GERMANY

MAIN MARKET DEVELOMENTS

The total turnover of the German telecommunications sector amounted to €60.4 billion at the end of 2009, a decline of 3% on the previous year. Fixed sector revenue was €35.2 billion (€36.8 billion in 2008), and mobile sector revenue was €25.2 billion (€25.5 billion in 2008). The total investment in the telecommunications sector was €6 billion or 0.25% of GDP at the end of 2009 representing a decrease by 16.7%. It has been estimated that 52% of this total investment has been made by competitors. The total value of investment by fixed telecommunications operators (including the incumbent) was €4 billion and by mobile operators was €2 billion.

Whereas in 2010 the incumbent still accounted for an overall share of nearly 50% of total fixed sector revenue, competitors were able to gain a significant share of new customers. As an illustration, they were able to increase the number of fixed access lines by nearly 11% and the number of broadband lines based on cable reached 11% confirming the trend towards infrastructure-based competition in the broadband market. As an alternative to triple-play services over cable, triple play subscriptions containing IPTV with telecoms operators increased by 37% to 1.0 million subscriptions.

The mobile sector in 2010 was still led by the two larger MNOs holding 60% of revenue share, with the remainder taken up by the two smaller MNOs and one large service provider, each with similar revenues. The main growth in the mobile sector can be found in mobile data services, which accounted for 56% of non-voice revenues and 16% of total mobile revenues[1].

MAIN REGULATORY DEVELOPMENTS

A draft amendment of the Telecommunications Act was submitted to stakeholders for consultation in October 2010[2]. It contains inter alia new draft provisions meant for the transposition of the new EU telecoms framework into German law that is due by 25 May 2011.

A draft law annulling § 9a of the German Telecommunications Act from February 2007 on the principles of regulatory treatment of new markets was adopted by the Government in May 2010[3]. This amendment was passed in order to comply with the judgment of the ECJ delivered in December 2009 on the infringement case against Germany[4] confirming the Commission's position that national legislation may not exempt next-generation electronic communication markets from regulation.

In October 2010 the ECJ upheld[5] the Commission's €12.6 million fine imposed in 2003 on the incumbent for abuse of its dominant position in the fixed telephony markets resulting in margin-squeeze.

Several regulatory measures adopted in 2010 were related to the German broadband strategy. Firstly, in April and May 2010, a spectrum auction comprising approximately 360 MHz of radio spectrum in the 800 MHz, 1.8 GHz, 2.0GHz, and 2.6GHz bands was held. Secondly, several market reviews and decisions were adopted concerning the fixed broadband markets.

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1 Several figures on market shares are based on the VATM 12th common market analysis 2010 (www.vatm.de)
2 A draft law was adopted by the Government in March 2011
3 The amendment entered into force in April 2011
4 Case C 424/07
5 Case C-280/08 P

As for the market for wholesale (physical) infrastructure network access, in March 2010, BNetzA finally set the prices the incumbent can charge its competitors for co-locating VDSL infrastructure, including access to street cabinets and ducts. In August 2010 BNetzA finalised the 3rd round market review of the market for wholesale (physical) infrastructure network access and in October 2010 the 2nd round market review of the market for wholesale broadband access and the associated remedies were adopted.

Following the publication of the final version of the NRA's strategy document outlining the fundamental principles of NGA regulation in March 2010, the NGA Forum was set up with the aim of initiating a constructive dialogue among the NGA market players.

As for the market for wholesale mobile termination, in January 2011 the NRA issued a draft decision reducing the regulated call termination rates on mobile networks by ca. 50%[6].

NRA

The Bundesnetzagentur (BNetzA) continued to rely on commercial negotiations between the incumbent and competitors, which again led to long delays in implementing and enforcing remedies and in the availability of adequate access products in the market. As an illustration, with regard to VDSL access remedies, it took more than two years, from the market analysis in 2007 to March 2010, when prices were finally set.

However, the NRA improved the regulatory practice in 2010 concerning market analyses. While the market analysis and remedies for the wholesale broadband market and the market for broadcast transmission services were issued at the same time, the delay between market analysis and draft measures for the market for wholesale (physical) infrastructure network access was six months.

The NRA also met its legal obligations for cooperation at EU level by notifying the draft measure on MTRs following the infringement procedure[7] against Germany for the failure to notify the Commission and other NRAs of the draft regulatory measures determining the level of MTRs and the related cost methodology.

Furthermore, with regard to legal certainty, BNetzA failed in two cases to motivate to a sufficient extent the imposition of obligations. Both in the cases of the access to dark fibre representing an important access obligation concerning the market for wholesale (physical) infrastructure network access, as well as remedies concerning leased lines, the Federal Administrative Court repealed parts of the obligations because of insufficient justification.

ECONOMIC REGULATION

Broadband

Broadband plans

The broadband strategy adopted in 2009 by the Government is aimed at ensuring broadband coverage for all households at speeds of at least 1 Mbps by the end of 2010 and making available advanced broadband connections at speeds of at least 50 Mbps to 75% of households by 2014. Broadband penetration had reached 32% of the population by January 2011, which is above the EU average. The target of functional broadband access coverage with a minimum of 1 Mbps for all households has just been missed, with 98.6% coverage at the end of 2010.

6 The final decision was adopted in February 2011

7 The infringement procedure (Case 2009/2227) has been closed by the Commission in April 2011

Progress was made on all four action pillars of the German broadband strategy – the use of synergies in infrastructure roll-out, supporting spectrum policy, growth-oriented regulation, and financial support measures.

The infrastructure atlas that has been available since December 2009 is a database containing data on parts of existing infrastructure such as fibre, ducts and masts as well as planned rollout projects. BNetzA collects the data and compiles it in the database. In October 2010 the database contained data from 117 companies. It can be made available on request, in future together with maps indicating the geographic location of infrastructure in order to increase usability.

The frequency auction of the upper part of the Digital Dividend spectrum, the 800 MHz band, represents an important step for broadband availability in rural areas. The Government expects that the remaining white spots, the 1.4% of the population where broadband services with at least 1 Mbps are not yet available, will soon be covered *inter alia* by the mobile broadband technology Long Term Evolution (LTE). The three MNOs that acquired blocks of the 800 MHz band announced rollout plans starting the end of 2010 with the target of nation-wide coverage in 2013. The licence conditions attached to this frequency band obliges the MNOs to first cover rural areas up to a certain degree before gradually deploying in more densely populated areas.

With regard to growth-oriented regulation, the NRA has set out parts of the framework conditions for the regulation of NGA networks. Following the publication of the final version of the NRA's strategy document outlining the fundamental principles of NGA regulation in March 2010, the NGA Forum was set up by the NRA with the aim to initiate a constructive dialogue among the NGA market players. The main discussion topic of the forum is the concept of "Open Access", i.e. the voluntary offering of network access products by operators without SMP on a non-discriminatory, transparent and open basis without regulatory intervention. Further topics of the forum are cooperation and co-investment, interoperability of wholesale access products, and facility sharing. On the particular issue of cooperation projects concerning broadband roll-out, the competition authority published a position paper in January 2010. The document is aimed at providing companies that are willing to co-operate an orientation concerning the competition law evaluation of cooperation plans.

As for the forth action pillar, the Government adopted a state-aid framework for passive infrastructure, the so-called duct framework. It was approved by the Commission up to the amount of €600 million. It provides the basis for the Federal as well as regional governments to support individual projects or introduce a funding programme for duct deployment in regions where deployment without additional funding is currently uneconomical.

Market situation

Broadband penetration grew by 1.5%, compared to 2.9% in 2009, resulting in 32% of the population having a broadband subscription in January 2011.This is above the EU average of 26.6%. 50.2% of the broadband lines are provided by the incumbent, 4.5% of which are provided by service providers based on resale. 7.5% of alternative DSL lines are provided based on DSL bitstream and 81.1% on DSL LLU. 12.1% are provided over alternative technologies other than DSL, mainly based on broadband cable. Two thirds of new lines based on DSL have been provided by the incumbent, which was able to increase its DSL market share to 51.7%. It has been estimated that the three main competitors have market shares of 16.1%, 13.3% and 9.9% respectively, while several smaller providers have shares below 3%.

52% of new broadband customers have been connected over non-DSL lines mainly based on broadband cable. In December 2010, 115,400 broadband lines were active broadband lines based on FTTH/FTTB, while 357,000 active lines were based on VDSL. Triple-play subscriptions to telecoms operators, principally to the incumbent, increased by 37% to 1.0 million subscriptions by July 2010 and were mainly based on ADSL2+ technology[8]. By the end of 2010 more than 2.3 million lines have been triple-play subscriptions based on broadband cable.

FTTH/FTTB deployments were carried-out by several market players. While the incumbent focused on FTTH in most cities, city carriers deployed FTTB in larger ones, whilst several municipalities started FTTH projects in smaller cities and rural areas. However, due to limited take-up, high-speed broadband lines with data rates above 30 Mbps still represent less than 5% of total broadband lines.

Broadband cable operators are in the process of upgrading their infrastructure with the transmission technology DOCSIS 3.0 with the aim of offering high-speed broadband services with data rates of more than 100 Mbps to 65% of households by the end of 2012. In March 2010 the incumbent announced that it envisaged deploying a FTTH network based on Gigabit Passive Optical Network (G-PON) architecture to reach 10% of households by the end of 2012, representing a rollout cost of €10 billion. The incumbent's FTTH infrastructure is expected to be complemented by regional FTTH networks deployed by local energy providers and municipalities. Several plans for FTTH deployment cooperation projects between the incumbent and infrastructure providers have been announced, but no agreement on cooperation contracts could be reached.

Regulatory issues

Several market reviews and decisions were adopted concerning the fixed broadband markets. With regard to the market for wholesale (physical) infrastructure network access, in March 2010, BNetzA finally set the prices the incumbent can charge its competitors for co-locating VDSL infrastructure including access to street cabinets and ducts. The prices are based on current cost accounting and 30-75% lower than those proposed by the incumbent. Competitors criticised the prices as too high and the cost methodology applied as inadequate. Until January 2011, no VDSL wholesale access agreements based on the new prices can be concluded.

All price obligations are fixed till 30 June 2011. This goes back to BNetzA's decision from 2007 requiring the incumbent to grant access to its street cabinets and ducts or to its dark fibre in order to facilitate competitors to deploy their own VDSL infrastructure. However, no prices for access to dark fibre have been set in light of the ruling from February 2010 of the German Federal Administrative Court that revoked the obligation concerning dark fibre, stating that BNetzA has not motivated to a sufficient extent the imposition of the obligation to provide, under certain conditions, open access to the incumbent's dark fibre.

In August 2010 BNetzA finalised the market review of the market for wholesale (physical) infrastructure network access. It proposed to include in the relevant market network infrastructure access based on FTTH. However, pure fibre lines serving large business end-users are considered to be outside the relevant product market. Based on this market analysis, the NRA published a draft measure on the regulation of fibre-broadband networks in January 2011. It did not foresee any *ex-ante* price regulation of optical fibre lines. Prices are expected to be agreed by the market and then subject to *ex-post* price control by the NRA. As for VDSL, in addition to street cabinets and ducts, dark fibre has again been included in the incumbent's access obligations.

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8 Several figures on market shares of competitors and on VDSL and FTTx are based on the VATM 12th common market analysis 2010 (www.vatm.de)

The market analysis and remedies concerning the market for wholesale broadband access were adopted in October 2010. As in the previous market analysis, BNetzA defined two separate product markets for Layer-2 and for Layer-3 Bitstream access. The most notable modifications are the inclusion of FTTH in both relevant markets and the inclusion of Cable in the market for Layer-3 Bitstream access. Both product markets are found to be national in scope with the incumbent having SMP. The related remedies include *ex-post* price control, accounting separation and non-discrimination. The latter is *inter alia* aimed at avoiding any timing advantage for the retail arm of the vertically integrated incumbent, in particular with regard to the introduction of new products based on NGA infrastructure.

Mobile

Market situation

The mobile penetration rate increased only slightly to 131% at the end of 2010 and was affected by the SIM card deactivation of inactive users. As a result, the proportion of pre-paid mobile users decreased to 55%. The mobile broadband penetration rate in terms of users accessing data services via dedicated data modems, cards or keys was 5.3% in January 2011 (up from 4% in January 2010).

Mobile sector revenue remained stable and was shared between the two larger MNOs (each with slightly above 30%), the third MNO and the largest service provider (both with 13.3%) and the forth MNO with 12.1%. The remainder of less than 2% was shared between the other six service providers and two MVNOs[9]. The average revenue per user has dropped from €248 in 2008 to €187[10] in 2009.

In this period, the average price per minute of mobile calls fell from €0.14 to €0.12 (by 14%). The ratio of voice minutes of mobile-originated calls compared to total voice minutes increased by 13% to 32%.

In 2010, the main growth in the mobile sector can be found in mobile data services. It was estimated that the growth in mobile data services accounted for 56% of non-voice revenues and 16% of total mobile revenues.

Regulatory issues

In January 2011, the NRA issued a draft decision setting the regulated call termination rates on mobile networks[11]. The new MTRs are reduced to a range of €3.36 – 3.39 cent/min, representing a reduction of ca. 50%. The cost methodology to determine the rates is based on a fully distributed cost model taking into account the operators' real cost including investment in spectrum and infrastructure. The MTR charged in the framework of a home zone tariff, where a mobile subscriber is charged a reduced tariff while using his mobile terminal at home, has been set at zero. This decision was criticised by service providers, as they see a risk that integrated operators with fixed and mobile arms could follow discriminatory price strategies.

Roaming Regulation

Whereas the tariff provisions of the amended Roaming Regulation were reportedly applied by all operators, technical problems experienced by operators and service providers were reported in the implementation of the cut-off limit and the related warning message. These

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[9] Several figures on market shares are base on the VATM 12th common market analysis 2010 (www.vatm.de)

[10] Wholesale revenues between MNOs and MVNOs were excluded in 2009 in order to avoid double counting of end users' expenditure.

[11] The final decision was adopted in February 2011

problems include the incorporation of MMS as part of consumption towards the cut-off limit, the implementation of the cut-off limit for data roaming for pre-paid customers and the implementation of the cut-off limit by service providers.

Fixed

Market situation

As of July 2010, the proportion of telephone subscribers using direct access to an operator other than the incumbent raised up to 33%. The trend towards telephone lines based on VoIP continued in 2010 with strong growth of 22% among the competitors. While the total number of alternative operators was 173, the number which offered public telephony through direct access rose to 156 (including shared access).

42% of all alternative operators used full LLU, whereas 47% utilised proprietary infrastructure[12] and only 11% used shared access. The use of alternative operators' services for national and international calls increased from 37% to 39% and from 39% to 41%, respectively, in the period July 2009 - July 2010.

Broadcasting

Market situation

The overall situation in the retail broadcasting markets remained stable. The number of IPTV subscriptions more than doubled in 2010 and reached a share of 1.5% of all households.

Regulatory issues

BNetzA finalised its 2nd round review of the market for broadcasting transmission services in September 2010 and proposed to deregulate this market for cable operators. However, it proposed to continue regulating analogue radio broadcasting transmission services.

HORIZONTAL REGULATION

Spectrum management

In May 2010, a spectrum auction comprising of approximately 360 MHz of radio spectrum was closed, with €4.385 billion received in revenue. By far the highest revenue was received for the upper part of the Digital Dividend spectrum, the 800 MHz band, because it provides the possibility to cover rural areas. Germany is the first EU country that has made this band available for mobile broadband. Spectrum in the 1.8 GHz, 2.0 GHz and 2.6 GHz bands was auctioned in order to provide high radio capacity for mobile broadband services in more densely-populated areas. The four existing MNOs took part in the auction. Three of them have obtained spectrum in the 800 MHz band. All spectrum made available in the auction will be assigned until 2025.

Following the flexibilisation decision concerning the 900 MHz band in October 2009 and the frequency auction mentioned above, and in light of the expiry of the GSM licenses at the end of 2016, BNetzA has initiated the assessment of the competitive situation with regard to the frequency distribution in August 2010. A draft decision laying out the regulatory approach to address possible market distortions and spectrum policy on the 900 MHz band beyond 2016 is expected to be issued in Summer 2011. BNetzA has transposed the revised GSM Directive by the adoption of the flexibilisation decision from October 2009 and the initiation of the competitive assessment as described above. The actual refarming of 900 MHz frequencies takes place upon request. Up until January 2011, only one of the smaller MNOs has requested

[12] Cable operators have the largest share when it comes to ownership of the access network, whereas the share of city carriers is very small.

the usage of their 900 MHz frequencies for UMTS limited to a selected number of rural areas. This request was approved by the NRA in December 2010.

In March 2010 the national frequency ordinance was modified[13] in order to comply with Commission Decision 2008/477/EC on the harmonised use of the 2.6 GHz band by ensuring that the usage range in this band includes nomadic and fixed wireless services that are in line with the parameter range set out in Commission Decision 2008/477/EC. This amendment was made in the context of the infringement case opened in 2009 against Germany regarding the implementation of the above mentioned Commission Decision.

According to information available to the Commission, not all of the necessary preparation has been made in Germany which would facilitate the granting of an authorisation to the operators of systems providing mobile satellite services selected by the Commission in accordance with European Parliament and Council Decision No 626/2008/EC.

Rights of way and facility sharing

As part of its broadband strategy, the Government is promoting access to public infrastructure and providing guidance to potential investors by reporting on NGA model projects.

In August 2010, BNetzA provided guidance on a coordinated approach to mobile network deployment, in compliance with competition law. In this regard, the NRA has revised its "paper on infrastructure sharing" from 2001 to take into account technological progress and the possibility of cooperation in rural areas. However, so far, no joint roll-out or infrastructure sharing plans have been announced by market players.

Administrative charges

BNetzA has still not included in its annual budgetary report, or the following year’s draft budget, a comparison on how the levels of collected administrative charges reflect underlying administrative costs, as required by EU law[14]. The Commission services are following the matter.

THE CONSUMER INTEREST

Tariff transparency and quality of service

An amendment to the Telecommunications Act entered into force on 1 March 2010, which improves tariff transparency and strengthens consumer rights by imposing price caps for calls to service numbers from mobile phones at €0.42 per minute or €0.60 per call, depending on the destination number[15]. However, the NRA may decide to set different price caps based on its market analysis.

Net neutrality

In March 2010, in the context of the political debate on Internet policy an "Enquête Commission on Internet and Digital Society" was established by the Bundestag, organised into four working groups – on net neutrality, copyright, data protection, and media literacy. The first reports of the working groups are expected in Spring 2011.

During 2010 two MNOs have been continuing to block voice-over-IP (VoIP) services over their mobile networks, unless the user had subscribed to a special tariff option allowing for

[13] Bundesgesetzblatt 2010 Part l I No. 17, 28 April 2010, p. 446

[14] Cf. Article 12(2) of the Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive).

[15] Bundesgesetzblatt 2009, Part I No. 49, 3 August 2009, p. 2411, Art. 2 (4c)

this application. This intervention was justified *inter alia* by potential resource bottlenecks for session identifiers in the case of a high number of parallel data sessions.

A significant number of citizen complaints were received by the Commission on the blocking by MNOs of telephone calls from mobile phones to local numbers used for call-through services such as international calls. While MNOs justified the intervention as an alleged misuse of their service, consumers and call-through service providers were alleging non-compliance with the principle of any-to-any communication. The Commission services are following this.

Universal service

No undertaking has been designated for the provision of universal service. The authorities have not intervened as they consider that the market provides the necessary services.

A text and video relay service for deaf and hearing impaired end-users based on text and sign language was made available. This service enables this special group of users to make phone calls to any number and to accept calls from any other fixed network telephone or mobile phone. Additionally the financing system of the text and video relay service was set up. Several months after its launch, it had been used by 400-600 users out of a potential 200,000.

Number portability/switching

In 2010, the average period for having a phone number ported and operational was five working days, both for fixed and mobile numbers. However, where notification of contract cancellation is timely, consumers normally have their numbers ported to their new provider without any delay. No wholesale charges are applied for porting fixed numbers and the retail price charged by the incumbent operator is no longer regulated. However, the price of €6.92 (VAT incl.) still applies. No wholesale charges are applied for porting mobile numbers, yet mobile operators charge retail customers up to €29.95 for porting a mobile number.

Consumer complaints

Consumer complaints in 2009 were focused on contractual relations, billing, change of provider, and unsolicited calls. Certain complaints have also been directed to the Commission. As in 2009, some citizens were concerned about the lack of a possibility to have broadband Internet in rural areas or the lack of choice. A high number of complaints still referred to difficulties when changing a fixed or broadband provider, which have led to periods of up to several weeks and even months without telephony services or a broadband connection. The NRA is following-up on individual cases to reduce any period of interruption to a minimum.

European emergency number 112

112 has been operational in Germany for many years. Whilst 82% know 112 is a number to call in case of emergency in Germany, only 19% are aware that this emergency number can be called from other Member States.

Harmonised numbers for harmonised services of social value (116)

Harmonised numbers have been assigned for 116000 - the hotline for missing children (expected to start in autumn 2011), 116111 − the child helpline, 116123 − the emotional support helpline for life aid, 116006 – the helpline for victims of crime and 116117 - non-emergency medical call services. However only the numbers 116 111, 116 117, and 116 123 are actually operational.

e-Privacy

Since the introduction of new provisions concerning illegal telephone marketing in August 2009, the number of complaints against unsolicited calls has increased significantly to more than 5000 complaints per month in 2009. In 2010 the number of these complaints has increased again to around 7,500 complaints per month by August. Since September 2010 there has been a noticeable drop. BNetzA issued eight fines against illegal telephone marketing in 2010 in the amount of about €600,000 and started a campaign to encourage users to notify illegal practices and provide the necessary details for legal follow-up.

The judgment of the Constitutional Court of March 2010 annulled the German law transposing the Data Retention Directive. The Court based its decision on the shortcomings of the implementation but found that data retention could be implemented in compliance with the German constitution. Following the judgment, a political debate started again in Germany on data retention. The Government has not taken a position yet.

The law on blocking access to child pornography content via communication networks (Zugangserschwerungsgesetz) entered into force in February 2010. However, the Government decided not to apply it for the time being.

The draft of the revised Interstate Treaty on the protection of minors (Jugendmedienschutz-Staatsvertrag) that *inter alia* introduced age labelling of Internet content was rejected by one state parliament and therefore has to be entirely redrafted.