

DECISION

In the administrative proceedings

initiated ex officio

with the participation of

1. Telefónica Deutschland Holding AG, Georg-Brauchle-Ring 23-25, 80992 Munich, legally represented by its management,
- party 1 -
2. E-Plus Mobilfunk GmbH & Co. KG, E-Plus-Straße 1, 40472 Düsseldorf, legally represented by its management,
- party 2 -
3. Vodafone GmbH, Ferdinand-Braun-Platz 1, 40549 Düsseldorf, legally represented by its management,
- party 3 -
4. Telekom Deutschland GmbH, Landgrabenweg 151, 53227 Bonn, legally represented by its management,
- party 4 -

regarding frequency regulation aspects of the proposed merger between Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG,

Ruling Chamber 1 (the President's Chamber) of the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen,

represented by

the Chair Bundesnetzagentur President Jochen Homann,
Vice Chair Bundesnetzagentur Vice President Dr Wilhelm Eschweiler and
Vice Chair Bundesnetzagentur Vice President Peter Franke,

following the public hearing on 5 May 2014 and
following the public consultation on the draft decision of 13 June 2014,

on 4 July 2014

ruled as follows:

1. Ruling Chamber 1 authorises Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG to use the frequencies held by both companies after the acquisition of E-Plus Mobilfunk GmbH & Co. KG by Telefónica Deutschland Holding AG in accordance with the following provisions.
2. Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG are required to return by 31 December 2015 the frequencies in the 900 MHz and 1800 MHz bands whose current assignment term does not run beyond 2016 (return of 900 MHz/1800 MHz spectrum before expiry).
3. Any other existing rights and obligations of the two companies, in particular the rollout and coverage obligation and the obligation to provide offers for service providers, are not affected by the arrangements.
4. The Bundesnetzagentur, taking an overall view, will investigate the need for action in respect of the post-merger spectrum holdings in particular at 2 GHz in light of the future spectrum holdings in the 900 MHz and 1800 MHz bands (investigation into spectrum distribution).
5. The applications submitted by Vodafone GmbH on 21 June 2014 and Telekom Deutschland GmbH on 24 June 2014 are rejected.

Ruling Chamber 1 draws attention to the fact

that it is planned to open the award proceedings for the frequencies in the 900 MHz and 1800 MHz bands and other frequencies (BK 1-11/003) in the course of 2014.

Grounds

- 1 The Chamber reached its decision on the following factual and legal grounds.

A Facts

- 2 The mobile operators Telefónica Deutschland Holding AG (party 1) ("Telefónica") and E-Plus Mobilfunk GmbH & Co. KG (party 2) ("E-Plus") intend to merge. In its letter of 16 August 2013 Telefónica notified the Bundesnetzagentur that it had concluded an agreement with the Dutch operator Koninklijke KPN NV (KPN) on 23 July 2013 to acquire sole control of E-Plus.
- 3 In the case of a merger between mobile operators, account must be taken of telecommunications law in addition to competition and antitrust law, whose aspects are assessed by the European Commission in merger control proceedings.
- 4 It is the Bundesnetzagentur's responsibility to examine, through the prism of telecommunications law, the frequency regulation aspects of the planned merger to ensure that discrimination in the relevant product and geographic market is not to be feared as a result of the companies' volume of spectrum and that efficient use of spectrum can continue into the future.
- 5 The telecommunications law decision ensuing from this examination is essentially based on the following facts:

A.1 Granting of frequency usage rights

- 6 Telefónica holds frequency assignments in Germany through its subsidiary Telefónica Germany GmbH & Co. OHG and offers mobile services. E-Plus also holds licences/frequency assignments – in part through subsidiaries – for mobile communications.
- 7 Parties 3 ("Vodafone") and 4 ("Telekom") also hold licences/frequency assignments for mobile communications and operate mobile networks in Germany.
- 8 The frequency usage rights were granted in each case in open, transparent and non-discriminatory proceedings. The frequencies were assigned in line with regulatory practice to secure the regulatory aims, most notably as defined in section 2(2) para 2 of the Telecommunications Act (TKG) of 22 June 2004 (Federal Law Gazette I, page 1190), as amended by Article 4 of the Act of 7 August 2013 (Federal Law Gazette I, page 3154), in each set of proceedings to competitively independent companies. The notion of competitively independent network operators applies not just in respect of the conduct of award proceedings but for the entire duration of the usage rights conferred on the basis of such proceedings. Hence the principle of competitive independence holds good in respect of the planned merger until such time as approval has been given by the relevant authorities.

A.2 Licensing for market opening

- 9 In Germany the first frequency usage rights for public digital cellular mobile communications were granted at the beginning of the 1990s. The GSM (D and E network) licences and frequencies were awarded in various tendering and auction proceedings.
- 10 The Council Directive of 25 June 1987 on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community (OJ EC L 196 of 17 July 1987, page 85) and the Council Recommendation of 25 June 1987 on the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community (OJ EC L 196 of 17 July 1987, page 81) provided the legal basis.
- 11 In addition to the European Economic Community, the European Radiocommunications Committee (ERC) of the European Conference of Postal and Telecommunications Administrations (CEPT) also adopted a decision on 24 October 1994 on the frequency bands to be designated for the coordinated introduction of the GSM digital pan-European communications system (ERC/DEC/(94)01).
- 12 The right to operate mobile networks based on the GSM or DCS 1800 standard was granted to three companies separately in the early 1990s under section 2 of the Telecommunication Installations Act (FAG) as published on 3 July 1989 (Federal Law Gazette I, page 1455).
- 13 As part of the opening up of the digital cellular mobile communications market, Telekom, then Deutsche Bundespost TELEKOM, in 1990 was the first to be granted a licence with the right to set up and operate the D1 mobile network (Annex B to Communication No 2007/1991, Federal Minister of Posts and Telecommunications Official Gazette 37/1991, page 1689).
- 14 The D2 licence to set up and operate a network for pan-European digital cellular mobile communications was awarded after a call for tenders to Vodafone, then operating as Mannesmann Mobilfunk GmbH, on 15 February 1990 (Annex A to Communication No 2007/1991, Federal Minister of Posts and Telecommunications Official Gazette 37/1991, page 1681).
- 15 At the time the market for digital cellular mobile communications was opened up, frequencies in the 900 MHz band were made available first in line with European

harmonisation under Council Directive 87/372/EEC. A few years later, frequencies in the 1800 MHz band were also released.

- 16 The E1 licence to set up and operate a digital cellular mobile communications network was awarded after a European call for tenders to E-Plus, then operating as E-Plus Mobilfunk GmbH, on 4 May 1993 (Communication No 26/1993, Federal Minister of Posts and Telecommunications Official Gazette 11/1993, page 229).
- 17 Notification of these three licences was published again on 5 December 1994 (Administrative Order No 259/1994, Federal Ministry of Posts and Telecommunications Official Gazette 23/1994, page 866).
- 18 CEPT ERC adopted a Decision on the frequency bands to be designated for the introduction of DCS 1800 on 1 December 1995 (ERC/DEC/(95)03). The DCS 1800 standard essentially corresponded to the GSM standard, with the exception of the frequency bands used. Hence the term "DCS 1800" was gradually replaced by the term "GSM 1800".
- 19 On 15 May 1997 the E2 licence was awarded after a call for tenders to the only applicant Telefónica, then E2 Mobilfunk GmbH & Co. KG (Administrative Order No 128/1997, Federal Ministry of Posts and Telecommunications Official Gazette 14/1997, page 679). This licence was granted on the basis of the Telecommunications Act (TKG) of 25 July 1996 (Federal Law Gazette I, page 1120).
- 20 As part of the licensing process Telefónica was assigned 2 x 22.4 MHz (paired) in the 1800 MHz band. At the same time E-Plus was assigned further spectrum at 1800 MHz to supplement its existing assignment of 2 x 15 MHz (paired), giving both E network operators (parties 1 and 2) 2 x 22.4 MHz (paired) in the 1800 MHz band. The two D network operators (parties 3 and 4) each had 2 x 12.4 MHz (paired) in the 900 MHz band at that time.
- 21 Following the opening up of the market, the spectrum in the 900 MHz and 1800 MHz bands designated on a harmonised European basis for the GSM mobile communications system was divided between the licence holders as follows:

Frequency band	Telekom (MHz)	Vodafone (MHz)	E-Plus (MHz)	Telefónica (MHz)
900 MHz	2 x 12.4	2 x 12.4	0	0
1800 MHz	0	0	2 x 22.4	2 x 22.4

A.2.1 Award of supplementary spectrum (GSM 1800 auction)

- 22 Following several requests for additional frequencies from the D network operators as from 1997 the Bundesnetzagentur – then the Regulatory Authority for Telecommunications and Posts (RegTP) – decided to auction additional spectrum from the 1800 MHz band (President's Chamber Decision of 14 April 1999 on the award proceedings for additional frequencies in the 1800 MHz band for GSM 1800 applications; Administrative Order No 45/1999, RegTP Official Gazette 7/1999, page 1251).
- 23 Only the four companies then active as network operators and thus able to acquire the frequencies as supplementary spectrum were admitted to take part in the auction (RegTP President's Chamber Decision of 21 June 1999 on the conditions for the award of additional frequencies for GSM 1800 applications; Administrative Order No 70/1999, RegTP Official Gazette 11/1999, page 1751).
- 24 The spectrum auctioned was bought by Telekom and Vodafone in almost equal amounts. Following the auction, the spectrum available was divided between the licence holders as follows:

Frequency band	Telekom (MHz)	Vodafone (MHz)	E-Plus (MHz)	Telefónica (MHz)
900 MHz	2 x 12.4	2 x 12.4	0	0
1800 MHz	2 x 5	2 x 5.4	2 x 22.4	2 x 22.4
Σ total spectrum	34.8	35.6	44.8	44.8

A.2.2 UMTS auction

- 25 The mobile operators that participated in the auction held in 2000 each supplemented their spectrum holding with 2 x 9.9 MHz (paired) in the 2 GHz band. In addition, Telekom, Vodafone and E-Plus each acquired 5 MHz (unpaired) at 2 GHz.

Frequency band	Telekom (MHz)	Vodafone (MHz)	E-Plus (MHz)	Telefónica (MHz)
900 MHz	2 x 12.4	2 x 12.4	0	0
1800 MHz	2 x 5	2 x 5.4	2 x 22.4	2 x 22.4
2 GHz (paired)	2 x 9.9	2 x 9.9	2 x 9.9	2 x 9.9
2 GHz (unpaired)	5	5	5	0
Σ total spectrum	59.6	60.4	69.6	64.6

A.2.3 Migration and alignment of licence terms (GSM concept)

- 26 In March 2005 the Federal Ministry of Defence waived its right to continue using the extended GSM (E-GSM) frequencies (880 MHz to 890 MHz and 925 MHz to 935 MHz). The E-GSM frequencies were designated for digital cellular mobile communications based on the GSM standard on a harmonised European basis.
- 27 On 21 November 2005 the concept for the award of additional spectrum for public digital cellular mobile communications below 1.9 GHz was adopted (GSM concept; Administrative Order No 88/2005, Bundesnetzagentur Official Gazette 23/2005, page 1852).
- 28 A fundamental element of the concept was to release the E-GSM frequencies for GSM (Administrative Order No 88/2005, page 1854):

"The E-GSM frequencies now available allow imbalances between the existing GSM networks – in terms of unequal spectrum packages owing to successive licensing – to be remedied and thus more favourable frequency regulation conditions to be created to secure fair and sustainable competition in GSM mobile communications within the meaning of section 2(2) para 2 TKG. The E-GSM frequencies are therefore to be divided equally between the E networks which – unlike the D networks – have so far only been assigned frequencies in the 1800 MHz band.

However, as it is not necessary to increase the overall amount of spectrum to create balanced frequency regulation conditions with a view to securing fair competition, the E networks will not be assigned the frequencies at 900 MHz in addition to their existing spectrum. Rather, the E network operators will be required to move some of their existing applications from the 1800 MHz band to the E-GSM frequencies."

- 29 The migration decisions were worded accordingly and Telefónica and E-Plus have since had frequencies in the 900 MHz band (Communication No 78/2006, Bundesnetzagentur Official Gazette 4/2006, page 702).

- 30 The vacated spectrum was auctioned in spring 2010.
- 31 As a further step in creating balanced frequency regulation conditions, the GSM concept gave the GSM network operators the option to extend the term of their frequency usage rights to 31 December 2016 (GSM concept, Administrative Order No 88/2005, page 1852).
- 32 This was necessary to create equal frequency regulation conditions for all licence holders as the licences had been awarded – and would therefore have expired – at different times.
- 33 E-Plus, Telekom and Vodafone were therefore each given the option to extend their licences to 31 December 2016, when Telefónica's E2 licence was due to expire. By the end of June 2007 all the companies had taken up this option and concluded public law contracts with the Federal Republic of Germany (Communication No 951/2007, Bundesnetzagentur Official Gazette 23/2007, page 4673). The licences/frequency usage rights held by E-Plus, Telekom, Vodafone and Telefónica now all expire on 31 December 2016.
- 34 In light of technical developments and the expected convergence of GSM and UMTS applications – which had been licensed separately – it was also planned to review and create more flexible frequency usage conditions.
- 35 After migration in line with the GSM concept in February 2006 the spectrum in the bands designated for GSM applications was divided between the network operators as follows:

Frequency band	Telekom (MHz)	Vodafone (MHz)	E-Plus (MHz)	Telefónica (MHz)
900 MHz	2 × 12.4	2 × 12.4	2 × 5	2 × 5
1800 MHz	2 × 5	2 × 5.4	2 × 17.4	2 × 17.4
Σ total spectrum	34.8	35.6	44.8	44.8

- 36 In its decision of 23 January 2012, with retroactive effect from 21 November 2005, the President's Chamber affirmed the regulatory considerations set out in the GSM concept adopted on 21 November 2005 (BK 1-12/001, Communication No 168, Official Gazette 3/2012, page 361ff).

A.2.4 Flexible spectrum use

- 37 Building on the GSM concept the Bundesnetzagentur, in its decision of 12 October 2009 on flexible frequency usage rights for wireless access for the provision of telecommunications services in the bands at 450 MHz, 900 MHz, 1800 MHz, 2 GHz and 3.5 GHz (BK 1a-09/001, Administrative Order No 58/2009, Bundesnetzagentur Official Gazette 20/2009, page 3575), stated that it would meet the frequency assignment holders' request to lift the restriction in these bands to enable network operators to use the spectrum on a technology neutral and mutual compatibility basis as soon as possible.

A.2.5 2010 auction

- 38 The Chamber initiated award proceedings on 12 October 2009 with its decision on combining the award of spectrum in the bands 790-862 MHz, 1710-1725 MHz and 1805-1820 MHz with the award of spectrum in the bands at 1.8 GHz, 2 GHz and 2.6 GHz for wireless access for the provision of telecommunications services (President's Chamber Decision of 7 April 2008 (BK 1-07/003) on the order for and choice of award proceedings and on the determinations and rules for conduct) and on the determinations and rules for the conduct of the award proceedings for spectrum in the bands at 800 MHz, 1.8 GHz, 2 GHz and 2.6 GHz for wireless access for the provision of telecommunications services

(BK 1a-09/002, Administrative Order No 59/2009, Bundesnetzagentur Official Gazette 20/2009, page 3623ff). On this basis the Bundesnetzagentur conducted an auction from 12 April to 20 May 2010.

- 39 Since the spectrum auction in 2010, the companies have held the following frequency usage rights:

Frequency band	Telekom (MHz)	Vodafone (MHz)	E-Plus (MHz)	Telefónica (MHz)
800 MHz	2 x 10	2 x 10	0	2 x 10
900 MHz	2 x 12.4	2 x 12.4	2 x 5	2 x 5
1800 MHz	2 x 20	2 x 5.4	2 x 27.4	2 x 17.4
2 GHz (paired)	2 x 9.9	2 x 14.85	2 x 19.8	2 x 14.85
2.6 GHz (paired)	2 x 20	2 x 20	2 x 10	2 x 20
Σ paired spectrum	2 x 72.3	2 x 62.65	2 x 62.2	2 x 67.25
2 GHz (unpaired)	5	5	5	19.2
2.6 GHz (unpaired)	5	25	10	10
Σ total spectrum	154.6	155.3	139.4	163.7

A.2.6 Frequency usage rights in the 3.5 GHz band

- 40 Since May 2012 E-Plus, through its subsidiaries, has also held 2 x 42 MHz (paired) in the 3.5 GHz band (broadband wireless access (BWA)). This spectrum was originally awarded in 2006 by means of an auction (BK 1-05/008, Administrative Order No 42/2006, Bundesnetzagentur Official Gazette 20/2006 of 11 October 2006, page 3051).
- 41 The spectrum is therefore divided between the companies as follows:

Frequency band	Telekom (MHz)	Vodafone (MHz)	E-Plus (MHz)	Telefónica (MHz)
800 MHz	2 x 10	2 x 10	0	2 x 10
900 MHz	2 x 12.4	2 x 12.4	2 x 5	2 x 5
1800 MHz	2 x 20	2 x 5.4	2 x 27.4	2 x 17.4
2 GHz (paired)	2 x 9.9	2 x 14.85	2 x 19.8	2 x 14.85
2.6 GHz (paired)	2 x 20	2 x 20	2 x 10	2 x 20
3.5 GHz (paired)	0	0	2 x 42	0
Σ paired spectrum	2 x 72.3	2 x 62.65	2 x 104.2	2 x 67.25
2 GHz (unpaired)	5	5	5	19.2
2.6 GHz (unpaired)	5	25	10	10
Σ total spectrum	154.6	155.3	223.4	163.7

A.2.7 Frequency usage rights held by the merging companies before the merger

- 42 E-Plus currently holds the following frequency usage rights, in part through subsidiaries:

Frequency band	E-Plus	Term
900 MHz	10.0 MHz	2016
1800 MHz	54.8 MHz	2016/2025

2 GHz	44.6 MHz	2020/2025
2.6 GHz	30.0 MHz	2025
3.5 GHz	84.0 MHz	2021
Total	223.4 MHz	

43 Telefónica currently holds the following frequency usage rights through its subsidiary:

Frequency band	Telefónica	Term
800 MHz	20.0 MHz	2025
900 MHz	10.0 MHz	2016
1800 MHz	34.8 MHz	2016
2 GHz	48.9 MHz	2020/2025
2.6 GHz	50.0 MHz	2025
Total	163.7 MHz	

A.3 Proceedings

- 44 In August 2013 Telefónica notified the Bundesnetzagentur that it had concluded an agreement with the Dutch operator Koninklijke KPN NV (KPN) on 23 July 2013 to acquire sole control of E-Plus.
- 45 On 31 October 2013 Telefónica notified its plans to acquire sole control of E-Plus to the European Commission (case number M.7018 Telefónica Deutschland/E-Plus).
- 46 On 20 December 2013 the European Commission opened an in-depth investigation (phase II investigation) to assess whether the planned acquisition of E-Plus by Telefónica is in line with the EU merger control rules in light of the extent of competitive effects.
- 47 In the case of a merger between mobile operators, account must be taken of telecommunications law in addition to competition and antitrust law, whose aspects are assessed by the European Commission in merger control proceedings.
- 48 It is the Bundesnetzagentur's responsibility to examine, through the prism of telecommunications law, the frequency regulation aspects of the planned merger to ensure that discrimination in the relevant product and geographic market is not to be feared as a result of the companies' volume of spectrum and that efficient use of spectrum can continue into the future. The President's Chamber therefore looks at the proposed merger under the statutory requirements set out in section 55(8) and section 55(7) in conjunction with section 63 TKG, focusing on the monocausal link between the spectrum distribution resulting from a merger and any ensuing discrimination.
- 49 Until such time as a decision on the proposed merger has been taken by the relevant authorities the two companies are competitively independent companies and must act as such. In light of this, the Bundesnetzagentur has requested both Telefónica and E-Plus to take appropriate action to ensure their competitive independence in the present proceedings.
- 50 The Bundesnetzagentur supports the European Commission in its tasks performed under the Merger Regulation. This approach guarantees concurrent and consistent decisions in terms of both competition law and frequency regulation.

A.4 Scope of telecommunications law probe

- 51 To guarantee objective, transparent and non-discriminatory proceedings the President's Chamber, the unit at the Bundesnetzagentur responsible in such cases, in September 2013 published the scope of the telecommunications law probe on its

website (www.bundesnetzagentur.de/zusammenschlussvorhaben) and in its Official Gazette (Communication No 345/2013, Bundesnetzagentur Official Gazette 17/2013 of 11 September 2013, page 3006ff).

A.5 Establishing the facts, the legal situation and the interests

- 52 To establish the facts, the legal situation and the interests in depth the President's Chamber drew up key questions and, in October 2013, requested stakeholders' views on these. The key questions addressed the essential aspects of the planned merger from the telecommunications law point of view (Communication No 565/2013, Bundesnetzagentur Official Gazette 20/2013 of 23 October 2013, page 3261ff). The consultation was designed to give all the actual and potential market players directly or indirectly affected by the proposed merger the opportunity to state their case. The responses received, as far as they are not confidential, have been posted on the Bundesnetzagentur's website.

A.6 Specific key questions relating to telecommunications law

- 53 With a view to the specific assessment of the frequency-related and economic aspects of the proposed merger the President's Chamber saw the need for a closer look at the facts, the legal situation and the interests, and put up further detailed questions for consultation in December 2013 (Communication No 82/2014, Bundesnetzagentur Official Gazette 1/2014 of 15 January 2014, page 148ff).
- 54 Essentially, the respondents said the following.
- 55 The competitors of the merged company commented in particular on the frequency-related and economic disadvantages stemming from the volume of spectrum the merged company would have. In light of this volume of spectrum the merged company, with roughly the same number of customers as at present, could be assumed to have greater capacity per customer than its competitors. Nor could this advantage be compensated for by network densification, as the necessary degree of densification was practically impossible and would entail a cost disadvantage that ruled out effective competition.
- 56 Further, it was said that the merged company would have a competitive advantage in being able to use the bands at 900 MHz, 1800 MHz and 2 GHz for the parallel deployment of broadband technologies (UMTS 900 MHz, LTE 1800 MHz, LTE 2 GHz).
- 57 The competitive advantages for the merged company would materialise soon after the merger, they said. National roaming would allow the frequencies needed for deploying broadband technologies to be cleared within a short space of time, without detriment to the customer.
- 58 In light of this, attention was drawn to the need for compensation, notably at 1800 MHz. One competitor called for the merged company to relinquish a complete spectrum holding – or at least frequencies in the respective bands from 900 MHz to 3.5 GHz – which should then be redistributed.
- 59 By contrast, the main thrust of the merging company's comments was that competition would not be distorted by the volume of spectrum and no frequency-related or economic disadvantages were recognisable for the other mobile operators. In particular, the term of the respective frequency usage rights was singularly important here. Purely theoretically, any disadvantages would only be felt at the earliest after network migration had been completed.
- 60 In addition to the four mobile operators, further stakeholders including telecommunications and mobile communications companies, service providers and manufacturers put forward their views on the specific key questions and on the interests and concerns of potential new entrants. Attention was also drawn to the importance of the wholesale market, that is the role of service providers and mobile virtual network operators (MVNOs), for competition.

61 In their views on the key questions, respondents stated what volume of spectrum they thought would be needed in future to maintain competition and what would constitute efficient use of spectrum in the case of merger, providing facts on the existing infrastructures and the extent to which they were used to back up their statements.

A.7 Key elements of a telecommunications law assessment of the proposed merger between Telefónica and E-Plus

62 In preparation for a decision in accordance with section 55 subsections (7) and (8) TKG the President's Chamber in March 2014 drew up key elements of a frequency regulation assessment of the proposed merger and published them for consultation (Communication No 157/2014, Bundesnetzagentur Official Gazette 157/2014 of 16 April 2014, page 812ff).

63 The key elements essentially set out two courses of action to secure non-discriminatory spectrum holdings for high speed telecommunications networks and to safeguard the regulatory aims and principles according to section 2 TKG:

- the return of spectrum in the 900 MHz and 1800 MHz bands by Telefónica/E-Plus before expiry and close in time to the reallocation of the "GSM spectrum" in conjunction with
- a subsequent investigation into post-merger spectrum distribution.

64 The public consultation served to create maximum transparency for all interested parties at an early stage in respect of the Chamber's considerations on frequency regulation action. This gives all interested parties the opportunity to present their reasoned views on the proposed action. Responses to the consultation were received from mobile operators as well as broadcasting representatives and users of radio microphones and other telecommunications companies as potential new entrants, service providers or MVNOs.

Key element 1: Non-discriminatory spectrum packages for all market players

65 Key element 1 essentially put forward the following:

"Measures based on section 55 subsections (7) and (8) TKG must therefore reflect the regulatory aims. Under section 52 in conjunction with section 2(2) TKG one of the aims of regulation, besides securing the efficient use of frequencies, fair competition and promoting markets with sustainable competition, is to expedite the rollout of public high speed next generation telecommunications networks. In the view of the President's Chamber, the aim of the proceedings pursuant to section 55 subsections (7) and (8) TKG is therefore to secure non-discriminatory spectrum packages for high speed telecommunications networks of all the network operators."

Essentially, the respondents said the following.

66 Overall the respondents agreed with the Chamber's comments on non-discriminatory spectrum packages for all market players. There was a call in particular for spectrum packages for all market players that ensure a level playing field (in terms of costs and the possibility to implement new technologies) for mobile services, especially in respect of LTE. Respondents agreed with the President's Chamber that a symmetrical distribution of frequencies in all bands was not necessary to secure non-discriminatory spectrum packages.

67 Further, it was said that the term "non-discriminatory spectrum packages" should be defined.

68 On the other hand, it was said that non-discriminatory spectrum packages did not fall within the scope of the probe under section 55 subsections(7) and (8) TKG nor were

they an objective of these provisions. The proposed merger fell under section 55(7) TKG and hence only notification of the change in ownership was required.

Key element 2: Need for short term action at 900/1800 MHz to ensure non-discriminatory spectrum packages for high speed telecommunications networks

69 Key element 2 essentially put forward the following:

"The President's Chamber therefore currently sees the need for short term frequency regulation action at 900/1800 MHz to ensure non-discriminatory spectrum packages for high speed telecommunications networks."

Essentially, the respondents said the following:

- 70 On the one hand, respondents agreed with the President's Chamber that there was a need for short term action at 900 MHz/1800 MHz. All network operators should be in a position to introduce new technologies such as LTE at the same pace and at a comparable cost. If the merged company kept all of its spectrum, competition in the retail and wholesale markets would be considerably distorted; this could and should be counteracted by appropriate frequency regulation measures. Some respondents called for the amount of surplus spectrum to be specified, for instance the merged company should relinquish at least 2 x 15 MHz (paired) in the 1800 MHz band.
- 71 On the other hand, it was said that there was no need for short term frequency regulation action at 900 MHz/1800 MHz to ensure non-discriminatory spectrum packages for high speed telecommunications networks. Competition would not be distorted in the 900 MHz and 1800 MHz bands. The competitors would have more spectrum at 900 MHz than the merged company.
- 72 The fact had to be acknowledged that the GSM networks operated by Telefónica and E-Plus had been set up and were still predominantly operated on the basis of frequencies in the 1800 MHz band only. Contrary to what was said in the key elements paper, competition would not be distorted by the merged company's total volume of spectrum at 1800 MHz. The key elements paper did not taken into account the reasons for the differences in spectrum holdings. For instance Vodafone had had the opportunity in 2010 to buy sufficient 1800 MHz spectrum at auction. Further, the Bundesnetzagentur itself concluded from its investigation into spectrum distribution that an asymmetrical frequency distribution in one band did not distort competition.
- 73 Nor did greater spectrum capacity per customer result in a distortion of competition. No relation could be established between this and the possibility of distortion. Before the GSM concept was implemented the D network operators had had less spectrum overall for GSM-based services than the E network operators but had had more than twice as many customers. This imbalance in spectrum capacity per customer was an inevitable result of the E network operators entering the market later.
- 74 Nor would the parallel deployment of UMTS and LTE or GSM and LTE distort competition. The merged company would not be able to operate GSM and LTE in parallel at 1800 MHz in the short term. The potential ability referred to by competitors was not sufficient to assume distortion to competition. Moreover, the merged company – even after official approval of the merger – would and could not make any rational plans for a band for which the frequency usage rights expired at the end of 2016 and for which the outcome of spectrum award proceedings could not be predicted with the degree of certainty required for network planning.
- 75 Furthermore, a reasonable period of time was to be allowed for migration, in particular if more spectrum was required.
- 76 In addition, one respondent said it was necessary to look at the question as to whether a distortion of competition was due solely to the specific spectrum holdings or whether it

was not rather (also) the exit of one competitor from the market that was part of the problem and therefore needed to be addressed by the measures to be taken.

Key element 3: Conduct of objective, transparent and non-discriminatory award proceedings for 900 MHz/1800 MHz and other frequencies immediately after approval of the merger

77 Key element 3 essentially put forward the following:

"The President's Chamber is therefore looking to open the award proceedings in the course of 2014 to give all competitors the opportunity to acquire non-discriminatory spectrum packages for broadband rollout immediately after approval of the merger."

Essentially, the respondents said the following:

- 78 The majority of respondents basically welcomed the fact that objective, transparent and non-discriminatory award proceedings for 900 MHz/1800 MHz and other frequencies would be conducted in the course of 2014 immediately after approval of the merger. It was also said that identifying and awarding the spectrum that could become free as a result of the planned merger between Telefónica and E-Plus could contribute significantly to promoting the broadband initiative.
- 79 On account of the total amount of spectrum available, the prompt conduct of award proceedings enabled both mobile operators and new entrants to acquire the required spectrum packages in line with their business models – but also in consideration of the changed market environment.
- 80 Some respondents said that although objective, transparent and non-discriminatory award proceedings were essentially suited to securing non-discriminatory and fair competition in respect of the acquired spectrum packages, it was necessary in this case to redistribute the spectrum.
- 81 In addition, there was a call for the frequency usage rights with longer terms to be taken into account as well.
- 82 One proposal was that the spectrum to be vacated should be redistributed before the award proceedings for the 900 MHz/1800 MHz frequencies. Another proposal was for the spectrum to be offered to the two current competitors in the market in non-discriminatory, open and transparent award proceedings. Here attention was drawn to the fact that measures would be needed to remedy the imbalances in the bands at 1800 MHz and 2 GHz. Furthermore there was a call for the GSM frequency usage rights to be extended provided they did not affect the spectrum imbalance resulting from the merger.
- 83 On the other hand, it was said that redistributing the spectrum between only current competitors would be discriminatory and awarding the merged company's spectrum separately would lead to a regulation-driven shortage. By contrast, the procedure proposed in key elements 3 and 6 was quite sufficient.
- 84 One respondent suggested that the spectrum be re-awarded in two steps. The first step would be to provide a suitable basic spectrum package for award to a potential new market entrant. The basic package should primarily enable urban coverage to be provided using frequencies in the 900 MHz and 1800 MHz bands, as this was the only way to keep the entry barriers to a highly saturated market dominated by established brands sufficiently low. Should no new entrant be found, the network capacities should be distributed between the market players subject to the strict condition that they be used for wholesale business.
- 85 It was said that there was a claim to the assignment of frequencies in the 900 MHz and 1800 MHz bands to a "new entrant". This was the only way to compensate at least in part for the hitherto biased and selective treatment in the form of assignments to the established mobile operators without the conduct of award proceedings.

86 With reference to the BK 1-11/003 award proceedings attention was also drawn to the fact that past demand identification proceedings could no longer be used as the basis for new award proceedings because the merger had significantly changed the situation in the market. It was also said that the scope of the proceedings should under no circumstances be extended to cover the 700 MHz band. Rather, this required a separate hearing.

Key element 4: No need for short term action at 800 MHz, 2 GHz, 2.6 GHz and 3.5 GHz to ensure non-discriminatory spectrum packages

87 Key element 4 essentially put forward the following:

"In the President's Chamber's view, there is therefore no need for action in the frequency bands at 800 MHz, 2 GHz (unpaired), 2.6 GHz and 3.5 GHz to ensure non-discriminatory spectrum packages. However, the Chamber, taking an overall view, will investigate the need for action in the band at 2 GHz (paired) in light of future changes in the spectrum holdings of all competitors through the award of spectrum in the 900 MHz and 1800 MHz bands (cf key elements 2 and 3)."

Essentially, the respondents said the following:

88 Some respondents agreed with the Bundesnetzagentur that there was currently no need for action at 800 MHz, 2 GHz and 2.6 GHz. In particular the frequency usage rights at 800 MHz were divided symmetrically between the merging company and the competitors. Furthermore, respondents agreed with the President's Chamber that no frequency regulation action was needed at 3.5 GHz because deployment of LTE was not expected until the medium to long term.

89 On the other hand, it was said that there was a need for short term action at 2 GHz, 2.6 GHz and 3.5 GHz since the frequencies had been awarded to competitively independent companies, it being understood that the companies would remain competitively independent for the entire duration of the usage rights.

90 In particular the Chamber's conclusion that there was no need for short term action at 2 GHz (paired) was challenged. Rather, the frequency assignments should be revoked or the merged company should return frequencies at 2 GHz immediately. Here there was a call for the company to relinquish 2 x 15 MHz (paired) in the 2 GHz band.

91 Some respondents said that spectrum at 2 GHz needed to be returned to provide a minimum spectrum package at 900 MHz/1800 MHz and 2 GHz for a "suitable" new market entrant.

92 One respondent recommended that unused spectrum in the unpaired 2 GHz bands be returned. These bands could be used for a pan-European direct-air-to-ground communications (DA2GC) system based on LTE.

93 It was said that there was also a need for short term action at 2.6 GHz, in particular that unused frequencies in the 2.6 GHz band should be returned.

94 Some of the respondents saw the need for short term action at 3.5 GHz. In particular, it was pointed out that assignments in the 3.5 GHz band would need to be revoked or at least some of these frequencies would need to be released to the market to ensure efficient frequency usage.

Key element 5: Return of spectrum in the 900 MHz and 1800 MHz bands by Telefónica/E-Plus before expiry and close in time to the reallocation of the "GSM spectrum" in conjunction with a subsequent investigation into post-merger spectrum distribution

95 Key element 5 essentially put forward the following:

"In the President's Chamber's view, it is necessary as a first step for spectrum in the 900 MHz and 1800 MHz bands to be cleared by Telefónica/E-Plus following award

and in good time before assignment to a competitor, to enable early use of the frequencies by the competitors.

To be able to take account of the developing factual basis and possible interrelations between the frequency bands shortly after conclusion of the award proceedings, the President's Chamber intends as a further step to carry out an investigation into frequency distribution in accordance with previous regulatory practice. The purpose of this investigation is to determine whether or not measures are necessary as regards the spectrum holdings resulting from the merger and remaining after the award, in particular in the 2 GHz band."

Essentially, the respondents said the following:

- 96 Some respondents welcomed the conduct of objective, transparent and non-discriminatory award proceedings for 900 MHz/1800 MHz and other frequencies in the course of 2014 immediately after approval of the merger. This would provide in particular new entrants with fair market access opportunities. Further, the spectrum should be released for broadband services.
- 97 It was said that the frequencies at 900 MHz/1800 MHz should be vacated in the short term irrespective of when the spectrum was awarded.
- 98 Furthermore, there was a call for frequencies in other bands to be returned early in the short term. The early return of spectrum at 900 MHz/1800 MHz only was not sufficient to prevent discrimination.
- 99 It was said that spectrum reallocation should depend on the entry of a new market player. A suitable basic spectrum package should be provided for award to a potential new market entrant. Should no new entrant be found, the capacities should be distributed between the current market players subject to the condition that they be used for wholesale business.
- 100 Attention was also drawn to the fact that re-awarding the spectrum was not the only assignment procedure provided for by telecommunications law.
- 101 On the other hand, it was said that it was not necessary for spectrum to be returned before expiry as there was no discrimination resulting from the merger. This held particularly true in light of the fact that the frequencies at 900 MHz and 1800 MHz had been used for GSM services over a longer period.
- 102 Some respondents agreed with the Chamber that an investigation into frequency distribution should be conducted after the award proceedings. Other respondents, however, said that this investigation should be conducted before the spectrum was re-awarded.

Key element 6: The award proceedings for frequencies in the 900 MHz and 1800 MHz bands and other frequency bands are to be opened in the course of 2014

- 103 Key element 6 essentially put forward the following:

"The President's Chamber intends to open the award proceedings for frequencies in the 900 MHz and 1800 MHz bands and other frequency bands in the course of 2014."

Essentially, the respondents said the following:

- 104 Some respondents welcomed the conduct of objective, transparent and non-discriminatory award proceedings for 900 MHz/1800 MHz and other frequencies in the course of 2014 immediately after approval of the merger. This would provide new entrants with fair market access opportunities.

- 105 In respect of the timescale, however, the conduct of award proceedings in the course of 2014 was viewed critically. If the award proceedings to be opened in the course of 2014 were to include the 700 MHz spectrum, the question arose in particular as to what extent, if any, proper proceedings could be conducted if a national consensus still had to be reached. Some respondents said that the 700 MHz spectrum should not be included in the proceedings.
- 106 It was said that the procedure proposed in key elements 3 and 6 was sufficient without the early return of spectrum. Awarding the 900 MHz/1800 MHz spectrum returned by the merged company in separate proceedings conflicted with key element 3 and constituted a breach of the requirement laid down in section 61(7) TKG of a fair, reasonable, open and transparent procedure for all concerned; it would also lead to a regulation-driven spectrum shortage. However, redistributing the spectrum between current competitors only would also be discriminatory.

Key element 7: Award proceedings that are objective, transparent, non-discriminatory and hence open to all interested parties enable new entrants to sufficiently acquire spectrum

- 107 Key element 7 essentially put forward the following:

"The conduct of objective, transparent and non-discriminatory award proceedings provides new entrants with fair market access opportunities."

Essentially, the respondents said the following:

- 108 Attention was drawn to the fact that underutilised spectrum at 2.6 GHz and 3.5 GHz was also currently available for new entrants. By contrast, spectrum at 700 MHz would not be available until 2020.
- 109 In a similar case in Austria no new entrant had entered the market despite access opportunities. Separate measures for new entrants were therefore not necessary.
- 110 On the other hand, there was a call for appropriate action to be taken to promote the market access opportunities for a new entrant. It was suggested that a suitable basic spectrum package be provided for award to a potential new market entrant. Should no new entrant be found, the capacities could be distributed between the current market players subject to the condition that they be used for wholesale business.

A.8 Public hearing

- 111 To give all stakeholders the opportunity to take part in an open and transparent discussion and to look at the facts, the legal situation and the interests in depth, the President's Chamber held a public hearing on 5 May 2014.
- 112 The hearing and the subsequent written submissions essentially dealt with the question as to whether and in which bands short term frequency regulation action was needed, focusing on the bands at 900 MHz/1.8 GHz and 2 GHz. One key question was whether or not the merged company could in the short term vacate frequencies at 1.8 GHz through national roaming to use them for broadband technologies in parallel to GSM and hence gain a considerable advantage over its direct competitors by virtue of its spectrum holding.
- 113 Telefónica essentially said that there was no need for action in any of the frequency bands. The proposed merger created clear advantages in terms of infrastructure competition. In light of increasing data rates, a third strong infrastructure could be developed in Germany for the benefit of the consumers.
- 114 On 6 December 2013 the merger company had presented its frequency usage concept with expansion plans for all bands to the Bundesnetzagentur. The merger of two mobile networks, which was the biggest challenge in network technology terms, required a certain amount of time in particular with a view to network migration.

- 115 All the frequencies were currently being used efficiently and could not be vacated early, Telefónica said. Network migration in particular at 1800 MHz – targeted for the end of 2016 – was, however, a goal. In Great Britain, Everything Everywhere – formed through the merger of two mobile networks – had actually had five and a half years to consolidate its networks, even though the networks in Great Britain were smaller compared to those to be merged in Germany. Network consolidation in Germany – with 45,000 network elements – would take at least two and a half years.
- 116 The degree of network usage meant that it was not possible to move millions of customers ad hoc from one network to another through national roaming, Telefónica said. Rather, network capacities – ie voice capacities – needed to be expanded in the network to which the traffic was to be migrated, and the traffic would then be moved slowly from one network to the other. The frequency usage concept presented to the Bundesnetzagentur included a plan on migration times using national roaming. All technical options in addition to national roaming were being assessed.
- 117 It was said that the two merging companies' networks primarily used frequencies at 1800 MHz, particularly in urban areas, with the focus on voice communications. This meant that the whole term of the frequency assignments would be needed for migration.
- 118 Professor Dr Kürner (TU Braunschweig), acting as technical expert for Telefónica and referring to his report of 29 April 2012 in response to the consultation on the analysis paper of 25 April 2012 (Communication No 275/2012, Official Gazette 8/2012, page 1150) said the following about migration scenarios:
- 119 In the case of a merger, less spectrum would be needed for the GSM networks than at present owing to the positive effects of bundling. It would, however, not be possible to reduce the amount of spectrum needed until after the networks had been consolidated. There were three possible options for consolidating the networks and operating them with less spectrum. However, all three required complex planning, considerable financial investments and a significant amount of time.
- 120 The first option was purely theoretical. Both networks would be operated in the same spectrum. This had not yet been done anywhere in the world. Introducing a completely new radio planning tool and process to provide automated planning for tens of thousands of stations would take about three years. Around twelve months would be needed for the regular software updates for the radio access network and about one and a half to two years just to provide the planning tools.
- 121 With the second option, to avoid mutual interference the reduced spectrum would be divided in half between the two networks and each network would be operated separately. However, even if the system technology supported this option, operating the two networks in adjacent parts of the spectrum would require detailed advance planning, and the planning processes for the two networks would need to be closely coordinated. Thus national roaming was a suitable option for increasing coverage but not for reducing spectrum requirements.
- 122 The third option would be to operate one of the two existing networks with less spectrum and switch off the other network. Some radio cells did not have sufficient capacity to provide coverage for the customers of both existing networks and would need to be upgraded. In addition, the coverage areas of the two networks were not completely identical. This no doubt also applied to indoor coverage, which would lead to a loss in coverage for the customers of the network that had been switched off. To avoid these two problems, careful traffic planning based on the capacities of both networks would be needed to produce a traffic forecast for the new network, solve the coverage problems or plan transferring sites from one network to the other. To avoid disadvantages for the customers, it was absolutely necessary for any planning to be done before switching off one of the networks. This scenario essentially set out those options for consolidating the networks that needed more time. Here again, detailed planning data would need to be exchanged and fed into the complex planning processes. In addition, the fact that the

- two networks were not operated with the same manufacturer's system technology meant that time-consuming modifications would be necessary.
- 123 Telekom essentially said that short term action was needed in particular at 2 GHz in addition to 900 MHz/1800 MHz. It pointed out that national roaming for GSM could be implemented very swiftly. Telefónica had concluded a national roaming agreement with Deutsche Telekom at the end of the 1990s. National roaming could be implemented within one year. Technology for LTE at 1800 MHz and 900 MHz was already available, with mass market technology available for the 1800 MHz band.
 - 124 In addition to measures to redress the imbalances at 900 MHz/1800 MHz, Telekom said it was crucial that spectrum in the 2 GHz band be relinquished and called for at least 2 x 15 MHz (paired) at 2 GHz to be returned by the end of 2015. The spectrum should be relinquished on the basis of bilateral, freely negotiated commercial contracts; only if the imbalances could not be rectified in this way should regulatory measures be taken. The return of spectrum in the short term was possible in connection with the need for action identified at 900 MHz/1800 MHz.
 - 125 The 2 GHz spectrum was very important to Telekom to attract premium customers. UMTS would be used for many years to come for high-quality voice communications.
 - 126 UMTS was the main competitive basis for broadband communications and would remain so for a long time, Telekom said. Thus the 2 GHz band was of great significance. Customers acquired for UMTS today could be migrated easily to LTE. Added to this were the large numbers of terminal equipment in the market, which also constituted a fundamental element of competition.
 - 127 Hence if the merged company did not relinquish a significant amount of spectrum at 2 GHz, it would have a considerable competitive advantage, said Telekom. Moreover, Telefónica had failed to substantiate its spectrum requirements.
 - 128 Vodafone welcomed the President's Chamber's considerations set out in the key elements in respect of the need for short term action at 900 MHz/1800 MHz. However, in particular the exact amount of spectrum to be vacated and the timing needed to be specified in advance. Vodafone put the amount of surplus spectrum to be revoked at 2 x 30 MHz (paired) at 1800 MHz and 2 x 5 MHz to 2 x 10 MHz (paired) at 900 MHz.
 - 129 Telefónica's request to keep all the frequencies until the usage rights expired should not be met since the merged company had more spectrum than Telekom and Vodafone together. This would enable the operator to triple the average data rate and hence the inclusive volume for services offered outside hotspots. These advantages had to be eliminated in the short term, Vodafone said.
 - 130 Telefónica could use the 900 MHz band for UMTS while Telekom and Vodafone needed the band for GSM coverage.
 - 131 There were neither technical nor commercial reasons why the merged company would not for instance use one of the merging company's current GSM frequencies at 1800 MHz for GSM and use the freed spectrum together with the other frequencies at 1800 MHz for LTE. The same applied to the possible clearance of 900 MHz spectrum and its subsequent use for UMTS 900.
 - 132 It could be assumed that up to 15,000 base stations could be upgraded within one year to expand LTE 1800 or UMTS 900. One year was sufficient to clear spectrum. It might even be possible to vacate the frequencies more quickly – even within the space of a few months – for the end of 2014. In respect of the timescale, there were no obvious reasons why it should not be possible to vacate the GSM spectrum through national roaming more quickly within a few months.
 - 133 Further, one participant at the public hearing questioned the competence of the President's Chamber to take a decision on the transfer of frequencies in a merger between two frequency assignment holders under section 55(8) TKG. It was said that

the President's Chamber had no legal competence to award any vacated spectrum until the administrative proceedings on the transfer of frequencies had been concluded with a decision taken under section 55(8) TKG. Since the President's Chamber lacked formal competence, the authority's approach created legal uncertainty, and shortening the proceedings – which contravened legislation – meant that all the companies concerned could invoke legal protection.

- 134 E-Plus drew attention to the fact that the principle of competitive independence for the entire duration of a frequency assignment was not laid down in the Telecommunications Act.

A.9 Consultation on draft decision

- 135 To guarantee continuity of open and transparent proceedings for all stakeholders and parties involved, the President's Chamber published a draft telecommunications law decision on frequency regulation aspects of the proposed merger for consultation on 13 June 2014. The draft decision was based on the considerations and measures set out in the key elements and the public hearing held on 5 May 2014. Essentially, the respondents said the following:

Responsibility

- 136 One respondent, referring to the functional responsibility of the President's Chamber, said that the Chamber had yet to establish scarcity in respect of the frequencies affected by the merger in the bands at 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz and hence the legal prerequisite for applying section 55(10) TKG had yet to be met. Thus the President's Chamber did not have functional responsibility.

Proceedings

- 137 Some respondents said that the time given to comment on the draft decision was too short. In addition, there had been no public hearing.
- 138 Telefónica said that neither Telefónica nor E-Plus had submitted an application for a decision under section 55(8) TKG and hence any decision taken under this provision was unlawful according to section 44(1) para 1 of the Administrative Procedures Act (VwVfg).
- 139 One respondent said that a final decision could not be taken because the grounds underlying the European Commission's decision on possible approval of the merger were not yet available. The draft decision needed to be reviewed and amended in line with the EU decision which took precedence.

Substantive legality

- 140 Some respondents agreed that the planned decision came under the scope of section 55(8) TKG. Another opinion was that the notified planned merger fell under section 55(7) TKG and not section 55(8) TKG. Measures for the transfer of frequencies in accordance with section 55(8) TKG had not been applied for, hence no decision was to be taken, it was said. A differentiation between section 55(7) and section 55(8) TKG could not be left open, since the different starting point shifts the responsibility to state the facts and the burden of proof to the merged company.
- 141 It was said that discrimination as a result of spectrum holdings did not fall within the scope of the probe under section 55(8) TKG and section 55(7) in conjunction with section 63 TKG. Furthermore, there was no room for an investigation into the question of a distortion of competition as a result of spectrum holdings, since the European Commission's approval would also cover the existing frequency assignments.
- 142 It was said that the President's Chamber did not define the relevant product and geographic market, as was legally required, and had not investigated whether or not

distortion of competition in the relevant product and geographic market was to be feared as a result of the requested transfer of frequencies.

- 143 In addition, it was said that the principle of competitive independence was not an aspect determined under section 61(3) sentence 1 TKG and which Telefónica and E-Plus had taken on as a commitment in accordance with section 61(6) TKG and hence was not a constituent part of the frequency assignment. Any regulations which might have existed had been rendered obsolete by changes in the legislation, it was said. In particular section 55 subsections (7) and (8) TKG provided for legal succession both for frequency assignment holders and for frequency assignments and set out the scope of the specific probe which – in respect of competition – was concerned with preventing competitive distortion. Further, it was said that the principle cannot be inferred from the award decisions themselves since such obligations needed to be included in the definitive operative provisions of the decisions, which was not the case. The principle was also contradicted by the administrative practice followed by the Bundesnetzagentur, which had not expressed any reservations about the acquisition of Inquam Broadband and Clearwire by E-Plus, it was said.
- 144 By contrast, some respondents agreed that the principle of competitive independence should be assessed, with one respondent calling for the entire spectrum holding of one of the merging companies to be returned.

Need for short term action at 900 MHz/1800 MHz

- 145 Telekom and Vodafone and potential new entrants essentially see the need for short term action at 900 MHz/1800 MHz. Some respondents agree with the President's Chamber that the frequencies at 900 MHz/1800 MHz should be returned shortly after approval of the merger to prevent discrimination as a result of the merged company's spectrum holding. The considerable asymmetries in frequency distribution would make fair competition impossible and prevent efficient frequency usage, it was said.
- 146 The respondents essentially referred to their previous comments.
- 147 Supplementing its previous statements, Vodafone said that it was possible and necessary for the frequencies to be returned or revoked with effect on 31 December 2014 or (alternatively) by mid-2015 at the latest. It was not clear why it was not possible for the merged company to vacate GSM frequencies in the short term through national roaming. Each of the mobile networks operated by Telefónica and E-Plus currently provided nationwide coverage, hence it would also be possible to provide nationwide coverage with only one of the two networks. In respect of capacity, too, 2 x 15 MHz could be seen as sufficient to support the GSM traffic. Consequently, the frequencies could be vacated within a few months after approval of the merger without any relevant loss of quality. Any minor changes needed to the network, should the two networks' coverage areas not be identical, could be made within a few months.
- 148 This issue should be clearly separated from the question of full network migration. Full network migration to fully realise the network synergies would take longer. The competitive advantage to be gained in the short term from using the vacated GSM spectrum for LTE or UMTS was, however, so big that the merged company was likely to realise this advantage and full migration of both networks to optimise the joint mobile network was not likely until the long term.
- 149 Telekom stated that the proposed measure was not suited to eliminating the risk of discrimination resulting from the merger and securing the efficient use of frequencies. Withdrawing the merged company's entire GSM frequency usage rights before expiry was considered unreasonable and inexpedient because of the consequent difficulties in aligning the networks, ensuring the availability and quality of services and meeting the company's associated supply commitments.
- 150 In addition, re-awarding the withdrawn frequency usage rights in parallel to the frequency usage rights from the other competitors' GSM licences, as planned, would make the

award proceedings considerably more complex, in particular on account of the different terms of the rights. It would also prevent competitors from supplementing their spectrum at 2.1 GHz.

- 151 The merged company should therefore be required to transfer 2 x 15 MHz in the 1800 MHz band (for use as from 1 January 2016) and 2 x 15 MHz in the 2.1 GHz band (for use as soon as possible but at the latest by 1 January 2016) to another company in the German mobile market. Consideration should also be given to withdrawing 2 x 5 MHz in the 900 MHz band for re-use as from 1 January 2016. All withdrawn spectrum should be vacated by 31 December 2015 at the latest.
- 152 Telefónica, on the other hand, stated that returning spectrum at 900 MHz and 1800 MHz early by 31 December 2015 would lead to a loss of quality for the 43 million or so mobile customers that would be clearly noticeable and have a lasting impact on competition. Telekom and Vodafone, which currently dominated the mobile market, would benefit from this and would be able to consolidate and expand their positions in the market.
- 153 Mobile broadband rollout would be impeded since resources would have to be diverted from other activities. The delay would affect some 43 million mobile customers who would not be able to benefit from broadband rollout as planned and in particular from the additional capacity.
- 154 It was incorrect to assume that the merged company could use the capacities of both networks for all its customers through national roaming. Planning and developing a national roaming solution would take around 12 to 18 months from completion of the merger. This was a complex process which also needed to ensure that the customers would be able to retain their current services and quality. A full mobility access design was also required.
- 155 Nationwide implementation of national roaming needed at least 24 months' preparation in total. National roaming needed to be implemented gradually – cluster by cluster – and involved a corresponding number of site visits. It was absolutely necessary for all service platform configurations, capacity additions and the mobile handover configuration from one network to the other to be implemented before national roaming could be activated for the customers in that particular area. The aim was a consolidated network, or "golden grid". National roaming had to provide all services to both groups of customers in all parts of the network.
- 156 The assumption that the merged company could use 2 x 20 MHz at 1800 MHz for LTE was unfounded. It was possible to recoup investments for spectrum assigned until 2025. Furthermore, LTE 1800 coverage provided by E-Plus would not be available for GSM traffic after completion of the merger. Firstly, coverage was only very small. Secondly, implementation of LTE required national roaming, which could not, however, be implemented so quickly.
- 157 With respect to the frequencies at 900 MHz, Telefónica said that the possibility of refarming 900 MHz spectrum for UMTS 900 use in 2015 and 2016 largely depended on the outcome of the frequency assignment procedure for Project 2016. Even if the 900 MHz spectrum was used for UMTS, this would not create additional capacities to serve GSM traffic.
- 158 The possibility of moving voice traffic from the GSM 1800 MHz band to the 2 GHz or 900 MHz band largely depended on the network overlap of both traffic layers. Even if it were in principle possible, it could not be done at national level within the time frame of 2014 and 2015, Telefónica said.

Appropriateness of the time frame

- 159 Vodafone stated that, in assessing the appropriateness of the time frame for returning the spectrum, insufficient account had been taken of the distortion of competition arising immediately after approval of the merger. The merged company's interest in being able

to continue using the frequencies – referred to several times in the draft decision – was not reflected as such in the Telecommunications Act and was to remain subordinate to the aim of non-discrimination. Further, significantly less weight should be given to the interest of the frequency assignment holder as the cause of the distortion. By contrast, the Bundesnetzagentur was obliged to take preventive action against the unlawful situation that was highly likely to occur to the competitors' disadvantage on approval of the merger and to keep any competitive distortion resulting from the merger to an absolute minimum in terms of time and in material terms. However, the merged company's interest in continuing to use the frequencies could in any case only apply to those frequencies that were absolutely necessary to maintain nationwide coverage without any loss of quality.

- 160 With respect to eliminating the distortion of competition directly resulting from the merger, the planned re-award of frequencies was not a relevant factor in determining the time scale. The Chamber overestimated the planning time needed to enable competitors to use the spectrum as soon as possible. Vodafone was highly interested in using the frequencies immediately after approval of the merger. Owing to the planning that could be done before the award and to the fact that a large number of mobile sites were equipped with single radio access network (SRAN) technology, LTE 1800 rollout could begin immediately after assignment of the frequencies. There were no clear technical or commercial reasons why the frequencies could not be vacated within a few months after approval of the merger. It was possible to implement national roaming within a very short space of time and without considerable effort. This issue should be clearly separated from the question of full network migration, it was said.
- 161 Telekom also called for the frequencies concerned to be vacated in good time to enable them to be re-used by 1 January 2016 at the latest.
- 162 By contrast, Telefónica called for a significant extension to the deadline set in the draft for the return of spectrum in the 900 MHz and 1800 MHz bands. If the merged company was required to return the frequencies at 900 MHz and 1800 MHz as early as 31 December 2015, it would not have sufficient spectrum to support GSM traffic up to the end of 2016. GSM traffic could not be easily relocated to UMTS networks in areas without UMTS coverage. And even in areas with UMTS coverage, there was likely to be a negative impact on both voice and data transmission where UMTS cells were already operating at high capacity. The merged company would consequently have to contend with a reputation for bad network quality, in turn involving a significant loss in market shares.
- 163 The Chamber also assumed that the 2 x 10 MHz at 1800 MHz acquired by E-Plus for use until 2025 could be used to migrate GSM customers. These frequencies were, however, already being used for LTE. The Bundesnetzagentur's proposal would halt or reverse LTE rollout in this band, which would not only devalue the investments already made but also lead to a degradation in the coverage provided for LTE customers. This is in contradiction with the regulatory aims set out in section 2(1) para 1 and section 2(1) para 5 TKG.
- 164 Furthermore, it was not correct to say that the European Commission's decision on the proposed merger would provide the merged company with adequate planning certainty. This assumption failed to recognise the fact that both companies would remain competitors even after the decision because the merger could not be completed until other conditions had been met. Moreover, there were other uncertainties linked to Project 2016.
- 165 Nor was the Bundesnetzagentur correct in saying that all the circumstances were solely within the merged company's sphere of risk. Meeting the time frame would largely depend on the participation of the Bundesnetzagentur itself.

No need for short term action at 800 MHz, 2 GHz, 2.6 GHz and 3.5 GHz

- 166 Telekom underlined that greater account should be taken of the effects on 2 GHz spectrum distribution in the market.
- 167 Voice traffic was currently always routed via UMTS or GSM. Only UMTS supported voice and broadband data communications simultaneously. UMTS would therefore play a key role in the next few years. The 2 GHz spectrum could not be seen as equivalent to and interchangeable with 1800 MHz until after that.
- 168 The 1800 MHz and 2 GHz bands were, however, precisely equivalent in terms of technology and market dynamics with regard to the need for short term action to correct imbalances in the bands. Any such action therefore needed to be taken in both bands at the same time.
- 169 Since the use of UMTS for voice and data services was still increasing enormously on account of the large numbers of terminal equipment in the market, additional capacity would already be required in the short term. Without the merger, the increase in demand for 2 GHz spectrum would affect all network operators to the same extent, but in the event of the merger would primarily affect one competitor. The additional demand as a result of a merger had, however, not been foreseeable at the time of the auction in 2010.
- 170 The merged company should therefore be required to transfer 2 x 15 MHz in the 2 GHz band (for use as soon as possible but at the latest by 1 January 2016) to another company in the German mobile market, it was said. The spectrum should be transferred primarily by spectrum trading or transferring usage rights. All withdrawn spectrum should be vacated by 31 December 2015 at the latest.
- 171 Short term action to correct imbalances was still needed even if the European Commission required the merged company to relinquish for instance 2 x 10 MHz in the 2 GHz band, since this would only have an effect if a new operator entered the German mobile market. In any case, however, the merged company would have to relinquish a further 2 x 5 MHz to other mobile operators to redress the remaining imbalance.
- 172 Furthermore, one respondent – referring to the proposed investigation into spectrum distribution – said that it was clearly unlawful not to conduct an investigation required under section 55(8) TKG until after the frequencies had been transferred. A transfer of frequencies could only be agreed to after an investigation had been conducted and had established that distortion of competition was not to be feared in the relevant market. An assessment of the state of competition was to be made on the basis of the current facts and the findings were to be substantiated.

A.10 Substantive proposals

- 173 Vodafone proposed in its submission of 21 June 2014 that
- the merged company be required to return by 31 December 2014 or, alternatively, by 30 June 2015 the frequencies in the 900 MHz and 1800 MHz bands whose current assignment term does not run beyond 2016. In any event, the frequencies not required to ensure continuity of mobile coverage for the merged company's customers are to be vacated immediately.
- 174 Referring to its previous submission, Telekom proposed the following in its letter of 24 June 2014:
1. Ruling Chamber 1 authorises Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG to use the frequencies held by both companies after the acquisition of E-Plus Mobilfunk GmbH & Co. KG by Telefónica Deutschland Holding AG in accordance with the following provisions.
 2. Such authorisation is granted in accordance with section 36(2) para 2 VwVfG on the following conditions:

a) Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG each transfer to other companies, by means of spectrum trading (section 62 TKG) or transfer of usage rights (section 55(8) TKG), the frequencies in the 1800 MHz band whose current assignment term does not run beyond 2016 and comprising at least 2 x 15 MHz without delay and by 31 December 2014 at the latest;

b) Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG each transfer to other companies, by means of spectrum trading (section 62 TKG) or transfer of usage rights (section 55(8) TKG), frequencies in the 900 MHz band comprising 2 x 5 MHz without delay and by 31 December 2014 at the latest;

c) Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG each transfer to other companies, by means of spectrum trading (section 62 TKG) or transfer of usage rights (section 55(8) TKG), frequencies in the 2.1 GHz band comprising a total of 2 x 15 MHz without delay and by 31 December 2014 at the latest.

3. In the event that Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG do not transfer the frequencies according to 2a) to 2c) to other companies as required by 31 December 2014, they must return these frequencies to the Bundesnetzagentur by 31 December 2014 to enable the Bundesnetzagentur to re-award the frequencies in open, objective, transparent and non-discriminatory proceedings as soon as possible.

B Frequency regulation aspects of the proposed merger between Telefónica and E-Plus

175 The decision is based chiefly on the following legal grounds.

B.1 Procedural legality

176 The decision is in conformity with the regulations on responsibility and proceedings.

B.1.1 Responsibility

177 Under section 2(2) in conjunction with (1) para 2 of the Bundesnetzagentur Act (Gesetz über die Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen) of 7 July 2005 (Bundesnetzagentur Official Gazette I page 1970, 2009), last amended by Article 2 of the Act of 26 July 2011 (Bundesnetzagentur I page 1554), the Bundesnetzagentur performs the federal administrative duties in the field of telecommunications law allocated to it by or pursuant to a law.

178 Section 55(3) sentence 1 TKG gives the Bundesnetzagentur the administrative duty of assigning frequencies for particular usages as individual assignments. Assignment of this duty includes the power, under section 55(8) and section 60(2) sentence 2 TKG, to modify frequency assignments and, under section 63 TKG, to revoke frequency assignments. This also includes the examination required by section 55(7) TKG.

179 Nor is the application of national law rendered invalid on this occasion by Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (OJEU L 24/1 of 29 January 2004, EC Merger Regulation), since the Bundesnetzagentur does not examine the general effect of a proposed merger in the relevant product and geographic market in terms of competition law.

180 Under Article 21(3) of the Merger Regulation, Member States shall not apply their national legislation on competition to any concentration with a Community dimension. This is not of relevance to application of the rules on frequency regulation to secure efficient and interference-free use of frequencies (section 52(1) TKG). It is the Bundesnetzagentur's responsibility to examine, through the prism of telecommunications

- law, the frequency regulation aspects of the planned merger to ensure that discrimination is not to be feared as a result of the companies' spectrum holding and that efficient use of spectrum can continue into the future. The Bundesnetzagentur therefore looks at the telecommunications law aspects of the proposed merger under the statutory requirements set out in section 55(8) and section 55(7) in conjunction with section 63 TKG, focusing on the monocausal link between the spectrum distribution resulting from a merger and any ensuing discrimination or inefficient frequency usage.
- 181 Functional responsibility within the Bundesnetzagentur lies in this case with the President's Chamber, in accordance with section 132(1) and (3) TKG. Under these provisions, the Bundesnetzagentur makes decisions through the President's Chamber in cases as described in section 55(10) TKG, amongst others.
- 182 The question of functional responsibility within the Bundesnetzagentur is important not only for the application of the special provisions of Ruling Chamber proceedings as set out in sections 132 to 136 TKG, but also for the admissibility of the remedies. Section 137(2) and (3) TKG allows Ruling Chamber decisions to be challenged using a process of law differing from that prescribed by the Code of Administrative Court Procedure. To speed legal protection, no preliminary proceedings (protests) may take place (section 137(2) TKG), nor can decisions by the Administrative Court be appealed (section 137(3) TKG).
- 183 The President's Chamber has functional responsibility in accordance with section 132(1) and (3) TKG because the decision it is required to take is concerned with the review of the distribution of frequency usage rights when resources are scarce within the meaning of section 55(10) TKG.
- 184 As set out in section 55(10) sentence 1, the Bundesnetzagentur may, without prejudice to section 55(5) TKG, order that the assignment of frequencies be preceded by award proceedings based on conditions according to section 61 TKG as determined by the Bundesnetzagentur if insufficient frequencies are available for assignment or more than one application is made for particular frequencies.
- 185 This provision is applicable both as regards ordering award proceedings and deciding to do without award (cf BVerwG, NVwZ 2011, 613 (616) margin no 30) and, additionally, in respect of looking at the distribution of frequency usage rights when resources are scarce.
- 186 The fact that the President's Chamber is responsible does not, however, rule out individual procedural questions needing attention prior to a decision on the ordering of award proceedings being clarified separately in advance of the Chamber dealing with the matter (cf BVerwG, NVwZ 2011, 613 (616), margin no 29).
- 187 To be distinguished from such preparatory or regulatory measures, however, are cases in which a functionally relevant band becomes free at the same time which, as such, can be made available to the market in accordance with objective criteria relatively easily (cf BVerwG, NVwZ 2011m 613 (616), margin no 30).
- 188 Under these criteria, the present decision on regulatory remedies on account of discrimination in the spectrum holdings as a consequence of the examination required to implement section 55(8) and section 55(7) in conjunction with section 63 TKG is also an instance of section 55(10) TKG.
- 189 This remedy would be implemented in two steps. First, the partial revocation (restriction or withdrawal) of the existing frequency usage rights and second, the reallocation of these frequencies.
- 190 At any rate, the decision on the frequency regulatory aspects of the proposed merger falls to the President's Chamber under the legal criteria set out above, as the Chamber sees no reason, at the time of the decision at least, to doubt the scarcity of frequencies as referred to in section 55(10) sentence 1 TKG. The area of application of section

- 55(10) TKG covers not just ordering award proceedings for expiring frequency assignments, but it also covers cases connected with examining the distribution of frequency usage rights, when resources are scarce, during the period of validity of the assignments. The Chamber sees no reason to doubt that a decision on the frequency regulatory aspects of the proposed merger has to be seen in the context of scarce resources. This view is supported simply by the fact that potential new entrants as well as the companies competing with the merging undertakings are calling for a redistribution of the spectrum in their favour. At the same time, Telefónica has declared that it plans to continue using the spectrum itself until at least 2017.
- 191 The decision to make the frequencies that have been returned or whose usage rights have been revoked available within the meaning of section 55(5) sentence 1 para 2 TKG for reallocation is directly related to the decision to end the validity of the current assignments.
- 192 The frequency regulatory considerations underlying this intervention include all the measures for consideration in the event of likely discrimination within the meaning of section 55(1) and (8) and section 55(7) in conjunction with section 63 TKG (see also Article 9 of Directive 2002/21/EC (Framework Directive) and Article 14 of Directive 2002/20/EC (Authorisation Directive) as amended on 25 November 2009 (2009/140/EC)) being established, and thus also the matter of the revocation of existing frequency usage rights, for this revocation would be a necessary interim step in assigning frequencies to another company.
- 193 The Chamber is not obliged to conduct formal proceedings to establish whether the frequencies assigned in the 900 MHz and 1800 MHz bands until the end of 2016 are a scarce resource. Compliance with section 55(10) sentence 1 TKG is given if frequencies are not available for assignment in sufficient numbers or if more than one application has been made for particular frequencies.
- 194 This particular case thus differs from the typical case addressed by section 55(10) sentence 1 TKG as the question at stake as a result of the examination is whether existing frequency usage rights will be assigned anew during their period of validity. The Chamber believes that the ongoing exercise of these usage rights and the express refusal to divest part of the spectrum the merging companies have been assigned constitutes, in this atypical case, the functional equivalent of applications for frequency assignment that form the basis for establishing scarcity in the second alternative of section 55(10) sentence 1 TKG. The 900 MHz and the 1800 MHz bands are assigned in full until 31 December 2016 at the earliest. This also holds good for the bands at 800 MHz, 2 GHz, 2.6 GHz and 3.5 GHz, assigned in some cases until 2020/2021 and until 2025. Moreover, the competitors, and potential new entrants, want to have further frequencies in these bands assigned. Even assuming that the competitors and any new entrants met all the other requirements for assignment, assignment would fail for the sole reason that the spectrum was not available for assignment. This situation meets the criteria of section 55(10) sentence 1, 2nd alternative TKG. Hence all the Bundesnetzagentur's decisions on this, no matter whether as a result of an application or ex officio, are decisions on scarce resources.
- 195 Thus the Chamber does not agree with the view that it is not functionally responsible on account of scarcity not having been established.
- 196 Even without this understanding of section 55(10) sentence 1, 2nd alternative TKG, the Chamber would establish scarcity via a prognosis as referred to in section 55(10) sentence 1, 1st alternative TKG. According to this prognosis which takes into account the frequency requirements set out above, the number of applications submitted at the time will exceed the amount of available spectrum. This prognosis is based on an identification of excess demand. The Chamber has no power of interpretation with this identification as such (cf BVerwG ruling of 22.06.2011 – 6 C 3.10 –, margin no 25).

- 197 A proven, robust process for identifying demand is available in the shape of formal demand identification proceedings which comply, moreover, with the EU's specified criteria of objectivity, transparency and non-discrimination. Admittedly, formal demand identification proceedings are not explicitly prescribed in section 55(10) TKG. If such proceedings are not held before the decision is issued, as in this case, the Chamber is required in any event to fall back on knowledge and evidence that promises, in comparable manner, to identify current spectrum requirements accurately and hence is not less suitable as the basis for its prognosis of (in)sufficient spectrum availability (cf BVerwG ruling of 22.06.2011 – 6 C 3.10 –, margin no 28).
- 198 The proceedings, in general, that have been conducted and the responses of the parties concerned and the new entrants, in particular, provide knowledge and evidence that promise, in comparable manner, to identify current spectrum requirements accurately. On more than one occasion the merging companies have expressly or tacitly rejected the redistribution requests of the competitors and potential new entrants. If the Chamber were to revoke frequency assignments of one or both of the merging companies in the 900 MHz or the 1800 MHz band in particular, an application for assignment of the newly available spectrum would be made in any case by the company affected by the revocation, in addition to the other parties seeking assignment. Hence there is insufficient spectrum available at present for the total requested assignments.
- 199 This is without prejudice to the matter of spectrum scarcity in the separate proceedings referenced BK 1-11/003 (Project 2016), in which all the frequencies from the 900 MHz and 1800 MHz bands whose assignments expire on 31 December 2016 will be provided.
- 200 Accordingly, the President's Chamber has functional responsibility under section 132(1) and (3) TKG.

B.1.2 Proceedings

- 201 The procedural provisions were upheld.
- 202 Proceedings for the examination according to section 63 TKG in conjunction with section 55(7) TKG and section 55(8) TKG were instituted by the President's Chamber on its own initiative, as provided for by section 134(1) 1st alternative TKG.
- 203 It is incumbent on the President's Chamber under section 63 TKG in conjunction with section 55(7) and (8) TKG (see also Article 9 of the Framework Directive and Article 14 of the Authorisation Directive) to study the frequency regulatory aspects of the proposed merger through the prism of telecommunications law to make sure that discrimination in the relevant product and geographic market is not to be feared as a result of the companies' spectrum holding and efficient use of frequencies can continue into the future.
- 204 The Chamber wishes to draw attention to the following in response to the view put forward that nothing should be done at national level before the result of the European Commission's merger probe was known. The Bundesnetzagentur supports the European Commission according to the principle of loyal cooperation in its tasks performed under the Merger Regulation. This approach guarantees concurrent and consistent decisions in terms of both competition law and frequency regulation. Proceedings at European and at national level were carried out in parallel so as to give the market clarity, and hence planning and investment certainty, at the earliest possible opportunity. The Commission announced on 2 July 2014 that it would conditionally approve the merger.
- 205 The Bundeskartellamt was involved as required by section 123 TKG.
- 206 Under section 134(2) paras 2 and 3 TKG Telefónica, E-Plus, Telekom and Vodafone will take part in the proceedings according to section 55(8) and section 55(7) in conjunction with section 63 TKG. Section 134(2) para 2 TKG provides for the operators of public telecommunications networks and the providers of publicly available telecommunications

services against whom the proceedings are directed to take part in proceedings before the Chamber. The companies named above are such operators and service providers. Moreover, they are holders of frequency usage rights in the 800 MHz, 900 MHz, 1.8 GHz, 2 GHz, 2.6 GHz and 3.5 GHz bands affected by the proposed merger, which is why the President's Chamber decision, which completes the proceedings, is addressed to them. Also, applications to attend the proceedings were submitted by Telekom und Vodafone.

- 207 The parties concerned and other interested parties were given the opportunity on several occasions to state their views, as provided for by section 135(1) TKG. The matter was decided by the President's Chamber on the basis of oral proceedings in accordance with section 135(3) sentence 1. The decision was reached through open, transparent, non-discriminatory proceedings attended by the companies concerned and interested groups. The Chamber held public oral proceedings on 5 May 2014 at which the facts, the legal situation and the interests were discussed at length with all present. This also provided the opportunity for participants to state their views on core issues, key elements and the draft decision.
- 208 In response to one view that a final position was not possible because the European Commission's reasons for a possible approval of the merger were not yet available and that the draft decision would have to be amended to match the EU decision that had precedence, the Chamber wishes to draw attention to the following. The European Commission examines the effects of the proposed merger in the relevant product and geographic market in terms of competition law, on the basis of the Merger Regulation. By contrast, the Bundesnetzagentur examines the telecommunications law aspects of the proposed merger with reference to the statutory requirements set out in section 55(8) and section 55(7) in conjunction with section 63 TKG, focusing on the monocausal link between the spectrum distribution resulting from the merger and any ensuing discrimination or inefficient frequency usage. It is therefore quite possible to take a stance on the Bundesnetzagentur's proceedings without knowing the reasons for the Commission's decision. That aside, interested groups were likewise able to take part in the Commission's consultation procedures and voice their interests and concerns.
- 209 In response to objections that the period for commenting was too short, the Chamber pointed out that overall, there had been several opportunities to do so, in particular as regards the key elements underpinning the decision. And nothing new of relevance to the decision was put forward in the oral proceedings on 5 May 2014 that had not been previously put forward and considered. To those saying that the oral proceedings on 5 May 2014 were of an informal nature only, the Chamber would point out that all the respondents had been given ample opportunity in the proceedings to air their views on the facts and considerations put forward by the Chamber, in accordance with section 135(3) sentence 1 TKG. All the interested parties had room to expand on their interests and concerns and to put forward facts they considered to have a bearing on the decision.
- 210 The European law requirements of Article 9 of the Framework Directive and Article 14 of the Authorisation Directive were thus accommodated too.
- 211 The Ruling Chambers and departments operating in the telecommunications sector, in accordance with section 132(4) TKG, have been informed of the intended decision and given the opportunity to comment.

B.2 Substantive legality

- 212 The decision is in conformity with substantive law.
- 213 The frequency regulation checklist for the proposed merger derives most notably from section 55(1) sentence 3 and (7) and (8), section 63(1) and section 52 in conjunction with section 2 TKG in connection with the principle of independent competitors which underlies GSM and UMTS licensing and frequency assignments.

- 214 It is the Bundesnetzagentur's responsibility to examine, through the prism of telecommunications law, the frequency regulation aspects of the planned merger to ensure that discrimination is not to be feared as a result of the companies' spectrum holding and that efficient use of spectrum can continue into the future. The Bundesnetzagentur therefore looks at the telecommunications law aspects of the proposed merger under the statutory requirements set out in section 55(8) and section 55(7) in conjunction with section 63 TKG, focusing on the monocausal link between the spectrum distribution resulting from a merger and any ensuing discrimination or inefficient frequency usage (cf B.1 for more details).
- 215 To respondents stating that it was for the Chamber to determine the relevant product and geographic market for examination according to section 55(8) TKG, the Chamber wishes to draw attention to the following. In connection with the proposed merger the Chamber considered whether the other assignees in the public mobile market that had acquired frequency usage rights essentially in proceedings for the award of scarce resources were likely to be discriminated against as a result of the merger on account of the existing spectrum holdings. In this connection the Chamber refers to its pronouncements in the proceedings concerning the examination of frequencies distribution for Article 1(2) of Directive 87/372/EEC (BK 1-11/001, cf 78/2011, page 4106, Bundesnetzagentur Official Gazette 23/2011 of 7 December 2011, margin no 294 f).
- 216 The requirements for the Chamber to allow use of Telefónica's and E-Plus's frequencies – possibly via their subsidiaries – after Telefónica has acquired control of E-Plus subject to the merging companies returning their frequency assignments in the bands from 880 MHz to 915 MHz, from 925 MHz to 960 MHz and 1710 MHz to 1780.5 MHz and from 1805 MHz to 1875.5 MHz early, before the expiry date of 31 December 2016, are met. In particular, it can be established that discrimination on account of the spectrum holdings in the 900 MHz and 1800 MHz bands arising from the merger is likely in the short term. Partial early return of existing frequency assignments is consistent with the legal bounds of discretion, given that there are reasons of a nature and weight that make reallocation during the current period of validity appear necessary and proportionate.
- 217 Besides being given shape in the TKG as a regulatory principle, competitive independence was already a requirement for the assignment of the GSM frequency usage rights and for bidders to quality for the auction in 2000. Thus Part C, point 2 of the licences of both Telefónica and E-Plus states that holders of UMTS frequency usage rights must have competitive independence. And so the principle applies that the Bundesnetzagentur has to secure the competitive independence of holders of frequency usage rights when there is a scarcity of resources. This principle forms an integral part of licences and frequency assignments under section 61(3) sentence 2 and (6) TKG in conjunction with the award rules. In the most extreme case the Bundesnetzagentur can enforce this by revoking the assignment in question.
- 218 Accordingly, it was necessary to make sure that both companies were independent in competition terms prior to the decision on the planned merger. In light of this, the Bundesnetzagentur has asked both Telefónica and E-Plus to take appropriate action to ensure their competitive independence in the present proceedings.
- 219 To those disputing the principle of competitive independence the Chamber would draw attention specifically to its pronouncements on the award of the UMTS licences (cf Administrative Order 13/2000, Regulierungsbehörde für Telekommunikation und Post Official Gazette 4/2000 of 23 February 2000, page 518). These award rules are, amongst other things, an integral part of the licences / frequency assignments – also noted in Part C, point 2 of the UMTS licences – which continue under section 150(4) TKG. In particular, the competitive independence of the licensees must be guaranteed after licence grant for the whole of the licence term.
- 220 The Chamber therefore believes that, in line with the philosophy and intent of section 55(1) sentence 3 and subsections (7) and (8), section 63(1) and section 52 in

conjunction with section 2 TKG, non-discriminatory spectrum holdings must be secured for all the market players for the entire period of the assignments when resources are scarce.

221 Section 55(3) sentence 1 TKG gives the Bundesnetzagentur the administrative duty of assigning frequencies for particular usages as individual assignments. Assignment of this duty includes the power, under section 55(8) and section 60(2) sentence 2 TKG, to modify frequency assignments and, under section 63 TKG, to revoke frequency assignments. This also covers the examination required under section 55(7) TKG.

222 This view derives from section 52(1) TKG, which assigns the following spectrum management duty to the Bundesnetzagentur:

"In order to secure efficient and interference-free use of frequencies and in consideration of the further regulatory aims set out in section 2, frequency bands shall be allocated and divided for frequency usages, frequencies assigned and usages supervised."

Under section 55(1) sentence 3, frequencies are assigned

"...for a particular purpose in accordance with the Frequency Plan and in a non-discriminatory manner on the basis of transparent and objective procedures." Section 55 TKG transposes Article 9 of the Framework Directive, according to which *"Member States [...] shall ensure that spectrum allocation used for electronic communications services and issuing general authorisations or individual rights of use of such radio frequencies by competent national authorities are based on objective, transparent, non-discriminatory and proportionate criteria."*

223 In respect of planned mergers entailing the transfer or lease of frequency usage rights, section 55(8) TKG states the following:

"Applications for a change in the frequency assignment are to be submitted without undue delay to the Bundesnetzagentur, in text form, with supporting documents, when

1. frequency usage rights are to be transferred by singular or universal succession,

(...)

In these cases, the frequencies may continue to be used until such time as a decision is taken on the application for a change in the assignment. The application shall be granted when the requirements for frequency assignment according to subsection (5) are satisfied, distortion of competition in the relevant product and geographic market is not to be feared and the efficient and interference-free use of frequencies is secured. Any frequencies no longer used are to be returned without undue delay by means of a written declaration (...)"

224 In respect of planned mergers entailing a change in ownership structure, section 55(7) TKG states the following:

"The Bundesnetzagentur is to be notified without undue delay of the beginning and the cessation of usage. It shall also be notified of any change of name, change of address, change in ownership structure and any identity-preserving transformations."

Section 55(7) should be considered in conjunction with section 63(1) TKG, which settles the following:

"...The frequency assignment may also be revoked, apart from in the cases specified in section 49(2) of the Administrative Procedure Act, where

1. one of the preconditions according to section 55(5) and section 57(4) to (6) is no longer given;
2. an obligation arising from the assignment is severely or repeatedly violated or has not been fulfilled despite repeated requests for fulfilment,
3. distortion of competition after the frequency assignment is probable, or
4. distortion of competition is to be feared as a result of a change in ownership structure in the person of the assignee."

Section 2(3) para 2 TKG requires the Bundesnetzagentur to apply

"objective, transparent, non-discriminatory and proportionate regulatory principles in pursuing the aims set out in subsection (2) by, amongst other things, (...) ensuring non-discrimination in comparable circumstances for operators of telecommunications networks and providers of telecommunications services."

- 225 In response to Telefónica stating that section 55(7) TKG was relevant and non-discriminatory spectrum holdings were not part of the checklist under the provision, the Chamber wishes to clarify the matter as follows.
- 226 In both cases of section 55(7) and (8) TKG the Chamber examines whether discrimination is likely on account of the spectrum distribution occasioned by the merger and inefficient use of spectrum likely as a result.
- 227 The Chamber, based on what the merging companies put forward, sees the area of application of section 55(8) as relevant since Telefónica is acquiring sole control of E-Plus and its subsidiaries, which have frequency assignments, and notified the Bundesnetzagentur accordingly by its letter of 16 August 2013. The merger of the two competitors and the end of their competitive independence gives Telefónica control over the assignees and thus control over exercise of the licence / frequency usage rights. This is not changed by the fact that, as the merging companies declare, the frequency usage rights of E-Plus are not yet, at any rate, to be transferred to Telefónica. As far as Telefónica states in this connection that no application according to section 55(8) TKG has been made and the decision is therefore unlawful, the Chamber draws attention to the following. On the one hand, the merging companies have stated that the merger also aims to transfer the usage rights to a Telefónica subsidiary. On the other, they said they would begin to consolidate their mobile networks once the merger had been approved, which presupposes that the spectrum be leased, at any rate, for use by the merged company. Leasing, as transfer, comes under section 55(8) TKG.
- 228 A distinction between section 55(7) and (8) TKG is not ultimately necessary in respect of a possible requirement to show cause and bear the burden of proof. The Chamber believes – also because of its own extensive fact-finding – that measures are necessary to prevent discrimination as a result of the merger. That is why, contrary to Telefónica's opinion, there can be no shift in the obligation to show cause and bear the burden of proof. Ultimately, the matter of a distinction between section 55(7) and (8) TKG can be left open as the same checklist is relevant in both cases.
- 229 What is important is to prevent discrimination within the meaning of section 55(1) sentence 3 in conjunction with section 2(2) para 2 and subsection (3) para 2 TKG and Article 9 of the Framework Directive for market players as a result of the merger, both in cases of frequency usage rights being leased or transferred and in the case of a change in an assignee's ownership structure that affects competitive independence. No market player should gain a considerable advantage or incur a considerable disadvantage as a result of regulatory action or failure to apply a necessary regulatory remedy. On the contrary, the principle of non-discrimination must be upheld. It should be remembered that the spectrum holding is an elementary factor in the provision of mobile services. The

mobile operators compete for customers via the services they offer. Hence a discrimination probe must take into account that a non-discriminatory spectrum holding here results not just from the capacity requirements of the operators' own customers but also from the competitors' holdings.

- 230 The spectrum in question was awarded essentially in open, transparent and non-discriminatory proceedings to competitively independent competitors. These proceedings allowed the market players to acquire competition-friendly spectrum packages, based on their own business models and in full knowledge of the competitors' packages. The merger of two competitors and the end of the competitive independence of the two thus poses the question of whether the other competitors are being discriminated against on account of the spectrum redistribution occasioned by the merger. This is particularly relevant in view of the fact that two competitors are merging and two complete spectrum packages are being put together.
- 231 Regulatory measures to prevent discrimination must be in conformity with the regulatory aims, according to section 55(7) and (8) TKG. Under section 52 in conjunction with section 2(2) TKG one of the aims of regulation, besides securing the efficient use of frequencies, fair competition and promoting markets with sustainable competition, is to expedite the rollout of public high speed next generation telecommunications networks.
- 232 In the view of the President's Chamber, the aim of the proceedings according to section 55(7) and (8) TKG is therefore to secure non-discriminatory spectrum holdings for the high speed telecommunications networks of all the network operators concerned.

B.2.1 Need for short term action at 900 MHz/1800 MHz

- 233 In the case of the planned merger under assessment, frequency regulation measures are required to ensure non-discriminatory spectrum holdings for high speed telecommunications networks.
- 234 There is a need for short term action in the frequency bands at 900 MHz/1800 MHz. Telefónica and E-Plus are required to return by 31 December 2015 the frequencies in the 900 MHz and 1800 MHz bands whose current assignment term does not run beyond 2016.
- 235 Spectrum in the 900 MHz and 1800 MHz frequency bands is assigned as follows:

Frequency band	Telefónica	E-Plus	Telefónica /E-Plus	Vodafone	Telekom
900 MHz	5.0 MHz	5.0 MHz	10.0 MHz	12.4 MHz	12.4 MHz
1800 MHz	17.4 MHz	27.4 MHz	44.8 MHz	5.4 MHz	20 MHz
Total spectrum 900 MHz: 34.8 MHz, Total spectrum 1800 MHz: 70.2 MHz					
Percentage approx (900 MHz)			28.8%	35.6%	35.6%
Percentage approx (1800 MHz)			63.8%	7.7%	28.5%
Percentage approx (total)			52%	17%	31%

Spectrum in 2 x ...MHz (paired)

- 236 The merged company has approximately 52% of the total spectrum in the bands at 900 MHz and 1800 MHz and currently uses the spectrum primarily for GSM services.

The largest difference in spectrum holdings in the 1800 MHz band is between Vodafone with only 7.7% of the frequencies and the merged company with 63.8% of the frequencies (a ratio of more than 1:8). A large part of this spectrum is assigned for a limited period until 31 December 2016, hence this ratio would remain for approximately two and a half years from approval of the merger.

- 237 In the Chamber's view, this aggregation of frequencies held by Telefónica and E-Plus after the merger is expected to be discriminatory against competitors. The Chamber's assessment is based on the following fundamental considerations: Firstly, the spectrum holding is a result of the merger and not of objective, transparent and non-discriminatory proceedings. Secondly, neither the customer numbers nor the traffic volumes of the two companies justify the need by the merged company for such an amount of spectrum compared to the competitors. Furthermore, the merged company is capable in the short term of utilising the large capacities of both networks for all its customers through national roaming and benefiting from the resultant additional advantages in terms of traffic theory.
- 238 Roaming is a functional element of all standard mobile technologies (GSM/UMTS/LTE) and can therefore, in principle, be implemented in the short term. In addition, Telefónica in particular has several years' experience of national roaming with GSM through its past cooperation with Telekom. In the Chamber's view, no facts were presented either in the written submissions or at the public hearing on 5 May 2014 to suggest that the merged company cannot in principle use national roaming in the GSM and UMTS networks. The Chamber therefore assumes that the merged company is capable of using national roaming to improve capacity within the existing networks or to relocate traffic by migrating subscribers to one network. This view is also shared by the competitors Telekom and Vodafone. In their view, too, it is possible to vacate GSM frequencies in the short term through national roaming.
- 239 The Chamber draws attention here to the fact that the measures to clear some of the current GSM spectrum before expiry for use for broadband systems is to be separated from the issue of fully consolidating the two networks.
- 240 In the Chamber's view, it is at least to be feared, but also likely that the merged company will push forward the deployment of LTE at 1800 MHz – which has already been started – as swiftly as possible, thus gaining a considerable advantage on account of its spectrum holding which the competitors will not necessarily be able to offset. Nationwide rollout of LTE 1800 would not be necessary to gain this advantage; deployment in conurbations would alone be sufficient. By contrast, full consolidation of both networks may take a relatively long period of time. The merged company, by virtue of its spectrum holding at 900 MHz/1800 MHz (2 x 54.8 MHz paired), is the only company that could use at least 2 x 20 MHz (paired) for LTE in parallel to the spectrum required for a GSM network in the frequency band at 1800 MHz. The merged company is therefore in a position to introduce new services using, for instance, LTE technology alongside GSM in the short term and considerably improve its competitive position vis-à-vis its competitors. The merged company is capable of expanding its large customer base with improved offers in terms of capacity, quality and price and hence gaining an advantage from the merger by virtue of its spectrum holding.
- 241 In respect of Telefónica's argument that it would not use 2 x 20 MHz (paired) at 1800 MHz for LTE in the short term on account of the different expiry dates, the Chamber points out that this would in fact be possible; one reason is that current radio technology is flexible in terms of the technology and amount of frequencies used and hence investments are largely independent of the spectrum volume. Here, the Chamber took particular account of the fact that E-Plus launched LTE in several towns and cities at the beginning of March 2014.
- 242 In the Chamber's view, the amount of spectrum held by the merged company at 900 MHz/1800 MHz is not justified with a view to non-discrimination and efficient

- frequency usage. Even if the merged company used 2 x 20 MHz (paired) for LTE services at 1800 MHz, it would – with a comparable number of customers – still have about twice as much spectrum for GSM services as its competitors. Vodafone, for instance, has only 2 x 17.8 MHz (paired) for GSM in these frequency bands. This competitor does not have comparable spectrum resources to be able to introduce LTE alongside GSM in these frequency bands in the short term.
- 243 Furthermore, there are concerns since the merged company, with almost the same number of customers as its competitors, would hold half of the spectrum in the 900 MHz and 1800 MHz bands. The competitors would therefore not be able to react promptly to the asymmetries resulting from the merger. With regard to the principle of efficient frequency usage, Telefónica did not say why – even given the use of 2 x 20 MHz (paired) for broadband technologies – the amount of GSM spectrum, being twice as much as its competitors', was not sufficient to provide its own customers with adequate GSM capacity without any relevant loss of quality.
- 244 In respect of the 900 MHz band, Telefónica said that it was not currently possible to use its frequencies for UMTS (2 x 5 MHz paired). In the President's Chamber's view, however, the merged company can use at least part of its spectrum at 900 MHz for broadband services in the short term given the availability of twice as much spectrum (2 x 10 MHz paired) after the merger. Here, too, the President's Chamber draws attention to the fact that it would be possible to deploy UMTS in the 900 MHz band; one reason is that current radio technology is flexible in terms of the technology and amount of frequencies used and hence investments are largely independent of the spectrum volume.
- 245 To redress the imbalance in spectrum holdings at 900 MHz and 1800 MHz and the likely associated disadvantages, the merged company is required to return by 31 December 2015 the frequencies in the 900 MHz and 1800 MHz bands whose current assignment term does not run beyond 2016. The time from approval of the merger until 31 December 2015 is seen as a reasonable period of time to vacate and return these frequencies.
- 246 In respect of calls to require the merged company to return specific amounts of spectrum at 900 MHz/1800 MHz, the Chamber draws attention to the fact that the amount of spectrum will not be defined in administrative proceedings, in light also of the short terms of the usage rights in these bands. Rather, the amount of spectrum to be returned will be determined by the companies in line with their business models in open, transparent and non-discriminatory proceedings.
- 247 In respect of voice services, the merged company also has UMTS capacities at 2 GHz enabling some of the voice traffic to be moved from the 1800 MHz band to the 2 GHz band.
- 248 Although Telefónica said that the UMTS networks were already operating at high capacity, in the Chamber's view the merged company has wider ranging UMTS capacities and spectrum than its competitors. Here, the President's Chamber took account both of the four mobile operators' figures for (voice and data) traffic volumes in the GSM, UMTS and LTE networks in 2013 and of the merged company's frequency usage plans. The Chamber appreciates in particular the fact that voice traffic is of only secondary importance in relation to the total capacity of the UMTS networks since voice traffic requires considerably less capacity than data traffic.
- 249 Since a considerable proportion of all mobile subscribers already have UMTS-enabled devices, their voice traffic can in principle be carried via UMTS networks. Furthermore, it can be assumed that a large proportion of the other subscribers use their devices to a lesser extent (eg a high number of prepaid customers) and hence produce less voice traffic. The Chamber therefore assumes that one of the two GSM networks operated by the merging companies is sufficient to provide coverage for those GSM subscribers whose voice traffic cannot be migrated to the UMTS networks. In addition, the next few

years will see a further decrease in the proportion of devices that only support GSM and so the proportion of voice traffic that cannot be migrated will decrease anyway.

- 250 Telefónica agrees that it is basically possible to migrate GSM traffic to the UMTS network. In the company's opinion, however, technical implementation at national level as a prerequisite for migration within the time frame of 2014 and 2015 is not feasible. In the Chamber's view, it would not be necessary to migrate all the traffic from both GSM networks to the UMTS networks. It would only be necessary to migrate the GSM traffic that could not be accommodated in the merged company's GSM network on account of insufficient capacity. The Chamber also points out in light of the data survey that traffic migration would probably be centred in areas with particularly high mobile traffic volumes (eg conurbations). The Chamber therefore believes that it is possible to migrate some of the voice traffic from the GSM networks in the short term. In addition, the Chamber points out that it will be possible to acquire further spectrum capacity in the period up to the end of 2015. Hence it is essentially up to the merged company to decide how much spectrum should be returned early.
- 251 In its considerations the Chamber has taken account of the fact that measures for capacity bottlenecks can be taken at a large number of sites but, as Telefónica says, not at all the sites operated by both companies.
- 252 Hence the merged company is capable of moving some of the voice traffic from the 1800 MHz band to the 2 GHz band.
- 253 Even if – as Telefónica says – one GSM network could not provide adequate capacity for all customers, the Chamber believes that the merged company has sufficient certainty to plan the migration of voice traffic since after 2016 it is expected to have at least 2 x 15 MHz (paired) that can be used for GSM (2 x 5 MHz (paired) at 900 MHz and 2 x 10 MHz (paired) at 1800 MHz).
- 254 The merged company can thus choose to migrate voice traffic from some of the spectrum at 1800 MHz to either 900 MHz, 1800 MHz spectrum assigned until 2025 or 2 GHz, depending on individual requirements and regional circumstances (eg 900 MHz in rural areas and 2 GHz in urban areas).

B.2.2 Appropriateness of the time frame

- 255 The period of time allowed for vacating and returning the frequencies – until 31 December 2015 – is appropriate. Until this date the merged company's interest in being able to continue using the assigned frequencies at 900 MHz/1800 MHz to guarantee mobile coverage for its customers without any relevant loss of quality prevails. After this date, to avoid discrimination and ensure efficient frequency usage, the interest of the competitors as well as that of the public and of potential new entrants in being able to use the frequencies earlier prevail.
- 256 According to section 63 sentence 2 para 4 TKG, a frequency assignment may be revoked if distortion of competition is to be feared as a result of a change in ownership structure in the person of the assignee. Section 63 sentence 3 TKG states that the period of time until revocation becomes effective must be appropriate. Following this legal notion, the period of time allowed for the merged company to vacate and return frequencies must be appropriate. The appropriateness of the time frame is determined by weighing up the interests of all the parties involved as well as public and individual interests. In determining the appropriate period of time the Chamber must safeguard the regulatory aims set out in section 2(2) in conjunction with section 52 TKG.

Here, the Chamber considered the following:

- 257 On the one hand, the period of approximately 18 months from the decision on the proposed merger in mid-2014 until the early return of the frequencies by 31 December 2015 gives the merged company a sufficient degree of flexibility for network migration without any relevant loss of quality for the customers. On the other hand, the period of

time allowed also ensures that competitors can react promptly to the merged company's spectrum holding. Competitors must be able to begin using the frequencies as soon as possible after re-award to compete with the merged company for customers. This holds particularly true in light of the fact that E-Plus already offers LTE.

- 258 In the Chamber's view, vacating the spectrum by 31 December 2015 is necessary and appropriate for the competitors as well, in view of the planned re-award of the spectrum in spring 2015. After the spectrum has been re-awarded, competitors need to plan for the use of the newly acquired frequencies in their existing networks. Vacating the spectrum earlier would, at best, carry limited positive implications for the competitors. The Chamber therefore assumes that the competitors' interest in using the frequencies as from 1 January 2016 outweighs the merged company's interest in using the spectrum.
- 259 In respect of Vodafone's comments to the effect that, in particular owing to current technology, it was possible to rollout LTE 1800 in the immediate term and that there was also an interest in doing so, the Chamber points out that – even if the possibility exists – this interest was taken into account when weighing up the various concerns and interests in determining the time frame. These include the consumer interest within the meaning of section 2(2) para 1 TKG in uninterrupted mobile coverage for the merged company's customers.
- 260 By contrast, the Chamber has also taken the fact into account that the merged company may have to vacate a large amount of spectrum – up to 2 x 35 MHz (paired) at 1800 MHz. In the Chamber's view, it is unlikely that all these frequencies will be returned as called for by respondents. The Chamber has, however, considered this as a possible scenario and has therefore acknowledged the fact that the merged company has an interest in continuing to use the frequencies after they have been re-awarded.
- 261 Telefónica stated in its written submissions and at the hearing that migration in the 900 MHz/1800 MHz bands would take approximately two and a half years. According to Telefónica, the frequencies would be needed until the end of 2016 to avoid any loss of quality for the merged company's customers. With more than 40,000 sites it was the biggest network consolidation in the mobile sector in Europe, Telefónica said.
- 262 The Chamber believes, however, that it will be possible to vacate the frequencies by 31 December 2015.
- 263 The Chamber has taken account of the fact that the merged company will be able to begin planning future frequency usage in line with its business model for vacating and returning the frequencies as soon as the merger is approved, ie in mid-2014. The merged company also has planning certainty in so far as it will have frequencies in the 900 MHz/1800 MHz bands beyond 31 December 2016.
- 264 In spite of Telefónica's comments to the effect that other conditions had to be met before the merger could be completed, the Chamber adheres to its considerations. Here, it is up to Telefónica itself to ensure that the necessary conditions are fulfilled as soon as possible. There are no clear indications in Telefónica's comments either why the conditions cannot be met by mid-2014.
- 265 After 31 December 2015, the merged company will have 2 x 10 MHz (paired) in the 1800 MHz band whose assignment expires on 31 December 2025. In this connection, it is planned to relocate the 1800 MHz frequency usage rights assigned until 2025 as soon as possible to enable planning for network migration to begin immediately upon approval of the merger. It is necessary to relocate these two frequency blocks anyway on the grounds of efficient frequency usage (section 52 TKG).
- 266 In respect of Telefónica's comments to the effect that the 2 x 10 MHz in the 1800 MHz band acquired by E-Plus for use until 2025 could not be used to migrate GSM customers since they were already being used for LTE, the Chamber points out that it is up to the merged company to decide which technology to use for the frequencies assigned on a technology-neutral basis. As regards the fact that E-Plus has already launched

LTE 1800 in several towns and cities, it should be pointed out that this does not prevent the merged company from using the 1800 MHz frequencies in other areas for GSM. Moreover, the merged company has further resources in other frequency bands that it can use to deploy LTE. In addition, the Chamber points out that it will be possible to acquire further spectrum capacity in the period up to the end of 2015, which means that less spectrum would need to be returned early.

- 267 Furthermore, the consultation document on the award of frequencies in the bands at 900 MHz and 1800 MHz and other frequencies (BK 1-11/003; Project 2016) provides for a frequency reserve of 2 x 5 MHz (paired) at 900 MHz for the current mobile operators.
- 268 Hence, in light of the various options open to the merged company as presented above, the uncertainties linked to Project 2016 referred to by Telefónica were not suited to calling a planning basis into question.
- 269 The award of the frequencies in the 900 MHz and 1800 MHz bands – planned for the second quarter of 2015 – will also provide planning certainty for the use of other frequencies in these bands. Furthermore, the merged company will have other frequencies at 2 GHz that can be incorporated into the plans for vacating the 900 MHz/1800 MHz spectrum. In particular voice traffic can be moved from 900 MHz/1800 MHz to the two UMTS networks.
- 270 The Chamber has taken account of the competitors' comments to the effect that it was possible to clear frequencies within the space of a few months, or in any case within one year. In the Chamber's view, vacating the spectrum within one year – ie by mid-2015 – in the interests of the competitors does not, however, outweigh the merged company's interest in being able to continue using the frequencies at least until the end of 2015.
- 271 In respect of Vodafone's comments to the effect that the interest of the merged company, as the cause of the competitive distortion, in being able to continue using the frequencies was to remain subordinate to the aim of non-discrimination, the Chamber points out that the regulatory aims and principles require an overall assessment to be made of the relevant interests and legal positions of all parties concerned. These include the consumer interest within the meaning of section 2(2) para 1 TKG in uninterrupted mobile service provision by the merged company.
- 272 The procedure for determining the time frame is also in accordance with the regulatory aims and principles set out in section 2 subsections 2 and 3 in conjunction with section 52 TKG. In particular with a view to the regulatory aim according to section 2(2) para 1 TKG the time frame is such that consumer interests are safeguarded through reasonable migration times and continuity of mobile coverage is not compromised. The time frame ensures that virtually full coverage for mobile customers is maintained. To safeguard consumer interests, account was also taken of the aim to make the spectrum resources available for competitive broadband coverage as soon as possible. Likewise the time frame also secures fair competition and promotes telecommunications markets with sustainable competition in services and networks and in associated facilities and services, in rural areas as well, in accordance with section 2(2) para 2 TKG. The timescale for returning spectrum early also contributes towards encouraging a variety of services at reasonable prices and promoting infrastructure-based competition. At the same time, the time frame is in keeping with the regulatory aim of expediting the rollout of public high speed next generation telecommunications networks according to section 2(2) para 5 TKG and secures the efficient use of frequencies within the meaning of section 2(2) para 7 TKG by making the spectrum available to the market in good time. Securing the efficient and interference-free use of frequencies is also the Bundesnetzagentur's fundamental task under section 52 TKG.
- 273 In following these aims, the Chamber applies objective, transparent, non-discriminatory and proportionate regulatory principles in accordance with section 2(3) para 2 TKG by guaranteeing that there is no discrimination between telecommunications network operators and telecommunications service providers in comparable circumstances.

- 274 These aims and principles serve the interests of the general public.
- 275 To ensure these aims and principles, Telefónica is required to provide quarterly reports on the status of the measures (planning and actual implementation) according to point 2 of this decision. Following re-award of the frequencies at 900 MHz/1800 MHz, Telefónica is required to provide quarterly reports on the status of the measures for vacating its spectrum not assigned beyond 31 December 2015.

B.2.3 No need for short term action at 800 MHz, 2 GHz, 2.6 GHz and 3.5 GHz

- 276 In the Chamber's view, there is no need for short term action in the frequency bands at 800 MHz, 2 GHz, 2.6 GHz and 3.5 GHz to ensure non-discriminatory spectrum holdings.
- 277 It is not sufficient to take an overall look at the amount of spectrum held to identify potential discrimination. Rather, it is necessary to look at the options open to the merged company as a result of its combined spectrum holdings in these bands to determine whether or not it will be in a position immediately after the merger to gain such advantages that would lead to discrimination against its competitors.
- 278 The Bundesnetzagentur, taking an overall view, will investigate the need for action in respect of the post-merger spectrum holdings in particular at 2 GHz in light of the future spectrum holdings in the 900 MHz and 1800 MHz bands. In respect of comments to the effect that a transfer of frequencies could only be agreed to after an investigation under section 55(8) TKG had been conducted and had established that distortion of competition was not to be feared in the relevant market, the Chamber points out that – having considered all known circumstances and facts – there is, in the Chamber's view, currently no sufficient factual basis for short term regulatory action in the bands at 800 MHz, 2 GHz, 2.6 GHz and 3.5 GHz.

The situation in the individual bands is as follows:

800 MHz

- 279 In the 800 MHz frequency band, Telefónica, Vodafone and Telekom are each assigned 2 x 10 MHz (paired) until 31 December 2025, the spectrum being suitable in particular for coverage with LTE broadband services.

Frequency band	E-Plus	Telefónica	Telefónica /E-Plus	Vodafone	Telekom
800 MHz	0 MHz	10 MHz	10 MHz	10 MHz	10 MHz
Total spectrum: 30 MHz					
Percentage approx	0%	33%	33%	33%	33%

Spectrum in 2 x ...MHz (paired)

- 280 Given a merger between Telefónica and E-Plus, all network operators would have the same amount of spectrum for mobile broadband deployment in this frequency band. In this band, all competitors have the same options for providing mobile broadband services across the country. There is therefore no need for frequency regulation action in this band. The comments received did not identify any specific need for action on account of discrimination, either.

2.6 GHz (paired)

- 281 In the 2.6 GHz (paired) band, each competitor would hold a frequency block of between 2 x 20 MHz (minimum) and 2 x 30 MHz (maximum) in the case of the merger.

Frequency band	E-Plus	Telefónica	Telefónica /E-Plus	Vodafone	Telekom
2.6 GHz (paired)	10 MHz	20 MHz	30 MHz	20 MHz	20 MHz
Total spectrum: 70 MHz					
Percentage approx	14%	29%	43%	29%	29%

Spectrum in 2 x ...MHz (paired)

- 282 Each competitor thus has at least 2 x 20 MHz (paired) and therefore sufficient spectrum for technically optimal deployment of broadband systems such as LTE, hence the President's Chamber again does not see the need for short term frequency regulation action in this band.
- 283 Furthermore, no discrimination is expected from spectrum holdings in this band in the short term since these frequencies are currently used primarily to supplement capacity in urban areas (such as hot spots), in contrast to the frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2 GHz bands.

Unpaired spectrum

- 284 In the 2 GHz and 2.6 GHz frequency bands, unpaired spectrum is assigned.

Frequency band	E-Plus	Telefónica	Telefónica /E-Plus	Vodafone	Telekom
2 GHz (unpaired)	5 MHz	19.2 MHz	24.2 MHz	5 MHz	5 MHz
2.6 GHz (unpaired)	10 MHz	10 MHz	20 MHz	25 MHz	5 MHz
Total spectrum: 84.2 MHz					
Percentage approx	18%	35%	52%	36%	12%

- 285 The frequencies of most significance to mobile communications in Europe are the paired bands at 800 MHz, 900 MHz, 1800 MHz and 2 GHz.
- 286 In the President's Chamber's view, there is currently no need for frequency regulation action in the unpaired bands on account of expected discrimination against competitors. Mobile technology for the unpaired bands at 2 GHz and 2.6 GHz is not yet sufficiently available in Europe for the mass market or is not yet used. These frequencies are currently used in particular to supplement capacity in hot spots.
- 287 In respect of comments questioning the efficient use of frequencies and calling for spectrum to be redistributed in favour of competitors and potential new entrants, it should be noted that the merger is not expected to bring about a change in terms of efficient frequency usage. The Chamber expects that the (paired and unpaired) frequencies at 2.6 GHz will be used more extensively following the swift rollout of broadband networks – in particular with LTE – using the frequencies at 800 MHz and 1800 MHz.

3.5 GHz

- 288 In the 3.5 GHz frequency band, E-Plus is assigned 2 x 42 MHz (paired). The other parties concerned do not have any spectrum in this band. The merger between Telefónica and E-Plus would therefore not bring about a change in spectrum distribution in the 3.5 GHz band.
- 289 The Chamber does not expect LTE to be deployed in the short term to such an extent that it would result in discrimination. Attention is also drawn to the fact that further frequencies in the 3.5 GHz band are available for assignment. The Chamber therefore does not currently see the need for frequency regulation action.

2 GHz (paired)

- 290 In the Chamber's view, there is no need for short term action in the 2 GHz band since there is currently no indication of possible discrimination between the parties concerned in respect of the re-award of frequencies in particular at 900 MHz and 1800 MHz.
- 291 In respect of possible medium to long term effects of an asymmetrical frequency distribution resulting from the merger in the 2 GHz band, there is in the President's Chamber's view currently no sufficient factual basis for a decision about the ordering of measures in this frequency band.
- 292 The Bundesnetzagentur, taking an overall view, will investigate the need for action in respect of the post-merger spectrum holdings at 2 GHz, taking into consideration the future spectrum holdings at 900 MHz and 1800 MHz after the frequencies have been re-awarded. In respect of comments to the effect that there was already a need for short term action at 2 GHz and that a specific amount of spectrum should be returned and included in the award proceedings for the frequencies in the 900 MHz and 1800 MHz bands, the Chamber points out that in its view it is sufficient to reassess the situation in this band in an investigation into spectrum distribution soon after the 900 MHz/1800 MHz spectrum has been re-awarded, in order to take any measures necessary to prevent discrimination resulting from the post-merger spectrum holding.
- 293 In the paired frequency band at 2 GHz, which is currently used for UMTS technology, Vodafone has approximately 2 x 15 MHz (paired) and Telekom has approximately 2 x 10 MHz (paired). The merged company has approximately 2 x 35 MHz (paired).

Frequency band	E-Plus	Telefónica	Telefónica /E-Plus	Vodafone	Telekom
2 GHz (paired)	19.8 MHz	14.85 MHz	34.65 MHz	14.85 MHz	9.9 MHz
Total spectrum: approx 60 MHz					
Percentage approx	33%	25%	58%	25%	17%

Spectrum in 2 x ...MHz (paired)

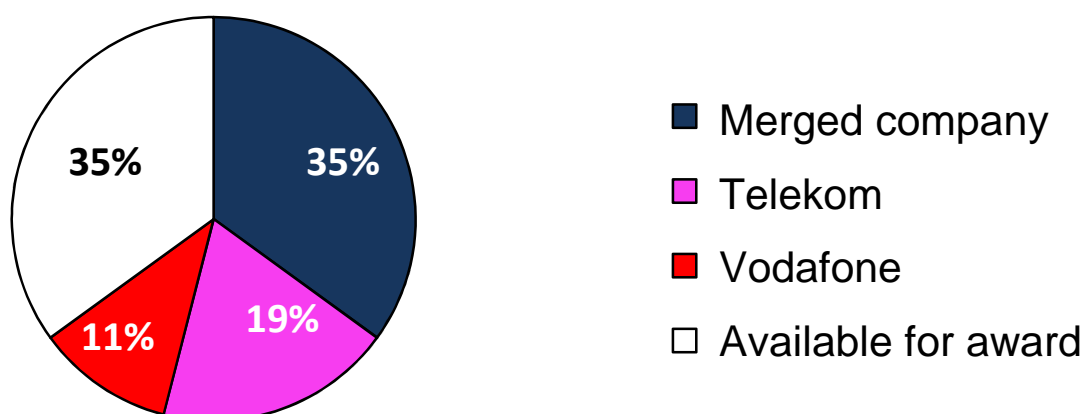
- 294 The merged company will have more than half of the paired spectrum in the 2 GHz band as from mid-2014. The largest difference in spectrum holdings in the 2 GHz frequency band is between Telekom with only 17% of the frequencies and the merged company with approximately 58% of the frequencies (a ratio of more than 1:3). The majority of these frequencies are assigned for a limited period until 31 December 2020.
- 295 Even if the 2 GHz band is currently used only for UMTS (data and voice services), it is suited to providing broadband services. The band is comparable to the 1800 MHz band – which is used for mass market broadband services using LTE technology – in respect of its propagation characteristics and the services offered. Once LTE is introduced at 2 GHz, the band will also be comparable to 1800 MHz in respect of the technology used.

In the Chamber's view, the 1800 MHz and 2 GHz bands are to be looked at together as regards the provision of broadband services.

296 Here, the fact must be taken into account that all network operators have long term spectrum assignments at 1800 MHz and 2 GHz (expiry in 2020/2025). Vodafone has a total of approximately 2 x 15 MHz (paired) beyond 2016 and Telekom approximately 2 x 25 MHz (paired). The merged company has approximately 2 x 45 MHz (paired) in these bands. The re-award of 2 x 45 MHz (paired) in the 1800 MHz band gives the competitors the opportunity to react promptly after the merger.

Frequency band	Telefónica/E-Plus	Vodafone	Telekom	Available for award
1800 MHz	10 MHz	0 MHz	15 MHz	45 MHz
2 GHz (paired)	34.65 MHz	14.85 MHz	9.9 MHz	0 MHz
Σ spectrum	44.65 MHz	14.85 MHz	24.9 MHz	45 MHz
Total spectrum: approx 130 MHz				
Percentage approx	35%	11%	19%	35%

Spectrum in 2 x ...MHz (paired)



Spectrum distribution in the bands at 1800 MHz and 2 GHz following the merger and before re-award

297 Each network operator will have the opportunity in the proceedings for re-awarding the spectrum at 1800 MHz to acquire a suitable and non-discriminatory spectrum package in these bands in line with its business model.

298 Even if the merged company could improve its UMTS capacity because of its spectrum holding at 2 GHz, it should be taken into account that it is not solely the volume of spectrum that determines the capacity in a network. In addition to the amount of spectrum and the technology deployed, network density is an important factor in the provision of network capacity. It is in principle possible for the competitors to react to the merged company's capacity by increasing the density of their networks or by deploying broadband technology in other frequency bands.

299 In respect of comments to the effect that UMTS cannot be replaced by LTE in the short term and that the competitive provision of UMTS at 2 GHz is extremely crucial for the medium and long term market success of every provider, the President's Chamber points out that the differences between the spectrum holdings do not necessarily result in discrimination. Even if one measure alone might not be possible to prevent discrimination, it is up to the companies to provide the services via their (LTE or UMTS)

networks in such a way as to meet the customers' demand. In particular, one company introducing LTE at 1800 MHz has already rolled out a high speed broadband network.

- 300 In addition, in respect of comments to the effect that – owing to the widespread use of UMTS devices – many customers take up LTE via UMTS, the Chamber does not see this as a reason for short term action in the 2 GHz band. In respect of the use of terminal equipment, a large range of LTE-enabled devices is already available in the market, and the relatively short life cycles mean that it is possible in the short term to penetrate the market to such an extent that UMTS is not a precondition for LTE take-up.
- 301 Respondents also said that the merged company, by virtue of its spectrum holding, could theoretically introduce new technologies such as LTE in parallel to UMTS and hence gain a competitive advantage. In the Chamber's view, however, this is not to be expected in the short term.
- 302 Furthermore, the Chamber, in assessing a need for short term action at 2 GHz, also took into account the fact that the merged company is required to return spectrum in the 1800 MHz band before expiry. It should be noted here that the Chamber's assessment concerning the early return of frequencies also took into account the merged company's spectrum holding in the 2 GHz band. The merged company is capable of moving voice traffic from the 1800 MHz band to its UMTS network in the short term. With this also in mind, the Chamber does not currently see any discrimination as a result of the merged company's larger spectrum holding at 2 GHz. However, the Chamber will, taking an overall view, investigate the need for action in particular at 2 GHz in light of the spectrum holdings of all competitors following the re-award of frequencies in the 900 MHz and 1800 MHz bands (investigation into spectrum distribution).
- 303 Moreover, the Chamber has also taken into account the merged company's commitments in connection with the merger control proceedings.

B.2.4 Continuity of existing rights and obligations

- 304 Any existing rights and obligations of the two merging companies arising from their licences and frequency assignments, in particular the rollout and coverage obligation and the obligation to provide offers for service providers, are not affected by the Chamber's agreement to the use of the frequencies after the acquisition of E-Plus by Telefónica.
- 305 The assignments granted to the mobile operators included a coverage obligation in accordance with section 55(5) and section 60 in conjunction with section 61 TKG to ensure the availability of infrastructure (Article 87f of the Basic Law) and the regulatory aims of section 2(2) TKG. It is necessary, in particular in the consumers' interest in the existing nationwide provision of voice communication services in accordance with section 2(2) para 1 TKG and to secure efficient use of frequencies in accordance with section 2(2) para 7 and section 52 TKG, to ensure that the coverage obligations imposed in the licences and frequency usage rights continue to apply in full. A reduction in the population coverage through the merger of two mobile operators is not consistent with the regulatory aims. At the same time, efficient use of the frequencies assigned can be ensured throughout the country.
- 306 The aim is, in the consumers' interest, to maintain and promote the existing competitive nationwide provision of telecommunications services by mobile operators which cannot be fully replaced by other services or infrastructures provided under intermodal competition. In particular the growing demand for mobile services and the call for "everywhere availability" can only be met by mobile networks with a high degree of coverage.
- 307 The mobile operators have stated that their mobile services cover almost 100% of the population. In view of the regulatory aims it is therefore appropriate and expedient for the

merged company to continue fulfilling the higher coverage obligation arising from the licence and frequency usage rights.

- 308 The Chamber draws attention to the fact that maintaining the current population coverage of nearly 100% was a deciding factor in determining the timescale for the early return of frequencies in the 900 MHz/1800 MHz bands.
- 309 The obligation to provide service providers with non-discriminatory access to services (cf also section 150(4) TKG) continues to apply to the merged company. This is underpinned by the necessity for continuity of such an obligation in the interests of maintaining security of supply within the meaning of section 2(2) para 1 TKG in light of the number of customers of the service providers and the promotion of sustainable competition within the meaning of section 2(2) para 2 TKG. In this connection, the Chamber draws attention to the fact that the obligations with respect to service providers relate to specific persons and not to specific frequencies. The Chamber stated the following in its decision of 12 October 2009 (BK 1a-09/002, Administrative Order No 59/2009, Bundesnetzagentur Official Gazette 20/2009, page 3730):

"The Chamber draws attention in this connection to the fact that the GSM and UMTS/IMT-2000 licences still include obligations with respect to service providers. This follows in particular from section 150(4) TKG. Since these service provider obligations form a constituent part of licences granted to specific persons and whose regulations still produce legal effects, the obligations continue to apply irrespective of the frequencies assigned. The call for the service provider obligations included in the "old-type licences" to be withdrawn can therefore not be met. Nor can the service provider obligation be restricted to specific frequencies held by a licence/frequency assignment holder on account of the regulation in the licences granted to specific persons."

C Exercise of discretion

- 310 In the Chamber's view it is not only correct (not an abuse of discretion), but also appropriate, to reallocate the 900 MHz and 1800 MHz spectrum, eliminating the causes of discrimination, for the period beginning 1 January 2016 in open, objective, transparent and non-discriminatory proceedings in conjunction with the early return of 900 MHz/1800 MHz spectrum by the merging companies.
- 311 Partial early return of the merged company's existing frequency assignments by 31 December 2015 is consistent with the legal bounds of discretion, given that there are reasons of a nature and weight that make early reallocation during the current period of validity appear necessary and proportionate.
- 312 Contrary to the view of some respondents, the Chamber is not obliged to ask the merging companies to return their assignments for administrative redistribution purposes. Discretion as to whether or not to take action is not reduced to zero (ie the outcome is not a non-discretionary decision). Respondents calling for the merged company to return specific amounts of spectrum were told by the Chamber that amounts should not be specified in administrative proceedings, not least because of the short period of validity of the usage rights in the 900/1800 MHz bands. Rather, these frequencies should be determined by the companies in line with their business models in open, transparent and non-discriminatory proceedings. In the Chamber's view it would be correct, and appropriate, to examine, against the backdrop of today's anticipated medium term effects of the spectrum holdings resulting from the merger, notably in the band at 2 GHz, spectrum distribution once it is known how the 900 MHz and 1800 MHz spectrum is to be reallocated.
- 313 Even if, as one respondent asserted and contrary to what the Chamber believes, competition was likely to be distorted by the merger as a result of the distribution of the 2 GHz spectrum even in the short term, the Chamber would not be obliged to revoke the assignments, for redistribution purposes, during the remaining period of validity or to

- reallocate the frequencies together with those at 900 MHz and 1800 MHz. Discretion as to whether or not to take action is not reduced to zero.
- 314 Section 40 of the Administrative Procedure Act (VwVfG) requires discretion to be exercised in accordance with the purpose of the authorisation and the legal bounds of discretion to be observed. Discretion was exercised in consideration of the following.
- 315 The Chamber believes that discrimination against the competitors is likely to lie in the aggregation, in the merged company, of Telefónica's and E-Plus's 900/1800 MHz spectrum, as the spectrum holding results from the merger and not from objective, transparent and non-discriminatory proceedings. The competitors would not therefore be able to react promptly to the asymmetries produced by the merger.
- 316 The Chamber assumes that the merged company is capable of using national roaming to improve capacity within its present networks or to relocate traffic by migrating subscribers to one network.
- 317 The merged company, by virtue of its spectrum holding at 900 MHz/1800 MHz (2 x 54.8 MHz paired), is the only company that could use at least 2 x 20 MHz (paired) for LTE in the frequency band at 1800 MHz in parallel to the spectrum required for a GSM network. This would put the merged company in a position to introduce new services using, for instance, LTE technology alongside GSM in the short term and to improve its competitive position vis-à-vis its competitors considerably on account of its volume of spectrum. The merged company is capable of expanding its large customer base with improved offers in terms of capacity, quality and price and hence gaining an advantage by virtue of the spectrum holding resulting from the merger. The Chamber took particular account of the fact that E-Plus launched LTE in several towns and cities at the beginning of March 2014.
- 318 Neither the customer numbers nor the traffic volumes can justify the need for an amount of spectrum such as that held by the merged company, compared to the competitors.
- 319 In its decision on an early return of the merged company's 900/1800 MHz spectrum the Chamber took into account the concessions made by Telefónica in the European Commission's merger control procedure.
- 320 A consideration for the Chamber in determining a suitable period of time was that both the merged company and the two competitors had around 1.5 years in which to replan usage of the 900/1800 MHz spectrum and to offer their customers uninterrupted mobile voice services. Once the European Commission has approved the merger in mid-2014 the merged company can begin replanning its frequency usages for voice services on the basis of the assignments in the 1800 MHz band (2 x 10 MHz, paired), valid until 2025. The 1800 MHz frequency usage rights assigned until 2025 are to be relocated as soon as possible to enable planning for network migration to begin immediately upon approval of the merger. Furthermore, the consultation document on the award of spectrum in the bands at 900 MHz and 1800 MHz and further spectrum (BK 1-11/003; Project 2016) considers a frequency reserve of 2 x 5 MHz (paired) at 900 MHz for the current mobile operators. The two competitors Vodafone and Telekom can begin replanning around mid-2015 after completion of the proceedings to reallocate the 900/1800 MHz spectrum.
- 321 The Chamber has also taken account of the fact that, in addition to the frequency assignments in the 900 MHz/1800 MHz bands, the merged company also has UMTS capacity at 2 GHz that can be used to relocate some of the voice traffic from the 1800 MHz band to the 2 GHz band to ensure the provision of voice services.
- 322 A particular factor for consideration was that it was solely up to the merged company to use all the available resources such as radiofrequencies, sites, GSM and UMTS systems, multistandard terminals and, not least, financial resources to provide its customers with uninterrupted voice services. The Chamber's considerations stemmed from the fact that Telefónica, for many years, had used Telekom's mobile network for

national roaming to improve the reach and quality of its GSM network. And so the merged company has the expertise to implement national roaming fast. Added to this is the fact that national roaming as offered by the merged company is an internal measure. The merging companies have the potential to clear some of their frequencies in the 900/1800 bands in timely manner. It is not therefore evident that delaying the return beyond 31 December 2015 is necessary for the protection of consumer interests.

- 323 The Chamber cannot see any need for action in the other bands – most notably 2 GHz – with any certainty. It will examine the distribution of spectrum following reallocation in the 900 MHz and 1800 MHz bands in order to establish all the facts.
- 324 The early partial return of 900 MHz and 1800 MHz spectrum by 31 December 2015 in connection with reallocation in open, objective, transparent and non-discriminatory proceedings as well as the examination of frequencies distribution serve, in compliance with section 52(1) TKG, to secure the efficient use of frequencies and to promote the other relevant regulatory aims and principles set out in section 2(2) and (3) TKG. The Chamber took particular account of the regulatory aims of safeguarding user, most notably consumer, interests in telecommunications as per section 2(2) para 1 TKG, securing fair competition and promoting telecommunications markets with sustainable competition in services and networks as per section 2(2) para 2 TKG and expediting the rollout of public high speed next generation networks as per section 2(2) para 5 TKG. In following these aims, the Chamber applies objective, transparent, non-discriminatory and proportionate regulatory principles in accordance with section 2(3) para 2 TKG by guaranteeing that there is no discrimination between telecommunications network operators and telecommunications service providers in comparable circumstances. These aims and principles serve the interests of the general public.

Specifically:

C.1 Suitability

- 325 Early partial return by 31 December 2015 of 900/1800 MHz spectrum by the merging companies is a suitable means for achieving a legitimate purpose.
- 326 Reallocating the 900 MHz and 1800 MHz spectrum, thus eliminating the causes of discrimination, for the period beginning 1 January 2016 in open, objective, transparent and non-discriminatory proceedings in connection with early partial return of 900/1800 MHz spectrum by the merging companies ultimately serves to secure efficient use of frequencies as per section 52(1) TKG and thus to promote competition in the mobile market as per section 2(2) para 2 TKG and to expedite the rollout of public high speed next generation networks as per section 2(2) para 5 TKG.
- 327 If this is to be achieved, the Bundesnetzagentur must coordinate and manage use of this technically finite and valuable resource by assigning frequencies and, if appropriate, revoking assignments.
- 328 Notably the regulatory aims of securing fair competition, promoting telecommunications markets with sustainable competition in services and networks and expediting the rollout of public high speed next generation networks for broadband services require frequencies to be returned to the Bundesnetzagentur so that discrimination caused by the merged company's spectrum holdings need not be feared and efficient use of frequencies can continue into the future.
- 329 In this way the Bundesnetzagentur can make returned spectrum available to the market in line with demand for non-discriminatory spectrum packages for the rollout of high speed telecommunications networks for mobile broadband using LTE systems, for instance.
- 330 On the importance of the 900/1800 MHz spectrum for the rollout of broadband networks and realisation of the federal government's broadband strategy the Chamber had said the following in its draft document for consultation (BK 1-11/003; Project 2016):

"Lifting the restriction on GSM frequency usage rights, the Bundesnetzagentur paved the way for the frequencies to be used for broadband systems such as UMTS and LTE. Today already, the frequencies can be used in principle to offer broadband mobile data services. Their physical propagation properties make these two frequency bands well suited to satisfy rising consumer demand for new, innovative data services, both in rural and in urban areas. Doing so allows the potential of the 900 MHz and 1800 MHz spectrum to be exploited to the full, in future too, by the offer of mobile voice services and, in particular, by high speed mobile data services."

331 The federal government in 2009, in its broadband strategy, set ambitious goals for the promotion of broadband:

"A total of 75 percent of households should have high speed broadband access with transmission rates of at least 50 MB/sec by 2014. The government's goal is to deliver nationwide access with this high-speed broadband as soon as possible." (The Federal Government's Broadband Strategy page 5, downloadable at www.bmwi.de)

332 One of the aims, therefore, in awarding the 900 MHz and 1800 MHz spectrum is to set incentives to invest and to promote innovation and sustainable competition for the good of the consumer, thus supporting the federal government's goals.

333 Responding to Telefónica's assertion that the measures would mean delays in the merged company rolling out broadband for its approximate total of 43 million mobile customers, the Chamber pointed out that the measures following the regulatory aim of promoting the rollout of high speed next generation telecommunications networks applied to all the competitors with a total of some 115 million mobile customers. It must be noted in particular that the merged company has recourse to the resources and experience of two mobile operators for further broadband rollout, in the 800 MHz band, too.

334 That is why the return, or revocation if appropriate, of frequencies is a suitable means of achieving these regulatory aims if spectrum is not voluntarily divested by the assignee.

335 Contrary to the view of some respondents, the Chamber is not obliged to revoke the merging companies' frequency assignments for administrative redistribution purposes.

336 Discretion as to whether or not to take action is not reduced to zero, as administrative redistribution (revocation and reallocation by the Bundesnetzagentur on its own initiative) of the 900/1800 MHz spectrum for the remaining period until 31 December 2016 is not a suitable means for setting investment incentives and promoting innovation and sustainable competition for the benefit of the consumer or for securing the efficient use of frequencies as per section 52, section 2(2) and (3) TKG.

337 Administrative redistribution of the 900/1800 MHz spectrum for the remaining period until 31 December 2016 would give the competitors of the merged company a period of use of 1.5 years at best. Given the requirement set out in section 55(9) sentence 2 TKG that a time limit for the assignment must be appropriate to the service concerned and take into proper account payback on the necessary investments, administrative redistribution for a period of approximately 1.5 years would not give the competitors sufficient planning and investment certainty. Moreover, an additional decision on subsequent use of the frequencies beyond 31 December 2016 would be needed in the conceivable case of administrative redistribution, in order to safeguard the regulatory aims.

338 In the Chamber's view there are no objective reasons for either administrative redistribution or an administrative decision on use of the 900/1800 MHz spectrum beyond 31 December 2016 (redistribution and extension of the period of validity of the frequency assignment), in order to secure the above regulatory aims.

339 The consultations have shown that, as set out above, the spectrum affected by the proposed merger is a scarce resource. The three mobile operators Vodafone, Telekom and Telefónica as well as potential new entrants have all voiced their interest in assignment of the spectrum affected by the proposed merger. Section 55(10) TKG states that the Bundesnetzagentur "may" order, without prejudice to subsection (5), that assignment be preceded by award proceedings according to section 61 TKG. In the case of scarcity, award proceedings are normally ordered under the law (ie are the normal case). Thus a redistribution of the merged company's spectrum during the remaining period of validity or a redistribution in conjunction with an extension of the period of validity is possible only as an exception if this is advisable in consideration of the regulatory aims set out in section 2(2) TKG. Such administrative measures would be advisable only if conducting award proceedings was not a suitable means of securing the regulatory aims. On this, the Federal Administrative Court has stated the following:

"When scarcity is present, section 55(9) sentence 1 TKG generally rules out individual assignment of the frequencies concerned. In such a situation the Bundesnetzagentur's discretionary decision ("may"), in the normal case, is the issue of an order for award, following its commitment to basic rights (Article 12(1) and Article 3(1) of the Basic Law) and of the prohibition of discrimination in EU law (Article 5(2) second paragraph, and Article 7(3) of the Authorisation Directive); only by way of exception may an order for award not be issued, despite frequencies being in scarce supply (ruling of 26 January 2011, loc cit, margin no 25 with further references). Accordingly, considerations of an explicitly discretionary nature are not needed in the normal case, but only by way of exception." (BVerwG ruling of 23 March 2011, reference 6 C 6/10, margin no 23).

340 The prompt conduct of award proceedings will enable, on account of the total amount of spectrum available, both the mobile operators and potential new entrants to acquire non-discriminatory spectrum packages in line with their business models – but also in consideration of the changed market environment. In addition, with regard to the availability of sufficient spectrum, particular attention should be drawn to the fact that provision of the 700 MHz band would make available additional valuable frequencies for rolling out high speed next generation telecommunications networks and providing mobile broadband services in line with demand.

341 Thus the Chamber believes that conducting open, objective, transparent and non-discriminatory award proceedings as per section 55(10) TKG is a suitable way of setting incentives to expedite the rollout of high speed mobile networks and to promote innovation and sustainable competition for the benefit of the consumer and also to secure the efficient use of frequencies as per section 52, section 2(2) and (3) TKG.

C.2 Necessity

342 The partial early return, by 31 December 2015, of the merged companies' frequencies and award soon thereafter in open, objective, transparent and non-discriminatory proceedings is also necessary if the aims efficient use of frequencies and securing fair competition, that is to say promoting a market with sustainable competition, are to be achieved and the rollout of high speed mobile networks for mobile broadband to be expedited.

343 A suitable measure is necessary if there are no other more lenient, but equally effective, means with which to achieve the desired purpose.

344 Waiting until the merged company's usage rights in the 900/1800 MHz bands expire on 31 December 2016 is not a suitable way of preventing discrimination and thus securing the efficient use of scarce frequencies and the above regulatory aims and cannot, therefore, from the very beginning, be considered a more lenient means. The competitors would have no possibility in this case of responding in timely manner to the spectrum holding resulting from the merger. This would have a considerable impact on

the development of competition and services (section 2(2) para 2 TKG), the rollout of high speed telecommunications networks (section 2(2) para 5 TKG) and customer coverage and the user interests affected by this (section 2(2) para 1 TKG).

- 345 In its considerations the Chamber particularly acknowledged the fact that E-Plus, at the beginning of March 2014, had begun to operate LTE in some towns and cities and thus commenced rollout in economically important areas. Immediately after clearance of the merger by the European Commission, therefore, the merged company will be able to operate an LTE network in the 1800 MHz band with a minimum of 2 x 10 MHz (paired), in parallel with its GSM network.
- 346 The merged company, by virtue of its entire spectrum holdings at 900 MHz/1800 MHz (2 x 54.8 MHz paired), is the only company that could use at least 2 x 20 MHz (paired) for LTE in the frequency band at 1800 MHz in parallel with the spectrum required for a GSM network. This would put the merged company in a position to introduce new services using, for instance, LTE technology alongside GSM in the short term and to improve its competitive position vis-à-vis its competitors considerably on account of its volume of spectrum. The merged company is capable of expanding its large customer base with improved offers in terms of capacity, quality and price and hence gaining an advantage by virtue of the spectrum holdings resulting from the merger.
- 347 The Chamber believes it will be possible to clear the frequencies by 31 December 2015. This view also holds good in light of the concessions made by the merged company in the merger control procedure. In setting an appropriate period the Chamber has taken account of the competitors' comments to the effect that it was possible to clear frequencies within the space of a few months, or in any case within one year.
- 348 Even if – as Telefónica says – one GSM network cannot provide enough capacity for all the customers, the Chamber believes that the merged company has sufficient certainty to plan the migration of voice traffic relatively quickly, since after 2016 it is expected to have at least 2 x 15 MHz (paired) that can be used for GSM (2 x 5 MHz (paired) at 900 MHz and 2 x 10 MHz (paired) at 1800 MHz).
- 349 The merged company can thus choose to migrate voice traffic from some of the spectrum at 1800 MHz to 900 MHz, 1800 MHz spectrum assigned until 2025 or 2 GHz, depending on individual requirements and regional circumstances (eg 900 MHz in rural areas and 2 GHz in urban areas).
- 350 For these reasons a return of the frequencies by the merged company later than 31 December 2015 is inconsistent with the principle of non-discrimination. It is probable that a later return, for instance in mid-2016, or expiry of its 900/1800 MHz frequency usage rights on 31 December 2016 would constitute considerable discrimination against the other companies in the mobile market since the competitors would not be in a position to respond fast to the merged company's bigger spectrum holdings, most notably at 1800 MHz and 2 GHz.
- 351 A different assessment is not arrived at either by the line of thought that it is not technically or economically feasible, or reasonable, for the merged company to return these frequencies by 31 December 2015 on account of the complexity involved in clearing the frequencies at 900/1800 MHz. At any rate, Telefónica has not claimed any objective technical non-feasibility; nor can objective technical non-feasibility be assumed, according to what the competitors say, no matter how the situation is regarded.
- 352 As the technical and economic requirements for securing the efficient use of frequencies affect the merged company only, any (merger-related) requirements still to be met in respect of early return come solely under its sphere of risk.
- 353 Even if Telefónica replied that keeping to the time limit for the early return of spectrum would depend critically on the Bundesnetzagentur's input, the Chamber does not deny that measures might be required for a number of the merged company's sites. But not all the sites of the two companies would be affected by the partial early clearance of the

spectrum, in the Chamber's view. In this connection the Chamber wishes to point out that the matter of early spectrum clearance is to be kept separate from the matter of the full consolidation of the two networks. In response to concerns raised by Telefónica in particular with regard to sufficient assignments for radio relay, the Chamber emphasised that the Bundesnetzagentur had already optimised the application and approval processes for radio relay links in view of the large number of applications received.

- 354 This situation, particularly for reasons of non-discrimination as required under telecommunications law (section 2(2) para 2, (3) para 2 TKG), cannot lead to the merged company being freed from the early spectrum return requirement or to this return being moved from the 900/1800 MHz bands. Spectrum management requires that account be taken most notably of the regulatory aim of securing the efficient use of frequencies (section 2(2) para 7 TKG) as well as securing fair competition (section 2(2) para 2 TKG).
- 355 If an assignee that has acquired frequencies in award proceedings cannot guarantee operation of the network in a manner consistent with the requirements of these proceedings, the Bundesnetzagentur must also examine whether the frequencies assigned to this holder are being used efficiently as defined by the TKG. If the hindrance to remedying a discriminatory spectrum package or inefficient use of frequencies that is inconsistent with the regulatory aims falls within the sphere of the assignee, the supervisory authority would have to examine whether the subjective requirements for frequency assignment as per section 55(4) sentence 2 TKG, in particular specialist knowledge and efficiency, were still met.
- 356 Nor can there be a divergent interpretation of this for mergers of mobile companies. Besides being given shape in the TKG as a regulatory principle, competitive independence was already a requirement for assignment of the GSM frequency usage rights and for bidders to qualify for the auction in 2000. Thus Part C, point 2 of the licences of both Telefónica and E-Plus states that holders of UMTS frequency usage rights must have competitive independence. And so the principle applies that the Bundesnetzagentur has to secure the competitive independence of holders of frequency usage rights when there is a scarcity of resources. This principle forms an integral part of licences and frequency assignments under section 61(3) sentence 2 and (6) TKG in conjunction with the award rules. In the most extreme case the Bundesnetzagentur can enforce this by revoking the assignment in question.
- 357 As regards securing the efficient use of frequencies the same conditions apply to the merged company as to other parties that have acquired or successfully bid for a GSM or a UMTS licence or spectrum for wireless access. Hence all things considered, nothing can be seen outside the merged company's own entrepreneurial risk that would make a discrimination-eliminating remedy necessary at a later time than 31 December 2015.

C.3 Appropriateness

- 358 Ultimately the measure for the 900 MHz/1800 MHz bands is appropriate, too, since it is not out of proportion to the purpose of the legal powers.
- 359 The early return of some of the frequencies in the 900 MHz/1800 MHz bands does not conflict with any alternative re-use proposed by the merged company. Telefónica did not specify any company interested in acquiring the frequency usage rights in these bands.
- 360 The early return of 900 MHz/1800 MHz spectrum is also appropriate because it is necessary from a regulatory viewpoint to "retrieve" some of the frequencies assigned to the merging companies.
- 361 The return of a frequency assignment before expiry serves to secure efficient use of frequencies (cf section 52(1) and section 2(2) para 7 TKG) and thus promote competition in the mobile communications market (cf section 2(2) para 2 TKG). In particular the regulatory aim of promoting sustainable competition in the markets for mobile services requires the partial return of discriminatory spectrum packages or spectrum that is no

- longer being used efficiently to the Bundesnetzagentur so that it can be made available to the market for re-use in line with demand.
- 362 Nor does the measure conflict with basic rights, in particular Article 14(1) and Article 12(1) of the Basic Law.
- 363 The measures do not conflict with the protection of property arising from Article 14(1) of the Basic Law.
- 364 The question as to whether the freedom of ownership arising from Article 14(1) of the Basic Law also comprises the right to an established and operated business enterprise and whether this would be affected can be left open. The question as to whether the right to an established and operated business enterprise is protected by the guarantee of property arising from Article 14(1) of the Basic Law is a matter of fundamental debate. The Federal Constitutional Court has yet to take a clear position on this question. The Federal Court of Justice (BGHZ 92, 34 (37)), the Federal Constitutional Court (BVerwGE 62, 224 (226)) and some specialist literature (for instance Papier, in: Maunz/Dürig, Basic Law, 40th instalment, Article 14, margin no 95; Wendt, in: Sachs, Basic Law, Article 14, margin no 26) have assumed this.
- 365 According to the Federal Constitutional Court's ruling, the right to an established and operated business enterprise should in any case not have greater protection than its basis (BVerfGE 58, 300 (353)). For instance, an entrepreneur cannot invoke the right to an established and operated business if an authority acts lawfully (Papier, in: Maunz/Dürig, Basic Law, Article 14, margin no 105; Bryde, in: von Münch/Kunig, Basic Law, Volume 1, 5th edition, Article 14, margin no 20). Hence, an authorisation can be revoked even if it forms the basis for a business enterprise (Papier, in: Maunz/Dürig, Basic Law, Article 14, margin no 105; Bryde, in: von Münch/Kunig, Basic Law, Volume 1, 5th edition, Article 14, margin no 20). The economic consequences for the enterprise are, however, also to be taken into account (Papier, in: Maunz/Dürig, Basic Law, Article 14, margin no 106; Bryde, in: von Münch/Kunig, Basic Law, Volume 1, 5th edition, Article 14, margin no 20).
- 366 According to the Federal Constitutional Court (BVerwGE 62, 224 (226)), account is still to be taken of the fact that the content and limits of property are defined by the legislator in accordance with Article 14(1) sentence 2 of the Basic Law. Key here is therefore how the legislator, on the basis of the social circumstances, has set the legal framework within which the established and operated business enterprise can develop.
- 367 Even if it is assumed that the right to an established and operated business enterprise is protected by Article 14(1) of the Basic Law, the measure for the early return of spectrum does not infringe the merged company's right to an established and operated business enterprise. For even if an authorised party for instance shuts down an approved facility, causing investments to be lost (Jarass, in: Jarass/Pieroth, Basic Law, 5th edition 2000, Article 14, margin no 13), the freedom of ownership is not affected.
- 368 Furthermore, the Chamber has taken account of the fact that, in addition to the frequency assignments in the 900 MHz/1800 MHz bands, the merged company has UMTS capacity at 2 GHz that can be used to relocate some of the voice traffic from the 1800 MHz band to the 2 GHz band to ensure the provision of voice services.
- 369 In this respect the consequences of the early return of frequency usage rights is not out of proportion to the intended purpose.
- 370 Nor does the early return unduly infringe the merged company's occupational freedom arising from Article 12(1) of the Basic Law.
- 371 The merged company's activity is restricted, at most, in the way it is performed but not in the choice of activity. On account of the provisions of the TKG, it is reasonable to consider the activity as a public mobile network operator as an occupation or profession within the meaning of Article 12(1) of the Basic Law. For instance section 40(2)

sentence 3 TKG uses this term. By contrast, it would be inappropriate to regard the operation of a public GSM mobile network as an independent occupation or profession within the meaning of Article 12(1) of the Basic Law. Hence the early return does not take the opportunity away from the company to be active as an operator of a public mobile network in the first place.

372 According to the Federal Constitutional Court's rulings, restrictions on the practice of an occupation or profession are permitted if they are based on reasonable public interest considerations (fundamental decision BVerfGE 7, 377 (405f); most recent 93, 362 (369)).

373 The early partial return of 900 MHz and 1800 MHz spectrum by 31 December 2015 in connection with reallocation in open, objective, transparent and non-discriminatory proceedings serves, in compliance with section 52(1) TKG, to secure the efficient use of frequencies and to promote the other relevant regulatory aims and principles set out in section 2(2) and (3) TKG. The Chamber took particular account of the regulatory aims of safeguarding user, most notably consumer, interests in telecommunications as per section 2(2) para 1 TKG, securing fair competition and promoting telecommunications markets with sustainable competition in services and networks as per section 2(2) para 2 TKG and expediting the rollout of public high speed next generation networks as per section 2(2) para 5 TKG. In following these aims, the Chamber applies objective, transparent, non-discriminatory and proportionate regulatory principles in accordance with section 2(3) para 2 TKG by guaranteeing that there is no discrimination between telecommunications network operators and telecommunications service providers in comparable circumstances. These aims and principles serve the interests of the general public.

374 The early return of 900 MHz/1800 MHz spectrum is necessary so that the spectrum can be used to provide non-discriminatory spectrum holdings for all competitors in order to achieve the above-mentioned aims. Hence the measure is based on reasonable public interest considerations.

375 Substantive proposals

376 Vodafone proposed in its submission of 21 June 2014 that

the merged company be required to return by 31 December 2014 or, alternatively, by 30 June 2015 the frequencies in the 900 MHz and 1800 MHz bands whose current assignment term does not run beyond 2016. In any event, the frequencies not required to ensure continuity of mobile coverage for the merged company's customers are to be vacated immediately.

377 Vodafone's proposals had to be rejected. In the Chamber's view, it is in any case correct and appropriate to redistribute the frequencies at 900 MHz and 1800 MHz as from 1 January 2016, eliminating the causes of discrimination, by means of the early return of 900 MHz/1800 MHz spectrum by the merged company. Partial early return of the merged company's existing frequency assignments by 31 December 2015 falls within the legal bounds of discretion, as stated above.

378 Referring to its previous submission, Telekom proposed the following in its letter of 24 June 2014:

1. Ruling Chamber 1 authorises Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG to use the frequencies held by both companies after the acquisition of E-Plus Mobilfunk GmbH & Co. KG by Telefónica Deutschland Holding AG in accordance with the following provisions.

2. Such authorisation is granted in accordance with section 36(2) para 2 VwVfG on the following conditions:

a) Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG each transfer to other companies, by means of spectrum trading (section 62 TKG) or transfer of usage rights (section 55(8) TKG), the

frequencies in the 1800 MHz band whose current assignment term does not run beyond 2016 and comprising at least 2 x 15 MHz without delay and by 31 December 2014 at the latest;

b) Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG each transfer to other companies, by means of spectrum trading (section 62 TKG) or transfer of usage rights (section 55(8) TKG), frequencies in the 900 MHz band comprising 2 x 5 MHz without delay and by 31 December 2014 at the latest;

c) Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG each transfer to other companies, by means of spectrum trading (section 62 TKG) or transfer of usage rights (section 55(8) TKG), frequencies in the 2.1 GHz band comprising a total of 2 x 15 MHz without delay and by 31 December 2014 at the latest.

3. In the event that Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG do not transfer the frequencies according to 2a) to 2c) to other companies as required by 31 December 2014, they must return these frequencies to the Bundesnetzagentur by 31 December 2014 to enable the Bundesnetzagentur to re-award the frequencies in open, objective, transparent and non-discriminatory proceedings as soon as possible.

379 Telekoms's proposals had to be rejected. Telekom failed to state that Telefónica intends to transfer frequency usage rights to Telekom or transfer frequencies for use. In the Chamber's view, it is in any case correct and appropriate to redistribute the frequencies at 900 MHz and 1800 MHz as from 1 January 2016, eliminating the causes of discrimination, by means of the early return of 900 MHz/1800 MHz spectrum by the merged company. The procedure for re-awarding the spectrum will be determined at a later point in time in the President's Chamber decision for the BK 1-11/003 proceedings. In respect of the spectrum at 2 GHz, it is in the Chamber's view in any case correct and appropriate to investigate the need for action in respect of the post-merger spectrum holding, taking an overall view and taking account of the future spectrum holdings in the 900 MHz and 1800 MHz bands.

380 Note

381 The President's Chamber intends to open the award proceedings for frequencies in the 900 MHz and 1800 MHz bands and other frequency bands in the course of 2014.

382 The Chamber draws attention to the fact that it has already initiated proceedings (BK 1-11/003) to clarify the use of the 900 MHz and 1800 MHz frequency bands as from 1 January 2017 so as to decide about their future use in good time before the frequency assignments expire.

383 In an earlier decision (BK 1a-09/001, Administrative Order No 58/2009, Bundesnetzagentur Official Gazette 20/2009, margin no 37, page 3611) the Chamber said that it would take a decision on its own initiative about assignment of the 900 MHz and 1800 MHz spectrum as from 1 January 2017 in good time before expiry of the current frequency usage rights in these bands, stating the following:

"In any case the Bundesnetzagentur will then have to decide on the question of the competitive neutrality of the frequency regulation framework. This applies both in the event of the frequency usage rights being extended and in the event of the frequencies being re-awarded. The Bundesnetzagentur will in this case re-examine the required redistribution of frequencies against the given framework. The Bundesnetzagentur will take particular account of the regulatory aims according to section 2(2) TKG in its legal assessment of any claims to extension and in its examination to establish whether or not proceedings should be ordered. In the Chamber's view, there may be a shift in the weight given to the different regulatory aims relevant to this question as a result of market developments.

In the Chamber's view, the issues are particularly complex and the decision to be made is of great importance for the market. To ensure a robust decision, the Bundesnetzagentur will start the proceedings in good time. Proceedings should be completed at the latest two years before the current usage rights expire so as to give the companies and the other parties concerned the planning and investment certainty they need."

- 384 After consideration of the responses to the key elements paper of 31 March 2014, the statements given by the parties concerned at the public hearing on 5 May 2014, the comments submitted following the public hearing and the responses to the draft decision, the Chamber still adheres to these proceedings. It is planned, following this decision, to publish the President's Chamber decisions required to open the proceedings for the award of the frequencies in the 900 MHz and 1800 MHz bands (order for the proceedings, choice of proceedings, award conditions and auction rules) for consultation in the third quarter of 2014. This gives all interested parties the opportunity to voice their interests and concerns also in view of the changed market structure. This applies in particular with respect to the requirements notified in the BK 1-11/003 proceedings, which can be updated in light of the merger, and also with respect to the requirements of potential new entrants. The President's Chamber intends to decide on the order for and choice of proceedings and on the award conditions and auction rules in the fourth quarter of 2014 and to open the proceedings by the end of 2014.
- 385 In respect of comments to the effect that the measures proposed in these proceedings will make the award proceedings considerably more complex, it should be noted that this is a matter to be discussed in the context of the upcoming decisions on the proceedings for awarding the frequencies in the 900 MHz and 1800 MHz bands (BK 1-11/003).
- 386 The federal government called for fast Internet access rollout in its broadband strategy and set the goal of providing 50 Mbit/s broadband services throughout the country by 2018. Mobile technology plays an important part in achieving this goal, in particular in providing coverage in rural areas.
- 387 In the 900 MHz and 1800 MHz frequency bands, approximately 160 MHz of spectrum will be available for mobile broadband as from 1 January 2017. The President's Chamber's draft document for consultation of 23 June 2013 (BK 1-11/003) proposed that these frequencies, together with other available frequencies in the 700 MHz band, be made available for mobile broadband in award proceedings in line with demand and as quickly as possible. The inclusion of the frequencies at 700 MHz depends on a national consensus – in the sense of a common understanding between the government and the federal states – being reached in the third quarter of 2014. The conduct of award proceedings that are objective, transparent, non-discriminatory and hence open to all interested parties enables both the current mobile operators and potential new entrants to acquire non-discriminatory spectrum packages on account of the total amount of spectrum available.
- 388 The availability of the 700 MHz band would provide additional valuable frequencies for cost efficient and swift rollout of high speed telecommunications networks throughout the country by new entrants as well.
- 389 In respect of the call for the 700 MHz band to be excluded fully from the BK 1-13/002 proceedings, the Chamber points out that a decision on the inclusion of the 700 MHz band will be taken during the proceedings for awarding the frequencies in the 900 MHz/1800 MHz bands and other frequencies (BK 1-11/003; Project 2016).

Rights of appeal

Actions against this notice may be filed in writing with the administrative court in Cologne, Appellohofplatz, 50667 Köln, Federal Republic of Germany, or placed on record with the

registry clerk within one month of its publication. The action must state the appellant, the respondent and the matter to which the action relates. It should specify the remedy pursued and state the facts and evidence justifying the action. Under section 137(1) TKG legal actions do not have suspensory effect.

The action and all supporting documents should be accompanied by a sufficient number of copies for all parties concerned.

Bundesnetzagentur für Elektrizität, Gas,
Telekommunikation, Post und Eisenbahnen

The President's Chamber

Bonn, 4 July 2014

Dr Wilhelm Eschweiler
Vice Chair

Jochen Homann
Chair

Peter Franke
Vice Chair