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PROGRESS REPORT ON THE SINGLE EUROPEAN ELECTRONIC COMMUNICATIONS MARKET 2007 (13th REPORT)

{COM(2008) 153}

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MARKET AND ECONOMIC DEVELOPMENTS

Financial and Economic Sector Overview

The following section provides a short overview of the current economic and financial state of the electronic communications sector. Price developments, more choice and innovation may be taken to indicate gains for the consumer, whereas the sector's performance as reflected by the financial markets can signal industry and firm's welfare.[1]

Consumer benefits

The benefits flowing from lower prices for electronic communications services constitute one of the most important parameters against which the functioning of EU regulatory policy should be judged; and they are highlighted throughout this implementation report. On this score, it is to be welcomed that in 2007 consumers again benefited from deflationary price developments for most standard communications services.

As depicted in annex 2 of this report, the OECD baskets measuring prices in mobile services for typical consumption patterns show EU 25-wide price decreases of up to 14% between 2006 and 2007. Similarly, in the EU broadband sector, intense competition has pushed monthly prices to new lows while increasing average bandwidth quality, as well as overall connectivity. Broadly speaking, in most EU markets the picture is one of increasing volume and falling prices, suggesting that the average European consumer of electronic communications services in 2007 was better off than in the year before.

These gains were further increased by the availability of new services such as mobile broadband and fixed fibre, which resulted from the high rate of innovation that has characterised the sector for many years. In areas where competition has failed to deliver lower prices and better value, the Commission remains vigilant. In 2007, the Roaming Regulation[2] was adopted to tackle the excesses persisting in the pricing structure for EU voice roaming services, thereby delivering important gains for consumers.

Investments

Last year's consumer gains were once more accompanied by increased investment in the electronic communications sector. Investment in telecommunications infrastructure remains an important contributing factor to overall productivity growth. Clearly, while investment in itself is important for economic growth, diffusion of knowledge and expertise could not happen in the absence of telecommunications networks. Moreover

[1] Data for this section are taken from trade associations, the OECD, Infonetics Research, investment banks Goldman Sachs and Morgan Stanley as well as European Commission sources. It should be noted firms' welfare may increase at the expense of consumer welfare in the case of anti-competitive behaviour.

[2] Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC (OJ L 171, 29.6.2007, p. 32)

investment in networks is necessary for the ultimate goal of achieving fully-fledged facilities-based competition.

Timely and efficient investment is thus an important indicator for the proper functioning of the framework. In 2007, aggregate investment in the electronic communications sector – measured in terms of capital expenditure – can be estimated to have exceeded €50 billion, representing a marginal increase over 2006. It was the fifth consecutive year of increased year-over-year investment levels. While still increasing, the flattening rate of growth can mainly be ascribed to mobile investment in the EU slowly reaching a plateau. Capital expenditure in this sub-sector is expected to pick up again in 2009 with the onset of a new investment cycle in response to likely future capacity constraints in mobile broadband. Also, with many EU markets reaching saturation levels for existing services, firms increasingly turned their attention to emerging markets such as India, South Africa or Latin America in evaluating investment propositions.

Looking at the figure in more detail, incumbent firms invested approximately 13.5% of their revenues in 2007 which constitutes a slight increase on the previous year. This percentage was again higher for alternative firms; and both are broadly in line with long-run historical averages for the sector. Total investment by alternative operators amounts to approximately 25% of the overall figure.

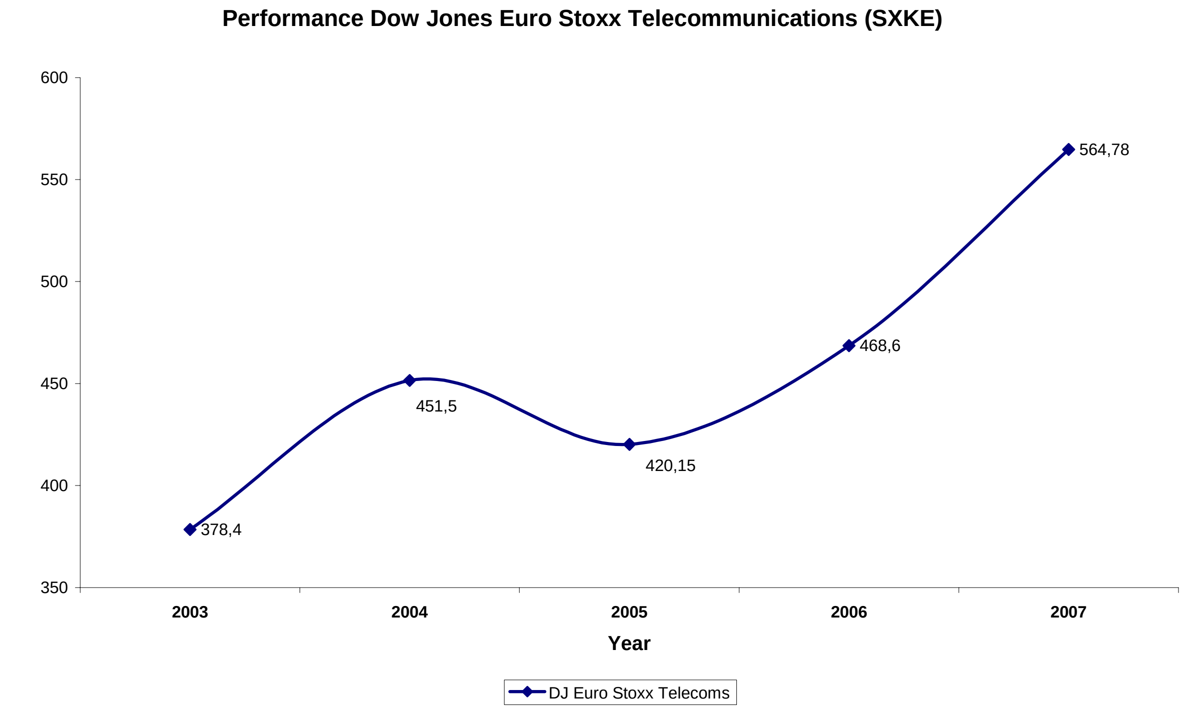
Structurally, appropriate regulatory action has fostered regulatory certainty and flexibility. While it is recognised that genuine facilities-based competition is ultimately to be preferred to service-based competition – as it minimises the necessity for intervening in the market – such competition is not universally available. Therefore, where for historical or accidental reasons alternative platforms have yet to emerge, the framework's concept of the investment ladder remains useful. In fact, there is first evidence to show that in the context of NGN alternative players might be able to roll-out their own networks rather than rely on the provision of regulated wholesale products for most of their access network. Clearly, this potential ability of alternative operators to invest is related to their presence in the market for many years, and their accumulated experience of demand and supply-side characteristics.

Mergers and acquisitions activity in the sector in 2007 abated when compared to previous years, mainly owing to the credit-market problems starting in August 2007.

Financial performance

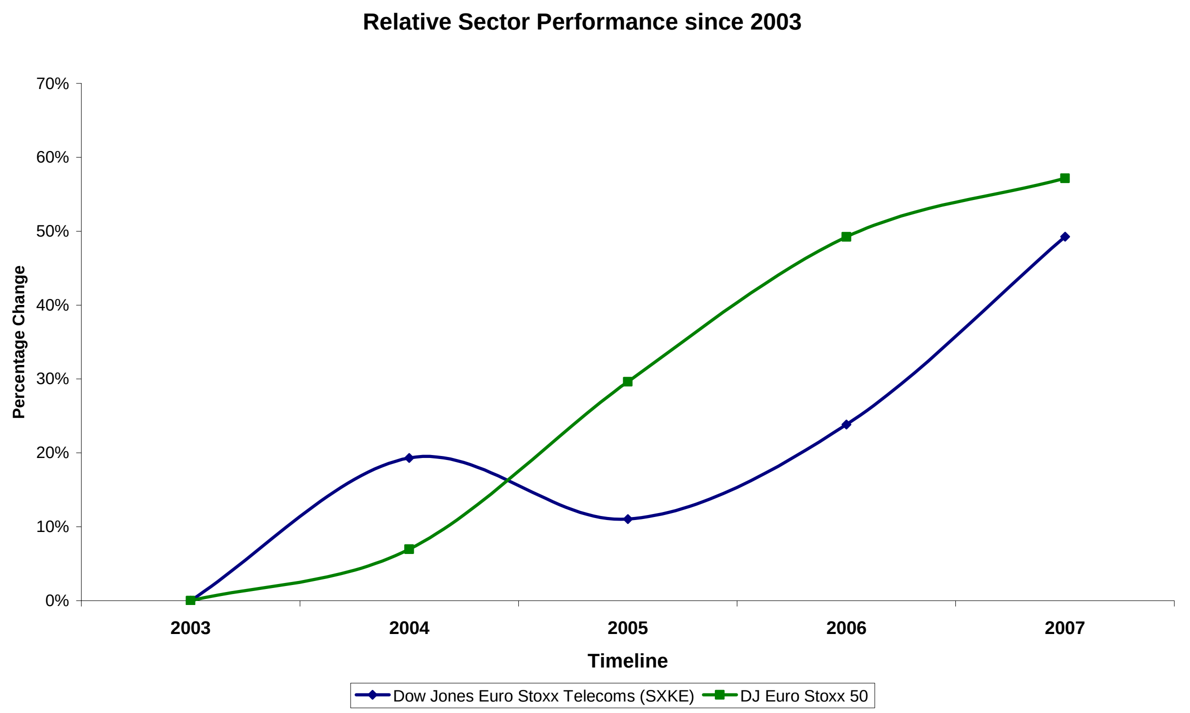
Despite the challenging overall conditions on the debt and equity markets, the financial performance of the sector in 2007 was again solid. As measured by the Dow Jones Euro Stoxx Telecommunications Index (SXKE), the value of the sector in 2007 increased by 20.52%. Over four years, the increase was 49.3% (see chart 1). While all major sector indices are disproportionately weighted towards the incumbent operators, they can still be seen as a good proxy for the overall financial health of the industry and its future growth perspectives.

Chart 1:



The picture above is slightly more nuanced when assessed in a wider context, as shown in chart 2.

Chart 2:



After many years trailing the overall market, since 2005 the electronic communications sector has now caught up with overall market performance. In fact, many financial analysts now rate the sector as overweight or outperform. Some reasons are the sector's strong defensive characteristics such as (1) continued strong cash-flows from fixed and broadband activities coupled with debt reduction over the past years (resulting in a debt/EBITDA ratio of now 1.8 for the sector as a whole), and (2) high dividend yields with a current sector average yield of 4.2%.

The Mobile Market

The mobile sector

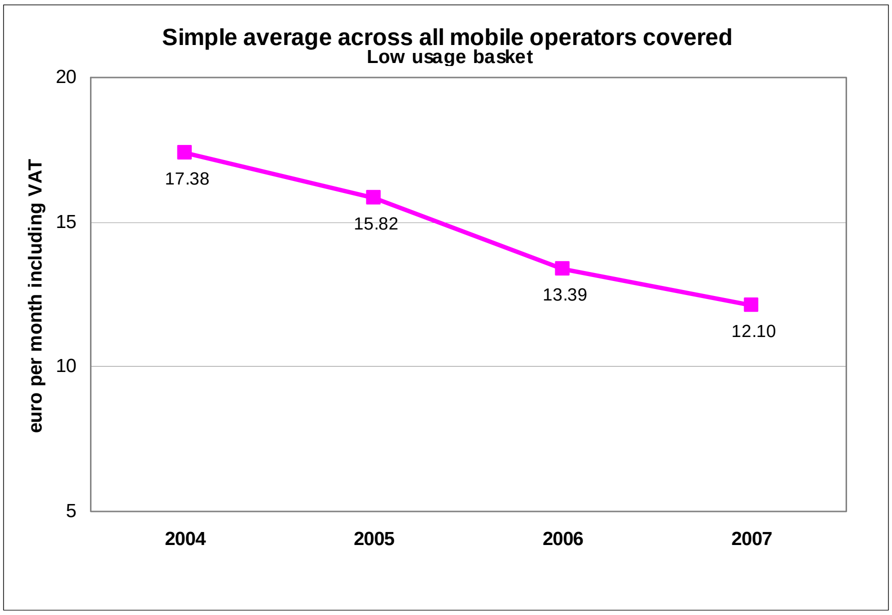
Operators have continued to register growth over the past year despite a further decline in voice revenues due to price decreases in domestic markets and the adoption of the Roaming Regulation that entered into force on 30 June 2007. Falling prices for mobile voice services and SMS have again led to a decrease in revenue from voice and SMS services although volumes have again increased to compensate partially for the price decreases.

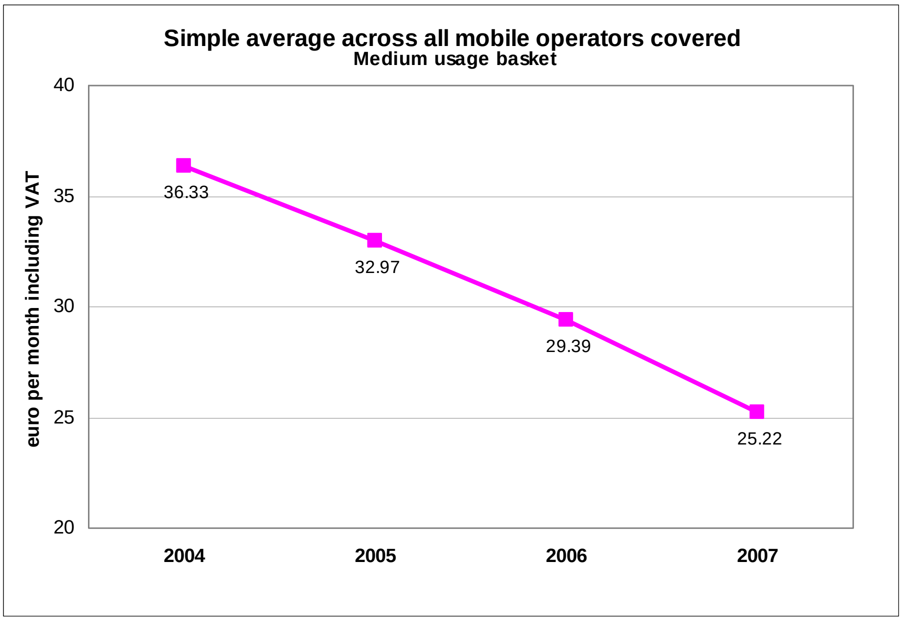
Analysts have termed 2007 as the year when 3G data services have finally taken off. After years of waiting, mobile broadband in many Member States is now a reality thanks to investments in high speed Internet access and flat-rate charging mechanisms.[3]

In general, prices for mobile services have fallen during the year as can be seen from the following figures. This mainly resulted from a decrease in the prices for mobile voice services and SMS. This led to lower revenues for operators although volumes have again increased to compensate partially for the price decreases as predicted.

While prices in the low usage basket have fallen by around 10%, the prices for mobile services in the medium usage basket and the high usage basket have decreased by nearly 14%.

[3] Data for this section comes from various European Commission sources including mobile operators, the UMTS forum website as well as investment banks Goldman Sachs and Morgan Stanley.


Simple average across all mobile operators covered
Low usage basket
euro per month including VAT
20
15
10
5
17.38
15.82
13.39
12.10
2004
2005
2006
2007


Simple average across all mobile operators covered
Medium usage basket
euro per month including VAT
40
35
30
25
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36.33
32.97
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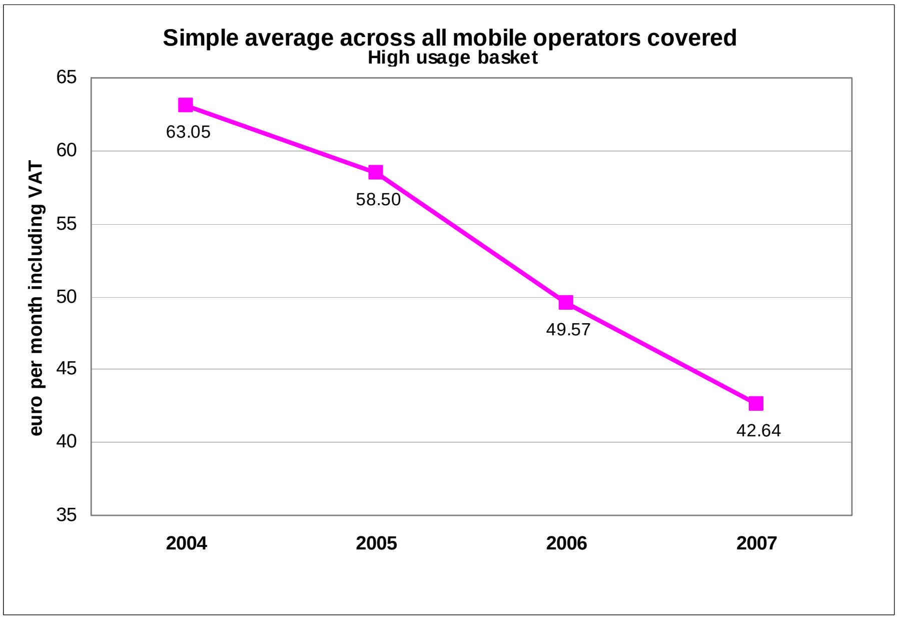
2004
2005
2006
2007



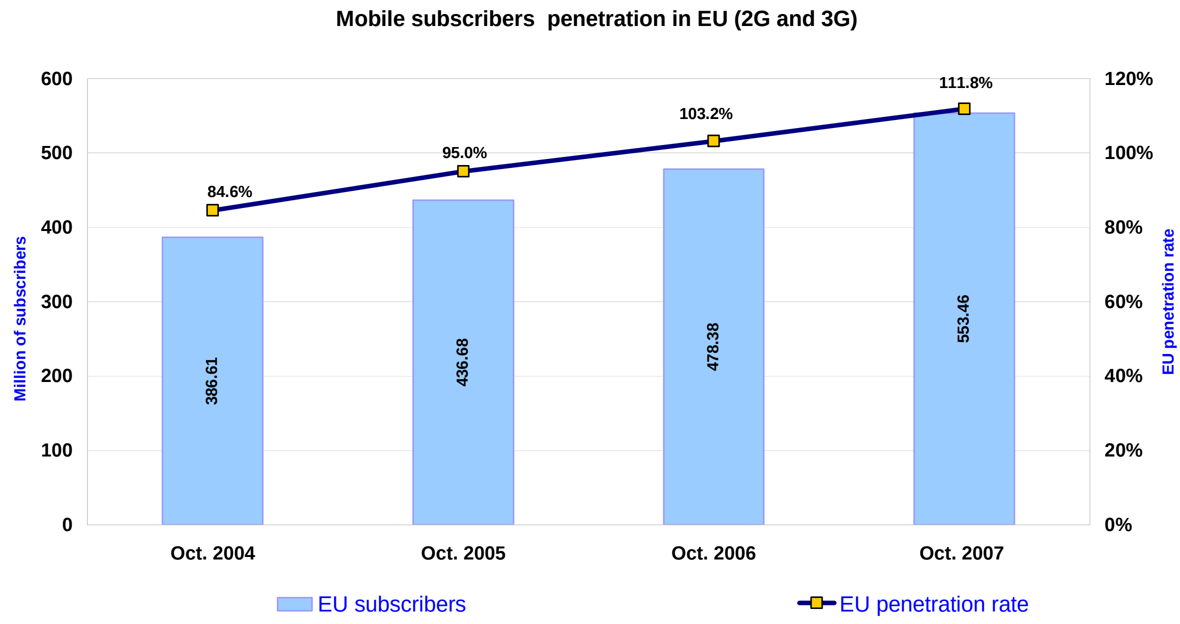
For the purposes of the above graphs, baskets using 2002 OECD methodology have been used.[4]

Despite still offering a limited share of the total revenue for mobile operators, non-SMS data services now account for around 7% of industry turnover and are continuing to show signs of growth.

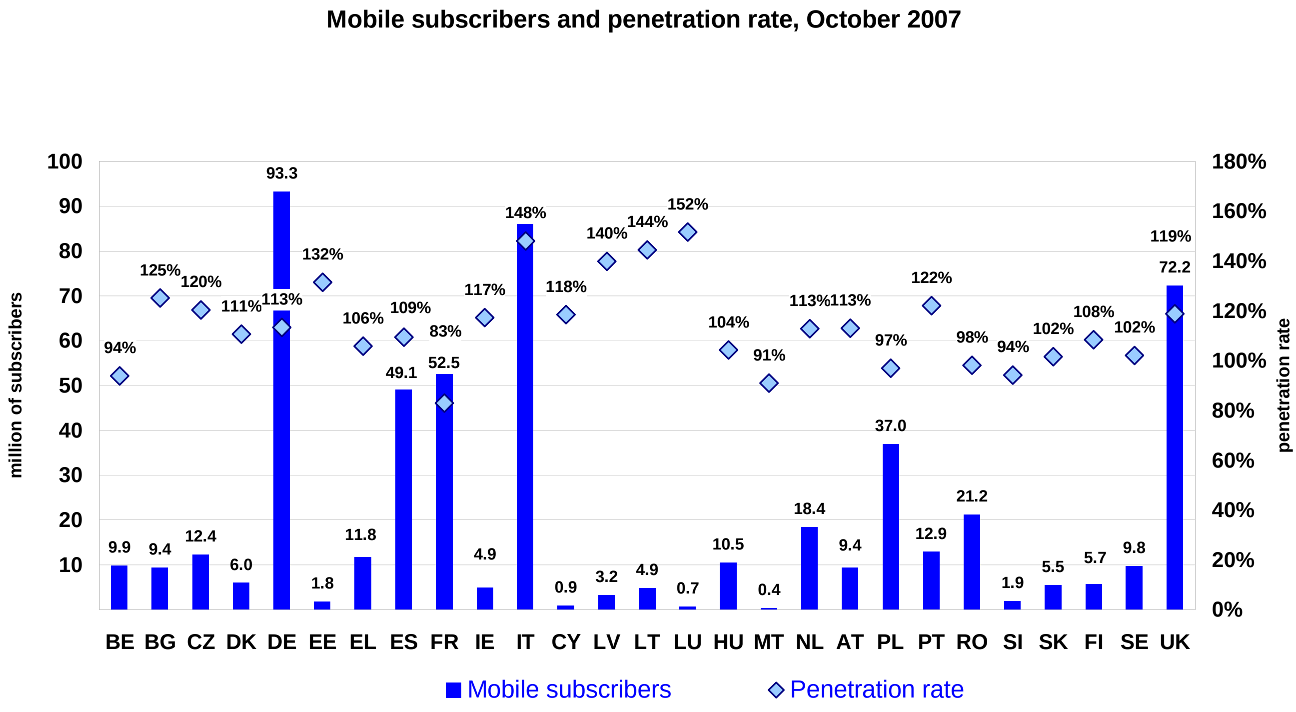
Mobile Penetration

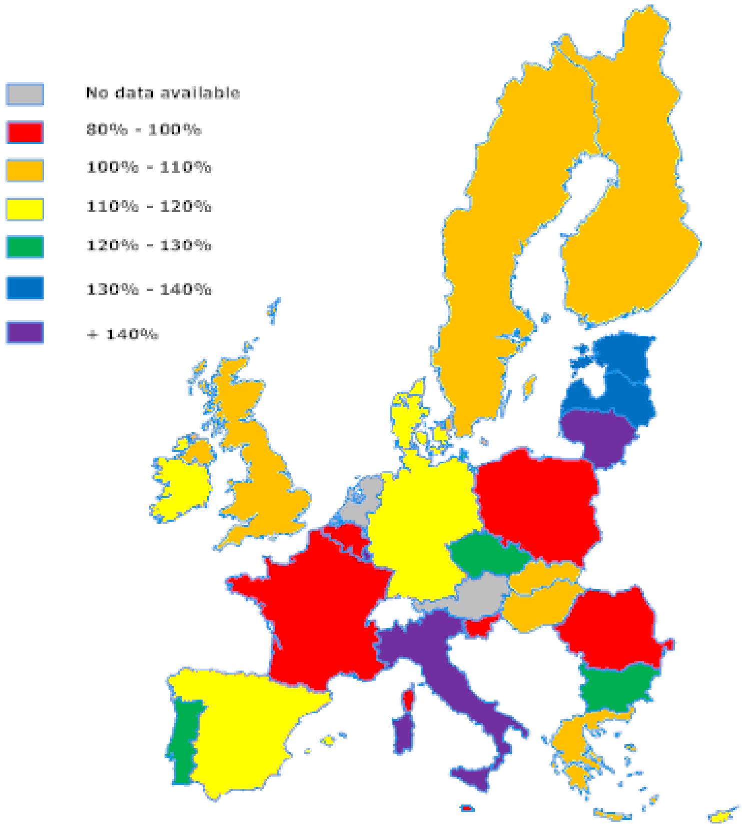
The average EU penetration rate continued to grow and has now reached 111.8%. There are now 19 Member States which have exceeded 100 per cent penetration. In some Member States there continues to be further growth of subscriptions which may be attributed to a number of factors. Consumers could be in possession of more than one subscription as a means to benefit from on-net tariffs. Other consumers could also have a data-only subscription. In some markets, data cards can be considered as an alternative to fixed broadband and indeed in Austria take up was very strong.

[4] Further details on the composition of these baskets can be found in the Annexes.



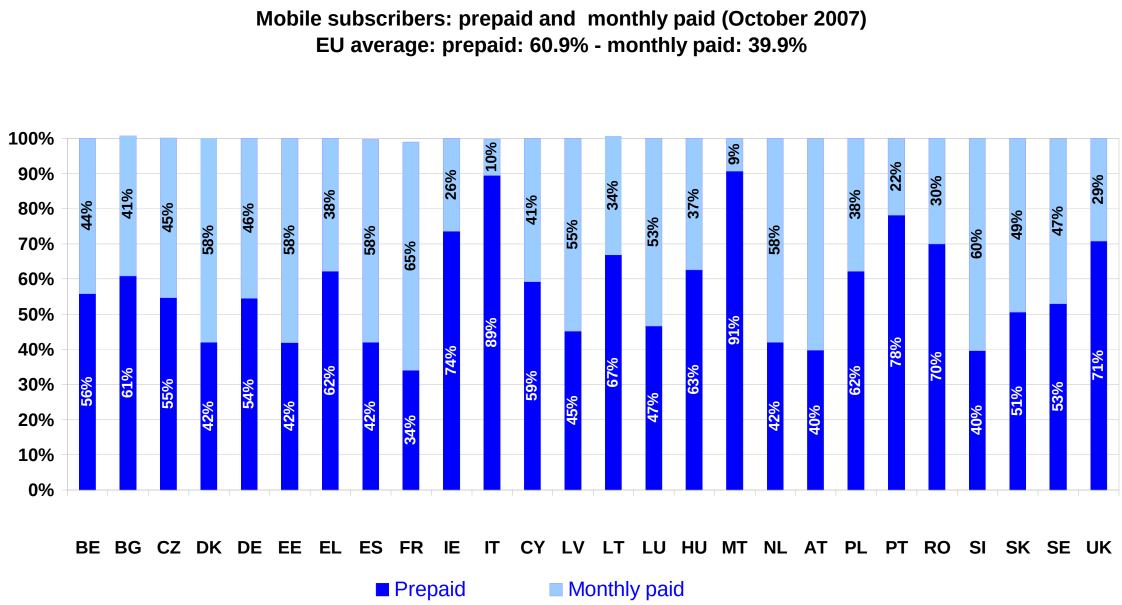
Although penetration has continued to increase, the rate of growth has slowed slightly, possibly indicating that the overall EU market is beginning to mature. Growth in penetration was also registered in Italy despite being a mature market with 148% and in Lithuania with 144%. The graph and map below gives an indication of the penetration levels and number of subscribers in the different Member States.





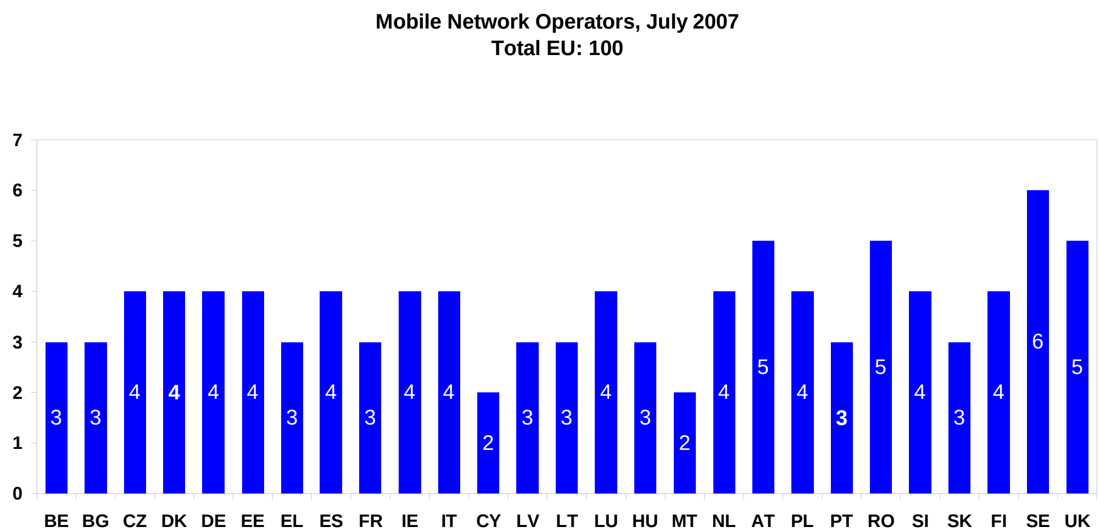
Member States where penetration rates increased by more than 10% compared to the previous year were Germany, Estonia, Italy, Latvia, Lithuania and Slovakia. Luxembourg and the Netherlands have both registered a decrease in mobile subscriptions compared to the previous year but this may be attributed to a change in methodology when calculating subscriptions. On the other hand, some Member States have continued to show just slight growth which to a certain extent indicates market maturity with France being the only Member State below 90% penetration at 82.9%.

The number of prepaid customers remains practically the same compared to the previous year with just a slight increase from just under 60% to nearly 61%. Malta and Italy still have the highest amount of prepaid customers at 91% and 89%. However, prepaid customers also exceed 70% of the customer base in Ireland, Portugal and Romania. On the other hand, there has been a significant increase in the number of prepaid customers in Denmark since these have gone up from 18% in 2006 to 42% this year.



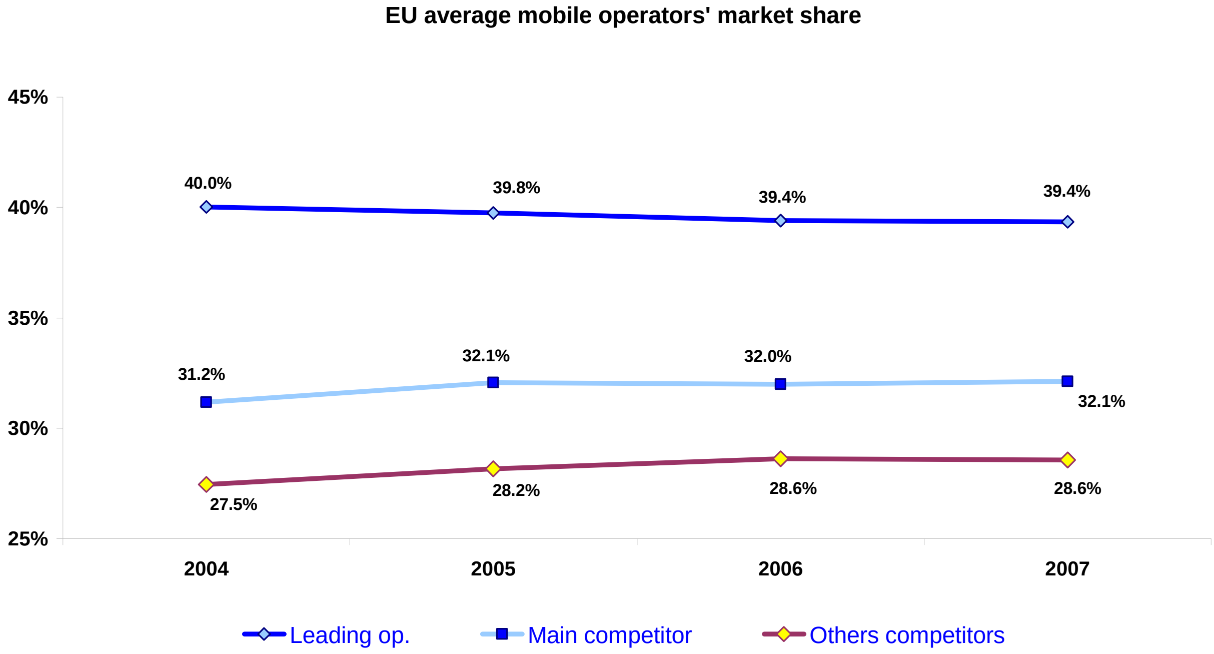
Market players

The number of mobile network operators has remained practically the same although there has been consolidation of the market in some Member States over the previous year. For the first time this year, there are more 3G networks offering commercial services than 2G networks. 86 operators are now offering 3G on a commercial basis, up from 70 last year, and 3G services are now available in all Member States. In fact, there is now more than one 3G operator offering such services in each Member State.

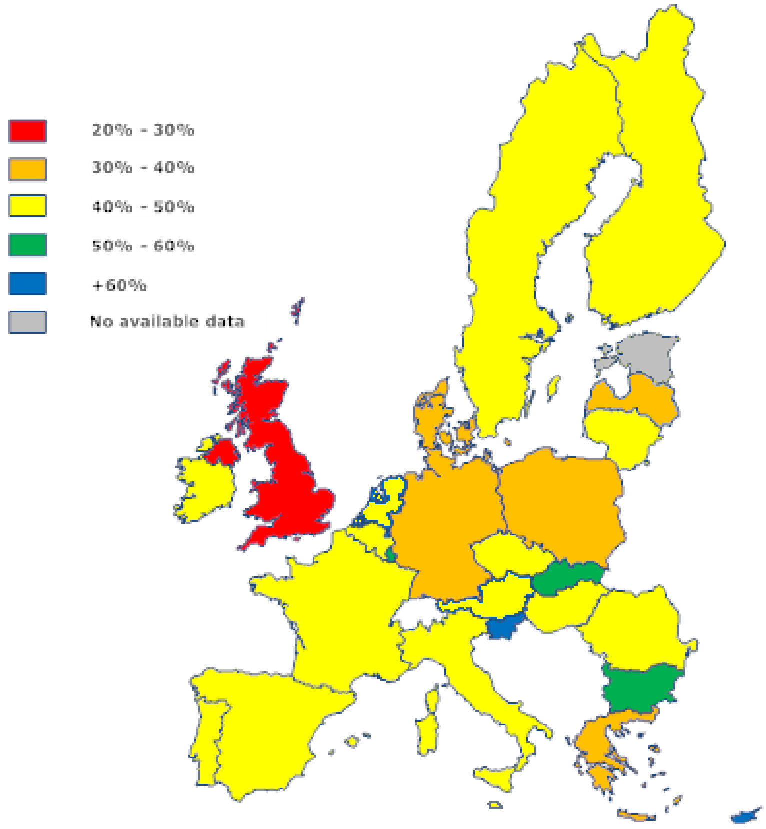


Although consumers are witnessing lower prices as a result of increasing competition, the market shares of the leading operators in each Member State have only reduced slightly since 2004. At EU level, the market shares between 2006 and 2007 of the leading operators in terms of subscribers have remained the same. The main competitors increased their market share by 0.1% while the remaining competitors retained the same market share indicating that the competing operators are finding it hard to dent the position of the leading operators.

The leading operators in Cyprus and Slovenia continue to have very high market shares of nearly 90% and 67% respectively, as can be seen in the map below, even though this has slightly decreased over the past year. In general, the leading operators in most Member States have between 40% and 50% of subscribers although in the United Kingdom the market share is 24%.



Market share of the leading operator in the mobile market, October 2007



3G and data services

It is estimated that there are around 88 million UMTS subscribers in the EU. The penetration is highest in Luxembourg and Ireland with around 29% and 28% of subscribers respectively, followed by Italy and Portugal with around 25%. 16% of the total number of subscriptions in the EU are now 3G[5].

SMS is still a very important source of revenue for mobile operators. In fact, most markets continue to register growth in SMS volumes which is compensating for the slight decrease in prices. It is estimated that mobile operators generate more than 14% of their turnover through SMS.[6] While prices per SMS have remained stable, operators are using 'buckets' of SMS which can be very cheap on a per SMS basis and which can generate considerable volumes.

Analysts and operators are now seeing data services other than SMS growing in importance. Although, data cards and data services over mobile still account for a small percentage of total revenue, mobile operators in some Member States are increasingly winning over customers by offering mobile broadband at prices and speeds that are comparable in some cases to DSL lines (current cards at up to 7.2Mbps).

While mobile prices per minute are still at least double the price of fixed calls, and therefore come at a premium, mobile networks are catching up with fixed-line providers

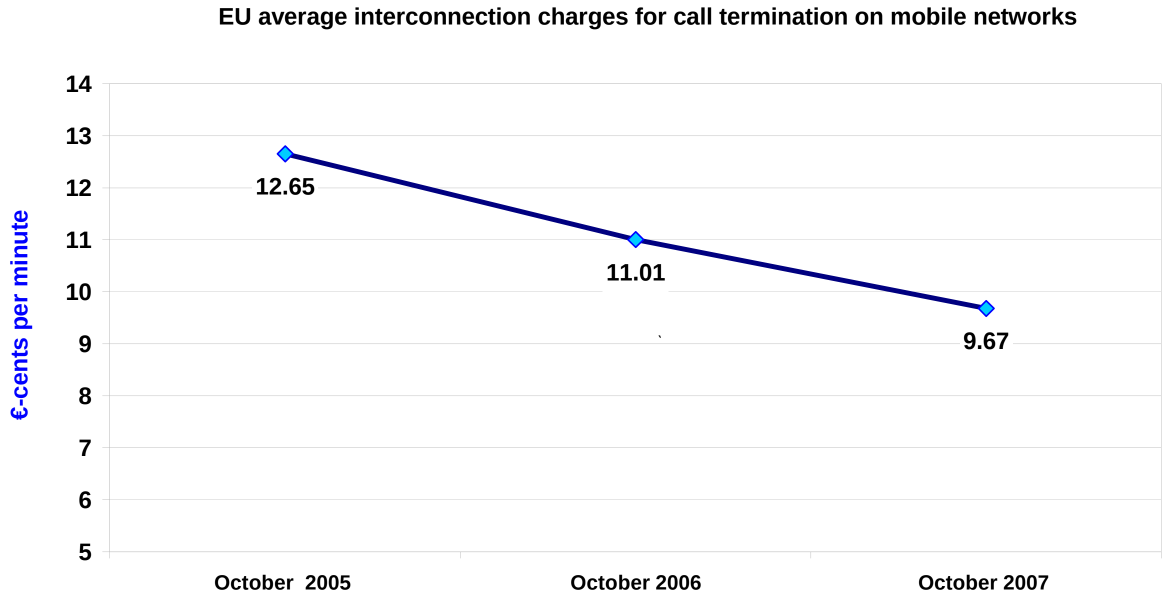
5 Source: http://www.umts-forum.org/
6 Source: Financial results of operators and investment bank reports.

on price and speeds for broadband and, in some cases, prices are even lower than for fixed broadband. Such prices could encourage fixed to mobile broadband substitution and mobile-only households. This is also expected to put pressure of fixed broadband prices.

Last year, it was noted that some operators had changed their strategy by offering data services through flat-rate data tariffs. This change in strategy appears to be encouraging more use of data services over mobile since it has improved transparency for customers who now know how they will be charged for using such services.

Interconnection and access

Mobile termination rates (MTRs) have continued to decrease as can be seen in the table below. The average MTR has dropped below 10 cents for the first time this year to 9.67 cents representing a drop of 12% when compared to 11.01 cents in October 2006.



But there still remain major discrepancies between the MTRs in different Member States. MTRs vary from the lowest in Cyprus at 1.93 cents to the highest in Estonia at 22.37 cents. The Commission has asked in several cases to bring termination rates down by shortening glide paths and ending asymmetric treatment (i.e. favourable treatment for specific operators). Regulatory pressure in a number of Member States has led to MTR rates well below the EU average of 9.67 cents. The trend is expected to continue in the coming years in view of the glide paths set out by NRAs.

International roaming

The Roaming Regulation came into force on 30 June 2007 and has been successfully implemented in all Member States with only isolated problems. The pessimistic predictions by industry have failed to materialise. It introduces maximum ceilings (Eurotariff) on retail prices for making and receiving calls in the EU and requires operators to ensure greater transparency of charges by sending customers pricing information when they travel to another Member State. The Roaming Regulation also caps tariffs that operators charge each other (wholesale charges).

Consumers are now making significant savings of around 60%. The cost of making a call home while roaming has dropped from €1.10 per minute on average before the Regulation to no more than €0.49 per minute plus VAT. When receiving a call the price has fallen from €0.58 per minute to no more than €0.24 per minute plus VAT. The consumer will make greater gains next year and the year after due to further lowering of the ceilings as set out in the Roaming Regulation.

In general, the transition to the Eurotariff went very smoothly. National regulatory authorities have noted exceptions, but generally these can be regarded as being small in number. At the end of September it is estimated that over 400 million EU citizens were protected by a Eurotariff which makes it the standard, default tariff in Europe.

It is still difficult to assess the elasticity effects of the decrease in prices. However, early indications from operators hint at increased usage of roaming voice services when compared to the previous year.

Mobile number portability

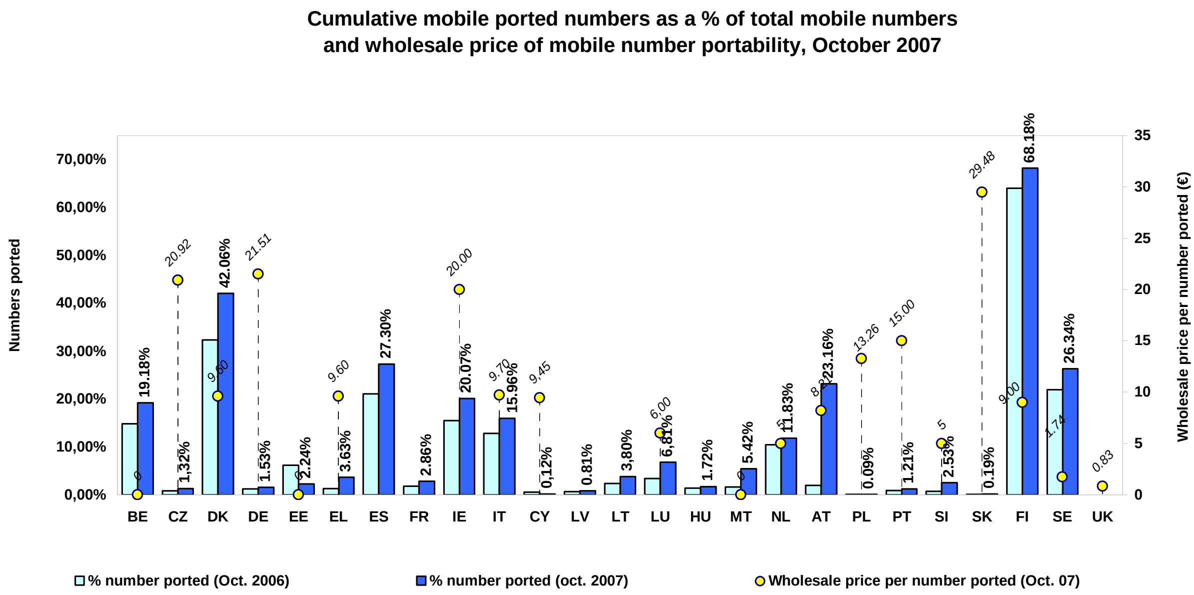
The number of mobile ported numbers increased over the past year (up by 7.1 million) in 24 Member States. As of October 2007, 46 million subscribers had ported their number since this facility was introduced (data is not available for the United Kingdom and Poland while number portability in Bulgaria[7] and Romania is not yet available).

The percentage of ported numbers in the EU since the introduction of mobile number portability is now 8.3%.

Italy leads in terms of the number of subscribers that have ported their numbers. This amounts to 15.96% of total mobile numbers. Finland has the highest percentage of ported numbers (68.18%) followed by Denmark (42.06%) and then Spain (27.3%).

In Spain, Estonia Latvia and Malta there is no charge at inter-operator level for the porting of numbers.

[7] The conditions of its accession to the EU allow Bulgaria to postpone the introduction of number portability until 1 January 2009 at the latest.



Fixed Voice Sector

Introduction

The traditional fixed market for voice calls continues to decline. The substitution of services over traditional switched networks by mobile and broadband services (as for example, VoIP calls included in bundled offers) are key factors in the evolution of the market.

In this environment of growing competition from other networks, fixed incumbents' market shares are still, on average, declining, albeit at a slower pace than before (both by retail revenues and volume of traffic). In some cases, fixed incumbents have even strengthened their position.

The market is still very concentrated in some countries but competition has increased in the EU as a whole. The national fixed calls market is still the least competitive (compared to fixed international calls and calls to mobile networks). Prices are generally stabilizing, although list prices have increased in the local calls market mainly reflecting the lower level of competition in that segment compared to international calls. Nevertheless consumers are experiencing increased choice from VoIP offerings and bundled packages. Regarding the fixed interconnection market, operators have benefited again this year from lower costs, except at the local level.

There has been a considerable increase in the number of direct access lines and fixed number portability remains a very important contributor to the competitiveness of the market (currently effective in all Member States except Bulgaria and Romania).

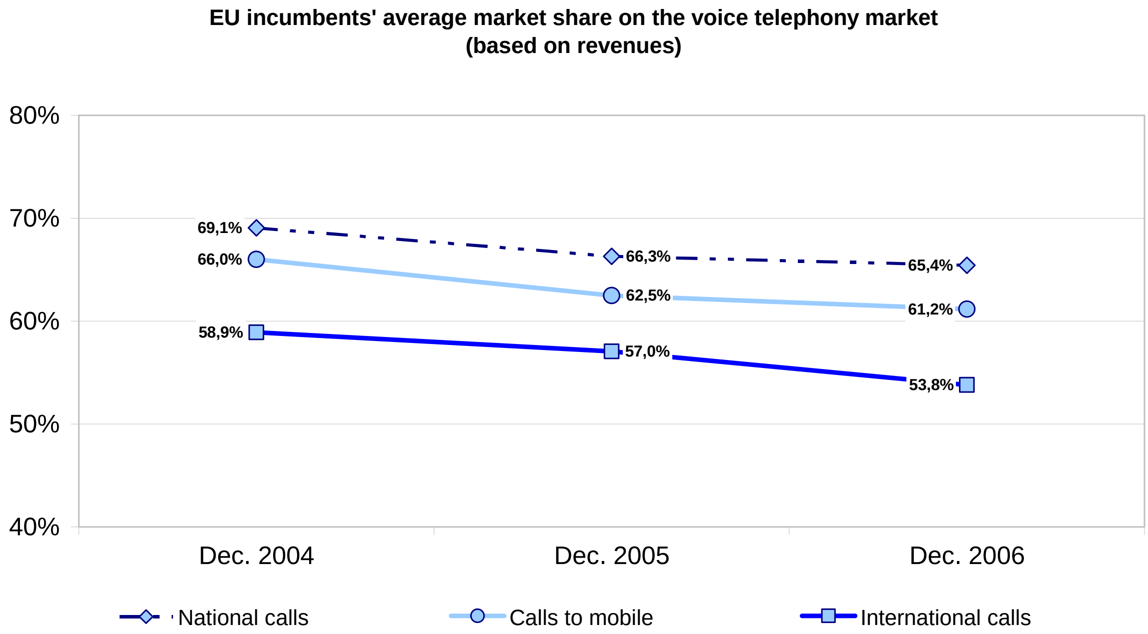
VoIP is gaining much broader attention this year as it continues to replace the traditional fixed voice market due to convergent services and offers. Another side of this phenomenon is that more and more of these voice offers come bundled with other services (for example, broadband Internet or television). Bundling is becoming a key element of the fixed electronic communications markets. It is however essential to ensure that alternative operators have access to the necessary wholesale inputs to enable them to offer competing services and that users' freedom to switch operator is not unduly restricted.

The pattern of competition

Market share

Fixed incumbents' market shares are still declining in the EU markets overall, both on the basis of retail revenues and by volume of traffic, but the rate of decline has slowed. By retail revenues, the incumbents' share of the fixed market declined from 65.78% in 2005 to 64.1% in 2006, and by volume of traffic from 63.6% to 61.8% respectively.

Depending on the type of call, the decline by revenues is similar to previous years (in the case of international calls, from 56.9% in 2005 to 53.8% in 2006), but at a slower pace in the case of calls to mobile numbers (from 62.5% in 2005 to 61.2% in 2006). In the case of calls to national fixed numbers the incumbents' market share declinesfrom 66.3% in 2005 to 65.4% in 2006. This suggests that the national fixed call market would be the least competitive of the three (national fixed calls, international fixed calls and calls to mobile networks).

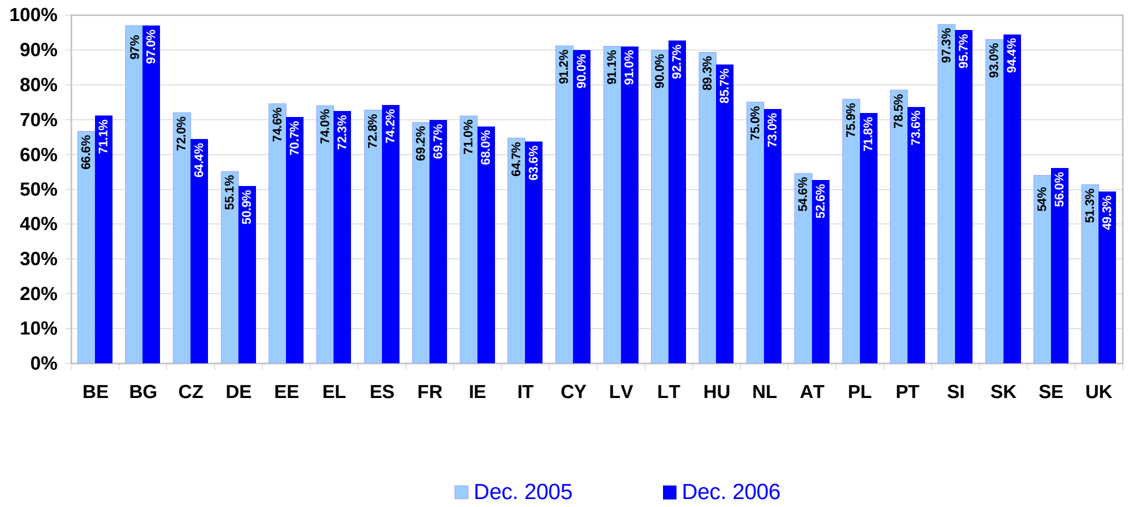


Looking at the incumbent's market share in each Member State separately, the biggest declines by revenues have occurred in the Czech Republic (from 72% in 2005 to 64.4% in 2006), Estonia (from 74.6% to 70.7%), Ireland (from 71% to 68%), Hungary (from 89.3% to 85.7%), Poland (from 75.9% to 71.8%) and Portugal (from 78.5% to 73.6%).

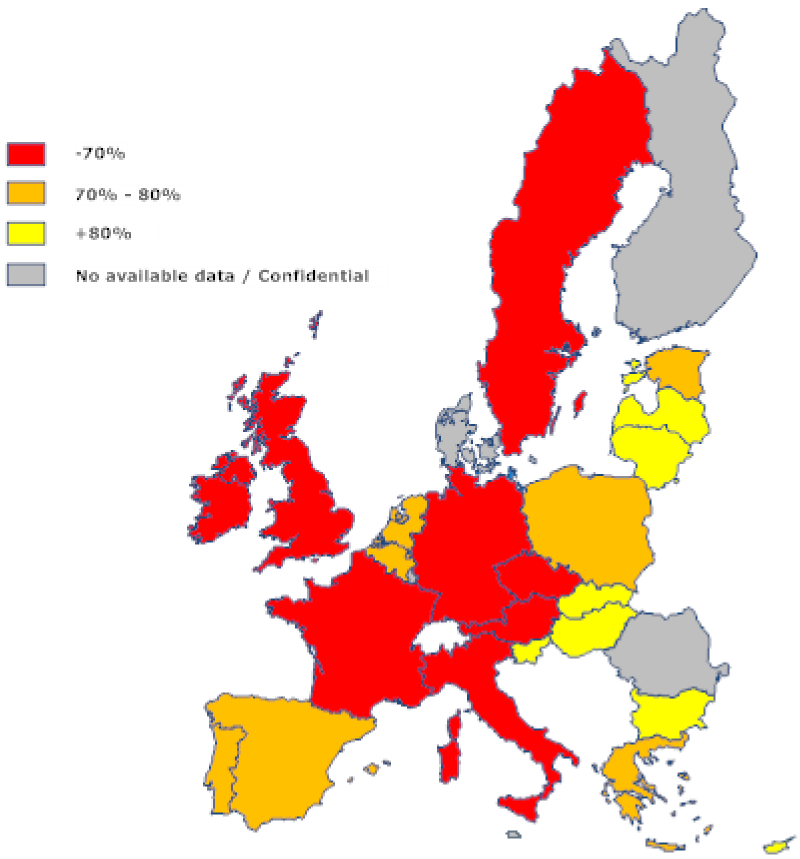
In other countries, for example, Belgium (from 66.6% to 71.1%), Lithuania (from 90.0% to 92.7%), or Slovakia (from 93.0% to 94.4%), the incumbent's market share has increased from the previous year.

The pattern of fixed markets across the EU remains diverse. The incumbent's market share in the overall fixed voice telephony market still remains particularly high (more than 90%) in Bulgaria, Cyprus, Latvia, Lithuania, Malta, Slovenia and Slovakia.

Incumbents' market share in the fixed telephony market (all types of calls) (by retail revenue)



Fixed Incumbent market share, October 2007

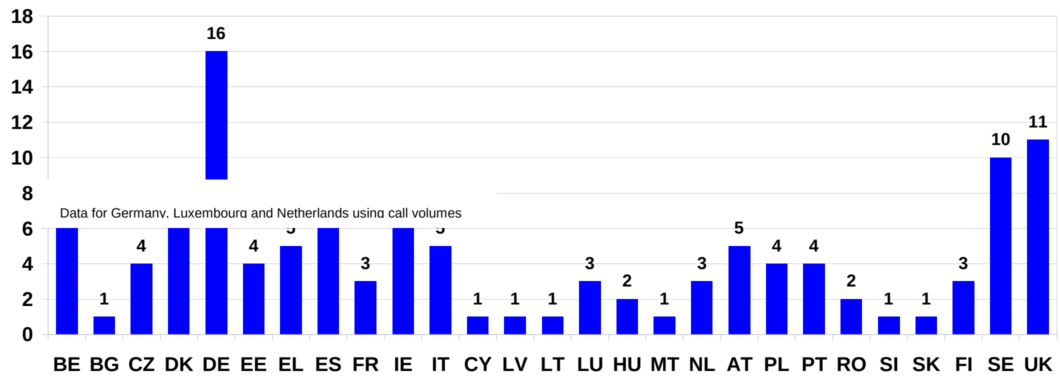


Choice

As mentioned in previous Reports, the market is still very concentrated in some cases. This can be the result of new entrants focusing their business on specific segments in the market, and thus having a limited impact on the overall level of competition.

An indicator that can be used as a proxy for concentration on the market is the number of operators that have a combined share of 90%. Comparing this data to previous years', shows that competition has increased. While in 2005 only 7 countries had five or more major competing players (including the incumbent), in 2006 there were 10 such countries.

Number of players in the fixed telephony market in terms of retail revenues (including the incumbent, Dec. 2007)



Operators that along with the incumbent operator have a combined market share of 90% of the voice telephony market

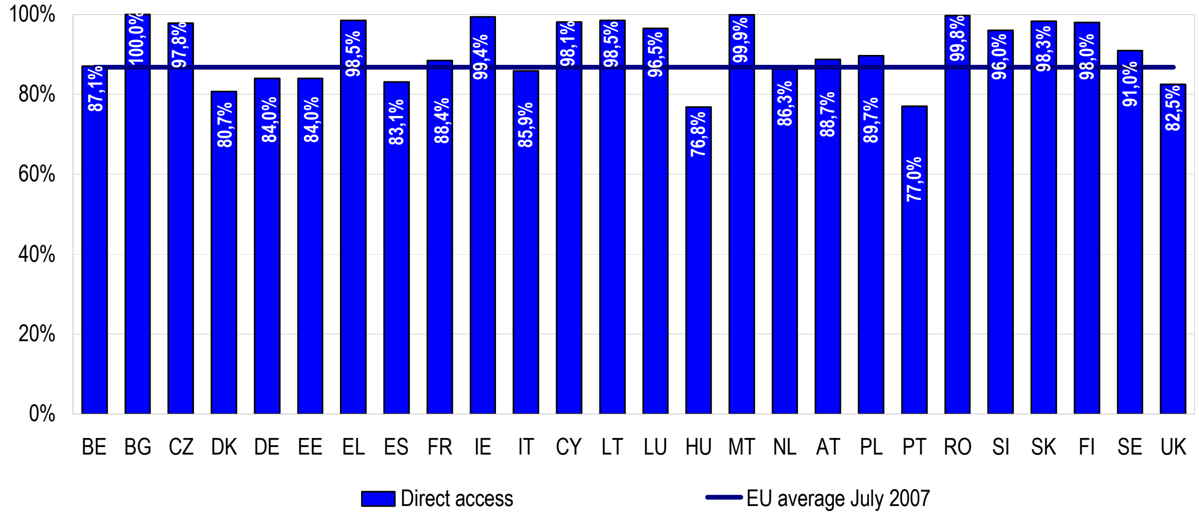
The provision of a publicly available fixed line (direct access) is one of the key elements for competing on the fixed market. Despite the incumbents' dominance in the local access market, there has been an increase (4 percentage points from July 2006)[8], on average, in the percentage of subscribers using an alternative provider in Member States, standing now at 13.5%[9]. While still relatively low, the increased availability of alternative network solutions (cable, unbundled lines, fibre) is increasing choice in direct access. On the other hand 86.5% of EU fixed subscribers on average are relying on the proprietary infrastructure of the incumbent operator for such direct access. This percentage is still very large even though it has been slowly declining over the years.

Despite these increases, competition in the fixed voice market remains largely based on indirect access wholesale products such as carrier pre-selection and carrier selection, but LLU is replacing these solutions in many cases.

8 According to July 2006 revised data EU average was 9,5%

9 Differences with previous years' results are due to changes in definitions by Member States and the use of estimations for 2006 in some Member States.

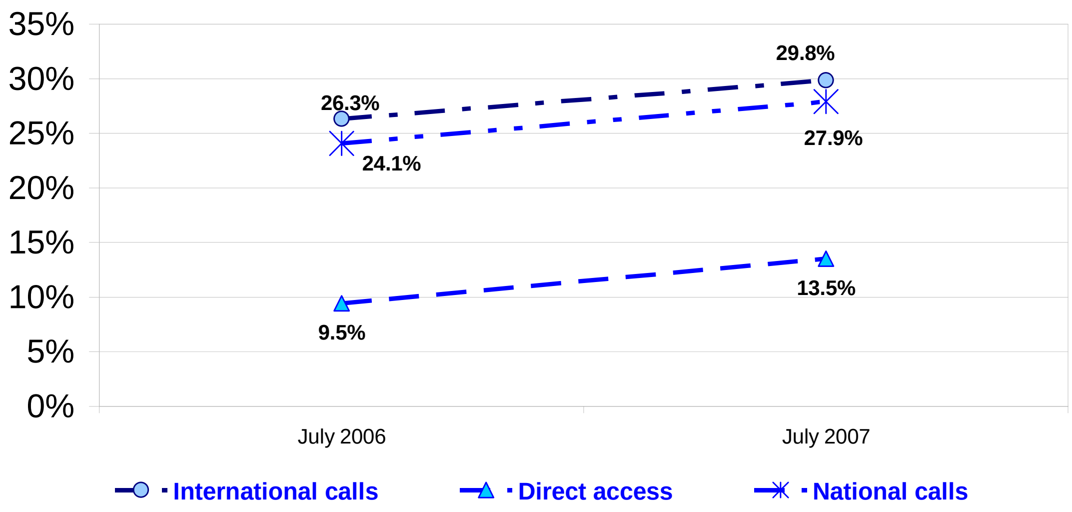
Subscribers using incumbent for direct access, July 2007
EU average: 86.5%



Data for Latvia unavailable

The number of EU subscribers using alternative operators has increased significantly during the reporting year. More subscribers are opting for alternative operators when making both national (15.8% more subscribers) and international calls (13.3% more subscribers).

EU subscribers using an alternative provider



Fixed number portability remains a very important contributor to the competitiveness of the market. Following its implementation in Slovakia, it is now operational in all Member States, except in Bulgaria (implementation required by January 2009 under the Accession Treaty) and Romania. Strong growth in the number of ported numbers has been recorded again in Greece, Spain, France, the Netherlands Slovenia and Czech Republic (despite a higher price in the latter than other Member States). Since the introduction of fixed portability, a total of almost 19 million subscribers have ported their numbers as of October 2007 (compared to 15 million at October 2006 and 7 million in 2005): 21% more

VoIP and fixed to mobile substitution

VoIP is gaining much broader attention this year as it continues to replace traditional fixed voice telephony due to convergent services and offers. The Commission is working to evaluate this phenomenon. For the first time this year, figures for VoIP and bundled offers have been requested from the Member States for the Implementation Report. However data is not available in many of them. This situation should be corrected in future years.

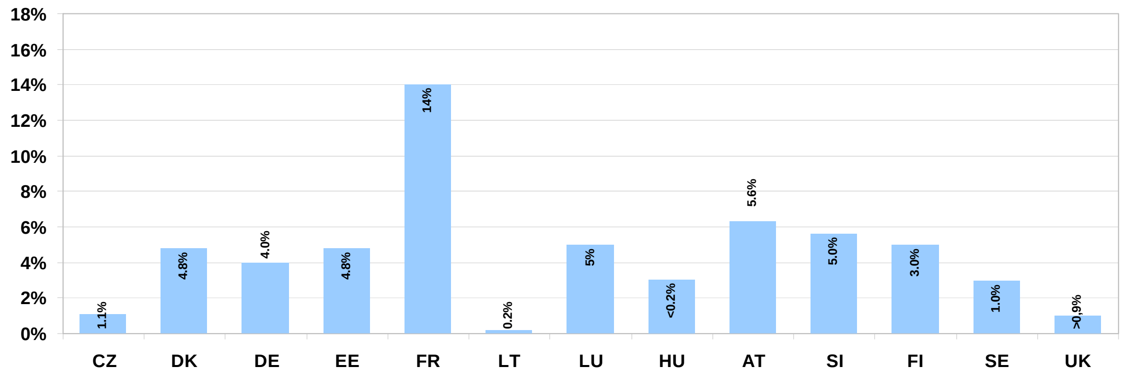
In France, Lithuania, Austria, Estonia, Slovenia and Hungary, IP originated calls (excluding P2P) account for at least 5% of the market (on the basis of outgoing minutes). VoIP is also strong in Finland, United Kingdom, Sweden, Malta, Denmark or Czech Republic. In general the number of VoIP connections is growing fast. For example, in France 14% of the fixed voice calls are originated on IP technology. In June 2007, nearly 30% of the households had Voice over Broadband (VoB) access.

In the Netherlands, the number of VoIP subscriptions (via ADSL) increased by more than 2 million in 2007, while cable telephony subscriptions reached nearly 800.000. In Slovenia, VoIP is available in 9% of the households and the largest cable operator has also started providing voice services using IP technology.

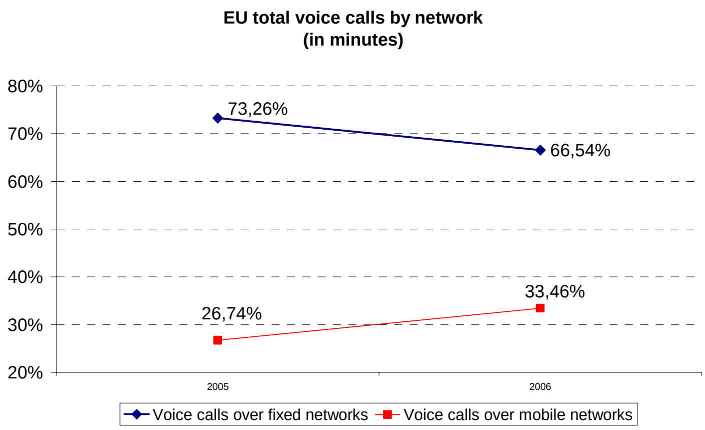
It should be mentioned that P2P (peer-to-peer) software for VoIP is not taken into account in these figures so the phenomenon is likely to be underestimated: in Finland 20% of broadband subscribers do use IP Telephony Software.

According to the Eurostat E-Communications Household survey, 16% of Europeans with Internet access at home use the PC to make free calls on the Internet to other users who have subscribed the same Internet phone service (45% in the case of the Czech Republic and Latvia, 44% in the case of Poland and 36% in the case of Bulgaria). On the other hand 4% of the Europeans with Internet access at home make cheap international calls or to mobile numbers using an Internet phone service (11% in Cyprus, 9% in Greece and 6% in the United Kingdom and France).

**Market Share of VoIP Operators
on the basis of volume of traffic
(December 2006)**



Another aspect of this phenomenon is that more and more of these voice offers come bundled with other services (for example, broadband Internet or television). Although bundling is hard to measure (sometimes services in one offer are invoiced separately, sometimes not), it is becoming a key element of the fixed electronic communications markets: 10% of the European population is already subscribed to a bundled offer.

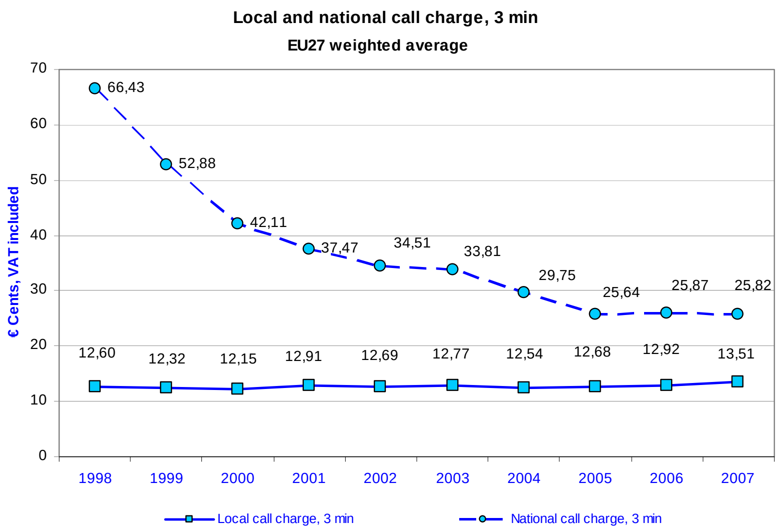


According to the Eurostat E-Communications Household survey, 12% of Europeans include television on their bundle package (22% in the case of Denmark), 23% include voice telephony, 6% include mobile telephony (24% in the case of Luxembourg) and 24% include an Internet access 37% in the case of the Netherlands). Finally, the volume of mobile voice traffic is catching up with fixed voice traffic. While fixed networks voice traffic accounted for 73.3% in 2005, it fell to 66.5% in 2006.

While the copper network is still the main platform, it is being gradually replaced by next generation networks. For example, in Slovakia the largest mobile operator entered the fixed market by deploying a fibre-to-the-home (FTTH) network and launching commercial services in September 2007.

Pricing

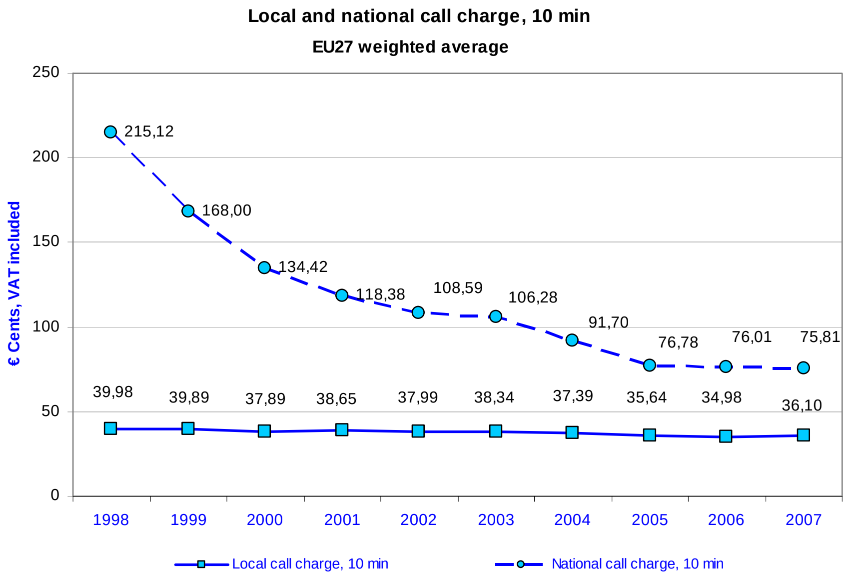
National fixed telephony tariffs are stabilizing. The trend towards a slower decline in tariffs which had been observed in previous years is even more evident in 2007. Although still declining in the national market, local call tariffs have increased slightly.



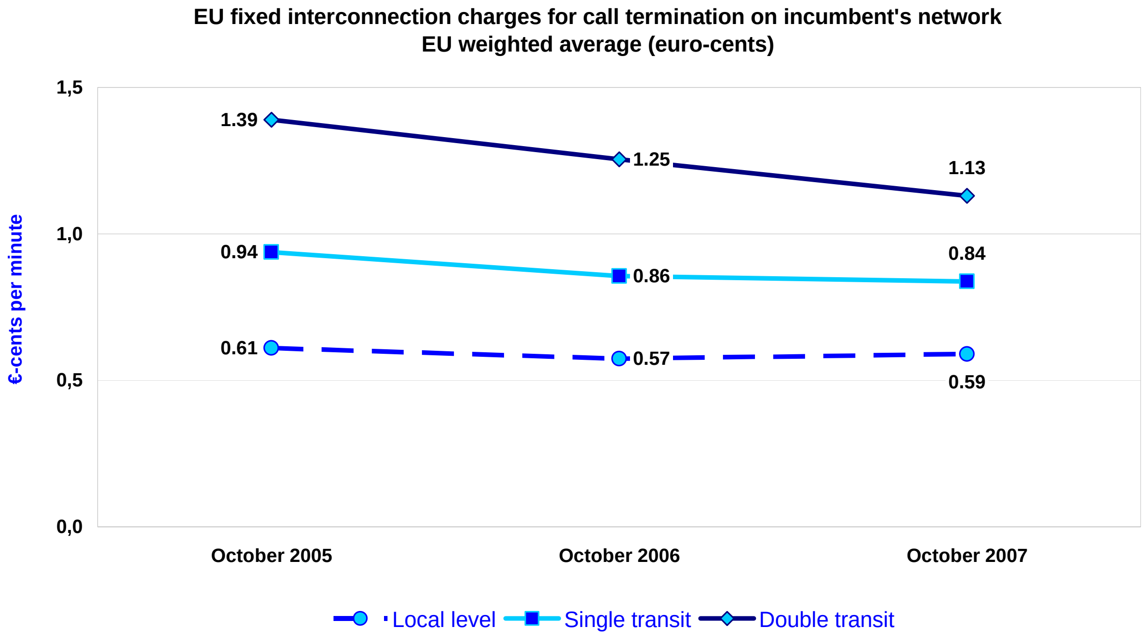
While prices for both 3-minute and 10-minute national calls have declined, the reduction is the lowest since 1998: 0.2% decrease for a 3 minute call and 0.3% decrease for a 10 minute call.

Regarding local calls, prices have increased slightly: 4.6% for a 3-minute call and 3.2% for a 10-minute call. The reasons for this could be found in the slight increase in the local interconnect costs and in the relatively lower level of competition compared to other segments of the market (international and calls to mobile for example).

Nevertheless the changes in both the local level and in the single transit level are not considerable and, in any case, consumers are increasingly benefiting from bundled offers.



Interconnection



Regulatory measures taken by NRAs in the fixed interconnection market after the market analysis (cost accounting systems and glide paths) seem to be reducing the interconnection prices. For example in Portugal interconnection prices were reduced by 12%, under the reference interconnection offer.

Operators have benefited this year again from lower interconnection costs. Except for the local level, with a 1.8% increase, EU average fixed interconnection charges for call termination on the incumbents' networks have further decreased: 3.5% less on the single transit level and 10.4% less on the double transit level. The countries with the lowest charges are Sweden, United Kingdom, Cyprus and Denmark.

Without Bulgaria and Romania (who have been included for the first time in the EU average), all levels would have shown a bigger average decline: the local level would have decreased in one year by 7%, single transit by 11.6% and double transit by 17.6%.

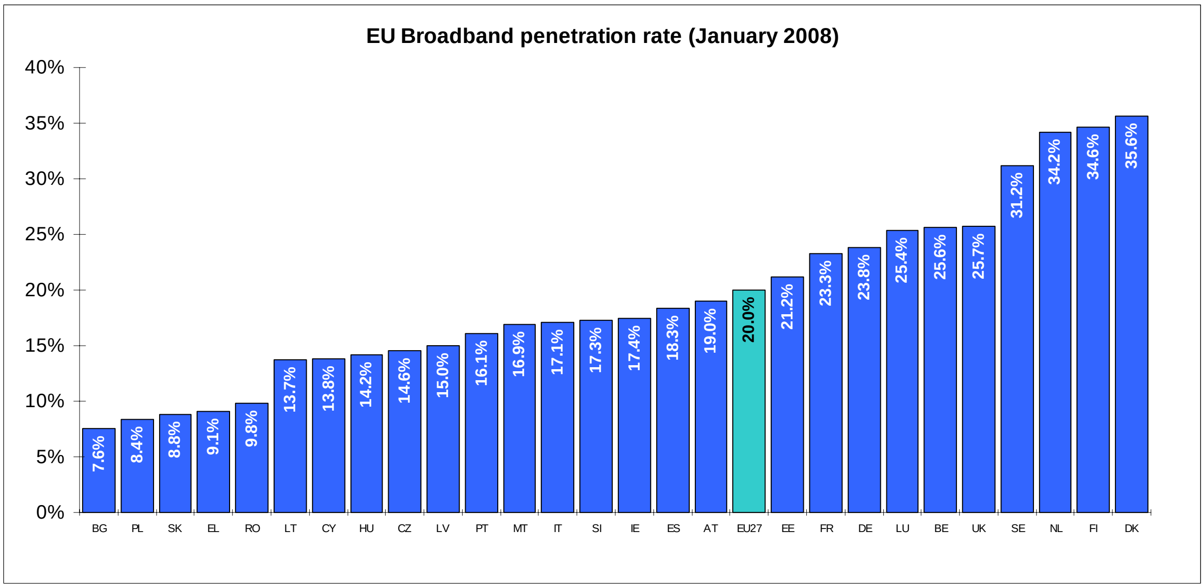
Broadband

Introduction

Broadband penetration has continued to grow in 2007 although at different speeds as the gaps between Member States continue to increase. In addition, significant differences in terms of broadband availability between urban and rural areas exist across the EU. While DSL remains the most popular broadband technology, other technologies have become viable alternatives, including mobile broadband in some cases. The market share of incumbents continues to decrease as a result of intensifying competition, while market players in general continue to invest with a view to improving the efficiency of their networks and meeting growing demand for higher speeds.

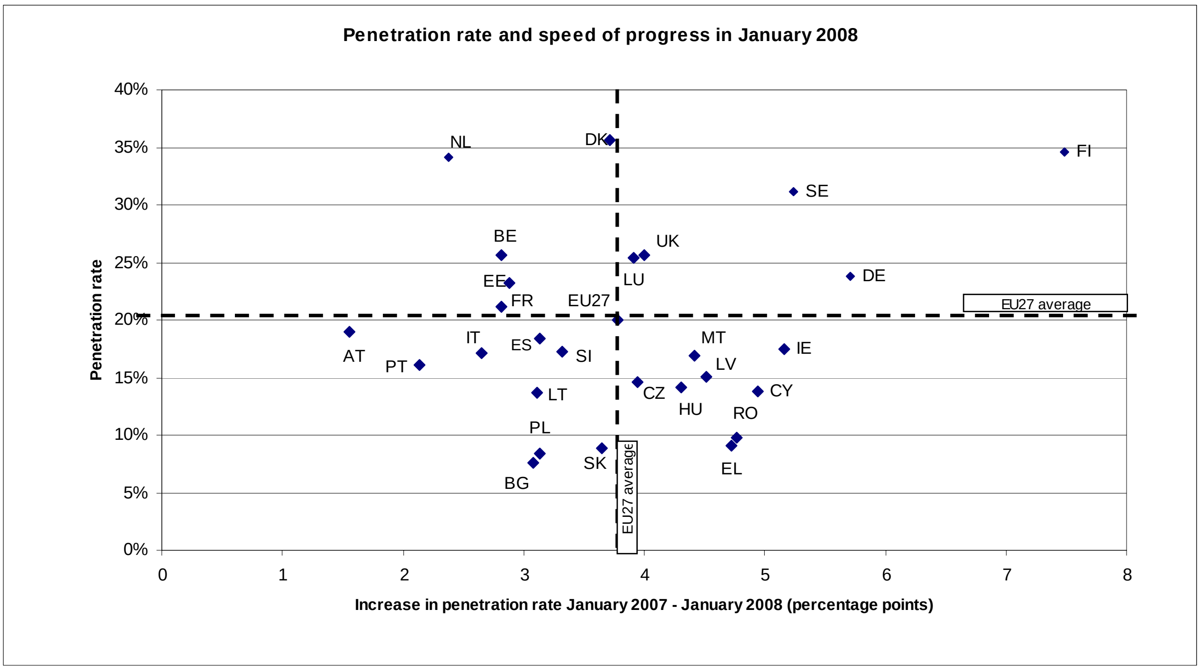
Take-up of fixed broadband

Strong broadband growth has continued throughout 2007 although at a slower pace than last year. On average, 52 294 broadband lines (EU27) were added per day during 2007 compared to 53 965 new broadband lines (EU25) per day during the previous year. The number of fixed broadband access lines was more than 99 million as of 1 January 2008, compared to 80 million in January 2007, an increase of more than 19 million lines within twelve months.



Data for Estonia, France, Lithuania, the Netherlands and Austria as of October 2007.

The EU average broadband penetration rate has risen from 16.3% in January 2007 to 20% in January 2008.



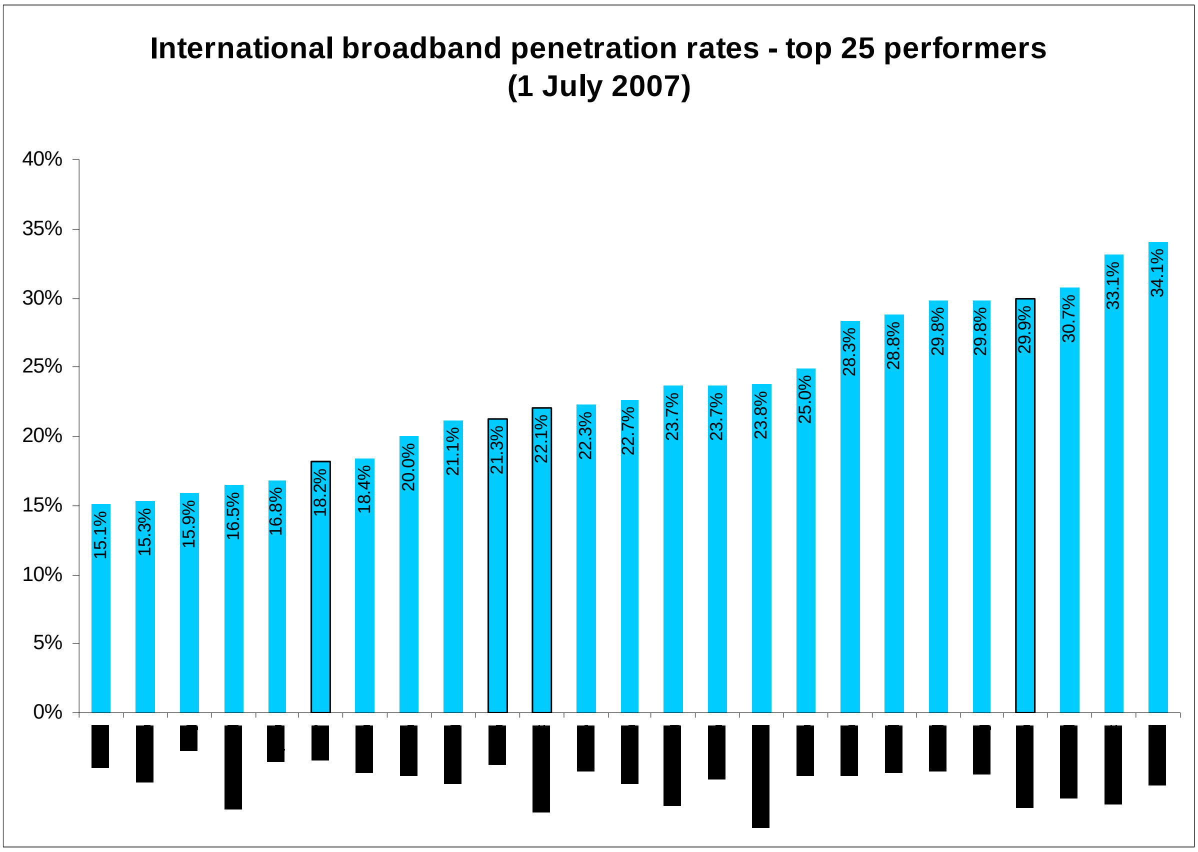
Data for Estonia, France, Lithuania, the Netherlands and Austria as of October 2007.

EU growth has been highest in Finland, Germany, Sweden, Ireland and Cyprus. Whereas for Finland and Sweden the growth figure follows on from an already advanced position, for the three other counties this represents a 'catching-up'. Other Member States with growth higher than EU average include Romania, Greece, Latvia, Malta, Hungary, the United Kingdom, the Czech Republic and Luxembourg. The gap between the Member States with the highest and the lowest penetration has increased from 27.4 percentage points in January 2007 to 28.0 percentage points in January 2008. However, growth in Member States is not necessarily expected to peak at the same levels, as the size of households across the Member States also varies considerably[10].

International Comparison

As of July 2007, Denmark and the Netherlands were the world leaders in fixed broadband penetration. Thirteen other EU countries were also among the world leaders, while in total eight Member States had penetration rates higher than the United States. However, the EU average was still lower than that of some other world economies, partly affected by the recent inclusion of Member States with low penetration rates (e.g. Bulgaria, Romania).

10 For example, Denmark, Finland, Sweden and the Netherlands have on average a smaller number of persons residing in one household compared to, for example, Slovakia, Bulgaria and Greece, all with much higher "persons/household" ratio.



Data for Austria and the Netherlands as of April 2007.

The United States performed better than in 2006 (partly as a result of affordable monthly subscription prices and increased investment) and succeeded in increasing its lead over the EU, while Japan failed to maintain the growth rates achieved in previous years. South Korea managed to recover from a sluggish 2006, and has shown strong growth in this important economic sector.

Comparable third countries & the EU	Broadband penetration rate (July 2007)	Annual increase in penetration rate July 2006-July 2007 (% points)	Annual increase in penetration rate July 2005-July 2006 (% points)
Switzerland	30.7%	4.5	6.0
Korea	29.9%	3.5	1.0
Norway	29.8%	5.4	6.3
Iceland	29.8%	3.3	5.0
Canada	25.0%	3.1	2.9
Australia	22.7%	5.7	6.3
United States	22.1%	4.2	3.7
Japan	21.3%	2.3	2.6
EU	18.2%	3.3	4.4
New Zealand	16.5%	4.9	4.6
Turkey	5.2%	2.2	1.7

Source - 1. third countries: OECD, June 2007; 2. EU: COCOM report July 2007

DSL is the most popular broadband access technology with consumers and businesses in the EU (79.9% of all fixed broadband lines on 1 January 2008). Cable represents the leading broadband platform in the United States, Canada and South Korea, with market shares ranging from 52.3% to 35.3%, as compared to 15.3% in the EU (1 January 2008 data). In Japan, 36% of all broadband connections are provided through fibre optics, whereas 30.9% of all South Korean broadband Internet users use FTTH, compared to 1.3% in the EU (1 January 2008 data). Despite an obligation on the Japanese incumbent to offer unbundled access to its fibre, the main driver for this investment seems to be intense local competition and demand for more bandwidth among consumers.

Mobile broadband

Mobile broadband technologies (e.g. UMTS-HSPA, W-CDMA, OFDM), generally allow transmission speeds lower than recent wired technologies (respectively, in principle, up to 15 Mbit/s compared to speeds exceeding 100 Mbit/s). Moreover, they often represent the most expensive broadband access vehicle. However, take-up of mobile broadband[11] has developed significantly in a number of Member States in recent years (e.g. Bulgaria, Denmark, Germany, Greece, Spain, Ireland, Italy, Luxembourg, Austria, Portugal, Romania, Slovenia, Slovakia[12]), including Member States facing fixed network coverage gaps or experiencing a high level of fixed-to-mobile substitution.

Market developments

DSL technology

In contrast to alternative technologies, the number of DSL lines grew less dynamically during 2007. Although generally markets have been regulated across the EU, the technology recorded growth of 22.4% (EU27) since January 2007, compared to 34.5% (EU25) growth during 2006. Operators using legacy networks are responding to the challenge of alternative technologies, and have progressively invested in infrastructure (e.g. MDFs, local loops, sub-loops, DSLAMs) which is based on technologies such as VDSL and VDSL2, thus ensuring higher transmission speeds and improving the efficiency of operators' networks.

Broadband technologies share	DSL	Cable	Fibre	WLL	Satellite	Leased lines	PLC	Other
2008 January	79.9%	15.3%	1.3%	1.1%	0.1%	0.1%	0.0%	2.2%
2007 January	80.8%	15.5%	1.1%	0.8%	0.2%	0.2%	0.0%	1.3%

Other technologies

Take-up of cable has been robust in particular in Germany, Poland, the United Kingdom, Spain, Hungary and Belgium. At EU level, annual growth was 21.7% on 1 January 2008.

11 Mobile broadband based lines (active Internet or advanced data usage) are estimated to potentially increase the overall penetration of a given Member State up to 30% in some cases.

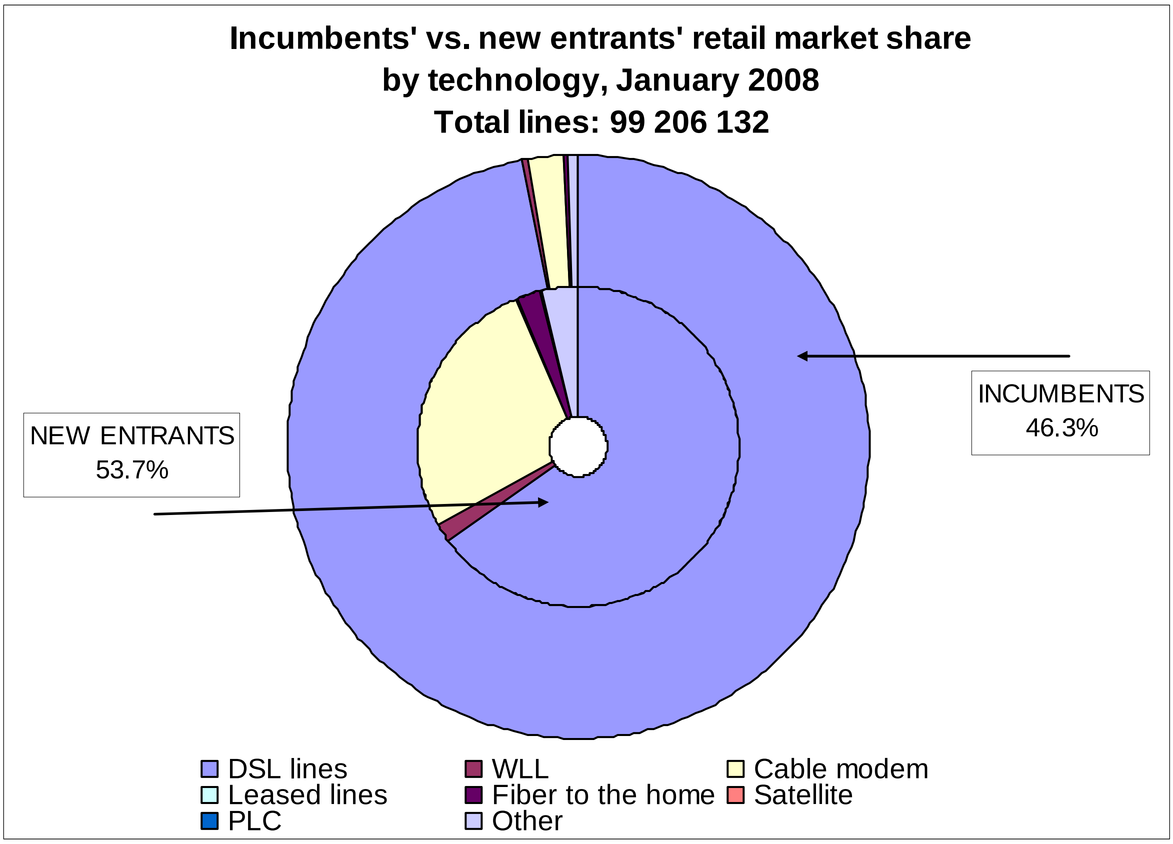
12 Data on mobile broadband was collected by the NRAs for the first time and varies significantly. As a high level of consistency of data could not be guaranteed by the Commission services, examples are provided in the present Report for illustration purposes only.

Amongst the Member States with a traditionally strong cable presence (i.e. market share exceeding 30%), Malta, Hungary, Belgium and the Netherlands saw cable increase its relative position as an access platform, whereas in Portugal (slightly) and Austria, cable lost ground to DSL.

Operators continued to roll-out FTTH and wireless local loop (WLL) networks leading to growth at EU level for these networks of 50.7% and 74.6% this year on average respectively. In Sweden, Lithuania and Estonia, the Member States with the highest ratio of FTTH access lines, FTTH has increased its market share compared to the end of 2006. WLL represents an important means of access in the Czech Republic, Ireland and Slovakia, the latter experiencing significant growth during 2007. Ethernet has developed into an important alternative platform in all three Baltic States, Denmark, Slovakia, Poland and Bulgaria. Municipal broadband projects/networks, be they fibre or wireless, are expanding across the continent (e.g. France, Spain, the Netherlands, the Czech Republic, the United Kingdom, Lithuania and Ireland).

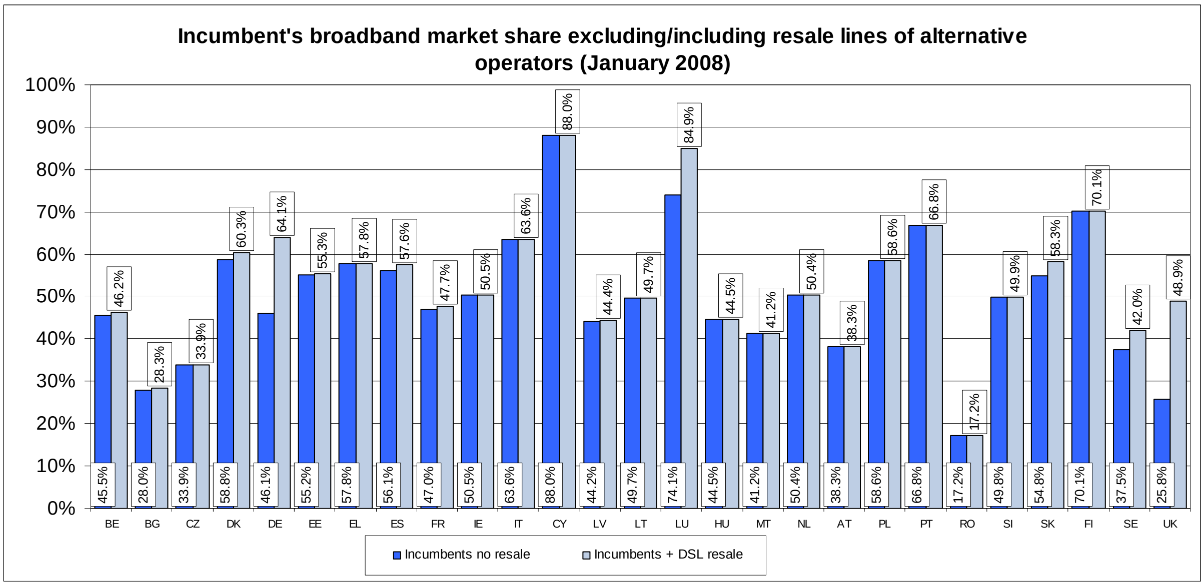
Market shares

At EU level the incumbents' broadband market share has declined slightly to 46.3% in January 2008 from 46.8 in January 2007 on average. The situation regarding market share differs from one Member State to another, ranging from 17.2% (incumbent's market share) in Romania to 88.0% in Cyprus.



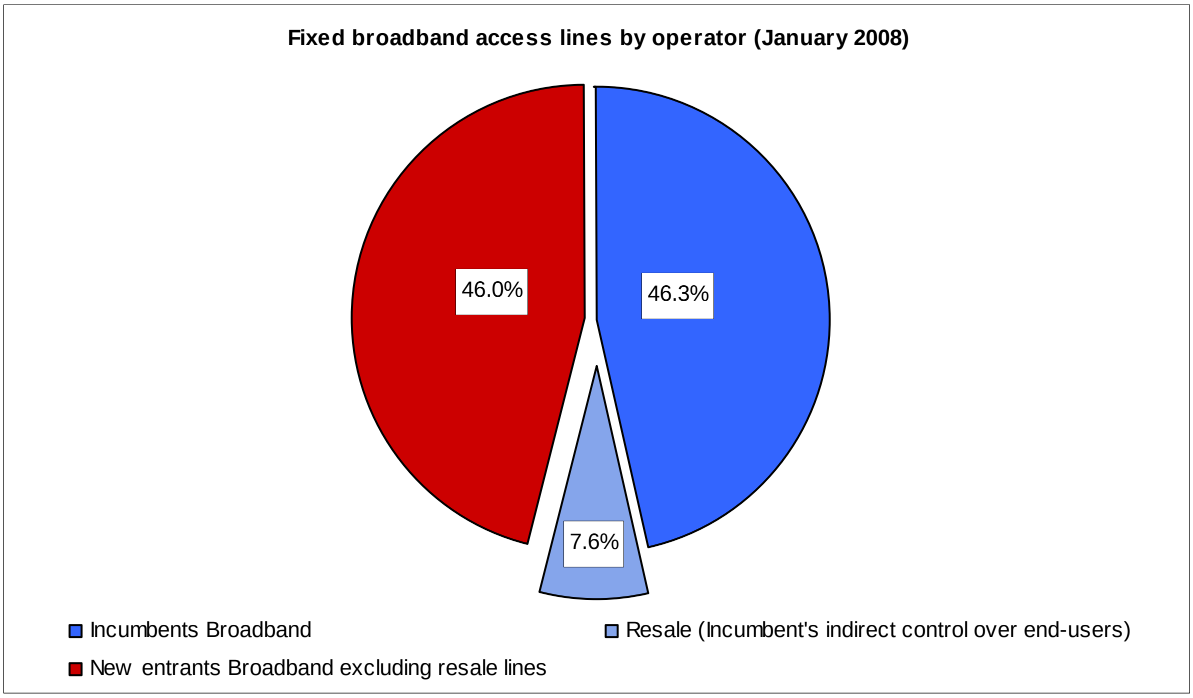
Over the past number of years resale has acquired critical importance in some Member States at the expense of infrastructure competition. However, resale of incumbents' DSL products, which remains mainly unregulated, does not guarantee sustainable competition.

Moreover, it is perceived as an instrument by which incumbents indirectly exercise control over end-users. Nevertheless, the importance of the resale segment has been decreasing.



Data for Estonia, France, Lithuania, the Netherlands and Austria as of October 2007.

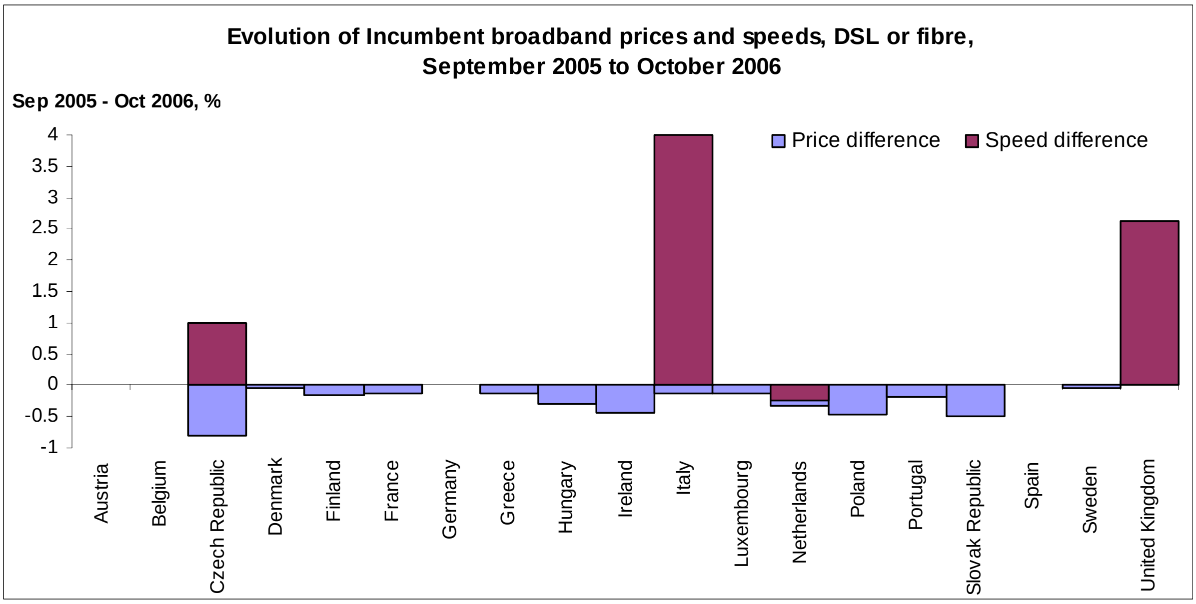
Differences in incumbents' market shares depending on whether DSL resale lines are included or not are considerable. For example, in the United Kingdom, the country with the highest number of resale lines, the incumbent's market share excluding resale lines is 25.8% as compared with 48.9% including resale lines (a difference of 23.1 percentage points). In Germany this difference is 18.0 percentage points, in Luxembourg 10.8 percentage points and in Sweden 4.5 percentage points.



Broadband speeds and retail prices

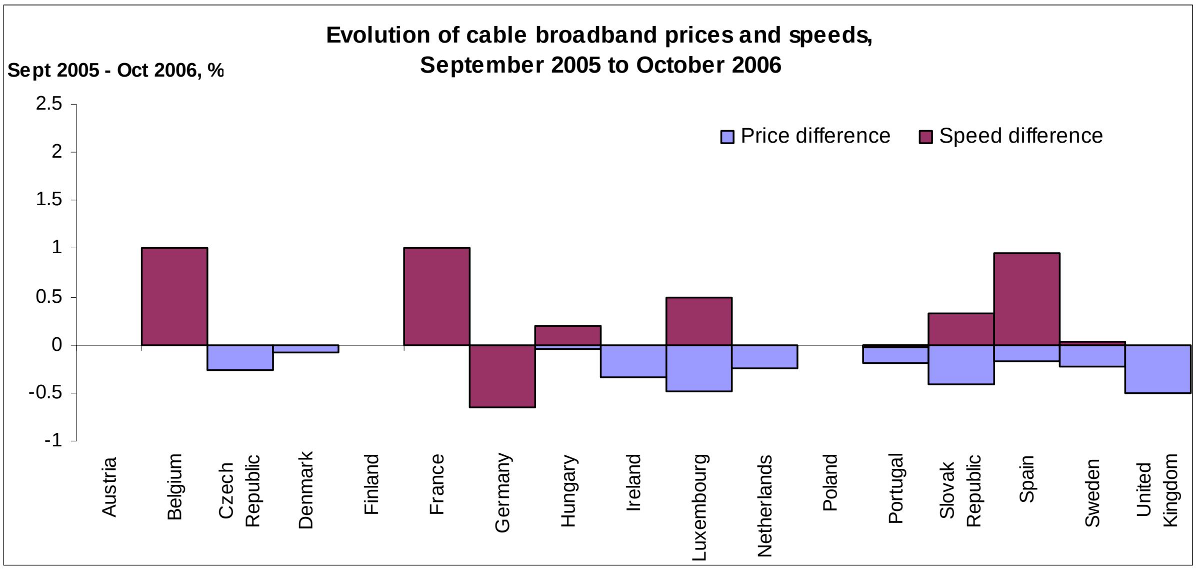
Higher data transmission speeds provide customers with more and better choice at lower prices for the same capacity. According to NRAs, EU average speeds (about 58% of all fixed lines) are, as of 1 January 2008, in the range of 2 Mbit/s-10 Mbit/s. However, in some Member States operators and Internet service providers have concluded a significant amount of contracts with speeds going beyond 10 Mbit/s (e.g. Belgium, Greece, Portugal, Bulgaria, Hungary), while at the same time there are numerous Member States where a large majority of fixed lines are still in the range of basic 144kbit/s-2Mbit/s (e.g. Cyprus, Slovenia, Finland, Austria).

An OECD study[13] reveals that prices for broadband DSL, fibre and cable subscriptions continue to fall across the EU, while transmission speeds have increased since September 2005.



Source: OECD, Communication Outlook 2007

[13] OECD, Communication Outlook 2007



Source: OECD, Communication Outlook 2007

Bridging the digital divide

Significant differences between broadband availability in urban and rural areas remain a key concern.

Broadband coverage across the EU – gaps between national coverage and coverage in rural areas	DSL rural coverage	DSL rural gap with national coverage	cable rural coverage	cable rural gap with national coverage
BE	100.0%	0.0%	30.0%	50.3%
DK	100.0%	0.0%	34.0%	26.0%
LU	100.0%	0.0%	47.4%	22.8%
NL	99.0%	0.0%	40.0%	51.3%
FR	96.5%	1.9%	1.1%	24.9%
ES	86.0%	4.0%	11.0%	37.0%
UK	95.0%	4.5%	4.8%	45.3%
EL	10.0%	8.0%	0.0%	0.0%
SI	78.5%	9.7%	24.3%	24.8%
FI	82.0%	9.8%	N/A	N/A
PT	84.0%	10.0%	48.0%	32.1%
SE	84.0%	11.3%	17.0%	31.3%
HU	77.0%	12.0%	0.0%	72.0%
AT	79.0%	12.3%	17.0%	19.0%
PL	54.8%	12.3%	7.0%	11.0%
IE	64.0%	21.6%	4.0%	4.0%
LT	58.0%	25.0%	2.1%	49.4%
DE	58.5%	34.1%	2.5%	33.2%
LV	37.0%	35.0%	0.0%	50.0%
SK	29.5%	36.2%	N/A	N/A
IT	50.5%	38.5%	0.0%	0.0%
CY	0.0%	69.7%	0.0%	30.0%
MT	0.0%	99.0%	N/R	N/R
EU25	71.3%	18.0%	7.4%	28.2%

Source: IDATE, October 2007, Broadband coverage in Europe – data refer to the end of 2006; data for CZ, EE, BG and RO not available. No data available for cable coverage for FI and SK.

For example DSL coverage in rural areas is 71.3% compared to 89.3% at a national level (94% urban only coverage). For cable the difference is greater with only 7.4% coverage in rural areas compared to 35.6% at national levels. The gap between DSL and cable coverage in rural areas and the national average is particularly significant in Slovakia, Italy, Latvia and Germany.[14]

Continuing the trend reported in 2006, auctions or selection procedures for wireless and mobile network licences have taken place in a number of Member States in 2007 (e.g. Bulgaria, Denmark, Greece, France, Luxembourg, Poland, the United Kingdom, Ireland, Estonia, Latvia, Lithuania and Sweden). The availability of commercial offerings based on these licences could represent a key element to bridging the digital divide across the EU.

The Commission's reform proposals will help to address this divide by facilitating the use of parts of the bandwidth which will become available following the digital switchover to increase broadband access in rural areas by means of wireless solutions.

[14] Idate Report 'Broadband Coverage in Europe' 2007 (data as of 31 December 2006)

Competition and regulation

The highly diverse rates of broadband penetration across the EU are the result of numerous factors ranging from historical legacies to demand-side related factors, such as income and education levels, to supply-side related factors such as levels of urbanisation and government support. However, competition is clearly critical to broadband rollout.

Effective competition has proven to be a driver of innovation and investment and has provided consumers and businesses with choice and affordable prices. All leading Member States in terms of penetration (e.g. Denmark, Finland, the Netherlands and Sweden) have had competitive conditions in place for a relatively long time as a result of the existence of alternative platforms such as cable networks or owing to early market liberalisation.

In other cases, access regulation of legacy networks has been crucial to the development of competition in Europe. This is clear given that almost 80% of fixed broadband lines rely on DSL. Some Member States (e.g. the Netherlands, Sweden and the United Kingdom) have already taken steps to explore issues relating to potential competition and regulation in the NGN environment. The Commission will enhance legal certainty for stakeholders by issuing guidance on the application of the regulatory framework to aspects of new fibre investment in the local access network.

There are a number of reasons why sector specific regulation has been particularly successful in some Member States. These include:

- the market analyses processes were carried out on time,
- remedies imposed on SMP operators have been sufficiently precise and detailed,
- appeals processes and time taken for judicial proceedings were reasonable and,
- regulators were not afraid to tackle actively non-price related market regulation issues.

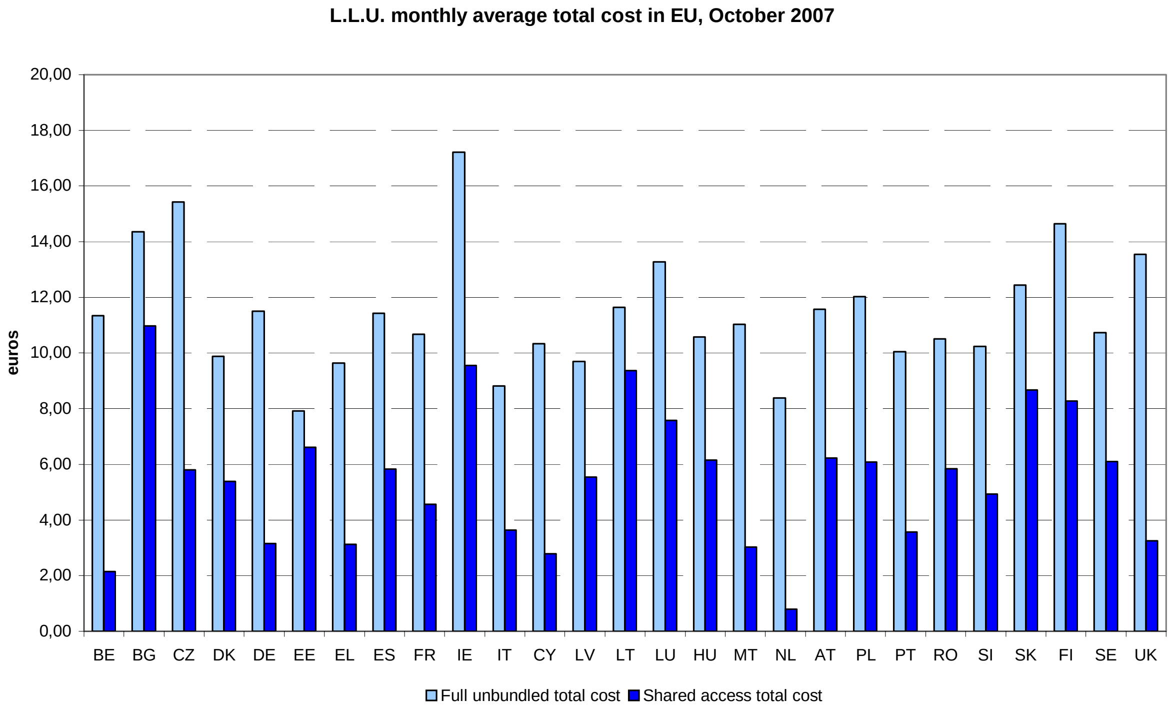
Countries which exhibited these characteristics include Denmark, the United Kingdom and most recently, Ireland. In a number of other countries, better regulation has improved market conditions and enabled alternative operators to migrate from service-based competition and bitstream to infrastructure-based competition, based on unbundling (the Czech Republic, France, Slovenia, Greece, Portugal and Spain).

However, in a number of Member States (Bulgaria, Germany, Estonia, Luxembourg, Romania, Slovakia and Sweden) bitstream take-up has not developed, partly because regulation was delayed or the national regulatory authority did not ensure that the wholesale offer was attractive for new entrants compared to other wholesale products. Bulgaria, Lithuania, Malta, Poland, Romania, Slovakia and to a certain extent Estonia, Latvia and Austria have not managed to put in place the conditions which favour the development of local loop unbundling (LLU), which is considered to be the most important form of access for alternative operators.

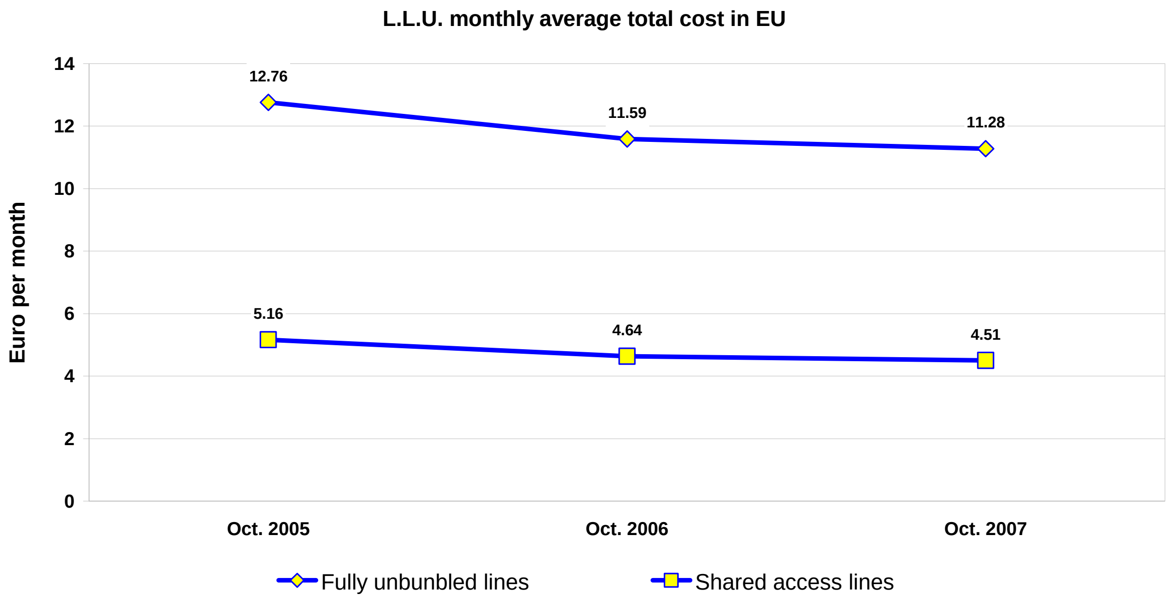
LLU Pricing

Although LLU has been mandatory for several years in the majority of EU countries, the effects of this regulation have been limited owing to the lack of a more rigorous approach by some NRAs which led to high and discriminatory pricing policies of the incumbents. LLU pricing influences the behaviour of alternative operators although provisioning and technical conditions remain important. Lower LLU fees generate demand for access to the local loop, which in turn translates into higher uptake of broadband services, in particular in urban areas.

All Member States, with the exception of Ireland, have either reduced or maintained the levels of monthly rental fees compared to 2006. The countries with the highest price reductions for fully unbundled local loops are Slovakia, Estonia, Sweden, Belgium and Slovenia. The largest price decreases in shared access have been recorded in Slovakia, Luxembourg, Austria, Sweden and Estonia. Likewise connection fees for full unbundling and shared access have declined, with Slovakia, Sweden and Austria showing the biggest reductions. Connection fees rose in Belgium, France and Finland.



On average, the weighted monthly average total cost has, compared to October 2006, decreased by €0.31 in case of full LLU, and by €0.13 in the case of shared access.



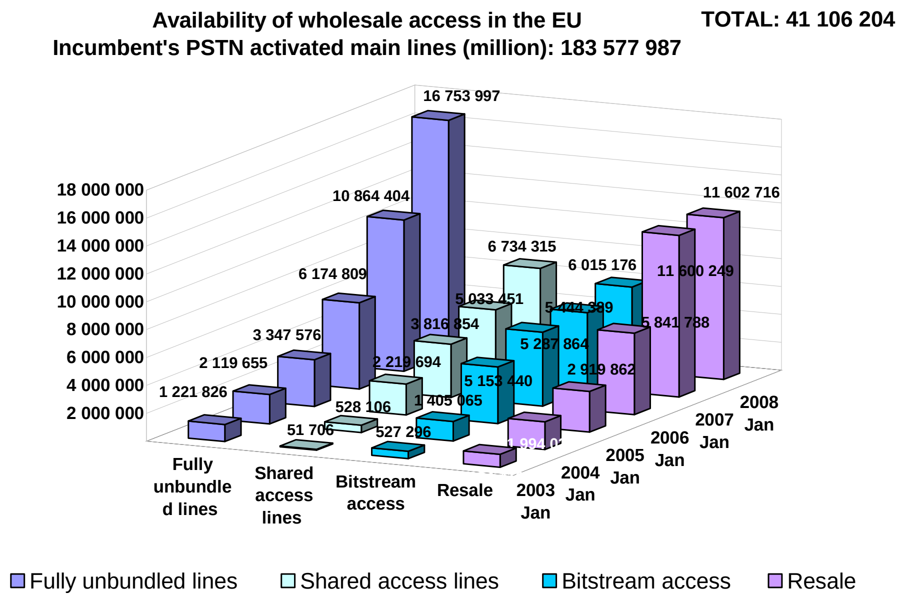
Non-price related regulation

Given difficulties with ensuring effective regulation on non-discrimination, a number of NRAs have started to examine the possibilities for new remedies beyond the boundaries of the existing regulatory toolbox. For example, the United Kingdom has already introduced functional separation, which has improved transparency and at the same time has enhanced the incumbent's standing on the financial markets.

Similarly, Sweden, Italy and Poland are considering taking steps to introduce this new remedy. In order to create a level playing field in all Member States, the Commission has proposed, as part of the regulatory review, to provide NRAs with the possibility to impose functional separation as a new remedy of last resort, a tool capable of addressing growing non-price related issues. Functional separation should thus help to guarantee non-discriminatory access in the case of access network bottlenecks.

Wholesale access to the incumbents' networks

New entrants, stimulated in part by effective access price regulation are climbing the ladder of investment by moving away from resale (11.6 million lines) and bitstream access (6.0 million lines) towards local loop unbundling (23.5 million lines) in the provision of broadband services.



LLU, based on incumbents' wholesale offers, now represents 12.8% of the activated PSTN lines in the EU and provides broadband network access to 56.6% of DSL new entrants. Fully unbundled lines have grown by 54.2%% over the year, shared access by 33.8% and bitstream by 10.5% as compared to the overall growth of new entrants' DSL market, which grew by 25.1% since January 2007.

Technology Trends

Wired technologies

The electronic communications sector is characterised by rapid technological advances, which present new challenges for the market and for regulatory approaches. In most Member States, operators are gradually upgrading existing infrastructures and deploying new networks in order to be able to carry higher data rates and to supply converged products in a more cost efficient manner. Next Generation Networks (NGNs) allow more efficient provision of multiple services over the same infrastructure. This trend constitutes a major challenge for stakeholders and regulators, with interconnection being one of the key issues.

Along with the convergence of platforms, there is a clear trend towards bundled services, where operators offer a variety of services for a single global price often to the benefit of consumers. An EU survey[15] on the evolution of communication services in European households showed that bundled services are widely adopted: 29% of EU households having subscribed to at least one bundled service. Moreover, over the last few years, greater use of mobile services has brought about a trend towards fixed to mobile substitution. Fixed voice traffic accounted for 66.54% of all voice traffic in 2006, compared to 73.26% one year earlier.

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15 E-Communications Household Survey (Nov.-Dec. 2007). Special Eurobarometer, European Commission.

Over the past years, DSL has grown in importance as the predominant broadband technology, and new DSL technologies have been adopted. However, alternative operators have mainly led investment in the other two main wired platforms currently used, namely cable and, to a lesser extent, FTTH.

Alongside the increased availability of broadband, fixed VoIP services, whether provided through managed networks by operators or through unmanaged networks by using computer application programmes, are experiencing significant growth, mostly in the business but also in the residential segment. Both alternative operators and incumbent operators are offering fixed VoIP services, whilst mobile VoIP services are still at a very early stage.

Although usage of VoIP is growing, divergent approaches by national regulatory authorities (NRAs) could frustrate the potential of this technology to transform the sector. Currently, usage of VoIP is still limited but growing in several Member States for example, it represents 14% of the overall fixed traffic in France, 6.3% in Austria and 5.6% in Slovenia[16]. Divergence of approach is evident on issues such as treatment as a traditional voice service, numbering, number portability, interconnection, quality of service, and provision of caller location information to emergency authorities. The European Regulators Group (ERG) has recently issued a Common Position on a number of these issues[17] which goes some way towards a more consistent approach.

Wireless technologies

The role of radio spectrum in the electronic communications market has significantly increased and the Commission, in previous Communications as well as in the recent review proposals, has stressed the need to develop the European dimension and to coordinate approaches to spectrum policy. On the one hand, wireless technologies have the advantage of being relatively easy to deploy, which can be especially attractive as a way of extending services to remote and sparsely populated areas, and of offering mobility in certain cases. On the other hand, these technologies are affected by spectrum scarcity and strongly depend on national spectrum policy, although for some services a European approach is essential (for example, for satellite services) if they are to realise their full potential. The Commission services have drafted a Recommendation on the non-technical conditions attached to rights of use for radio frequencies in the context of the Wireless Access Policy for Electronic Communications Services (WAPECS). This aims to establish a list of frequencies where a more flexible and neutral use of radio spectrum for different electronic communications services would be allowed.

In the last years most 3G mobile operators have upgraded their mobile networks with HSDPA, which will allow higher speed data transfers. The Commission has proposed to expand the usage of the radio frequency bands originally reserved for GSM services by allowing other technologies capable of providing electronic communications services in those bands[18]. Following the Commission's proposal to repeal Directive 87/372/EC

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16 Please note only 14 Member States provided VoIP data.

17 ERG (07) 56 rev 2

18 Proposal for a Directive of the European Parliament and of the Council repealing Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of

(GSM Directive), several Member States have already taken steps to introduce neutrality into the spectrum in the relevant bands.

Wireless technologies are mainly used as an access solution for providing voice and data services to subscribers, although in certain cases backhaul services can also be provided. Although DSL and cable technologies still account for most of the broadband market share, wireless technologies already provide competition to the existing wired platforms in certain Member States. WLL accounts for more than one third of the overall retail broadband lines in Czech Republic, mainly based on Wi-Fi, 15.5% in Slovakia, 15% in Ireland and 8.4% in Lithuania where a “pre-WiMAX” network covers 70% of the population. In Estonia WiMAX networks cover 60% of the territory and in Malta a mobile network operator launched its WiMax wireless access service in 2007.

Most mobile operators have started offering mobile unicast TV services over traditional mobile networks. Italy and Finland have been the first Member States in launching commercial services for broadcasting mobile TV using DVB-H standard. Recent trials carried out in the EU reveal a strong consumer interest in this kind of services. In July 2007, the Commission published its Communication on Mobile TV[19] urging the Member States and the industry to develop a proactive European strategy towards mobile TV and encouraging the use of DVB-H as a common European standard for broadcasting mobile TV. The Commission services have recently proposed to include DVB-H in the list of official EU standards. The purpose is to avoid market fragmentation and to allow economies of scale, which could foster the deployment of mobile TV services across the EU.

However, the availability of spectrum, in particular in the UHF band, remains a key issue for the development of mobile TV services. In November 2007, the Commission published its Communication on the Digital Dividend[20], stressing the need for capitalising on the digital dividend and for reusing spectrum for innovative services such as mobile TV, pan-European services and wireless broadband.

public pan-European cellular digital land-based mobile communications in the Community (COM/2007/0367 final).

19 "Strengthening the Internal Market for Mobile TV", COM(2007) 0409.

20 "Reaping the full benefits of the digital divide in Europe", COM(2007) 700.

REGULATORY DEVELOPMENTS

Institutional Framework

Independence of National Regulatory Authorities

The independence of the national regulatory authority (NRA) and other bodies entrusted with tasks under the regulatory framework remains critical for the credibility and effectiveness of regulation at national level. In Latvia the standing of the regulator may be reinforced through planned constitutional changes. In Hungary the State's special rights in the main fixed incumbent have been removed following infringement proceedings.

On the other hand the Commission opened infringement proceedings in 2007 against Bulgaria with regard to the issue of the separation of regulatory and ownership functions. An infringement is also pending concerning the situation in Poland, where the head of the NRA has no fixed term of office and can be removed by the President of the Council of Ministers without giving reasons. The proposed transfer of the tutelage of the Romanian NRA to the national Parliament and the possibility for the Ministry of Communications to give instructions to the NRA is also under consideration by the Commission. In addition there continues to be an issue in Luxembourg regarding the presence of personnel from the Ministry responsible for electronic communications legislation on the board of a state-owned provider of ducts and fibre.

Powers and Resources of National Regulatory Authorities

In general terms the authority and influence of the national regulatory authorities on their respective electronic communications markets has grown as they have gained experience in carrying out the market reviews required by the 2002 regulatory framework and in adopting and applying the regulatory measures which flow from them.

In a number of Member States measures have been taken during the reporting period to strengthen the powers of the national regulatory authorities in key areas. For example the NRA in Hungary has been given greater responsibility over spectrum policy matters and general policy making in the sector, while in Ireland and Malta the NRAs have or will shortly acquire new enforcement powers (particularly with regard to the level of financial penalties and the ability to apply competition law). In Slovenia the NRA has enhanced powers of supervision and mediation and in Denmark the NRA's strengthened power to set the terms of interconnection agreements has resulted in an increase in the number of requests for intervention. In France, the Netherlands and Finland legislative changes have been introduced to strengthen consumer protection. In Finland the NRA has been provided with more tools for access regulation and has also been given greater powers to determine the cost accounting methodologies to be applied to regulated undertakings. The competences of the NRA in the broadcasting and audiovisual sector have been clarified by legislation in Greece.

However, in a number of Member States questions regarding the powers or competences of the NRA could still be further clarified. The Commission is looking into a possible lack of power on the part of the Swedish NRA to resolve disputes relating to the contractual terms of regulated products. In Poland there is a perceived lack of powers for the NRA to ensure adequate access and interconnection, while the legal challenge to the appointment of the President of the NRA has contributed to uncertainty in the sector. In Bulgaria and Estonia the relatively low levels of the maximum fines which can be imposed by the NRA may call into question the effectiveness of their enforcement powers. The provision on "new markets" in the German telecommunications law is also seen as an unjustified limit on the discretion of the NRA when carrying out its duties to review relevant markets under the regulatory framework. In Cyprus the NRA is hampered by the continuing failure of the government to adopt a national broadband strategy.

The delineation of responsibilities and competences in the broadcasting sector appears to raise particular difficulties in a number of Member States. In Malta concerns have been raised regarding a lack of clarity over the division of responsibilities between the NRA and the national broadcasting authority, while in Belgium the division of competence over mixed broadcasting and electronic communications matters between different regulatory bodies could contribute to delay and uncertainty. In Bulgaria the division of tasks between the national regulatory bodies is unclear, particularly as regards the allocation of frequencies for analogue services and the assignment of licences for broadcasters.

Lack of available resources for the NRAs (whether in terms of the recruitment and retention of staff or finances generally) continue to be a concern in a number of Member States, such as Bulgaria, Greece, Luxembourg, Poland and Slovakia. On the other hand measures have been taken to improve the situation in Italy (with increased staffing levels and the creation of a new directorate for consumer protection matters), in Ireland (with the creation of a dedicated enforcement team within the NRA) and in Greece (where the NRA has established a system of 'task forces' dedicated to specific projects). In Sweden the NRA has been re-organised to achieve more efficient use of available information while in the Netherlands the NRA has established a new system called the "structural market monitor" designed to reduce the administrative burden of market data collection for both itself and the industry. In Estonia plans have been announced for the merger of the NRA and the national competition authority in 2008.

Infringement proceedings were launched in 2007 against Bulgaria regarding the effectiveness of the decision making procedures in the NRA.

Dispute resolution

The Framework Directive requires that NRAs have the power to issue binding decisions to resolve disputes arising in connection with obligations imposed under the regulatory framework. It is therefore essential that NRAs are authorised to settle all relevant disputes and have the required power to enforce their decisions whenever necessary. Concerns in this regard have been expressed e.g. in Malta, where a new bill will strengthen the interconnection related powers of the NRA, and in Sweden, where the NRA appears to have a limited authority when dealing with contractual terms and conditions regarding regulated products and services. In Poland also there is a perceived lack of powers for the NRA to encourage, and where appropriate, ensure adequate access and interconnection.

Concerns continue to be expressed, e.g. in Belgium, Italy and Portugal, with respect to the time it takes for the NRA to resolve disputes. The Framework Directive provides for a time limit of four months, except in exceptional circumstances.

On the one hand the Framework Directive permits national regulatory authorities to decline to resolve disputes where other mechanisms, e.g. mediation, exist and would be more effective to settle the dispute in a timely manner. On the other hand excessive use of the dispute resolution mechanism might lead to the general character of the NRA's market related decisions being undermined. The large number of disputes handled by e.g. the Austrian and the Polish NRAs seem to indicate problems in the formulation of remedies earlier in the regulatory process.

Individual dispute resolution procedures are often used to clarify *ex ante* obligations which are insufficiently precise or detailed to begin with. This can have a distortive effect on the market, either because the terms imposed following dispute resolution procedures will differ between different individual operators or because clarified "regulated products" will only become available to parties at different points in time. Excessive use of the dispute resolution mechanism might also indicate weaknesses in the functioning of the appeal mechanisms in a Member State: in Sweden, the settlement of interconnection disputes appears to lead to decisions allowing retroactive compensation while appeal decisions are not able to be enforced retroactively.

Appeals

Effective appeal mechanisms at national level are a pre-requisite for the proper functioning of the regulatory framework for electronic communications. The key challenge is to find a proper balance between the rights of regulated parties and the timely implementation of regulatory decisions.

Lengthy proceedings, systematic appeals against NRA decisions (often by the incumbent), a lack of expertise in the appeal bodies, the automatic suspension of the binding effects of the NRA's decision and the denial of the right for third parties affected by a decision to appeal, continue to be reported as major problems in a large number of Member States.

Systematic and protracted legal challenges can lead to legal and commercial uncertainty. Undertakings may have an incentive to avoid adhering to regulatory obligations when they know that appeal procedures will take several years, that the NRA will have little inclination to enforce those obligations while the case is pending (even if the decision stands) or where there is a likelihood that the decision will be remitted to the NRA to be taken again from scratch.

Some Member States have sought to reform their judicial system to improve the functioning of their national appeal system in the medium or long term – by appointing more judges or experts, eliminating an instance in the court hierarchy or designating other appeal bodies (Germany, Greece, Ireland, Malta and Poland). Proposed amendments to the law in Sweden include a wide range of measures, such as the limitation of instances of appeal, the reduction of procedural steps (in the submission of evidence, in pronouncing suspension, etc.) and the appointment of experts.

Procedures that result in automatic suspension of the decision undermine the effectiveness of the appeal system. Furthermore, a wide divergence is apparent in the manner in which appeal bodies have suspended NRA decisions over the last few years. In order to achieve greater consistency a common standard should be applied in line with Community jurisprudence. In the context of the Review, the Commission therefore proposes to clarify the principle of non-suspension of NRA decisions in the Framework Directive. The amendment stresses the rule that interim measures may only be granted "in order to prevent serious and irreparable damage" and if "the balance of interests so requires". The Commission's reform proposals in this area should diminish the incentives for systematic appeals by operators as a means of delaying the implementation of regulatory decisions.

The Framework Directive explicitly acknowledges the right for third parties who are affected by an NRA decision to challenge this decision before the appeal body. The Commission considers that a broad interpretation should be given to the terms "affected by a decision of the national regulatory authority" and therefore pursued in 2007 an infringement proceeding against Sweden (where decisions may only be appealed by a narrowly defined "concerned" person). In Belgium the appeal court ruled that third party operators did not have the right to intervene in an appeal against an NRA decision.

In 2007 two references for a preliminary ruling pending before the European Court of Justice concerned the categories of third party which have the right to appeal against an NRA decision under the EU regulatory framework for electronic communications[21].

[21] Cases C-426/05, Tele2 UTA Telecommunication, and C-55/06, Arcor. In a third case, C-366/06, Verkot (removed from the register), the Finnish Supreme Administrative Court was considering whether a third party had the right to appeal and had requested a preliminary ruling from the Court of Justice on the interpretation of the Framework Directive in this regard. The ECJ's judgment of 21 February 2008 in Case C-426/05 held that the right to appeal extended beyond those who were the direct addressees of the NRA decision in question.

Implementation of Regulatory Measures

Decision making

Market review exercise

Significant progress has been made over the last year towards effective implementation of the 2002 regulatory framework across the Community, with the first round of market analysis and review of obligations now substantially completed in almost all Member States. Bulgaria and Romania, which joined the Community in January 2007, have not yet notified any draft measures to the Commission and other NRAs under Article 7 of the Framework Directive. In the case of Romania a market review exercise was carried out along the lines of the EU regulatory framework before accession, but formal notification of updated market reviews is required for compliance with the Community *acquis*.

In a number of cases (e.g. Luxembourg, Belgium, Portugal) the only markets not notified under the first round of market reviews were ones which have been removed from the Commission's revised Recommendation on relevant markets of 17 December 2007[22]. The Commission has taken the view that where a market has been removed from the Recommendation it is no longer necessary to notify that market under Article 7, provided that no *ex ante* obligations subsisted on the relevant market at the time of adoption of the revised Recommendation. In many Member States the second round of market reviews is already under way.

Remedies and experience with their implementation

With the completion of the first round of market reviews, the focus of attention has shifted towards the imposition of SMP remedies by the NRAs and, more importantly, the effective implementation and enforcement of those remedies. In this regard the picture is much patchier, with the adoption of final measures imposing or clarifying SMP obligations still awaited in some cases (e.g. Hungary, Belgium, Poland) and the practical implementation of the obligations imposed still very much work in progress in a number of countries. The delay between the completion of the market analysis and the imposition of definitive obligations has been raised as an issue in particular in Germany, Estonia, Ireland and Luxembourg.

Furthermore, significant disparities can be seen across the Community in the practical effects of the remedies selected in different Member States. For example in some Member States the level of detail provided by the regulatory obligations is not sufficient in some specific instances to create the certainty needed to generate real investment and to justify the launch of commercial competitive activity for those products (e.g. Estonia, Malta, Finland). Access to the market on competitive terms often has to await the

[22] Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services 2007/879/EC (OJ L 344, 28.12.2007, p. 65).

resolution of these legal uncertainties through dispute resolution procedures or other legal challenge.

In other cases the relevant reference offers for specific products (e.g. wholesale line rental, bitstream access or local loop unbundling) exist, but on pricing conditions that do not provide an incentive for alternative operators to take up those offers. Such a situation has been reported for example in Lithuania, Luxembourg, Slovakia, Malta, Poland and Sweden. In some cases (e.g. Slovenia) the regulated prices may be sufficient to induce alternative operators to enter into contracts, but their commercial objectives may nevertheless be frustrated by difficulties in the practical provisioning of the products or services concerned, whether this be attributable to non-price discrimination on the part of the SMP operator or simply to the lack of sufficient clarity in the methodologies or procedures to be applied. In this regard it is becoming increasingly clear that effective, up-to-date and enforceable Service Level Agreements (SLAs) and Service Level Guarantees (SLGs), closely monitored by the NRAs, are essential if the benefits of the remedies chosen are to feed through to the market generally and the end-user in particular.

One of the areas of *ex ante* regulation where the disparities in the terms and the effectiveness of remedies are most obvious is that of the choice of cost-orientation and cost accounting remedies. Even where an obligation of cost orientation is imposed, this can be meaningless if no methodology is adopted by which the relationship of prices to costs can be monitored and verified. Where the regulated undertaking is left to select the methodology to be applied (subject, for example, only to *ex post* approval by the NRA), one can expect that it will serve essentially the regulated undertaking's interests. The form and detail of cost orientation remedies across the Community still varies significantly, without there always being any clear correlation between the detail chosen and the national market conditions. For example prices for regulated products can be determined by reference to a benchmarking exercise or on the basis of a retail minus formula or by reference to a variety of different costing methodologies. Equally, the move towards cost-orientation can be subject to very different timeframes and glide paths. While it is legitimate for NRAs to choose the methodologies most suited to their national conditions, the absence of consistency in the approaches taken (even in the same relevant markets) and of the transparency of the systems applied, clearly acts as an extra burden on operators seeking to offer pan-European services and remains a barrier to the single market.

Lack of enforcement powers or activity by NRAs as a follow-up to the imposition of remedies can mean that regulated products are still not available in practical terms long after the completion of the market review concerned. Examples of this can be seen in Italy, where the migration processes between different regulated wholesale services have still not been implemented long after the relevant market analysis was completed, or in Poland, where the transitional obligations derived from the old ONP framework still apply.

Shortcomings in the existing system relating to remedies and their enforcement have convinced the Commission of the need for it to have a 'say' on remedies and of the need for enhanced enforcement powers for NRAs, both of which have been included in the Commission's reform proposals.

As SMP obligations are imposed and the implementation process matures across the Member States, it is becoming increasingly clear that the difficulty in ensuring the timely and effective application of the non-discrimination obligation in real terms, particularly as regards the relative treatment of the SMP operator's own downstream business and alternative operators, is one of the key issues confronting NRAs. This is one of the reasons why the authorities in an increasing number of Member States are looking into the possibilities for functional separation of the SMP operator's access bottleneck products from the other parts of its business, following on the experience of the United Kingdom in this area, in order to find a more structural solution to this persistent problem. Some form of functional separation is under consideration in a growing number of countries including Italy, Ireland, Poland and Sweden.

These developments highlight the need to find a mechanism to ensure consistency of approach across Member States.

Consultation with stakeholders

While in general terms the national consultation procedures required by the 2002 framework for the adoption of measures having a significant impact on the market seem to be provided for, there are concerns in some Member States that new legislation or regulation has been adopted without due consultation of interested parties (Hungary and Latvia).

The greatest unease over the need for transparency and effective consultation arises in relation to the move towards next generation networks (NGN). The roll out of these new technologies will have fundamental effects on the competitive structure of the markets and on the commercial strategies of all market players. While NRAs in some Member States, such as France, the Netherlands and the United Kingdom, have been seen to be proactive in canvassing the views of market players and setting up consultative structures which give the industry a stake in influencing the regulatory outcome, there are concerns that this issue is not being tackled in a pro-active manner in some others. Alternative operators in many Member States are particularly concerned that little or no transparency exists over the NGN roll-out strategy of the fixed incumbent, even though this will directly affect their businesses and access products.

Broadband Implementation

In the majority of Member States SMP has been found in the local loop unbundling (LLU) market and the wholesale broadband access (bitstream) market and a full range of remedies has been imposed. So far, only the Dutch NRA has found the wholesale broadband access market competitive, in view of the competition from cable platforms and LLU[23]. However, the implementation of the obligations imposed has been delayed in many cases and problems with implementation of mandated reference offers have arisen in the majority of Member States due to a variety of issues (pricing, service level agreements, collocation, migration between products or portability).

[23] The Dutch NRA distinguished between the low-quality bitstream market, which was declared competitive, and the high-quality bitstream market, for which a regulated wholesale product is still provided.

The current availability of wholesale access products at several network levels varies from country to country. In Member States where there is choice between various levels of wholesale access products, alternative operators are able to choose those most suited to their needs and gradually invest in their own infrastructure. On the other hand, in Germany, alternative operators have only the options of LLU and resale, as the obligations to provide IP and ATM bitstream products have not yet been applied in practice. Last year, the imposition of a regulated wholesale offer permitting "naked DSL" (i.e. a DSL access line without the need for a fixed telephone subscription) was already emerging in some Member States (e.g. Denmark, France, Germany, Italy, Poland, Finland and Slovakia) as a remedy appropriate to address the market's changing needs. The trend has continued in countries such as Hungary and Portugal. In several Member States the bitstream offer has been extended to higher speeds and, although the analysed markets are at wholesale level, several NRAs also monitor retail offers in order to prevent anticompetitive situations.

In many Member States there is a trend towards migration between different wholesale products, mainly from resale and bitstream towards LLU. Some NRAs have made efforts to address the relationship between different regulated wholesale products when deciding on remedies, particularly with a view to facilitating migration and to balancing the price levels of the different regulated products.

EU regulators have selected different methodologies in order to implement price obligations in these markets, although retail-minus and cost orientation are the most common. On the other hand the Czech NRA did not impose any price obligation for bitstream, as it considered that wholesale prices were decreasing sufficiently, while the Slovakian regulator did not mandate any price regulation for LLU access.

In addition to price obligations, non-discrimination obligations remain key for establishing effective competition in these markets. The United Kingdom regulator was the first to introduce functional separation as a means of improving equal access to wholesale products, although others, such as Italy or Sweden, are actively working on this option. The implementation of effective functional separation offers the incumbent fixed access network provider the prospect of less regulation elsewhere in its network.

Some NRAs are considering forms of geographic segmentation when reviewing the relevant markets, reflecting the development of different competitive conditions. In November 2007, the United Kingdom regulator submitted its review of the wholesale broadband access market for consultation, in which it intends to define different geographic markets using local exchanges as geographical units. Geographic segmentation of markets and deregulating in areas characterised by sustainable competition is in line with the principles of the regulatory framework. However, it has to be ensured that geographic segmentation takes place in a coordinated and consistent manner, supported by robust evidence on a combination of structural and behavioural factors, in order to avoid the risk of further fragmentation of the single market.

Next Generation Networks (NGNs)

Many SMP operators are planning or have already started deploying fibre in their access networks, either fibre to the cabinet to provide VDSL services or fibre to the home directly reaching buildings or customers, as well as in the core networks. NGN deployment results in new regulatory challenges, particularly for the local loop unbundling market and the wholesale broadband access market, where many alternative operators have based their operations on regulated wholesale access to the networks of SMP operators. The Commission took this issue into account when it revised its Recommendation on relevant markets (with effect from 18 December 2007), by removing the reference to "metallic" loops from the definition of the market for wholesale access to the local loop for broadband and voice services.

Last year, the Commission already expressed its concern with regard to a legislative amendment adopted by Germany, under which new markets (including possibly those based on the incumbent's new VDSL network) may be exempted from regulation. More recently, it seems that the Austrian regulator might want to exempt optical fibre lines from wholesale access regulation.

In most Member States, alternative operators raised concerns about the potential risk to LLU investments in the context of upgrades of the incumbents' networks and the lack of transparency for their investment plans. During the last two years, a growing number of NRAs have launched public consultations to obtain the opinion of the industry on the regulatory challenges posed by NGNs and others are about to do so, although very few of them have so far taken regulatory measures. The Dutch NRA consulted stakeholders well in advance on the regulatory issues pertaining to the roll-out of the incumbent's IP-based network and, as a result, the main LLU operators have already negotiated with the SMP operator the conditions for phasing out LLU services by migrating to other wholesale products. The Danish regulator has encouraged the operators involved to find agreed solutions, and clarified the application of co-location rules for NGNs. The French regulator is currently studying the possibility of rules to govern the sharing of networks inside buildings and to allow access to the incumbent's civil engineering, i.e. ducts, for alternative operators. In Germany and Luxembourg, the regulators have required the incumbent to provide access to physical infrastructure or ducts or other appropriate solutions to take account of alternative operators' interests where the network is upgraded.

Mobile Implementation

No retail mobile markets are included in the Commission Recommendation on relevant markets; therefore regulation for mobile markets is applied only at the wholesale level. The markets for access and call origination on public mobile telephone networks has been generally found to be competitive and any existing regulation consequently withdrawn. This market (“Market 15”) has therefore been removed from the list of relevant markets in the revised version of the Recommendation. However, national regulatory authorities which consider that this market is still susceptible to *ex ante* regulation and find it to be uncompetitive, will be able to propose regulation in this field and notify their market analysis to the Commission.

As regards the market for termination on public mobile telephone networks, regulatory intervention is the rule since all mobile operators have been found dominant in terminating calls on their own network. There continued to be further decreases in mobile termination rates in many Member States in 2007. Several NRAs have determined asymmetric termination rates to take into account *inter alia* the different dates of market entry, though in some cases the level of asymmetry has been reduced. Whereas transparency, cost accounting and non-discrimination are frequently among the remedies imposed, not all Member States have imposed a cost orientation obligation. Discrepancies in termination rates in the different Member States are resulting in the need to establish a common approach to the issue. There has been ongoing work between the European Regulators Group and the European Commission to find a consistent approach to the termination rates at European level.

At the end of June 2007 the Roaming Regulation was adopted following agreement at first reading between the European Parliament and Council. The Commission had published its proposal for the Regulation in July 2006.

The Regulation has been implemented and consumers are already benefiting from lower roaming tariffs.

The Regulation introduces a maximum level for the charges that operators may levy at wholesale level as well as maximum retail ceilings (Eurotariff) for making and receiving roaming calls in the EU. These price caps will further decrease in 2008 and 2009 and the Regulation is set to expire in 2010 unless there is a decision to extend it. The wholesale cap has been set at 30 cents per minute (excluding VAT) up to 30 August 2008. This will then decrease to 28 cents and to 26 cents respectively. The price caps for retail tariffs (excluding VAT) have been set at 49 cents for making a call and 24 cents for receiving a call while roaming. This will decrease to 46 cents for making a call and 22 cents for receiving a call on 30 August 2008. The following year, the prices will decrease to 43 cents and 19 cents respectively.

The Regulation also requires operators to ensure greater price transparency by means of a push-SMS whenever a customer enters a Member State other than that of his home network.

In cooperation with the European Regulators Group, the Commission has been following the implementation of the Roaming Regulation very closely and in general implementation has been smooth, although there have been some teething problems in particular with regard to transparency.

The Commission is required to report to the European Parliament and Council at the end of 2008 on the functioning of the Regulation. This Report will address the issue of whether the Regulation should be extended in duration (beyond the current expiry date of 30 June 2010) and/or whether it should be amended to include other roaming services such as SMS messages and/or data roaming.

Fixed Implementation

The following trends are identifiable in the European fixed line market: a decrease in traffic volumes, increasing fixed-to-mobile substitution, significant developments in VoIP services in some Member States and the emergence of bundled service offerings in most Member States. The remedies selected by NRAs need to reflect these trends.

Although incumbent operators still maintain a large share of the fixed calls markets, the trend towards de-regulation in this area has continued during the reporting period. A number of regulators (such as in the United Kingdom, Ireland, Denmark, Finland, Austria, Estonia, Czech Republic or Hungary) have found some of the fixed retail or wholesale markets competitive, and a number of NRAs (such as in Spain, France, Finland, Austria or Belgium) have lightened the burden of regulation.

Most regulators have imposed on SMP operators the obligation to publish a reference interconnection offer (RIO) based on a fixed price per minute. With regard to countries with higher interconnection charges (Bulgaria, Czech Republic or Lithuania) a lack of regulation or ineffective regulation has been identified. A capacity-based interconnection model[24], in addition to the meter-based interconnection model, has been available in Spain since 2001. This has proved to be very successful as it allows better demand planning by the incumbent and allows alternative operators to route a higher number of minutes at lower unit cost. A capacity-based interconnection model has also been adopted in Portugal and Poland.

Carrier selection (CS) and carrier pre-selection (CPS), considered to be key building blocks for competition in the fixed market, are now available as a matter of law in all Member States. In some countries, such as Portugal or Cyprus, regulators have imposed standstill periods during which the incumbent is prohibited from attempting to win-back customers just transferred to alternative operators.

Nevertheless, CS/CPS remains difficult in some Member States. In Bulgaria CS works only in respect of international and long distance calls; CPS has not been implemented in practice in Slovakia and Bulgaria; while in Latvia and Slovenia CPS services are used only for international calls. In addition, in some Member States the terms on which it is offered means that take-up remains minimal (Slovakia, Romania, Bulgaria).

In several Member States e.g. Belgium and the United Kingdom, the use of CS/CPS based services has declined in 2007 as wholesale line rental (WLR) and/or LLU have grown. An increasing number of Member States have imposed an obligation to provide WLR, allowing for the possibility for alternative operators to provide a single bill to their customers.

However its take-up is limited in some cases due to low margins, inappropriate conditions or, indeed, late introduction in a sector shifting towards bundled products. In the United Kingdom an upgraded WLR product (WLR3) was introduced in 2007 as part of the incumbent's functional separation exercise (although take-up by alternative operators has been limited, so far).

With the growing number of bundled offers in which fixed voice is offered as a service additional to broadband, mobile and/or TV services, regulators are facing a challenge as in many instances offers combine regulated and unregulated services, with the risk that SMP operators may leverage their dominance into other markets. For example in Belgium and the Czech Republic alternative operators stressed the difficulties in replicating the incumbent's bundled product and problems with bundled offers have also been reported in Estonia.

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[24] In the capacity-based interconnection model an operator may contract certain capacity from the dominant operator at a specific point of interconnection paying a fixed cost, regardless of the traffic minutes actually routed.

The regulatory approach to VoIP services varies across the EU with a number of issues being tackled or still to be resolved by the NRAs, such as whether those services qualify as "publicly available telephone services" (PATS) for the purposes of their regulatory treatment, as well as issues related to numbering, number portability, interconnection or provision of access to emergency services or of caller location information to emergency authorities. In the United Kingdom Ofcom strengthened regulation of VoIP services with regard to service reliability and access to emergency services. The European Regulators Group adopted a Common Position in December 2007 which addressed a number of issues relating to the regulation of VoIP services.

Broadcasting Implementation

Regulation of broadcasting markets

By the end of 2007 the markets for broadcasting transmission services had been analysed in most Member States. Unclear division of competences between regulatory authorities or in some cases a clear lack of competence have contributed to delays in the market analysis process. Problems in Greece seem to have been resolved, with the adoption of a new law (attribution of the required competence to the NRA) and in Belgium a cooperation agreement was reached between the federal and regional regulators. In other Member States (Poland and France), relations between broadcasters and transmission networks cannot be regulated as the NRA is not legally entrusted with the regulation of access for content providers. Consequently, regulatory decisions adopted in the area of broadcasting do not always adequately cover the whole market. Lack of clarity as to the division of labour between content and transmission issues also arises in the case of Bulgaria, as regards the coordination between the NRA and the broadcasting authority, and Malta, where a proposal for transfer of competence is in preparation.

Market shares of the different platforms and deployment of networks, including digital platforms and digital terrestrial television (DTTV) services, vary considerably across the EU.[25] In some Member States households rely largely on cable networks for viewing broadcast content (e.g. Belgium, Germany, Luxembourg, Malta, the Netherlands), while households in other Member States mostly depend on terrestrial transmission (e.g. Greece, Cyprus, Italy, Poland and Spain). Satellite television on the other hand has gained a considerable market share in Austria and the United Kingdom (respectively 48.8% and 32.4% of households). IP TV is still considered an emerging platform and has a relatively small number of subscribers. The largest numbers of IPTV subscribers are located in France, Spain, Belgium and Italy (approximately 2.7 million in total).

The market review decisions of the NRAs reflect this national reality, considering only terrestrial transmission in some cases or analysing only competition on the cable markets in other cases. In several Member States markets have been found to be effectively competitive and no obligations have been imposed on undertakings.

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[25] See the study undertaken for the Commission by Dataxis, "Digital television data; EU market for digital television", 2006.

Digital switchover

As to digital terrestrial television (DTTV), commercial offers have been available for many years in some Member States and penetration has reached relatively high levels before the deadline for digital switchover. For example DTTV is available to more than 70% of the population in the United Kingdom, more than 80% in France (according to the national coverage plan) and more than 87% of the population in Spain. In Finland 85% of terrestrial TV households already had digital antenna reception by mid 2007, before the analogue switch-off took place.

Transition from analogue to digital terrestrial television ("digital switchover"), if not yet completed (as was the case in the Netherlands (December 2006), Finland (August 2007) and Sweden (October 2007)), will continue to be a matter of interest for authorities and NRAs in the coming years.[26] Several Member States have elaborated or are preparing national plans or strategies for analogue switch-off or have adopted specific digital broadcasting laws organising analogue-digital simulcast for a transitional period and imposing digital switch-off before the end of 2012 (in pilot regions, gradually region by region or on a national scale).[27] The definitive date of the switchover will in some cases depend on assessments about the availability of services, content, relevant end-user equipment, etc.

The introduction of DTTV will release additional spectrum capacity and allow more competition in the market. For that reason, NRAs are currently consulting with market players on technical plans or are preparing tenders for the assignment of multiplexes. In some Member States the authorities have already assigned licences (Finland, Germany) or are preparing the launch of public tenders for the management of spectrum by mobile television broadcasters (Hungary, Austria).

When assigning radio frequencies, including for broadcasting purposes, Member States are obliged, pursuant to Article 5(2), second paragraph, of the Authorisation Directive, to follow open, transparent and non-discriminatory procedures. Selection criteria must be objectively justified, non-discriminatory, proportionate and transparent. The Commission will be monitoring legal or procedural arrangements during the transition towards full implementation of digital television against the requirements of non-discrimination, proportionality and transparency. For example, the Commission has been examining the provisions of the Italian broadcasting act with respect to the transition to DTTV, concluding that this legislation favours the existing analogue operators and precludes new operators from acquiring the necessary frequencies to enter the digital television market.

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[26] In its Communications of 17 September 2003 on the transition from analogue to digital broadcasting (from digital' switchover' to analogue 'switch-off') (COM(2003) 541 final) and 24 May 2005 on accelerating the transition from analogue to digital broadcasting (COM(2005)204), the Commission invited Member States to establish switch-over strategies and to switch off analogue broadcasting at the latest in 2012.

[27] The only exceptions are Romania, which has not yet determined its national switchover strategy, Poland, which announced switchover for the end of 2014, and Lithuania, where switchover will take place between 2012 and 2015.

The Consumer Interest

Tariff transparency and quality of service

Provision of transparent and up-to-date information on tariffs and prices, as well as terms and conditions relating to access and use of publicly available telephone services, is at the heart of the consumer protection measures enshrined in the Universal Service Directive. The Directive further encourages the provision of information to enable independent evaluation mechanisms to develop which will allow cost comparison of alternative usage patterns. However, evidence from the Special Eurobarometer 260 Survey (2007) suggests that a significant percentage of EU25 citizens still finds it difficult to compare offers for retail electronic communications services (38% for mobile telephony offers, 34% for fixed telephony offers and 30% for Internet offers).

Various web-based price comparison tools have been developed in a number of Member States. In most cases, the regulators have actively taken on the task of providing such service to consumers and end-users. These dedicated on-line tools are often set up in a highly sophisticated manner and also include information on quality of service.

For example the Swedish regulator continues to run a web-based price comparison service that allows for a comparison of fixed, mobile and Internet services to users with different usage profiles. Parameters of service quality are soon to be added to the database. In the United Kingdom a quality of service comparison is available for fixed and mobile telephony users on websites run by the industry. The Spanish and Portuguese regulators both publish quality of service parameters on their website and measure performance against targets. In Portugal consumers can also simulate their traffic profiles on an online observatory of mobile prices.

A price comparison website has also recently been launched by the Lithuanian regulator. In 2007, the Irish tariff comparison website was extended to cover mobile broadband services. The Hungarian price comparison information system covers fixed, mobile, broadband and cable TV services. Other such websites are running in Slovenia, and Estonia.

Several Member States have introduced measures reinforcing the obligations regarding tariff transparency, specifically towards premium rate services. Other countries, the Czech Republic for example, rely on what appears to be a successful code of self-regulation agreed amongst mobile and fixed operators. However, the transparency of mobile tariffs in particular continues to be a general concern. In Lithuania, concerns have been voiced regarding the unfavourable contractual terms in cases where subsidized handsets are found to be faulty while obligations for monthly payments remain.

Universal Service

Universal service is a minimum set of services as defined in the Universal Service Directive available to all end-users at an affordable price and specified quality, independently of the geographical location within a Member State.

It is left to the discretion of the Member States to determine the most efficient and appropriate mechanism for the implementation of universal service, provided that the principles set out in the Universal Services Directive are followed.

Germany and Luxembourg continue to be the only Member States where the providers of universal service have not been designated on the grounds that the universal service is provided commercially by the market. Sixteen Member States have carried out universal service designations on the basis of the 2002 regulatory framework. Seven of those have designated their universal service providers following an open tender procedure.

The Commission is addressing the issue of an *a priori* exclusion through infringement proceedings against France, Spain and Portugal. A proceeding against Finland on the same matter was closed in 2007.

Several Member States have made a decision to limit the scope of the current designations. Such decisions concern mainly access at a fixed location, comprehensive directory and directory enquiry service and provision of public payphones. The Czech Republic no longer includes access at a fixed location as a designated element, and Sweden and Finland are considering mobile solutions. Romania has limited the current designations to the deployment and management of 'tele-centres' which are installed to provide an access point to electronic communication services in rural areas. The Commission services are examining this universal service scheme.

Universal service may involve the provision of services to some end-users at prices that depart from normal market conditions. The designated undertakings may be compensated for the specific net cost incurred, following a series of procedures defined in the Universal Service Directive. In this context, the NRA must evaluate whether the net cost establishes an unfair burden on the designated operator. Such evaluation is a pre-requisite for any compensation.

Most of the Member States provide in their legislation for a financing mechanism through a fund into which market players contribute. There are currently only five Member States where the funding mechanism has been activated (France, Italy, Romania, Belgium- for social tariffs only, Czech Republic). Spain and Latvia are in the process of activating such a mechanism. However, France, Italy and Romania are the only Member States where the designated undertakings effectively receive compensation from such fund in practice.

The Commission is addressing the issue of establishment of an unfair burden by infringement proceedings against Belgium and Spain.

Directory services and directory enquiry services

Comprehensive directory information and directory enquiry services constitute an essential access tool for consumers using publicly available telephone services. As such they are a part of the universal service obligations. Both fixed and mobile subscribers need to be given the opportunity to have their information listed in a non-preferential fashion, while respecting their right to privacy as ensured by the e-Privacy Directive.

Most of the Member States now have the comprehensive directory and directory enquiry service available. The Commission closed an infringement proceeding against the United Kingdom in October 2007 after the authorities agreed with the mobile industry on a number of corrective measures that allowed mobile subscribers to be included if they so wished.

However, infringement proceedings are still pending against Poland and Portugal since 2005. In Poland it appears that corrective measures have been put in place and the Commission may be able to close the case when the information is confirmed. Furthermore, both comprehensive directories and directory enquiry services are not yet available to subscribers in Bulgaria and Romania.

It appears that both of these elements of universal service are most likely to generate a net profit. Several Members States decided to take the elements of comprehensive directories and directory enquiry services out of the current scope of designated universal service provision. Such appears to be the case for both elements in Estonia, Italy, Sweden and Finland. In Ireland and Austria only the comprehensive directory enquiry services have been taken out of the scope of the current designations. The market continues to provide the service commercially.

Disabled and social needs

Promotion of an inclusive society enabling access to information and communication technologies (ICT) by people with disabilities and special social needs is one of the priority policies identified within the Commission's i2010 framework. The eAccessibility Communication of 2005[28] emphasized the need to counter the barriers faced by these users.

A follow-up study to the Communication published in 2007[29] highlights the fact that users with disabilities and special needs continue to be confronted with many limitations in their possibilities to use ICT products and services that are now an essential part of social and economic life. The situation in the EU appears to be a patchwork with wide differences across the Member States. Moreover, the eAccessibility status and policy in the EU compares unfavourably in comparison with the USA, Canada, or Australia.

The Universal Service Directive encourages Member States to take specific measures, on the basis on their national conditions, in order to ensure that users with disabilities and special social needs, including those on low income, have access to the services enjoyed by the majority of users. Since the current framework does not mandate the imposition of

[28] COM(2005) 425.

[29] Study on 'Measuring Progress of eAccessibility in Europe' (MeAC), October 2007

such measures, the depth of those measures as well as the results achieved vary greatly across the EU.

At least 18 Member States include the provision of special measures towards users with disabilities and special needs in the current scope of designated universal service elements. Such measures usually refer to special tariff plans and prices or discounts for connection and call making. Several Member States require the designated undertakings to make available adapted terminals (text telephone relay services, visual call warning, microphone amplification), in some instances for a discounted price or free of charge. Additional measures provided in a few countries include special billing services and subscriber information provided in braille or large print.

Italy has introduced additional provisions to those covered in the designations. Users with hearing deficits are thus entitled to a special low price for SMS service, and blind users are entitled to 90 hours of free Internet service per month. In Sweden, where the current scope of universal service covers only access at a fixed location, the regulator itself procures relay services for text and video telephony, tele-speech, health care information service for text telephone users and communication services provided via databases for visual and hearing impaired users.

In most of the Member States the obligations concerning the provision of public payphones include specific requirements for disabled users. New measures have been adopted in this respect in Slovakia and Belgium.

In Bulgaria, the new legislation includes the provision of directory and directory enquiry service for visual and hearing impaired users.

In Sweden and Ireland the regulators are actively interacting with disabled users forums and industry in order to identify the requirements, find solutions, and define the way forward. The Irish NRA and the National Disability Authority cooperate closely in this regard. A consumer guide on the usage of phones and broadband by people with disabilities and elderly is a first concrete result of the Forum on Services for People with Disabilities, established by the Irish regulator in 2006. The goal of the Swedish NRA is to provide access to a broad range of services, using the new technological solutions provided by the industry. In 2007, the regulator selected several new ideas for trial studies, such as video-mail and symbol-based communication via fixed and mobile networks.

As illustrated above, the specific measures employed across the Member States, together with the depth and scope of their impact, remain very heterogeneous. Examples of best practice help to reveal the possible ways of making EU society more inclusive.

Number portability and switching

Number portability is one of the key facilitators of consumer choice and effective competition. It allows subscribers to retain their numbers independently of undertakings providing the service. The task of the national regulators is to ensure that pricing for number portability is cost oriented and any direct charges to subscribers do not act as a disincentive to use this tool. At the same time, it is important to facilitate appropriate tariff transparency for both end-users who port their numbers and those who call them.

As fixed number portability became available in Slovakia in 2007, number portability is now available for both mobile and fixed users in all Member States except Bulgaria and Romania. In Latvia the facility is planned to be introduced for pre-paid mobile users in February 2008. Overall, the Commission notes the positive impact number portability has had by exerting competitive pressures on the voice telephony markets.

A number of Member States have included VoIP and MVNO in their porting systems. In Belgium both VoIP and MVNO offer number portability. Spain and Ireland have extended the mobile number portability to MVNO. It appears that there are porting obligations for VoIP services in other Member States, but the existing obligations vary to a great extent, depending on their classification, use of numbers (geographic or non-geographic), and nature (non-nomadic or nomadic).

Fixed number portability appears to be increasingly successful in Spain, France, the Netherlands and Czech Republic. Mobile number portability, on the other hand, has reached the highest numbers in Italy and Spain. Overall, mobile number portability has been most widely used as a tool of consumer choice in Finland (68.18% of total mobile subscribers have ported their numbers), Denmark (42.06%) and Spain (27.30%).

The Irish regulator has specified that inter-operator charges for number portability are to be cost-oriented. In this way, Ireland reacted to the concerns that the relatively high charges had a negative effect on new entrants. Such arrangements contrast with the high prices charged in the Czech Republic, Slovakia and Germany, for example.

The time aspect appears to be of crucial importance. Long delays and outstanding disputes may have an additional negative impact on the uptake of number portability amongst end-users. For example, since the new system shortening the delay of two months to ten days has been implemented in France, the number of portings has increased significantly. In Spain a five day period for porting a number appears to benefit the overall usage of this facility. The United Kingdom regulator decided to reduce the maximum porting time for mobile numbers to two working days as of April 2008, and plans to further reduce this time to just two hours in 2009. In contrast, lengthy and often cumbersome porting procedures in Poland (14-30 days) and Slovakia (up to 20 days) appear to undermine the full potential benefit for end-users. In Italy for certain periods in 2007 mobile number portability took up to 45 days.

The Commission also notes the importance of a fast and effective inclusion of new entrants into the existing porting systems. In Slovakia, the new mobile entrant launched its services in February 2007; however, it appears that number portability will only be fully available for this operator a year later. In Ireland, each new market entry necessitates agreements and technical testing with the existing mobile players, which can take several months.

The Commission has proposed in its framework review a legal requirement for porting to take place within one working day. Other impediments to consumers switching provider are also receiving attention.

At least in the Netherlands, increasing difficulties have been reported with regard to switching between Internet providers. Long delays, double billing, and lack of information are amongst the most common grievances in the Netherlands. In the United

Kingdom and Italy the NRA took measures to tackle the issue of mis-selling (arbitrary switching of providers without the customer's consent).

Consumer complaints

With a growing number of electronic communications service providers offering an ever wider range of services, the need for an effective procedure dealing with disputes between consumers and service providers has become more evident. The Universal Service Directive requires Member States to ensure an alternative to a formal and often lengthy court proceeding in the form of a simple, inexpensive and transparent out-of-court procedure for dealing with unresolved disputes involving consumers. Particular mechanisms put in place vary amongst the Member States.

In most Member States such procedures are provided by the NRAs, which often have easily accessible regional departments dealing with the complaints. A number of countries have several institutions sharing the responsibilities for a resolution of customer disputes. In Sweden the Consumer Ombudsman working within the Consumer Authority can lodge cases in the market Court. Many complaints are referred to the Consumer Bureau for Telecom and Internet, which was set up in 2006. The Swedish regulator also provides for consumer counselling and settlement of complaints. Similarly several bodies are responsible for consumer protection in Hungary, France, Latvia, Spain, Poland, Portugal and the United Kingdom.

Where there are more institutions involved, it becomes even more necessary to provide the consumer with sufficient information on the procedures available. It is also advisable to streamline the process as much as possible so as to avoid waste of resources through duplication. For example in Latvia it has been noted that activities of the NRA and Consumer Protection Centre have overlapped.

The vast majority of complaints involve prices and billing, as well as quality and availability of service. Contracts are increasingly becoming a source of concern, especially in cases where the individual terms of contracts do not fully comply with the legislative requirements. Such instances were noted in Greece, Hungary and Poland. In Finland, legislative amendments were introduced in 2007 to strengthen consumer protection with regard to contracts. In Spain secondary legislation was adopted regulating complaint procedures and customer service provided by operators. The Italian NRA notes the activation of non-requested services, including carrier pre-selection, as one of the frequent sources of complaints. The number of complaints about inadvertent roaming has significantly increased in Austria.

European emergency number 112

The Commission was active in promoting implementation of the single European emergency number 112 in 2007, both in the framework of infringement proceedings and through intergovernmental action within the Communications Committee. The importance of a proper functioning of this number was also highlighted in a Written Declaration adopted by the European Parliament on 6 September 2007.

112 can be used to call emergency services free of charge from fixed telephones, including payphones, and from mobile telephones throughout the European Union except

in Bulgaria, in relation to which the Commission launched an infringement proceeding in October 2007

According to the current regulatory framework, access to 112 must be ensured for end-users of publicly available telephone services. In the framework of the regulatory review, the Commission has proposed enlarging the scope of beneficiaries of this provision by stipulating that access to emergency numbers should be part of any telephone service which permits calls to telephone numbers. In this context it is welcome that some Member States are already reviewing their legal regulation, in particular with regard to VoIP services, with a view to ensuring transparency as to their status vis-à-vis emergency numbers and to guaranteeing access to emergency services at least for certain categories of VoIP users.

The provision of caller location information to emergency services for 112 calls remained the most difficult implementation issue in the context of 112 in 2007. The Commission decided to refer Italy, the Netherlands, Lithuania, Poland, Slovakia and Latvia to the Court of Justice and opened an infringement proceeding against Romania for failure to implement the provision of caller location information for 112 calls from mobile phones. On the other hand, the Commission closed the pending infringement proceedings on this issue concerning Hungary, Portugal, Belgium and Greece on the basis that these Member States had introduced this facility at least on the basis of the technically simpler “pull” method, whereby caller location information is provided to emergency authorities on their individual request in relation to a specific mobile 112 call.

Although the Commission recommended Member States to implement automatic “push” provision of caller location information for every 112 call already in 2003, the manual “pull” system still remains the prevalent technology, in particular in the case of 112 calls from mobile phones. As part of its proposals for the review of the regulatory framework the Commission has proposed to make the “push” system mandatory. It is already used by a number of countries and it is welcome that some further Member States took steps in 2007 to introduce this more efficient system for the provision of caller location information.

Even though a single European emergency number has been introduced, it does not mean that the emergency services' response to 112 calls is of the same quality everywhere, since the emergency response systems are not subject to harmonisation in the Community. Thus, several Member States have introduced integrated emergency call centres (Public safety answering points) handling all kinds of emergencies while many others maintain systems of distinct call centres for each emergency service. Moreover, the resources of the emergency services vary significantly from one Member State to another.

'116' EU hotlines/helplines

Commission Decision 2007/116/EC[30] gave end users the possibility to reach certain services that have a high social value by using the same recognisable numbers in all Member States. Member States thus have to reserve in their national numbering plan all numbers beginning with '116' to be used as harmonized numbers for harmonized services of social value.

A specific '116' number has already been reserved in the EU for the following services: the missing children hotline (116 000), child helplines (116 111) and emotional support hotlines (116 123). The '116' numbers are to be accessible without payment and are not to be time-limited. 116 000 number has already been assigned to organisations providing hotlines for missing children in five Member States (Portugal, Belgium, Denmark, Finland and Greece). The service in Greece is already operational. Besides the numbers already assigned, further interest has been expressed for the 116 000 number (Czech Republic, Slovakia, Romania, the Netherlands and Hungary), as well as for 116 111 and 116 123 numbers (Luxembourg, Finland and Ireland).

A majority of Member States have already reserved the said number range in their national numbering plans and established a procedure for the assignment of the reserved numbers to interested service providers. The implementation process is also currently under way in the United Kingdom, Poland, Latvia, Italy and Spain.

At the same time, most Member States are taking measures to promote the availability of '116' numbers, mainly via information on the websites of the NRA and press activity, but also by direct contacts with the potential service providers.

Must-carry

Pursuant to Article 31 of the Universal Service Directive, Member States may impose the obligation on network operators to transmit specified broadcast channels and services, for clearly defined general interest objectives. These obligations shall be proportionate and transparent, and subject to periodical review.

The Commission, closely monitoring compliance with the regulatory framework of any must-carry obligation in the Member States' broadcasting legislation, initiated infringement proceedings against Belgium, Germany, the Netherlands and Finland in 2006. As a consequence of the Commission action but also in the light of the transition to digital terrestrial television, the latter Member State started to review its must carry legislation in 2007. Belgium adopted a new act on electronic communications (for the bilingual region of Brussels-Capital) in March 2007, taking into account some of the Commission's concerns. As certain requirements with respect to proportionality and transparency had not been met, the Commission sent a complementary letter of formal notice in June 2007. In the infringement proceeding against Germany, the Commission focussed upon the obligation to have 100% of all available cable channels reserved for stations identified by the Land.

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30 Commission Decision 2007/116/EC of 15 February 2007 on reserving the national numbering range beginning with 116 for harmonised numbers for harmonised services of social value (OJ L 49, 17.2.2007, p. 30).

In parallel with the Commission proceedings against Belgium and Germany, two national courts have made references for a preliminary ruling to the Court of Justice.[31] In its judgment on the Belgian preliminary ruling the Court stated that Article 49 of the EC Treaty (free movement of services) does not preclude any must-carry legislation, provided such rules are not disproportionate in relation to the objective of guaranteeing the pluralist character of the television programmes available. This means in particular that they must be subject to a transparent procedure based on objective non-discriminatory criteria known in advance. This fits with the Commission proposal for amendment of Article 31 of the Universal Service Directive in the review of the regulatory framework, namely the requirement for Member States to clearly and specifically define the general interest objectives in their national law. Obligations shall however remain proportionate and transparent and subject to a periodical review.

Must carry obligations should only be imposed on electronic communications networks where a significant number of end-users use them as their principal means to receive radio and television broadcasts. As nascent technologies like mobile television do not yet reach a significant number of end-users, the question arises whether the Universal Service Directive would apply to these new platforms. In Hungary and Austria, new rules seem to have granted must carry status to some television channels on mobile television transmission (for Lithuania, existing rules have been interpreted this way). At the same time, new acts accompanying digital switchover seem to strengthen the must carry rules for the new digital terrestrial transmission networks, e.g. in Hungary and Portugal. The Commission services are looking into these matters.

e-Privacy

The e-Privacy Directive (2002/58/EC)[32] (the Directive) complements and supplements the general Data Protection Directive (95/46/EC)[33] in the area of electronic communications. It provides for basic obligations to ensure the security and confidentiality of communications over EU electronic communications networks, and gives consumers a set of tools to protect their privacy and personal data.

The e-Privacy Directive has been transposed in both Romania (2004) and Bulgaria (2007). No significant transposition issues have been detected.

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31 They concern respectively the former must-carry rules for the bilingual region of Brussels-Capital (legislation valid until March 2007) (Judgment of 13 December 2007, C-250/06, United Pan-Europe Communications Belgium and others (not yet published), and the must-carry rules of Lower Saxony (case C-336/07, Kabel Deutschland Vertrieb und Service).

32 Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (OJ L 201, 31.07.2002, p. 37).

33 Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (OJ L. 281, 23.11.1995, p. 31).

Security

The security of electronic communications has been the subject of action in several Member States in 2007. The Greek authorities have consulted on a draft law to strengthen public security in mobile communications, including by requiring encryption of voice signals. In Finland, the NRA has undertaken a review of its email regulation, including potential threats to mobile services. In Luxembourg, security provisions have been reinforced on the reform of general data protection legislation. On the operational side, Lithuania's NRA was establishing a computer emergency response team (CERT). In Finland, the NRA has received additional funding for its CERT-related activities.

In the spring of 2007 Estonia was subject to an organised wave of cyber attacks on websites of the government, banks, telecommunications companies and media outlets. These denial-of-service attacks lasted for nearly a month. To prevent further attacks, Estonia had to close off parts of its network to computer users outside the country, isolating itself from the rest of the Internet.

Enforcement

Enforcement of privacy requirements remains a challenge. As regards cookies and spyware, effective enforcement action has been limited so far in the European Union. According to a survey compiled in the context of the Contact Network of Spam Authorities (CNSA), reasons include the cross-border nature of the problem, as well as a lack of detailed regulatory requirements or self-regulatory guidelines, lack of awareness and insufficiently deterrent penalties. A notable exception was the December decision of the Dutch NRA OPTA to impose fines totalling €1 million on three companies considered among the 10 largest spyware distributors in the world.

Unsolicited communications or 'spam' generated about 70 000 complaints to the Swedish Consumer Authority in 2007. However, most senders seemed to be located outside the EU. The international dimension of privacy threats reinforces the importance of international cooperation, including in the CNSA. In Italy, the main telecom operators were required to cease unsolicited marketing practices following the intervention of the Authority for Privacy.

Privacy Enhancing Technologies

Technology can also contribute to minimise risk. This was the subject of the Commission Communication of 2 May 2007 on 'Promoting Data Protection by Privacy Enhancing Technologies (PETs)' (COM(2007)228). Examples of PETs include automatic anonymisation of data after a certain lapse of time; encryption tools to prevent hacking; cookie-blocking software on the user's PC; and the Platform for Privacy Preferences (P3P), allowing Internet users to analyse the privacy policies of specific websites.

Data retention for law enforcement purposes

The 2006 Data Retention Directive[34], which seeks to harmonise the national data retention measures derogating from the e-Privacy Directive, had to be transposed by 15 September 2007. The Directive obliges Member States to ensure the retention of data on electronic communications for a period of between six months and two years. Member States had the option to postpone its application to Internet access, e-mail and Internet telephony until 2009. Sixteen Member States had declared their intention or reserved their right to do so.

While Ireland has challenged the legal basis for the Directive before the European Court of Justice, its transposition has been delayed in several Member States (e.g. the Netherlands, Portugal, Poland, Finland, Sweden, Czech Republic and Lithuania). In other Member States, secondary legislation was still missing (Spain). In those Member States where the Directive has been implemented, there have been questions regarding the costs for industry, in particular where compensation has not been provided for (e.g. Denmark, Italy, Malta), as well as the scope of the retention obligation (e.g. Italy). Spain has implemented a register of mobile prepaid customers in conjunction with transposition.

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[34] Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC, (OJ L 105, 13.4.2006, p. 54)

Horizontal Regulation

Administrative charges

The EU regulatory framework expressly restricts the amount of administrative charges that may be imposed by national regulatory authorities to the administrative costs resulting from their regulatory work, such as management, control and enforcement of the general authorisation scheme and of rights of use; appropriate adjustments also need to be made in the light of the difference between the total sum of the charges and the administrative costs (Article 12 of the Authorisation Directive). It also explains that systems for administrative charges should not distort competition or create barriers to market entry (Recital 31 of the Authorisation Directive).

Problems have again been reported as regards the limitation of administrative charges to administrative costs in a small number of Member States. In particular, the Belgian NRA's revenue and expenditure account of 2006 revealed a surplus of €3 million that is by law reimbursable to the state treasury. The absence of a mechanism to adjust the level of administrative charges to administrative costs is an issue in Bulgaria too. The Latvian and Portuguese regulatory authorities do not distinguish, in their annual accounts, the administrative costs relating to the regulation of electronic communications activities from the costs relating to the regulation of other economic sectors (the postal sector in case of Portuguese NRA and postal, energy and railway sectors in case of the Latvian NRA). The Commission services are looking into these issues.

Rights of way

The EU framework provides that rights to install facilities should be granted in a timely, non-discriminatory and transparent manner, in order to guarantee the conditions for fair and effective competition. As facility sharing can be of benefit for town planning, public health or environmental reasons, NRAs should encourage voluntary agreements in this area. In cases where undertakings are deprived of access to viable alternatives, compulsory facility or property sharing may be appropriate. Importantly, when competent authorities are considering an application for rights of way, the authority in question should act without delay. Furthermore, effective mechanisms should exist to allow electronic communication undertakings to appeal to an independent body against decisions of authorities on rights of way. Systems for charges should not distort competition or create barriers to market entry. Any applicable charges should be in line with the principles of a general authorisation system.

However, difficulties with the implementation of these provisions have been reported in a number of Member States.

Timing and non-discrimination

For example in Belgium delivery of building permits for antennae is slow. In Greece, despite the adoption of certain legislative acts during 2006, the new rules are not yet applicable and market players continue to experience difficulties with cumbersome and lengthy procedures. Market players in Greece indicate that they are frequently faced with arbitrary claims and unreasonable conditions for the granting of the rights of way, while authorisations to install base stations have not been granted for several years. In Spain, operators are still encountering difficulties in obtaining rights of way, in the form of burdensome procedures, delays or even the dismantling of mobile antennae. In Cyprus the difficulties experienced by new entrants in obtaining rights of way led the European Commission to send a reasoned opinion to the Cypriot authorities in June 2007. In Poland, until September 2007 the existing legal framework imposed several environmental conditions which have caused significant delays for the roll-out of networks, while in Romania mobile network operators have reported repeated refusals by local municipalities to grant rights to install the masts and antennas required by their respective GSM and 3G licences as well as delays in the granting process. In Sweden, in recent years, local councils have become increasingly restrictive with respect to granting permission to operators to install new masts or roll out new networks. Operators have also complained about the very large discretion local municipalities enjoy for granting rights of way.

In addition market players in Romania have raised concerns over the fact that a municipality which is building a fibre communications network within its territory is also responsible for granting permits to other operators for infrastructure roll-out. A similar concern exists in Luxembourg, where a municipality running a cable network is also responsible for issuing network infrastructure permits.

Appeals

In Belgium obtaining a final decision of the Council of State may take three to four years. In Sweden, as a general rule, appeals brought before the courts are lengthy, while in Italy the procedure for imposing rights of way over highways in case of dispute has not been settled by the Ministry of Communications.

Charges

In Spain an increased number of municipalities started imposing a public domain occupation tax equivalent to 1.5% of gross revenue on mobile network operators. Mobile operators refused to pay the tax and have appealed a number of cases. The Commission is looking into the transparency and proportionality of fees for rights of way over non-metropolitan roads and highways in Italy. In Hungary and Poland operators report a lack of clear rules for determining the applicable fees, while the NRAs deal with matters on a case-by-case basis. In Romania the NRA was aware of several cases where local network operators complained about discriminatory and unreasonable price conditions applied by private and public land owners.

SPECTRUM MANAGEMENT

The efficient management of spectrum resources across the EU is critical for economic success. According to some estimates, the contribution of spectrum-dependant activities to the European GDP may be as much as €250 billion.

The introduction of digital television will release additional spectrum capacity for new and enhanced services and bring more competition to the market. For that reason national regulators are currently elaborating technical plans with market players or are preparing tenders for the assignment of multiplexes. In some Member States, the authorities have already granted rights of use (Finland, Germany, Italy) or are preparing the launch of public tenders for the use of spectrum by mobile television broadcasters (Hungary, Austria, France).

Spectrum Liberalisation and Secondary Trading

In 2007 a common EU approach to the optimal use of radio spectrum has made significant progress, thereby supporting the consolidation of the innovative single market for wireless communications. The revisions to the regulatory framework proposed at the end of 2007 are expected to consolidate the regulatory basis with a view to accelerating this trend as required by the pace of new technologies, changing demands for services and the growing globalisation of markets.

The trend towards greater use of market-based approaches in spectrum management continued. In particular Malta, Denmark and Finland took preparatory steps for a major spectrum management reform centred on service and technology neutrality, liberalisation and trading. While Latvia and Romania introduced spectrum trading, Sweden is considering the leasing of spectrum, and the United Kingdom has consulted on spectrum trading in the public sector. Although Spanish legislation generally allows transfers of spectrum rights, Spain is about to adopt a regulation on radio spectrum management specifying the conditions for such trading. Portugal is studying options for a general policy on spectrum trading. Importantly, the Swedish and United Kingdom regulators announced their intentions to apply technology and service neutrality to the spectrum (or at least part of the spectrum) representing the digital dividend. Nevertheless, partly due to the limited number of spectrum bands open to spectrum trading, in most Member States the actual cases of trading have remained relatively few.

Progress has also been achieved in consolidating at EU level the conditions for collective usage of spectrum. For example harmonised conditions of usage of specific spectrum bands for RFID on an unlicensed basis have been put in place. This trend is likely to be further supported by the proposals made on the review of the regulatory framework, where the use of general authorisation for the attribution of spectrum usage rights is encouraged.

In parallel to the Commission proposal[35] for the repeal of Directive 87/372/EEC (the "GSM Directive") and for the adoption of a spectrum technical harmonisation decision for the 900 MHz and 1800 MHz frequency bands in order to make the use of these bands more technology and (or) service neutral, a number of Member States took regulatory steps in this sense. In this context re-balancing of the 900 MHz assignments to individual operators has been undertaken by some national regulators. The Dutch NRA used an opportunity cost approach in order to determine the level of 900 MHz licence renewal fees.

Implementation of Spectrum Decisions

The Commission services gather in the Radio Spectrum Committee information provided by Member States on how spectrum harmonisation Decisions are implemented at national level. This information is published. The situation is summarised in the following paragraphs on the basis of this information.

The 2004 and 2005 Commission radio spectrum harmonisation decisions[36] have not yet been implemented at least in part in Ireland, the United Kingdom, Luxembourg, Slovakia, Bulgaria and Romania.

The 2006 decisions, including 2006/771/EC of 9 November 2006 on the harmonisation of the radio spectrum for use by short-range devices (SRD) and 2006/804/EC of 23 November 2006 on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band, had been implemented in most Member States, except for Belgium, Latvia and Romania in case of Decision 2006/771/EC and Latvia, Luxembourg, Romania and Austria in case of Decision 2006/804/EC.

In 2007 the Commission adopted the following spectrum harmonisation decisions: 2007/90/EC of 12 February 2007 amending EC Decision 2005/513/EC of 11 July 2005 on 5 GHz WAS/RLAN, 2007/98/EC of 14 February 2007 on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services (MSS), 2007/131/EC of 21 February 2007 on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community (UWB) and 2007/344/EC of 16 May 2007 on harmonised availability of information regarding spectrum use within the Community[37]. By the end

[35] Proposal for a Directive of the European Parliament and of the Council repealing Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community COM(2007) 367 final.

[36] Commission Decision 2005/928/EC of 20 December 2005 on the harmonisation of the 169,4-169,8125 MHz frequency band in the Community (frequency band originally designated for the ERMES paging system); Commission Decision 2005/513/EC of 11 July 2005 on the harmonised use of radio spectrum in the 5 GHz frequency band for implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs); Commission Decision 2005/50/EC of 17 January 2005 on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community; and Commission Decision 2004/545/EC of 26 July 2004 on the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community.

[37] Decision 2007/344/EC shall enter into force on 1 January 2008.

of 2007 their implementation was incomplete. In particular, the MSS Decision had been implemented by 23 Member States, the UWB Decision by 19 Member States and the amending WAS/RLAN Decision by 20 Member States.

A further difficulty is that the above mentioned EU spectrum harmonisation legislation is often duplicated in intergovernmental agreements in the CEPT (non binding ECC decisions and recommendations).This often gives rise to confusion on the part of market players and other interested parties, as they find it difficult to distinguish the non binding consensus position resulting from the CEPT process from the legally binding and enforceable provisions of EU harmonisation measures, when both address similar cases of spectrum usage.

Assignment of Spectrum

The EU regulatory framework requires that spectrum assignment procedures conform to the principles of objectivity, transparency, non-discrimination and proportionality (Article 9 of the Framework Directive and Article 5 of the Authorisation Directive). Lack of transparency in the analogue radio and TV frequency assignment procedures was reported in Bulgaria.

As regards new spectrum assignments in 2007, a number of Member States, including Greece, Italy, Lithuania, Luxembourg, Poland and Sweden issued rights of use suitable for the deployment of WiMAX services. An additional mobile 3G licence was issued in Malta. In contrast, the procedure to grant a fourth 3G licence in France did not conclude successfully.

There is an increasing use of spectrum resources to address the challenge of the digital divide. In particular, a fixed wireless access (FWA) auction was organised in Denmark that required applicants to cover scarcely populated areas. Public funds have been used to develop local wireless access networks in Polish rural areas. In contrast, a Wi-Fi project started by the Prague municipality focuses on an area already covered by competing broadband infrastructures and is limited to the provision of free Internet access to e-Government websites.

As an example of emerging co-ordinated spectrum assignment procedures, Irish and United Kingdom regulators co-ordinated their respective tenders in the 1785-1805 MHz bands, and relevant licences were issued on a technology neutral basis to the same company in both Ireland and the United Kingdom (Northern Ireland).

Building on a harmonisation measure for the use of specific spectrum bands, a framework for a co-ordinated selection and authorisation of mobile satellite system operators to provide pan-European services has been developed in the framework of the Communications Committee. On 22 August a Proposal for a decision on the selection and authorisation of systems providing mobile satellite services was adopted by the Commission to create a legal basis for the pan-European selection and authorisation of MSS operators throughout Europe (COM (2007)480).

At EU level, coordination is also presently been pursued for mobile communications services on aircraft (MCA) and the Commission is planning to adopt a Recommendation on the authorisation aspects of MCA services.

The proposals for the revision of the regulatory framework are expected to facilitate dealing with such cases of pan-European services. In particular the Commission has proposed the establishment of a European Electronic Communications Market Authority which will *inter alia* facilitate the licensing of pan-European services using spectrum.

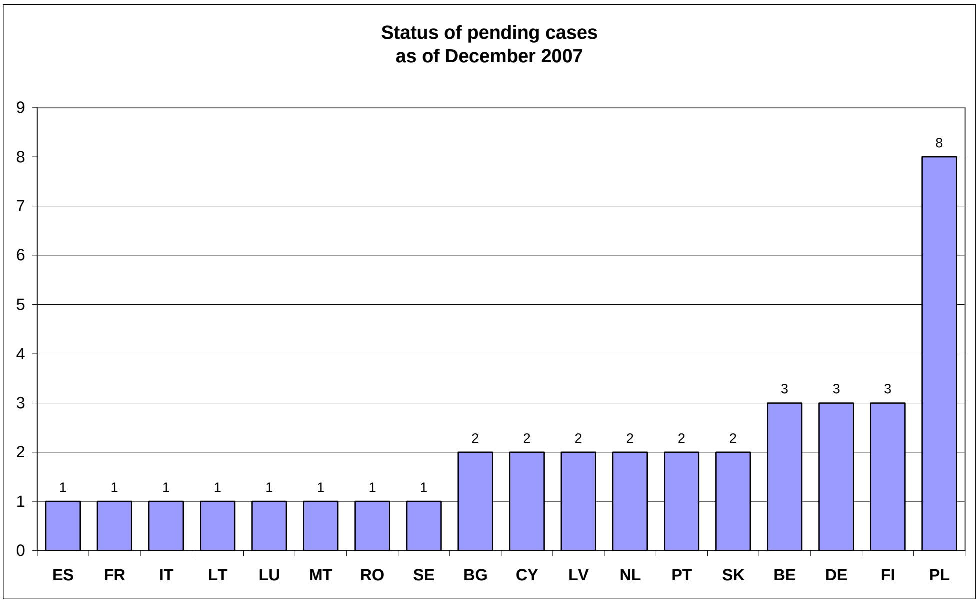
MONITORING AND ENFORCEMENT

Enforcing effective implementation of the regulatory framework for electronic communications continued to be a priority in 2007. The Commission has opened nearly 160 infringement proceedings under Article 226 of the Treaty from the date of application of the new regulatory framework until the end of the reporting year, in some 100 cases due to failures to implement correctly the regulatory framework. While all EU 27 Member States have been concerned by enforcement action, a significant number of issues has been settled since.

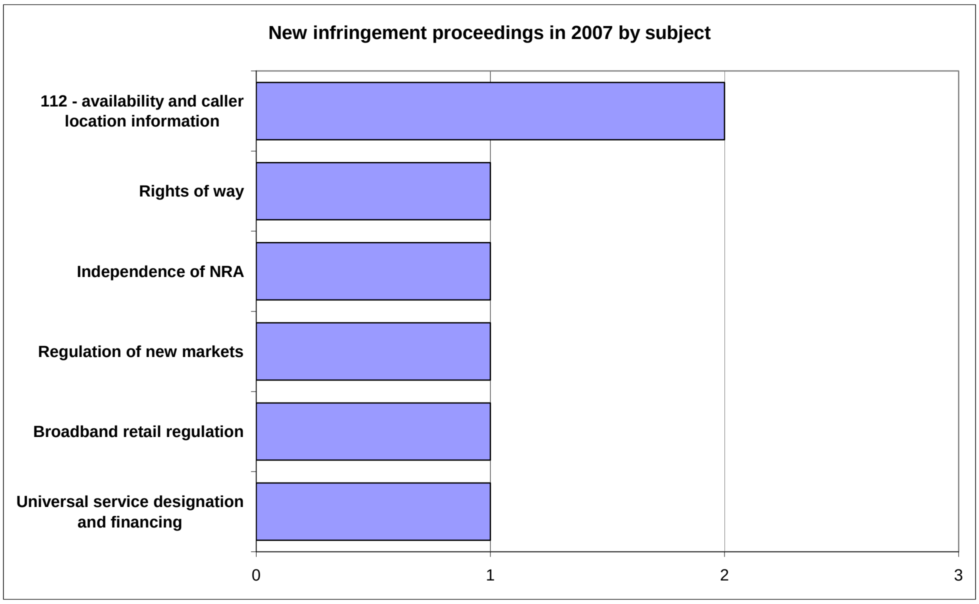
Overall during 2007 the Commission opened thirteen new proceedings, while nine pending cases were taken to the second phase with the sending of a reasoned opinion to the Member States concerned. Moreover, the Commission decided to refer twelve cases to the Court of Justice in 2007. At the same time, the Commission decided to close twenty-one proceedings following action by the Member States.

Six infringement proceedings were launched due to the failure of the new Member States, Bulgaria and Romania, to notify on time all transposition measures taken. All these cases, however, could be closed after the sending of letters of formal notice, the first stage in the infringement procedure, following the adoption and notification of the relevant transposition measures. The Commission services have now started scrutinising the implementation measures notified to it by Bulgaria and Romania.

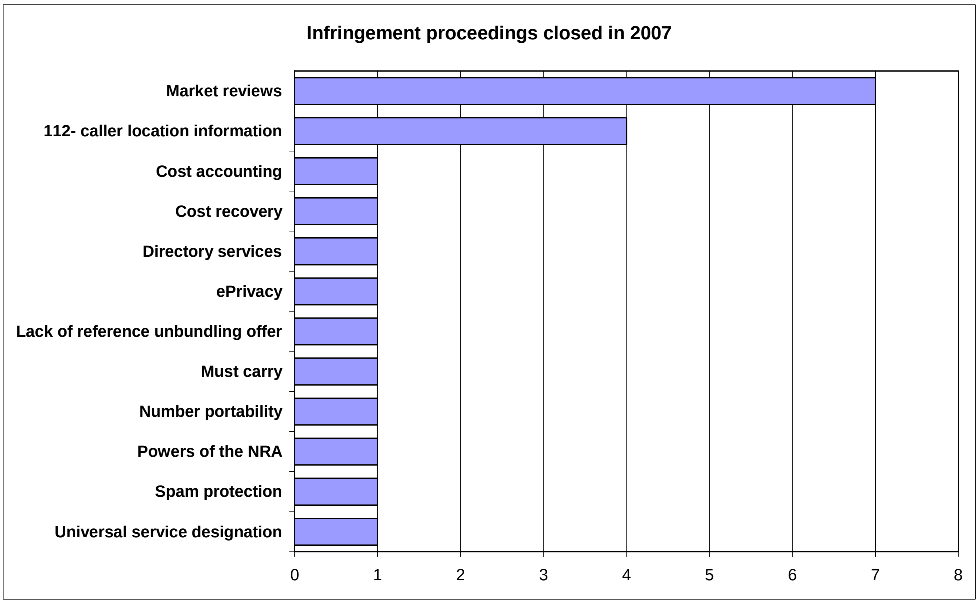
Finally, although all 27 Member States had completed formal transposition of the regulatory framework, there were still 37 proceedings for incorrect implementation pending at the end of 2007.



New proceedings in 2007 again focused on the availability of 112 and of caller location information to emergency authorities for calls to 112 made from fixed and/or mobile phones. Other issues addressed are referred to in the graph below.



Following the completion of the first round of market reviews in most Member States, proceedings closed in 2007 mainly concerned the implementation of the market review procedures. Moreover several proceedings concerning caller location information for 112 could also be closed due to implementation measures taken by the Member States. The following figure gives an overview of the number of cases closed per subject of incorrect implementation.



Most of the twelve cases which the Commission decided to refer to the Court of Justice in 2007 also concerned the non-availability of caller location information for calls to 112 (Italy, Latvia, Lithuania, the Netherlands, Poland, Portugal and Slovakia). In the case of Portugal the problem was resolved, and the proceeding was subsequently withdrawn.

Others actions were related to the lack of powers of the NRA (Germany) and consumer issues (Poland, Portugal).

The Commission has continued to issue press releases at each stage of the proceedings opened. These are available at the implementation and enforcement website of the Information Society and Media Directorate General[38] together with overview tables for all cases, which are updated regularly.

In line with the Commission Communication on better monitoring of the application of Community law[39], the Commission services have also focussed on preventing infringement proceedings by providing general guidance on transposition requirements via the Communications Committee and by using intensive bilateral contacts with the relevant national authorities.

38 http://europa.eu.int/information_society/policy/ecomm/implementation_enforcement/index_en.htm

39 COM(2002) 725, of 11 December 2002.

ANNEX 1

IMPLEMENTATION IN THE MEMBER STATES

BELGIUM

INTRODUCTION

Despite some regulatory action and a slight uptake of unbundling, Belgium has not kept up with the top performers in the European ranking of broadband penetration. Retail prices for Internet access have remained relatively high. In contrast, the mobile market shows ongoing competition. Traffic is increasing and retail prices have fallen.

Some key regulatory moves have taken place in Belgium in 2007. In September the long-awaited cooperation agreement between the federal and the community regulators entered into force, and in November the federal regulatory authority notified to the Commission two key market analyses for broadband, i.e. unbundling and bitstream access. This should be followed by implementation measures, which should lead to more competition in the broadband market. Systematic appeals and lengthy proceedings, however, continue to cast uncertainty on the effectiveness of regulation.

REGULATORY ENVIRONMENT

Main regulatory developments

Despite some remaining gaps in the regulatory work, the Belgian legal framework for electronic communications is almost complete. Market reviews have almost been finalised, except for the markets for broadcasting transmission services. The federal regulatory authority, the Institut belge des services postaux et des télécommunications/Belgisch Instituut voor postdiensten en telecommunicatie (IBPT/BIPT), has submitted for the first time draft market analyses to the regional media regulators, following the entry into force of the cooperation agreement between the federal State and the (linguistic) communities. The draft measures — concerning unbundling and bitstream access — were subsequently notified to the Commission in November 2007.

The federal Electronic Communications Act was amended in April 2007 on universal service, as a reaction to the infringement proceedings in this respect, which are still ongoing. A specific federal act was adopted in March 2007 to deal with broadcasting transmissions in the bilingual region of Brussels-Capital. A considerable amount of secondary legislation was adopted, mainly concerning consumer protection, universal service and numbering.

In 2007, IBPT/BIPT imposed on the fixed incumbent an obligation to set up a cost accounting system. It has put in place a margin squeeze test for retail markets. IBPT/BIPT also decided in January 2007 to regulate the markets of leased lines and a cost model is being developed (bottom-up) to that effect.

Organisation of the NRA

The newly concluded cooperation agreement allows the federal regulator and the community regulators to consult each other when they are exercising competences in the field of infrastructures common to telecommunications and broadcasting. In the event of disagreement between the federal and community regulators, draft decisions will be submitted to and possibly adopted by the Conference of Regulators or by the Interministerial Committee for Telecommunications and Broadcasting. It remains to be seen, however, how this cooperation will work in practice and whether it will enable Belgium to make up the delays.

In its reply to the Commission's infringement proceeding with respect to Belgium's rules for the costing and financing of universal service obligations, the Belgian authorities have stated that the Belgian Parliament is to be seen as the NRA competent for the assessment of any unfair burden in the context of the national universal service scheme. This was confirmed by the Act of 25 April 2007, amending and interpreting the Electronic Communications Act of June 2005.

There have been some minor changes to the enforcement powers of IBPT/BIPT. The NRA may impose a maximum fine of up to 5% of an undertaking's turnover (to a maximum of €12.5 million), but is no longer obliged to impose a minimum fine. So far IBPT-BIPT has not used its fining powers very often. Its legal power to serve notice in case of infringement of the telecom rules was used in February and October 2007 against the incumbent, which was ordered to reflect the lowering mobile termination charges in its retail tariffs.

While the NRA's financial resources have not changed significantly, operators have pointed again to the 2006 accounts, which show, unjustifiably in their view, a surplus of €3 million (which legally has to be returned to the State treasury), a structural financial reserve and specific provisions for other services. On the other hand, the NRA's human resources have been structurally reinforced with the staffing level increased by 20 persons.

Dispute-settlement procedures before the Competition Council are hardly used and the legal timeframe of four months is generally not respected. Operators doubt whether this body has sufficient expertise and staff to deal with specific telecommunication issues. As an illustration, they point to a case based on competition law concerning price squeeze and the lack of cost-orientation of the incumbent's retail tariffs, which has been pending since 2005.

Decision making

IBPT/BIPT has finally carried out the first round of analyses for all relevant markets within its remit (except for broadcasting transmission services in the bilingual Region of Brussels-Capital, attributed to the BIPT by law of March 2007). The market analyses related to the wholesale markets for unbundled access and bitstream access were notified to the Commission in November 2007. Some definitive measures are still missing, however, and specific implementation measures are needed for specific areas such as the use of technologies in the new unbundling reference offers, the leased lines regulation (specific reference offer, cost model, qualitative aspects).

IBPT/BIPT has revisited the market for mobile termination, in order to introduce more symmetry in termination rates, on top of continued reduction of these rates according to a glide path.

This has been in contrast with the various markets for broadcasting transmission services, which are still subject to analysis. These markets are within the competence of the regional regulators (responsible for broadcasting in the linguistic communities) and of the IBPT/BIPT in Brussels-Capital. A first notification — by the French community regulator — was withdrawn in early 2007.

Market decisions have continued to be systematically appealed, and most cases are still pending. Lengthy procedures, combined with the possibility of retroactive annulment by the courts and the impossibility for the NRA to adopt retroactive decisions, have contributed to increasing legal uncertainty in Belgium. These elements also appear to weaken in practice the decision-making authority of the NRA.

The absence of a right for third operators to join an appeal procedure against an NRA decision was confirmed by the appeal court in late 2006 in a case concerning amendments to a reference offer. The court considered that the subjective rights of an LLU or bitstream operator vis-à-vis the incumbent cannot be derived from the reference offer but only from the individual access contract. The Commission services are looking into the matter.

MARKET AND REGULATORY DEVELOPMENTS

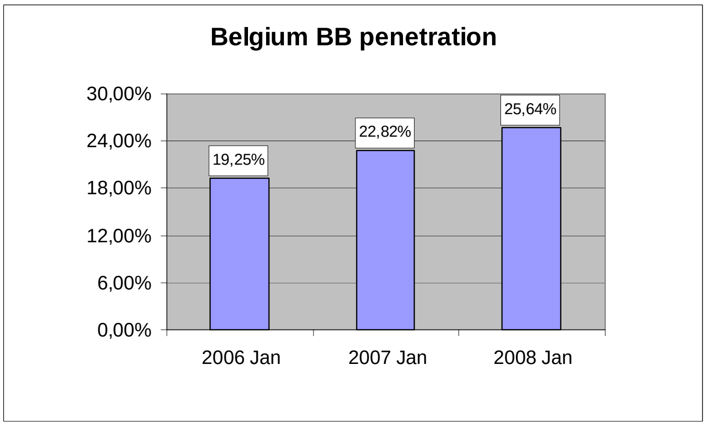
The total turnover of the Belgian telecommunications sector was €9.72 billion as at 31 December 2006, the revenue from fixed markets was €5.49 billion, and the one from mobile markets was €4.22 billion. The total value of tangible investments by alternative operators in fixed telephony networks was €0.25 billion. Mobile operators invested €0.41 billion. The incumbent fixed network operator invested €0.38 billion in its fixed infrastructure in 2006.

Generally speaking, there has not yet been much debate in Belgium about fibre networks and next generation networks. The incumbent has, however, made announcements about next generation access through VDSL2, which aim to withdraw certain regulated access products from 2009, replacing them by commercial products or new technologies. Based on these announcements, the regulator was expected to start a public consultation on Next Generation Networks and Next Generation Access in January 2008.

In the meantime, bundled services have continued to develop considerably in Belgium, both on the incumbent’s network and on cable. This could have implied an increase in the value in the fixed markets, despite a constant decrease in volumes of traffic.

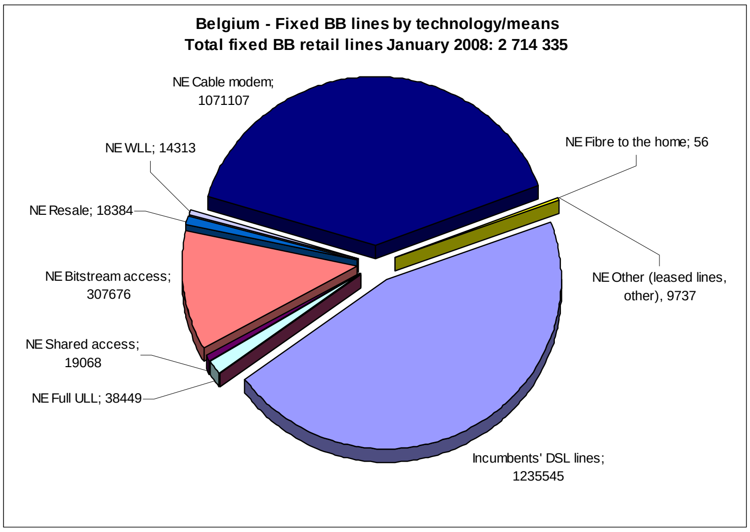
Broadband

Market situation



The pace of growth (less than 3 percentage points) has stayed beneath the European average and behind numerous other fast-growing Member States. With 25.64% broadband penetration and in sixth place (as at January 2007), Belgium has begun lagging behind in comparison with the European best performers. However, it still maintains a position above the average in the ranking. The new entrants' market share has slightly increased (+1 percentage point), mainly through cable connections. The market share of alternative DSL operators has slightly decreased (14%).

According to a study on retail tariffs carried out for the Belgian Ministry of Social Integration in January 2007, the prices of high speed broadband offers (>10Mb) were considerably higher than in neighbouring countries. Prices for medium speed offers (>4Mb and >2Mb) were slightly higher while the prices of the most used speed (the incumbent's ADSL offer of 4Mb) were slightly lower than the European average.



DSL rural coverage is 100%. For cable, however, rural coverage is still limited (30%) and the gap with respect to national coverage is significant (80% coverage)[40].

Regulatory issues

Market analyses related to the wholesale markets for unbundled access and bitstream access were notified to the Commission in November 2007. In the meantime, current measures and obligations imposed on the incumbent (reference offers for unbundling and

[40] IDATE report (October 2007): Broadband Coverage in Europe. The data used in the report refer to December 2006.

bitstream access, respectively BRUO and BROBA) are still based on the old telecommunications legislation. The NRA has been particularly active in developing new bottom-up cost models, which should lead to lower wholesale prices and a larger uptake of the existing regulated products.

Alternative operators have started migrating from bitstream to unbundling, although the percentage of the unbundled lines remains very modest in the overall picture (2% of all broadband lines): bitstream remains the most important access type (11.3%). Wholesale naked bitstream (BROBA without voice) has seen a large uptake in the last two years (from 17.6% to 43% of total bitstream lines). Most operators have welcomed the substantial price decreases for monthly rental fees (from €11.26 to €9.29 for full unbundling and from €1.61 to €0.52 for shared access) resulting from active NRA work on cost-orientation. This has brought them to the lower levels of Europe. The lower prices for bitstream access blocks and tie-cables adopted in November 2006 were followed in 2007 by price decreases for splitters and for one-off fees. Some prices, however, remain high in the view of alternative operators.

The incumbent was ordered by the NRA — back in 2006 — to include ADSL2+ in its bitstream reference offer. Its continued refusal, however, has not yet been subjected to sanctions. Such behaviour is seen as discriminatory by the alternative operators, as this technology is currently used at retail level (this dispute about ADSL2+ has been brought before the Competition Council). Operators complain about their impossibility to compete with the incumbent in terms of higher speed or new converged offers.

Alternative operators have continued to complain about unsatisfactory service level agreements (SLAs). As the incumbent seemed unable to meet the imposed short deadlines for provisioning and fault repairing in 2006, the NRA decided in April 2007 to increase these deadlines to a more realistic level. The NRA decided in November to reduce them again to former levels in 2008 using a glide path. On the other hand, alternative operators are requested to provide binding forecasts for installations and migrations. They do not accept, however, that minimal deviation from such forecasts from their side would be followed by the incumbent's denial to comply with SLAs. In the same decision of November 2007, the NRA also strengthened SLA requirements to be met by the incumbent on the basis of alternative operators' forecasts, and imposed the publication of a list of key performance indicators (KPIs).

Mobile markets

Market situation

The penetration rate in Belgium in terms of active mobile subscribers amounted to 93.86% as at July 2007, compared to an EU average at 109.37%. Market shares expressed in minutes of traffic have remained more or less stable: about 46% for the first, 32% for the second and 22% for the third operator (December 2006). Growth in minutes amounted to 21.4% in 2006, and prices have been decreasing substantially (by more than 5%). The number of post-paid customers increased from 37% to 40%. Mobile virtual network operators (MVNOs) represented a market share of less than 1% (in minutes).

The coverage of each of the 3G networks was estimated to exceed 40% of the population according to IBPT/BIPT, i.e. the minimum provided by law. The first operator, however, has claimed 80% coverage.

Regulatory issues

Mobile termination rates have continued decreasing throughout 2007. The national average rate fell indeed from €0.1553 in October 2006 to €0.0991 in October 2007, a level that is very close to the European average. Following Commission comments, the NRA revisited the market and notified a complementary decision with the view of reaching symmetry between the first and the second operator by mid-2008, and less asymmetry with the third operator. The measures were finally adopted in December 2007.

Roaming

After some early problems in the implementation of information obligations by one operator, which were noted by the Commission to the NRA, all Belgian mobile operators complied with the new European Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community. Prices have been set at the maximum level indicated by the Regulation. One operator is offering slightly lower tariffs.

Fixed

Market situation

Traffic volumes sharply decreased (-7.6%) and so did the number of active carrier pre-selection lines, which may be due *inter alia* to increasing fixed-to-mobile substitution. However, the market share of the incumbent rose again, both in volume (from 65% to 70% in 2006) and in value (from 66.6% up to 71.10%). As an example, the incumbent's market share for national fixed calls fell from 76% to 69% between 2004 and 2005 but rose again to 77% by the end of 2006. This might be explained by increasing offers of flat rate packages and bundles.

Only one competitor had a market share close to 10%, five others had a small share varying between 2 and 5% (in value).

Regulatory issues

As the fixed line incumbent is required not to charge excessive prices by virtue of the market decision on fixed telephony services, it has the obligation to reflect decreases of termination rates of third operators in its own retail prices. However, after having been served formal notice by the NRA, the incumbent applied the first reduction of mobile termination rates in May 2007, and after a second formal notice, was expected to adapt its prices to the second reduction in January 2008.

In June 2007, the Court of Appeal rendered its judgment on the appeal lodged by the incumbent against the IBPT/BIPT 2006 decision on the retail access markets (markets 1 and 2). The court dismissed most grounds for annulment and maintained almost all the obligations imposed upon the incumbent. The effective implementation of the obligation to provide wholesale line rental (WLR), also confirmed in court, has been delayed, reportedly following operational problems. Doubts have been raised by alternative operators with respect to the proportionality of the implementing costs and the very low level of retail minus (11%).

Broadcasting

Market situation

Most households are connected to the cable networks (more than 90%). Different types of digital platforms are rapidly emerging and are offering services to more than 14% of Belgian television households.

As to terrestrial networks, the analogue switch-off in the Flemish Community is expected to take place at the latest by the end of 2008. The French Community proposed in a July 2007 Strategic plan for transition to digital broadcasting to maintain a period of analogue-digital simulcast until the switch-off by the end of 2011.

Concentration of cable companies has taken place in the entire country, with the grouping in one consortium of the various local cable operators in the south. More recently, the main cable operator in the north of the country has also continued its consolidation efforts.

Regulatory issues

The regulator of the French Community (Conseil Supérieur de l'Audiovisuel) notified three draft decisions on the markets of broadcasting transmission services (local markets of cable operators, a market for xDSL television and a market of terrestrial television transmission), but withdrew them insofar as the regulator had lost its competence due to the annulment of the applicable legal provisions. The regulator of the Flemish Region has not notified any analysis so far, neither has IBPT/BIPT, which was entrusted with this task in the bilingual Region of Brussels-Capital.

Horizontal regulation

Spectrum management

By royal decree of 28 March 2007, GSM operators were given the possibility to offer 3G services on the GSM frequency bands 880-915 MHz and 925-960 MHz as from August 2008. This will allow them to meet their coverage obligations more easily (50% of the population by beginning 2008 and 85% from March 2009 with the 900 MHz and the 2 GHz band).

Implementation of spectrum decisions

Belgium has implemented the Commission spectrum harmonisation decisions, except Decision 2006/771/EC.

THE CONSUMER INTEREST

Tariff transparency and quality of service

The implementation of an electronic tool to compare customer tariffs, the so-called "tariff simulator", has been delayed despite its announcement back in 2006. Other consumer protection provisions were implemented in 2007, such as the ministerial decree on mandatory information on customer invoices. Operators have expressed doubts whether the federal NRA is capable of enforcing the numerous consumer protection provisions, especially with respect to new operators in the market.

In May 2007, a new federal consumer protection act was adopted with respect to certain elements of broadcasting transmission services. It specifies the obligation for broadcasting operators to provide information concerning contractual terms and conditions, as well as quality and security of networks and services.

Universal Service

Since 2006, the Commission has been looking into the costing and financing of the Belgian universal service obligations by means of infringement proceedings. In April 2007, the Belgian authorities amended the Electronic Communications Act. Via an interpretative provision, the Belgian authorities have notably claimed that the Belgian Parliament was the competent NRA that had decided, by the adoption of the Act in June 2005, that any net cost incurred by any operator had to be considered as an unfair burden. Moreover, net costs have been calculated as any loss of revenue resulting from the granting of social discounts, specifically for the provision of the social tariffs (all operators that offer public telephony services are legally required to provide these discounts). A transitory regime has also been set up, by which the incumbent, which is still the main provider of these tariffs, will be granted reduced compensation during five years.

The Commission was not satisfied with these changes and has referred the Belgian State to the Court of Justice.

As to the general part of the universal service obligations (fixed telephony, directory enquiry services, directories and public payphones), the Belgian Government adopted the necessary secondary legislation in 2007 in order to proceed with the definitive designations (concerning the open designation mechanism, the procedure and the period of designation). The Commission services continue looking into the financing of this part of the universal service obligations.

Number Portability

The amount of both mobile and fixed numbers has considerably increased over the last year (nearly +500 000 for mobile ported numbers). 19% of the total mobile numbers are ported numbers.

By royal decree of 20 March 2007, the obligation to offer number portability was extended to MVNOs.

A new royal decree, adopted in April 2007, concerns the granting and withdrawing of rights of use for numbers (management of the national numbering space). It endorses the existing rules on rights and obligations for VoIP services, which are granted geographical numbers.

Consumer complaints

The field of action of the ombudsman for telecommunications was extended to the contracts and invoices related to broadcasting transmission services.

European emergency number 112

As caller location information for mobile calls is available in Belgium, the Commission closed the infringement proceeding related to this issue. A royal decree of 27 April 2007 imposed on Belgian mobile operators the obligation to provide, as from May 2008, location information in real time and by automatic electronic means to the emergency services.

Must-carry

The Commission sent Belgium a complementary letter of formal notice after legislation in the bilingual region of Brussels-Capital on the must-carry regime was amended. It considers that the new provisions do not yet conform to the requirements of the Universal Service Directive. At the same time, the must-carry case in the French-speaking Community was closed following annulment of the underlying decree providing for the must-carry regime.

With respect to the (former) Brussels must-carry rules the Court judged, in December 2007, that the freedom to provide services does not preclude a must-carry regime on the condition that such legislation pursues an aim in the general interest and is not disproportionate in relation to that objective (Case C-250/06, *United Pan-Europe Communications Belgium and Others*).

Data protection

Belgium has not yet transposed the Data Retention Directive, though some measures had already been put in place before.

BULGARIA

INTRODUCTION

The Bulgarian mobile market seems to be dynamic despite the lack of number portability, for both fixed and mobile numbers, with a high penetration rate well above the EU average. In contrast, there is a marked absence of competition in the fixed market, where the incumbent dominates the market in terms of revenue. There are also some problems related to the particular situation in Bulgaria in the broadband market, where almost half of the retail broadband access is provided by local area networks.

The Electronic Communications Act, adopted on 10 May 2007, was generally welcomed by Bulgarian operators. However, serious concerns remain in the Bulgarian market, especially as regards the NRA's independence and effectiveness, the absence of market analyses and the lack of secondary legislation needed for full implementation of the EU regulatory framework. Moreover, frequent appeals lodged under the old Telecommunications Act by operators against essential NRA decisions have had a negative impact on the smooth development of the market and have delayed the implementation process. In addition, only consumers in the capital region can benefit from the single European emergency number ‘112’.

REGULATORY ENVIRONMENT

Main regulatory developments

Until May 2007, Bulgaria had in place a law transposing the 1998 regulatory framework. While the Bulgarian authorities notified the May 2007 Law as fully transposing the 2002 regulatory framework, some secondary legislation is still needed to ensure implementation of important measures such as market analyses and access and interconnection. Some of the relevant decisions, ordinances and decrees were expected by the end of the year. These acts were to be adopted by the NRA (the Communications Regulatory Commission (CRC)), by the State Agency for Information Technology and Communications – the executive power's body responsible for electronic communications – or by the Council of Ministers.

No market analyses have been notified yet. Prior to carrying out market reviews, the Bulgarian Law requires a methodology on rules and procedures for the analysis of markets to be prepared by the CRC and adopted by Decree of the Council of Ministers. Approval of this methodology was still pending by the end of the year and, according to the Bulgarian authorities, was expected by the beginning of 2008.

Organisation of the NRA

There are several serious issues concerning the Bulgarian NRA's effectiveness and independence which led the Commission to launch infringement proceedings in November 2007. Some steps to address these concerns have subsequently been taken in Bulgaria.

The division of regulatory functions between the notified NRA – the CRC – and the State Agency for Information Technology and Communications is unclear, as it seems that the State Agency, responsible for electronic communications policy and for adoption of secondary legislative acts under the Law on Electronic Communications, has some regulatory powers or at least some supervision over these. Furthermore, the State Agency's Chairperson was a member of the incumbent's board, which raised questions of incompatibility with Community law principles, as the regulatory framework clearly provides that the regulator has to be legally and functionally independent of all organisations providing services in the market. Moreover, the State keeps a "preferential share" on the incumbent, which was privatised in 2006, and has veto rights on some decisions.

There were also serious delays in the appointment of two CRC board members (the Chairperson being one of them), which had jeopardised and seemingly impeded, in some cases, the NRA's decision-making ability. The two appointments took place in November 2007. It would seem that a general positive approach has been taken by the now completed CRC in order to speed up decision-making.

In addition, there seems to be a significant issue related to the lack of CRC resources, both financial and human, that prevents the CRC from effectively fulfilling its tasks. Administrative charges and fees collected by the CRC are deposited with the State budget. As a part of the State budget, the CRC budget is approved by the National Assembly, on proposal of the Council of Ministers. The CRC's expected revenues and expenditure for the following year have to be approved beforehand by the Minister of Finance. It seems that, even though the Minister increased the CRC's general budget for 2008, there has been a reduction in the CRC's financial resources for its staff, at a time when more resources appear necessary to ensure implementation of the Bulgarian electronic communications law, especially in terms of carrying out the market analyses and putting in place effective monitoring mechanisms. It seems that some proposals aimed at strengthening its financial and regulatory independence have been made by the CRC.

Cooperation between the CRC and the Competition Authority (CA) is, in general, reported to be satisfactory. The CA has to be consulted during the market analysis process. It seems that coordination between the CRC and the audiovisual authority CEM (Council for Electronic Media) suffers from a lack of clarity on the allocation process for digital frequencies and licences to broadcasters. An amendment of the Law on Radio and Television, which was not yet approved when this report was being drafted, would clarify the institutional framework.

Decision-making

As mentioned above, the prolonged absence of two members of CRC board meant that any decision required unanimity. This appeared to impede a normal and effective decision-making process. Regulatory decisions such as market analysis methodology, access and interconnection ordinance and functional specifications for number portability seem to have been delayed for this reason. As of December 2007 the board of CRC is complete.

According to operators, the maximum level of penalties that can be imposed by CRC is relatively ineffective. As fines are not linked to the undertaking's turnover, they would appear to be insufficient to incentivise the operator to comply with regulatory obligations.

Appeals

The Bulgarian Act establishes that the main CRC decisions – information requests for market analyses, market analysis-related decisions, remedies and settlement of disputes between operators – stand while appeals are pending. Nevertheless, it seems that operators generally appeal against CRC decisions. While this has been delaying the implementation of the challenged decisions, as appeals had a suspensive effect under the old Telecommunications Act, the situation might change as the new Law on Electronic Communications provides that the main CRC decisions will stand when they are the subject of an appeal.

MARKET AND REGULATORY DEVELOPMENTS

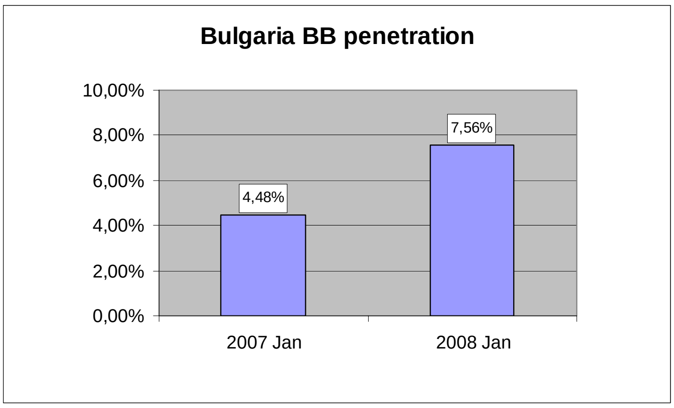
Total electronic communications revenues in Bulgaria at the end of 2006 were estimated at around €1 548 million, of which the mobile sector accounted for €918 million and the fixed sector for €399 million. Total value of investments reached €417 million, of which €255 million came from mobile players, €105 million from the fixed incumbent and a mere €8 million from fixed alternative operators.

The most dynamic market in Bulgaria is indeed the mobile market. The situation is similar to other new Member States, where the number of fixed lines is relatively low and there is high growth of the mobile sector.

Although the two main mobile operators have both mobile and fixed networks, bringing bundled offers to the market has proved difficult owing to problems in concluding interconnection agreements (caused by high termination rates). The broadband market still needs to develop. There were 40 cable operators offering double play offers (cable TV coupled with Internet access or with voice services) and three offering triple play offers (voice, data and television) as at December 2006.

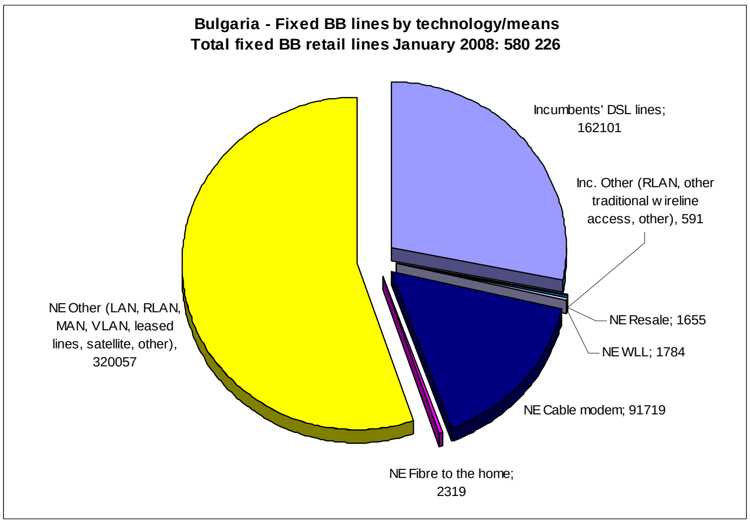
Broadband

Market situation



The broadband penetration rate in Bulgaria is still the lowest in the EU (7.56% in January 2008, compared to 4.48% in January 2007) and far below the EU27 average (20.04%). There is competition between platforms in the broadband market. Cable operators as well as local area networks (LANs) and the fixed incumbent are present in this market. Bulgaria had 580 226 broadband lines, 28.3% of which were DSL lines, in January 2008, a slight increase from 27.5% in January 2007. The incumbent had 99% of the DSL market share in January 2008 (it was 100% one year ago).

71.8% of broadband lines are non-DSL (cable, satellite, wireless local loop, PLC, FTTH) and the only DSL offer in the market comes from the incumbent. The incumbent has 28% of the broadband market share. LAN, RLAN, VLAN and MAN technologies, which are used mostly by alternative operators, have 55 % market share among the broadband technologies. Cable operators had 15.80% as at January 2008.



There is no investment in LLU and only two lines are currently unbundled (shared access). Despite the interest of alternative operators in a bitstream offer, as a first tool to start offering broadband services, no agreements had been signed by the end of 2007. The controversial point was the high wholesale prices, which created a price-squeeze effect.

Regulatory issues

CRC imposed price restrictions on bitstream services in November 2007 to address the price-squeeze effect. The incumbent has consequently reviewed the wholesale prices offered to alternative operators in the reference unbundling offer but it appealed against this CRC decision on the grounds that CRC had imposed overly strict price limitations for unbundling. This decision was still pending by the end of 2007. Its impact on competition remains to be seen.

In addition, two decisions imposing access to the incumbent's lines through a bitstream offer have been adopted as a result of specific disputes between operators. Appeals were lodged against both decisions. One of the decisions was confirmed, while the appeal against the other was still pending with the Supreme Administrative Court by the end of January 2007. Alternative operators claim that there is a price squeeze between the incumbent's wholesale offer and its retail prices.

The definition of the local loop in the law covers only the twisted metal pair. This may make it difficult for the NRA to impose access to other types of networks, should market developments require this. An appeal against the definition was brought by alternative operators to the Constitutional Court.

Finally, it seems that LANs have profited from the lack of regulation and control and have accessed the incumbent's ducts without any authorisation or payment. In some cases they have laid down cable networks illegally. LANs also connect with bigger servers that allow the downloading of content without necessarily paying copyright fees. While some LANs are operating without prior registration or notification, it seems that others have started to notify their operations.

Mobile

Market situation

The mobile market seems to be competitive and has a very high penetration rate, 122.81% at October 2007, well above the EU27 average of 111.8%. Nevertheless, this market is characterised by very high termination rates. There are three main mobile operators. The leading operator had 51.04% market share; the second operator had 38.78% and the third one 10.03%, in terms of number of subscribers at October 2007. An analogue operator, whose phase-out is planned for 2013, has 0.15% of the market share. Most of the customers are pre-paid users. All three leading operators have GSM and UMTS licences. They offer 2G, 2G+ and 3G commercial services. No interest has been shown so far by MVNOs.

Regulatory issues

The main problem concerns mobile termination rates, which are currently among the highest in the EU. Mobile termination is not regulated but subject to commercial negotiation between operators. Average fixed-to-mobile termination rates were extremely high (€18.80 cents) compared to the EU27 average (€9.87 cents) as of October 2007, and also compared to the mobile-to-mobile termination rates (€12.8 cents). According to alternative operators, they have not changed since 2004. The absence of *ex-ante* regulation, as a result of the delay in the market analyses, combined with the lack of regulation under the old Law on electronic communications, are the main reasons for the high prices.

By way of derogation from Article 30(1) of Directive 2002/22/EC Bulgaria has been given, in its accession conditions, the possibility of postponing the introduction of number portability to no later than 1 January 2009. Mobile number portability has therefore not yet been introduced, despite the Bulgarian Law having set a 1 January 2007 deadline for its introduction. The CRC adopted the necessary secondary legislation for the implementation of mobile number portability in December 2007. According to the Bulgarian authorities, it should be effective in the first quarter of 2008.

Roaming

The European Regulation on roaming has been implemented in Bulgaria. One of the mobile operators offers a tariff below the eurotariff threshold and the two other operators offered the eurotariff before the deadline required by the Regulation.

Fixed

Market situation

The fixed market is the weakest market in Bulgaria in terms of competition, as it still needs to develop, mainly with regard to local calls and fixed-to-mobile calls. The total number of fixed lines decreased by 4% in 2006 compared to the previous year[41]. The incumbent had 97% of the market share in terms of revenue[42]. The absence of competition is mainly due to the difficulty in concluding interconnection agreements, due to the high fixed termination rates imposed by the incumbent.

Carrier selection (CS) is in place as regards long-distance and international calls. The incumbent has appealed against the CRC decision adding calls to mobile networks to the reference interconnection offer. The incumbent's high wholesale prices for access have made the presence of alternative retail offers very difficult. BTC have recently signed annexes to the current agreements with the alternative operators for reducing the CS prices.

The incumbent is in the process of digitalising its network. This process is a prerequisite for implementing fixed number portability, and is expected to be finalised by the beginning of 2009, when number portability will have to be implemented. The incumbent reported 100% digitalisation of the network in all regional capitals at the beginning of 2007 and had covered 73% of the network by the end of the year.

Regulatory issues

As no part of this market has yet been analysed by the NRA, new remedies to promote competition cannot be imposed and the remedies imposed under the old rules are still in force. In accordance with the previous law, the CRC imposed an access obligation on the incumbent, including cost-orientation, transparency, accounting separation and collocation, but this CRC decision was also the subject of an appeal by the incumbent and was still in court at the end of 2007.

Broadcasting

Market situation

Half of the households have a cable connection in Bulgaria. There are two satellite operators. TV over IP is just emerging. In July 2007 cable operators served 1.66 million TV households, satellite 228 000 and terrestrial TV 62 000.

The timetable for digital switchover has been delayed, December 2012 being the date for the switch-off of analogue broadcasting. The final use ("refarming") of the digital dividend will be decided by the Council of Ministers. The plan for the deployment of digital terrestrial television in Bulgaria, in compliance with WRC 2006 Plan, was developed jointly by the CRC and the State Agency in November 2006. Approval by the Council of Ministers was still pending when this report was being drafted.

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41 CRC 2006 Annual Report

42 As of January 2007

Regulatory issues

While the Bulgarian Electronic Communications Act of May 2007 provided that the Radio and Television Act would be amended so as to ensure its compliance with the EU regulatory framework within six months of the Electronic Communications Act, the amended Act had not yet been published when this report was being drafted.

Some problems have been reported to the Commission concerning the analogue radio and TV frequency allocation. The frequency allocation is directly related to the licensing of radio and TV programmes. The former task is the responsibility of the CRC, the latter of the CEM. Coordination between the CRC and the CEM is unclear and has produced diverging results.

The National Plan for digital terrestrial TV broadcasting and switchover should resolve some of these inconsistencies when approved. It should also incorporate the relevant part of military frequencies for civilian use. The complexity in releasing these frequencies might be one of the reasons why the Plan is being delayed.

Horizontal regulation

Spectrum management

The National Frequencies Plan is prepared by the National Radiofrequency Spectrum Council and approved by the Council of Ministers. The Council's members are all the Ministries involved (including the Ministry of Defence as well as the National Guard Service and the National Intelligence Service), the State Agency and the CRC. This Plan was drawn up in 2002 and has been updated annually. According to the new Bulgarian Law, it must be reviewed at least every two years.

Bulgaria has reportedly implemented all the Commission's spectrum decisions with the sole exception of the ex-ERMES Decision (Decision 2005/928/EC), which does not have a date for entry into force.

WiMAX licences were issued in 2005 and one more was issued in 2007. There are currently two operators offering nationwide WiMAX services.

Administrative charges

The CRC collects administrative charges and fees from operators, which are deposited with the State budget. The Minister of Finance approves the expected revenues and expenses calculated by the CRC for the following year. Only a proportion of the collected fees goes to the CRC budget, which is part of the State budget. It is unclear to what extent the administrative charges are used to cover the CRC's expenses, as specified in the regulatory framework. The Commission services are looking into this matter.

Rights of way and facility sharing

Rights of way and facility sharing rules are laid down in primary law. Secondary legislation is needed for some implementation aspects, which should be drafted by the Ministry of Regional Development and Public Works, the Ministry of Agriculture and

Forestry, and the Chairman of the State Agency. It seems that this procedure is seriously delayed.

Authorisations

In the broadcasting area the CEM has responsibility for programme content and selection of broadcasters to be authorised, and the CRC issues the frequency licences.

The situation in the broadband market is very unclear. As already mentioned, it is not clear whether most of the LAN providers have already asked for a general authorisation. It is clearly very difficult for the regulator and public authorities to impose on unauthorised LANs obligations which would force them to comply with the regulatory framework or with the law in general.

Numbering

As a result of the absence of interconnection agreements between alternative operators and the incumbent, non-geographic numbers are provided mainly by the latter. It would appear that these numbers are not accessible from mobile operators' networks, including the universal directory enquiry services.

THE CONSUMER INTEREST

Universal service

The incumbent operator was designated as the universal service provider under the old Law. This operator is allowed to cover some remote zones through DECT wireless technology. In addition, the designated operator was granted, by the end of 2007, a CDMA licence which could also be used for provision of universal service in barely accessible and remote regions.

It seems that comprehensive directories and comprehensive directory enquiry services are not yet available in Bulgaria. An Ordinance on comprehensive directories and directory enquiry services, issued at the end of 2007, is meant to clarify the problems relating to access of the alternative operators' subscriber lists.

The Bulgarian Law provides for a compensation fund, which may be used, if appropriate, by the universal service provider. Nevertheless, the precondition set by the Law is that the retail revenues of the universal service provider should be less than 80% of the total revenues of public telephone services, and the incumbent currently has 97% of the total telephony revenues on the retail fixed market.

Directory services and directory enquiry services

Despite the liberalisation of the market, alternative operators' networks do not give access to these services, because of the above-mentioned problems with the interconnection agreements.

Concerning the provision of the subscribers' lists to the directory services editors, the principles of fairness, objectivity, cost-orientation and non-discrimination laid down in the Universal Service Directive do not appear in the Bulgarian Act. The new ordinance on comprehensive directories and enquiry services is reported to incorporate these principles. The Commission services are looking into this matter.

Also, it seems that the Bulgarian Act has adopted an opt-in system for both mobile and fixed users, which would mean that subscribers have to actively request their inclusion in the directory. In practice, this leads to a lower number of users registered on the directory lists than in Member States using the opt-out system.

European emergency number 112

The single European emergency call number ‘112’ is not available in Bulgaria, either for end-users of fixed telephony services or for end-users of mobile services. The Commission launched an infringement procedure against Bulgaria on this ground in October 2007. A first emergency centre started operating in Sofia at the beginning of July 2007, allowing ’112’ calls in that region. A second centre for the north-eastern region was planned to start operating by the end of 2007. The Council of Ministers adopted a plan in October 2007 for deploying the “112” number and "112" centres in Bulgaria for the period 2008 – 2009.

Number portability

Number portability is not available either for mobile or for fixed numbers. The conditions of accession of Bulgaria to the EU, as set out in the Accession Treaty, allowed Bulgaria to postpone the introduction of number portability until 1 January 2009 at the latest. Although the Bulgarian Law stipulates that mobile number portability should be available as from 1 January 2007, this was still not the case when this report was being drafted. The functional specifications for mobile number portability have been the subject of several appeals by the leading mobile operator, delaying their implementation. The CRC adopted the new version of the technical specifications, in accordance with the Law on Electronic Communications, in December 2007.

Must-carry

The "must-carry" provisions relate to the national and regional public television and radio channels and apply to the incumbent, cable operators and digital multiplex operators.

Consumer complaints and out-of-court dispute resolution

The Bulgarian Act devotes one Chapter to consumer protection, regulating in detail the general terms and conditions of the contracts between operators and end-users. The CRC is the body responsible for dealing with disputes between operators and consumers, when an operator does not respect these general terms and conditions. Complaints concern mainly billing and the location of masts.

Data protection

There is a general Law on data protection, supplemented by a specific Chapter in the Bulgarian Act. Users have to give their prior consent before receiving calls, messages or emails for advertising.

CZECH REPUBLIC

INTRODUCTION

Extensive platform competition is the main characteristic of the Czech broadband market. The incumbent, however, holds a strong position on the DSL section and has introduced a bundled offer of fixed voice, mobile and ADSL service to strengthen its market position. With intensive competition on the mobile market, there are signs of increasing fixed-to-mobile substitution. The fixed market has consolidated to four effective market players.

In 2007, the second round of market reviews was initiated but the results were not notified by the end of the reporting period. The regulator continued to address the level of competition by fine-tuning the remedies imposed on the markets throughout the previous year. The digital switchover has been successfully completed in one region of the Czech Republic.

REGULATORY ENVIRONMENT

Main regulatory developments

The Ministry of Informatics was dissolved in June 2007. The electronic communications and postal services remits were transferred to the Ministry of Industry and Trade, while issues related to e-Government services were assumed by the Ministry of Interior.

The Ministry of Informatics, and thereafter the Ministry of Industry and Trade, continued to work towards better transposition of the EU regulatory framework. An amendment to the Radio and Broadcasting Act, adopted in December 2007, sets the national rules for better transition from analogue to digital broadcasting. Further amendment of the Act on Electronic Communications of 2005 is under preparation with a view to the transposition of the Data Retention Directive. A decree on emergency calls issued in September 2007 lays down details for the implementation of caller location information for emergency numbers. The latest ordinance on numbering plans, effective from July 2007, takes account of the Commission’s Decision on 116 harmonised numbers.

The Czech regulator ČTÚ completed its analysis of all markets as defined in the Recommendation in 2006. ČTÚ initiated the second round of market reviews in 2007. The Commission had not received any notification regarding the second round by the end of the reporting period. The additional decisions on remedial measures taken in 2007 added detail to the remedies already imposed on particular markets.

Organisation of the NRA

ČTÚ continues to perform its tasks independently, with sufficient regulatory powers granted by the legislation.

There have been no improvements with regard to the mechanism for appealing against the decisions made by ČTÚ. An administrative appeal in certain instances thus automatically suspends the decision's effects. The Commission is examining concerns that such a procedure may not be in line with the EU regulatory framework.

Nevertheless, the decisions related to remedies do not give rise to automatic suspension. These can only be challenged in court, where they stand unless the court decides otherwise.

The regulator's approach continues to be intensive public consultation within the scope of the market review process, and to address particular concerns voiced by market players. ČTÚ has introduced an electronic data gathering system for some markets. A monthly report issued by the NRA channels information regularly to all stakeholders.

Decision making

One retail market (fixed retail non-residential international call market) and four wholesale markets (fixed transit services, trunk segments of leased lines, mobile access, and international roaming) were assessed to be effectively competitive. Based on the comments from the Commission, ČTÚ imposed price regulation on the fixed origination market, and cost orientation, transparency and non-discrimination on the broadcasting transmission services market at the end of 2006. The full set of remedies including price regulation therefore applies to the wholesale fixed and mobile call termination markets, fixed wholesale call origination market, local loop unbundling market, wholesale termination segments of leased lines market and broadcasting transmission services market. The new remedies imposed in 2007 on the fixed and mobile termination markets fine-tune the remedies already set in place in 2006.

However, as regards the wholesale broadband access market, contrary to the comments made by the Commission, the remedies do not cover ATM and/or DSLAM access and price regulation. Naked DSL service is not present on the Czech market. Active monitoring and follow-up by the NRA is thus necessary to establish whether the scope of remedies is sufficient to address the issue of competition.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the telecommunications sector was €4.4 billion as of 31 December 2006. The revenue from the fixed market was €1.7 billion, whereas the revenue from the mobile market reached €2.5 billion. The total value of tangible investments was €451.2 million, of which €233.4 million came from mobile operators, €118 million from fixed alternative operators, and €100.2 million from the incumbent operator.

The broadband market is characterised by intense platform competition. The incumbent's overall position on this market is 33.9% of total fixed broadband retail lines. The incumbent, however, holds a strong position on the DSL market. Other main platforms of broadband competition remain WLL and cable.

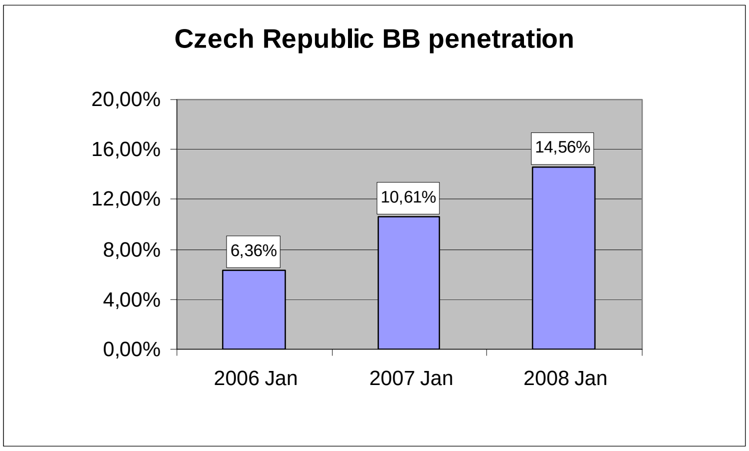
With regard to technologies used, the market players tend to combine their data offers to achieve greater coverage and a wider range of services. The incumbent thus offers an integrated broadband service combining its ADSL and CDMA 450 services. It has also merged its HSDPA and GPRS services into an interchangeable service. Similarly, one mobile operator offers an exchangeable service via UMTS TDD with EGDE and GPRS, achieving up to 60% coverage. The same mobile operator has started a pilot resale of ADSL service in cooperation with fixed market players. The third mobile player is still to launch its 3G services commercially. Overall, 3G coverage remains restricted mostly to the two largest cities, and investment in infrastructure has not progressed. All three mobile operators offer GRPS and EDGE services.

Following a consolidation of the fixed market in 2006, the number of effective competitors on this market has fallen to four. The fixed incumbent provides both fixed and mobile services. The market share of the alternative fixed operators by retail revenue has increased slightly to 35.6%. The number of fixed lines continues to decline. VOIP services are starting to gain in importance. The incumbent is following the trend of converging voice and data services, and has introduced an offer bundling its fixed, mobile and ADSL service (Duo Mobil) which other alternative operators find difficult to replicate. The incumbent also offers a selection of programmes on an IPTV basis. IPTV is also offered by one of the alternative providers.

A public broadband initiative by the Prague municipality to provide free Internet access via WIFI technology by building a new wireless network faced opposition from commercial market players. In view of these concerns and the advice of the Czech competition authority, the project was restricted to the provision of public services in the field of e-Government. The Commission's decision under the State aid rules did not object such a limited-scope project. However, the decision indicated that any further commercial use might raise concerns in this regard.

Broadband

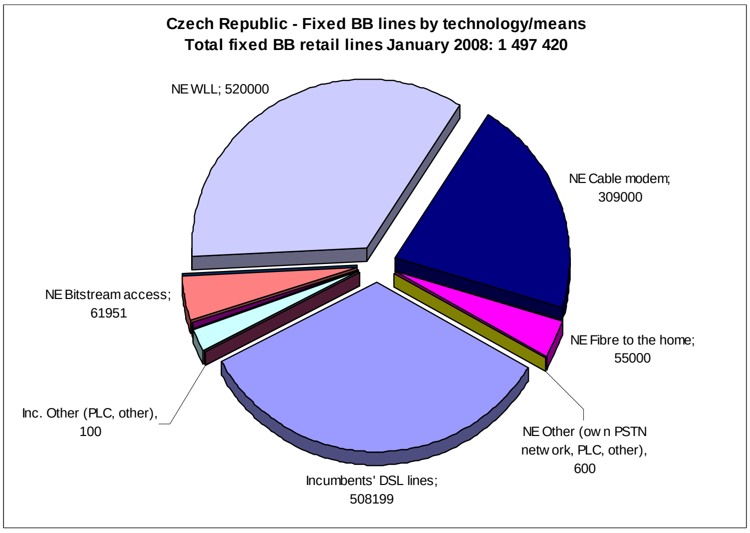
Market situation



The broadband penetration rate increased from 10.61% in January 2007 to 14.56% in January 2008. However, since the penetration rate is below the EU average of 20.04%, there is still ample scope for more competition. The most significant growth was noted with regard to WLL and DSL lines. Any bitstream access is carried through a 'managed' wholesale bitstream access offered by the incumbent and concluded via bilateral agreements which predated ČTÚ's bitstream remedy in December 2006.

Extensive platform competition is the main characteristic of the Czech broadband market. The new entrants' 66.1% market share by fixed retail access lines relies mainly on an infrastructure other than DSL to provide broadband access. WLL (34.7% of total fixed retail lines) and cable modem (20.6%) remain the main platforms for service provision by the alternative operators.

DSL, with its broadband market share of 40.9% by retail lines, is the single most important technology underpinning broadband services, followed closely by WLL. The incumbent holds the strongest position on the retail DSL market with 82.9%. Its share of this market appears to be stable, despite the growth in the number of unbundled lines. Wholesale DSL provision is bundled with line access provision.



Regulatory issues

A full set of remedies (access, transparency, non-discrimination, accounting separation and price regulation) was imposed on the incumbent following the analysis of the LLU market in 2006. Price regulation was set by price caps based on the LRIAC model and the ABC method for both LLU and co-location. Following price drops in 2006, the number of LLU lines grew significantly in 2007. However, while the number of unbundled lines has more than doubled, the overall impact of LLU on the broadband market remains rather small. Prices both for fully unbundled local loop and shared access remained stable in 2007 and held up above the EU average. Market players do not indicate any further investment in LLU. Concerns have been raised as to co-location prices and the economic viability of LLU vis-à-vis the incumbent's retail prices. The NRA has indicated an investigation in this regard.

Wholesale broadband access regulation imposed in December 2006 includes an obligation to provide wholesale broadband access at IP level. The remedy does not include access at ATM and DSLAM level. Price regulation was not imposed, as the NRA perceived wholesale prices to be decreasing sufficiently due to the indirect influence of competitive pressures. The Commission invited ČTÚ to consider price regulation and granting bitstream access at ATM and/or DSLAM level.

Bitstream access based on the regulator’s remedy is not implemented on the market. This is partially due to the incumbent upgrading its network to a higher speed level, making the transition to bitstream access difficult. The market players have raised concerns as to the procedure of moving their customers onto bitstream access, as well as to the economic viability of bitstream with regard to retail prices and promotion offers on the part of the incumbent. There is a growing market interest in the provision of naked DSL in order to create an offer which can compete with the incumbent’s Duo Mobil. Similarly, LLU is gaining importance in this respect.

ČTÚ has started to review wholesale broadband access market, the first market to do so in the second round of market analyses. It has indicated its willingness to take into account the concerns raised by the market players.

Mobile markets

Market situation

Mobile penetration rate is high, at 120%, and there are signs of fixed to mobile substitution. There are three GSM operators with market shares of approximately 41%/39%/20% competing in the mobile market. 3G services have been launched by two bigger operators. The third operator is expected to launch its 3G service in 2008. Negotiations are ongoing amongst the operators concerning 3G network sharing. A new entrant is offering services based on CDMA technology.

Regulatory issues

The mobile access market was found to be effectively competitive, and regulation is therefore not imposed. One simple reseller is offering the smallest GSM operator's products. Otherwise there are no MVNO present. Directory inquiry services are not offered by third parties. Premium rate services are negotiated via commercial contracts. Mobile operators, together with the fixed market players, have developed a code of conduct for value-added services that appears to bring positive results for the customers.

In the mobile termination market, all three operators were designated as having individually significant market power on their own networks. ČTÚ has thus imposed a full set of remedies, including access, transparency by a reference offer, accounting separation and price regulation by price caps. Mobile termination charges thus appear to be relatively low. The remedy imposed on this market in 2007 provides for more detailed specification of the remedies already in place, restricting the remedies only to subscriber numbers and excluding value-added services from the scope of the regulation. The regulation in place appears to address the competition issues identified in the market analysis.

Roaming

All three GSM operators appear to have implemented the requirements set out in the Roaming Regulation to a satisfactory level. The possibility for the NRA to impose penalties remains to be reflected in national primary law.

Fixed market

Market situation

The fixed market underwent significant consolidation throughout 2006-2007, reducing the number of effective competitors to four. The alternative operators offer their services mostly via CS and CPS. These appear to be most successful in the business segment of the market, specifically with regard to international calls, where their market share by retail revenue is 60%. Only 2.18% of all subscribers use a provider other than the incumbent for direct access. VOIP services have started gaining in importance, although their significance on the market is rather low at 1.1%. The overall incumbent’s fixed telephony market share by retail revenue has decreased from 72% to 64.4%. The fixed penetration rate is rather low at 40%.

As a reaction to the incumbent's Duo Mobil offer, the other mobile operators have expressed interest in becoming established on the fixed market, in cooperation with the existing fixed players (via CPS and DSL resale or LLU to provide fixed voice services and DSL). In a market which shows signs of fixed-to-mobile substitution, this offer is difficult to replicate for the alternative fixed operators.

Regulatory issues

Access markets are regulated by CS/CPS, accounting separation, and resale of access service. Fixed retail call markets are regulated by accounting separation. Simple resale of the monthly rental fee was imposed on the access markets in 2006. To date, however, the alternative operators have not used this facility. Instead, demand is growing with regard to the standard wholesale line rental, partially due to additional competitive pressure caused by the Duo Mobil offer. The incumbent published a WLR offer on a voluntary basis in December 2007.

The full range of remedies, including price regulation, applies to the markets for wholesale fixed call origination and termination, and wholesale terminating segments of leased lines with effect from 2006. However, the interconnection charges for call termination are well above the EU average.

Broadcasting

Market situation

Broadcasting is dominated by terrestrial transmission (60%), with an estimated share of 10% for digital terrestrial transmission and 50% for analogue terrestrial transmission. Cable follows with 24%, and satellite transmission with 14.6%. A mere 1.13% of households receive national TV programmes primarily via IPTV. The largest cable operator has merged with its biggest rival. One of the larger fixed alternative operators still holds a 100% market share of analogue terrestrial broadcasting.

As part of the process towards the national digital switchover, analogue broadcasting has been successfully switched off in the region of Domažlice. Another analogue switch-off project is currently running at Ústí nad Labem. *Regulatory issues*

While the market definition comprises analogue terrestrial broadcasting transmission only, following the comments from the Commission, the NRA imposed a full range of remedies including price regulation at the end of 2006.

An amendment to the Radio and Broadcasting Act aimed primarily at setting comprehensive legal provisions for the digital switchover was adopted in December 2007. ČTÚ has prepared a Technical Plan for the Switchover from Analogue to Digital Terrestrial TV Broadcasting. The NRA is to start a tendering procedure for the DVB-H licence, possibly including frequencies, as demand has already been signalled by the market players.

Horizontal regulation

Spectrum management

The Czech authorities have signalled full implementation of the Radio Spectrum Harmonisation Decisions adopted by the Commission (Decisions 2004/545/EC, 2005/50/EC, 2005/513/EC, 2005/928/EC, 2006/771/EC, 2006/804/EC, 2007/98/EC, 2007/131/EC and 2007/90/EC). The legislation provides for the possibility of spectrum trading in granted allotments following the notification and subsequent agreement of the NRA. This possibility has not been used by the market players yet.

Rights of way and facility sharing

The provisions regarding the granting of rights of way in the Electronic Communications Act use the concept of easement. The administrative procedures and disputes are handled by the local Construction Office as defined in the Construction Law of 2007.

THE CONSUMER INTEREST

Universal service

Provision of access at a fixed location was taken out of the scope of universal service. An amendment to the Electronic Communications Act taking effect on 1 January 2008 further reduces the scope to exclude provision of special prices for low income recipients.

In the most recent designations (2005-2006) ČTÚ has set the scope of universal service as the provision of directories, directory inquiry services, public payphones, additional services, disabled users' access to PATS and provision of special prices for disabled users and users with low income. The incumbent was the sole designated provider for all but the last element, for which other mobile operators have been designated alongside the incumbent. All the elements are to be provided for a period of three years with the exception of public payphones, designated for six years.

Universal service financing comes both from the state budget and the universal service fund. While the compensation mechanism has been activated, the effective contributions for 2001 onwards have been delayed by court proceedings and appeals by contributors. The NRA has indicated the likelihood of issuing the final decisions on the contributions for 2001 in the coming months. The decisions on contributions for 2004 were finalised at the end of 2007. It should be noted that the total net cost of each designated undertaking is to take account of all profits from any of the partial services provided by that undertaking.

Number portability

Fixed number portability has been available since 2003, while mobile portability was introduced in January 2006. The number portability facility has so far been used more frequently by subscribers in the fixed market (more than three million fixed numbers ported and more than 90 000 mobile numbers ported as of October 2007). The prices for both types of number portability are well above the EU average. They are not subject to regulation; the NRA takes a decision on prices only in the event of a dispute.

One out of three disputes regarding the pricing of mobile number portability was resolved by the NRA in 2007. The charges set in the decision are asymmetric, but the difference is not substantial.

Consumer complaints

ČTÚ and its regional departments provide an out-of-court dispute resolution mechanism for customers. The issues at stake mostly concern alleged high prices charged and quality of service. The regulator takes a binding decision on prices, and the decisions can be appealed in court.

European emergency number 112

112 calls are available free of charge from all publicly available telephone services, including payphones. Caller location information is available for all networks by the push method. For payphones, no payment in terms of coins or cards is necessary to call 112. It is possible to make calls to 112 even from mobile phones with sim cards that are out of credit, from phones without sim cards, or from places where there is no coverage, given that coverage is provided by at least one other mobile operator.

The Czech Republic has established a smart system to handle calls in foreign languages. At any time, emergency operators are able to see on their screen which languages are available in other PSAPs throughout the country. Calls can thus be handled in a total of six languages (Czech, English, German, French, Italian and Russian).

Citizens are informed about the existence and use of 112 via notices in payphones, phone books and on their bills. 112 is mentioned in the instructions for use of mobile phones, and is included in teaching programmes in primary and secondary schools. The Ministry of Interior launched a “Safe Travel” campaign in 2006 to circulate more information on 112 and its usage.

Must-carry

The must-carry rules defined in the Radio and Broadcasting Act provide for all public channels to be included in the lowest retransmission offer of cable operators. The Council of Radio and Television Broadcasting decides on the inclusion of commercial channels. A transitional regime expiring in 2011 and comprising both public and commercial channels (minimum offer) currently applies. An amendment to the Act has recently been adopted, amending the must-carry rules likewise. The Commission services will examine the rules as amended.

Data protection

The Ministry is currently preparing draft legislation aimed at completing the transposition of the Data Retention Directive. It is expected to take effect in 2008.

DENMARK

INTRODUCTION

In 2007 Denmark took first place in the EU in the level of broadband penetration. This success has been attributed to strong competition from both unbundling and alternative infrastructures, which has led to price competition. Fierce competition also prevails in the mobile sector, although so far 3G has not had a big impact. The market has been consolidated through acquisitions of two Danish service providers by foreign operators.

On the regulatory side, the NRA has now submitted all market analyses. Specific issues, such as the internal cabling problem, have been clarified through national legislation.

REGULATORY ENVIRONMENT

Main regulatory developments

In 2007, the Danish national regulatory authority IT-og Telestyrelsen (National IT and Telecom Agency – NITA) prepared a strategic policy report on the future of the Danish telecommunication sector. The report was also opened to public consultation. The key challenges for the year ahead were determined to be the following: promoting broadband competition and ensuring better scope for lower broadband prices and higher broadband speeds; ensuring that there are no barriers to penetration of IP telephony and 3G; ensuring predictability, transparency and simplicity in regulating a market dominated by development and convergence; and ensuring effective enforcement of regulation.

In the strategic policy report, it is also recommended that, along with the revision of the EU’s telecommunications directives, Danish authorities will also take an active part in the discussions on the possible advantages and disadvantages of functional separation, following a specific evaluation of the competitive situation and taking due account of the principle of proportionality. In the shorter term, NITA is considering how to improve enforcement, e.g. of the non-discrimination remedy.

A Fixed Wireless Access (FWA) auction took place in June 2007. The new licensee has been required to provide broadband by the end of 2010 to households where users cannot get broadband access, mainly in areas with low population density.

Organisation of the NRA

NITA forms part of the Danish Ministry of Science, Technology and Innovation. The 300 employees are managed by a Director General and two Deputy Directors.

Remedies are in place and are apparently being effectively monitored and enforced without any significant difficulties.

In most cases, appeals against NITA's decisions are directed to the Appeal Board and rarely to the courts. During 2007, 66 % of NITA's decisions were eventually upheld (10% more than in 2006). A decision may be referred back to the NRA several times in succession. Some decisions of the Appeal Board have raised criticism owing to their lack of clarity.

The NRA has regular co-ordination meetings with the NCA.

Decision-making

With the recent submission of the transit services in the fixed public telephone network market (market 10), the broadcast transmission services market (market 18) and the re-notification of the wholesale trunk segments of the leased lines market (market 14), NITA has completed its analysis of all markets.

The alternative operators have called for a more effective operational implementation of the market analyses. In some cases, the incumbent simply transformed old agreements into standard offers. NITA reviewed them, but there have been no results so far.

NITA is currently considering how its assessment of reference offers can be simplified in order to reduce processing time.

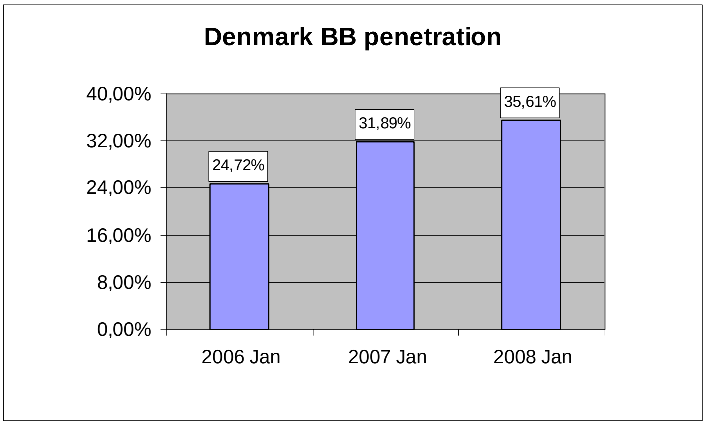
MARKET AND REGULATORY DEVELOPMENTS

The total revenues in the telecommunications sector stood at €5.4 billion in 2006, of which the fixed market amounted to €1.31 billion and the mobile market to €2.11 billion. The incumbent invested €0.43 billion in the fixed telephony networks, while the alternative operators spent €0.55 billion. Mobile operators' investments amounted to €0.62 billion.

There have been major investments by power companies in establishing fibre networks. Some alternative providers feared that interconnection issues might arise due to the different technologies used by the power companies to build regional networks-. NITA, on the other hand, had a positive outlook on these investments.

Broadband market

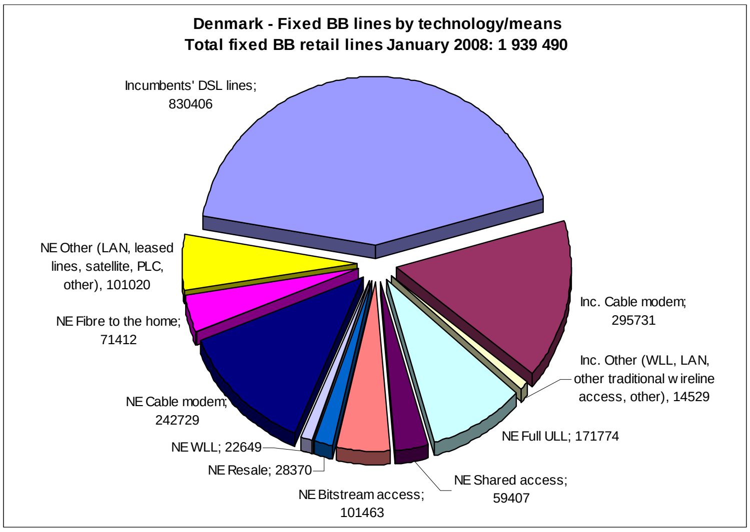
Market situation



Denmark was first in the EU in terms of broadband penetration, with a rate of 35.61% (as of January 2008).

Price competition was particularly noticeable in the broadband area in 2007. At the same time there was a marked increase in the share of broadband subscriptions using high speeds, with the price for a 2 Mbit/s broadband connection falling by more than 35% between November 2006 and May 2007.

The incumbent has been the dominating market player in the market for broadband lines with a 58.8% market share as of January 2008 (excluding resale lines of alternative operators), compared to 60.1% a year earlier. The total number of broadband lines increased from 1 730 674 to 1 939 490 in the year prior to January 2008. On the DSL market the incumbent was also the leader, with 830 406 lines.



Alternative operators primarily based their services on wholesale products supplied by the incumbent. In addition, there were growing investments in alternative and competing infrastructures, such as cable, fibre, housing associations' internal networks, wireless networks, etc. However, there was still no nationwide alternative to the incumbent's copper network.

The number of wholesale LLU lines in the form of fully unbundled lines has continued to increase, reaching 188 492 lines in January 2008 compared to 102 023 lines in January 2007. The shared access lines supplied by the incumbent to new entrants, however, fell from 87 025 to 49 874 in the same period.

The connection prices for fully unbundled local loops as well as for shared access continued to decrease in the year prior to October 2007, by approx. 15% and 17% respectively, keeping them among the lowest in the EU. The monthly rental prices stayed at a constant level, with €8.61 for fully unbundled loops (EU average: €10) and €4.3 for shared access (EU average: €3).

DSL coverage in rural areas is 100%. However, cable rural coverage is still limited (34%) and the gap with respect to the national average is 60%.

Regulatory issues

However, some alternative operators were concerned about the potential loss of their investments in the co-location sites in the context of the incumbent's move to roll-out high bandwidth network (ADSL2, later - VDSL) closer to the customers (based on the plans already announced by the incumbent, approx. 4.5% of fully unbundled local loops could be affected) and the insufficient warnings of changes. NITA considered the existing regulation to be sufficient and encouraged the operators involved to come up with agreed solutions.

According to alternative operators, they have received warnings for five physical installations of the incumbent out of a total of 1800. The incumbent gives a 6 month warning prior to rolling out its NGN to a specific area, and a 2 month warning for specific lines. In addition, the NRA has issued a note clarifying the application of co-location rules to NGN. According to the NRA, the incumbent does not have an overall roll-out plan. Quality access to NGN will be ensured through a cable management forum, established by the incumbent to discuss use of its copper with other operators and NITA.

An internal cabling issue concerning two alternative operators seeking to run a cable between two racks co-located in the incumbent's facilities appears to have been largely resolved by legislation, although the incumbent seems to have adopted a rather stringent interpretation whereby such cabling is allowed if it is primarily used for interconnection towards the incumbent itself.

In the opinion of alternative operators, the incumbent benefits from first-mover advantages, with no equivalence or notification of product specification change. The incumbent's ADSL roll out with rebates to PSTN line customers has led to complaints by alternative operators, and an appropriate change is expected from the incumbent.

Mobile markets

Market situation

The Danish mobile market has been characterised by strong competition and growth in the past years. This has resulted in constant price reductions and high levels of mobile subscriptions, reaching 6.02 million in October 2007. The penetration rate rose to 110.4%, up from 103.7 % a year earlier.

At the end of October 2007 there were four mobile network operators, two MVNOs and 26 resellers on the Danish market. The incumbent's market share in the mobile area increased to about 40% due to the recent acquisition of a service provider. Two other major providers cover 24% and 19% respectively of the mobile market with their own networks.

So far, 3G has not had a big impact, with approximately 500 000 customers divided between the incumbent, the two alternative operators and their subsidiaries. An additional operator launched its services in December 2007.

Regulatory issues

In order to promote the development of more advanced mobile services, NITA has analysed in its strategic review the possibility of sharing elements of infrastructures among 3G providers as well as allowing longer commitment periods for telecommunications services.

Under current legislation the providers are not allowed to share network elements as such, e.g. the radio infrastructures, but only masts and buildings. At the time of writing, NITA has been analysing how network sharing in areas that do not come within coverage requirements stipulated in the licences of 3G providers may improve penetration of 3G, more widespread provision of advanced services, and coverage of the last 20% of the population.

The current provision on the commitment period means that 3G providers, and other telecommunications providers, are not allowed to bind their customers to contracts of more than six months. This is considered by NITA and some small alternative operators as a barrier to innovation, investments and penetration in the area of 3G services. NITA recommends in its strategic review that this rule be changed by allowing a longer commitment period.

NITA's decision on market 15 – evaluating it as effectively competitive – has been referred back by the Telecommunications Complaints Board, and a new decision was pending at the time of writing of this report. In the meantime, the regulation has remained in force, placing the obligation of meeting all requests for access (objective and non-discriminatory terms as well as accounting separation and publication of all agreements) on the incumbent and one alternative operator only.

Roaming

The implementation of the Roaming Regulation 717/2007/EC has gone through relatively smoothly. All mobile operators were quick to react to the new Roaming Regulation by lowering their roaming charges either to the maximum extent possible or to a slightly more advantageous level (in the case of two alternative mobile operators) than that required by the Regulation.

Fixed markets

Market situation

The incumbent has continued to be the largest provider in the Danish market for telephony on the fixed network with a market share for domestic telephony of about 65%, which is showing a slightly rising trend. In overall terms, however, the market for fixed-network telephony has sharply declined, with the number of traffic minutes falling by half from 2001 to 2006. For international telephony, the incumbent's market share is about 50%.

The number of subscribers actually using a provider other than the incumbent operator for direct access (via PSTN or ISDN) has fallen slightly to 19.3% (July 2007). The number of public fixed voice telephony operators rose by seven to reach 72 in July 2007.

Alternative operators have complained about the high one-off handling fee for number ranges which is payable to the incumbent. Its effect might be to encourage operators to apply for excessive number ranges, which results in inefficient use of numbers.

The interconnection charges for terminating calls on the incumbent's fixed network have decreased further in 2007, for both single and double transit, from €0.62 to €0.55 and from €0.88 to €0.79 respectively. As a result, they have continued to be among the lowest in Europe.

Regulatory issues

Under current legislation, NITA has the powers to set terms and conditions for access and interconnection reference offers and agreements, either on its own initiative or if required by one of the parties. According to NITA, many terms of interconnection agreements, including the commercial terms, have been examined and most fees related to the copper network have been regulated. However, while it seemed that the alternative operators were still concerned about a few unresolved issues, the incumbent noted that the NITA's intervention in interconnection agreements was not encouraging the alternative operators to enter into negotiations.

NITA has updated the Danish LRAIC-model with data for the years 2006 and 2007, setting prices for interconnection products such as local access, local termination, transit and co-location.

The draft decision was made at the end of October 2007 and notified to the Commission. It was expected to take effect from 1 January 2008.

Broadcasting

Market situation

According to NITA, satellite operators cover 100% of the country's territory. In practice, however, there are some limitations since clients in apartments may not be able to obtain permission to install a satellite dish. End users in most parts of the country also have the possibility to choose cable TV. The coverage of the IP-TV network was expanding rapidly, reaching 18 295 households in July 2007. NITA was expecting the number of end users choosing these two latter platforms to increase significantly in the coming years.

Regulatory issues

The finalised analysis of the broadcasting transmission services market (market 18) suggested that there was effective competition on the market.

NITA has identified separate markets covering different platforms, considering the broadcasting transmission services via cable, satellite and IP-TV platforms as one market and terrestrial broadcasting as another market, subject to a licence. Currently there are no further licences available.

At the end of 2009, analogue TV broadcasting will be switched off. The Danish authorities are currently making the necessary arrangements, which will create additional broadcasting transmission capacity. NITA stresses that it will be necessary to undertake a new evaluation of the market before the end of 2009, taking into consideration the emergence of digital terrestrial broadcast transmission services.

Horizontal regulation

Spectrum management

All Commission decisions on spectrum harmonisation have been implemented. The amended 5 GHz RLAN Decision (2007/90/EC), the UWB Decision (2007/131/EC) and the MSS Decision (2007/98/EC) entered into force on 30 September 2007. The legal national reference is the national frequency plan.

The recent spectrum allocations include 450 MHz for a mobile network development, 870 MHz licences, presumably for broadband services, and 3.4-3.8 GHz for fixed wireless access (with broadband to remote areas as a condition). Legislation to reform the spectrum management is in preparation.

NITA is currently examining the possibilities of expanding spectrum trading. It is envisaged that a division of the licence – either geographically or by spectrum – and transfers of parts of a spectrum will be allowed. The new regulation is expected to come into force in January 2009.

Spectrum for digital TV would include eight multiplexes. Five would be assigned to broadcasters (with mobile TV options), one would be for mobile services, and two would remain in digital reserve (for trial and innovation). The analogue switch-off is scheduled for October 2009.

The incumbent was concerned about the on-going consultation on the DTT gatekeeper: proof of the absence of any competition issues would have to be provided, which in effect would exclude all major Danish players. Approximately 40% of the transmission capacity would be provided on a wholesale basis.

THE CONSUMER INTEREST

Universal service

The universal service regime is currently under review. Some deregulation is being considered, e.g. for ISDN or low-capacity leased lines. The obligation to provide maritime safety services is also under review. There may be a one-year extension of the old regime. According to the incumbent, the uncertainty on how to deal with maritime safety services is hindering progress on the reform of the universal service regime.

Number portability

Number portability on the fixed market increased only slightly in the year prior to 1 October 2007 (from 1 113 000 to 1 199 799), whereas the use of this customer tool on the mobile market grew from 1 810 000 to 2 533 333 in the same period.

European emergency number 112

The 112 emergency system has been modernised in recent years, with seven emergency call centres across the country being run by the Danish Police. The Danish Fire Brigade is responsible for handling emergency calls in the Greater Copenhagen area. All the emergency centres are connected with each other by a communications network in a nation-wide call centre solution. All emergency call centres can handle calls in English. In addition, in Greater Copenhagen, operators can generally handle calls in German.

Caller location information is available both from fixed and mobile networks in Denmark. When a 112 emergency call is made, the system automatically and instantly displays caller location information, such as the name and address connected to the number. Furthermore, the system shows the geographic position from where the call has been made.

Citizens are informed about the existence and use of 112 by means of notices in payphones and in phone books. The number is well known, as it has been the only emergency number in Denmark since as long ago as1992.

Data protection

The Danish data retention rules have been in force since 15 September 2007. The mechanism and storage facilities were viewed by operators as an excessive obligation, for which there is no compensation provision initially. There is uncertainty as to the extent of the obligation and cost of implementation. It is also difficult to expand these services to other countries owing to different rules. This, according to the incumbent, leads to distortion of competition and also represents a much faster and more extensive retention than in other EU countries.

GERMANY

INTRODUCTION

Broadband penetration has increased considerably, infrastructure-based competition has further developed, and end-user prices have continued to fall. The number of fixed subscribers using a provider other than the incumbent operator to make their calls has gone up markedly, but much of it remains resale. Convergence is becoming more and more a reality. Moreover, retail prices for mobile communications have continued to fall with new mobile service providers entering the market.

However, there is still room for improvement in terms of regulatory effectiveness. Important remedies imposed — like IP-based or ATM-based wholesale bitstream access — are not in place yet in practice. While BNetzA has considerably reduced mobile termination rates, alternative market players have criticised a lack of pro-activeness and guidance on the part of the NRA with regard to the roll-out of next generation access networks. Finally, the introduction of legal provisions on the (non-)regulation of new markets led the Commission to refer the issue to the European Court of Justice.

REGULATORY ENVIRONMENT

Main regulatory developments

The recent legislation on new markets which was published in the Federal Law Gazette on 23 February 2007 has been the main point of concern regarding regulatory developments in Germany. The Commission is of the opinion that under this provision new markets can only be regulated and the Community consolidation mechanism will only be applied if certain requirements are met. Following publication of the new provision in the Federal Law Gazette, the Commission sent a letter of formal notice to Germany, since Germany's approach could in effect grant a “regulatory holiday” to the incumbent fixed network operator, not provided for in the European regulatory framework, with regard to the fibre networks rolled out to street cabinets. In effect, it reduces the discretion of the German NRA and bypasses the consultation and consolidation mechanism provided for in the EU regulatory framework. The case was referred to the Court of Justice in summer (C-424/07).

Germany completed the first round of market analyses with the exception of the national wholesale market for international roaming. Despite the fact, however, that market analyses have been completed, the remedies imposed are, in several important wholesale access markets, still not in place in practice. Time-consuming negotiations between market players on reference offers and delayed decisions by the NRA on drafts of these offers have led to delayed applications of remedies, for example, in important markets like unbundled local loop, IP based wholesale bitstream access and ATM based wholesale bitstream access. For the interconnection market, the reference offer was only approved by the German NRA in the second half of 2007 whereas the final remedy had already been notified to the Commission more than a year ago. Only on 21 December 2007 did BNetzA take the final decision on the reference offer for local loop unbundling. The effectiveness of imposed remedies can therefore still not be assessed at this stage.

For the time being the remedies actually applied in practice are still in many cases those imposed under the old regulatory regime.

In the mobile markets, the NRA regulated the applicable MTRs, with the effect of lowering them by about 10%. However, not all end-users have apparently yet been able to benefit from this regulation as the incumbent fixed network operator is allegedly not passing on these reductions to its customers.

Organisation of the NRA

Concerns continue to exist inasmuch as the members of BNetzA's presidential chamber depend on political appointment. It appears that in important political questions, like the treatment of VDSL based markets, the presidential chamber plays a decisive role. Market players expressed concerns that regular meetings between representatives of the Ministry and members of the Presidential Chamber are allegedly used by the government to give guidance to the NRA.

Decision making

BNetzA finalised the first round of market analyses and has taken important regulatory decisions, for example concerning wholesale access and leased lines markets. It has already started with the second round of market analyses. The fact, however, that in general there are separate decisions for market definition/analysis and for remedies has tended to lengthen the proceedings, including during the reporting period. However, it is worth mentioning that in one case BNetzA notified the draft market analysis and the underlying remedies in a single decision to the Commission, which indicates that by law BNetzA is under no constraint to separate market definition/ analysis from the decision on which remedies to impose.

Given the order of market analyses some market players raised concerns that BNetzA was prioritising certain business models. BNetzA informed the Commission that the second round of market reviews would in principle follow the same order as the first round as the NRA is obliged by law to repeat market reviews every two years.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the German telecommunications sector was €66.1 billion as of 31 December 2006; the revenue from the fixed markets was €39 billion, and from the mobile markets €26.6 billion. The total value of tangible investments by alternative operators in fixed telephony networks was €3.7 billion. Mobile operators invested €2.7 billion. The incumbent fixed network operator invested €3.2 billion in its fixed and mobile infrastructure in 2006[43].

Fixed-mobile convergence is becoming more and more a reality, with mobile offers aimed at persuading customers to give up their fixed subscription, and triple play offers continue to gain in popularity. Many mobile operators have added broadband and fixed

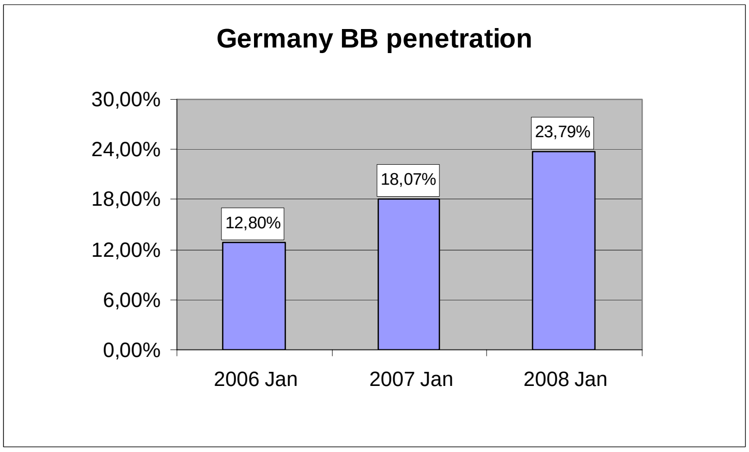
43 Since no official data are available for the incumbent's investments, the latter figures are taken from Dialog Consult/VATM Study "Der deutsche Telekommunikationsmarkt — Zehn Jahre Liberalisierung im Festnetzmarkt".

telephony offers to their portfolio. Ten operators, including the incumbent and the major cable network operators, offer triple play.

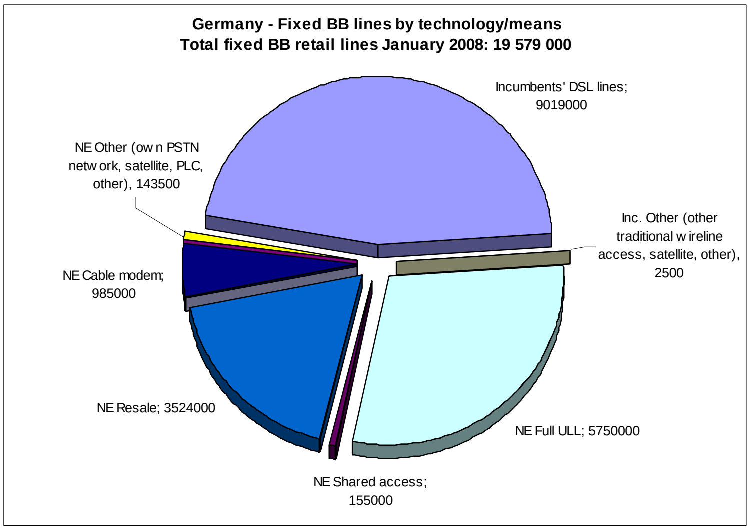
Broadband

Market situation

The market situation has improved further compared to the previous year. This was mainly due to alternative operators who were able to significantly increase their market shares concerning retail access. Moreover, retail prices have fallen considerably.



In January 2007 the broadband penetration rate was 23.79% (up from 18.07%; EU average is 20.04%). However, compared to leading countries in Europe weaknesses in infrastructure persist[44]. In rural areas in particular additional infrastructure efforts appear to be needed to generate further penetration growth[45]. For example, whereas in urban areas DSL coverage is 99%, in rural areas this figure was only 58.5%[46] at the end of 2006. Cable continues to be used mainly for television, but the cable network operators have continued to offer broadband internet services, and by January 2007 their market share was about 5% (up from 3.17%).



The alternative operators´ share in the DSL retail lines market has increased from 50.3% in January 2007 to 51.4% in January 2008. However, a closer look at these figures demonstrates that this positive development is to a large extent based on resale products from the incumbent. If DSL resale lines of new entrants were included in the incumbent's

44 This is confirmed by the first ePerformance Report 2007 "Germany in the international benchmark", a study by TNS Infratest Forschung GmbH, published by the Federal Ministry of Economics and Technology, p. 18.

45 See second ePerformance Report 2007, published by the Federal Ministry of Economics and Technology, p. 7.

46 "Broadband Coverage in Europe", 2007 Survey, Study by IDATE, data as of 31 December 2006, p. 86.

market share, this would still amount to 64.1% in January 2008 (down from 69.5% in January 2007).

As far as market shares for fixed broadband access lines in general are concerned, the alternative operators´ market share stood at 53.9% in January 2008 (up from 52% in January 2007). Whereas in the previous year the incumbent had offered resellers high discount rates, it appears to have recently changed its strategy by trying to bind its customers by long-duration contracts which are automatically extended by one year if not cancelled in due time. Alternative operators fear that due to this new strategy customers will be unduly bound to the incumbent.

Compared to the previous year, the number of new entrants using fully unbundled lines increased more significantly than the number using resale. In addition, providers operating mostly at the regional level have continued to roll out their own infrastructure, including fibre to the building. Infrastructure-based competition has thus improved compared to the previous year.

Cable operators have continued to strengthen their role in Germany's broadband market. With regard to triple-play offers some cable network operators have reportedly gained more new customers than the incumbent's largest competitor on the fixed market. However, the remaining separation of the German cable network into various levels based on the history of this technology in Germany makes it difficult for this technology to perform as well as it could[47]. Consolidation of the market has continued with network level 3 operators merging or cooperating with operators at level 4.

In the fixed network, many operators provide special offers such as a reduction in the connection fee or fixed sums of credit. Furthermore, end user equipment (modems etc), in particular for new DSL subscribers, is often offered free. Flat-rate tariffs for DSL subscriptions continue to fall. 40 operators providing fixed voice telephony services combined their offers with broadband (double-play).

Regulatory issues

As noted above, resale and the unbundled local loop are in place, while bitstream wholesale access is still not provided. In September 2006, BNetzA notified to the Commission the final remedy imposing an obligation on the incumbent fixed network operator to offer an IP-based wholesale bitstream access offer. In January 2007 the NRA notified a similar obligation concerning ATM-based wholesale bitstream access. Since then there have been lengthy negotiations on reference offers proposed by the incumbent. As regards IP-based bitstream the NRA decided that the proposal had to be modified. Then the incumbent took a while to come forward with a modified offer which now will again have to be approved by BNetzA. On 28 August 2007, however, BNetzA decided that the incumbent fixed network operator had to introduce a stand-alone bitstream offer by 1 January 2008. The incumbent has in the meantime announced its intention to offer

[47] For historic reasons, the cable network in Germany is divided into four network levels. Network levels 1 and 2 serve to transport signals from broadcasters to regional distribution points. Network level 3 extends from these distribution points to the transfer points outside the subscriber's home. Network Level 4 is the part of the network from the transfer point to the cable jack in the subscriber's home.

such a product, but only as of 7 April 2008. Regarding ATM-based wholesale bitstream access the NRA has not decided on what modifications have to be implemented in the incumbent's first proposal for a reference offer. As negotiations between the incumbent and its competitors on the details of this offer were ongoing, the NRA wanted to wait for the results of these negotiations before taking a decision. It is therefore not foreseeable when wholesale bitstream access products will be available in practice for alternative operators.

Despite the final results of the wholesale broadband access market analysis (see 11th Report), alternative operators expressed concerns that when demanding access to the incumbent operator's new VDSL infrastructure BNetzA might reject this request with reference to the new German legislation to exempt certain markets from regulation. In its interim decision on the incumbent's draft reference offer for IP-based wholesale bitstream access from August 2007, the ruling chamber referred to a letter from BNetzA´s presidential chamber expressing the view that certain markets based on VDSL technology could be regarded as not belonging to existing ADSL 2+ based markets.

Infrastructure-based competition and investment by alternative operators would be hampered if the incumbent fixed network operator did not continue to have to grant access to its network, regardless of whether or not it was upgraded to VDSL. Despite the fact that BNetzA published an administrative document on how it intends to apply the new German legislation on new markets, it remains unclear how far the German regulator could use this new provision to justify denying access to markets based on new infrastructure rolled out by the incumbent fixed network operator.

Alternative operators complained also about the fact that the incumbent fixed network operator is not revealing its plans for NGN roll-out. They criticised the NRA for remaining too passive in this respect and for not seizing the opportunity to play a mediating role by trying to bring together different investment models. The incumbent fixed network operator nevertheless appears to have continued to roll out VDSL infrastructure.

Mobile markets

Market situation

Mobile penetration was at 113.3% in 2007 (up from 101% in 2006) with 93.3 million subscriptions. There were four mobile network operators, seven main mobile service providers and one MVNO in the market. The overall market share of the incumbent fixed network operator's subsidiary was 37.0% in 2007 (36.9% in the year before). The main competitor held a market share of 34.9% (35.6% in the year before). The third and fourth mobile network operators together had 28.2% market share.

Further new low-cost mobile operators entered the market, offering a minimum service and an easy tariff system, with just one price for calls to all national mobile and fixed line networks and SMS and particularly low costs for on-net calls. A popular newspaper and almost all discount supermarket chains now offer mobile telephony products as resellers. All but one mobile network operator started subsidiary low-cost brands with only a minimum service. As a consequence, tariffs have continued to fall. Prices for mobile flat rates have also gone down in the reporting year.

Regulatory issues

At the end of 2006, BNetzA imposed a reduction of MTRs on all four operators, with the consequence that on average the MTRs were mandated to go down by 16% between November 2006 and November 2007. This decision was appealed by all four mobile network operators. At first instance, the Administrative Court of Cologne decided that BNetzA had not shown that its decision to impose ex-ante tariff obligation had been proportionate. The Court was of the opinion that ex-post tariff control might have been sufficient. BNetzA appealed this decision and its remedy is still executable. Now the Federal Administrative Court will have to decide whether to confirm BNetzA´s decision to impose ex-ante tariff control as has been imposed by all other European regulatory authorities for this market. However, due to the underlying provision of the TKG, an issue that was addressed in previous reports and on which the Commission based an infringement proceeding, general legal uncertainty remains. Even if, however, the Federal Administrative Court upheld the annulment, BNetzA would not necessarily have to establish a different level of MTRs when deciding on them ex post. In this case, however, BNetzA´s new decision could only have effect for the future.

Whether the lowering of MTRs by BNetzA has been the reason for growing competition on the retail mobile markets is still too early to judge. New and bold business strategies of operators are encouraging. However, it is not clear in how far the incumbent fixed network operator has passed on savings from the reduction of MTRs to its customers. The relatively stable level of prices of fixed to mobile calls for end-users seems to argue against a pass-on. Consequently BNetzA explicitly asked the undertakings concerned to pass on the reduced wholesale tariffs to their customers.

In November 2007, BNetzA had to decide again on MTRs as the previous decision was limited until then. It decided to further lower the MTRs by about 10% for the two largest mobile network operators and by about 11% for the other two mobile network operators. The applicable termination fees are now 7.92 cent/minute and 8.8 cent/minute (EU average 9.78 cent/minute).

Roaming Regulation

The Roaming Regulation was applied on time by the operators, and the NRA reported no difficulties. The mobile subsidiary of the incumbent fixed network operator was the first operator to offer its customers a Eurotariff (July 2007). The other network operators followed suit, and by the end of August 2007 every mobile operator was offering the Eurotariff, which in all cases was set close to the price cap level. Operators reported difficulties in meeting the transparency obligations laid down in the Regulation in a timely fashion. However, in the end they apparently managed to adhere to the set deadlines.

Fixed

Market situation

The total number of operators offering public fixed voice telephony stood at 165 in July 2007. There were 13 managed VoIP operators offering public voice telephony, with a market share of 4% on the basis of outgoing minutes of communications at the end of 2006.

In July 2007, 31% of subscribers (up from 27%) were using a provider other than the incumbent operator for national calls, 34% (up from 30%) were doing so for international calls, and 16% (up from 11%) had direct access (either through proprietary infrastructure or LLU) to a provider other than the incumbent operator. This shows that competition has further increased in Germany. The number of alternative operators offering public voice telephony through direct access by means of full LLU has gone down in the reporting year from 49 to 45, while the number of operators using proprietary infrastructure has gone up from 65 to 69. This shows that there is a move to more own infrastructure on the part of alternative operators.

On the basis of retail revenues and outgoing minutes of communications, all types of calls show further decreases in the market shares of the incumbent fixed network operator. On the basis of outgoing minutes of communications, the following increases in alternative operators' market shares can be noted: from 51% to 52% for national fixed calls, from 44% to 46% for calls to mobile and from 51% to 52% for all national calls, while the share of international calls has risen from 72% to 75%.

C(P)S is broadly applied, and the fact that the incumbent fixed line operator also collects the charges for call-by-call connections made through its competitors makes it attractive for customers to use carrier selection.

Regulatory issues

BNetzA notified the second market analysis for the wholesale unbundled access market and the planned remedies for this market. Alternative operators were afraid that the incumbent fixed network operator would close down main distribution frames when rolling-out new fibre infrastructure, rendering investments by these operators for establishing connections to the MDF worthless. In general, competitors expressed concern as to the lack of transparency regarding the incumbent network operator's plans on network roll-out. In commenting on BNetzA´s draft analysis[48] the Commission made it clear that several business models should in principle remain economically viable and possible for alternative operators. BNetzA imposed various remedies on the incumbent fixed network operator designated with SMP.

To enable competitors to reach the incumbent's street cabinets, BNetzA imposed on the incumbent the following new obligations: to give access to ducts; if access to ducts is not possible for technical or capacity reasons, to give access to the unlit fibre between the MDF and the street cabinet; to inform the requesting party about the availability of

[48] Commission comments in proceeding DE 2007/646 SG-Greffe (2007) D/203748.

access to ducts/unlit fibre and to make it clear when it intends to equip a street cabinet with its own DSLAM.

The Commission had asked for further investigations of the wholesale leased lines markets at the end of September 2006. BNetzA decided to withdraw the notification of these markets, and re-notified them in 2007. It has in the meantime also notified the remedies for the wholesale terminating segments of leased lines market. However, these remedies are not being applied in practice yet. In the wholesale trunk segments of leased lines market BNetzA found no SMP. Market players criticised the delay in carrying out the review for the leased lines markets.

Broadcasting

Market situation

In the German market for TV and radio, end-users mainly use cable (53.7%[49]) or satellite (42.5%) to receive the radio and television signal. Analogue terrestrial TV has virtually ceased to exist as an alternative access platform (1.6%), whilst digital terrestrial television (DVB-T) continuous to grow (around 9.9%, compared to 3.9% in the previous year). Both television via ADSL ("IPTV") and UMTS account for less than 1% of all connections and are considered by BNetzA as still nascent alternative platforms for the delivery of the television signal.

Regulatory issues

As regards BNetzA's notification of the broadcasting transmission services market the Commission did not challenge the NRA's finding that the three major German cable operators enjoy significant market power for parts of the cable network (network level 3[50]). In this case, BNetzA quickly imposed remedies, such as the obligation to grant signal delivery access to downstream cable operators, and to provide collocation at the signal delivery transfer points and access to these facilities at all times. The cable network operators fear that by imposing obligations on the operators of this network level to the advantage of operators of network level 4, the artificial separation of the German cable network infrastructure between these two levels could be perpetuated. In previous reports the Commission had welcomed consolidation between the two network levels in Germany on the grounds that this could help cable network operators to up-grade and further digitalise their networks in order to become an alternative supplier of broadband offers to end-users.

Horizontal regulation

Spectrum management

As regards frequency harmonisation at European level, Germany implemented almost all relevant Commission decisions based on the radio spectrum decision by making changes to the national frequency usage plan. The implementation of Commission Decision

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[49] This year´s figures come from the digitisation report 2007 by the Commission on Digital Access (an institution formed by the Media Authorities of the Länder).

[50] See FN 6.

2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology (UWB) is under way.

In October 2007, BNetzA awarded a subsidiary of the incumbent fixed network operator the task of rolling out the network for mobile TV. According to a decision by the Media Authorities of the Federal States ("Bundesländer") in October 2007, the intention is to operate the pilot platform for mobile TV by a joint venture of three undertakings. The joint venture still has to provide the requisite agreements, in particular regarding content rights and the inclusion of public service broadcasters' programmes in an economically sound overall concept. The Commission would point out in this context that the imposition of must-carry obligations under Article 31 of the Universal Service Directive is limited to cases where a certain network is used by a significant number of end-users as their principal means of receiving radio and television broadcasts.

THE CONSUMER INTEREST

Tariff transparency

The consumer protection association regards the lack of transparency of tariffs as a problem, in particular with regard to mobile tariffs. At the same time, the association welcomes improvements on international roaming charges as introduced by the Roaming Regulation.

Universal Service

In Germany no undertaking is designated for the provision of universal service. As the market provides the service there appears to be no need for intervention by State authorities.

Number Portability

On 1 October 2007 there were almost 1.5 million ported mobile numbers, some 400 000 more than in the previous year. The average period for having the ported number operational was five working days, as in previous years. The major mobile operator charges recipient operators more than €21 for porting a number.

European emergency number 112

112 is fully operational in Germany. According to the German authorities and as confirmed by network operators, caller location information is available both for fixed and mobile calls. 112 has been in use in Germany for decades. German citizens were informed by the GSM network operators that 112 can be used in all EU countries. Before the holiday season telephone bills sometimes include a notice on emergency numbers in foreign countries.

Must-carry

Must-carry is regulated in all sixteen "Bundesländer", and in some of these all analogue channels are reserved for must-carry. It appears that in a few Bundesländer the stations that take part in terrestrial digital TV provision (DVB-T) receive in turn must-carry status for analogue provision via cable. Restrictions are regulated in laws and in cable allocation statutes of the Bundesländer. Some must-carry rules have been called into question by market players, and the Commission initiated an infringement proceeding against Germany in October 2006. In so doing, the Commission addressed the legislation of four Bundesländer, without prejudice to the legislation dealing with must-carry rules or the application of these rules in the remaining Federal States. The target grievance is the obligation to have 100% of all available cable channels reserved for stations identified by the Federal State. In summer 2007, the Administrative Court of Hanover put four questions to the European Court of Justice concerning the Lower Saxony must-carry regime (C-336-07), which is the one the Commission is now focusing on in the aforementioned infringement proceeding.

Data protection

Parliament adopted the law transposing the EU directive on data retention in autumn 2007. It took effect on 1 January 2008. Shortly after its entry into force, 30 000 interest groups and private persons reportedly filed complaints against the law with the Federal Constitutional Court.

ESTONIA

INTRODUCTION

The Estonian telecoms market belongs to a group of relatively developed EU markets. The country has relatively high Internet usage, e-government services and broadband penetration. There is increasing infrastructure competition in urban areas, via attractive bundles and growing IP-TV. Mobile penetration in the country is high. A number of market players offer GSM and third generation mobile services.

Following the completion and notification of all relevant market analyses, the regulator's attention has shifted towards supervision of the remedies imposed, which should, in turn, provide the market of electronic communication with sufficient incentives for further development. It remains to be seen whether infrastructure competition on legacy networks will develop, given a number of still unresolved issues in regulated wholesale markets.

REGULATORY ENVIRONMENT

Main regulatory developments

Taken as a whole, there were some positive changes in the regulatory environment in 2007. As reported in the 12th Report, Sideamet, the Estonian National Communication Board (ENCB) had been very slow in notifying its market analyses, which placed the authority behind all other European regulators in this respect and led the Commission to launch an infringement proceeding against Estonia. This situation continued in the first half of 2007, which compelled the Commission's services to further pursue the proceedings and refer Estonia to the Court of Justice. Soon after, ENCB streamlined its efforts, and was able to complete and notify all market analyses by the end of summer 2007. On this basis, the Commission was able to close this infringement proceeding. What remains to be seen is the effectiveness of the authority's measures, as the regulator will have to focus on supervising the implementation of remedies. This should in turn facilitate alternative operators to grow, in particular on legacy networks.

Market analysis completion allowed the Commission to close another pending proceeding, concerning incomplete reference unbundling offer (RUO) based on a transitional regime.

Organisation of the NRA

The responsibility for regulation of the Estonian markets of electronic communication is shared by five regulatory authorities, ENCB — the principal national regulatory authority (NRA), the Ministry of Economic Affairs and Communications, the National Competition Authority (NCA), the Consumer Protection Office (CPO) and the Data Protection Inspectorate (DPI). Cooperation between the various bodies, however, does not raise significant issues.

The main tasks of the ENCB include the creation of the necessary conditions for the development and promotion of public electronic communications networks and services, ensuring the protection of the interests of users of voice, data and video services by promoting free competition and quality of service, assigning rights of use of radio frequencies and numbering as well as exercising supervision in all sectors of its activity. In the broadcasting area, the NRA is represented in the Commission issuing content broadcasting licences, which advises the Minister of Culture on broadcasting licence issues. In addition to its overall objectives, ENCB has three key challenges for the year ahead: competition in local loop unbundling and provision of wholesale broadband services on the DSL market, reduction of interconnection prices on mobile and fixed markets and efficient management of limited resources, i.e. electronic radio frequencies and numbering.

Compared to 2006, ENCB managed to carry out its regulatory functions in a more efficient manner during 2007 despite limited resources. ENCB has one of the smallest operating budgets in the EU, entirely financed by the Government. The sanctioning powers of the NRA are regulated by administrative law, which sets the maximum penalty threshold at €3 000, which is considered quite low.

The NCA has, on the other hand, more powerful tools at its disposal. The current penalty threshold under the new penalty code for non-competitive behaviour is set at €30 000 (misdemeanour procedure), while it can reach €16 million in the case of repetitive breaches (criminal law). However, it has proven to be difficult for the NCA to demonstrate the abuse of competition under the umbrella of the criminal law. The CPO deals with all contractual issues between consumers and operators according to the consumer protection law. The DPI is responsible for dealing with data protection, including spam issues.

The important reorganisation of the regulatory authority started in 2007 and was due to be completed in January 2008. This includes splitting ENCB into two authorities, namely the Estonian Competition Authority (ECA) responsible for, among other issues, sector specific regulation, and the Estonian Technical Surveillance Authority (ETSA) responsible for spectrum, numbering and terminal issues.

Decision making

ENCB has completed its first round of market analysis. However, the NRA has, on several occasions, left it to the discretion of the SMP operators to further detail the remedies, such as cost-based pricing and selection of an appropriate cost-accounting model. This creates a lot of uncertainty for both the SMP and alternative operators which is not appropriate for long-term business strategies.

The fact that eight out of 18 markets have been found to be fully competitive sends a positive signal as far as general market competitiveness in telecoms is concerned. However, the remaining 10 markets will require close NRA supervision and preparedness for efficient intervention in order to prevent further market distortion.

Concerning general competition activities in 2007, the NCA reached a decision, following a complaint, in one case, in relation to the participation of the incumbent in public procurement calls for tenders. The authority found that the services provided had indeed been cheaper than those of the competition but found no cross-subsidisation and predatory pricing. In another case, which relates to the incumbent's discount retail packages, the NCA issued an order for the incumbent to stop providing the services. Furthermore, the NCA has launched an investigation concerning the non-SMP operator's increase of mobile termination charges for off-net calls of the market leader, which in turn translates into higher retail prices for subscribers calling onto the network of the non-SMP operator.

MARKET AND REGULATORY DEVELOPMENTS

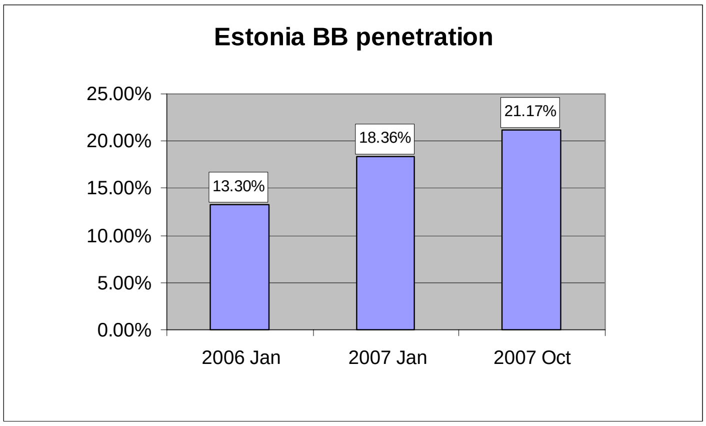
Revenues in the telecommunications sector in 2006 totalled €707 million. Fixed market revenues stood at €250 million, while the mobile market generated some €360.5 million. €77.1 million, in total, was invested in the Estonian electronic communications sector in 2006 according to the NRA: the fixed incumbent invested some €31.7 million, whereas alternative operators invested €11.3 million; this compares to €33.6 million invested by mobile operators.

The Estonian electronic communications market is characterised by a continuing decrease of fixed voice telephony, and a continuing increase of mobile telephony services and high bandwidth data communication. Consumers continue to benefit from an increasing number of bundled services, whereas retail prices remain at low levels. One fixed voice telephony service provider has joined forces with the largest Estonian mobile virtual network operator (MVNO) and the group of smaller Internet service providers (ISP). The new consolidated company intends to launch quadruple play services in the very near future.

Promoting competition has proven to be more difficult, given a number of unresolved issues in recently regulated wholesale markets. High termination rates in mobile telephony networks continue to be the most acute issue and have a direct impact on the development of retail service markets. The incumbent's prices for access to ducts continue to impede competitors' activities in the roll-out of fixed voice telephony and broadband infrastructure. The issue, which the NCA has been investigating since 2006, still remains unresolved.

Broadband

Market situation



Broadband penetration is one of the highest amongst Member States (21.2% in October 2007[51]) and has grown by 2.8 percentage points since January 2007. Despite the prevalence of the incumbent's DSL products, the competition is balanced mainly due to the presence of cable operators (23.2% market share), while some operators have also rolled out fibre to the home (FTTH), which has a 17% share amongst the broadband technologies, and local access networks (LAN). 7.5% of all broadband service end-users access the Internet via radio transmission networks, such as WLL and WiMAX. One alternative operator

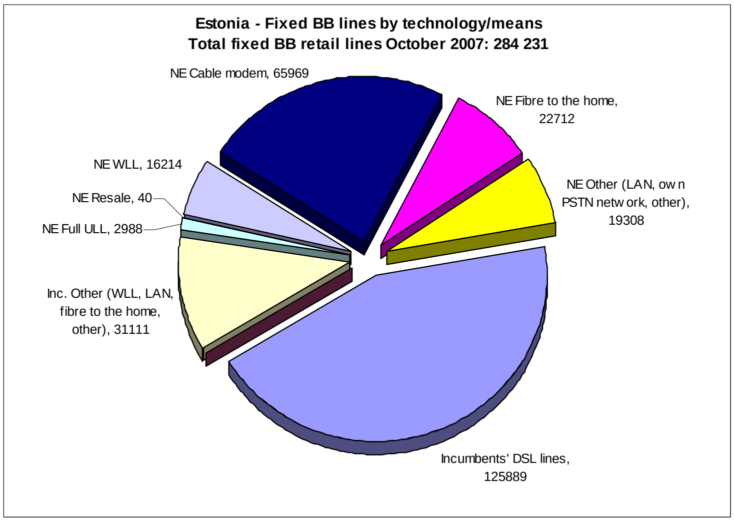
[51] Data for 31 December 2007 were not available.

already provides nation-wide coverage based on CDMA technology. The number of bundled products (triple play in particular) grows on average by 50-60% per year and there had been more than 40 000 DSL connections using triple play products at the time this Report was being drafted. The number of 3G modem users for internet is, despite an uptake of basic 3G services, still limited.

Cable, offering internet connectivity, has continued to exercise a large competitive pressure on broadband providers using DSL networks, however its roll-out remains generally limited to the most densely populated.

Similarly to the situation in 2006, only 2.3% of all connections are based on local loop unbundling (LLU) in the DSL segment. The number of broadband subscribers using the alternative PSTN network remains below 1%. The incumbent has maintained its market share on the DSL market compared to January 2007, whereas the incumbent's overall market share was reduced from 57.4% in January 2007 to 55.2% in October 2007.

The low uptake of LLU and bitstream products demonstrates that regulation of these two important markets may have arrived too late for many of the market players. Many alternative market players continue to invest in wireless and other alternative infrastructures. Nearly 60% of Estonia is covered by WiMAX technology broadband networks, primarily provided by a public transmission service provider.



Regulatory issues

The impact of the NRA's regulation and the effectiveness of imposed remedies remain to be seen during 2008.

Recent price regulation on the wholesale unbundled access market has contributed to a reduction in the incumbent's monthly rental fee for full LLU (€6.3, in cases where full spectrum is made available to competitors), compared to 2006 (€8.9). Similarly, the new price of the shared access monthly rental fee is €3.6, down from €4.7, whereas the monthly rental fee for the provision of voice using the lower bandwidth of full LLU is €5.1, down from €7.7 in 2006. Despite significant price decreases, there is little room for competition, given that the monthly PSTN rental fee stands at €5.3 without VAT.

The new reference unbundling offer (RUO) introduces deadlines to be respected by the SMP operator. These refer to technical verification of requests in relation to available capacities and to realisation of connections to the alternative operator. However, the customers of the incumbent, according to alternative operators, still seem to have preferential treatment and appear to have connections provided in shorter deadlines.

Furthermore, as a result of market regulation, alternative operators can now use their own splitters.

Following the regulation of the wholesale broadband access market and the imposition of an obligation on the SMP operator to provide access at IP, ATM and DSLAM levels, the bitstream product has finally become available to wholesale customers in Estonia.

Mobile markets

Market situation

The retail mobile market in Estonia keeps dynamically developing. Mobile penetration increased from 113% in 2006 to 131.5% in 2007. The volume of originated and terminated mobile minutes and the turnover from mobile retail services continued to grow in 2007.

Three mobile network operators (MNOs) offer services on the basis of their own GSM and UMTS networks in Estonia, whereas the fourth MNO (that recently merged with one alternative fixed telephony provider) does not yet commercially operate its own UMTS network, but offers its GSM services as a mobile virtual network operator (MVNO). Compared to 2006, the market share of the third largest MNO grew at the expense of market shares of the leading operator and the second largest operator. There are a number of service providers as well as enhanced service providers who provide services using MVNO's capacities, building on the regulator's efforts to reduce mobile termination fees. This is expanding virtual customer base and competition, the latter being reflected in constant retail price decreases. 3G services are available in the three largest Estonian cities. Mobile data and content services should have a beneficial impact in the medium term, as subscribers upgrade handsets to take advantage of the higher speeds on offer.

Regulatory issues

A recent court decision, which upheld the NRA's proposed symmetrical remedies, has finally reduced mobile termination rates (MTR) to the planned levels. After a year and several months of standstill, caused by an appeal launched by two smaller MNOs, which were granted legal protection, the proposed regulation will eventually reduce one of the highest MTR levels in the EU. Until September 2007, all three MNOs maintained termination charges, ranging from 16 euro cents to 17.6 euro cents that highly exceeded the glide path benchmarks set by the NRA (13.1 euro cents for 2006, 9.5 euro cents for 2007 and 6 euro cents for 2008).

Mobile operators have reported significant loss of interconnection revenue, as a number of market players terminated international traffic through GSM gateways. This unregulated, but growing, segment of communication may have important implications for the quality of mobile services as additional traffic overcharges the network capacities of the MNOs. The NRA has, so far, not taken any position with regard to this issue.

Roaming

All GSM operators appear to have implemented the requirements set in the Roaming Regulation at a satisfactory level. According to ENCB, in the second half of 2007 retail international roaming prices were generally falling to or below the Eurotariff levels.

Fixed markets

Market situation

As reported in the 12th Report, there is no significant infrastructure competition in the traditional fixed telephony market. There are a number of service providers that continue to rely on the capacities of the incumbent's infrastructure, such as switches, interconnection channels, signalling channels and trunk segments of leased lines. Competition remains largely service based (CS/CPS), with all but one alternative operator interconnecting on the national level only. The majority of business models offer little added value to consumers, and it seems quite unlikely that new, more infrastructure-based business models will emerge in the very near future, owing above all to years of weak regulation. Small alternative operators have therefore specialised in niche markets. Some have focused on provision of services to corporate clients operating large private networks, while others offer wholesale transit for international traffic, using highly controversial GSM gateways. Operators have started consolidating activities and IP telephony has started entering the market of cable operators.

CPS cannot be provided to 16% of the customer base, as no more than 84% of the incumbent's network is digitalised.

The largest alternative competitor on the fixed market has 10% of market share in voice telephony and uses a combination of CPS, full LLU (lower bandwidth) and own network elements. 14 market players provide national calls services (six using CS/CPS), with the average price for national calls below the EU average.

Regulatory issues

The obligations imposed on the SMP operator on the fixed wholesale call origination market include, amongst others, price control and access, including access to ducts. With growing competition in cable, alternative operators began to look into ways of gaining access to the cable platform, which remains lightly regulated.

Alternative operators currently charge termination rates which are on average from 2% to 50% higher than the incumbent's terminations rates. The outcome of the analysis on the fixed wholesale call termination market requires the incumbent to apply interconnection prices on the basis of historical costs. It further provides a sort of transitional forbearance, where 11 alternative operators will be allowed to terminate calls applying asymmetrical rates based on a price cap calculated on the EU weighted average, unless an even higher termination rate is substantiated by the underlying costs. The NRA has imposed no access obligation on alternative operators, despite comments from the Commission services. The main argument of ENCB is that the ECA provisions confer general obligations for operators to provide end-to-end connectivity, indirectly access. However, it is difficult to see how such a general obligation may address potential access problems, such as delaying tactics, as effectively as a specific access obligation imposed as a result of a market analysis.

On fixed retail access markets, ENCB obliged the incumbent to enable its customers to access the services of interconnected alternative providers of publicly available telephone services by means of CS/CPS on the basis of a cost-oriented price, whereas the costs of CS/CPS are covered by wholesale call interconnection rates that are cost-oriented. However, wholesale line rental (WLR), which would enable alternative operators to present a single bill for monthly rental and calls, has not been considered as a possible remedy by the NRA.

New regulation of wholesale broadband access markets, which provides for a possibility of voice provision, does not alleviate alternative operators' extreme difficulties in winning over new customers. A combination of high investment cost for the alternative operators, the price of PSTN monthly rental that is charged by the incumbent and the absence of one-off fees charged by the incumbent to retail customers for the existing copper pairs, continue to be the main dissuasion factors. According to an alternative operator, it would also take about two decades for the competitor to reach the break-even point in order to refund the investment in one-off fee charges only. Further to the incumbent's regularly low-priced PSTN retail tariffs, the incumbent continues with an aggressive pricing policy, where certain packages (on analogue exchanges) are sold for €3.1 with VAT, including numerous discounts for "calls to friends" and favourable "night rates".

Alternative operators also report that the incumbent uses dumping strategies when competing for bigger corporate and public clients. This consequently excludes smaller operators from competing for the business segment. The NCA, on a complaint of one alternative operator, confirmed that economies of scale existed but found no predatory pricing and hence dismissed the complaint of the plaintiff.

The NRA has decided not to regulate markets for publicly available national and international telephone services for non-residential users.

Broadcasting

Market situation

Terrestrial broadcasting is a transmission platform used by 52% of customers, cable by 39%, satellite by 4% and IPTV, which is a growing category, by 5% of Estonian households. There are three nation-wide television programmes in Estonia, one public and two private operators. A local television programme is also active in part of the country.

Estonian authorities, which plan the switch-off of analogue broadcasting for 2012, envisage a market for maximum 10 digitalised terrestrial (DTT) networks in Estonia, namely for the newly identified SMP transmission service provider (three networks) and the fixed telephony incumbent (one network), whereas the remaining six networks will be set up on the basis of public tender.

In December 2006, the Estonian broadcasting transmission company and Estonia's leading cable TV operator agreed on a joint venture, targeting households outside the reach of the cable network. In July 2007, the same broadcasting transmission company started pilot HD transmissions of Estonia's public broadcaster over its DTT network. The service was first offered to subscribers in Tallinn and is now expanding to other regions. The service utilises MPEG-4 compression and presently distributes 20 channels on two multiplexes covering over 80% of the population. The third multiplex, which was launched later, was expected to provide a total capacity for 30 free-to-air and pay TV channels and increasing coverage to 95% of the population.

Regulatory issues

In Estonia there are two wholesale broadcasting service providers active on the market. The current analogue public transmission provider appears to be active predominantly in the over-the-air signal transmission, whereas the fixed incumbent has a capacity to transmit signal between the transmitters via a dedicated leased line.

Horizontal regulation

Spectrum management

Estonia has implemented all Commission spectrum harmonisation decisions[52], with the exception of Decision 2007/344/EC on harmonised availability of information regarding spectrum use within the Community.

The NRA has granted rights of use on a 'first-come, first-served' basis in the 3.6-3.8 GHz frequency band to those operators which had not been granted rights in the 3.4-3.6 GHz frequency band. The rights to use frequencies for digital television transmission networks have so far been granted on the basis of spontaneous applications. However, as the frequency plan has been amended, new rights of use for broadcasting will be issued via public tender.

THE CONSUMER INTEREST

Tariff transparency

ENCB continues to run its web-based price comparison service, enabling consumers to calculate and choose the most suitable offer on the market from the tariffs of all operators.

Universal Service

Very few new fixed access lines have been granted to the consumers on the basis of the universal service (US) obligation during 2007, largely due to a high degree of fixed-to-

52 Commission Decisions concerning the 169 MHz, 5 GHz, 24GHz and 79 GHz frequency bands were implemented in 2006. In addition, five new Decisions were implemented in 2007: 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community; 2007/98/EC on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services; 2007/90/EC amending Decision 2005/513/EC on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs); 2006/804/EC on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF); and 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

mobile substitution. As the affordable price, which is set by the Minister of Economic Affairs and Communications on a recommendation from the NRA, is 1 EKK cent or 0.06 euro cents above the price of the calculated access provision cost of the designated US provider, there was no request for compensation of the financial burden sustained by the provision of this service during 2007.

There are no specific measures for disabled people nor have there been any low-income schemes introduced in Estonia. However, queries on needs of disabled people have been addressed to the relevant organisations, but no complaints or proposals were received.

Number Portability

An issue identified in the 12th Report concerning a dispute between the database manager and the NRA, where some 100 000 requests had not been processed for more than a year, has now been successfully resolved. Statistics reveal that the porting of numbers in Estonia has been rather successful in terms of numbers ported. Some 15 000 fixed telephone numbers and 39 577 mobile telephone numbers were ported in 2007 (October), in addition to 58 578 ported numbers in 2006 and 75 443 ported numbers in 2005. However, the record could be improved significantly, since it takes 30 days on average to port a fixed number, which is considered long. On the contrary, mobile number porting takes a maximum of five days.

Consumer complaints

In 2007, the great majority of activities related to issues regarding the billing of internet services, issues concerning phone sets and complaints regarding rights to withdraw from contracts for provision of TV services when contract conditions had been changed. Following the successful intervention of the CPO, all contracts can now be freely terminated without penalties.

European emergency number 112

There have been about 150 000 calls made to the 112 number each month. The authority responsible for handling 112 calls is the Emergency Response Centre. There are four regional Emergency Response Centres (PSAPs). The average response time for providing caller location information is between 15 and 30 seconds. PSAPs can handle all calls in Estonian and Russian. Currently, faxes are being used for people with hearing disabilities.
Citizens are informed about the availability and usage of 112 *via* notices in payphones and phone books. In addition, mass media campaigns, multilingual websites and educational programmes increase the visibility of 112 services.

Data protection

The Parliament has adopted the Act amending the Electronic Communications Act and Public Health Act required for integral transposition of data retention Directive 2006/24/EC, whereas the decision has been taken to require market players to store the data for a period of 12 months.

In the spring of 2007 Estonia was subject to an organised wave of cyber attacks on websites of the Government, banks, telecommunications companies and media outlets. These denial-of-service attacks lasted for nearly a month. To prevent further attacks, Estonia had to close off parts of its network to computer users outside the country, isolating itself from the rest of the internet.

IRELAND

INTRODUCTION

Competition became dynamic on the Irish broadband market in 2007, with widespread uptake of mobile and wireless broadband and attractive fixed broadband services, allowing Ireland to record the fourth highest growth in broadband penetration in the EU in the period January 2007-January 2008. In the meantime, fixed operators have started preparing for next generation networks.

2007 was a year of some significant reforms in Ireland, from enhanced enforcement powers for the national regulatory authority ComReg, through a changed appeals mechanism, to a framework for digital terrestrial TV. While several implementation issues identified in previous years in areas such as unbundling and number portability have now largely been resolved, early adoption of final remedies in the fixed interconnection markets and effective implementation of all the remedies will remain a priority.

REGULATORY ENVIRONMENT

Main regulatory developments

In 2007 several important changes to the Irish regulatory framework for electronic communications were introduced through legislation, notably enhancing ComReg's enforcement powers and abolishing the Appeals Panel. The local loop unbundling (LLU) development process has made substantial progress, opening new investment opportunities for alternative operators. At the same time new regulatory challenges have emerged, primarily concerning the incumbent's next generation network as well as the incumbent's initiative to separate its network infrastructure from its retail operations.

Organisation of the NRA

The Communications Regulation (Amendment) Act 2007, signed into law on 21 April 2007, has strengthened ComReg's enforcement powers in several ways. Firstly, as a result of the Act and secondary legislation, penalties for breaches of specific obligations have been increased, maximum fines now reaching €5 million or 10% of turnover, whichever is the greater. Secondly, the Competition Act 2002 has been amended to enable ComReg to investigate breaches of competition law in the electronic communications sector and to strengthen cooperation and coordination of activities between ComReg and the national competition authority. Thirdly, ComReg has been granted enhanced information-gathering powers, accompanied by enforcement provisions.

The first practical results of these legislative changes are already visible as ComReg is stepping up its enforcement efforts: a dedicated enforcement team has been created, and more own-initiative investigations have been started.

The new legislation also contains measures designed to increase the transparency of ComReg's activities, namely the obligation to publish in advance, before the end of each financial year, an annual action plan setting out ComReg's principal activities and associated budgeted expenditure.

By virtue of the European Communities (Electronic Communications Networks and Services) (Framework) (Amendment) Regulations 2007, adopted on 12 June 2007, the appeals mechanism centred around the Electronic Communications Appeals Panel has been replaced by the possibility of appeal to the High Court against a ComReg decision. It is expected that this will result in a more speedy appeals process.

Decision making

ComReg had analysed and notified all markets identified in the relevant Commission Recommendation in 2006. ComReg has however formally lost two appeals cases, and four appeals have been launched against its market analyses. It has therefore decided not to proceed to the adoption of the final measures for several markets, and to analyse them again on the basis of the most recent data and the improved market analysis procedures. This additional work in the framework of the first round of market analyses was finalised in 2007. Moreover, ComReg has started the second round of market analyses, in particular as regards the markets for wholesale leased lines, wholesale unbundled access and wholesale broadband access.

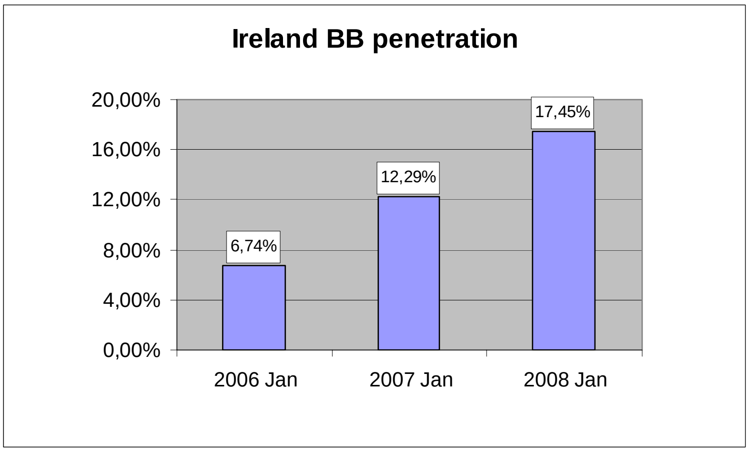
MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Irish telecommunications sector was €4.1 billion as of 31 December 2006.

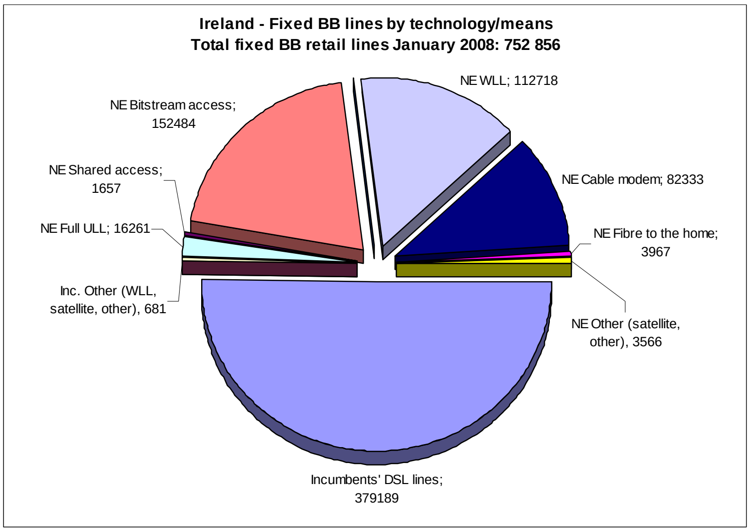
Discussions on the concept and configuration of the incumbent's next generation network (NGN) accelerated in 2007. The incumbent fixed network operator announced in January 2007 that its NGN would be built with VDSL2 technology and rolled out to street cabinets, affecting 37 exchanges in the Dublin area in the initial phase, to be completed by 2010. According to the incumbent, a combined copper/NGN network will remain in place for a considerable period of time, therefore minimising the impact at the wholesale level. In April 2007, a chief executive-led industry steering group was created with two working sub-groups dealing respectively with the core network and access issues. In July 2007, ComReg published a position statement analysing impacts of the NGN on existing wholesale products and identifying the broad lines of future NGN wholesale products. ComReg has also commissioned studies on NGN sub-loops and bitstream. While further progress on this regulatory process was expected in the short term, no strict deadline has been set. Alternative operators have however called for more transparency as regards the incumbent's overall NGN roll-out plan.

Broadband

Market situation



In January 2008, broadband penetration reached approximately 17.4% compared to around 12.3% in January 2007, while the EU-27 average was at 20%. Ireland recorded the fourth highest growth in terms of new broadband fixed lines per 100 population in the EU in the period January 2007-January 2008. Broadband services are provided through a number of competing infrastructures: wireless local loops expanded strongly, and mobile broadband took off in a significant manner. Nevertheless, digital subscriber lines (DSL) have remained the main technology with 73% of subscribers in January 2008. As of January 2008, 31% of all DSL subscriptions were supplied by alternative operators, a slight drop from 34% in January 2007, reportedly due to the withdrawal of an alternative operator from the consumer DSL market. Overall, the broadband market share of the fixed incumbent grew slightly in 2007 and was close to 50% in January 2008 (above the EU-27 average of 46.3%).



The Irish government has launched a national broadband scheme in order to extend broadband access to the remaining portion of the population, estimated at approximately 10%, that is not covered by the existing broadband infrastructure. Following the pre-qualification questionnaire in May 2007 (11 responses), four operators have been invited to submit proposals for the competitive dialogue procedure. The provider is expected to be selected in the second quarter of 2008. In Ireland the DSL coverage in terms of population in rural areas is 64% (compared to the DSL national coverage of 86%).[53]

[53] IDATE report (October 2007): Broadband coverage in Europe. The data used in the report refer to December 2006.

Regulatory issues (including market analyses and remedies)

A number of local loop unbundling (LLU) issues that, reportedly, used to result in significant user cut-off periods and hinder investments by alternative operators were finally resolved in September 2007. In particular, the incumbent implemented all requested migration paths to LLU from other wholesale products; provided a standard Service Level Agreement (SLA) which should meet industry requirements; concluded negotiations on and implemented an enhanced SLA and concluded negotiations on appropriate LLU backhaul.

Furthermore, ComReg performed a review of existing regulation concerning GLUMP, a product combining LLU (Local Loop Unbundling) and GNP (Geographic Number Portability), which had been launched in August 2006. As a result ComReg published in September 2007 two documents: Regulatory Guidance for Undertakings on the Provision of GLUMP, setting out provisions relevant to the wholesale interoperator relationship and other provisions relevant to the provision of retail services to all end-users, as well as an information notice "Output of the GLUMP Code of Practice review: Provisions not having a legal basis", encouraging best practices in managing customer migrations.

The monthly rental charge for both fully unbundled local loop and shared access increased slightly in both 2006 and 2007, and remained amongst the highest in the EU. In contrast, the connection fees were reduced slightly compared to 2006. The number of wholesale LLU lines fell from approximately 18 488 in January 2007 to approximately 16 261 in January 2008. The number of wholesale bitstream lines reached 152 487 (compared to 111 193 lines in January 2007).

Mobile markets

Market situation

The mobile penetration rate reached 117% in October 2007. The market shares by revenue of the four mobile operators were approximately 43%, 39%, 14% and 3% in June 2007, confirming the trend of gradually diminishing market shares of the two largest operators.

In March 2007, ComReg issued a 3G mobile licence to the fixed incumbent, increasing the number of Irish 3G operators to four. In 2007 the three established 3G operators saw a widespread uptake of their mobile broadband services. One operator is successfully testing mobile TV services based on the DVB-H standard. Spectrum in the 900 MHz region has been assigned to a potential 4G operator.

In 2007 the first mobile virtual network operator (MVNO) entered the Irish market. Market entry took place later than initially expected owing to technical number portability issues.

Regulatory issues (including market analyses and remedies)

As regards the mobile call termination market, all operators but one have been identified as having significant market power (SMP), as the SMP designation of that one operator was declared null and void by the Appeals Panel. ComReg has completed the re-analysis of the market in this respect. In August 2007, ComReg announced the undertakings by three mobile operators to voluntarily reduce their mobile termination rates over the next five years, which should result in an average blended rate of €0.08 by 1 January 2012 (compared to the average rate of €0.15 in October 2007, considerably above the EU-27 average). The fourth mobile operator has committed to reductions which are lower at the beginning of the five-year period but will accelerate towards the end of the period.

Roaming

All Irish mobile operators complied duly and on time with the new European Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community. In most cases prices have been set at the maximum level indicated by the Regulation.

Fixed

Market situation

The incumbent's market share (measured by retail revenues) in the fixed telephony market was slightly below 70% in 2007, several percentage points down on 2006. Approximately 22% of subscribers used an alternative provider for voice telephony services in July 2007 (down from 24% in 2006, reportedly due to the withdrawal from the market of an alternative operator). There were nine VoIP providers in Ireland in July 2007.

Regulatory issues (including market analyses and remedies)

ComReg has decided to withdraw market regulation in the retail calls markets, setting the deadline of 30 April 2008 for the implementation of this de-regulation decision in practice. In the retail access markets ComReg imposed as of 1 October 2007 a price cap on the incumbent, entailing a line rental price freeze until 30 September 2008 and a price cap based on the rate of inflation (consumer price index) thereafter.

Fixed termination rates had not been re-set for a long time under the 2002 regulatory framework in Ireland. However in December 2007 ComReg decided to impose cost-oriented prices (using the forward-looking long-run incremental costs — FL-LRIC model) on the fixed incumbent and glide paths towards an efficient rate on the alternative operators, conditional upon exceeding the market threshold of five per cent. The incumbent's fixed wholesale termination rates were close to the EU average in October 2007.

Broadcasting

Market situation

Approximately 30% of Irish TV viewers rely on analogue broadcasting, the remaining 70% being almost equally divided between the satellite and cable platforms. A Digital Terrestrial TV (DTTV) pilot project is ongoing in the Dublin area.

Regulatory issues

On 10 April 2007 the Irish DTTV plans were set out in the Broadcasting (Amendment) Act 2007: one national DTTV multiplex would be assigned by ComReg to the national public broadcaster RTE in order to transmit the four national public channels. Four national multiplexes would be assigned by ComReg to the Broadcasting Commission of Ireland (BCI), which would then issue licences (multiplex contracts) to content providers. One further multiplex is reserved for possible future public service broadcasting requirements. No specific analogue broadcasting switch-off date has been set. The Minister for Communications, Energy and Natural Resources will monitor the availability of DTTV services and the relevant end-user equipment and, depending on the results of such monitoring, will issue a policy direction to ComReg regarding the date or dates after which ComReg may no longer issue analogue broadcasting licences. In November 2007, ComReg published the DTTV multiplex licence conditions and have since issued a DTTV licence to RTE. Market players are urging the Irish government to announce its plans concerning the digital dividend.

Horizontal regulation

Spectrum management

On 11 October 2007 the National Table of Frequency Allocations for Ireland was updated to reflect the Commission's radio spectrum harmonisation decisions and revised to include a column specifically referring to the EU legislation. Procedural improvements have also been put in place in order to speed up the updating exercise in the future. The review of the Wireless Telegraphy Act will probably be finalised only after the review of the EU regulatory framework for electronic communications.

The test and trial licensing scheme, launched in 2006, has proved to be successful and has been used for mobile communications services on board aircraft, DTTV and mobile TV. As a result of the coordination between Ofcom (the UK national regulatory authority) and ComReg of their respective radio spectrum assignment procedures in the 1785-1805 MHz bands, relevant licences were issued on a technology-neutral basis to the same company in both Ireland and the United Kingdom (Northern Ireland). A public consultation on the future use (re-farming) of the GSM spectrum is planned for the first quarter of 2008. Following an unsuccessful initial auction in August 2006, a spectrum assignment procedure for the 26 GHz band is to be organised by ComReg in early 2008.

Rights of way and facility sharing

In response to the practice of some property developers of entering into exclusive contracts for the provision of electronic communications services to future residents of their sites and the fact that such property developers effectively fell outside ComReg's jurisdiction, the Communications Regulation (Amendment) Act 2007 has enabled ComReg to ensure compliance with physical infrastructure sharing conditions imposed on infrastructure providers such as property developers.

THE CONSUMER INTEREST

Tariff transparency

The Communications Regulation (Amendment) Act 2007 has provided for sanctions for overcharging for a service or product supplied by an operator or service provider to an end-user. The investigation of this type of offence may involve an audit by ComReg of the undertaking's billing system. Market players have claimed that these provisions are unjustified and disproportionate. Moreover, ComReg was considering improvements in billing formats used by operators. The ComReg's tariff comparison website was extended to mobile broadband in 2007.

Universal service

In 2006 the fixed incumbent had made a formal request to ComReg for compensation of the net costs involved in meeting universal service obligations. On 2 July 2007 ComReg decided that the relevant period for assessing the incumbent's request for funding would be the financial period commencing from 1 April 2006, thus rejecting the incumbent's request for funding to be backdated to 1999. ComReg also called on the incumbent to submit a full justification for its request within one month of the publication of relevant audited separated accounts. Any subsequent request for funding should be submitted on an annual basis.

Based on the development of quarterly statistics on universal service performance by the incumbent, on 1 August 2007 ComReg issued a public consultation on proposals to set binding universal service performance targets for the incumbent. In particular, ComReg has proposed specific performance targets for first-time connection to the public telephone network (e.g. 80% of all requests to be met within two weeks), the level of network fault occurrence (e.g. 12.5 faults per 100 lines (3.125 faults per quarter) to be met by the end of 2009) and repair times (e.g. 95% of fault repairs to be completed within four calendar days).

The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) (Amendment) Regulations 2007 have provided that ComReg may specify additional quality of service standards in order to assess the performance of undertakings in providing services to disabled end-users.

In October 2007, ComReg and the National Disability Authority (NDA) launched a consumer guide entitled "Phones and Broadband — a guide for people with disabilities and older people". The purpose of the guide is to give straightforward, accessible and useful information on the services available for people with disabilities and older people. It includes information on Textphone, a service that converts voice messages into text, and SMS to Speech, which allows people to listen to text messages. This is the first concrete result of work by the Forum on Services for People with Disabilities, which was established by ComReg in September 2006.

Number portability

On the basis of a public consultation concerning number portability in the fixed and mobile sectors launched in April 2007 and subsequent analysis, on 30 November 2007

ComReg issued a specification on wholesale number portability. According to this specification, charges must be cost-oriented and limited to the incremental (i.e. short-term volume-dependent) administrative cost to the donor operator of per-line enabling/transaction costs, based on a fully efficient number porting process; no direct charges may be applied to subscribers for number portability. One of the concerns so far has been the wholesale mobile number portability charge of €20 per port (one of the highest in the EU) disproportionately affecting new entrants, which by definition have a smaller customer base.

The entry into the market of the first MVNO has also exposed another aspect of the existing mobile number portability mechanism. While the technical sophistication of the mechanism has meant almost instantaneous and automated number portability from a consumer perspective, new market entry involves agreements and technical testing between mobile operators which can take several months.

Approximately 991 000 mobile numbers had been ported by June 2007, compared to 690 000 numbers 12 months earlier. Approximately 70 000 fixed numbers were ported in 2007.

Consumer complaints and out-of-court dispute resolution

Representatives of consumer interests have indicated that consumers could be better informed about the operators' consumer charters and the applicable dispute settlement procedures.

European emergency number 112

The Communications Regulation (Amendment) Act 2007 has provided a legal basis for the Ministry to launch a tender for the provision of an emergency call answering service. The Act also addresses the price per call that the provider of the service may charge for handling emergency calls and empowers ComReg to review this price. The public consultation on the 112 tender documents closed on 7 December 2007. In parallel the Ministry was working with mobile operators on technical specifications for the automatic "push" provision of 112 caller location information. Most market players were concerned about the financial burden that would result from this system.

Must-carry

The must carry obligations apply to cable and MMDS (Multipoint Microwave Distribution System) operators, but not to satellite operators. Four national public channels are included, plus one commercial channel depending on the platform. Approximately three community channels licensed by BCI are included too.

Data protection

At the time of writing this report the Data Retention Directive (2006/24/EC) was not transposed into Irish law. Ireland has challenged the legal basis of the Directive before the European Court of Justice.

GREECE

INTRODUCTION

Throughout 2007, new trends have been observed on the Greek electronic communications market. Broadband penetration has increased significantly. This sudden increase has, however, caught the market unprepared, leading to a huge rise in users' complaints to EETT. Convergence has brought some consolidation to the market in the form of fixed-mobile alliances and the first fixed-mobile converged products.

The Greek telecommunications law has been applied at a rapid pace with the completion of the analysis of all markets and the application of remedies and in some cases sanctions. Secondary legislation in the form of Ministerial Decisions is still pending, whereas EETT has completed all the requisite secondary legislation. Two long-standing problems persist regarding the procedures for granting rights of way and inadequacies in the existing appeal system.

REGULATORY ENVIRONMENT

Main regulatory developments

The Greek Law on Electronic Communications and Other Provisions 3431/2006, in force since February 2006, has been applied at a rapid pace, bringing considerable legal certainty and giving the Greek national regulatory authority, the Hellenic Telecommunications & Post Commission (EETT), the powers to carry out its duties in the interest of market competitiveness.

The Greek authorities notified in July 2007 the new bill entitled "Concentration and Licensing of Media Enterprises and Other Provisions", completing primary transposition of the regulatory framework.

The adoption of all secondary legislation in the form of NRA decisions or regulations as specified by Greek law was completed. In contrast, the adoption of the majority of secondary legislation for which the Ministry of Transport and Communications is responsible is still pending. While the Greek telecommunications law provides for the adoption of 69 acts under the responsibility of the Ministry of Transport and Communications (or in collaboration with other competent ministries), only 23 acts had been adopted at the time of drafting of this report, thus leaving a considerable legal gap in the enforcement of the law.

The analysis of all relevant markets was recently completed with the notification of the last pending broadcasting transmission services market in September 2007. Responsibility for analysing the broadcasting transmission services market was finally assigned to EETT under the new Greek law on the concentration and licensing of media enterprises adopted in July 2007.

The reporting year has seen an improvement regarding the immediate availability of approved cost-oriented tariffs for regulated wholesale and retail services. The introduction of cost-oriented prices in past years was delayed mainly because of the late submission of data by the incumbent. This resulted in EETT setting temporary tariffs until cost-orientation was approved. Once prices were approved, alternative operators were asked to modify their payments retroactively for the relevant year. However, in early 2007, the audit of the regulated prices for the years 2006 and 2007 was completed, making 2007 the first year that the market had cost-oriented prices in the middle of the relevant year. Although alternative operators expressed satisfaction with this development, they noted that there was no real wholesale-retail cost accounting separation in the incumbent's accounts.

Following a new legislative measure submitted by the government to the Greek Parliament in December 2007, private investors seeking to obtain more than 20% of the incumbent's shares will need prior government approval. The Commission departments concerned have contacted the Greek authorities on this issue.

Organisation of the NRA

EETT employs 165 people (as at the end of 2007) out of the 220 it is entitled to under Greek law. Often, EETT forms 'task force' groups of permanent and expert staff which are assigned specific responsibilities as per EETT's priorities. For example, a task force was created to deal with issues such as local loop collocation, with the issuing of the Reference Unbundling Offer or with the drafting of proposals on the rights of way submitted to the Ministry. These task forces have enhanced the dialogue with all operators.

In general, EETT has been successful in carrying out its tasks of implementing the new national telecommunications law and issuing the secondary legislation. In particular, EETT has successfully managed to complete the analysis of all relevant markets and to promote broadband services throughout Greece (through initiatives such as "broadband week", information campaigns and a dedicated website).

The Greek NRA has been particularly active in addressing consumer complaints which, this year, have been considerable, as the rapid take-up of broadband services offered by the operators found the supply side of the market unable to fully satisfy the demand for these services. As a result, consumers were losing confidence in the operators and the quality of services offered. EETT responded quickly to consumer complaints, launching hearings and imposing fines on operators.

EETT has commissioned a strategic study on the regulatory strategy for the Greek electronic communications industry for the next five years. At the time of writing, the results of the study were under evaluation.

Decision-making

The majority of EETT's decisions related to the specification and implementation of the imposed remedies. These are the Reference Interconnection Offer RIO (June 2007), the Reference Broadband Offer RBO (June 2007) and the Reference Unbundling Offer RUO (April 2007), which were all approved with modifications. Moreover, the adoption of the retail-minus methodology has been approved in the wholesale broadband market. The pending decisions regarding imposed remedies, such as the approval of the Reference Offers in respect of the incumbent's leased lines and the Wholesale Line Rental, were expected to be taken by the end of 2007.

Despite some improvement, concerns have been expressed about the continued inefficiency of the Greek judicial appeals system. The Greek telecommunications law makes provision for appeals either to the Administrative Court of Second Instance or to the highest administrative court, the Council of State. It seems that the Administrative Court has taken some decisions relatively rapidly. Yet, in some cases, operators do not adhere to obligations imposed on them due to the long delays in reaching appeal decisions.

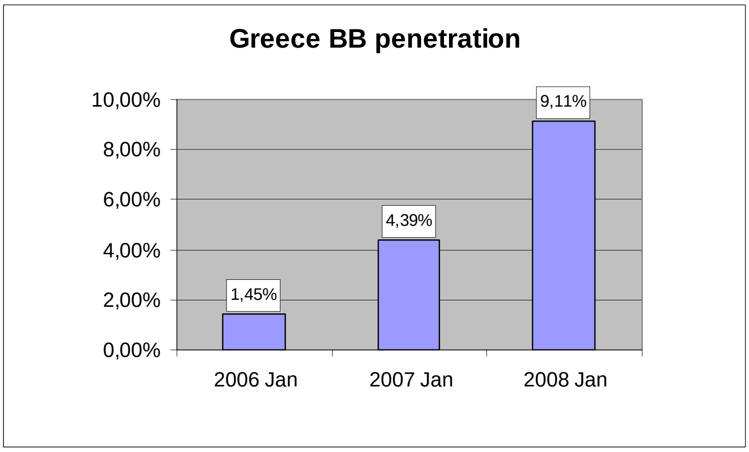
Some alternative operators have noted that a significant number of appeals remain unresolved because the substance of the appeal is found to go beyond the competence of the Administrative Court and the Council of State procedures have proved to be extremely long.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Greek telecommunications sector in 2006 was €8.32 billion. Revenues on the fixed market amounted to €3.79 billion and to €4.53 billion on the mobile market. Investments in the telecommunications sector totalled €0.804 billion, of which €0.225 billion were made by the incumbent in the fixed telephony network, €0.102 billion by alternative operators and €0.47 billion by mobile operators.

Broadband market

Market situation



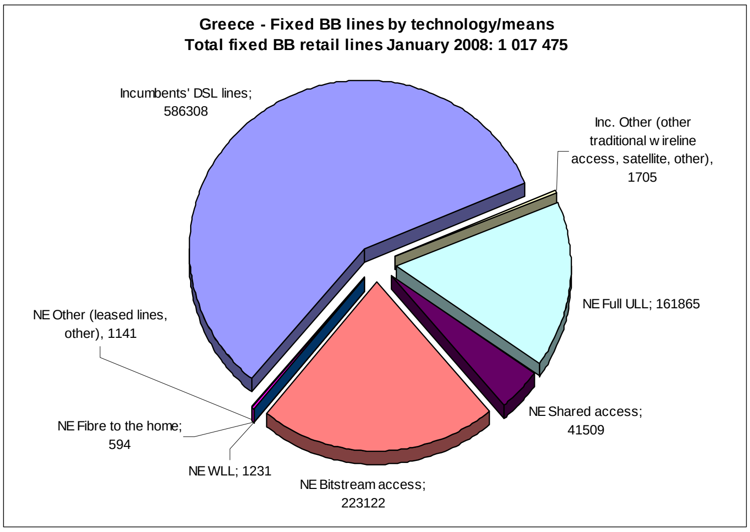
In 2007 there was significant growth in broadband penetration, which reached 9.11%, partly as a result of effective regulation.

The total number of broadband lines increased from 369 653 in October 2006 to 1 017 475 in January 2008. Nevertheless, Greece is still below the EU average penetration rate, which is 20.0%.

The incumbent's market share of retail broadband connections in January 2008 was 57.8% compared to 63.1% a year earlier.

Market participants have either invested in local loop unbundling (LLU) or increased their DSL lines in the market via bitstream access. A significant increase is observed in the uptake of local loop lines, which soared from 12 176 lines in January 2007 to 232 582 lines in January 2008. In the same period, new entrants' DSL lines by means of shared access have more than quintupled, rising from 7 328 lines to 41 509 lines. High uptake of bitstream access lines has also been recorded, increasing from 158 415 lines to 223 122 lines.

LLU accounts for 16% of broadband lines (compared to 4% in December 2006) and is currently growing by approximately 10 000 lines per week but EETT is expecting an even greater growth rate. A significant contributor to this growth is the availability of new physical collocation facilities. The number of the incumbent's sites increased from 30 (October 2006) to 97 (September 2007). Furthermore, the number of local exchanges with distance collocation reached 114. According to EETT, the target was to reach 150 local exchanges with physical collocation by the end of 2007.



In an attempt to promote broadband and alternative infrastructures, the Greek NRA held a public auction for WiMAX at the beginning of 2007. The winner has the rights of use for a period of ten years and can develop a network of Fixed Wireless Access of at least 384/128 Kbps speed to final users. The undertaking is required to provide electronic communication services to at least 20% of the population in seven geographical areas of Greece and within four years from licensing.

To stimulate the delivery of next-generation broadband services, EETT is currently investigating the options available for the installation of optical networks as close as possible to the customers' premises.

DSL coverage in rural areas is 10% and the gap with respect to the national coverage is 18%.[54]

Regulatory issues (including market analysis and remedies)

Some alternative operators commented that EETT's regulatory measures in the wholesale broadband access market were discouraging the option of bitstream access in order to encourage local loop unbundling. They considered broader use of bitstream – especially in rural areas where there are no alternative networks – as necessary.

The approval, with modifications, and the adoption of the new Reference Unbundling Offer (RUO) in April 2007 and the Reference Broadband Offer (RBO) in May 2007 marked two long-awaited regulatory developments in the broadband market. The incumbent's Reference Offers for wholesale terminating segments and trunk segments of leased lines were also concluded. EETT was working on their approval when this report was being drafted.

[54] Source: IDATE, October 2007, Broadband coverage in Europe. Figures as of 31 December 2006.

In August 2007, EETT approved the Discounted Cash Flow (DCF) model as the basis for calculating the retail-minus factor and establishing retail-minus wholesale broadband access tariffs. The decision set the minimum margin for ADSL access at 20.58% between retail and wholesale rates. The retail-minus methodology has already been used in the 2007 cost audit of the incumbent.

Following a significant number of complaints filed by Greek consumers against Greek telecommunications operators regarding LLU and other relevant matters (5 100 in the first quarter of 2007 only, compared to 5 500 in the whole of 2006), EETT conducted hearings and imposed fines (for breach of electronic communication or competition law) on the incumbent and performed on-site inspections at the incumbent's sites concerning physical and distant collocation and relevant facilities. As a result, the incumbent was fined, under competition law, for abusing its position in the broadband market as it was found to have adopted a "margin squeeze" practice. The incumbent expressed its intention to appeal against this decision.

Mobile markets

Market situation

The Greek mobile market continues to maintain its high growth rates, with mobile operators reacting to competition by way of synergies with fixed operators and introducing bundled offers (fixed and mobile telephony and internet) in an effort to gain market share. As a result of a recent merger, there are currently three mobile operators on the Greek market with market shares of 38.11%, 34.88% and 27.01% respectively.

The number of subscribers reached 11 814 529 in October 2007. Mobile penetration continued to rise, from 100% in October 2006 to 105.76% in October 2007.

Regulatory issues (including market analysis and remedies)

All mobile operators have 3G licences and are expanding their services using HSDPA. However, the problem of obtaining authorisations to install base stations and antennae for 2G or 3G persists, mainly because of the lack of secondary legislation.

In addition, all mobile operators were unhappy about an adjustment in the calculation of a special levy in November 2006 on post-paid mobile subscriptions but not on fixed communications. The levy, which is imposed on top of the 19% VAT, is directly proportional to the monthly bill. Operators also complained about a tax relief provision for companies which includes 100% of fixed telephony and only 50% of mobile telephony expenses.

Roaming

All mobile operators were quick to react to the Roaming Regulation 717/2007/EC by lowering their roaming charges to the maximum level indicated by the Regulation before 30 August 2007. However, they all expressed concerns about the possibility of extending the Regulation to SMS and data services.

Fixed markets

Market situation

The national fixed calls market is dominated by the incumbent, which maintains a high market share of 75.13% (on the basis of retail revenues) in national fixed calls and 69.08% for calls to mobile networks. International calls amount to a 71.46% market share. There is a slight decrease compared to last year's data.

The fixed market was consolidated through mergers in 2006/07 amongst fixed-line and wireless operators as well as acquisitions of virtual telephony and broadband operators by alternative operators, possibly leading to their fixed-line presence.

There were 25 alternative operators offering public voice telephony services through direct access, 11 of them through fully unbundled access to the local loop and 14 through own local access infrastructure.

Interconnection charges for call termination on the incumbent's fixed network decreased in the year prior to October 2007 for both single and double transit, from €0.86 to €0.80 and from €1.10 to €1.009 respectively.

Regulatory issues (including market analysis and remedies)

Though found to have significant market power in all fixed markets, the incumbent felt that it was being excessively regulated even in the retail markets. It considered that excessive regulation was acting as a disincentive to investment in own infrastructure by alternative operators.

Alternative fixed operators were concerned that mobile operators were entering the fixed market, offering converged services using fixed geographic numbers. They noted that this could raise questions of efficient spectrum management, consumer transparency and market definition. According to EETT, it is too early to know whether and to what extent converged fixed-mobile services would change the mobile market.

The incumbent's interconnection tariffs seem at last to have been submitted promptly. The alternative operators were, however, concerned about the fact that there were fluctuations in the leased lines every year, which created instability on the market and called into question the cost accounting methodology used.

Broadcasting

Market situation

In the Greek retail market for television and radio broadcasting, end-users predominantly rely on analogue terrestrial transmission (88% of all connections and a coverage of 98%) and satellite (10% of all connections) to receive television and radio services. Ten television programmes (nine free-to-air and one pay-tv programme) – all with nation-wide coverage – are offered via analogue terrestrial transmission. Alternative transmission platforms have less than 2% end-user penetration and are in the early stages of development. No commercial cable television networks exist in Greece.

Regulatory situation

The lack of transposition of regulatory competence for the market for broadcasting transmission services has been resolved by a law on audiovisual media, which has assigned this competence to EETT. This market analysis, notifying effective competition, was subsequently accepted by the Commission.

Horizontal regulation

Spectrum management

Adopted in March 2006, the National Frequency Range Allocation plan incorporates the majority of the Commission's harmonisation decisions on frequency bands and frequency usage. According to the Greek authorities, decisions issued after the adoption of the Greek national frequency plan will be incorporated into any future amendment of the national frequency plan.

Following the adoption of the National Frequency Range Allocation plan, EETT proceeded with the publication of a number of regulations regarding the use and allocation of rights of use of radio frequencies, licences for the construction of antennas on land, and transfer of rights of use of radio frequencies.

Rights of way and facility sharing

The lack of secondary legislation on rights of way renders any infrastructure network development particularly difficult and ultimately jeopardises infrastructure-based competition. Pending the adoption of this secondary legislation, authorisations to install base stations or antennae for 2G or 3G are not being granted.

When this report was being drafted, a proposal for a Common Ministerial Decision concerning the procedures for the allocation of rights of way, and a draft NRA Regulation on tariffs for the allocation of rights of way, were being prepared. The Commission services are looking into this matter.

Authorisations

In addressing the growth of VoIP services, EETT amended the regulation for General Authorisations adopted in June 2006, incorporating provision of VoIP services and/or voice services through the internet, provision of internet access services and protection of consumers.

Network roll-out

Some alternative operators proceeded with their investment plans to expand their networks based mainly on local loop while other operators invested in their own network. The year has been characterised by the introduction of bundled products, such as ADSL+2 packages with internet speeds up to 20Mbps, wireless access to the internet and converged fixed-mobile products. One alternative fixed provider expanded its own fibre-optic network to offer new-generation services combining telephony, fast internet, and TV. Mobile operators were expanding their 3G services (using HSDPA) despite the persistent problems with base stations and antennae.

There has also been consolidation in the market with operators joining forces to face increased competition. An internet provider bought a fixed alternative operator and then signed a collaboration agreement with the second mobile operator in the Greek market introducing the first bundled products. A foreign telecommunications investor bought out the third mobile operator who in turn owns the fourth mobile operator, and also bought one of the main alternative fixed operators.

Some operators expressed criticism of the fact that new gas networks had been rolled out quickly under favourable regulatory conditions and an opportunity was lost to coordinate this with the roll-out of alternative fibre networks in the telecoms sector. Complaints were also raised concerning the bilateral agreement between one alternative operator and the Public Power Corporation which gave the former exclusive access to the fibre network of the latter.

With regard to the roll-out of the funded project for Broadband Access Development in Under-served Territories, which is aimed at co-financing broadband investment for local access across Greece, some operators expressed serious concerns about the obstacles they had to face in obtaining rights of way from authorities and the refusal of the incumbent to provide access to its locations for the setting-up of microwave access points.

THE CONSUMER INTEREST

Universal Service

EETT's proposals on the definition of universal service, the selection procedure in respect of the universal service provider, the cost calculation and the funding of universal service have been adopted as Common Ministerial Decisions by the Ministry of Transport and Communications. A draft proposal on the quality of universal service was under public consultation at the time of writing.

Directory service and directory enquiry services

Following a decision adopted by EETT, the problem with the conditions of access to the general subscriber database held by the incumbent was resolved with the per hit access price being set at 7.61 cents, down from 17 cents. This is a positive development, which should enhance competition in this segment of the market.

European emergency number 112

The infringement case against Greece, launched in 2005 on the grounds of non-availability of caller location information, was closed in October 2007. Caller location information is now available from both fixed and mobile networks in Greece.

Number portability

There has been a strong increase in ported numbers for both fixed and mobile numbers. In October 2007 the number of fixed ported numbers (including non-geographical numbers) amounted to 227 850, compared to 60 948 a year earlier. Mobile ported numbers increased from 141 154 to 428 599 in the same period, representing growth of around 303%.

Data protection

The Ministry of Transport and Communications, together with the Ministry of Justice, has submitted for public consultation a draft law aimed at strengthening privacy protection and public security in mobile communications, which requires that mobile operators ensure encryption of voice signals in every form of transmission media which is used to carry voice traffic. This proposal has raised concerns among the mobile operators as to its potential high costs and its technical feasibility.

SPAIN

INTRODUCTION

The consolidation trend, on the one hand, and the entry into the market of the first mobile virtual network operators (MVNOs), on the other, have resulted in the presence of several integrated operators in the Spanish electronic communications market. There is a greater level of infrastructure competition, with alternative operators notably investing in cable and local loop unbundling (LLU), while mobile operators are gradually upgrading their networks to provide high-speed data services. Spanish consumers are benefiting from falling prices and from increased choice in terms of bundled offers and intensive number portability.

The national regulatory authority, the Telecommunications Market Commission (CMT), has focused on implementing the regulatory obligations, though some regulatory measures have not yet been implemented (e.g. the IP bitstream offer). Additional important remedies were imposed in 2007 (e.g. wholesale line rental). The overall financial burden and the difficulties encountered with the roll-out of networks are still considered by operators to be critical barriers to investment.

REGULATORY ENVIRONMENT

Main regulatory developments

The CMT completed the market review process at the end of 2006, and has been a pioneer in a number of regulatory approaches, such as access obligations for mobile origination, Ethernet interfaces for leased lines or cost-oriented access for wholesale broadcasting transmission services. However, despite the innovative changes to some regulatory measures, their impact on the market has been delayed as some obligations have not yet been implemented (IP bitstream offer or price obligations for wholesale broadcasting transmission services) or have just recently been implemented (leased lines reference offer including Ethernet interfaces, known as ORLA) in practice. On the other hand, where the regulator provided continuity of existing regulation (wholesale fixed markets) or mandated some kind of "light" regulation (MVNOs), remedies have been effectively implemented.

Following the initial market review, in the course of 2007 the CMT notified the obligation to provide wholesale line rental (WLR) as an additional remedy for the call origination market; it also notified further details on the methodology for analysing incumbent's retail offers to prevent anticompetitive practices, such as margin squeeze or abusive bundling, and to ensure replicability (retail telephony markets and wholesale broadband market). In addition, the regulator set mobile termination rates (MTRs) for the fourth mobile network operator (MNO), as well as for a "full" MVNO, as defined by the regulator.

In June 2007, the Commission launched an infringement proceeding for incorrect transposition and implementation of parts of the Universal Service Directive.

Organisation of the NRA

The division of regulatory functions between different national regulatory authorities (NRAs) persists, even though the main responsibilities are divided between two of them: the CMT and the Secretariat of State for Telecommunications and Information Society (SETSI), which is concurrently responsible for telecommunications policy within the Ministry of Industry, Tourism and Commerce. As mentioned in previous reports, the CMT appealed two Regulations to the Supreme Court, concerning numbering, for which a preliminary ruling was requested (C-82/07), and audiovisual competences, which is still pending.

Over the last year, the CMT provided assistance on several subjects to the national competition authority (NCA), which has been recently reorganised, and both authorities are currently negotiating a cooperation agreement.

Decision-making

Following the completion of the initial market review required by the EU framework, the CMT has been working over the reporting period on the effective implementation of the obligations imposed on operators with significant market power (SMP). In certain cases, the national two-year deadline for the review of the markets is approaching, whilst the imposed remedies have not yet been implemented. The CMT will soon need to start reviewing the competition situation in a second round of market analyses.

In general, the national consultations by the CMT have been welcomed by interested parties. However, as in previous years, the sector would like to see more transparency on price obligations, while respecting confidentiality. For instance, the benchmarking methodology used for determining the fourth MNO’s termination rates was declared confidential. During the consultation period prior to its final adoption, the decision on universal service net costs was available for consultation only at the CMT’s premises and no extension of the deadline for comments was granted.

The CMT has continued monitoring regulated markets and disputes. Following one of those investigations, the CMT imposed penalties on the incumbent for not fulfilling its obligation in relation to the management system for LLU requests in May 2007 and for not delivering various LLU elements to alternative operators in July and December 2007. Alternative operators request more own-initiative investigations by the regulator to check on the fulfilment of obligations, especially in the field of unbundling obligations.

In May 2007, the CMT launched a national public consultation on several aspects related to Next Generation Access Network (NGaN) deployment, and it expects to announce its regulatory position shortly. The contributions of consulted undertakings showed that 12 operators, including cable operators, are in favour of some kind of functional separation of the incumbent operator. Alternative operators have raised concern that the consultation was a theoretical exercise without any detailed evaluation of the incumbent’s deployment plans. Telefónica is running a pilot VDSL2 and optical fibre test accessible to the CMT and to alternative operators, and it announced a significant investment in fibre networks subject to favourable regulatory treatment. Meanwhile, the CMT is analysing the regulatory approach to the upgrade to VDSL2 services. Moreover, the regulator plans to study the migration from current platforms to IP core networks.

So far the CMT has always defined national markets and imposed the same remedies throughout Spain, but it seems to be considering the introduction of a different approach.

MARKET AND REGULATORY DEVELOPMENTS

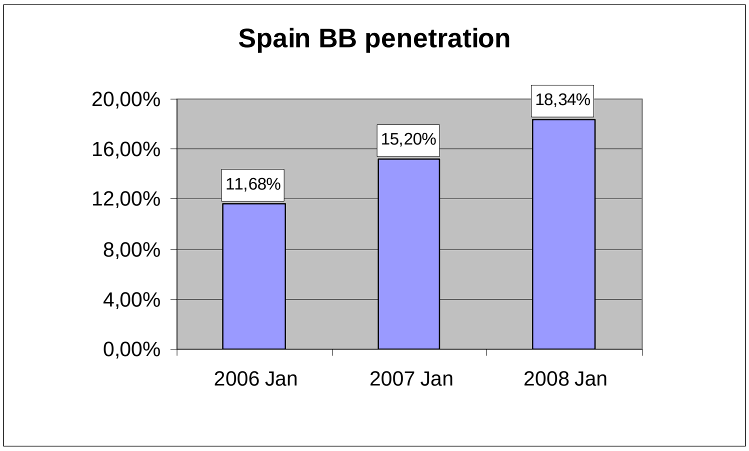
The growth of retail revenue from the electronic communications sector in Spain amounted to 5.8%, 5 points less than the previous year but still higher than the EU average[55]; whilst wholesale revenue decreased due to the shift to unbundling and to further consolidation in the sector. Investment totalled €5.7 billion in 2006, which is an increase of 3.1% over the previous year and exceeds the 2002 investment level. Although the incumbent's group is the largest single investor in the Spanish electronic communications market, alternative operators invested 60.7% of the overall figure for investment, the majority of which was driven by the mobile and cable operators.

The consolidation trend and the signature of the first MVNO agreements have resulted in the presence of several integrated operators. On the one hand, two MNOs acquired undertakings which were present in the fixed and broadband market. On the other, several cable operators launched mobile services following the imposition of access obligations. Operators still complained about the excessive overall financial burden imposed on the sector, which seems to be higher than for other sectors. This situation might be intensified with the activation of the universal service financing mechanism.

In Spain the trend towards bundled services has particularly intensified: by the end of 2006 one third of residential customers using fixed networks had subscribed to bundled offers and more than one fifth subscribed to the most frequently purchased service package, which is a double-play offer of fixed telephony and Internet access. Moreover, the content offers are assuming growing importance for both cable and DSL operators, with half of the cable customers subscribed to triple-play offers.

Broadband

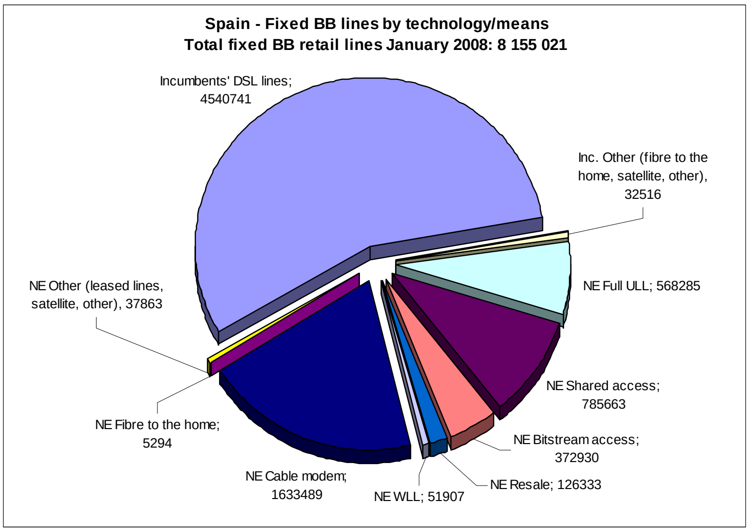
Market situation



The number of broadband lines continued to grow during the last year, though at a slower pace than the EU average: broadband penetration increased from 15.20% in January 2007 to 18.34% in January 2008, but it is still below the EU average (20.04%). Spain, via financed programmes, has sought to extend broadband coverage to rural and isolated areas, which should reach 96% of the population by the end of 2007, although generally at lower speeds than in urban areas. A recent study on broadband availability showed that the digital divide in terms of DSL coverage between the national average

55 CMT's Annual Report 2006.

and rural areas in Spain is only 4 percentage points (90% and 86% of population respectively) while significantly higher in terms of national and rural cable coverage (48% and 11% of population respectively)[56]. A significant trend is that 87.2% of broadband residential customers subscribed to broadband services as part of a bundled offer[57].



Almost four out of five broadband lines are DSL, which constitutes the main technology, followed by cable. Alternative DSL operators hold 22.7% of the retail broadband market and cable operators 20.0% as of January 2008, although the incumbent is adding the majority of new broadband subscriptions. In fact, since mid-2005 the incumbent has gained market share in terms of lines. The upward trend in the number of unbundled lines seems to continue (1.35 million in January 2008, compared to 939 000 lines in January 2007), and this represents around 8.6% of the incumbent's activated lines. Since 2006, LLU is the preferred option for alternative DSL operators (16.6% of overall retail broadband lines) whilst the number of indirect access and resale lines continues to fall.

Regulatory issues

In June 2006, the CMT imposed an obligation on the incumbent to provide ATM and IP bitstream access and changed the cost model from retail minus to cost orientation. In December 2006, the regulator took an interim measure, which entailed significant reductions of the bitstream charges based on cost accounting data. However, more than one and a half years after the analysis of the wholesale broadband access market by the CMT, the incumbent's reference offer (known as OIBA) including regulated IP bitstream has still not been adopted and no further change in prices has been implemented following a study commissioned by the CMT in order to establish a cost-oriented model for bitstream access. The CMT expects to approve the OIBA in the first quarter of 2008.

Even though LLU prices were not modified last year, they are still in line with the EU average except for the shared access connection fee, which is the third highest in the EU. In September 2006, the revised reference unbundled offer, RUO, (known as OBA) introduced some changes which are not yet in place, such as LLU demand estimates by alternative operators and regulatory monitoring of the incumbent's internal protocols for service provision in order to strengthen the non-discrimination obligation. Further modifications were adopted in 2007, preventing operators from discounting the

56 "Broadband coverage in Europe", IDATE, October 2007 (data as of 31 December 2006).
57 CMT's Annual Report 2006.

incumbent's penalties for non-fulfilment of the RUO conditions directly from their payment for wholesale services. So in the event of a disagreement, reimbursements due from the incumbent to alternative operators will need to be resolved under civil law. In this respect, the CMT can open sanctioning procedures for non-fulfilment of the RUO obligations or non-compliance with CMT's resolutions, including those imposing the payment of penalties.

The decrease in the number of LLU access disputes submitted to the CMT might be partly due to the fact that operators prefer to reach agreement with the incumbent operator, given the regulator's reputation for delayed action in the past, and partly due to a different investment phase of DSL operators. Alternative operators and recently also the Secretary of State for telecommunication issues have called on the CMT to monitor carefully the incumbent's compliance with the current obligations, as the decisions and fines imposed by the regulator so far do not seem to act as deterrents. The CMT itself has acknowledged that problems remain in this area and that non-discriminatory treatment would be key for the competitive situation.

Meanwhile, the CMT continued to monitor the fulfilment of the obligations set out in the RUO by the incumbent, and imposed fines on the incumbent for not fulfilling its obligation in relation to the management system for LLU requests in May 2007 and for not delivering various LLU elements in July and December 2007. Moreover, the regulator is investigating a complaint submitted by an alternative operator alleging that the subscribers' line database provided by the incumbent to its competitors is not accurate, favouring the incumbent's own retail services, as well as an alleged case of discriminatory behaviour by the incumbent in relation to time limits.

In July 2007, the Commission imposed a fine on the incumbent of €152 million for a very serious abuse of its dominant position in the form of a margin squeeze in the Spanish wholesale broadband access market between September 2001 and December 2006. The decision has been appealed by Telefónica (T-336/07) and also by Spain (T-398/07) before the Court of First Instance.

Mobile markets

Market situation

The Spanish mobile market is continuing to grow, albeit at a slower pace than in previous years and, as a result, the mobile penetration rate (110.4%) was below the EU average (111.8%) as at October 2007. Competition in the mobile market is strong, with the most intensive use of number portability in the EU as a competition tool (350 000 mobile numbers ported per month) and three of the main European mobile players present in Spain. During the last year, the number of market players in the mobile market significantly increased: the fourth UMTS licence-holder and the seven MVNOs launched commercial services.

For one more year, the market share of the incumbent's subsidiary in terms of subscribers (45.7) dropped slightly in favour of the second operator (30.7%), whilst the third one remained constant (23.6%) as at October 2007. The average revenue per minute (ARPM)[58] decreased further, reaching 16.9 €-cent/min at the end of 2006, compared to

[58] CMT's Annual Report 2006.

18.2 €-cent/min one year earlier. The total number of users of UMTS services, although growing, is still low and data traffic, excluding SMS and MMS, amounted to a mere 3.3% of overall revenues.

Regulatory issues

Seven new entrants have launched mobile services following the access obligation imposed by the regulator on the three MNOs present at the time and which have not required further regulatory intervention. The appeals, to the national courts, lodged by the MNOs against the regulator's finding of joint dominance are still pending. So far the new entrants' market share has been marginal, and most of the new entrants are mobile service providers, although some cable operators are MVNOs with an infrastructure-based business model.

Though the establishment of an asymmetrical glide path for MTRs was supposed to increase regulatory certainty, the changes introduced every six months in nominal prices and peak/off-peak time periods might have produced the opposite effect. Following a number of interconnection disputes involving the new players in the mobile market, in October 2007 the CMT adopted further measures setting an asymmetric glide path for the fourth MNO in the market. The fourth MNO, which launched commercial services in December 2006 and contrary to its main competitors only holds a UMTS licence, still has a marginal market share of less than 1%. In October 2007, the CMT notified to the Commission draft measures intended, amongst others, to require 'full' MVNOs to set reasonable termination charges.

Roaming Regulation

The CMT and the SETSI both have competences in relation to the Roaming Regulation. Its implementation has run smoothly in Spain, and no problem has been detected in the Spanish outermost regions as operators are offering national mobile tariffs. The three main MNOs have opted to offer a tariff corresponding to the maximum ceilings. In 2006, the retail and wholesale ARPM[59] for Spanish mobile operators were significantly higher than the regulated caps. As Spain is a tourist destination, wholesale roaming services have grown over recent years. Although roaming constitutes only 3% of the overall traffic, it generates 13% of mobile revenues.

Fixed

Market situation

Revenues in the fixed sector (€8.8 billion) are falling, although they still represented 21% of the overall revenues in the telecoms sector in 2006. However, the number of fixed lines is growing slightly and, at the end of October 2007, fixed penetration reached 40.63% of the population in Spain. One out of three residential customers have subscribed to fixed services as an additional service to broadband and/or TV services. Operators increasingly used fixed number portability to attract customers. One of the main alternative operators recently launched a bundled service including VoIP telephony,

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[59] According to CMT's figures, in 2006, the retail ARPM that Spanish mobile operators got from their subscribers roaming abroad was 1.02 €/min, and the wholesale ARPM from foreign customers roaming in their networks was 0.70 €/min (VAT included).

contrary to the existing bundled offers with traditional voice services, although VoIP market share is still marginal.

By July 2007, cable and LLU infrastructure investments resulted in 16.9% of subscribers using a provider for direct access other than the incumbent, one of the highest proportions in the EU. Contrary to the trend in previous years, in the course of 2007 the number of pre-selected lines increased slightly. As of December 2006, the shares in the fixed voice telephony retail market in terms of revenues were more or less stable.

Regulatory issues

Although WLR was not considered as a remedy in the initial market notifications in 2006, one year later the CMT finally imposed it as an additional obligation in the call origination market, thus enabling alternative operators to provide their customers with a single bill. The decision of November 2007 stated that the incumbent has six months to implement the wholesale service for analogue lines (€11.53 monthly fee) and two additional months for basic ISDN lines (€17.84 monthly fee), including non-active lines. The NRA has imposed a standstill period of four months on the incumbent.

In 2007, the subscription and monthly fees for fixed access increased by the Consumer Price Index. However, the CMT decided that the subscription and monthly fees will not be increased further in 2009. The CMT has facilitated the migration from shared access to fully unbundled access in cases where the subscriber swaps the incumbent's fixed telephony service for a VoIP service provided by an alternative operator.

The CMT imposed obligations not only for traditional interfaces but also for Ethernet and Fast Ethernet interfaces on the wholesale terminating leased lines market. The reference offer (known as ORLA) was adopted in December 2007 with prices established through a retail-minus methodology. With the publication of the ORLA, leased lines prices for traditional interfaces, which were last updated in November 2005, have experienced an average reduction of between 13% and 47%.

Broadcasting

Market situation

During the last year, the broadcasting transmission market grew by 36.9%[60] due to the high coverage requirements imposed in July 2005 for national channels and to the significant increase in the number of allocated digital channels. Spain has one of the highest terrestrial television market shares in the EU. The majority of cable and IP-TV subscribers are benefiting from a bundled offer and more than half from triple-play offer. Mobile operators started offering audiovisual content to their mobile users through video streaming.

[60] CMT's Annual Report 2006.

Regulatory issues

There are positive signs in the wholesale broadcasting transmission market. At the beginning of 2006, the CMT imposed an access obligation on the incumbent which owns the only terrestrial broadcasting transmission network with national coverage, in 41 locations at cost-oriented prices. Although all national digital terrestrial television (DTT) broadcasters signed contracts with the SMP operator in 2006, two out of seven changed to an alternative operator in 2007, which was first to request access to the SMP operator's network. However, the cost accounting model has not yet been approved and the regulator expects this new entrant to benefit from the obligations at the beginning of 2008. The deadline for review of the market is February 2008.

In July 2005, the government provided for the allocation of a single multiplex for mobile broadcasting services before the switch-off. However, the tender for the assignment of frequencies has been further postponed due to the fact that the necessary legal framework has not yet been approved.

Horizontal regulation

Spectrum management

The SETSI has spectrum competences, since the planned Radio Spectrum Agency (the NRA intended to manage radio frequencies) has not yet been established. Although the Spanish legislation generally allows transfers of spectrum rights of use, the SETSI has recently presented a draft regulation on radio spectrum management specifying the conditions for spectrum trading for very limited frequency bands. Operators have been complaining for a further year about the excessively slow and not always transparent spectrum procedures, although the SETSI has no knowledge of those complaints.

Following the switch-off, the Spanish authorities have decided that a large part of the digital dividend is still likely to be used for broadcasting terrestrial services to the detriment of mobile and broadband communications. There has already been a significant increase in the number of allocated digital channels: 20 at national level, 62 at regional level (only 52 assigned) and 1 148 at local level (only 624 assigned). Moreover, national channels have been allocated in the upper part of the UHF band, unlike in other Member States.

Spain has taken measures to implement the remaining Commission Decisions adopted under the Radio Spectrum Decision to harmonise spectrum use in specific bands and has accordingly updated the national frequency allocation plan (known as CNAF), which was published in November 2007. The CNAF already includes the possible use of 900 MHz and 1800MHz for different technologies subject to EU approval, although the existing licences will need to be suitably modified. Spectrum refarming is currently a very contentious issue in Spain, as assignment of spectrum in the relevant bands is unequal and some of it was directly assigned more than ten years ago.

Rights of way and facility sharing

Difficulties in network deployment continue to be a primary concern of both fixed and mobile operators, and it seems that earlier measures have not been sufficient. The situation is very diverse, and in some regions and municipalities operators are still encountering serious difficulties in obtaining rights of way in the form of burdensome procedures, delays or even dismantling of mobile antennae.

In relation to mobile services, this issue is not just affecting UMTS but also GSM services. In June 2007, the Minister for Industry, Tourism and Trade called on the local authorities to facilitate the roll-out of network infrastructure as only 20% of the planned GSM mobile coverage plan in rural areas, intended to achieve 99% population coverage by the end of 2008, had been fulfilled at that time[61]. In view of the public concern over antennae, the SETSI created a website, which provides an on-line service enabling citizens to compare the certified electromagnetic emission values for mobile installations to the mandatory limits. A more complete website is under preparation.

More municipalities started imposing a public domain occupation tax equivalent to 1.5% of gross revenue on MNOs, taking the view that the latter are not excluded by a 2003 law on municipalities funding. Mobile operators, who are already paying significant spectrum fees and economic activity charges based on the number of subscribers and antennae, have refused to pay the tax and have appealed a number of cases.

THE CONSUMER INTEREST

Tariff transparency and quality of service

At the end of 2006, general consumer legislation entered into force prohibiting the rounding-up of tariffs, with practical implications for mobile services. The NCA is investigating the increase in domestic prices following the abolition of the rounding-up practice, although the CMT has already established that there were minimal price increases.

Following the adoption of an Order on quality of service (QoS) in March 2006, operators publish a QoS report on their websites on a quarterly basis. Moreover, the universal service provider sends quarterly QoS information to the SETSI, which checks the performance against the minimum QoS targets for provision of universal service.

Universal service

In June 2007, the Commission launched an infringement proceeding for incorrect implementation and transposition of parts of the Universal Service Directive. The Spanish authorities initiated the first designation procedure for a universal service provider under the current regulatory framework, whilst the bundling of universal service elements as laid down in the public consultation may have limited the number of expressions of interest from potential operators. The incumbent operator was the only undertaking to express interest in accordance with the established criteria. The Spanish authorities decided to maintain directory enquiry services within the scope of the universal service and recently extended the current universal service designation until the end of 2008. Moreover, the Spanish Parliament has approved a law which paves the way for the future inclusion of broadband services in the scope of universal service, and will become the first EU country to do so, although the provision of fixed telephone services still constitutes a problem in certain areas.

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[61] According to the latest E-GSM Plan data, 1 824 (34.2%) of the 5 335 projects had been finalised by November 2007, with 1 453 (27.2%) additional ongoing projects.

In November 2007, the CMT approved the net costs for provision of the universal service over 2003, 2004 and 2005 (€284.35 million) and decided to activate the universal service financing mechanism. The regulator now needs to determine how the various operators will contribute to the universal service fund, as no public funding is provided for by law. The previous decisions, where the regulator established that the unfair burden condition was not fulfilled, were always appealed by the universal service provider. Market players raised concern that this process was not very transparent and that the establishment of the unfair burden had not been sufficiently reasoned.

Number portability

Number portability continues to contribute significantly to the competitiveness of the Spanish market, and this facility has been used extensively as a competition tool to attract customers. October 2007 data indicate that Spain has one of the highest totals of mobile ported numbers (13.40 million, 27.30%) and of fixed ported numbers (3.01 million) in the EU.

The use of mobile number portability (MNP) in Spain entails no cost for the end user or for the operators. MNP has been extended to mobile service providers and MVNOs, which have the responsibility for directly managing the process. The fourth MNO, which entered the market in December 2006, has achieved a positive balance of ported numbers so far. In March 2007, the CMT speeded up the procedure for MNP, reducing the portability period to one and a half days, so that the total maximum time from the subscriber requesting that the number be ported is now five working days.

Consumer complaints

The SETSI has been very active in recent years in adopting legislation to strengthen consumer's rights, in areas such as quality of service, premium-rate services, complaint procedures or the right to automatic compensation for any interruption of service. In April 2007, a new order was adopted regulating complaint procedures and customer service.

The office established within the SETSI three years ago to deal with users' complaints and to provide information on users' rights receives an average of 287 queries and 54 complaints a day. Information about this office and about other consumer protection bodies is now included in operators' bills. The CMT's website includes information about consumer rights, FAQs and complaint procedures. The majority of the complaints (41.7%) concerned subscriptions and cancellations for the various services, followed by billing issues (22.9%). The number of complaints related to fixed access, which is still an issue of concern, increased from 5.9% to 7.8% in the first semester of 2007[62].

European emergency number 112

The implementation of 112 in Spain is considered satisfactory and the 'push' method for caller location information is used countrywide. Spain has a system with a network of 17 centralised Public Safety Answering Points (PSAPs) at regional level (plus two PSAPs in Ceuta and Melilla), as responses to 112 calls are a regional competence. In September 2007, Spain signed the eCall Memorandum of Understanding.

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[62] SETSI's report on queries and complaints, June 2007.

Data protection

The transposition of the Data Retention Directive (2006/24/EC) was completed in October 2007, although it will require further secondary legislation. Spain did not request the postponement of application for Internet data, so the provisions have immediate effect for all network operators and service providers. The retention period is one year (same as the existing one), extendable to 24 months, and costs will be borne exclusively by market players. The legislation includes the establishment of a register of mobile prepaid customers.

FRANCE

INTRODUCTION

France has continued on its positive trend regarding the broadband sector in 2007, thanks to dynamic competition leading to low prices and an increasing number of services for consumers, mainly through bundled offers. The mobile market has not evolved similarly in terms of penetration, prices and competition, notably following the negative decision on the ineligibility of the single candidate for the fourth UMTS licence and the limited impact of mobile virtual network operators (MVNOs) and of number portability in the distribution of market shares.

The regulator has started the second round of market reviews and reduced the number of obligations imposed on the incumbent on the fixed markets. At the same time, regulatory challenges related to new technology developments, mainly the deployment of fibre networks, have increasingly focused the attention of the regulator and stakeholders. Investment plans on fibre are high on the agenda of the main operators, not to mention the interest shown by several local authorities. The debate on the digital dividend developed further after the adoption of a law stipulating the progressive switch-off of analogue television between 2008 and 2011. Legislation aimed at reinforcing consumer protection and including an amendment modifying the universal service mechanism was expected to be adopted in early 2008.

REGULATORY ENVIRONMENT

Main regulatory developments

France published several laws relevant to electronic communications in 2007. A law on broadcasting, covering *inter alia* the switch-off of analogue television, was approved in March. Another law containing several provisions on roaming was adopted in December 2007. The main provisions focused on the application of regulated roaming tariffs to calls between mainland France and the overseas departments. Finally, a law on competition and consumer protection, with a specific chapter on electronic communications, was expected to be adopted in early 2008. The draft law included provisions on customer care services and on premium rate services, providing free-of-charge waiting time for on-net calls to customer care services and no overrated calls for off-net calls. The possibility for users to terminate their contracts after 12 months under certain conditions and a reduced advance notice for termination by users were also introduced. The French regulatory authority, ARCEP, launched in October 2007 the second round of market analyses, starting with the market for wholesale mobile termination rates, both in mainland France and overseas. A consultation on high speed and very high speed Internet as part of the broadband market analysis was organised by ARCEP in December 2007.

Organisation of the NRA

There is generally a good perception of ARCEP's work regarding the *ex-ante* regulation and its implementation among operators, consumer associations and local authorities. Stakeholders have participated actively in the public consultations organised by the regulator, such as the consultation on access to infrastructures and fibre networks. Nevertheless, some operators are less positive on the *ex-post* measures. According to them, dispute-resolution procedures, which have been a useful tool in previous years, are no longer delivering the desired results. As a consequence, the number of procedures was reduced from 12 in 2005 to two in 2007[63].

ARCEP was tasked by the March 2007 broadcasting law to intervene on the pending issue confronting local authorities and cable operators regarding ownership of network and the contractual clauses setting specific obligations for cable operators. ARCEP was requested to report on the legal situation of these contracts. Cooperation between ARCEP and the broadcasting authority (Conseil Supérieur de l'Audiovisuelle or CSA) seems to work satisfactorily.

Decision making

In 2007, ARCEP continued the process of deregulation of fixed telephony markets, lightening some of the measures imposed on the incumbent, and more specifically of the measures related to the transit services between mainland France and the overseas departments. Some operators have qualified this development as too rapid, and expressed their concerns that competition law measures may not be sufficient to protect competition in this market.

The last market notifications under the first round of market reviews were in 2006. Wholesale market analyses related to mobile access and call origination and to broadcasting transmission services to content operators, which constitutes a part of the broadcasting transmission services, were not notified. With its first decision in the second round of market reviews, ARCEP again reduced mobile termination rates, and maintained asymmetric regulation for the smallest mobile operator. The new price caps will apply from 2008 until the first semester of 2009.

As ARCEP's decision on cost accounting and accounting separation was only adopted in December 2006, ARCEP's verifications under the new system were still ongoing by the end of the year. Accounting separation provisions are aimed at preventing discriminatory practices in favour of the incumbent's own activities or unfair cross-subsidies, and the verification will allow to check that the costing of wholesale offers is appropriate. In the meantime, alternative operators have complained about the lack of transparency and the complexity of the model.

63 Source: ARCEP's website.

MARKET AND REGULATORY DEVELOPMENTS

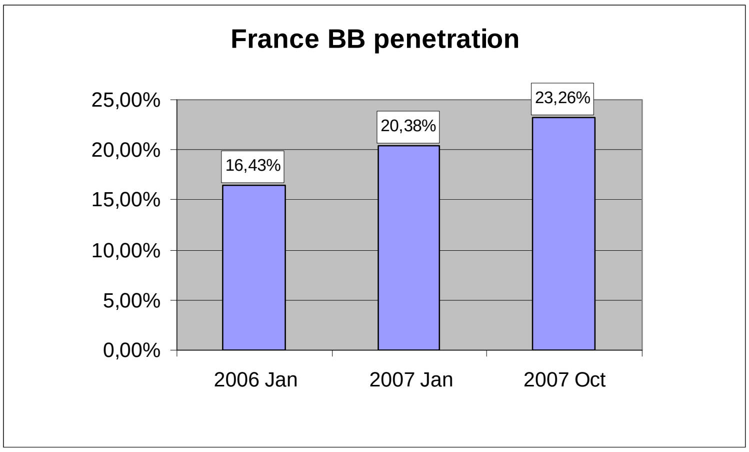
The total revenue in the telecommunications sector in France was 2.57% of GDP, below the EU average of 3% of GDP in 2006. The total turnover of the telecommunications sector in France was €46.1 billion as at 31 December 2006. The revenue contribution from the fixed market was €23.6 billion, and that of the mobile market, €22.5 billion. The total value of tangible investments in France was €7 billion, of which €3.27 billion came from mobile operators and €3.7 billion from fixed operators.

French operators have continued to compete actively on bundled offers, in particular offers combining television, broadband and telephony. Competition has prompted several operators to invest in fibre technology. The cable operator has already started deploying fibre; the incumbent has announced pre-deployment plans in Paris and other big cities; the main alternative fixed and broadband operator has similar plans.

A first call for tenders on mobile personal television ("télévision mobile personnelle", TMP) for broadcasters was launched by the CSA ("Conseil Supérieur de l'Audiovisuel", the broadcasting authority) in November 2007. Moreover, a call for tenders for a digital terrestrial TV multiplex operator (TNT) was also launched.

Broadband

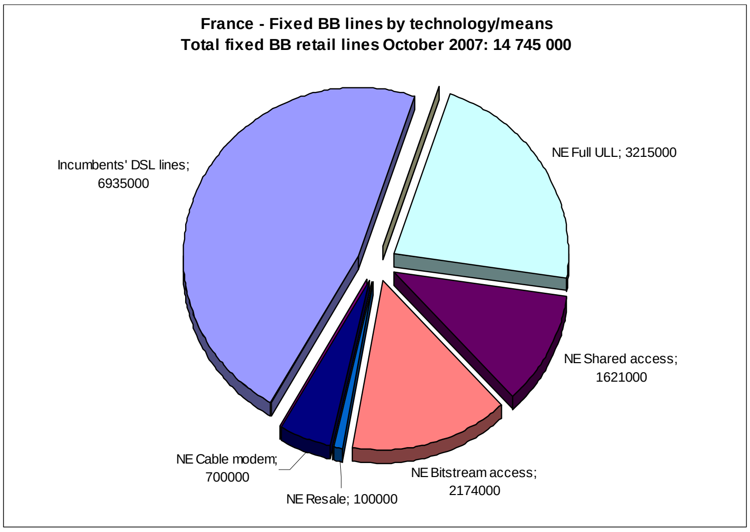
Market situation



The broadband market continued to grow, with a penetration rate of 23.26% in October 2007, compared to 20.38% in January 2007. However, the growth rate, that started declining slightly last year, has continued this tendency, moving France from eighth to ninth position in the EU regarding broadband penetration[64]. Moreover, the increase in the penetration rate was 2.9% from January to October 2007, below EU average growth, which was 3.8% from January 2007 to January 2008. The EU27 average penetration rate was 20.04% as at January 2008. France had 14.74 million broadband lines, 95.3% of which were DSL lines, as at October 2007.

[64] This may be partly due to the fact that 31 December 2007 data were not available.

France had a total of 4.84 million unbundled lines as at October 2007, compared to 3.92 million in January 2007, most of them being fully unbundled lines. This growth has built on the development of the fully unbundled lines and the naked DSL offers, according to ARCEP. 3.21 million lines were fully unbundled as at October 2007, compared to 2.1 million as at January 2007. The incumbent's market share decreased slightly, from 48.2% to 47% of the total broadband retail lines as at October 2007. This trend was also observed in the DSL market, where the incumbent's share decreased from 51% to 49.37% as at October 2007. The importance of the incumbent's resale and bitstream access products decreased to the benefit of unbundling.



DSL coverage in rural areas was high, 96.5% (in terms of population), close to the coverage at national level, which was 98.4% as at December 2006. Nevertheless, the coverage gap between rural areas and national average was very significant for cable. France had the lowest coverage rate in rural areas in the EU (in countries where cable was present in rural areas), only 1.1%, compared to 26% at national level as at December 2006[65].

Regulatory issues

Regulation has contributed significantly to the development of competition on copper networks, based on local loop unbundling and bitstream offers. Attention has started to shift towards the challenge of competition in a 'fibre to the home (FTTH)' context. The main French broadband operators have announced their plans for the roll-out of new fibre local loop networks.

The NRA thus launched in July 2007 two public consultations: one on access to the incumbent's civil engineering infrastructures, i.e. ducts, and one on the sharing of last part of the fibre network inside buildings. It also organised an audit on the incumbent's infrastructure in order to assess the capacity of these ducts available for alternative operators through this solution.

ARCEP launched a new round of market analysis along these lines in December. The main new proposed measure in the wholesale network infrastructure access market is to open up the incumbent's ducts for alternative operators. ARCEP proposed to maintain in substance the current regulatory measures as regards the wholesale broadband access market. New legislation is under preparation to provide a legal basis for the sharing of

65 Source: IDATE report (October 2007): Broadband Coverage in Europe.

fibre networks inside buildings, which would apply to all operators and not only to the incumbent.

Access to the fibre network itself is not considered by ARCEP as necessary at this point. The preferred solution for the coming years is access to ducts. It remains to be seen whether this approach will be sufficiently effective in developing competition in the fibre sector. It seems that precise information on the effective capacity of ducts is missing for part of the network, and possibly could prevent an accurate evaluation of the availability of the incumbent's ducts as a real alternative for access to fibre. Moreover, alternative operators have expressed concerns on the current ducts' capacity left, in particular in highly populated areas.

Mobile markets

Market situation

The French mobile market has remained relatively unchanged in terms of penetration, market share, prices and competition for the past few years. The revenues growth of the mobile sector has continued its slowdown process, from 12% in 2004 to 9% in 2005 and 4.1% in 2006[66]. The mobile penetration rate, at 82.87% as at October 2007, has increased by less than one point during this year (0.87%) and was still well below the average for the EU27, which stands at 111.8%. The market shares of the three main mobile network operators (MNOs) have experienced no significant changes since last year, despite new rules on number portability and the presence of MVNOs in the market. The leading operator's and the main competitor's market share were respectively 44.3% and 34.1% (in terms of subscribers) as at October 2007, compared to 45.3% and 35.1%. The third operator's market share has not developed and even decreased from 17.6% in October 2006 to 17.4% in October 2007.%. Prices are still relatively high compared to other Member States and have not experienced significant improvements over the last years.

Thirteen MVNOs were on the market as at October 2007, none of them having control over network elements. This figure does not include mere resellers of the MNOs' products. Market shares have only slightly increased, from 1.99% in September 2006 to 4.2% in October 2007, this figure including MVNOs owned by mobile operators. It seems clear that MVNOs do not exercise much competition pressure on the mobile market. One reason could be the restrictive conditions imposed by the mobile operators for providing access to their networks, in the absence of any regulatory measure on access to mobile networks on this market.

[66] Source: ARCEP's Annual Report 2006.

Regulatory issues

The mobile access and call origination wholesale market was notified in 2005 and then withdrawn, in order to assess the impact of the MVNOs on the market, according to ARCEP. Notification was then postponed again, in order to study the impact on the market of the attribution of the fourth 3G licence, whose allocation process was opened in March. Nevertheless, this market surveillance has not significantly encouraged competition in the mobile market. The opportunity to inject more dynamism and improved competition, by taking regulatory measures, seems to have been lost.

No new 3G licence was awarded to the (only) candidate, as a result of the applicant's non-conformity with the financial criteria. By the end of the year, an amendment to the law allowed the Government to modify the financial conditions for obtaining the fourth licence. Therefore, it remains to be seen whether a new procedure will be opened in the near future, under new terms and conditions.

ARCEP analysed the mobile call termination market under the second notifications round in July 2007. The regulator further lowered the mobile termination rates, aiming at tariffs gradually approaching costs. In conjunction, ARCEP continued to impose asymmetric regulation, allowing the third mobile operator to charge higher mobile termination rates than the other two operators, which has been controversial for the leading operators.

Roaming

Implementation of the Roaming Regulation in France has been satisfactory. Two operators, one MNO and one MVNO, offer more advantageous tariffs than required by the Regulation. Also, a law approved in December 2007 contains several provisions on roaming, the most important being on the implementation of roaming tariffs to the calls between mainland France and the overseas departments. Following these provisions, all operators are applying the roaming tariffs to these territories.

Fixed

Market situation

The fixed market remained stable compared with last year. The incumbent, 27.4% of which is owned by the State, continues to hold a very significant position in the market share. Its market share was at 69.7% (by revenues) as at January 2007, compared to 70.5% last year. VoIP operators reached 14% of voice traffic as at January 2007, while the incumbent's share was 57.5% of voice traffic.

The wholesale line rental offer (VGAST), which was put on the market quite late, has not provided, according to alternative operators, an effective alternative for fixed telephony services in non-unbundled areas (the main use has been for professional users). In these areas most alternative operators have developed alternative voice service offers through broadband using naked DSL. There has been very active competition on bundled offers, mainly in the form of low flat rates and new services to be added to the basic commercial offers. Double play (voice and broadband), triple play (data, voice and television) and quadruple play (data, voice, television and mobile) had a total of approximately 7.8 million subscribers as at July 2007.

Regulatory issues

ARCEP has continued the process of removing obligations imposed on the incumbent in the fixed retail markets, initiated in 2006. The NRA has lightened the obligations related to the inter-territories transit wholesale market. Alternative operators are reluctant, arguing that the incumbent has still a very significant share of the fixed market. Accounting obligations have remained in all these markets.

The NRA decisions on cost accounting and on accounting separation under the current regulatory framework, only adopted in December 2006, have been imposed on the incumbent on several markets, but their effects remain to be seen. ARCEP has not yet finalised the verification process for the first new regulated accounts. According to alternative operators, this can only have little value as it is restricted to old figures.

Broadcasting

Market situation

The market shares of the different broadcasting platforms in 2007 remained in the same proportion as in 2006. The main platform is terrestrial TV, with 58.5% of households. Satellite has 21.4% and cable 13.6%. IP TV has doubled, with 6.4%.

Digital terrestrial television (DTTV) is deploying satisfactorily, with a coverage of 80-85% of the population by the end of 2007. The March 2007 broadcasting law ("Loi sur la télévision du futur") sets 95% as the final coverage goal. 27% of households were equipped with DTTV adapters as at September 2007. Analogue terrestrial broadcasting should be definitely switched off by November 2011.

Regulatory issues

ARCEP regulation focuses on the wholesale market for DTTV transmission services. While competition is emerging on transmission services offered to the DTTV multiplexes for broadcasting digital television, the main operator owns most underlying infrastructures. ARCEP imposed accounting obligations and non-discrimination obligations on that operator following the market analysis.

Horizontal regulation

Spectrum management

The MSS Decision (Decision 2007/98/EC) was implemented in June, and the ex-ERMES Decision (Decision 2005/928/EC) as well as the UWB Decision (Decision 2007/131M/EC) were finally endorsed in September. Implementation of the amended WAS/RLANs Decision (Decision 2007/90/EC) is still under way.

An important issue in 2007 has been the launch of a call for applications for the fourth 3G licence. However, the NRA finally decided in October that the financial criteria were not respected and, therefore, the licence was not granted to the only applicant, the main alternative broadband operator. In late 2007, the Government was afterwards allowed to modify the financial criteria for an eventual new call. The use of 2G bands for 3G services was submitted to public consultation in May 2007. Following this, ARCEP published its guidelines on the use of the 900 and 1800 MHz bands for 3G.

Discussions on the digital dividend continued throughout 2007 in the context of the “Comité stratégique pour le numérique”, which includes the relevant Ministries and authorities (ARCEP, CSA). The new law adopted in March 2007 (“Loi sur la télévision du futur”) set the switchover date at 2011, with a transition starting in 2008. Broadcasters and telecom operators both claim the frequencies to be released in order to improve their services or provide new ones. The March 2007 broadcasting law, however, has reserved the possibility for the three main analogue terrestrial broadcasters to be authorised to broadcast a digital channel from the date of the switchover of their analogue signal.

In the meantime, the possibility for secondary trading of frequencies, created in 2006, has been used for wireless local loop, enabling regional authorities to transfer their frequency authorisation to smaller administrative entities. It would appear that secondary trading has so far not been used in a significant manner.

Rights of way and facility sharing

The 2005 Decree on rights of way, providing for maximum thresholds to be imposed for the use of the public domain and appealed against by some local authorities and operators, was confirmed by the Conseil d’Etat in 2007. Nevertheless, some cities have been reported to charge high fees for access to facilities. The Commission services are looking into the matter.

Authorisations

The new broadcasting law adopted in March 2007 requested ARCEP to report on the conformity of existing contracts between cable operators and local authorities. The French law requires that these contracts be brought into line with the provisions on electronic communications on authorisations. This issue has been pending for several years. While local authorities claim ownership of part of the network , cable operators reject some contractual clauses as either abusive or incompatible with the general authorisation conditions applicable to other operators.

ARCEP published its report in July 2007, stating *inter alia* that the property of the network in many cases belongs to local authorities, and asking operators and local authorities to negotiate a solution concerning the contested clauses. Such negotiations had not started by the end of 2007.

Numbering

ARCEP adopted a decision on premium rate services. This decision sets the relations between the different operators in the value chain, by imposing an obligation of giving access to these numbers and an obligation of recovering part of the user’s bill for the benefit of the service provider. ARCEP also adopted a decision requiring the incumbent to launch a reference offer for billing and recovery. Some issues such as pricing, transparency and access from mobile networks remain to be clarified. ARCEP has put in place a round table with operators to deal with them.

THE CONSUMER INTEREST

Tariff transparency

A new law on competition and consumers was approved in December. It includes a specific chapter on electronic communications, providing *inter alia* for: the absence of charge while waiting over a hotline; the prohibition to charge premium rates for customer care service and the reduction of the advance notice for contract termination.

Universal Service

The Commission referred France to the Court of Justice in May 2007 for infringing EU rules, which stipulate that the designation mechanism of the universal service provider has to be non-discriminatory, transparent and efficient and that all undertakings can therefore participate in the designation mechanism; also, the designation mechanism should ensure that universal service is provided in a cost-effective manner. While the case is pending before the Court, an amendment to the French law on competition and consumers was expected to address the issue in early 2008. The Commission services are currently examining whether the new provisions allow operators to take part in the universal service designation mechanism in a non-discriminatory manner.

A new designation proceeding took place in 2007, linking the comprehensive directory service and the comprehensive directory enquiry services. The fixed incumbent was designated as the universal service provider for the two elements in March 2007 for a two-year period.

Directory services and directory enquiry services

While the liberalisation of these services initially attracted a high number of players, leading even to some confusion among consumers, there was a trend towards consolidation in 2007. ARCEP published a decision in March 2007 clarifying the conditions for making available the relevant information for provision of these services.

Number portability

New rules on number portability were implemented in 2007, reducing the porting time from up to two months to a maximum of ten days and establishing a one-stop-shop process for users. Ported numbers have increased significantly as a consequence. The total accumulated number of fixed ported numbers was 5 300 000 as at October 2007, compared to 2 702 500 the year before. 2 600 000 fixed numbers were ported in 2007, compared to 1 700 000 the year before. The number of mobile ported numbers was 1 490 600 as at October 2007 compared to 837 000 one year earlier. Consumer associations have, however, argued for a new reduction to one day. Currently, it seems that the average time for fixed number portability is four days and for mobile, seven days.

Consumer complaints

The communications and telephony sector was the object of a large number of consumer complaints in 2007. It was the most frequently targeted sector in complaints to the DGCCRF (Directorate-General for Competition, Consumer Policy and Fraud Control) in 2007. 28.1% of the total number of complaints concerned telephony and Internet, representing 17 808 in the 2nd semester of 2007. The majority of complaints concerned failure to fulfil the provision of services (28%) and non-respect of contract termination requests (17%). The number of complaints related to billing issues increased by 31%, and forced subscriptions also experienced a large increase (30%) between the third and the fourth quarter of 2007.

The powers of DGCCRF concerning consumer protection were reinforced by a law adopted in December. An injunction power can now be used by DGCCRF in order to compel operators to comply with their obligations or to withdraw any illicit clause following a dispute-resolution process. DGCCRF will also be able to act before the courts to request the annulment of any illicit or abusive contractual clause, as well as to request measures to compel operators to comply with their contractual obligations towards users. Consumer associations had been claiming for a class action, but this was not included in the Law.

The Mediator, put in place by telephone operators to deal with consumer complaints on a voluntary basis, became the Electronic Communications Mediator in January 2007, as its remit was extended to Internet conflicts. The number and variety of bodies involved in out-of-court dispute resolution might still be confusing for users, as their competences are potentially overlapping.

European emergency number 112

Difficulties in reaching the “112” emergency number from ported (fixed) numbers and in specific cases of roaming were reported to the Commission. It is also not clear whether there is a proper transmission of caller location information in France. The Commission services are looking into these matters.

Data protection

A data-retention decree, adopted in March 2006, included a list of data to be stored by operators and the time to retain them, i.e. one year. This Decree was appealed against but confirmed by the “Conseil d’Etat” in August 2007. According to operators, this Decree adds on a set of other secondary laws, also dealing with data retention, which brings confusion and overlapping of the obligations to be respected by stakeholders.

ITALY

INTRODUCTION

The main trends in the Italian electronic communications market were increased competition, declining retail prices for certain products and progressive development of innovative offerings such as integrated fixed–mobile services and bundled multi-play products.

Italy has one of the highest penetration rates of mobile services in the world and the largest mobile market in the EU. Broadband penetration continued to grow, but is still lower than the EU average.

Key regulatory decisions were taken on bitstream services, on fixed–mobile integrated offers, on consumer protection and on price transparency for final customers. For some other decisions, technical implementing measures were still not in place (e.g. termination/trunk services and migration procedures between intermediate services). The government introduced a draft law aimed at giving the NRA the power to order functional separation.

REGULATORY ENVIRONMENT

Main regulatory developments

The National Regulatory Authority (AGCOM) has been actively regulating access to the incumbent's network. Decisions on the local loop, the replicability of the incumbent's retail offers and administrative separation of the incumbent's wholesale and retail divisions have produced positive results so far. At the same time, investigations were held with a view to defining regulatory principles covering the transition to a NGN environment. AGCOM recently reopened analysis of fixed retail access, local loop unbundling (LLU) and wholesale access markets.

In October 2007, the National Competition Authority (AGCM) opened an investigation into possible abuse of a dominant position by the incumbent on both fixed voice and broadband markets. In particular, AGCM claims that the incumbent retail division may have made use of sensitive information from the wholesale division to retain users who were in the process of changing operator. The incumbent contests the allegations.

In November 2007 the Commission referred Italy to the Court of Justice for the lack of caller location in mobile calls to 112. Another infringement procedure was pending against Italy in relation to the law on the transition to digital TV (the 'Gasparri' law), which in the Commission's view discriminates in favour of incumbent broadcasters. The Commission is looking into the action taken by national authorities, both at legislative and operational level, to overcome these problems.

A draft law presented by the government to add functional separation to AGCOM's remedies toolbox is currently under discussion in Parliament. In the meantime, AGCOM has launched two public consultations, covering the issues of the influence of functional separation on existing obligations, the effectiveness of existing regulatory measures and the network elements to be covered by functional separation remedies. AGCOM has recently launched the second round of market analysis related to the fixed network access market.

Regulatory discussions on Next Generation Networks (NGN) have been ongoing, linked to those on functional separation. Estimates of the cost of NGN in Italy vary from €6.7 billion to €12 billion (including all parts of access networks).

Organisation of the NRA

To address the lack of human resources, in July 2007 the government approved an increase in AGCOM's staff from 273 to 419 employees. A new organisational model introduced in February 2006 and leading to a considerable reinforcement of AGCOM staff was fully implemented.

Operators complain about a lack of information on the handling of their complaints. While access to the relevant documents and contacts with the case handlers are frequent, they would like AGCOM to set up more transparent internal procedures for handling formal complaints.

Appeal procedures continue to take a very long time (around 2 to 3 years). However, provisional measures in urgent cases are ruled on by the Court within 2-3 months.

The expected single access point for public consultations from the different national authorities has not been implemented. Measures to make the information more easily accessible are in progress.

Decision-making

In spring 2007, AGCOM started the second round of analysis with the markets for mobile access and mobile call termination.

AGCOM has published final measures concerning all markets analysed during the first round. The measures relating to the broadcasting market, which was the outstanding market, were notified to the Commission in November 2007.

A significant number of obligations have been imposed on the incumbent in all wholesale and retail fixed markets. According to the incumbent, this exceeds the regulation imposed in other Member States, both in terms of scope and strength of remedies.

Furthermore, AGCOM has identified three markets not listed in the Recommendation on relevant markets, namely origination of calls on mobile networks to non-geographic numbers, retail Internet dial-up access and wholesale international termination rates. For the first of these the process ended in March 2007, when the measure was withdrawn by AGCOM, while for the other two AGCOM found no operators with a significant market power position.

Operators generally criticise the lengthiness of market analysis procedures and, in particular, the delay in implementing obligations on new wholesale services. The delay can be explained by long and difficult consultation procedures and the need for additional investigations by AGCOM**.** The new bitstream offer is available as of November 2007 and wholesale line rental (WLR) as of 15 December 2007.

There has also been a significant delay in taking final measures on regulatory cost accounting and the financing of universal service obligations, for which Italy has a detailed system of evaluation.

AGCOM's speed and efficiency in monitoring and sanctioning non-compliance with regulatory obligations has been questioned by alternative operators, although AGCOM is acting more efficiently than in the past (several proceedings have been taken which led to the imposition of fines).

MARKET AND REGULATORY DEVELOPMENTS

As of 31 December 2006, the total turnover of the Italian telecommunications sector was €41.3 billion. Revenue from fixed markets was €19.5 billion and that from mobile markets was €21.7 billion. The total value of tangible investment in fixed telephony networks was €2.5 billion by the incumbent and €1 billion by alternative operators. Mobile operators invested €3.2 billion. Investment in the market decreased compared to the previous year because of the lower amount invested by fixed alternative operators and the fact that the deployment of mobile networks is almost complete.

In 2007, there was significant direct foreign investment in the Italian market. The incumbent's controlling interest was sold to a group of banks and to a telecom operator from another Member State. Furthermore, another foreign European telecom operator acquired the ownership of an important Italian fixed alternative operator.

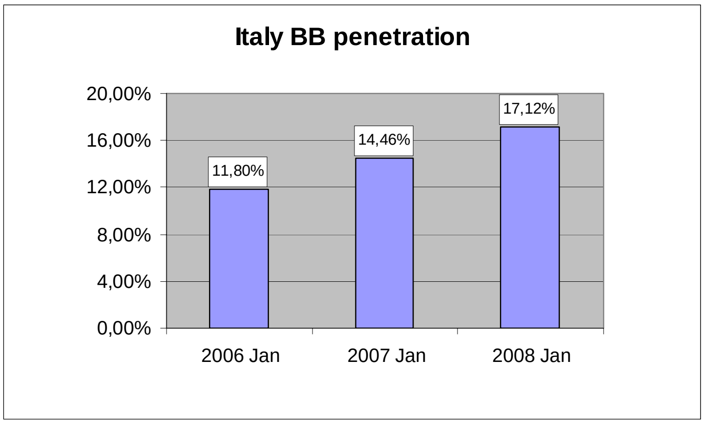
The Italian telecom market has been characterised by the further development of bundled offerings, consisting not only of double play but also triple play services including voice, broadband, and television provided on fixed or mobile networks.

Furthermore, converged fixed-mobile services have started to be widely commercialised by the incumbent and by one mobile operator. All fixed non-integrated operators are entering the mobile market as service providers, so that many other products are expected to be launched in 2008.

In 2007 there was also a consolidation of mobile TV offerings (based on DVB-H standard). Digital television penetration has almost reached 50%, while IPTV figures are starting to be significant (almost 300 000 users).

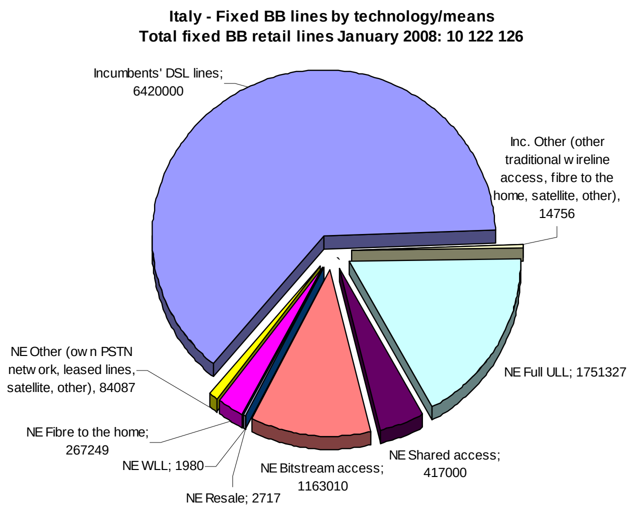
Broadband

Market situation



Broadband penetration significantly increased in 2007, reaching 10.12 million broadband users in January 2008 and a penetration rate of 17.12%, still lower than the EU average (20%).

As regards DSL coverage of the population, at 31 December 2006 the gap between coverage in urban areas and the national average was particularly significant (38.5%). While broadband coverage at national level is 89% (more than 95% for large cities), coverage in rural areas remained quite low (50.5%).[67] With the aim of reducing the digital divide and, at the same time, climbing above the European average for broadband penetration by households and families, the Italian government, together with regional and local administrations, launched a specific programme to extend broadband infrastructure to all disadvantaged areas of the country.



Alternative operators have increased their market share of broadband (from 33.3% to 36.4%), but the incumbent's share is still above 60%. ADSL represents the most widely used technology for broadband.

Italy remains one of the EU leaders in local loop unbundling (LLU). As of January 2008, there were more than 3.6 million activated full LLU lines (over 1 500 000 lines more than in January 2007) and around 556 000 shared access lines. Prices for full LLU have continued to be among the lowest in the EU (€7.81 per month).

Regulatory issues

In October 2007, AGCOM issued a decision on the incumbent's reference offer for the new bitstream services (for both ATM and Ethernet/IP technology). The rules for the implementation of the bitstream offer were adopted by AGCOM in May 2007 after a lengthy process in which all the operators took part. Alternative operators have criticised

[67] Source: IDATE, Broadband coverage in Europe (October 2007).

the delay in implementing bitstream access (available as of November 2007); in the meantime, they have had to rely on wholesale ADSL services (built on a retail-minus model) that nevertheless had characteristics very similar to bitstream.

Bitstream access includes access either in ATM or Ethernet, up to 20 Mb/s, the IP multicast service, a wide choice of quality of service and “naked” access. The prices of the approved offer are in line with European best practice.

For its part, the incumbent has claimed that the obligation to notify retail ADSL offers in advance cannot be imposed under the analysis of the wholesale market. Moreover, it has claimed that any obligations concerning multicast wholesale services (i.e. IPTV) should be imposed under the analysis of the broadcasting market.

Alternative operators have maintained that collocation costs for shared access have not been brought into compliance with the relevant AGCOM decision. AGCOM is examining further the cost-orientation of such components.

AGCOM’s decision of June 2007 governs customers’ activation/deactivation and migration procedures between operators using LLU, bitstream and WLR services. Operators failed to conclude an agreement on the implementation of the procedures and requested the intervention of AGCOM in December 2007. Thus number portability between alternative fixed operators continues to be inefficient and expensive.

AGCOM has set up an innovative system for measuring the quality and speed of downstream and upstream broadband connections. Consumer associations have asked AGCOM to impose minimum requirements in the matter.

Mobile market

Market situation

The Italian mobile market, with 148% penetration as of 1 October 2007, one of the highest in Europe, is nearing saturation in terms of subscribers. In this situation, mobile number portability represents a key factor in competition, as evidenced by the 14 million mobile numbers ported since its introduction in 2002, including 4.1 million ported in the last year. In terms of revenues, as of December 2006 the first two main operators held, respectively, 41.1% and 36.82% of the market**.** All mobile operators are gradually introducing advanced services such as mobile TV.

UMTS services have continued to grow, thanks to improved network coverage, the availability of enhanced terminals and the launch of mobile broadband services (HSDPA) and mobile TV. As of 1 October 2007 there were more than 21 million UMTS subscribers, an increase of 38.5% since October 2006.

In 2007, mobile networks operators concluded several reseller/enhanced service provider (ESP) agreements with some important retail chains, the National Post and three fixed operators, some of which exceeded 100 000 subscribers by end-2007. However, alternative fixed operators have maintained that the current technical and economic conditions applied by mobile network operators do not allow them to offer competitive integrated fixed-mobile services. AGCOM pointed out that it has not received any formal complaints on the matter.

Regulatory issues

In August 2007, AGCM fined two operators for discriminatory business practices for terminating fixed-to-mobile calls on their networks, in particular by applying to their commercial divisions more favourable technical/economic conditions than to third operators since 1999. Two other proceedings, against a third big operator for a similar practice and against all three operators for abuse of collective dominance on the mobile origination market, were closed after the conclusion of reseller/ESP agreements by one of the operators involved.

After a joint investigation by AGCOM and the AGCM in January 2007, a government decree abolished any fixed fee for the recharging of pre-paid mobile cards. Pre-paid cards account for 90% of the mobile subscribers' market and Italy was the only country in which recharge costs were charged. Consumer associations have welcomed the initiative as reducing costs and increasing transparency. However, they complain that additional measures introduced by this decree, concerning unused credit, are not implemented (in the case of credit transfers to the new operator) or are usually long and expensive (for reimbursement of credit). Mobile operators have considered this intervention inappropriate, since a public consultation on a draft AGCOM decision regulating the subject was ongoing when the decree was adopted. The abolition of the recharge cost has particularly affected the two smaller operators, whose revenues from recharges accounted for about 40% of their operating income (between 12% and 15% for the first two operators).

During 2007 the fourth mobile operator, whose termination rate was 50% higher than that of the two major operators, was not obliged to apply regulated termination costs. Given its positive market development (8.9% of market share as of October 2007) AGCOM decided to fix a regulated rate that will decrease its termination rate by 18% from March 2008. The two main mobile operators and the fixed operators have asked for further and faster reduction of the asymmetry, which they consider an unfair burden on users too. With the completion of the second analysis for the mobile termination market (already started by AGCOM) all the mobile operators will be subject to a new price control mechanism as of 1 July 2008.

Roaming

All Italian mobile operators complied duly and on time with the new European Regulation 717/2007/EC on roaming on public mobile telephone networks within the Community. Prices have been generally set at the Euro-tariff level.

Fixed market

Market situation

The traditional fixed market revenue has continued to shrink, mainly to the benefit of mobile and broadband services. While alternative operators have slightly gained market share of the fixed services markets, the incumbent's market share is still above 60% for all types of voice calls (more than 70% in the national fixed voice market). The access market in particular was strongly held by the incumbent, which holds an almost 90% market share.

Regulatory issues

High termination rate asymmetry and delays in approving the incumbent's regulatory accounts were the main regulatory issues arising in 2007.

Alternative fixed operators can take advantage of asymmetric interconnection termination charges. As of October 2007, they can charge up to 1.32 €/cents per minute, as against 0.74 €/cents applied by the incumbent (single transit). While this is the highest asymmetry level in the EU, five alternative operators have requested even higher termination prices (for 2006 and 2007), claiming high costs. AGCOM has allowed three operators to apply termination rates above 1.54 €/cents per minute, from 2006 to 30 June 2007. AGCOM has recently announced the approval of the glide path that will lead to symmetric termination rates among all fixed operators of 0.57 €/cents per minute in 2010. The glide path differs according to the extent each operator rolled out its own infrastructures.. With a view to introducing a new glide-path towards symmetric prices, AGCOM has also been developing a cost-based model for determining the termination cost for an efficient alternative operator, in cooperation with the European Regulators Group (ERG), as requested by the Commission.

The incumbent claims it suffers a significant net loss because of the obligation not to differentiate its retail prices according to the termination rates of the different alternative operators' networks. AGCOM found that the asymmetry does not impose retail prices below costs on the incumbent and this decision has since been confirmed by the Italian Court.

AGCOM has not fully made up its delay in approving the incumbent's regulatory accounts. When this report was being drafted, regulatory accounts for 2004 had been approved, while the analysis of the regulatory accounts for the years 2002 and 2003 was ongoing. The incumbent would like AGCOM to apply a more consistent approach instead of imposing different regulatory accounting principles, criteria and reporting rules for each market.

At the time of drafting of this report, AGCOM was analysing the incumbent's reference offers (for both 2006 and 2007) for the new wholesale termination and trunk services. The existing partial circuit architecture has continued to be provided by the incumbent, but alternative operators have complained that price reductions for 2007 (mandated by AGCOM) have not been fully applied.

Broadcasting

Market situation

Digital terrestrial TV (DTTV) penetration continued to grow in 2007 although more slowly than in previous years. 20% of households have a digital terrestrial decoder (around 4.8 million out of a total of 23.5 million TV households). 27.57% of households use a satellite TV platform (6.5 million households). As a result, some 48% of households had digital TV access as at September 2007.

During 2007, the first two Italian cities, Cagliari and Aosta, were fully digitalised. Switch-off in these two pilot regions is expected by mid-2008, while at national level it is planned in 2012.

After a consultation phase, AGCOM adopted guidelines for frequency re-assignment for the switch-off in the first region (Sardinia).

Local operators that are not able to acquire provisional frequencies for simulcasting have asked for the switch-over to be finalised earlier.

The Italian government has launched a series of technological, economic and social measures to support the transition to digital TV. A fund worth €40m, for each of the years 2007, 2008 and 2009, has been set up by the Italian Ministry of Communications to promote the adoption of digital TV technology by network operators, broadcasters, public utilities, content providers and users.

In order to monitor the transition and set out guidelines, a "Digital Italy" Committee has also been set up, comprising the main players involved in the transition including, notably, public and private, local and national TV broadcasters, cable or satellite broadcasters, representatives of local and national institutions and associations.

In the meantime, the Ministry and AGCOM have finalised the setting-up of an electronic database of TV frequencies. 108 free local frequencies have been identified for allocation to analogue TV services. It is the first time in Italy that broadcasting frequencies have been assigned by public tender.

Regulatory issues

The Commission has sent Italy a reasoned opinion that Italian broadcasting law on the transitional period for the implementation of digital TV infringes, amongst others, the Framework and Authorisation Directives. In particular, the law precludes operators which are not active in analogue transmissions from creating their own digital TV networks. A draft law aimed at addressing the infringement issues is under discussion in the Italian Parliament.

In June 2006 AGCOM found two major broadcasters had collective dominance of the market for analogue broadcasting transmission services. A proposal for remedies was opened for public consultation and notified to the Commission in November 2007.

Horizontal regulation

Spectrum management

After the AGCOM decision on the call for tender procedures, in October 2007 the Ministry of Communications approved the call for tenders for 35 local/regional authorisations to provide WiMAX-based services. Some will be reserved, on a priority basis, for newcomers who do not have frequency resources to offer similar broadband services. Alternative fixed operators maintained that such asymmetric measures are not sufficient to be able to compete with the existing large mobile operators in providing broadband services. Furthermore, they would have liked to use these frequencies for backhauling or radio links, which is presently not allowed. For their part, consumer associations have complained about the absence of any coverage obligations for areas not yet served by broadband providers. AGCOM considers that its decision (which has been confirmed by the Italian Court) is in line with European regulatory principles for frequency assignments. It also considers that the digital divide should be tackled within a nationwide multi-initiative policy and that the imposition of extra coverage obligations would constitute an excessive burden on operators.

The WiMax auction was expected to start at the end of January 2008 and be concluded around mid-February. 47 participants had been admitted.

In August 2007 AGCOM launched a public consultation on the refarming and allocation of the available spectrum in the 900, 1800 and 2100 MHz frequency bands. Furthermore, the limitation to 25 MHz imposed on each 2G operator was expected to be lifted. A new competitive selection procedure is envisaged for the IMT-2000/UMTS system (two blocks of band may be reserved to newcomers).

Italy has transposed all harmonisation decisions taken under the Radio Spectrum Decision 676/2002/EC, through amendments to the national frequency plan. In July 2007 a Ministerial Decree aimed at transposing Decision 2006/804/CE was signed which liberalised the radio frequencies for Radio Frequency Identification Technologies.

Rights of way and facility sharing

Missing secondary legislation for rights of way on highways (which is necessary to complement existing legislation) had not yet been approved by the Ministry of Communication when this report was being drafted. Concerning non-metropolitan roads, there has been no significant improvement in the situation described in the Twelfth Implementation Report. A formal complaint was lodged in 2006 on the basis of an alleged breach of the principles of transparency and non-discrimination. The Commission services are looking into the matter.

THE CONSUMER INTEREST

Tariff transparency

Several new obligations on tariff transparency have been introduced. For billing purposes, premium rate services traffic must be separated from fixed/data traffic and the main components for fixed and mobile traffic must be clearly indicated. Information given to users by operators has also been improved.

Universal service

Pending the designation of the universal service provider, the incumbent continues to provide the universal service.

The scope of the universal service includes access at a fixed location, public payphones and some specific conditions for disabled and low-income users. The latter include a 50% discount on the monthly rental fee for low-income users and for some users belonging to special social classes, and exemption from the monthly rental fee for users who are hearing-impaired. Furthermore, AGCOM introduced two important measures for disabled users (outside the scope of USO service) to be provided by all mobile and internet service providers: low prices for SMS for users with hearing impairments, and 90 hours/month free internet service for blind users.

AGCOM has set up a complex, detailed evaluation system of the net cost for universal services (with an audit held by an independent third party). Due partly to the complexity of the evaluation process, the last approved net cost is for 2003. For subsequent years the net cost will be calculated on the basis of a new methodology, still under approval.

Directory services and directory enquiry services

Mobile operators apply the wholesale price ceiling for mobile call origination to directory service numbers set by AGCOM in 2006 (provisional measure under Article 7(6) Framework Directive). Consumer associations have claimed that retail prices have not substantially changed. On the other hand, directory enquiry service providers maintain that the reduction in wholesale mobile access charges only allows them not to sell under cost. According to them, current retail prices are in line with other EU Member States.

In July 2007, AGCOM solved a dispute between two directory service providers and the incumbent, imposing the application of the reference offer as of 1 January 2007, for third party billing. More recently, the incumbent increased the prices of some components of the interconnection that would constitute a significant burden on service providers. AGCOM was intervening on this matter when this report was being drafted.

Number portability

Mobile number portability has been successfully applied since 2002. So far, almost 14 million mobile customers have ported their numbers, which is the largest number in Europe.

AGCOM had to intervene in 2007 to solve the problem of long waiting lists for mobile number portability, of up to 45 days during the first quarter. At the end of 2007, AGCOM increased the number of numbers ported per day from 9 000 to 12 000 for the two biggest operators. The capacity of the remaining operators has been maintained at 9 000, subject to an increase to 12 000 if necessary. The Commission services are looking into this matter.

The new regulation on "migration procedures" is expected to make fixed number portability between alternative operators cheaper and more efficient. However, the measure has not yet been implemented, because of the lack of agreement between operators, for which AGCOM intervention has been requested. The Commission services are looking into this matter.

Consumer complaints

For the first time, call centres have been the subject of regulation by the Personal Data Protection Authority, to ensure correct use of sensitive data for marketing purposes. AGCOM has also defined a minimum set of quality indicators for call centres.

In 2007 AGCOM approved a new regulation for out-of-court dispute settlement in order to speed up procedures, limit delaying tactics by operators and simplify requests for conciliation. Furthermore, regional public bodies for out-of-court dispute resolution (CO.RE.COM) were given the power to issue binding decisions. To increase transparency, from 2007 all dispute resolution decisions are published on AGCOM's website. During 2007 AGCOM imposed fines of €5 million (compared with €3 million in 2006).

Activation of non-requested services (including carrier pre-selection) remains one of the most common consumer problems in Italy, although the new regulation on distance contracts has started to produce positive results. About 650 complaints were lodged with the Data Protection Authority in 2007 on this issue and 105 administrative penalties were imposed (45 concerned unsolicited activation of carrier pre-selection).

A great number of violations of the transparency obligation for premium rate services have been reported. For this purpose, in 2007 AGCOM introduced an obligation to provide selective call barring free of charge for satellite and premium rate service numbers.

European emergency number 112

The Commission has referred Italy to the European Court of Justice because caller location information from mobile calls is not available to authorities handling emergencies. The new "112 plan" that would allow mobile caller location has been delayed and the testing phase has not yet started. The Commission services are also examining the procedures put in place in Italy for the handling of 112 calls when it involves emergency call centres of different national emergency services.

Data protection

Data retention is currently regulated by a number of successive measures adopted by AGCOM, the Personal Data Protection Authority, the Ministry of Communication, the Ministry of Justice and the Ministry for Internal Affairs. In some cases this has led to overlapping requirements imposed by different authorities. Telecom operators would like better coordination to produce clearer and more consistent legislation on the matter, avoiding unnecessary financial burdens.

The Italian Data Protection Code states that operators must retain telephone traffic data for 24 months; this period can be extended by another 24 months in the case of organised crime or terrorism. Internet traffic data (excluding content) must be kept for 12 months. However, a subsequent "anti-terrorism" government decree obliges telecom operators to store all traffic data as of July 2005 until 31 December 2008.

Following a series of inspections at telecom operators' premises, the Personal Data Protection Authority adopted a new decision on the rules to be followed by telecom operators on the retention of telephone and internet traffic data for the purpose of judicial proceedings. At the time of drafting of this report, Italy had not yet transposed Directive 2006/24/EC on telecom data retention.

CYPRUS

INTRODUCTION

Despite ongoing investments in alternative infrastructure, competition on the electronic communications market remained limited in Cyprus in 2007, characterised by a very strong market position of the 100% state-owned incumbent operator in the fixed, mobile and broadband markets. Broadband penetration is still low. Efficient granting of rights of way to enable network rollout is still a key issue for alternative operators, in both the fixed and the mobile markets.

Following market analysis, new remedies were imposed in 2007 on operators with SMP, such as the Wholesale Line Rental ("WLR") reference offer. SMP operators' fixed retail prices have also been capped. The impact of these regulatory measures on the market, however, still needs to be seen. A national broadband strategy is still not available.

REGULATORY ENVIRONMENT

Main regulatory developments

2007 saw a number of developments with regard to the regulatory approach adopted by the NRA. For example, the Office of the Commissioner for Electronic Communications and Postal Regulation ("OCECPR") implemented the measures resulting from the market analysis in 2006 following public consultations carried out by the OCECPR on WLR, LLU (revised) and Bitstream.

The constantly growing market shares of the second mobile network operator ("MNO"), the efforts made by public authorities to address rights of way issues, the practical introduction of certain remedies and the take-up of triple-play services stand out as positive developments in 2007. On the other hand, broadband penetration is still low and a national broadband strategy is still not available.

Moreover, by a decision of 5 December 2007, the Supreme Court of Cyprus ruled that all decisions of the Competition Authority taken in the past four years are null and void, as one of the board members was also the mayor of a district in Nicosia during that same period. This development raises concerns of legal certainty with regard to decisions related to the electronic communications sector.

Organisation of the NRA

In Cyprus, the main regulatory tasks continue to be carried out by the Department of Electronic Communications of the Ministry of Communications and Works (DEC) (competent authority in spectrum management) and the Office of the Commissioner for Electronic Communications and Postal Regulation (OCECPR) (competent authority for all other regulatory tasks).

While concerns were raised by market players about the length of dispute resolutions, no dispute resolution was requested in 2007. However, the OCECPR acted as a mediator or coordinator in several cases.

Appeals against the DEC's and the OCECPR's decisions are addressed to the Supreme Court. Decisions adopted during the appeal procedure stand. However, alternative operators regret that a large number of the decisions of the OCECPR are systematically challenged by the incumbent operator, which has the obvious effect of reducing legal certainty and predictability in the market.

Decision-making

As the OCECPR completed the analysis of all markets listed in the Recommendation on relevant markets in 2006, with the exception of the wholesale international roaming market, and as the Roaming regulation[68] was adopted, the European Commission closed the relevant infringement proceedings against Cyprus in October 2007.

All the markets analysed are considered to be non-competitive and final remedies have been imposed in markets where SMP was found, with the exception of broadcasting transmission services, where the OCECPR applied the three-criteria test and concluded that the wholesale market for broadcasting transmission services is not susceptible to ex ante regulation.

MARKET AND REGULATORY DEVELOPMENTS

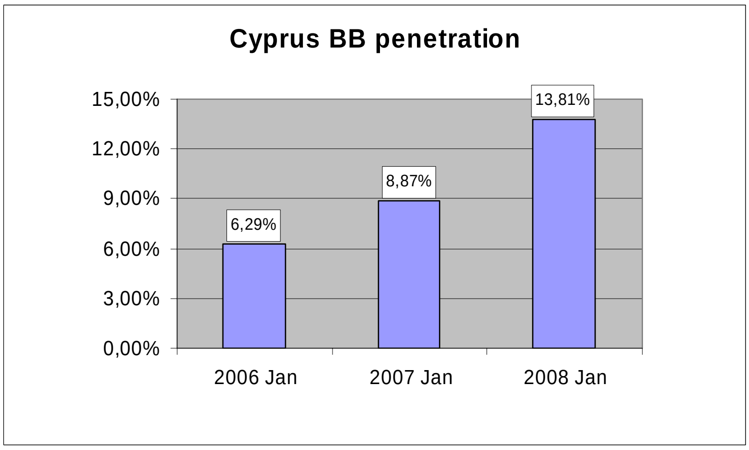
Investment in the Cypriot telecommunications networks totalled €77.03 in 2006, of which the incumbent, the alternative operators and the MNOs invested €32.52 million, 0.6 million and €30.81 million respectively, while the telecommunications sector in Cyprus generated €438.21 million in revenues during the same period.

The Cypriot e-communications market is still in transition from a monopoly to a competitive situation, as the incumbent's still dominant market share in the fixed, mobile and broadband markets demonstrates. In an increasingly convergent world it is regrettable that the market has been slow to open, as reflected in the slow take-up of broadband services in the absence of a comprehensive national broadband strategy.

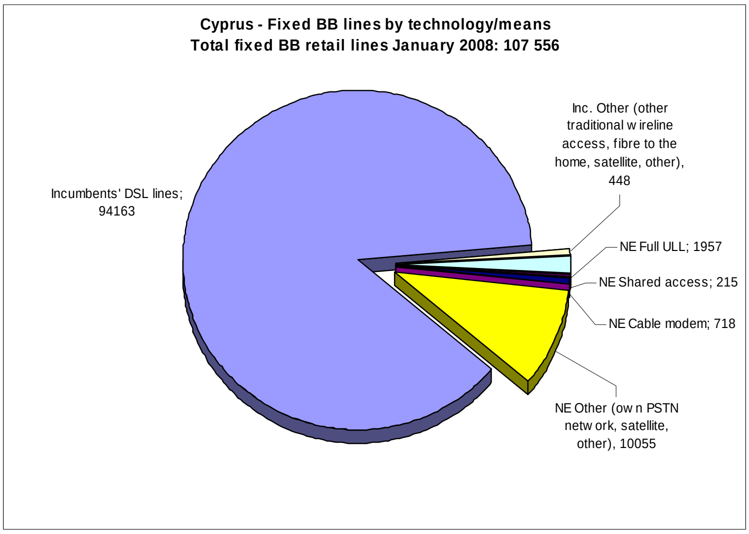
Broadband

Market situation

Following 8.87% broadband penetration in Cyprus in January 2007, the figure in January 2008 is 13.81%. Notwithstanding rapidly increasing broadband penetration, this figure is still relatively low and below the EU average.



68 Regulation (EC) No 717/2007 of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC (OJ L 171 of 29 June 2007, pp. 32-40)



The incumbent operator's broadband market share is 88%,[69] which clearly shows a strong dominance on this market. In addition, there is no real platform competition as DSL is the main technology for broadband services for the time being.

Forthcoming auctions of BWA and DTT licences in 2008 are expected to change this situation. The incumbent's broadband operation is mostly concentrated in the main cities rather than in the countryside. Triple-play services are offered by the incumbent and one of the alternative operators.[70] This new entrant, the strategic partner of the Cyprus Electricity Authority, owns its own island-wide fibre optic network built on the electricity network and reaches end-users via the sub-loop of the incumbent, but it also intends to roll out its own network to end-users.

A study describing the situation as at 31 December 2006 on broadband availability showed that rural areas in Cyprus are not covered by xDSL and cable.[71]

Regulatory issues

Following its market analysis, in April 2006 the OCECPR renewed the full and shared access obligation on the incumbent's local loop and/or sub-loop in a non-discriminatory and transparent way at cost-based prices. The incumbent is also obliged to publish an RUO. With regard to the wholesale broadband access market, the provision of bitstream access based on the "retail minus" method was imposed on the incumbent operator. Despite this remedy and the availability of the service, no bitstream agreement has been signed so far between the incumbent and the alternative operators.

The 2006 RUO was adopted and published on 29 December 2006. Under the 2006 RUO, the timeframe for unbundling was dramatically reduced from 25 days to 6 days. The monthly rental fee and the connection fee for full unbundled local loops are below the EU average. In this respect, alternative operators complain about the low margin between the incumbent operator's wholesale and retail prices. The number of unbundled local loops had grown very rapidly up to July 2007 and by January 2008 1 957 fully unbundled local loops (compared to 933 in October 2006) and 215 shared lines were reported, in parallel with the 10 019 recently established broadband lines by alternative operators. These developments enable new entrants to start offering their broadband services.

69 Data from January 2008
70 Pure triple-play services are offered only by one of the alternative operators, while the incumbent offers triple play with a combination platform (ADSL & PSTN/ISDN).
71 Broadband coverage in Europe, 2007 survey. Data as at 31 December 2006

Under the NRA's decision of 20 April 2006, the incumbent was required to establish and publish an operational version of the Access Network Frequency Plan (ANFP) to be adopted for its network. Despite this obligation, the final version of the ANFP has still not been adopted. However, this obligation has been introduced in an interim form, following common proposals by all interested operators for the adoption of a hybrid version of the plan, as initially proposed by the obligation of the NRA and a later proposal of the incumbent operator. A final version of the plan will be adopted in 2008.

Mobile markets

Market situation

In Cyprus there are two MNOs, the incumbent with an 88.77% (90% in 2006) market share (in terms of subscribers) and the second MNO with an 11.23% market share (10% in 2006). According to its licence, the second MNO must increase territorial coverage of its network to 75% by the end of 2007. The second MNO was taken over in September 2007 by an entity that bought out the parent company.

Both MNOs have 3G licences and provide related services. In 2007, mobile penetration reached 118.48% (113.6% in 2006), which is above the EU average.

Regulatory issues

Cyprus is one of the rare Member States where the mobile access market has been found not to be competitive and the dominant MNO (the incumbent operator) has been designated as having SMP.

In the absence of mandatory MVNO access,[72] the OCECPR must enforce stringent and effective wholesale regulation to ensure that the two MNOs currently on the market in Cyprus are able to compete at arm's length.

In its comments following notification of the mobile access market, the Commission called on the OCECPR to impose price regulation with regard to national roaming services which the incumbent is obliged to offer to the second MNO. In its comments the European Commission emphasised that the price of national roaming services should be cost-based and allow an appropriate margin between the incumbent's retail tariffs and its wholesale national roaming tariff. The price of national roaming was set by the OCECPR at a level of €0.0214, which the second MNO found to be twice as high as its own calculation. The price component for wholesale national roaming services remains important in Cyprus, as the second MNO has not yet rolled out completely its own network (84.76% in December 2007), notwithstanding its desire to achieve total territorial coverage as soon as possible.

Moreover, it has to be noted that mobile call termination charges in Cyprus are very low (the incumbent's and the second MNO's termination rates are €0.0193/min and €0.031/min respectively, based on asymmetric price regulation). In addition, the fixed-to-

72 It was announced in the auction documents for the second GSM licence granted on 4 December 2003 that the spectrum reserved in the 2003 auction will not be licensed for a period of 5 years or until the new entrant (second MNO) has achieved a market share of 25%, whichever comes first.

mobile prices (2.06 €cents) are the lowest in the EU-27 (average 9.87 €cents). The second MNO published an RIO on 1 January 2007, but no accounting separation obligation applies until its annual turnover exceeds €50 million.

Roaming regulation

Both MNOs are reported to have correctly implemented the Roaming Regulation. The tariffs were set close to the maximum ceilings both for receiving and for making phone calls within the Community.

Fixed

Market situation

In Cyprus, the incumbent operator still has a dominant position in the fixed voice telephony sector. Its market shares in terms of total revenues accounted for 90% of all types of fixed calls and 90% of calls in 2006[73] (91.2 and 86% respectively in 2005) while the overall fixed line traffic volume is in decline. As regards international calls, the incumbent's retail revenues increased by 4% compared to the previous year.

The Minister of Finance, now responsible for management oversight in relation to the incumbent, drew on the revenues accrued by the incumbent. Nevertheless, as it is still not mandatory to return dividends to the State, the incumbent operator cannot be considered to be subject to the normal constraints of business.

The alternative operators provide voice telephony services mainly through carrier selection, pre-selection and access to the Internet through public switched telecommunications networks.

Regulatory issues

Following its market analysis in December 2006, the OCECPR imposed CS/CPS and WLR obligations on the incumbent, thus finally permitting new entrants to have a direct contractual relationship with their end-users and to provide them with only one bill. As an implementing measure of the decision, the WLR price for alternative carriers was set by the OCECPR in July 2007 at 18.44% retail minus + 5 cents. However, no agreement has been concluded so far.

In July 2007, a price cap based on cost orientation was imposed on the incumbent following an analysis of the fixed access market for residential and non-residential customers. This measure, which entered into force on 1 November 2007, should ensure more margin for alternative operators when setting their retail prices for the corresponding services and consequently enhance competition, whereas the incumbent fears that this movement will speed up the churn phenomenon.

The process of carrier pre-selection has improved, but as a consequence there have been allegations that the incumbent operator has launched anti-competitive win-back campaigns for all customers that move to an alternative operator. As a result, the

[73] 31 December 2006

OCECPR inserted a "Subscriber Win-back Code" in the incumbent's 2006 RIO, adopted in October 2006, in order to minimise this kind of market behaviour. Alternative operators claim, however, that this has not been sufficient.

In 2007, the OCECPR designated the incumbent as an operator with SMP in the retail market for the minimum set of leased lines and in the wholesale markets for terminating segments and trunk segments of leased lines. In respect of the latter two, on 1 August 2007, two reference offers for wholesale leased lines were adopted.

Broadcasting

Market situation

In Cyprus, end-users receive broadcasting mainly via analogue terrestrial transmission (88%) and satellite (8%). Nine television channels (seven free-to-air and two pay-tv channels) and 13 radio stations — all with nationwide coverage — are offered via analogue terrestrial transmission. Cable and xDSL each have less than 5% end-user penetration and are in the early stages of development.

Two analogue UHF channels have at the moment been reserved to facilitate the introduction of digital terrestrial television in Cyprus. 2012 was set as the date for analogue switch-off. In the course of 2008, the DEC and the OCECPR are planning to introduce digital terrestrial television network(s), via an auction process, where the UHF frequencies allotted to Cyprus in RRC-06 will be authorised.

Regulatory issues

As mentioned in the 12th Implementation Report, the Cypriot authorities notified the European Commission in September 2006 of a market analysis of and draft measures relating to broadcasting transmission services. The OCECPR excluded cable, xDSL and satellite from ex ante regulation.

Horizontal regulation

Spectrum management

All radio spectrum harmonisation Decisions have been transposed, including the ones from 2006 and 2007.[74]

Despite plans which have been pending for several years, Fixed Wireless Access networks and services do not yet operate in Cyprus. In order to increase competition, the DEC is planning to introduce Broadband Wireless Access via an auction process (jointly with the OCECPR). The auction process should take place in the near future to allow the available frequencies to be distributed that alternative operators need in order to compete effectively with the incumbent operator.

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74 The framework for using the radio frequencies mentioned in Decisions 2006/771/EC, 2006/804/EC and 2007/131/EC, as well as other radio frequencies, is prescribed in "The Radio-communications (Use of Radiofrequencies by Radio equipment that is Exempted from the Obligation to obtain an Authorisation) Order of 2007" (P.I. 264/2007, 22.6.2007), issued by the Director of the DEC.

To enhance communications of public safety services in Cyprus and facilitate the provision of digital PMR services, the DEC and OCECPR launched a public consultation in November 2007 to explore the possibility of introducing TETRA networks.

Rights of way and facility sharing

With regard to the rollout of fixed infrastructure, market players voiced heavy criticism at the slowness with which the required rights are granted and at the different practices employed by the different authorities involved in the licence granting process.

Operators need permits from the Department of Public Works of the Ministry of Communications and Work for major roads under their jurisdiction, or from local authorities (municipalities or district authorities) for all other roads under their administration.

Taking into account the difficulties new entrants are having in rolling out fixed networks, such as the refusal by the relevant authorities to grant rights of way to install facilities on, over or under public property and on roads/highways, the European Commission sent a letter of formal notice to the Cypriot authorities in July 2006 and a reasoned opinion in June 2007.

As a result, the Cypriot authorities made an effort to harmonise how the necessary permits are granted between the competent authorities and to tackle the technical difficulties in granting rights of way. On 31 August 2006, the Council of Ministers adopted the "Code of procedures regarding the acquisition of rights of way in the road network by electronic communications providers" (the "Code of 2006"). This was based on the recommendations of the Technical Committee set up under the supervision of the Public Works Department and composed of representatives of the Ministry of Interior, the Planning Bureau, the Town Planning and Housing Department, the Land and Surveys Department, the Union of Municipalities and the OCECPR. These new policy guidelines on procedures to obtain permits from public or local authorities have been adopted in the form of a Policy Decision of the Council of Ministers. The Code of 2006 sets time limits for the various procedures. The time for the collection and recording of comments, opinions and remarks from the various public services and the provision of the relevant authorisation from the competent authority must not exceed a period of 6 weeks, unless there are special reasons, which must be sufficiently justified. According to the Cypriot competent authorities, applications for the acquisition of rights of way will be evaluated within this period, provided that all the essential documents are attached. The recommendations contained in the Code of 2006 were supposed to be implemented by the end of 2006, as, according to the recommendations, the relevant legislation[75] needed to be reviewed to be consistent with the provisions of the policy framework in the Code of 2006. A Technical Committee consisting of competent public/local authorities and interested operators agreed on technical aspects and technical plans to be applied under

[75] The Regulation of Electronic Communications and Postal Services Law of 2004 (Law No 112(I)/2004), Public Roads Law (chapter 83), Town and Land Country Use Planning Law, Immovable Property (Possession, Registration and Valuation) Law (chapter 224), Department of Lands and Surveys (Fees and Rights) Law (chapter 219), Municipalities Law of 1985 (Law No 111/85), Basic Requirements that must be met by Specific Categories of Products Law (Laws Nos 30(I)/2002 and 29(I)/2003) and Organisation of Roads Streets and Buildings Law

the new procedures, resulting in a progressive implementation of the Code of 2006. Legal amendments were also adopted in July 2007, thereby increasing legal certainty.

As a result, co-location is promoted in the case of existing roads within towns. Underground rollout of fixed line infrastructure on existing roads is examined on a case-by-case basis if co-location is not technically feasible. On new roads special ducts have been dedicated to all operators and the cost will be shared between interested parties.

As regards mobile networks, both the incumbent and the second MNO face significant delays[76] and difficulties in rolling out their mobile networks. Furthermore, most sites in rural areas are Government-owned, and accordingly approval for construction can be a lengthy process which has to be approved both by the relevant Ministry/ies to which the land belongs and by the Council of Ministers.

To tackle existing problems concerning the granting of town planning and building permits for masts and antennas, the Council of Ministers adopted the “Policy and Procedures for the Installation and Operation of Radio-communication Stations with Transmission Capability” (the “Code of 2005”) on 14 December 2005. Under the Code of 2005, the checks for both town planning and building permits should no longer include the verification of exposure to electromagnetic fields. Paragraph 4 of the Code of 2005 states that the maximum time limit for examining applications for town planning and building permits is 6 weeks and, in the case of building permits, applications that have not been examined within the 6-week time limit are to be considered approved.

Finally, radio-communications installations of less than 600 kg or 4 metres in diameter are exempted from the planning permit requirement. As for building permits, an amendment of the Streets and Building Law is under way but it has still not been adopted by Parliament. The draft bill will authorise the Minister of Interior to issue Decrees exempting certain constructions, including masts and antennas, from the necessity to obtain building permits. Other important points of the Code of 2005 will also be covered by the Decree to be adopted after adoption of the draft bill, such as the 6-week rule and in general all the provisions of Paragraph 4 of the Code. Nevertheless, until the requisite legal amendment is in place, the more flexible building permit regime cannot enter into force more than two years after the adoption of the Code of 2005.

In view of the problems the second MNO is having installing its own base stations, the European Commission sent a letter of formal notice to Cyprus in March 2007.

Apart from the slow process of granting the requisite permits and licences for the installation of fixed and mobile networks, operators also face the problem of removing illegally erected masts/antennas. While the incumbent operator has had to remove 5 base stations so far, the second MNO had to dismantle 27 base stations in 2006 and 2007.

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[76] Of the 29 applications that the second MNO filed for building permits between January 2005 and November 2007, five were rejected and a licence was issued for three of them (in one case more than two years after submission of the application). Of the pending applications of the second MNO, five have been pending more than a year.

THE CONSUMER INTEREST

Universal Service

In Cyprus, the last designation of the universal service provider (USP) took place on 18 March 2005 for a period of 3 years. The incumbent was designated for all elements and for the whole territory. The OCECPR, however, received no request to set up a compensation mechanism for the provision of the universal service.

This designation will expire on 11 April 2008, on which date a new universal service provider or providers must be designated by the OCECPR.

Number portability

Number portability was implemented in Cyprus on 12 July 2004 under the supervision of the OCECPR. Number portability is valid for fixed telephony numbers within the same geographical area, for non-geographic numbers and for mobile numbers. Between the implementation of number portability in Cyprus and October 2007, 2 552 fixed and 1 139 mobile numbers were ported. Under a decision of the OCECPR, the time to port numbers was reduced from 14 days to 4.

European emergency number 112

In Cyprus emergency calls are made both to 112 and to 199, the national emergency number. 112 calls are diverted to the appropriate Police Department for further action. Emergency operators are required to handle calls in Greek and English and interpreters may be called upon.

In response to the infringement proceedings initiated by the European Commission in April 2006, the Cypriot authorities ensured that caller location information was available from both fixed and mobile networks in Cyprus. Consequently, the infringement proceedings were closed in September 2006.

Some operators have recently reported that 112 caller location information cannot be effectively transmitted to the competent emergency authorities. The Commission is looking into this matter.

Must-carry

In Cyprus, no must-carry obligation is imposed on operators.

Data protection

The Data Retention Directive was transposed by Law 183(I)/2007, which was published on 31 December 2007.

LATVIA

INTRODUCTION

Competition intensified in the Latvian electronic communications sector, and consumer prices dropped in 2007 despite the general inflation rate, which exceeded 14% at the end of the year. Broadband penetration has risen rapidly and a regional development project was launched to improve access to broadband in rural areas. A notable development, which could lead to significant market and competition changes in the future, was the launch of discussions on the privatisation of the remaining government stakes in the fixed incumbent and in one of the two established mobile network operators.

On the regulatory side, measures were taken to complete the introduction of number portability. The Latvian NRA also completed the first round of market analyses and imposed remedies in a number of markets that had been reviewed previously. Other major developments in 2007 concerned universal service, administrative charges and fees, procedures of granting rights of way and caller location for calls to the European emergency number 112.

REGULATORY ENVIRONMENT

Main Regulatory developments

One of the major issues for the Latvian NRA in 2007 was the universal service. In particular, for the first time it received and confirmed the universal service provider’s request for compensation. Preparations were also started to establish a specific universal service compensation mechanism. In the field of financial regulation, the Latvian authorities proposed the introduction of new State duties on the use of radio frequencies and numbering resources, which gave rise to an active debate among stakeholders. They also developed and launched at the end of the year a system to provide emergency services with caller location information for 112 calls from mobile telephones. Earlier in November, the Commission had decided to refer Latvia to the Court of Justice on this issue.

Following the completion of the first round of market analysis with the notification of the broadcasting transmission services market in October, the Commission closed, in December 2007, the infringement proceeding against Latvia concerning market analysis. A related infringement proceeding concerning inadequate transposition of the notification mechanism, on the other hand, was pursued by the Commission, since the latest amendments to the Electronic Communications law, passed in May 2007, only partially addressed the transposition problems identified by the Commission.

These amendments to the Electronic Communications Law also introduced changes as regards acquiring rights of way and clarified the rules concerning number portability for pre-paid mobile customers, as a result of which the NRA issued new regulations in October on number portability. Accordingly, although with a significant delay compared to post-paid subscribers, number portability will also be introduced in Latvia for pre-paid customers as from 1 February 2008.

Organisation of the NRA

The Latvian NRA, the Public Utilities Commission (PUC), is a multi-industry regulator responsible for electronic communications, postal, energy and railway services. The industry representatives generally recognise the independence of the NRA, the competence of its staff and its capacity to exercise regulatory tasks in the field of electronic communications. In 2007, the NRA was expecting a further extension of its status through amendments to the Constitution, which were being prepared and discussed in Latvia with a view to providing for an explicit Constitutional regulation of certain State institutions, including the PUC. One of the consequences of its wider multi-industry responsibilities is that the NRA does not distinguish, in the annual accounts that it publishes, its specific administrative costs relating to the regulation of the electronic communications market.

A hindrance to effective implementation of the NRA's statutory tasks is the failure of numerous electronic communications to provide market data. Although many market players would like the NRA to publish more of the market data that it gathers from operators, there is also a widespread practice among undertakings to mark their data submissions as confidential, which prevents their publication. Discussions are under way between the NRA and telecoms associations on this issue, including proposals to define a certain set of market data that will be considered public.

Decision-making

The industry representatives generally welcomed the practice of the NRA of organising public consultations on proposals and draft decisions. In the case of public hearings, the NRA publishes their conclusions and, in the case of written consultations, the NRA publishes the submissions of contributors. Several market players pointed out in this regard that they would also like the NRA to provide feedback on the submissions and proposals made in the framework of written consultations, which would further improve the consultation process.

Moreover, the issue of public consultations was raised in relation to the work of the Ministry of Transport, which is in charge of preparing Government decisions that may have great significance for market players, such as changes in the national frequency allocation plan or in relation to charges and fees. In particular, it was noted that the Government Regulations of September 2007, which revised the tariffs of charges applied to electronic communications undertakings by the Electronic Communications Office, were prepared by the Ministry of Transport and passed through the Cabinet under the accelerated decision-making procedure, which excluded public consultation. Previous Government Regulations, which regulated these tariffs, had expired in August 2007, and there obviously was a need to enact new Regulations quickly in September since a legal vacuum had emerged in this area. However, it would appear that better planning of this regulatory activity could have obviated the need to apply accelerated procedures in this sensitive matter, which caused negative reactions on the part of the industry. More generally, the Latvian associations of electronic communications undertakings appear to be willing to make an active contribution to the discussion of proposals and initiatives in this area, and a constructive dialogue with the industry would be facilitated by the implementation of more streamlined consultation procedures by the State authorities responsible.

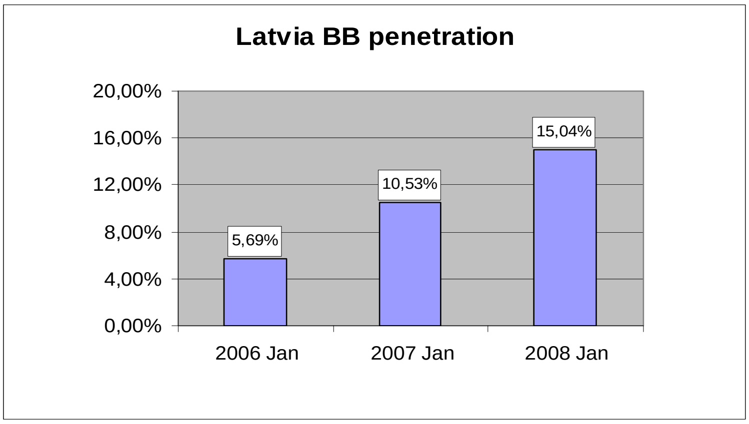
A draft law was presented in 2007 to amend the dispute resolution procedures of the NRA. It is intended that the parties to the dispute would no longer be able to appeal against the dispute resolution decision of the NRA to the court, but instead would be given the option, should they not be happy with the NRA decision, of bringing their case to court for retrial between themselves. The Commission will follow closely the development of this proposal in the light of the regulatory framework requirements.

MARKET AND REGULATORY DEVELOPMENTS

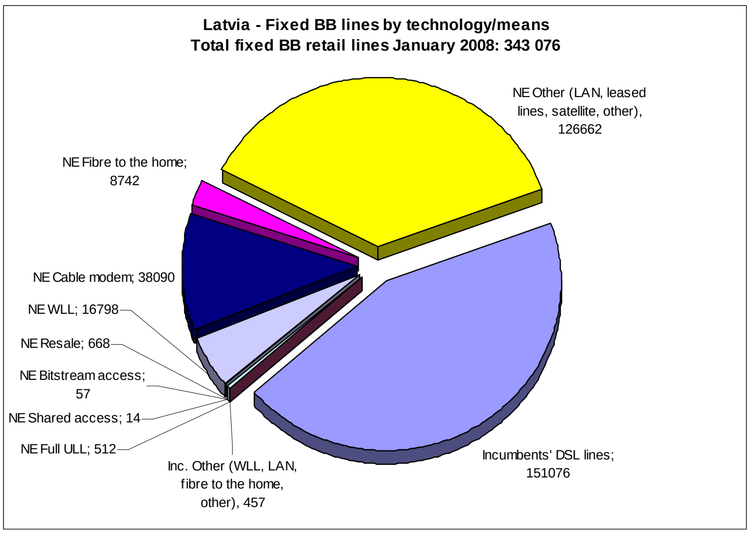
The total turnover of the Latvian telecommunications sector was about €671 million as at 31 December 2006, revenue from the fixed markets being €123 million, and from the mobile markets €266 million. The total value of tangible investments in telecommunications networks was more than €80 million, including about €43 million invested by the fixed incumbent, €1.4 million invested by alternative operators and €40 million invested by mobile operators.

Broadband

Market situation



Thanks to the continuing strong growth during 2007, Latvia's broadband penetration rate increased by about 4.5 percentage points to reach 15.04% in January 2008 (compared to 10.53% in January 2007 and a growth rate of about 4.8 percentage points in 2006). Although the gap is reducing, Latvia's broadband penetration remains below the EU average, which increased by 3.7% percentage points to reach 20.0% in January 2008.



The fixed incumbent's broadband market share remained stable during 2007 at about 44%, which is close to the EU average of 46.3% in January 2008. It ranges from a relatively small share of 15-20% in Riga, which is due to the significant infrastructure-based competition, and a much stronger 80-85% presence outside the capital, where the incumbent's DSL lines remain the dominant infrastructure. The main broadband competitors are Ethernet and cable operators, which were engaged in active consolidation with a number of reported acquisitions in 2007. A regional development project is currently being implemented in Latvia to improve access to broadband in rural areas. The selection procedure was won by a CDMA mobile network provider, which would provide a minimum connection speed of 256/128 Kbps. There is a significant difference between broadband availability in urban and rural areas. For example, as at 31 December 2006, DSL coverage in rural areas was 37% compared to 72% nationally, and there was no cable coverage in rural areas compared to 50% cable coverage nationally.[77]

The offer of converged bundled services by operators is expanding, including the fixed incumbent's IPTV service.

Regulatory issues

Following the 2006 market analyses, the NRA imposed remedies on the fixed incumbent concerning the minimum set of leased lines market and the wholesale unbundled access market, the wholesale broadband access market and the wholesale terminating segments of leased lines market. The remedies communicated to the Commission and imposed on the fixed incumbent concerning the minimum set of leased lines market were transparency, the obligation to publish a reference offer, price control and cost orientation and accounting obligations. In the other three markets, in addition to the remedies referred to above, the NRA also imposed non-discrimination and accounting separation remedies. In consequence, the fixed incumbent published reference offers in 2007 for wholesale unbundled access to the local loop, wholesale broadband access and terminating segments of leased lines.

The fixed incumbent's wholesale access business is still negligible. The lack of demand for local loop unbundling (LLU) is explained by the fact that it is easy and cheaper for alternative operators to duplicate infrastructure. Some alternative operators were of the opinion that the wholesale price for LLU and leased lines was too high to build a viable business case under the conditions prevailing in Latvia. While the monthly average total cost for full LLU in Latvia is below the EU average, the cost in the case of shared access is slightly above the EU average. On the other hand, some companies had shown interest and were negotiating the purchase of the fixed incumbent's wholesale broadband access product.

The lack of demand for wholesale products is also attributed by some market players to the particularity of the system of turnover charges (regulatory fee) applied by the NRA to cover its administrative costs. Under this system, the regulatory fee, which does not exceed 0.2% of the undertaking's turnover, applies to the wholesale product twice – both when the wholesale service is provided and when its cost is included in a retail product. However, according to the NRA, undertakings purchasing wholesale services, the cost of which is passed on to their retail customers, have the right to discount their wholesale costs from the amount subject to the regulatory fee. This issue therefore appears to be causing confusion and should be clarified between the NRA and the undertakings concerned.

[77] IDATE report from October 2007: Broadband coverage in Europe

Mobile Markets

Market situation

The existing duopoly in the Latvian mobile market persists as the market shares of the three GSM/UMTS mobile network operators (MNOs) did not change significantly over the last year. This can be explained by the maturity of the market, where market shares can only be expanded by taking customers from competitors (in 2007, the mobile penetration rate increased to 140%, which is one of the highest in the EU, up from 123.3% in 2006). Even though number portability is available and free of charge both between mobile operators and for customers switching providers, its take-up remained limited. One of the reasons advanced is that attracting competitor's customers is complicated by a significant difference between on-net and off-net call retail tariffs. It has to be taken into account, however, that so far number portability has only been available for Latvian post-paid mobile customers.

The 3G networks of all three Latvia's GSM/UMTS operators currently cover about half of the population, as required under the relevant licences. All three MNOs are also working to expand the coverage and capacity of their 2G networks. Thanks to the greatly extended coverage of the new entrant's network, the issue of national roaming is no longer on the agenda.

Regarding revenues, the data stream is growing since mobile broadband products can successfully compete with xDSL. There is competition in mobile broadband speeds that go up to 7.2 Mbps. Mobile TV is also being tested.

As regards mobile virtual network operator (MVNO) activity, it is generally recognised that their prospects in the Latvian market are not too bright since they have to compete with the highly developed prepaid business of the MNOs themselves. The largest Latvian MVNO was acquired in 2007 by its network provider, one of the two established MNOs. The deal was approved by the Competition Council in May 2007, subject to certain conditions. In consequence, it is now only the new entrant that has several independent MVNOs working on its network, the latest addition being one of the largest cable providers.

Regulatory issues

In 2007, following an additional market analysis, the NRA imposed transparency and non-discrimination remedies on the new mobile entrant in the wholesale mobile voice call termination market. A more extensive range of remedies, including price control and cost accounting obligations, were imposed on the two established MNOs earlier in 2006; one of these MNOs has appealed against the decision. In addition, the appeal launched in 2005 by one of the established MNOs against an earlier decision of the NRA, which imposed price caps on termination rates of the fixed incumbent and both MNOs of the time, is also still pending. In June 2007, a district administrative court found the decision of the NRA to be unlawful. An appeal against this decision is now before the second court instance – the regional administrative court. The mobile call termination rates, which are lower than the EU average, have not changed in Latvia over the last year and have remained asymmetric. GSM spectrum re-farming is not on the agenda for the moment.

Roaming

Both the Eurotariff and transparency requirements of the Roaming Regulation were implemented on time by Latvia's mobile operators.

Fixed markets

Market situation

In fixed voice telephony, the incumbent’s market share was still above 90% in December 2006, both by retail revenues and by volume of traffic, and had remained practically unchanged compared to December 2005. In rural areas, the fixed incumbent is co-operating with the CDMA mobile network provider to digitalise telephone lines. Carrier pre-selection (CPS) services are being provided for international calls by a number of undertakings.

Regulatory issues

Following the 2006 market analyses, the NRA imposed remedies on the fixed incumbent in retail access and call markets. The remedies imposed on the fixed incumbent in these markets were carrier selection and CPS and price control and cost accounting obligation. In addition to these obligations, the fixed incumbent is also subject to the accounting separation obligation, which is generally imposed by the Law on the Regulators of Public Utilities.

Broadcasting

The deadline for the introduction of digital broadcasting is 2012, but it is expected to happen earlier. In October 2007, the PUC notified the European Commission of its analysis of the broadcasting transmission services market, thus completing the first round of market analysis. This market analysis was based on the findings of the Competition Council in a case concerning the abuse of a dominant position by a dominant player in the broadcasting market. The NRA did not impose ex-ante regulation in this market, considering competition law remedies under the decision of the Competition Council to be sufficient.

Horizontal regulation

Spectrum Management

The NRA is responsible for the management of radio frequency resources for commercial use in telecommunications and it assigns the rights of use to specific frequency bands to undertakings (except for radio and TV broadcasters, which receive their rights of use from the National Radio and Television Council). The Latvian frequency allocation table was updated in March and December 2007 in accordance with the Commission’s radio spectrum harmonisation Decisions 2005/928/EC, 2005/50/EC, 2004/545/EC and 2005/513/EC. Commission Decisions 2006/771/EC, 2006/804/EC, 2007/90/EC, 2007/98/EC and 2007/131/EC still need to be implemented.

In June 2007, the NRA issued a decision on the rights of use to radio frequencies, which deals with the grant, extension, withdrawal and transfer of rights of use. The assignee may ask for its rights of use to be transferred to another specific undertaking; the decision is at the discretion of the NRA. The NRA organised a number of selection procedures last year for granting rights of use to radio frequencies, in particular in the 10.5 and 33 GHz bands. On a number of occasions it has also withdrawn rights of use for frequency bands that have not effectively been used by assignees, in particular in the 900 MHz band and 450 MHz band. In 2007, preparations were started for the introduction of new State duties on the use of radio frequencies and numbering resources. These draft measures are giving rise to active debate in the market, and the Commission will closely follow future developments.

While individual rights of use for radio frequencies are assigned by the NRA, technical implementation matters are the responsibility of the Electronic Communications Office, a State Stock Company supervised by the Ministry of Transport, which licenses the installation and putting into operation of radio equipment and ensures electro-magnetic compatibility. The Office applies administrative charges for these activities, which make up a major share of the overall charges imposed on electronic communications undertakings.

The specific legal status of the Office appears to have created some confusion in the electronic communications market. Thus, in 2007 the Competition Council examined a case brought by an MNO, which alleged abuse of a dominant position by the Office in the provision of its electromagnetic compatibility assurance services. The Competition Council found that the Office exercised public functions with regard to the management of radio spectrum and numbering and could not be considered a market player. In addition, the Competition Council noted that the Office should act in conformity with its public status and that tariffs for its services should be objectively justified, based on costs, transparent, non-discriminatory, proportional, and determined according to a single and clear methodology.

Rights of way and facility sharing

No significant administrative problems were reported by operators regarding the acquisition of rights of way. In the May 2007 amendments to the Electronic Communications Law the Electronic Communications Office was given new responsibilities as regards rights of way. The Office would review and decide on technical and building projects, would grant or refuse or withdraw building permits for the rollout of electronic communications networks and would monitor compliance with the relevant regulations. A number of secondary legal acts still needed to be amended for the Office to start implementing this new function. The Office is expected to be the sole permitting authority for authorising projects not involving construction works, while in the case of rollout projects involving construction works it will be the Office and the local authorities that issue permits.

Concerns were expressed in this regard by some market players, who feared that involvement of the Office would slow down the procedures for acquiring rights of way and would increase their costs because additional charges may be introduced. It thus remains to be seen what the consequences of implementing these new rules on rights of way will be.

THE CONSUMER INTEREST

Universal service

The current make-up of the universal service (US) in Latvia consists of directory services, connection to the network at fixed location, social tariff, discounts to persons with disabilities and provision of public pay telephones. In 2007, the designated US service provider, the fixed incumbent, requested compensation for the first time of its net costs for the provision of the US in 2006 in the amount of approx. €2.6 million. The NRA found an unfair burden and confirmed the request for compensation in October.

The May 2007 amendments to the Electronic Communications Law provided that a specific mechanism for the compensation of US net costs should be set up by the Cabinet of Ministers and that compensation would be paid from the State budget before such a mechanism is established. A working group with the participation of market players was set up to deal with the matter. It was intended to devise a single compensation mechanism for the US obligations in three industry sectors regulated by the NRA – electronic communications, post and electricity, which should be operational as from 2010. The introduction of a US net costs compensation mechanism will be a significant test of the Government's and the NRA's capacity to provide an appropriate solution for the electronic communications sector. The Commission will closely follow future developments in this area.

At the end of 2006, the NRA invited undertakings to apply for the designation as US provider in 2007, although only a few working days were granted to respond, which clearly did not make it easy for applicants to formulate proper applications. As regards US provision in 2008, the NRA did not issue an invitation to apply for designation, considering that it was not feasible in the absence of a compensation mechanism. Instead, the NRA extended the existing designation of the fixed incumbent to provide US until the end of 2008 or until the establishment of a compensation mechanism and a new designation, if that takes place earlier. At the same time, the NRA stipulated that losses incurred though the provision of the connection to the network are not to be included in net costs for the provision of US. It also relaxed, to some extent, the rules regarding maintenance in operation of public pay telephones.

Number portability

The May 2007 amendments to the Electronic Communications Law clarified the rules concerning number portability for pre-paid mobile customers, as a result of which the NRA issued new regulations in October on number portability. Accordingly, although with a significant delay compared to post-paid subscribers, number portability will also be introduced in Latvia for pre-paid customers as from 1 February 2008.

The charge applied between operators for porting fixed numbers (€8.55) is lower than the EU average (€9.69), no charges apply to number porting between mobile operators and porting of numbers is free for the customers of both mobile and fixed operators. Moreover, the beneficiary operator would usually grant certain bonuses to customers switching providers. As of October 2007, 12 533 fixed numbers and 25 944 mobile numbers had been ported in Latvia. In the case of mobile numbers this amounts to 0.81%

of all mobile numbers, which is one of the lowest percentages in the EU, where in total 9.3% of mobile numbers have been ported since the introduction of this facility.

Call routing to ported numbers is provided through a common database established by the industry. In addition, the Electronic Communications Office developed another database for the same purpose at about the same time as the industry database was set up. The authorities explain this duplication of work by long inaction on the part of the industry, which forced the authorities to act in its place to meet the approaching implementation deadlines for number portability. Major operators continued to use the industry database and had no plans to switch to the one provided by the Office. While the existence of two databases serving the same purpose could raise issues as regards efficient use of administrative charges collected from operators, it certainly appears to suggest a failure to coordinate efforts between the public authorities and the industry in this project.

Consumer complaints

The NRA has information of about 150 complaints arising between undertakings and their customers every year, and this number remains stable. It also examines a number of consumer complaints each year concerning the terms of service contracts. In a number of instances, it has found certain contractual terms to be incompatible with the law and has consequently, required the electronic communications undertaking to remedy the situation within a prescribed time limit. In 2007, the NRA established an IT system that allows Internet service providers to test their broadband service quality, which should also be helpful in resolving their disputes with consumers. Some market players have cited overlaps in the dispute resolution activities of the NRA and the Latvian Consumer Protection Centre, which, in some instances in the past, have both initiated proceedings in the same dispute.

European emergency number 112

In December 2006, the Government issued Regulations providing for the establishment by the Electronic Communications Office of a central database to transmit caller location information from electronic communications undertakings to emergency services. These arrangements, which involve the Office acting as an intermediary, are designed as an intermediary solution pending the introduction of an integrated emergency call handling platform. There will thus be a need to ensure smooth transition of the currently implemented system to the new integrated emergency call platform, once it is introduced.

In the course of 2007, the new system was first put into operation for the delivery and transmission of caller location information for fixed 112 calls. Its implementation for mobile 112 calls took longer because of the technical complexity and costs involved in ensuring the availability of caller location information from mobile networks, which in Latvia are fully borne by MNOs. The system for providing emergency services with caller location information in relation to mobile 112 calls was finally launched at the end of December.

Data protection

The amendments of May 2007 to the Electronic Communications Law transposed Directive 2006/24/EC on the retention of data. There was an active discussion on the issue of access to retained data, involving telecommunications providers, NGOs, law enforcement institutions as well as the office of the Ombudsman. According to the Electronic Communications Law, the Cabinet of Ministers has to determine the procedure for accessing retained data but it had not been enacted by the end of 2007. As regards e-privacy, the Latvian Code of Administrative Offences was amended in May 2007, providing for an administrative fine to be imposed on undertakings in the case of failure to provide information to data subjects as required by law. The authority responsible for personal data protection – the Data State Inspection – issued its first decision imposing an administrative fine for spamming.

LITHUANIA

INTRODUCTION

In 2007, the trend towards infrastructure-based competition as opposed to service-based competition became more visible. Mobile broadband is picking up, the incumbent is rolling out a next generation network and alternative operators' fibre lines already account for approximately 18% of all broadband access lines. Nevertheless, broadband penetration has remained below the EU average. Both digital terrestrial TV and IPTV services are already available on the market.

Access to the fixed incumbent's network continues to be problematic and, together with several persisting interconnection problem areas, calls for rigorous implementation of the remedies resulting from the completed first round of market analyses. Other issues included the continuing absence of an effective 112 caller location service and the application of must-carry rules to the emerging mobile TV services.

REGULATORY ENVIRONMENT

Main regulatory developments

The national regulatory authority RRT has made many efforts to develop a clear and effective regulatory framework for electronic communications services on time. Nevertheless, quick and rigorous implementation of the remedies imposed as a result of market analyses is necessary to address a number of competitive distortions persisting in several markets. In 2007, consumer-related issues and network and information security received close regulatory attention, too.

Organisation of the NRA

The twelfth implementation report noted a potential issue arising from the fact that the Ministry of Communications (the Ministry) performed functions associated with the control of operators, namely the analogue broadcasting transmission incumbent, and at the same time was represented in the RRT's advisory body (the Council). It also appeared that the same person represented the Ministry both in the RRT Council and on the operator's board. In 2007 the Ministry appointed different representatives to the RRT Council and the board of the analogue broadcasting transmission incumbent. The Commission services will continue to monitor the extent to which the RRT's independence of all electronic communications operators is effectively ensured.

Decision-making

RRT has completed the first round of market analyses. While three appeal cases (two retail access markets, and the wholesale broadband access market) are still pending in the courts, four judgements have confirmed the RRT's decisions.

All the reference offers and standard access agreements have been published. The incumbent has recently published revised reference offers for bitstream access, leased lines and interconnection. However, reference offers are monitored by RRT on an ex-post basis, and they are published as new versions without highlighting important changes. This leaves scope for tightening regulatory supervision somewhat as well as enhancing transparency for alternative operators, especially small operators who often lack the human resources to keep abreast of regulatory developments. RRT would welcome more formal complaints from alternative operators on instances of the incumbent's non-compliance with the remedies imposed.

Ex-post general competition investigations are carried out by the national competition authority (NCA) on the basis of complaints, which have been few so far. Throughout the investigations the NCA cooperates with RRT on such issues as market definitions and economic data. The NCA gives an opinion on RRT's ex-ante market analyses. The RRT's radio spectrum and phone numbers assignment tender commission also includes an NCA representative.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Lithuanian telecommunications sector was €0.76 billion as of 31 December 2006;[78] revenue from fixed markets was €0.15 billion and revenue from mobile markets was €0.36 billion. The total value of tangible investment by alternative operators in fixed telephony networks was €19 million. Mobile operators invested €61 million, while the incumbent fixed network operator invested €21 million.

The number of players in the different markets has not changed significantly compared to 2006. Small alternative operators have taken some steps to consolidate, usually through operational alliances. Bundled offers have reached approximately 31 000 Lithuanian users. A high degree of the fixed-to-mobile substitution remained an important feature of the Lithuanian electronic communication markets in 2007.

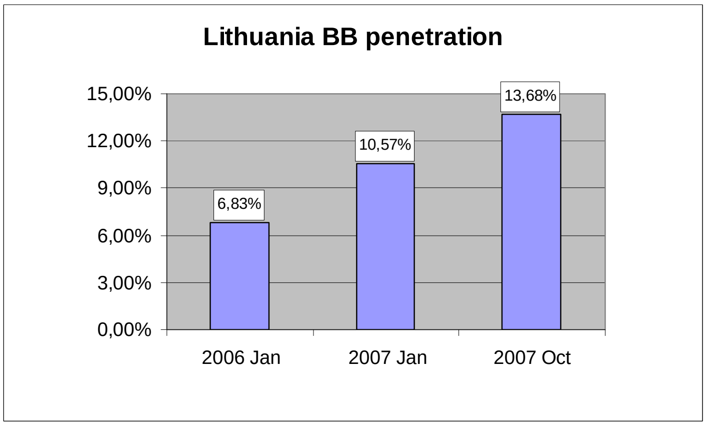
The first stage of development of the publicly funded rural fibre backbone network (called RAIN) is coming to the end. If launched, the second stage could address the last mile for the public sector and active equipment. The RAIN network operator would rent fibre from the fixed incumbent in order to ensure full national coverage. Approximately ten alternative operators could be accommodated by the RAIN network.

In the meantime, the analogue broadcasting transmission incumbent is finalising a fibre ring between five major cities. The fixed incumbent is rolling out fibre to the home. The initial three-year plan covers densely populated areas in five major cities (approximately 500 000 households).

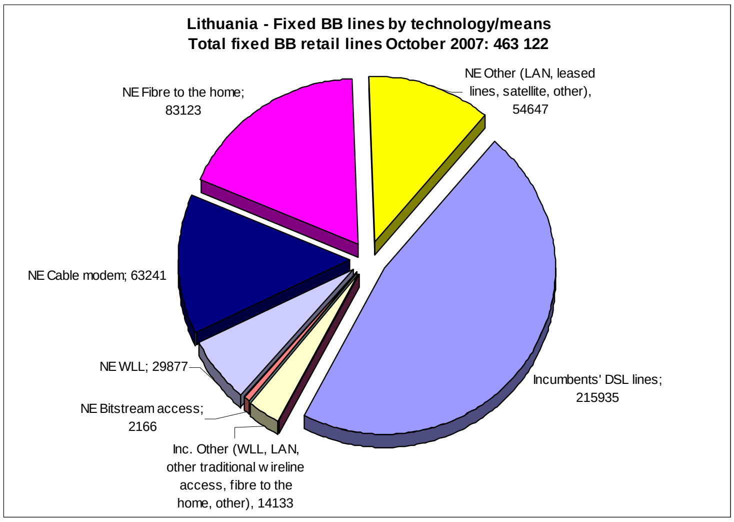
[78] €0.62 billion as of 30 September 2007.

Broadband

Market situation



In October 2007,[79] broadband penetration had reached approximately 13.7%, compared to approximately 9.3% in October 2006. Lithuania is one of the better-performing new Member States, but still lags behind the EU-27 average of 20%. Broadband services are provided through a number of competing types of infrastructure: fibre (approximately 18%), cable (approximately 14%), local area networks (approximately 11%). As much as 53% of broadband lines were provided using non-DSL technology in October 2007, but intra-DSL (digital subscriber lines) competition is virtually non-existent. The broadband market share of the fixed incumbent did not change in 2007 and was close to 50% towards the end of the year (above the EU-27 average at 46.3%). In Lithuania, DSL population coverage in rural areas is 58% (compared to national DSL coverage of 83%), and cable population coverage 2% (compared to national cable coverage of 52%).[80]



RRT has high hopes for wireless technologies as regards growth of broadband penetration in the future. For the time being, the analogue broadcasting transmission incumbent, for example, runs a pre-WiMAX network that combines WIFI and radio links. It has 70% coverage and is used for business services and as a backhaul for residential WIFI.

Regulatory issues (including market analyses and remedies)

As a result of an NCA price squeeze investigation in 2006, a fine close to €1 million was imposed on the fixed incumbent. In 2007, the incumbent launched a wholesale bitstream offer adapted to the provision of internet service to residential customers. Apparently it

79 January 2008 data not available.

80 IDATE report (October 2007): Broadband coverage in Europe. The data used in the report refer to December 2006.

has not proved popular with alternative operators so far (only 2367 wholesale bitstream lines were used by alternative operators in October 2007). Wholesale monthly rental charges for various bitstream products remained among the highest in the EU in 2007.

The first agreement on unbundled local loops (LLU) was signed in September 2006. LLU has been taken up by two alternative operators so far, accounting for approximately 382 wholesale local loops. Monthly wholesale rental charges are €7.75 for fully unbundled loops and €5.5 for shared loops, while the corresponding retail prices of the incumbent appear to be €7.8 for business users and €6.66 for residential users. According to the alternative operators, the use of the incumbent's network on a wholesale basis is not economically viable, because of high tariffs (e.g. the LLU connection fee was one of the highest in the EU in October 2007), reluctance to sell (repeated claims that technical capacity was lacking), and additional costs.

In March 2007 RRT adopted a formal dispute resolution decision on LLU, ordering the incumbent to apply non-discriminatory technical investigation deadlines, not to charge a technical investigation fee, and to give access to the network information system free of charge. The incumbent has appealed against the decision.

Mobile markets

Market situation

The mobile sector has remained the leader in terms of revenue generation, accumulating approximately 47% of total electronic communications revenue. Good price and quality of service competition continued to prevail in 2007. Consumers appreciate free incoming calls in Estonia and Latvia, which, in the latter case, partly deals with the issue of inadvertent roaming. According to data provided by RRT, the combined coverage of 3G (third-generation) mobile networks is now approximately 75% of the Lithuanian population. The mobile penetration rate reached 144% in October 2007. The market shares of the three mobile operators were approximately 41%, 36% and 23% in October 2007.

Regulatory issues (including market analyses and remedies)

A cost model (BU-LRAIC) for mobile termination markets is not yet in place, as the results of the tender for developing the model have been referred to the court. In the meantime, transitional measures are in place, under which operators are required not to apply (price) conditions for the provision of voice call termination services which are less favourable than those applied on 30 September 2004. In practice this implies an average termination rate of €0.10, close to the EU-27 average.

Lithuania has a high degree of fixed-to-mobile substitution, with fixed call origination accounting for "only" approximately 25% of all originated calls. In this situation, any delay in applying remedies would appear to entail the continuation of significant market distortions.

Roaming

All Lithuanian mobile operators complied duly and on time with European Regulation 717/2007/EC on roaming on public mobile telephone networks within the Community.

Two operators chose to set prices at levels slightly below the maximum laid down by the Regulation.

It appears that, for some operators, monitoring foreign partners' wholesale tariffs could involve quite a lot of work because, due to the averaging principle, not all mobile operators reduced the wholesale tariffs from the first day of application of the Regulation. According to RRT, collecting roaming data for the past periods could be challenging.

Fixed

Market situation

The fixed voice telephony income continued to decline in 2007. Only approximately 6% of subscribers used an alternative provider for voice telephony services in July 2007. Alternative operators' activities use a variety of platforms, including fibre and wireless. There were 27 VoIP providers in Lithuania in July 2007.

Regulatory issues (including market analyses and remedies)

The HY-LRAIC cost model for fixed termination on the incumbent's network has been finalised. According to RRT, the use of this cost model should gradually bring the incumbent's fixed wholesale termination rates from the highest in the EU down to the EU average.

The alternative operators claim that fixed termination on the incumbent's network is more expensive for national traffic than for foreign traffic. This difference effectively forces alternative operators to reduce their fixed termination rates to the level of the incumbent's international termination rates in order not to face substantial reductions in foreign traffic. The non-discrimination obligation re-imposed by RRT on the incumbent in the fixed termination market, partly to deal with this issue, has been appealed against.

The issue of higher retail call prices to alternative networks (approximately €0.12 compared to approximately €0.03 for the incumbent's local on-net calls at peak time) remains unresolved, even though it was first raised with RRT by alternative operators in March 2005. Reductions have been insignificant so far. Apparently this creates a margin for the incumbent of approximately €0.09, since fixed termination on the alternative networks costs the incumbent approximately €0.03. Recently RRT again looked into retail markets for fixed local/national telephone services to residential and non-residential customers, mostly in order to address this issue (in the first round analyses RRT had not imposed the non-discrimination remedy in the retail calls markets at all).

Retail offerings by the incumbent on price squeeze terms would appear to be a continuing problem. In order to ensure compliance with the price control remedy in the fixed retail calls markets, RRT will carry out the audit of the incumbent's costs in 2008.

The incumbent has recently introduced a fixed "subscription" fee of LTL 1000 (approximately €290) for national transit to mobile and alternative networks. This fee affects those operators that send low amounts of traffic. Alternative operators also complained that the costs involved in establishing interconnection were shared disproportionately.

Broadcasting

Market situation

Cable networks are partly digitised and serve approximately 10% of population. The fixed incumbent's IPTV product, launched in October 2006, had acquired approximately 11 000 subscribers as of July 2007. IPTV covers approximately 50% of Lithuania, focusing on densely populated areas.

Following a digital terrestrial television (DTTV) trial in Vilnius by the analogue broadcasting transmission incumbent, both this operator and the fixed incumbent are now in the process of rolling-out their DTTV transmission networks across Lithuania, each network allowing for the broadcasting of 20 digital programmes. The programmes have been distributed between the transmission networks by the Radio and Television Commission. The two DTTV transmission operators are using the same technical standards in order to ensure interoperability. In reality the fixed incumbent is using the analogue broadcasting transmission incumbent's towers. The switch-off of analogue broadcasting will start in 2012. The possibility of speeding up the process of switching off analogue broadcasting is under consideration.

Regulatory issues (including market analyses and remedies)

Broadcasters are "tied" by content licences to their transmission service providers: the analogue broadcasting transmission incumbent in the case of analogue broadcasting; the analogue broadcasting transmission incumbent or the fixed incumbent in the case of digital broadcasting. These content licensing provisions would appear to have the potential to cause market distortions.

Horizontal regulation

Spectrum management

The radio frequencies and their respective use regulated by the Commission's radio spectrum harmonisation decisions are included in the Plan on the Usage of Radio Frequencies and in the List of Radio Frequencies/Channels That May Be Used Without an Individual Authorisation, approved by RRT.

In July 2007 RRT launched a tender for the assignment of radio spectrum (3.4-3.6 GHz bands) to operators of public wireless broadband access networks (the "WiMAX tender"). In September 2007 winners of the tender were announced: the analogue broadcasting transmission incumbent, a cable operator and an alternative wireless operator. According to the coverage requirements imposed, they will have to cover three major cities within two years, five major cities within five years (at least 50% of residents of each city) and all the territory within ten years. The results of the tender have been appealed against in court by one of the contenders.

In October 2007 RRT launched a public consultation on allowing the use of spectrum for mobile communication services on aircraft on the basis of the general authorisation.

Rights of way and facility sharing

The incumbent's new network roll-out projects are ductless, therefore do not provide space for co-location. This is explained by the incumbent by the drive to reduce costs. Access to existing ducts remains problematic, in particular due to relatively frequent "use for own needs" denials. There is scope for better coordination of digging works between operators. RRT is reviewing the co-location rules, and new provisions on coordination of digging works will be put in place as a result.

THE CONSUMER INTEREST

Tariff transparency

In October 2007 RRT launched a consumer-dedicated price comparison website. There has also been a change in the provisions applying to consumer contracts: if a consumer wishes to have a credit limit (e.g. to protect himself against excessive calls by children), the operator must provide it.

Representatives of consumer interests noted problems that had apparently arisen in situations where a customer takes a subsidised terminal committing to a two year contract. If the terminal breaks down and cannot be repaired, no compensation is paid to the customer (because the phone was priced at 1 Lithuanian litas) but the contract remains in force.

Universal service

In October 2007 RRT announced an open call addressed to all public electronic communication service providers inviting expressions of interest for provision of universal service or any of its elements without compensation.

Number portability

Number portability is free of charge to end-users and is delivering tangible results: fully operational from February 2006, mobile number portability allowed approximately 184 700 numbers to be ported in 2007, compared to close to 100 000 in 2006. Fixed number portability represented only approximately 11 000 ports in 2007. It takes approximately five days to port a number to another operator.

European emergency number 112

The functioning of the 112 service appears not to be entirely satisfactory in Lithuania. In 2006, an infringement case was opened against Lithuania on the grounds that, contrary to the requirements of Article 26 of the Universal Service Directive, caller location information was not available to emergency authorities in Lithuania for calls made from mobile phones. At the end of 2007 the mobile caller location function was still not available in Lithuania. Nevertheless, the Lithuanian authorities have already put in place a legal framework resolving the contentious issue of financing the investment required for an effective 112 caller location service.

Must-carry

The Commission services are looking into the Lithuanian regulatory framework for mobile TV. In particular it would appear that the must-carry rules (involving six TV channels in practice) are applicable to mobile TV in Lithuania.

Data protection

The Lithuanian authorities are working on a Law on Network and Information Security aiming at ensuring a high level of security of electronic communications. The NRA has created a computer emergency response team (CERT). At the time of writing this report the data retention Directive 2006/24/EC had not been transposed into Lithuanian law.

LUXEMBOURG

INTRODUCTION

Luxembourg progressed substantially regarding broadband penetration in 2007, and competition in mobile markets has produced tangible benefits for consumers and businesses. Long-term competitive conditions are, however, uncertain in view of the incumbent operator's predominance in the fixed and broadband sectors, which are increasingly combined in bundles. A gradual transition to fibre-based networks is taking place.

Against this background, the regulatory landscape has remained relatively stable. Despite considerable efforts by the regulatory authority, several remedies that could promote competition, resulting in more choice and lower prices in Luxembourg, have not yet been applied.

REGULATORY ENVIRONMENT

Main regulatory developments

Overall, there were no major changes in the legislative environment in 2007. Specific legislation concerning rights of way — two *Règlements Grand-Ducaux* — was adopted in April 2007, which allowed the Commission to close infringement proceedings on this matter. Similarly, the Commission closed infringement proceedings concerning the publication of a statement of compliance regarding the incumbent's accounts. However, concerns persisted regarding the lack of effective separation between the regulatory functions and those functions associated with the ownership or control of undertakings providing electronic communications networks and services. In particular, while no rules are in place to avoid interference between the Ministry of Economy that controls the incumbent operator and the Ministry with regulatory functions (the Ministère d'Etat), two officials are currently exercising both regulatory functions in a department of the latter Ministry and management functions for an operator. The Commission has decided to launch infringement proceedings against Luxembourg on these grounds.

Organisation of the NRA

There is a general perception that the NRA, the Institut Luxembourgeois de Régulation (ILR) is acting independently. Some operators have pointed to its lack of resources (altogether fewer than 45 staff for the telecommunications, energy, and postal sectors), in particular to carry out market reviews. The ILR, however, made a significant effort to bridge this gap in 2007, relying to a sizeable extent on external consultancy.

While no specific issues of cooperation between the NRA and the competition authorities have arisen, there is an ongoing perception that the competition authorities lack sufficient resources (there are about four staff for both the Conseil de la Concurrence and the Inspection de la Concurrence) and electronic communications expertise. The NRA submits draft market analysis decisions to the competition authorities for an opinion.

In 2007, for the first time, decisions taken by the ILR were appealed against. The incumbent appealed to the administrative court, in particular against decisions approving the reference interconnection offer (RIO) and setting out terms, and against fixed termination and origination tariffs. This creates a certain level of uncertainty in Luxembourg, particularly in view of the risk of the decisions being overturned.

Decision making

By October 2007, the ILR had completed the few remaining market analyses left to be notified to the Commission, except for the market for broadcasting transmission services. Since then, the market has been removed from the Commission Recommendation on relevant markets, and the Commission has been able to close the infringement proceedings on the matter. Generally speaking, the ILR has imposed a full set of regulatory obligations.

At the same time, alternative operators claim that the NRA should be more proactive where the incumbent operator does not offer specific wholesale products on a voluntary basis (e.g. wholesale line rental and ethernet services).

Despite the market analysis having been conducted, remedies are still missing in key areas such as wholesale broadband access. In a dispute between the incumbent and an alternative operator, the NRA decided in September 2007 to impose upon the incumbent a technically feasible replacement solution for alternative operators affected by the relocation of the Kirchberg exchange.

MARKET AND REGULATORY DEVELOPMENTS

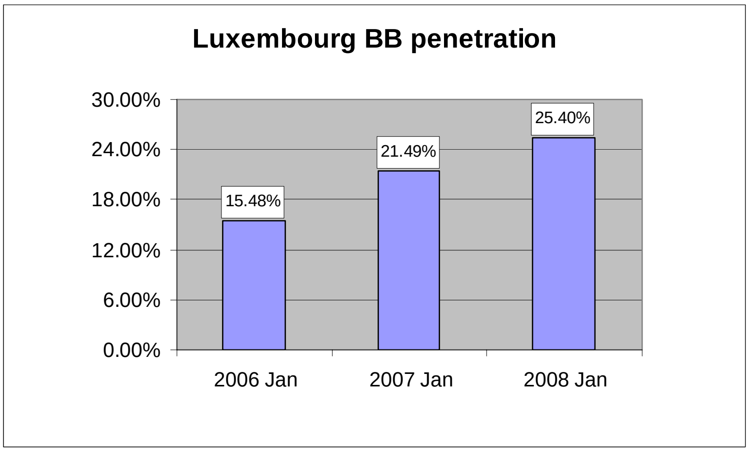
The total turnover of the Luxembourg telecommunications sector was €485 million as of 31 December 2006. Revenue from fixed markets was €237.5 million and revenue from mobile markets was €248 million. The total value of tangible investment by alternative operators in fixed telephony networks was €92 million, while mobile operators invested around €30 million. The incumbent invested approximately €60 million in fixed telephony networks, while alternative operators invested only around €5 million.

Generally speaking, there were no major competitive developments in Luxembourg in 2007. The incumbent continues to control over three quarters of the fixed telephony market and the vast majority of broadband connections. Moreover, it bundles these services together with mobile telephony in an offer which cannot effectively be replicated, in the absence of specific wholesale products. While the takeover of the third mobile network operator by a Belgian mobile network operator (itself controlled by the French incumbent) might open up new prospects for competition in the mobile sector in the medium to long term, the incumbent's mobile arm increased its market share in 2007, according to the ILR.

In the mean time, the state-owned operator created in 2006 to provide dark fibre to other operators has entered into agreements to develop its network, partly using railways. The objective is to provide fibre network and duct access to operators (and universities) from late 2008. While this publicly funded initiative might lead to better connectivity, operators are concerned that it might distort competition. However, no service has been provided yet. As indicated in the previous report, a specific matter of concern is the position of a Ministry official responsible for drafting electronic communications legislation as the president of the operator. The Commission is addressing this independence issue through infringement proceedings.

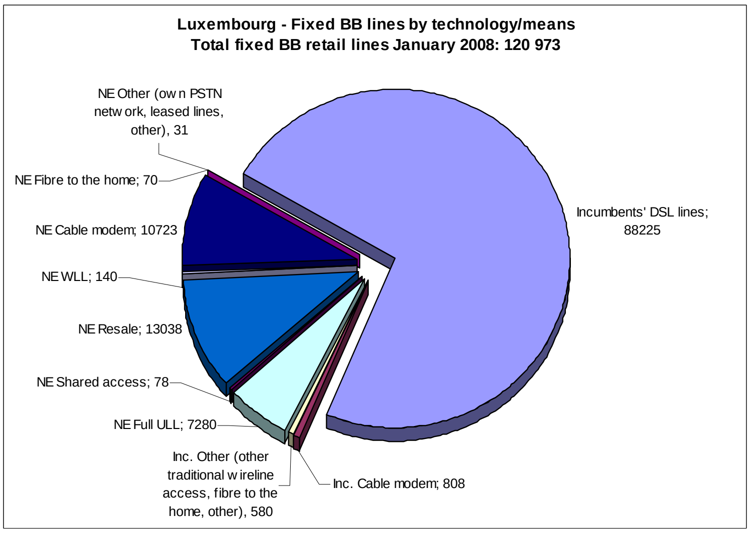
Broadband

Market situation



Luxembourg considerably improved its broadband penetration over the previous year, by 3.9 percentage points, to 25.4% in January 2008, well above the EU-27 average of 20.0%. The incumbent's share of the broadband market, still very high, is slightly lower at 84.9% (including resale of DSL lines) as of January 2008, compared to 85.1% last year. At 15.1%, the market share of the alternative operators (excluding resale DSL lines) is slightly higher than last year. Despite an increase in absolute figures, the number of resale lines has decreased slightly and now accounts for 10.7% of all DSL lines, compared to 11% last year. Luxembourg is also among the top three EU countries with complete national DSL coverage and extensive cable coverage of 70% of the country, almost equally shared between urban and rural areas.[81]

Regulatory issues



The low presence of alternative operators on the broadband market is partly due to the absence of genuine bitstream access. While the incumbent claims that the offer in place is a genuine bitstream offer, alternative operators generally consider it to be a mere resale product which does not allow them to differentiate their products, and they expect the NRA to impose a regulated bitstream offer at cost-oriented tariffs.

81 IDATE report (October 2007): "Broadband coverage in Europe". Data refers to end of December 2006.

This situation has led one alternative operator to offer products based on local loop unbundling (LLU), which has not reached substantial numbers so far (8 017 lines as of July 2007). Alternative operators have difficulties competing with the incumbent for lack of a service level agreement for LLU. The monthly rental price for full local loop unbundling has decreased to €10.75 as of October 2007 compared to €11.73 in October 2006, while the connection fee costs €91.1, which is about twice the EU average (€46) for full LLU connection fees The shared access monthly rental decreased from €4.68 in October 2006 to €3.2 in October 2007 but the connection fee is still very high at €157.4 compared to the EU average of €51 as of October 2007. It follows that very few operators request shared access from the incumbent.

While the incumbent is upgrading its network to fibre, the ILR has obliged it to offer access to physical infrastructure, ducts, an “Ethernet” solution, or any other appropriate solution, under favourable financial conditions, to an alternative operator affected by the relocation of a telecom exchange centre.

Mobile markets

Market situation

As of October 2007, the penetration rate for mobile was 146%. (This is lower than the previous year’s 171% rate due to the methodological changes in data collection in Luxembourg.) The market share based on traffic is 51% for the incumbent, 40% for the second mobile operator and 10% for the third mobile operator. (The market share based on revenue is confidential.) Revenue in 2007 was estimated at €270 million, compared to €247.8 million in 2006. The number of mobile subscribers as of 1 October 2007 was approximately 700 000, with 371 620 post-paid subscribers and 324 859 prepaid subscribers. While prices have remained stable, this relatively competitive situation has prompted operators to launch flat-rate packages to attract customers.

The third mobile operator was acquired in the course of 2007 by the second Belgian mobile network operator, which itself is controlled by the French mobile and fixed incumbent. The first visible consequence of this takeover was the launch of transborder mobile voice and SMS packages which exclude specific roaming charges in Luxembourg, France, and Belgium.

Regulatory issues

The third 3G licence, which had been reallocated in May 2006, was declared void by the administrative court following a competitor’s appeal.

As a result of the expiry of the existing transitional national roaming agreement with the first operator by the end of 2007, the third MNO is expected to rely on its own network from 2008. It remains to be seen whether the revised procedures for obtaining planning permission for mobile masts and antennas will facilitate deployment.

While the ILR has imposed a glide-path for mobile termination rates on the three operators on the market for mobile termination, the market for access and call origination on mobile networks is considered to be competitive.

Roaming

Luxembourg operators implemented the Roaming Regulation in July 2007, i.e. they were among the first operators in the EU to do so. The Roaming Regulation is generally considered to have been well implemented. Tariffs are at the ceiling of the eurotariff.

Inadvertent roaming is a specific issue in Luxembourg, due to the proximity of Belgium, Germany and France. Consumer complaints in Luxembourg are expected to be addressed by operators, which have apparently made efforts to improve network coverage, partly by installing several mobile antennas in foreign territories, e.g. Germany.

Fixed

Market situation

The fixed market did not evolve significantly in 2007. The incumbent, wholly owned by the Luxembourg State, continues to have a strong market share, with over three quarters of traffic (76.1% by call minutes). Revenue market shares are even higher. (The incumbent and alternative operators' revenue market shares in the fixed market are confidential.) Its market share of national calls to mobile, by call minutes, is slightly higher, at 78.4%; for international calls it is slightly lower, at 71.45%.

Regulatory issues

The lack of wholesale line rental (WLR) remains an issue in Luxembourg. In a decision on 2 February 2007 on the fixed retail access markets, the ILR imposed an obligation on the incumbent to offer WLR based on cost-oriented prices from October 2007. While alternative operators considered that the proposed offer provided no viable margin and needed to be accompanied by a service level agreement, the ILR was expected to approve the incumbent's WLR offer in early 2008.

In response to time-consuming procedures for customers that wish to change to a carrier pre-selection (CPS) operator, the ILR has so far suggested that the incumbent put in place an automated system of customer identification. No decision was taken on such a system in 2007.

Broadcasting

Market situation

Cable penetration in Luxembourg is estimated to be above 80%, while satellite penetration is estimated to be below 20%. Very few households receive television via terrestrial means. All but one channel has switched to digital, yet the take-up of digital terrestrial TV is limited. IP-TV is expected to be launched by the incumbent fixed operator in 2008, on the basis of experiments that started in 2007.

Cable is still quite fragmented in Luxembourg. There are approximately 70 non-profit organisations and municipalities having less than 5 000 connections (with the exception of the municipality of Esch-sur-Alzette and Dudelange, which have between 10 000 and 20 000 connections). The three main actors have a combined market share of 60% (in terms of subscribers), and some of them offer double and triple play packages combining television with internet access and/or voice telephony.

Regulatory issues

The Commission has been able to close the infringement proceedings opened against Luxembourg for failure to notify the market for broadcasting transmission services, which is no longer listed in the amended Commission Recommendation.

Horizontal regulation

Spectrum management

Most Radio Spectrum Decisions were not implemented in Luxembourg at the time of drafting this report. The current national legislation on radio spectrum management prohibits any spectrum trading. A new National Frequency Plan, in the form of a Règlement Grand-ducal, was, however, expected to be adopted in early 2008.

While the switchover from analogue to digital broadcasting has almost been completed, no specific debate has apparently taken place in Luxembourg on the distribution of the digital dividend which is generally generated by the use of digital technologies.

Two WiMAX licences were awarded by the Ministry of Communications on 1 August 2007. An additional call for proposals was made in October 2007 for the remaining capacity.

Administrative charges

Some operators were questioning the level of the administrative charges imposed by the ILR based on turnover. A decision of 21 November 2007 lowered the taxation rate based on gross income to 0.4% as compared to 0.5% in 2006.

Rights of way and facility sharing

An important development in 2007 was the adoption in April of two Règlements Grand-Ducaux regarding respectively State motorways and railways, and municipalities' public roads. At the same time, some operators voiced concerns that one municipality was both running a cable network and issuing permits for network infrastructure, including antennas for mobile phones. The Commission services are looking into this matter.

THE CONSUMER INTEREST

Universal service

While there is no designated undertaking with universal service obligations in Luxembourg, the incumbent has been providing universal service on an informal basis.

European emergency number 112

Information on 112 is available via notices in phone books and in payphones and campaigns for citizens are organised on a regular basis. Caller location information is available for fixed networks. For mobile networks, caller location information is available in push mode and the phone number is automatically displayed.

Number portability

Mobile number portability continued to grow in 2006 and during the first half of 2007. There were 47 422 ported mobile numbers as of August 2007, which represents 21 339 numbers ported in one year and about 1 800 numbers per month. By contrast, fixed number portability is quite limited, as only 6 576 numbers had been ported as of August 2007.

Alternative operators and the NRA identified an issue regarding the incumbent's implementation of CPS, namely that it requests the subscriber's bill number before proceeding with the request. The incumbent claims that this measure is justified as it guarantees the identity of the subscriber.

Data protection

A new law on data protection amending the existing law of 2002 was adopted on 27 July 2007. It simplifies formalities and application of the law by companies, associations and professionals. They do not have to notify most current data processing to the National Commission for Data protection (CNPD).

HUNGARY

INTRODUCTION

In 2007, the Hungarian electronic communications market was characterised by significant market consolidation, take-up of mobile broadband services and an increase in innovative services such as IPTV. Despite high mobile and growing Internet penetration rates, the relatively low level of broadband penetration remains to be addressed. Although the number of fully unbundled local loops increased significantly in 2007, it is still very low compared to other Member States in the European Union.

Most of the regulatory progress is due to the results of the market analysis and amended legislation. The NCAH (National Communications Authority of Hungary) has actively helped to improve the technical and financial conditions relating to Reference Unbundling Offers (RUO), relatively low wholesale prices and mobile termination rates reaching symmetry as of 2009.

REGULATORY ENVIRONMENT

Main regulatory developments

In the past two years, the Act on electronic communications has been amended several times, without these amendments being notified to the European Commission as required by the regulatory framework. Operators regret that the two latest major amendments to the Act on electronic communications have been carried out without any consultation of the market. As a result of the adoption of the Act CIX of 2006 amending the Act on electronic communications, the provisions on price setting without a market review have finally been removed; the two price setting secondary laws remain in force, contrary to what was announced in 2005. In July 2007, the Act LXXIV of 2007 on the rules of broadcasting transmission services and digital switchover ("Act on digital switchover") was adopted. Its conformity with the regulatory framework is currently under examination.

Despite positive progress in the market, the presence and consolidation of a large number of alternative operators and considerable activity by the NCAH, the main incumbent still has a strong market position in certain segments of the market (fixed, mobile and ADSL), and the division of the fixed-line market into five local telecommunications operators (LTO) still results in regional asymmetry. However, this asymmetry is slowly diminishing, thanks to the recent consolidation of the market (the number of LTOs decreased from five to three following various mergers in the fixed line market) and in-house integration efforts.

The NCAH developed a firm consumer protection approach in 2007 and made efforts to facilitate the local loop unbundling (LLU) procedure via market analysis, since effective LLU is considered to be one of the key components of competition in the sector.

Organisation of the NRA

The regulatory tasks are divided between the NCAH and the Ministry of Economy and Transport ("Ministry"). The Hungarian State held a 'golden share' in the main incumbent despite the fact that all Hungarian electronic communications networks and service providers are private companies. The Ministry exercised ownership rights in respect of that golden share, which raised doubts as to its independence as stipulated by the Framework Directive. The Commission had launched infringement proceedings against Hungary's golden share regime and the Hungarian Parliament adopted the necessary legal amendment on 16 April 2007, abolishing the special rights of the State.

Following the amendment to the Act on electronic communications at the end of 2006, the NCAH became a government office and received certain powers in general policy-making and spectrum policy.

Regulatory tasks relating to the implementation of the Act on digital switchover are also covered by the NCAH.

Decisions of the NCAH appear to be systematically challenged before the appeal courts, although the number of appeals is on the decrease. Pending appeals may seriously reduce legal certainty and predictability in the market, as operators constantly point out that Hungarian courts are overburdened and final decisions rendered by a second instance court can take 2-3 years in some cases.[82] Some market players are concerned that the appeal courts often take decisions on the basis of procedural issues rather than on the merits of the case.

Decision-making

In 2007, Hungary's major regulatory task was to start the second round of market analysis and to implement the results of the first round of market analysis.

With the notification of draft measures relating to the wholesale market for broadcasting transmission services in November 2007, the NCAH finally notified measures resulting from the last market analysis in the first round.

The NCAH found that there was effective competition in the wholesale markets for transit, trunk segments of leased lines and mobile access. All other markets were found to be non-competitive. The NCAH has taken final measures in all of the non-competitive markets notified in the first round, with the exception of the wholesale market for broadcasting transmission services notified to the European Commission in November 2007.

At the same time, the NCAH has already started the second round of market analysis, and has already analysed all the listed markets with the wholesale market for broadcasting transmission services.

In general, the work of the NCAH in 2007 was considered by market players to have been rather efficient. However, concerns are still voiced as to the non-imposition of

[82] These long-lasting cases are the ones where the NCAH imposed detailed cost orientation remedies

wholesale line rental (WLR) by the NCAH and non-imposition of the obligation to negotiate access with mobile virtual network operators (MVNO).

Market players are concerned about the very short consultation deadline (20 days) set by the law for submitting comments on the draft NCAH decisions, the large number of often burdensome and incoherent data requests from the NCAH and the lack of transparency of certain decisions. More intensive cooperation was observed between the NCAH and the Office of Economic Competition (the NCA) since the NCA takes part in the project management committee for the market analyses.

In general, electronic communications operators are concerned that NCAH decision-making in the course of dispute resolutions is very slow. Nevertheless, in 2007, the NCAH rendered its decisions in all four dispute resolutions within the time limit set by law (45 days, which can be extended once by up to 15 days).

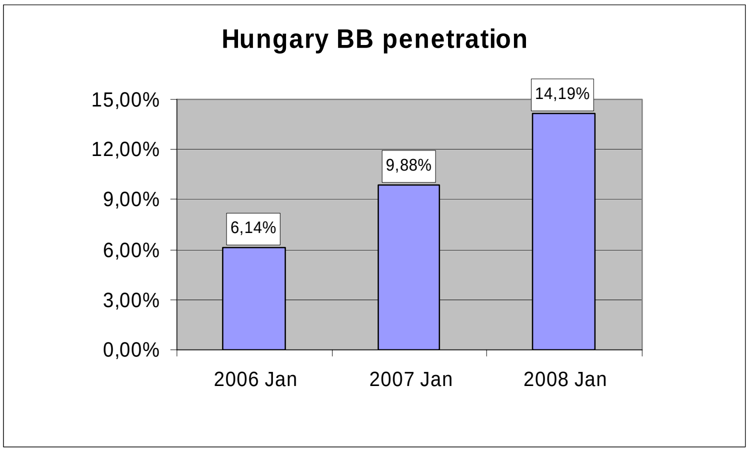
MARKET AND REGULATORY DEVELOPMENTS

Investment in the Hungarian telecommunications networks totalled €175.32 in 2006, of which LTOs, alternative operators and MNOs invested €56.41 million, €34.79 million and €84.11 million respectively; the Hungarian telecommunications sector generated €3 829.28 million in revenues during the same period.

Market players take the view that, with the increasing level of consolidation of the Hungarian electronic communications market and the take-up of triple play and mobile broadband services, convergence of services is the main regulatory challenge in Hungary.

Broadband

Market situation

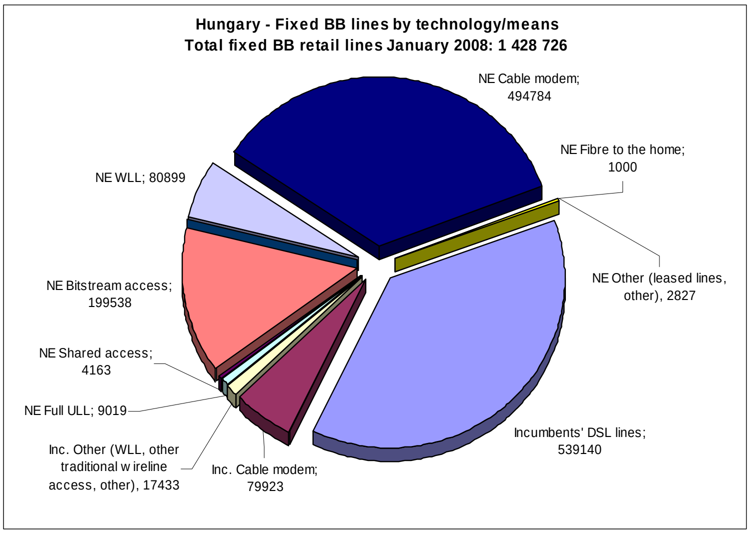


Broadband penetration increased to 14.19% in January 2008 (from 9.88% in January 2007), which is still below the EU-27 average, whereas Internet penetration exceeded 39% by the end of 2007.

According to the data of the Hungarian Central Statistics Office (KSH), the number of Hungarian Internet subscriptions amounted to 1.57 million in the second quarter of 2007, a 36% increase in comparison with the same period in 2006. The use of broadband Internet access was roughly 18 times higher than dial-up or ISDN over the same period. Of the 334 ISPs, 25 cover roughly 90% of subscribers to Internet services.[83]

[83] Second quarter of 2007

In Hungary, roughly two thirds of broadband lines are based on ADSL and one third on cable; the fixed incumbent operators have 44.5% of the broadband lines market. Both cable and ADSL operators offer triple play services.



A study on broadband availability showed that the DSL rural gap with national coverage is 12% in Hungary and that 77% of rural areas are covered by DSL.[84]

Regulatory issues

As regards the wholesale broadband access market, the NCAH decided in September 2006 to set the wholesale prices on a "retail minus" basis for each operator found to have SMP on a given market so as to guarantee a minimum margin for retail service providers. As a result, wholesale prices decreased by between 2-51% (depending on the LTO) for a pack with 1 Mbps and average retail prices are below 5010 HUF (€20), with the cheapest broadband access below 2000 HUF (€8). Similar regulations will be imposed following the second round of market analysis.

After intervention on the part of the NCA, the five LTOs committed themselves to introducing and had actually introduced naked ADSL services both at retail and at wholesale level by summer 2007. By this commitment the NCAH has imposed an obligation on these operators to provide wholesale naked ADSL.

As regards the LLU market, the LTOs were designated as SMP operators and access and interconnection-related obligations were imposed on them. As a result, the one-off fees of the operators with SMP decreased in 2006 by between 66% and 82% while the monthly local loop charge fell by between 18% and 34% respectively. The average monthly cost of the fully unbundled local loop in Hungary is €9.54, slightly below the EU average (€10) whereas the cost for shared access (€5.1) is still well above the EU average (€3).

By January 2008, 9 019 local loops were fully unbundled (compared to 1 354 in January 2007) and 4 163 shared access were reported (3 070 in January 2007). Although this is a significant increase, this number is still low compared to other EU Member States. The NCAH emphasised that the importance of LLU for broadband access needs to be improved. The NCAH also imposed on operators with SMP the continuous transition of Internet service provision in the case of unbundled local loops.

A public consultation was held by the NCAH in June 2007 where both alternative operators and LTOs were able to share their views on the technical conditions of LLU and bitstream access in a bid to make LLU and bitstream offers more attractive. The

84 Broadband coverage in Europe, 2007 survey. Data as at 31 December 2006

views expressed by alternative operators during this public consultation are widely reflected in the market review notified to the Commission in November 2007. In addition, the non-discrimination obligation was tightened on the wholesale broadband access market by making it a breach of non-discrimination where the SMP operator applies a pay incentive system for managers and/or employees, the performance of the wholesale department and other (retail) departments are linked and therefore the managers and/or the employees of the wholesale department are motivated to protect the revenues and profitability of the retail department.

Mobile markets

Market situation

Hungary has three mobile network operators (MNOs) — the mobile division of the main incumbent and two Hungarian subsidiaries of foreign MNOs, with respective market shares in October 2007of 44.08%, 34.85% and 21.07%. While the different MNOs` market shares remained basically the same (44.8%, 33.8% and 21.4% respectively in 2006) the number of subscribers increased in 2007. Mobile penetration reached 104.4% (95.4% in 2006), with 10.5 million subscriptions in 2007. The increasing number of post-paid subscriptions (37%) is evidence of increasing consumer trust.

Concession contracts for 2G frequencies (900 MHz) were extended with the two major MNOs in November 2007. For the 7.5-year extension of the licences, the two MNOs agreed to pay 10 billion HUF each (€39.5 million) and to invest a net 20 billion HUF (€79 million) each on developing their mobile broadband infrastructure further over the next two years. All MNOs have an UMTS licence (granted in 2004) and started 3G-related services in 2005. The fourth 3G licence has still not been granted in Hungary.

Mobile broadband take-up in 2007[85] was a major development in Hungary's electronic communications sector. Successful DVB-H, mobile television trials are being carried out, but effective mobile TV service provision can only start once licences are granted for the operation of one digital radio (T-DAB) and five digital TV free-to-air broadcasting networks (DVB-T), as one of the bundled DVB-T multiplexes is suitable for DVB-H (the technology depends on the winner of the tender). However, following the amendment of the Act on digital switchover in December 2007, the call for tender should be issued before 31 December 2008.

[85] Recent official data not available. In the second half of 2006, 60 000 mobile broadband subscriptions were reported out of 1 172 million broadband subscriptions (5.1%). The biggest MNO announced in August 2007 that it had more than 100 000 mobile broadband subscribers.

Regulatory issues

In 2005, all MNOs had been designated as operators with SMP in the wholesale mobile call termination market. On 4 October 2006, the NCAH decided to require MNOs gradually to decrease their MTRs following a specific glide path resulting in symmetry between operators and in cost-oriented MTRs by 1 January 2009 (at HUF 16.84 (about €0.06)). The glide path is applied as a new regulatory tool based on a bottom-up LRIC model. This decision has been applicable since 1 February 2007. The reductions at wholesale level also brought down retail fixed-to-mobile prices (9.64 €cents), which are slightly below the EU-27 average (9.87 €cents).

Roaming regulation

All three MNOs are reported to have implemented the Roaming Regulation[86] on time. The tariffs were set close to the maximum ceilings both for receiving and for making phone calls within the Community.

Fixed

Market situation

The fixed market went through a consolidation process in 2007. The second largest LTO was taken over by the owner of the third largest LTO and the leading alternative operator. The fourth LTO merged into the main fixed incumbent, which in turn merged with its ISP in October 2007. As a result of these acquisitions and reorganisation efforts, there are three LTOs in the Hungarian fixed electronic communications market: the main and the second incumbents and the LTO belonging to the major cable operator.[87] The consolidation trend also continued with the acquisition of the main CS/CPS operator by the second LTO.

LTOs continue to occupy a strong market position in their respective territories. On the basis of revenues, as at 1 January 2007 LTOs had an 85.72% market share for all types of fixed calls (89.3% in 2006) plus 80.35% and 73.02% market shares respectively for calls to mobile and international calls. The market share of LTOs for international calls significantly decreased in 2007 (from 87.4% to 73.02%). Despite the regulatory obligations imposed under the first round of market reviews, competition in retail calls markets in Hungary has not developed significantly.

Fixed line penetration was 32.66% in 2007,[88] compared to 33.57% in 2006, while mobile penetration increased to 104.32% in October 2007 (95%[89] in 2006). Fixed voice traffic also continued to decrease in 2007.

86 Regulation (EC) No 717/2007 of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC (OJ L 171 of 29 June 2007, pp. 32-40)

87 Programme distributor, programme provider, telephony and internet service provider

88 August 2007

89 Data from September 2006

Traditionally, new entrants in the fixed communications markets have been more active in the non-residential segment of the market, providing voice telephony services through carrier selection and pre-selection. Today, new entrants and LTOs clearly intend to widen their scope of services to include fixed, mobile and broadband to both residential and corporate clients.

In 2006, cable operators entered the access market for fixed voice services and had attracted approximately 190 000 subscribers by September 2007.[90]

Regulatory issues

The NCAH found that there was effective competition in the wholesale markets for transit (first and second rounds of market analysis) and trunk segments of leased lines (first round).

On 10 May 2006, the NCAH decided to reduce the fees of the five SMP operators for wholesale call origination and call termination by 11-34% (11% in the case of the nationwide incumbent). Moreover, the one-off fee for carrier selection was reduced on average by 50% and for number portability by 30-40%. In September 2007, the NCAH published its decision on the review of retail markets for access to the public telephone network at a fixed location for residential and non-residential customers. The decision maintains CS/CPS obligations on the five SMP operators as well as price regulation; WLR has not been introduced. As a new component in the NCAH decision, operators with SMP are not allowed to establish loyalty conditions (including the duration of the subscriptions) that are not proportionate to the advantages obtained by end-users.

Following the reductions in interconnection fees, charges for call termination on the incumbents` fixed network (single transit) (0.91 €-cents) are slightly above the EU average (0.8 €-cents).

The interconnection problem between one cable operator and the second LTO,[91] reported in the previous report, has still not been resolved. The NCAH intended to impose indirect interconnection on the wholesale market for fixed call termination by obliging SMP operators to hand over traffic originating on their networks to transit operators selected by a third party network for termination in the third party operator’s network. However, the Commission took the view in its comments that this problem is not directly related to the termination market.

Broadcasting

Market situation

In Hungary, broadcasting transmission services are provided via several platforms: analogue terrestrial, cable, satellite, microwave, IPTV, DVB-T and DVB-H (in pilot phase).

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[90] Estimated on the basis of the number of subscribers of the four biggest cable operators (157 153)

[91] Refusal to send calls originating on the SMP operator’s network via a transit provider to a third party network for termination.

National coverage of analogue terrestrial transmission is approximately 90%. The main television and radio transmission company was privatised in 2005 and resold in 2007. Approximately 55% of Hungarian households have a subscription to cable TV services. It is a very fragmented market, with approximately 400 service providers, but the two biggest operators cover almost half of total cable subscriptions. Satellite broadcasting subscriber services are provided by two operators, one of them a new entrant on Direct to Home Sat TV services and rapidly gaining market shares.

As the Media Act of 1996 (Media Act) prevented cable operators from providing broadcasting transmission services to more than one third of the Hungarian population, the European Commission had launched infringement proceedings against Hungary, which was referred to the Court of Justice in December 2006. The European Commission withdrew its action against Hungary in July 2007 after the latter had abolished the provision at stake in June 2007. As a result, consolidation of the cable market is likely to start.

With the entry into force of the Act on digital switchover, analogue switch-off must take place by 31 December 2011. A call for tender for the multiplexes (1 digital radio and five digital DVB-T networks, of which one is suitable for DVB-H) must be issued before 31 December 2008. Programme providers and operators with more than 300 000 subscribers in the TV broadcasting markets (de facto the two major cable operators) are excluded from this call for tender in order to avoid horizontal concentration and vertical integration in the market.

Regulatory issues

Hungary notified the Commission of the draft measures relating to the wholesale market for broadcasting transmission services in November 2007. The major television and radio transmission company was designated as operator with SMP and had price control imposed among other things.

Horizontal regulation

Spectrum management

The radio spectrum harmonisation Decisions of 2004 and 2005 are reported to have been transposed in the National Frequency Plan, but some of the most recent (Decisions 2007/344/EC and 2007/98/EC) have not yet been fully implemented.

Administrative charges

The market surveillance fee cannot be higher than 0.35% of the previous year's annual net revenue derived from e-communications services. The exact rate is established by the Minister each year. This amount is set at 0.212% at the moment.

Rights of way and facility sharing

MNOs expressed concerns due to the increasing problems they have encountered as a result of municipalities refusing to install masts and antennas for 3G networks.

Following the annulment by the Hungarian Constitutional Court of several legal provisions of the Act on electronic communications, allowing expropriation by the NCAH and the registration of rights of way by the cadastre on private property in order to install e-communications equipment, where agreement could not be reached between the owners and the operators, the Act on digital switchover amended the problem provisions.

THE CONSUMER INTEREST

Universal Service

In April 2004, each of the five LTOs was designated by the Minister of Informatics and Communications for 4 years as a Universal Service Provider (USP) and since then they provide the four components of the universal service in their respective geographical areas. Operators can benefit, in principle, from the Universal Electronic Communications Support Fund. For the years 2004, 2005 and 2006, the USPs' compensation requests were refused as net avoidable costs were not demonstrated.

Number Portability

Between January 2004 and August 2007, a total of 217 514 fixed numbers were ported in Hungary, while between May 2004 and September 2007 a total of 180 268 mobile numbers were ported, accounting for 1.7% of total mobile subscribers in Hungary.

Consumer complaints

In July 2007, the NCAH published the results of a survey of individual subscriber contracts concluded between almost a hundred service providers (fixed, mobile, Internet and programme distribution) and their subscribers. The NCAH found incompatibilities with the legal requirements in every service provider's contracts. Operators were therefore given 30 days to bring their individual subscriber contracts in line with national legislation. The NCAH will follow up on these measures in 2008.

European emergency number 112

The European Commission sent a letter of formal notice to the Hungarian authorities in April 2006 since caller location information was not provided in practice to the Hungarian emergency authorities, either from fixed or from mobile networks. Following confirmation by the Hungarian authorities that the provision of caller location information by both fixed and mobile operators was technically feasible and is also provided in practice on request, the case was closed in June 2007. In addition, the Ministry adopted a Decree which provides that as of 1 December 2008 a push system will apply with regard to 112 caller location information.

Must-carry

Following the adoption of the Act on digital switchover, new must-carry rules have applied since July 2007. "Dominant broadcasters", as defined by the Act, have to conclude a contract for up to forty television programmes, as defined in the Act, to transmit them to subscribers.[92] In addition, must-carry obligations are imposed on mobile TV service providers without taking into account whether a "significant number of end-users of such networks use them as their principal means of receiving radio and television broadcasts". The Commission's services are examining conformity of the Act on digital switchover, in particular these provisions, with the regulatory framework.

Data protection

The bill amending the Act on electronic communications designed to transpose the provisions of the Data Retention Directive was adopted by the Hungarian Parliament on 19 December 2007 and will enter into force on 15 March 2008.

92 Economically and technically reasonable contractual offers in conformity with general contractual terms and conditions of the "Dominant broadcasters" (published beforehand) must be accepted within the limit of forty television programmes.

MALTA

INTRODUCTION

Malta has seen an improvement in the competitive situation across markets in 2007 as operators, seeking to become converged players, have expanded into communications markets other than their traditional ones. Broadband penetration grew at a faster rate this year after some previous slowdown and a new competitor with broadband wireless access services entered the market. Consumers' choice of mobile operators was set to improve following the allocation of the third 3G licence.

On the regulatory side, the market for wholesale broadband access has still to be analysed, following the withdrawal of a previous notification. The length and quality of the appeal procedure continued to be one of the major obstacles to the effectiveness of the regulatory framework in Malta. Significant progress was made in mobile number portability as portings more than tripled in 2007.

REGULATORY ENVIRONMENT

Main regulatory developments

In August 2007, the lengthy legal process to determine who would acquire the third 3G licence came to a conclusion, with the licence ending up in the hands of the national cable TV operator. Negotiations for an MVNO agreement were eventually concluded on a commercial basis without the need for intervention by the NRA (the MCA). A proposal to increase the ceilings for monetary sanctions available to the MCA was in parliament at the time of writing this report.

Organisation of the NRA

The Malta Communications Authority (MCA) assumes all the responsibilities of the NRA under the EU regulatory framework. It cooperates with the Office of Fair Competition (a branch within the Ministry of Competitiveness and Communications functioning as the competition authority) according to a Memorandum of Understanding. This cooperation was not considered satisfactory by industry, which pointed to some confusion as to the division of tasks between the two authorities, and saw the Office of Fair Competition as inactive and lacking understanding of the sector.

According to a draft law amending inter alia the Maltese Competition Act, which was being discussed by Government, competition law powers were to be assigned to the MCA within the electronic communications field with the intention of creating a one-stop shop. The new powers to be thus granted to the MCA are expected to enter into force in 2008 and were welcomed in particular by the alternative operators. The Office of Fair Competition, which has had four electronic communications-related cases in the last four years, was at the same time in the process of generally strengthening its resources such as economists and legal staff.

The limited sanctioning powers available to the MCA with regard to access and interconnection-related disputes were being addressed in a law proposal. The amended law would raise substantially the maximum financial penalties, currently €233 000 for a one-off fine and €4 660 on a daily basis, and would also remove the current limit of €23 300 for fines for interconnection-related offences. At the time of writing this report the bill had been approved by parliament and was expected to enter into force early in 2008.

Decision-making

The MCA was planning to finalise its first round of market analyses by the re-notification of the wholesale broadband access market early in 2008.

In general, operators have been concerned about the transparency of the market analysis process. In certain markets the NRA has imposed most or all remedies available but the obligations in question were not laid down in detail. According to some operators, the implementation of access agreements based on those obligations risked becoming complex and time-consuming, increasing in turn the risk of disputes and eventual appeals. The MCA, for its part, was concerned that appeals were being made systematically, even for minor issues.

While the lack of specification might give rise to appeals, all market players were united in their concerns about the functioning of the appeal process.

One principal issue seemed to be the perceived lack of resources and expertise of the appeals board, which in turn led to long handling times and regulatory uncertainty. At the time of drafting this report, there were 12 appeal cases pending, one of which concerned a decision taken in 2003 on the basis of the old telecommunications legislation.

It is not clear whether the replacement of the former Telecommunications Appeals Board by the Communications Appeals Board has improved the situation to the degree anticipated by the legislator and whether an effective appeal mechanism within the meaning of the regulatory framework is in place.

At the same time, decisions which are the subject of an appeal tend not to be suspended. In one case – an appealed decision on open access to the cable TV network, based on the old telecommunications law – the MCA agreed not to enforce the decision while the appeal was being heard. The case was still pending at the time of drafting this report.

MARKET AND REGULATORY DEVELOPMENTS

No macroeconomic data on the Maltese market were available at the time of drafting.

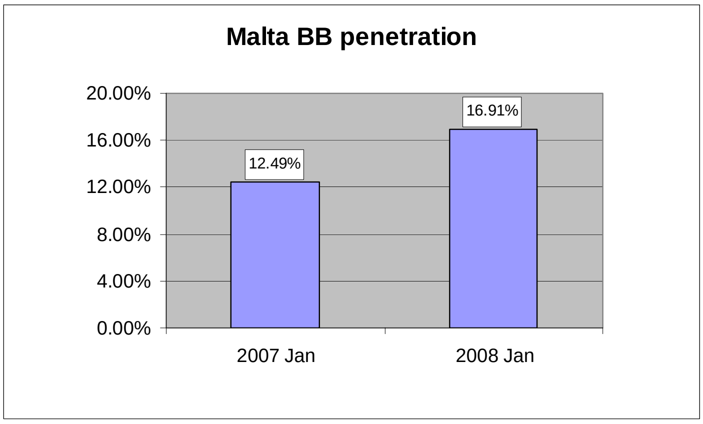
Market developments in 2007 were characterised by a drive to create converged service operators, as evidenced by a take-over of the digital terrestrial broadcaster by the fixed incumbent in February 2007, the acquisition by the cable incumbent of a controlling share in the third 3G operator and the launch by a mobile operator of its broadband wireless access products services in July 2007. This movement could benefit competition on all platforms. Promotion of bundled packages started in July 2007, but no quadruple play or Universal Mobile Access (UMA) solutions were commercially available at the time of writing this report.

The electronic communications marketplace in Malta now consists of two vertically and horizontally integrated operators that will soon be capable of providing quadruple play, a foreign-owned mobile operator expanding into other communications markets as well as an alternative telecommunications provider using wholesale components from the fixed incumbent, and a group of small Internet Service Providers.

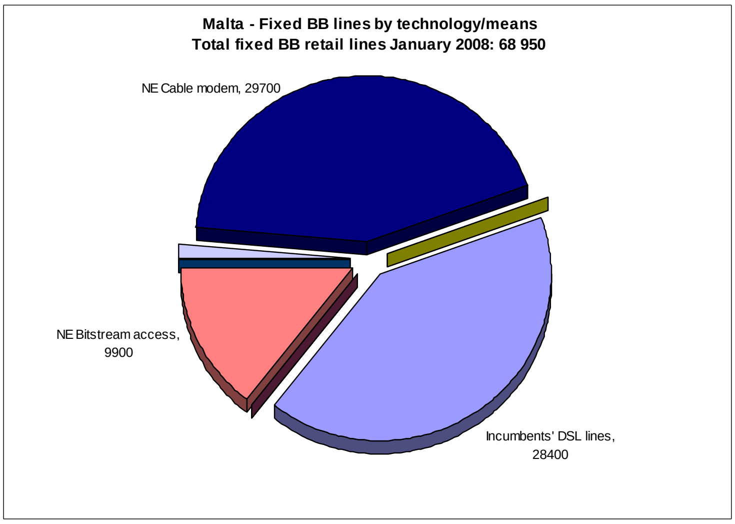
The fixed-to-mobile substitution process continued in Malta, with a further increase in the mobile networks' share of the overall voice traffic. There were, at the time of drafting, interconnection agreements between all market players in Malta.

Broadband

Market situation



Broadband penetration in Malta in January 2008, at 16.91%, remained below the EU average of 20.0%. While in 2006 broadband penetration growth was stagnant, 2007 saw a substantial increase. While the slower growth in 2006 could be attributed to subscribers downgrading to attractively priced 128 Kbps services (not classified as broadband, but available from both the incumbent DSL provider and the cable operator), in 2007 the DSL and cable providers upgraded the speed of these services considerably to a minimum of 2 Mbps at no extra charge. Generally, as measured by price in relation to speed, the Maltese broadband market has seen decreased broadband prices.



DSL continued to be the predominant technology with 55.5% of all retail broadband lines as at January 2008. In the reporting period, the subsidiary of the fixed incumbent strengthened its position on the retail broadband market for the fourth consecutive year to reach a market share of 41.2% as at January 2008. The non-incumbent ISPs were consolidating, but their combined market share was quickly shrinking, with churn mainly to the fixed-line incumbent. Whereas in January 2007 these ISPs were providing almost 21% of all broadband connections (on a resale basis), in January 2008 their market share was only 14.4% (on the basis of bitstream access). In July 2007, one of the three broadband wireless licence holders finally launched commercial services, and was planning nationwide coverage by March 2008.

Malta already enjoyed the coverage of two ubiquitous networks (cable and DSL) over the whole national territory.

There was no demand for local loop unbundling, and there was at the time of writing this report still no wholesale broadband access product available to third parties on cable.

Regulatory issues

In December 2006 a draft MCA decision regarding the wholesale broadband access market was notified to the Commission. It has been withdrawn following discussions with the Commission services on the scope of the market analysis. A new draft decision on this market was expected to be notified early in 2008.

The effective roll-out of the three broadband wireless access networks licensed in 2005 remained an issue. The two licence holders who, at the time of drafting this report, had not launched services were paying sanction fees due to missed roll-out licence requirements. The third licence holder (a mobile operator) launched its broadband wireless access service in July 2007 (with limited consumer interest so far). The licences were technology-neutral in allowing any type of communication on the licensed frequencies, including mobile services, as long as broadband services were offered. However, there has been concern among operators that the administrative fees for using certain frequencies were based on point-to-point usage, making some point-to-multipoint communication in services to end-users too expensive, thus limiting the practical scope of the licence.

The overall low interest in the LLU product as a concept may help explain the lack of development of the available offer. The incumbent operator pointed to the particular character and size of the Maltese market as a reason for this lack of interest. While a LLU offer was in place and the published prices were relatively low in an EU comparison, it is not clear whether prices had been published for all the necessary components. Moreover, alternative operators pointed out that the RUO seemed to be modelled on the British incumbent's offer, with large bundles of subscriber lines in comparison to the smaller amounts of potential customers available in Malta.

Mobile markets

Market situation

Maltese consumers' available choices seem to be increasing following the allocation of the third 3G licence. This may have a positive effect on prices – among the highest in the EU – and penetration, which grew substantially but, at 91%, remains below the EU average of 111.8%. Most subscriptions were pre-paid. So far, handsets have only been subsidised to a limited extent, but the subsidisation of 3G phones had increased lately, as operators sought to direct traffic onto their 3G networks.

3G as well as HSDPA coverage by active operators was already at 100% of the national territory. Mobile voice call minutes continued to increase, but SMS was inexpensive and popular, and may have provided some substitution to voice. An agreement with an independent supplier of MVNO enabling solutions was reached in autumn 2007. The agreement was reached after a dispute was launched and then withdrawn.

Regulatory issues

The lengthy legal process to determine who would acquire the third 3G licence finally came to a conclusion in August 2007. The original winning bidder for the licence in question did not initially pass the due diligence examination by the MCA and was denied the licence and appealed. While the decision was subject to appeal, the plaintiff was acquired by a venture capital company, and after a new due diligence procedure the MCA changed its decision in favour of the plaintiff. The venture capital company awarded the third 3G licence eventually reached an agreement with Malta's cable TV operator, and transferred the licence to that operator. According to the terms of the licence a fee of €5 823 434 had to be paid up-front or a slightly higher amount but split into instalments over the duration of the licence. Roll-out requirements were identical to the other two licence holders: 50% population coverage in two years from the issuing of the licence (August 2007), and 99% in five years' time. With the third 3G operator due to start providing services, the competitive situation will need to be re-assessed in the analysis of this market planned for 2008.

The mobile termination rate glide path fixed by the MCA in December 2005 and based on EU25 benchmark was reaching its floor in January 2008 at €0.092. The MCA will review the strategy in 2008.

Roaming

Maltese mobile operators were among those potentially affected the most by the new Roaming Regulation, with around 25% of their total revenues coming from international roaming, but there were, at the time of drafting this report, no indications that the Regulation was not being complied with. Prices have been set at the maximum level indicated by the Regulation.

Fixed

Market situation

While there was fixed-to-mobile substitution on the traffic level, with the continued decrease of fixed minutes, there has so far been no decrease in the numbers of fixed telephony subscribers – in fact some increase has been noted, which can be attributed to the entry of new alternative operators and to the fact that subscribers now have more than one subscription – and Malta retained one of the highest penetration levels in the EU.

While the fixed incumbent operator has maintained its dominant position in local access and local (national) calls as well as fixed-to-mobile calls, its market share in terms of revenues has started to fall – from close to 100% in 2006 to 98.84% at 31 December 2006 following the cable-TV operator's entry into the national voice market in late 2006. A wholesale line rental (WLR) agreement has also been implemented. While this could make alternative services more attractive, the alternative operator on the receiving side of the agreement was concerned that the wholesale price was nearly identical to the retail subscription price of the incumbent. Generally, alternative operators expressed concern about margin squeeze and non-price discrimination in the fixed voice market. In reaction to complaints, the MCA launched a consultation process to reinforce rules that prohibit anti-competitive win-back tactics.

International bandwidth and leased lines – critical for alternative operators – were expensive, while, according to the ISPs, there is no published international leased lines offer above 2 Mbit/s.

Regulatory issues

According to the obligations placed on it by the MCA, the fixed incumbent must apply cost orientation to its interconnection rates by using accounting separation and a cost accounting model based on historic costs. The cable-TV operator's termination rates, in turn, cannot be higher than the termination rates of the incumbent. Following the bottom-up model designed by the MCA to depict an efficient next-generation network, beginning with a fixed interconnection price decrease by 33% in 2006, the MCA lowered the same price an additional 33% in January 2007. The call termination rate – at €0.013 not adjusted further at the time of writing this report – remained among the highest in the EU, although to a smaller extent than before.

The MCA was reviewing the terms and conditions (service level agreements) of the incumbent's reference interconnection offer (RIO), following a public consultation, and a decision was due in January 2008. Interconnection rates were symmetric and reciprocal. A leased-lines costing model was being finalised in autumn 2007. The WLR agreement described above was, at the time of drafting this report, being reviewed by the MCA.

Broadcasting

Market situation

According to NRA figures some 86% of Maltese households were connected to a cable TV network owned by a single operator by September 2007. The remaining households were reliant on (digital or analogue) terrestrial TV reception, while satellite dish ownership continued to be minimal. Digital terrestrial television TV (DTTV) was provided by the subsidiary of the fixed incumbent. At the time of writing this report, there were no commercial DVB-H[93] transmissions (see also below) and no IPTV offer. The mobile subsidiary of the fixed incumbent was offering a TV over EDGE service. As in several other Member States, problems with intellectual property rights remained unresolved for this transmission form. Analogue terrestrial transmission was carried out by four programming companies themselves.

Regulatory issues

Two operators, including the fixed incumbent, were initially assigned eight frequency channels for a duration of eight years with the possibility of an extension by a further eight. The alternative operator, which started commercial operations in July 2005, had subsequently been acquired by the fixed incumbent in February 2007. Despite the fact that the national frequency strategy caters for any type of broadcasting service, all available coordinated channels were assigned to terrestrial digital TV networks in May 2005. No licences specifically for DVB-H transmission services had been granted at the time of writing this report and no coordinated frequencies were available. Malta is on track for analogue terrestrial TV transmission switch-off by 2010.

93 Digital Video Broadcasting Handheld, a mobile TV standard.

Operators considered that there was some lack of clarity about the division of competences between the MCA and the national broadcasting authority. Efforts were being made at the time of drafting to clarify with the broadcasting authority the roles and responsibilities for ensuring compliance with all content-related provisions. Operators had also expressed some confusion as to the responsibility in a case regarding the bundling of fixed telephone subscriptions and digital terrestrial television, which had been subject to investigation both by the MCA and by the competition authority.

A Policy and Strategy for Digital Broadcasting meeting General Interest Objectives was put out for consultation in September 2007. The document proposed a policy and implementation strategy in respect of digital terrestrial broadcasting relative to the criteria used for classifying a broadcast channel as meeting general interest objectives, the process for allotting capacity to the qualifying broadcasts, the relationship between must-carry obligations and general interest objectives, the application of must-carry obligations across transmission platforms, and the conditions attached to the usage of frequencies reserved for broadcasting that meets general interest objectives.

Horizontal regulation

Spectrum management

Malta appears to have implemented all four Commission radio spectrum harmonisation decisions. Three of them (2004/545/EC in the 79 GHz frequency band, 2005/513/EC in the 5 GHz band and 2005/50/EC in the 24 GHz band) were effectively implemented in January 2006 by adjusting the national frequency plan (NFP). The fourth, Decision 2005/928/EC regarding the 169 MHz range, was implemented in 2007 by updating the NFP and adopting a General Authorisation.

In September 2007, the MCA adopted a policy document – "Strategic Framework for the management of Radio Spectrum 2007-2010" – which was based on a consultation document finalised in October 2006. This document, focusing on strategies to ensure efficient and flexible spectrum management, mentioned the possible introduction of frequency trading, spectrum liberalisation and licence exemptions. It also established spectrum neutrality as a principle.

"Refarming" of spectrum by allowing the use of 3G services in the 900 MHz spectrum currently used for 2G services was still being examined by the authorities at the time of drafting this report. An important question is whether or what fees should be paid for 2G/3G licences. The 2G licences expire in 2010.

THE CONSUMER INTEREST

Universal service

The incumbent is the designated universal service provider. It has to satisfy all reasonable requests for connection to a fixed location, and provide directory and directory enquiry services and special end-user facilities for disabled users. All voice telephony providers must ensure free access to emergency services. A leading mobile operator is responsible for providing handsets for people with hearing difficulties. While all these obligations have been met, no request for USO funding has been submitted to MCA.

Number portability

Since number portability became available for mobile subscribers as of 1 April 2006, 20 000 mobile numbers have been ported, an increase of 14 500 numbers in the reporting period. Fixed number portability became relevant after the cable TV operator's interconnection agreement with the incumbent in October 2006 and its subsequent launch of voice services. At the time of drafting this report, 1 500 fixed numbers had been ported in total.

European emergency number 112

112 is the only advertised number for emergency services in Malta and has been working effectively since 2000.

Must-carry

As explained above, the current must-carry regime (whereby the broadcasting network operators have to carry all national channels) was still under review by the competent authorities, who were examining the options for a way forward with regard to general interest objectives and must-carry obligations.

Data protection

The bill transposing the data retention directive has been drafted and is likely to be adopted in the second quarter of 2008.

THE NETHERLANDS

INTRODUCTION

The Netherlands was again one of Europe's and the world's leading countries in broadband penetration. Although the number of players has been decreasing as a result of consolidation in the broadband, mobile and broadcasting markets, infrastructure competition has generally remained robust and has brought major benefits for consumers, including attractive bundles of services. Competition at retail level has also induced the incumbent pro-actively to negotiate wholesale access to its new IP-based network.

Against this background, the national regulatory authority has been promoting negotiated solutions to access issues, in particular regarding next-generation networks, while taking strong enforcement action, when needed, for instance regarding non-discriminatory provision of business telephony services.

REGULATORY ENVIRONMENT

Main regulatory developments

The national regulatory authority, Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA), started new market analyses in 2007, partly in response to the plans announced by the incumbent to roll out a next-generation network ("All IP") by 2010 and partly to correct the existing market analyses that were overturned in the national courts.

OPTA's approach to the incumbent's "All IP" strategy, which consists of encouraging negotiated market solutions, is producing results. The agreements reached between the incumbent and the main alternative operators (July 2007) and the voluntary offer by the incumbent to maintain access to certain Main Distribution Frames (MDF) will be taken into account by the regulator when adopting new market decisions. However, it remains uncertain whether all the operators will be able to participate in the migration process and take up new access products.

Organisation of the NRA

OPTA is systematically monitoring market developments by means of its structural market monitor. By periodically requesting a limited amount of information from market players, the NRA may be able to avoid extensive data collection every few years with a view to new market analyses. The structural monitor is intended to reduce the administrative workload on operators and is welcomed as a valuable tool by the market.

Enforcement and monitoring of the "traffic light" model (allowing the incumbent to draw a distinction between green (allowed), red (forbidden) and amber services that, under certain conditions, have to be submitted to *a priori* checks by the NRA) and compliance with the non-discrimination obligation (at wholesale level) are the NRA's main concerns. Heavy fines were repeatedly imposed on the incumbent in December 2006 and in July and October 2007. OPTA found that the incumbent had granted illegal discounts to business customers, thereby failing to comply with the price-floor obligation imposed on the fixed telephony market. Since 2006, the incumbent has been under an obligation to notify new services and tariffs to the market and the regulator and, in most cases, compliance with the retail tariff and non-discrimination obligations is assessed only *ex post*. In future, OPTA will consult the incumbent intensively about programmes intended to ensure proper compliance with the rules.

In 2007 the NRA concluded cooperation protocols with the national consumer authority (on exchanges of information, requests for mutual assistance and enforcement) and with the national police corps (on exchanges of knowledge and information for combating cybercrime). In June 2007 OPTA was also given a new task in the field of consumer protection: it will be able to refuse, suspend or withdraw any decision to grant a premium rate number in the event of abusive behaviour with respect to tariffs.

After all the market decisions in the first round were challenged before the court in 2006, the court of appeal on industrial affairs has handed down several judgments since August 2006. In most cases, market decisions have not been annulled, but only subjected to minor repairs. However, in several others, the court criticised the lack of substantiation in the market analyses. It ordered the NRA to adopt new market decisions on the mobile termination and wholesale broadcasting markets. Article 1.3(4) of the Telecommunications Act imposes an obligation, in cases where the NRA adopts decisions with significant consequences for the market concerned, to substantiate the proportionality of the obligations, both qualitatively and quantitatively, taking into account all the relevant foreseeable consequences of the decision. As this legal obligation is perceived by the NRA as too heavy a burden, a proposal has been tabled in Parliament to repeal this provision.

Decision-making

A large part of last year's regulatory activity concerned the response to the incumbent's announced move to next generation networks (NGN). After issuing a position paper in October 2006, OPTA started new market reviews with a focus on LLU and wholesale broadband access. At the beginning of 2007 OPTA concluded that policy rules for phasing out MDF access and migrating to other access products would not be appropriate. Furthermore, a study conducted by consultants on behalf of the NRA indicated that use of SLU by other providers would not be an economically viable alternative to LLU and that the current offer for wholesale broadband access was not viable.

As the new market reviews were unlikely to produce a set of obligations that would comprise the fully fledged alternative described in the position paper, OPTA appealed to the incumbent and the other market players to consult one another.

In July 2007 OPTA received Memoranda of Understanding (MoU), by which three LLU operators had reached an agreement with the incumbent on the conditions for phasing out MDF locations. These MoUs should lead to definitive migration agreements and were made available in the form of a non-discriminatory public offer to all operators. At the same time, the incumbent started negotiations with other (mainly business) operators.

OPTA has committed itself to take these new developments into consideration when imposing obligations in the context of the new market review for wholesale broadband access (scheduled for March 2008). The regulator's "high-trust" approach and preference to promote negotiated solutions are demonstrated in this way of dealing with NGN. This is generally welcomed as a positive trend by the market, although some alternative operators question the process. In their view, it is not always sufficiently transparent and not all the relevant stakeholders are fully involved. The negotiations between the incumbent and new entrants are not always balanced and a strong presence on the part of the regulator is required in order to obtain legal certainty.

Two further decisions were notified to the Commission in the course of 2007. The NRA started a new market review on the mobile call termination markets, which led to adoption of a new market decision in July 2007. It also adopted a decision on wholesale tariff regulation related to prices of subloop unbundled services.

MARKET AND REGULATORY DEVELOPMENTS

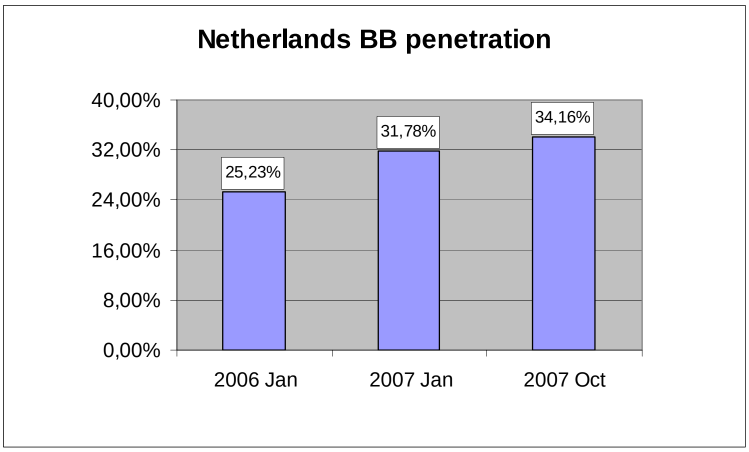
The total turnover of the telecommunications sector in the Netherlands was €12.2 billion as at 31 December 2006, of which €6.5 billion was revenue from the fixed markets and €5.7 billion revenue from the mobile markets.

Continuing competition between DSL providers and cable operators and, to a certain extent, emerging local fibre initiatives have led to an extensive offering of high-speed internet, interesting content and digital products, including bundled offers: at least 12 operators are offering a double-play package of fixed voice telephony and broadband, while at least 7 offer a double-play product including television and broadband. Triple-play products (television + broadband + fixed) are becoming common (offered by at least 8 operators to 1 081 000 subscribers).

The Dutch market is undergoing significant consolidation, both on the cable and on the DSL broadband sides. The merger of three regional cable companies has left two major players on the market, while the incumbent has acquired several internet service providers. In 2006 the incumbent's plans to roll out fibre to the street cabinet by 2010 ("All IP") had already put a virtual stop to further investment in local exchanges, and this was not reversed in 2007.

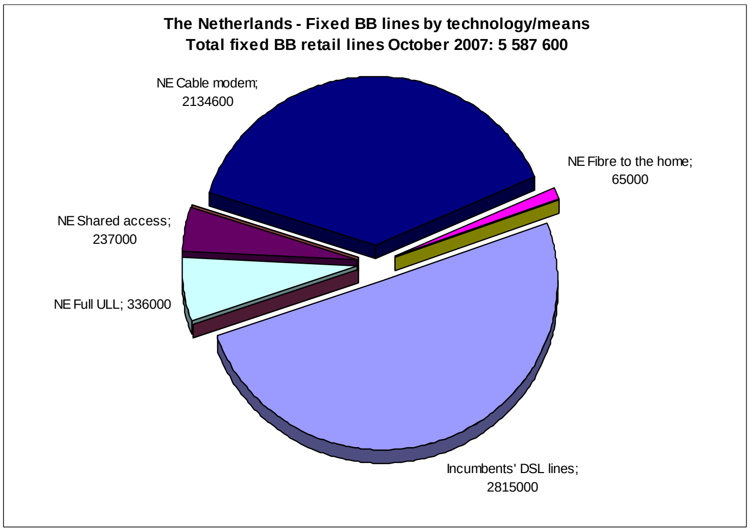
Broadband

Market situation



Although in the European ranking of broadband penetration, the Netherlands (34.2% – October 2007 data) has been overtaken by Denmark and Finland, it is still one of the world leaders. As most households with a PC now have a broadband connection, growth is slowing down (2.4 percentage points between January and

October 2007).[94]



The alternative operators' share of the retail market dropped to nearly 50% due to the take-over of a DSL provider by the incumbent. Within DSL retail lines, the incumbent therefore holds a very large and growing market share, with 83% (October 2007). The number of fully unbundled lines is still growing, while the number of shared lines is falling. The main competitors are, however, the cable operators (accounting for more than 77% of the new entrants' retail lines). Nevertheless, the number of retail broadband connections based on DSL is 1.5 times higher than cable connections.

DSL rural coverage is close to 100%. For cable, however, there is a big gap between urban and rural areas (rural coverage is 40%, while the national coverage is over 90%).[95]

Regulatory issues

Very strong retail competition from the cable operators has forced the incumbent to take pro-active steps to establish wholesale agreements with alternative operators as part of its "All IP" project. The three main LLU operators in the Netherlands, which cover 50% to 70% of the territory, have negotiated conditions with the incumbent for phasing out LLU services at the more than 1 200 existing MDF exchanges. In July 2007 they formalised their agreement in Memoranda of Understanding (MoUs), which should be followed by a definitive migration agreement. On 1 October 2007 the incumbent made the public offer available in a non-discriminatory manner to all market players.

In 138 core locations of the incumbent and in an additional 35 to 45 locations (to be publicly agreed with LLU parties) MDF access will be maintained after 2010 so that alternative operators can continue to cover up to 50% of the population. For the remaining coverage, alternatives will have to be explored in the form of bitstream access, certain forms of SLU or reuse of copper from MDF. Migration costs will be borne by the incumbent for the agreed locations and, under certain conditions, also for the other locations. All operations with respect to phasing out locations, timing, migration to SLU, etc. will be carried out in a non-discriminatory manner, including for the incumbent itself. The agreement also includes provisions on prices, quality and availability of backhaul services, wholesale broadband access and reporting (e.g. voluntary price

94 31 December 2007 data not available; this may partly explain the relative drop in the penetration ranking.

95 IDATE report (October 2007): Broadband coverage in Europe. The data used in this report are for December 2006.

squeeze test). Apart from the voluntary offer, the incumbent remains bound by the current reference offer for subloop unbundling (approved in May 2007, as part of the obligations resulting from the market decision on unbundling).

OPTA postponed the new market review on wholesale broadband access in order to allow further negotiations on MoUs (until 15 December). The NRA would carry out this market review in 2008, taking into account the standard MoUs for MDF migration and the complements to the SLU reference offer. As the MoUs will not affect the LLU market before 2010 and the incumbent will continue to honour reasonable access requests until the phasing-out, this market will not become subject to regular review until 2009. OPTA published its analysis and decision with respect to SDF backhaul in December 2007. Policy rules on the conditions for phasing out MDF access would be required only if they are not covered by the MoUs and the public offer and insofar as no disputes arise on these issues.

Some operators, however, are urging the NRA to provide more transparency on market analysis planning. They consider that the status of the negotiated agreements is unclear and that there is a lack of focus on business markets. NGN should then be addressed, *inter alia*, by also reviewing the leased lines and Ethernet markets.

Mobile markets

Market situation

Consolidation is also taking place on the mobile market. After the first acquisition in recent years, leaving four network operators in the market, the number of players is likely to decrease further to three due to a merger. The mobile subsidiary of the incumbent still holds a large market share of about 48% (of subscribers), with the second and third operators holding on to about 26% and 21% respectively. Mobile penetration is very high (112%). The number of post-paid subscribers is growing (43% of total revenue). Innovative offerings, such as lower tariffs for calls made at or around home, are starting to enter the market.

Regulatory issues

Since the 2005 market analysis on mobile call termination was annulled by the court decision of August 2006, OPTA re-analysed this market. The market review process, entailing very extensive data collection and analyses, finally led to a new market decision on 30 July 2007. In the meantime, the mobile operators had started negotiations (after agreement by the competition authority, which did not consider this an infringement of competition law). Then in May 2007 they agreed on a voluntary reduction of their termination rates. In the light of the court ruling, OPTA took this agreement into consideration, making a quantitative analysis of the welfare effects of regulation. It concluded that imposition of MTRs at the level agreed by the operators (slightly higher than the BULRIC level) was justified by the welfare analysis.

Under the market decision, the slightly asymmetric MTRs will follow a downward glide path, starting in August 2007 (€0.100 and €0.124) and ending in July 2009 (€0.070 and €0.081). These tariffs are below the European average.

Roaming

All mobile operators in the Netherlands complied duly and on time with the new European Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community. Prices have been set at the maximum level indicated in the Regulation.

Fixed

Market situation

Turning to VoIP, fixed-to-mobile substitution and flat-rate offerings are the main trends in fixed voice telephony. Despite growth in digital services, the incumbent's share of the fixed telephony market decreased from 79% to less than 70% in 2006. Its market share in terms of retail revenue remains high (more than 70%).

Take-up of internet telephony is rising steeply. After the number of households with cable telephony subscriptions doubled between 2005 and 2006 (to nearly 800 000), the number of VoIP subscriptions (also via ADSL) increased to more than 2 million in 2007. The fixed telephony incumbent is the largest VoIP provider with a market share of more than 30%, followed by the two large cable companies.

Regulatory issues

In 2006 the incumbent sued the State, OPTA and the competition authority for "discriminatory and asymmetric regulation". Its claims were rejected by the court, but the incumbent is continuing to press the NRA to lift the price floor regulation it has been imposing on the fixed telephony retail market. OPTA sees no reason to carry out new market analyses, arguing that the incumbent has sufficient room for offering low tariffs to customers to compete in the market.

The incumbent has been imposed several heavy fines for offering illegal discounts to business customers. This behaviour prompted the NRA to produce programmes to secure better compliance with the rules. Alternative operators, however, still have doubts about the effectiveness of the "traffic light" model.

Alternative operators also complain about the effectiveness of the wholesale line rental process (tariff regulation decision adopted in December 2006). Due to delays in the process, unreasonable conditions, e.g. on forecasts (due to the lack of negotiating power of the operators concerned) and a low retail minus tariff, WLR allegedly cannot be used as an effective means to increase competition.

Broadcasting

Market situation

The cable sector continues to dominate broadcasting transmission with a market share of more than 87%. Analogue cable infrastructure is still the most used platform. The growth of the digital TV market is being driven mainly by the cable network operators (more than 1 million subscribers by the end of 2006), but also by satellite and digital terrestrial television (offered by the fixed incumbent). Digital switchover took place in December

2006. IPTV is being offered by at least two operators (including the fixed incumbent) and can cover more than 50% of all households.

An increasing number of households (more than 1 million) are using triple- or quadruple-play bundles, including television.

Regulatory issues

OPTA's retail market decision, valid for one year, expired in March 2007. This decision was annulled by the court in July 2007, but its legal effects were finally left intact. Cable television tariffs have not increased substantially, but OPTA is continuing to monitor closely developments oin the retail market.

The 2006 wholesale market decisions had been challenged in court by the cable operators. Examining the proportionality of the wholesale obligations (see above, under "Organisation of the NRA"), the administrative judge found that the NRA had not sufficiently justified the need for regulation with respect to the obligation to provide access to programme providers. The decision was annulled and OPTA has been ordered to investigate whether there is specific demand for access to broadcasting transmission networks from content providers. A new decision, repairing this aspect of the initial market decisions, was adopted in December 2007.

Horizontal regulation

Spectrum management

In March 2007 the Ministry adopted, after consultation, the decision to extend for three years the GSM 900 licences of two mobile operators (which were due to expire in 2010). This means that all GSM licences will expire and may be reassigned at the same time, in 2013. With a view to promoting efficient use of the frequencies, the extension has been made subject to payment of a market-based fee.

Implementation of spectrum decisions

The Commission spectrum harmonisation decisions have been fully implemented in the Netherlands.

THE CONSUMER INTEREST

Tariff transparency

Self-regulation (by a code of conduct) in the field of premium rate numbers, in particular with respect to the behaviour of the number owners, has been abandoned. New provisions have been added to the Telecommunications Act to promote number and tariff transparency. It will be possible to indicate, by a general administrative measure, abusive tariff practices that would lead to refusal, suspension or withdrawal of premium rate numbers by OPTA.

Universal service

The universal service obligations in the Netherlands include a complete set of services. These are provided, without compensation, by the fixed incumbent, which was designated under the 2004 transitional arrangements.

Number portability and switching

There has been a significant increase in ported numbers, mainly in fixed telephony (more than 1 million numbers). The price of mobile number portability (between operators) is low (€5).

The NRA and the consumer authority have been concerned for several years about the numerous problems faced by consumers when switching from one internet provider to another (long delays, double billing, lack of information, etc.). Although OPTA has limited powers in this area, it has been promoting self-regulation between providers. If this fails to prove sufficiently effective, the legislator could take further steps.

European emergency number 112

The Netherlands has been referred to the Court of Justice for failing to ensure that mobile operators make caller location information available to the emergency services. In the second half of 2007, tests were conducted and discussions held about the technical specifications so that the mobile operators could comply with this obligation. The national telephone exchange which must handle the mobile calls was expected to come into operation at the beginning of 2008.

Must-carry

The Commission has opened infringement proceedings concerning the compatibility of the must-carry rules in the Netherlands with the requirements of Article 31 of the Universal Service Directive.

Data protection

A bill concerning the data retention obligation is due to be adopted by the Netherlands Parliament soon. Electronic communications providers criticise the lack of clarity with respect to future implementation by general measures (data to be retained, means of making data available for investigation requests, security and destruction). They consider the proposed period of retention (18 months) too long and have requested the authorities to provide for compensation since this obligation stems from a public interest.

In 2007 OPTA imposed fines totalling €1 million on three companies considered to be among the ten largest spyware distributors in the world.

AUSTRIA

INTRODUCTION

The Austrian market continues to be characterised by strong competition in the mobile market and increasing market shares for the incumbent fixed network operator in various market segments. While fixed broadband penetration in Austria is now below the EU average, mobile broadband services have become very popular, with end-user prices for these services having gone down.

Lengthy negotiations between market players and the fact that the NRA in various cases refrained from setting concrete wholesale prices has led to delays in the application of remedies in practice. With regard to Mobile Termination Rates (MTR), however, the NRA set detailed prices in October 2007 together with an ambitious glide path towards a symmetric mobile termination rate for all mobile network operators.

REGULATORY ENVIRONMENT

Main regulatory developments

While the regulatory framework is firmly established and the NRA is well on the way to completing the market reviews on time, it may be questioned whether regulation based on the 2002 regulatory framework is producing results in the markets efficiently and quickly enough.

The situation is nearly unchanged compared to the previous year. The NRA is very active in carrying out market reviews and, where necessary, imposing remedies. The second round of market analyses has nearly been completed. In practice, however, it is difficult to judge the effectiveness of the remedies imposed. Several remedies under the new regulatory framework have still not yet been applied in practice due to the fact that the NRA normally does not set prices in its market analyses. These are, in general, set by operators on request following dispute settlement procedures, despite the fact that the NRA has the power to set prices if it observes any deviation from the price setting standard it has imposed as a remedy for a particular service. The NRA's practice has led to delays in setting tariffs, with a negative impact on the efficiency of the regulatory process.

As a consequence, some market players appear to prefer applying old agreements rather than waiting for new reference offers to be approved, while others are clearly asking the NRA to be more active and to better follow up and monitor the application of imposed remedies in practice.

Organisation of the NRA

The Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) acts as the operational arm of the Austrian Communications Authority (KommAustria), a subordinate administrative body of the Federal Chancellery, which regulates the broadcasting sector, and the Telecommunications Control Commission (TKK), which is responsible for the review of electronic communications markets.

The coalition agreement of the current Austrian government addresses the reform of the National Regulatory Authority and changes to the structure of decision-taking in the field of electronic communications. However, discussions on these issues have not yet come to any conclusion. The Commission services will continue to monitor this process closely. It may be recalled that in previous Reports the Commission had expressed concerns about the independence of KommAustria given that the public broadcasting infrastructure is largely owned by a foundation under public law. Any new authority would certainly have to be examined with regard to its ability to come to decisions in an independent and impartial way.

Decision-making

TKK had already started the second round of notifications in 2006. As in the first round of market reviews, it found no SMP on the residential international calls market and the trunk leased-lines market. It withdrew existing regulation in the market for transit services in the fixed public telephone network. Regarding the latter market, the Commission had vetoed the first notification. Given the information provided by TKK in its second notification, the Commission accepted the non-SMP finding. In the first round of market analyses, the market for mobile access and call origination was found to be competitive and therefore no regulation was imposed.

TKK had imposed almost the full set of remedies in all wholesale markets found to be non-competitive, with the main exception of the markets for fixed termination by alternative operators, where lighter remedies were imposed. In general, TKK maintained strict remedies in retail markets. In particular, cost orientation based on cost accounting was again imposed in all retail markets where TKK found SMP. However, TKK now uses a different method for controlling retail fixed call prices: the SMP operator may apply tariffs without prior authorisation, but the NRA can subsequently prohibit these tariffs. Alternative market players have expressed concerns, since this way of *ex-post* price control appears to be less effective in combating market failures identified in the course of SMP designation, as it allows the SMP operator to apply an uncontrolled tariff at least for a certain period of time.

Several remedies are *de facto* not applied yet since they are not sufficiently detailed. The details then need to be clarified in dispute settlement procedures before the NRA if the parties cannot achieve agreement. This delays their application. In several cases, lengthy negotiations between operators have meant that the corresponding remedies have not yet been applied. Under Austrian administrative law, third parties do not in general have a right to appeal market analysis decisions. The Austrian Administrative Court referred this issue to the European Court of Justice through a request for a preliminary ruling (C-426/05). The ECJ is expected to take a decision in early 2008.

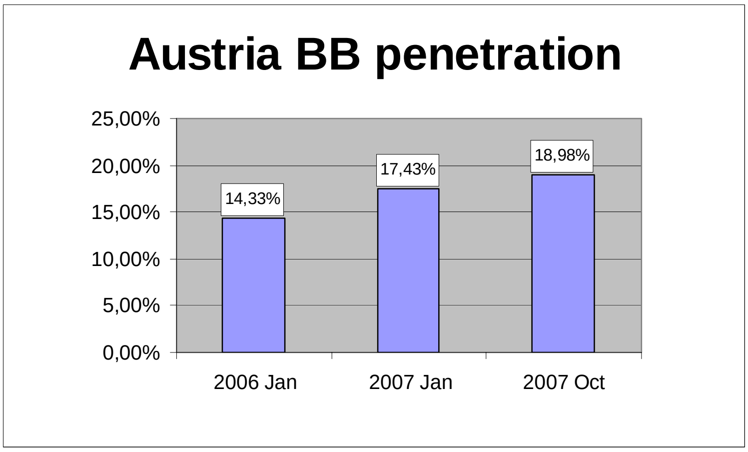
Market players as well as the NRA have expressed concerns that, overall, the mechanism for the enforcement of regulatory obligations imposed by the NRA is not sufficient.

MARKET AND REGULATORY DEVELOPMENTS

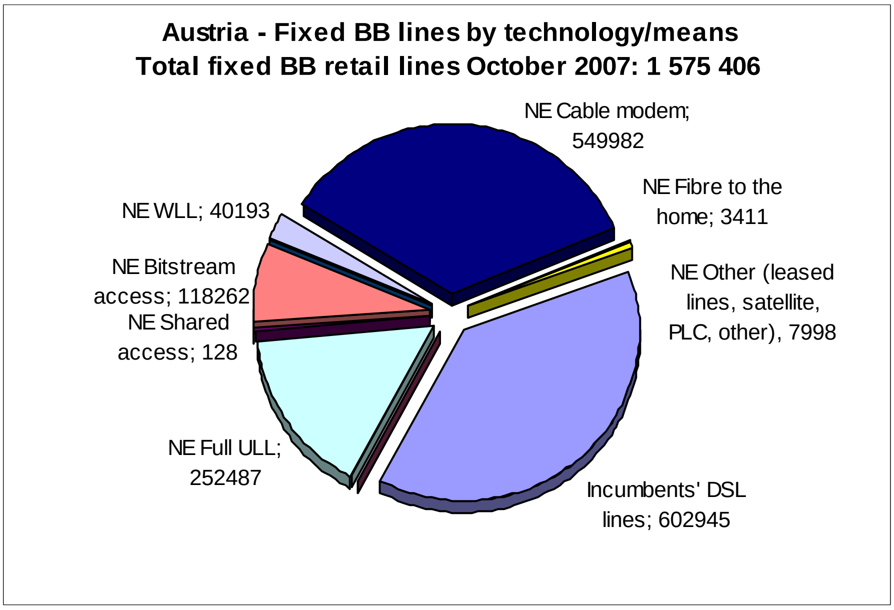
The total turnover of the Austrian telecommunications sector was €5.95 billion as of 31 December 2006, with revenue from the fixed markets (including broadband and leased lines) amounting to €2.26 billion and revenue from the mobile markets totalling €3.69 billion. The total value of tangible investment in telecommunications networks was €750 million, including €218 million by the incumbent in fixed telephony networks and an estimated €105 million by alternative operators in fixed telephony networks. Mobile operators invested around €427 million.

Broadband

Market situation



The penetration rate was 18.98% in October 2007 (up from 16.42% in October 2006, but still below the EU average of 20.04%). Whereas urban areas have 100% DSL coverage, rural areas enjoy only 79%[96]. In urban areas, however, cable continues to be the most popular technology despite the fact that the market share of cable broadband lines has declined. In the previous year, cable had a market share of 38%. In October 2007, all broadband lines based on means other than DSL, which includes wireless local loop, cable modem, fibre to the home, leased lines, power line communications and others, had a market share of only 38.2%.



As regards broadband lines, the market share of alternative operators was 61.7% in October 2007, up from 60.3% in October 2006. 61.8% of broadband lines in Austria were based on DSL technology. The market share of the incumbent fixed network operator in DSL lines was 61.9% in October 2007. In October 2007 new entrants had 252 487 DSL lines on PSTN using full LLU (up from 143 301 in the previous year).

Whereas 372 266 new broadband lines were created from July 2005 to July 2006, the year from July 2006 to July 2007 saw this figure decrease to 238 963. A clear broadband strategy by the Austrian government to counter this development is still lacking.

According to the NRA the retail prices for fixed broadband have been decreasing[97].

96 IDATE report of October 2007: 'Broadband coverage in Europe', data as of 31 December 2006, page 42.

97 RTR's Communications Report 2006, p. 142.

Retail prices for mobile data transfer within Austria have fallen considerably. However, concerns in this area have been raised by the consumer protection department of the Austrian Chamber of Labour with regard to the long duration of retail contracts, which bind consumers to one operator for up to 24 months. Nevertheless, mobile broadband data cards have recently become very popular in Austria, with end-user flat-rate prices just below €20 per month. However, the bandwidth available with these cards in practice is quite low compared to fixed-line broadband. This appears to support the assumption that these offers complement fixed-line broadband offers rather than being currently able to substitute them.

Regulatory issues

In the wholesale broadband access market, TKK has imposed retail-minus pricing obligations and required the dominant undertaking to establish an appropriate cost accounting system to implement these obligations.

Despite the imposition of remedies, however, the market share of the incumbent fixed network operator has remained relatively stable. This may be because in practice regulated bitstream access is not fully operational yet. Wholesale broadband access for alternative operators is still broadly based on agreements between market players under the old regulatory framework. The NRA does not seem to enforce its measure obliging the incumbent fixed network operator to have an attractive bitstream offer in place in a sufficient way.

Alternative market players have again reported that the incumbent fixed network operator tends to create new obstacles to LLU by invoking practical problems in opening lines, imposing additional conditions and delaying the actual unbundling work. In addition, the incumbent fixed network operator introduced a retail triple-play offer in mid-November 2007 lasting two months, which its competitors regarded as resulting in a margin squeeze, in particular on broadband tariffs at wholesale and retail level. TKK checked this triple-play offer and imposed conditions on it. The general monthly rental fee for LLU has therefore been reduced from €10.70 to €10.44 (EU average: €10). Some alternative operators claim that this is still too high to permit an acceptable profit margin. It remains to be seen whether the regulatory safeguards imposed by the NRA have been sufficient to prevent market distortions due to this offer.

Like other markets, the wholesale broadband access market is defined by a decree published by RTR. In the reporting year, RTR changed the explanatory remarks accompanying its definition of this market to state that purely optical fibre lines were not included. Despite the fact that the legally binding wording of the decree as such remained unchanged, some market players expressed concerns that with this amendment to the explanatory remarks the NRA might want to exempt certain next-generation networks from regulation. The Commission services are closely following developments in this regard.

RTR has initiated a national discussion on next-generation networks but has not published clear guidance yet.

Mobile markets

Market situation

Mobile penetration was 113.52% in June 2007 (up from 108%), with 9.42 million subscribers. There are now four mobile network operators in the Austrian market. The second largest operator has acquired what was previously the fourth largest. The merger was approved by the

Commission following commitments on the part of the second largest operator. When assessing the merger, the Commission stressed the previous role of the fourth largest operator as a 'maverick' who had promoted competition through remarkably low end-user prices. Despite the merger, end-user prices for mobile communications have in general remained very low and among the lowest in Europe.

There are no figures on market share published this year, as the NRA claims that they are 'confidential'.

According to the NRA, retail rates for mobile communications have been decreasing[98].

Regulatory issues

The decisions by TKK in the first and the second round of market reviews concerning the market for voice call termination on individual mobile networks were appealed by the mobile network operators (MNOs), and subsequently annulled by the Administrative Court (VwGH). The main reasons for annulment were: (i) insufficient examination of countervailing buyer power; (ii) TKK's failure to take into account the Commission's comments concerning the inefficiency of the procedure, and (iii) the concept of LRAIC for an efficient operator. The latter concept, which forms the basis of the cost orientation obligation imposed by TKK on the MNOs with SMP, was considered by the VwGH to be unclear. In consequence, TKK was invited by the VwGH to carry out the market analyses again for the period 2004-2008 and to set concrete mobile termination rates.

In its new decision, TKK heeded the Commission's previous comments and this time set the mobile termination rates in the remedy itself, without waiting for a dispute settlement procedure. TKK set out a glide path towards a symmetric target mobile termination rate of 5.72 cents as from 1 January 2009 at the latest. This level is to be reached by all MNOs through linear decreases towards the target level . As the MTRs had already been fixed by TKK for the period 2004-2006, TKK left them unchanged. However, the decision has since been appealed by all mobile network operators.

The Commission welcomed TKK's decision to modify its price control measures and to set symmetric mobile termination rates as from 1 January 2009. The Commission also invited TKK to revisit its analysis as soon as a common approach is established at European level.

Roaming Regulation

The Roaming Regulation was applied in time and the NRA reported no difficulties. By the end of August 2007, every mobile operator offered the Eurotariff, which in nearly all cases was set at almost exactly the price cap level. Only one operator offered tariffs clearly below the maximum ceiling. The mobile branch of the incumbent fixed network operator was reported to have introduced a new special package just before the entry into force of the Roaming Regulation, which allegedly hindered customers on that tariff from moving automatically to the Eurotariff. Operators reported difficulties in meeting the Regulation's transparency obligations in time. However, they apparently managed to meet the deadlines.

98 RTR's Communications Report 2006, p. 142.

Fixed

Market situation

The incumbent fixed network operator has maintained its leading position in the market. Regarding calls from fixed to mobile, its market share even went up from 49% to 51.34% based on outgoing minutes of communications. For other types of calls its market share has remained high. For instance, its market share for national fixed calls is 59.99% based on outgoing minutes of communications and 59.95% on the basis of retail revenue.

Retail rates for fixed voice telephony have been stagnating[99].

Regulatory issues

TKK imposed most of the remedies needed in all wholesale markets found to be non-competitive. In the markets for fixed termination, lighter remedies were imposed for alternative operators.

TKK also imposed an obligation on the incumbent fixed network operator to offer wholesale line rental to its competitors. However, this has not been taken up in practice, and will probably not be taken up because of a lack of interest expressed by the market.

Broadcasting

Market situation

As of 1 July 2007 there were 130 000 households with analogue terrestrial TV and 200 000 households with digital terrestrial TV, which was launched only in October 2006. At the end of 2006, 1.67 million households received TV via satellite and 1.33 million households used cable as their TV platform.

Mobile TV based on DVB-H is not provided yet. However, the NRA has launched a public tender for the assignment of spectrum for the broadcast of mobile TV. The NRA expects this service to be launched just before the European football championships in Austria and Switzerland from 7 June 2008.

*Regulatory issue*s

The Austrian broadcasting legislation was amended in August 2007 to incorporate provisions on mobile TV to serve as a basis for the assignment of frequencies and the further development of this technology.

Horizontal regulation

Spectrum management

Austria has implemented almost all relevant Commission decisions under the Radio Spectrum Decision by adapting the federal frequency usage plan accordingly. The last to be implemented was the decision on the harmonisation of the 169.4-169.8125 MHz frequency

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[99] RTR's Communication Report 2006.

band (2005/928/EC). The implementation of Commission Decision 2007/131/EC on allowing the use of radio spectrum for equipment using ultra-wideband technology, Commission Decision 2007/98/EC on mobile satellite services (MSS) in the 2 GHz frequency bands, and Commission Decision 2007/90/EC amending Decision 2005/513/EC on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) is under way. In the light of the envisaged digital switchover in 2010, alternative operators have expressed an interest in the re-farming of frequencies.

THE CONSUMER INTEREST

Universal service

Up to now, the funding of universal service has not been based on the funding mechanism laid down in the Telecommunications Law, as operators had agreed among themselves on compensation for the universal service provider. This was also the case for 2005.

Number portability

In general, number portability is not very much used in Austria and in absolute figures there has only been a slight increase in both fixed and mobile number portability. Regarding the prices for fixed number portability, Austria is one of the countries in Europe with a very high wholesale price. As far as mobile number portability is concerned, the wholesale price is quite moderate with an average of €8.21. However, the incumbent's mobile subsidiary has just announced an increase in the retail price for mobile number portability to €29, which could discourage consumers from making use of this facility.

Consumer complaints

The consumer protection department of the Austrian Chamber of Labour has reported that the number of consumers complaining of inadvertent roaming has increased considerably, above all in border regions. In the case of data roaming in particular, this problem has resulted in considerable costs for consumers in some cases. The consumer protection department reports that many users are simply not aware that their computer might log onto a foreign network even though they are in Austria. However, the NRA reports that this issue has not been mentioned by many consumers.

European emergency number 112

The European emergency number 112 can be called from both fixed and mobile telephones. Caller location information is provided for all calls, upon request ('pull-system').

Must-carry

Austria has changed various laws in order to update its legislation for mobile television. In doing so, it has also introduced a 'must-carry upon request' provision in favour of the state-owned public broadcasting station and the nationwide private television station. According to Article 31 of the Universal Service Directive, Member States may impose reasonable 'must carry' obligations on undertakings providing electronic communications networks only *where a significant number of end-users of such networks use them as their principal means to receive radio and television broadcasts*. The Austrian legislator has limited this controversial provision to the first one and a half years of operation of the platform.

Data protection

Austria has not yet transposed the EU Directive on data retention. Concerning data on telephone calls, the European Commission has addressed this issue in a letter of formal notice to the Austrian authorities. Regarding data on internet use and emails, Austria has to transpose the relevant EU rules by March 2009.

POLAND

INTRODUCTION

Diverging trends could be observed on the Polish telecommunications market in 2007. Competition became keener in the mobile market, with the entrance of the fourth mobile network operator and a number of mobile virtual network operators. In the fixed market the incumbent continued to be largely dominant, although its market shares declined in both telephony and broadband following regulatory decisions. Broadband penetration in Poland remained one of the lowest in the EU in 2007, despite faster growth.

Poland has not yet finalised the first round of market analyses. This has not prevented the regulator actively promoting the goal of lowering prices paid by end-users via other routes, although according to market players it has caused legal uncertainty. Seven infringement proceedings were pending against Poland, of which one, concerning retail broadband regulation without prior market analysis, was launched in 2007.

REGULATORY ENVIRONMENT

Main regulatory developments

The President of UKE (Office for Electronic Communications) continued to actively strive to lower the prices paid by end-users for electronic communications services. The Regulator's decisions were notable for a "hands-on" approach to the market as exemplified by the frequent recourse to dispute resolution as a regulatory tool and the continued use of transitional measures. The President of the UKE is currently considering whether to introduce functional separation of the fixed incumbent.

Amendments to the Telecommunications Act of 2004, introducing quite significant changes with regard inter alia to the powers of the NRA, market analyses, consumer rights and corresponding obligations of all undertakings, and the 112 emergency number, were approved by the government in the summer of 2007; however, they had not been submitted for parliamentary discussion when this report was drafted, following political changes in the autumn of 2007.

Poland was in 2007 the Member State with the highest number of open infringement proceedings for incorrect transposition and application of the EU regulatory framework. Seven proceedings are currently pending, of which one was opened in 2007. Two cases are currently before the Court of Justice.

Organisation of the NRA

Following the change in government, the Ministry of Infrastructure took over the responsibilities in the field of electronic communications previously held by the Ministry of Transport. The legality of the process of appointment of the President of the UKE continued to be questioned in court throughout 2007, shedding doubt on the validity of her decisions and causing legal uncertainty on the market. At the time of drafting this report, the ruling of the Polish Supreme Court that would finally resolve the issue was awaited.

The President of UKE is charged with most of the responsibilities of the NRA under the regulatory framework, with the notable exception of market definition for the purposes of market analysis, for which the Ministry is responsible, and UKE appears to have most of the necessary powers to effectively fulfil its regulatory functions. However, the Regulator is experiencing difficulties in retaining experienced staff. This has a negative impact on the day-to-day functioning of the authority, which is financed from the State budget. Legal changes in 2006, which had removed a fixed term of office for the President of UKE and granted the President of the Council of Ministers an unlimited right to dismiss the head of the NRA at any time and without the need to indicate reasons, were not undone in 2007. As indicated in the 12th Report, the Commission is concerned that the changes introduced may influence the impartiality of the NRA and sent a Reasoned Opinion to Poland in June 2007.

The Regulator also seems not to have the necessary specific enforcement powers, in particular the power to encourage, and where appropriate ensure, adequate access and interconnection and interoperability of services irrespective of the market power of the undertakings involved. The case was referred to the Court of Justice in May 2007.

More judges and assistants were appointed to the Competition and Consumer Protection Court, responsible inter alia for hearing most of the electronic communications cases, raising the total number of judges and assistants to 14. Despite this slight improvement, the length of appeal proceedings appears to be an issue as the Court takes approximately 2.5 years to reach a judgment. The number of appealed decisions is also striking as there are currently some 500 proceedings pending against decisions of the Regulator, launched solely by the incumbent.

Decision making

The NRA almost finalised the first round of market analyses in 2007. The re-notification of the market for wholesale trunk segments of leased lines is expected shortly. According to the UKE, the market for mobile access and call origination will also be re-notified. The second round of notifications is not expected to start in early 2008.

While several decisions taken by the NRA have begun to take effect, such as the imposition of wholesale line rental (WLR), bitstream access, or changes in reference offers, many of its decisions are subject to lengthy appeals. Despite market analysis efforts, decisions have in general continued to be based on transitional provisions (the ONP rules). Certain provisions, such as those relating to dispute settlement, are very broadly interpreted. Some operators have also voiced concerns about the frequent intervention of the NRA in dispute resolution, which is seen by operators as taking away the incentives to negotiate in good faith.

At the same time, dispute settlement proceedings are often used by operators to seek further specification of the wide range of not always detailed remedies imposed by the NRA. This is shown by the high number of such proceedings: there were 163 inter-operator dispute resolution requests in 2007. This approach affects transparency and legal certainty for market players.

Moreover, most of the regulatory obligations currently in place are based on benchmarks or retail-minus methodology. Some operators are concerned that rates are not cost-oriented. The incumbent has complained that some rates have been mandated at levels significantly below cost and alternative operators would not like to see tariffs raised in the future as a result of bringing them into line with costs.

MARKET AND REGULATORY DEVELOPMENTS

Revenues in the telecommunication sector in 2006 totalled €10 504 million as of 31 December 2006. Revenue from the fixed markets was €4 768 million, while the mobile market generated some €5 736 million. The total value of tangible investments in the electronic communications sector was €1 635 million. Mobile operators invested €742 million, which represents almost half of overall investment. Fixed alternative operators invested €398 million, slightly less than the total investment by the incumbent.

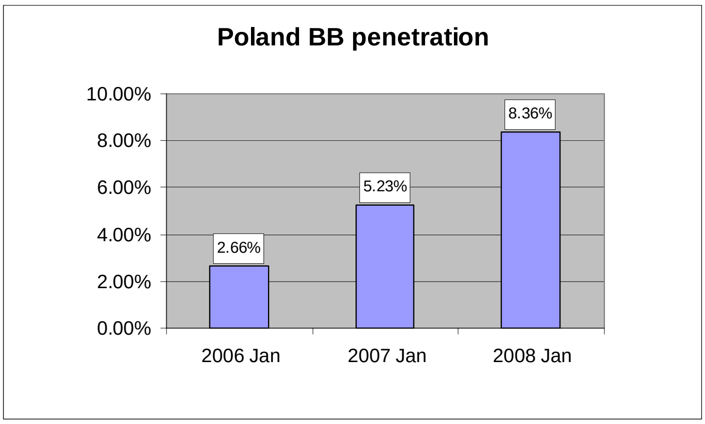
Competition has become stronger in the mobile market following the entry of a new network operator as well as a number of MVNOs. The three large mobile operators are trying to attract new customers by offering innovative services, for example the possibility of making small payments by mobile phone. They are also competing on the fixed market, having signed WLR agreements with the fixed incumbent. All mobile network operators have signed MVNO agreements and more are in the process of being negotiated.

Revenues on the fixed telephony market have continued to fall as a result of lower prices, the growing popularity of PC-based VoIP services and fixed-to-mobile substitution. At least two fixed line operators are offering IPTV services on a commercial basis. In the reporting period, there was an increase in the number of cable operators offering triple play including voice and broadband access in addition to TV services.

The Regulator is in the early stages of considering the possibility of introducing functional separation of the incumbent. A study will be undertaken in this regard, to determine the effectiveness of existing remedies. A decision on whether or not to implement functional separation is expected in mid-2008.

Broadband

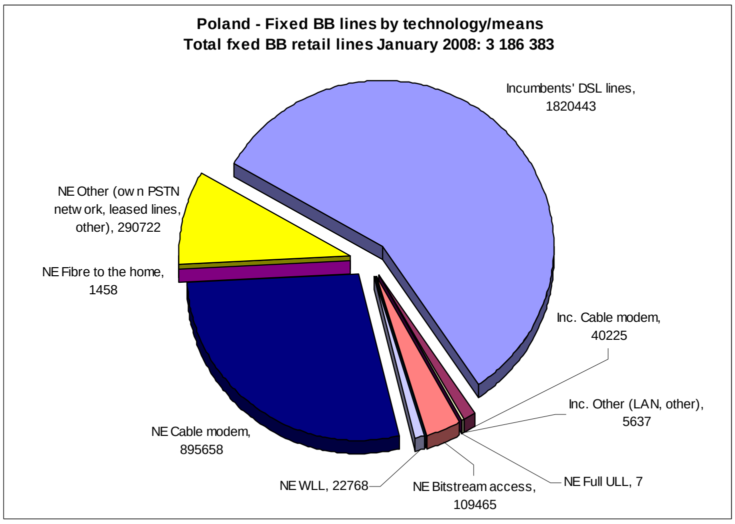
Market situation



Broadband penetration in Poland, at 8.36% in January 2008 (despite growing by over 3 percentage points compared to January 2007), was the second lowest in the EU-27 and way below the EU average (20.0%). The incumbent's market share in the retail broadband market dropped significantly (by almost 10 percentage points) during the past year and in January 2008 stood at 58.6%. This results from competitive pressures from alternative operators entering the broadband market on the basis of the incumbent's bitstream offer, as well as dynamic growth in the number of lines in technologies other than DSL (more than 500 000 added lines in 2007).

Despite this, several factors apparently remain which are intrinsic to the low penetration rates in Poland. For instance, fixed line telephony penetration is low (and does not cover many rural areas) and the price of retail broadband services remains high with respect to the disposable income of Polish consumers, despite falling somewhat in the reporting period. The growth in service-based competition following the significant take-up of the wholesale bitstream offer has led to tangible benefits for consumers in terms of price reductions and offers with higher speeds and download capacities. Local loop unbundling, however, was still not functioning in Poland as only five local loops had been unbundled by the end of 2007. However, several agreements were in place that were likely to lead to more local loops being unbundled in the near future.

Competitors to the incumbent's DSL broadband offering included cable operators, which more than doubled the number of lines (to ca. 900 000 lines in January 2008), the DSL offerings of alternative fixed operators using the bitstream offer and their own infrastructure, as well as mobile operators providing internet access using various technologies. The cable sector was however fragmented and penetration did not cover the majority of the population.



The gap in DSL coverage between rural areas and the national average was 12.3% as at December 2006, with 54.8% coverage in rural areas compared to 67.1% at national level. A comparable gap (11%) was observed in cable coverage, with only 7% in rural areas against 18% national coverage. On the whole, the gap between rural and national coverage for both DSL and cable, at 12.3% and 11% respectively, was lower in Poland than the average gap for the EU-25, at 18% and 28.2% respectively. This can be explained by the fact that levels of broadband data coverage are generally low in both urban and rural areas in Poland.[100]

Regulatory issues

In February 2007, the NRA adopted final measures for the wholesale broadband market. It included bitstream access in the market definition (at the ATM level and to take account of reasonable requests from alternative operators to ensure access at DSLAM and/or IP level). The remedies included an obligation to provide access, including the use of network elements and associated facilities, a non-discrimination and transparency obligation, accounting separation and price control as well as an obligation to present a reference offer.

However, the NRA has continued to regulate bitstream on the basis of the old ONP regime, considering that new measures could only be applied when the SMP operator presents its cost calculation together with the new reference offer and when that offer has been analysed. At the time of drafting this report, the NRA was still in the process of analysing the reference offer for bitstream that had been submitted in May 2007. The Commission is concerned about the continued use of transitional measures more than three years after Poland's accession to the EU.

100 IDATE report: Broadband coverage in Europe, October 2007; data refer to the end of December 2006.

By August 2007, 16 wholesale agreements had been signed between alternative operators and the incumbent on the basis of this reference offer and further agreements were being negotiated. By the end of 2006, the incumbent had unbundled 59 local loops for the purpose of bitstream access. Moreover, in November 2007, the NRA changed ex officio the terms of contracts between the incumbent and alternative operators for bitstream access. The price at wholesale level was now established using retail-minus methodology at a single rebate of 51%, and a separate rebate relating to special offers (at 41%) was withdrawn.

The changes to the reference offer for local loop unbundling, mentioned in last year's report, which significantly lowered the prices for full and shared access and provided for better and more detailed regulation of co-location and co-operation between operators, had led to only five local loops being unbundled when this report was drafted. However, six agreements had been signed, with the UKE intervening in three cases to help resolve issues between operators. The incumbent has blamed the slow take-up of LLU on over-advantageously priced bitstream access, which takes away the incentive to invest. The NRA adopted final measures on the market for wholesale unbundled access to the local loop in June 2007. It was still in the process of analysing the incumbent's new reference offer for local loop unbundling at the time of writing this report.

It is also on the basis of the previous legal framework that the NRA has regulated the prices of the incumbent's retail broadband services, and has fined the incumbent (including a maximum fine amounting to 3% of revenue in February) for lack of transparency and cost orientation of its retail broadband offerings, as well as failing to submit its retail broadband tariffs for prior approval. However, the Commission sees no legal basis for retail broadband regulation without a prior market analysis and has opened an infringement proceeding.

Mobile markets

Market situation

The mobile penetration rate reached 97% in October 2007, following another year of significant growth (6 percentage points in the reporting period), but is still below the EU average of 111.8%. The mobile market in Poland features three large operators providing mobile services — voice and data (including 3G services in highly populated areas) with similar market shares, respectively 36%, 32% and 32% (in terms of subscribers as of October 2007). The fourth mobile network operator had attracted 700 000 customers by the end of 2007. The market shares of the three MVNOs are still marginal, not exceeding 10 000 in October 2007.

With regard to retail price trends on the mobile telephony market, subscribers enjoyed further reductions across usage baskets in 2007 and retail tariffs remained among the lowest in the EU. The mobile operators invested strongly over the past year to upgrade their networks and improve HSDPA coverage.

Consumers' choice of mobile operators widened in March 2007 as the fourth network operator that had been assigned 3G frequencies in May 2005 finally entered the market after a long delay due to difficulties in rolling out its network. It offered services based on national roaming both on a competitor's infrastructure and to a lesser extent on its own network. It has continued rolling out its network and plans to cover 50% of the territory by 2009.

At the time of drafting this report there were also five MVNO agreements in place and three operators had launched commercial services. More agreements were being negotiated as cable and fixed operators were planning to enter the mobile market. With mobile penetration approaching 100% these new entrants were targeting niche market segments to compete for market share with the other mobile operators.

Competition was expected to intensify as two frequency slots in the 1800 MHz band (each covering 49 duplex channels) were finally assigned by auction in September 2007, following two unsuccessful tenders in 2005. Both winning bidders were new entrants. The tender conditions were shaped in such a way that a great deal of weight was given to the criteria of promoting competition. There was no restriction with regard to the technology to be used or the type of services to be provided. The rollout requirements are 15% population coverage by the end of 2009.

Regulatory issues

In spite of the lack of a relevant market analysis, the regulator was considering imposing an MVNO access obligation on one of the mobile network operators and notified a draft decision to the Commission in May 2007. The Commission raised its objections in a comment letter. No decision had been taken by the NRA at the time of writing this report.

In April 2007, the Regulator issued a decision imposing a glide path for mobile termination rates, having consulted neither the stakeholders nor the Commission. Commission services are looking into the matter. The rates were set on the basis of benchmarks of three countries with the lowest rates, which was criticised by operators. The termination rates for the fourth mobile operator are not currently regulated.

Certain environmental and public safety regulations were amended in August 2007 to simplify the procedure for deploying masts and network rollout.

Roaming

The new European Regulation 717/2007/EC on roaming on public mobile networks within the Community was implemented on time and without any significant problems. One mobile operator – a new entrant - set prices below the maximum level indicated by the regulation.

Fixed

Market situation

Despite increased competition from alternative operators basing their services on the WLR offer, the incumbent has remained by far the largest player with regard to fixed telephony and has 71% of the fixed calls market (as of December 2006, in terms of revenues). Its market share has however continued to decline (by 5 percentage points since a year earlier). Despite promotional offers aimed at bonding the customer for longer and keener competition following the WLR offer, retail prices for fixed telephony remained generally unchanged in 2007. Fixed-to-mobile substitution continued to develop in Poland in 2007. Mobile traffic volumes (in million minutes) increased from 16 352 at the end of 2005 to 26 238 at the end of 2006, which was reflected in a similar decline in fixed traffic volumes. There was also a decline in fixed subscriptions.

While there were 93 operators offering publicly available telephony services as of July 2007, the main market players were the fixed incumbent, four fixed alternative operators, and the mobile players that are moving into the fixed market. In December 2006 three alternative operators had a market share greater than 5% (5.20%, 6.16% and 7.24%). No significant consolidation took place in 2007.

While there has been significant growth in terms of subscribers to telephony over cable services, their overall market share remains marginal, with 420 000 lines in September 2007 according to figures produced by the cable operators association (PIKE).[101]

Regulatory issues

The incumbent has continued to apply the Reference Interconnection Offer (RIO) based on the former Telecommunications Act despite final measures having been adopted on the markets of fixed wholesale call origination and termination in July and September 2006 respectively. The NRA made important changes to this RIO in July 2006, among other things introducing capacity-based interconnection with a flat rate for a defined capacity of traffic exchange. The incumbent is of the opinion that this flat-rate interconnection offer was mandated at rates significantly below cost (by some 250%) and claims that audit results confirm this. Cost orientation was still not effectively in place in 2007 following the NRA's rejection of the incumbent's (independently audited) cost calculation in October 2007. This decision has been criticised by the incumbent. Commission services are looking into the matter.

By September 2007, the Regulator had issued 14 separate decisions imposing wholesale line rental (at a 47% rebate of the retail price) in the process of dispute resolution between the incumbent and alternative operators. The decisions were based on the transitional measures and a wide interpretation of the ONP regime, and not on the results of the relevant market analysis despite the final measure imposing regulatory remedies on the wholesale market for fixed call origination (including a general obligation to offer WLR) having been adopted. Operators complain that the process whereby WLR is imposed not on the basis of a reference offer but by recourse to individual decisions leads to discrimination as decisions are issued at different points in time.

In wholesale leased lines markets the final measures still remained to be adopted at the time of writing this report. In October 2007, while in the process of analysing these markets, the NRA introduced significant changes to the reference offer for leased lines (based on the previous regulatory regime). Prices were reduced by up to 49% and the offer was expanded to include additional capacities. The incumbent has appealed this decision citing the lack of legal basis, as the market analysis process was ongoing.

Broadcasting

Market situation

Cable penetration in Poland stood at about 45% (4.5 million subscribers) according to PIKE figures and is concentrated in big cities.[102] Out of more than 400 cable operators registered in 2005, few had a subscriber base greater than 100 000 and only one operator had more than 1 million subscribers. Digitisation of the network has been progressing and in June 2007 there were 122 000 digital cable TV subscribers in Poland.

[101] PIKE, September 2007.
[102] Ibid.

As of September 2007, there were 6.1 million users in Poland relying on terrestrial broadcasting as their main means to receive (analogue) TV broadcasts. The three satellite digital platforms available on the Polish market had 2.6 million subscribers. At least two operators were offering IPTV services using DSL-enabled networks, although their take-up was limited also because of the low broadband penetration levels.

A new switchover strategy has been prepared by the Ministry of Transport in cooperation with the NRA but has still not been formally adopted. The strategy envisages the creation of a single multiplex in the transitional period. In accordance with the strategy, Poland is planning to switch off analogue transmission by the end of 2014. No frequencies had been assigned by the time of drafting this report. The introduction of mobile digital TV is not expected for some time in Poland as no specific standard has been identified so far and no frequencies have been set aside. This is despite strong industry interest in this innovative service, some debating opportunities provided by the NRA and planned test services in the DVB-H standard.

Regulatory issues

In November 2007, the NRA made significant changes to the Reference Offer for access to the broadcasting infrastructure, lowering tariffs by some 40% in comparison to those proposed by the subsidiary of the fixed incumbent.

Horizontal regulation

Spectrum management

Poland has implemented the Commission Radio Spectrum Decisions: Decisions 2004/545/EC, 2005/50/EC, 2005/513/EC, 2005/928/EC, 2006/771/EC, 2006/804/EC, 2007/90/EC, 2007/98/EC and 2007/344/EC.

The NRA's policy is aimed at allowing the use of spectrum for all types of services. At present spectrum trading is possible between undertakings if both consent to it. However, this does not apply to spectrum assigned at auction, in which case a favourable decision by the NRA and the competition authority is required.

At the same time the NRA has been actively trying to promote broadband access by means of other technologies including wireless technologies in rural areas. Its policy has been aimed at encouraging local authorities to build local access networks using public funds in areas where operators have not found it commercially viable. To meet the requirements of spectrum for this purpose, it organised a number of auctions in 2007 for WiMAX frequencies in small rural areas.

Rights of way and facility sharing

Cable operators have complained about the high cost to them in comparison with companies operating in other sectors as well as about cumbersome and not always transparent procedures as far as rights to install facilities on public and private land are concerned. In addition, local authorities appear to impose taxes on the telecommunications infrastructures and each authority appears to have wide discretion in deciding the levies.

THE CONSUMER INTEREST

Universal Service

The fixed incumbent that was designated as universal service provider in May 2006 applied for compensation of the net cost of universal service provision for the first time in June 2007. The President of the UKE has apparently refused to grant such reimbursement on procedural grounds. The NRA considered that the incumbent had not presented sufficient documentation to prove that such a cost had been incurred. The incumbent was considering appealing the decision.

Operators were also concerned by the President of the UKE's interpretation of a provision of the Universal Service Directive which grants customers the right to withdraw from a contract upon notice of a modification of contractual conditions if they do not accept the new conditions. The Regulator has fined a mobile operator for not having informed its customers of their right to withdraw from their contracts upon a change in the terms and conditions mandated by the Regulator, consisting of replicating certain binding provisions of Polish law in favour of the consumer. The UKE considers that its interpretation is in line with the provisions of Polish law, which provide that any change in the contract, whatever its scope, triggers the customers' right to resign from the contract. Commission services are looking into the matter.

Directory services and directory enquiry services

For a number of years there were no comprehensive directory services and directory enquiry services available in Poland covering fixed and mobile subscribers, and the matter had been referred to the Court of Justice in October 2006. However, after a number of steps taken by the UKE President, a comprehensive directory enquiry service finally became available at the end of 2007 according to the UKE and a fully comprehensive directory is expected at the beginning of 2008. The Commission is looking into the matter.

European emergency number 112

While the single emergency number 112 has been available for all end-users since September 2005, it appears that important deficiencies remain with regard to identifying the caller's location when calls are made from mobile phones. The matter has been referred to the Court of Justice.

Number portability

Number portability for both fixed and mobile numbers has been available since 2006. While operators are concerned about the lengthy and cumbersome procedure for fixed number portability, which takes between 14 and 30 days, work on simplification is ongoing according to the UKE. Mobile number portability is causing less concern and 35 000 mobile numbers had been ported by December 2006.

Consumer complaints and out-of-court dispute resolution

In 2007 the NRA considerably stepped up efforts to better inform consumers. It has delegated the task of interacting with consumers and consumer organisations to its 16 regional offices, which is expected to allow disputes to be resolved more quickly. It has also set up a consumer information centre to advise consumers on all issues relating to electronic communications.

This has proved very popular, with more than 5 000 calls being registered in the first six months of operation. The NRA was also considering giving consumers the possibility to lodge their complaints via a website.

In addition, out-of-court disputes involving consumers may be dealt with by the consumer arbitration court established by the Telecommunications Act of 2004 or by the NRA in a mediation procedure.

Personal data protection

Poland has not yet transposed the Data Retention Directive. Transposition was planned as part of the review of the Telecommunications Act currently under way.

PORTUGAL

INTRODUCTION

Alternative operators have continued to gain market share in the fixed and broadband markets, which however remain below the EU average. On the fixed market, the number of subscribers using an alternative operator for direct access is the highest in the EU. As regards the broadband market, alternative operators have significantly invested in local loop unbundling (LLU), while Portuguese consumers are increasingly using mobile broadband and subscribing to bundled offers.

The regulator has adopted a full range of remedies to be imposed on the incumbent operator. Although the effective implementation of some regulatory measures introduced by the regulator has been delayed (e.g. wholesale line rental or leased line reference offer), others are producing positive results, such as LLU. During 2007, the regulator was active in preparing the next spectrum assignments. An important challenge ahead is the evaluation of the effects of the spin-off of the incumbent's cable subsidiary, in November 2007.

REGULATORY ENVIRONMENT

Main regulatory developments

Most markets were analysed by July 2005. No detailed calendar for the second round of market analyses has been announced yet although the regulator, ICP-ANACOM, plans to review the relevant markets in 2008. In August 2007, the regulator notified the final regulatory measures for the broadcasting transmission services market. In October 2007, it also notified the Commission of an amendment to the price control remedies for 2008 for the voice call termination market to introduce asymmetric regulation of mobile termination rates (MTRs). The Commission commented that this amounted to the imposition of a substantially different remedy and noted that cost orientation had not yet been implemented, although the further price reductions were welcomed.

Following the spin-off of the incumbent's cable subsidiary in November 2007, the regulator would need to evaluate its effects on competition in the market and possibly review the existing regulatory obligations accordingly. There are now two separate undertakings with different boards of directors, but a more or less common shareholder structure. The incumbent is requesting a full regulatory revision, since previous market analyses considered all the undertakings of the incumbent's group. Meanwhile, the regulator is taking a cautious approach so far as the spin-off is still rather recent, although it expects more competition to emerge in the future.

Two infringement proceedings are currently pending in relation to the Universal Service Directive: one on the designation of universal service providers and one on the availability of a comprehensive directory and directory enquiry service (C-458/07).

Organisation of the NRA

ICP-ANACOM has regulatory competences in the postal and electronic communications sectors, but overall its organisation does not reflect any division of tasks. During the reorganisation of the national regulatory authority (NRA) in 2007, a Communications Security Office was established with competences for the security of communications networks and services, in particular access to emergency services.

The NRA has consistently provided assistance to the national competition authority (NCA), AdC, in its relevant areas of competence during the last takeover bid and in relation to other issues. In August 2007, AdC adopted a decision imposing a fine of €38 million on the incumbent for abuse of dominant position on account of its refusal to grant access to ducts before the duct reference offer was mandated.

The effectiveness of appeal mechanisms has been raised as a critical issue by market players, although appeals do not have the effect of automatically suspending NRA decisions except in cases where fines or sanctions are imposed. Only four of the 36 NRA decisions so far appealed have been resolved in first instance, though the final decision is still pending in each case. Moreover, some appeals lodged with the administrative courts in 2001 have been pending for almost seven years, thus creating legal uncertainty in the sector.

Decision-making

Following the first review of markets, the NRA found the incumbent to have significant market power (SMP) in all but one of the markets analysed, and imposed a full range of obligations. It should be noted that there is still a significant level of retail regulation in the Portuguese market and there has been an increase in some wholesale obligations, such as ‘naked DSL’.

In 2006 the Commission started infringement proceedings against Portugal for failure to notify all relevant markets under the first Commission Recommendation. Since the two remaining relevant markets (mobile access and wholesale international roaming) with no *ex ante* regulation imposed have been withdrawn from the list of relevant markets, the Commission has finally closed the case.

Stakeholders have complained about the long period between the end of a public consultation and the adoption of a final decision by the regulator, and about the delay in resolving some disputes between operators.

There is no public debate yet about next generation networks (NGNs), though the regulator envisages a consultation on this topic during 2008. It seems that the first fibre deployments are already taking place even in local exchanges that are currently open for LLU. Alternative operators consider that this regulatory uncertainty is critically affecting their business plans. In September 2007, the regulator organised a conference on convergence under the auspices of the Portuguese presidency.

MARKET AND REGULATORY DEVELOPMENTS

According to data from ICP-ANACOM, investment in the electronic communications market in Portugal totalled €784 million and turnover was €7.38 billion in 2006. There is a trend towards consolidation in the fixed and broadband markets on the one hand and an increase in the number of mobile market players on the other hand, although the latter mostly do not have an infrastructure-based business model.

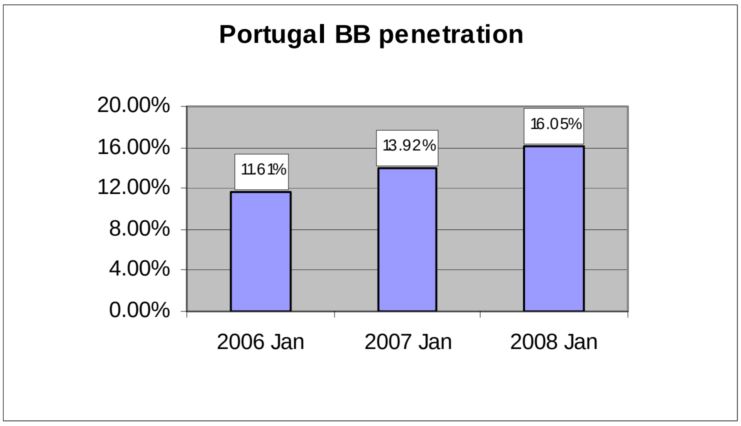
In March 2007, the takeover bid launched by an alternative Portuguese operator for the incumbent and its cable subsidiary failed, as one of the necessary conditions for the takeover bid was not approved by shareholders. However, as part of a plan to fend off the hostile bid, the incumbent had announced its intention to divest its 58.4% stake in its cable subsidiary should the takeover bid fail.

The spin-off of the cable subsidiary became effective on 7 November 2007 when the incumbent's shareholders exchanged their shares. Separate ownership of the copper and cable networks should prove beneficial to competition in the Portuguese fixed and broadband market by creating incentives to invest in fixed network upgrades and to compete in developing new services. It should be noted that the Portuguese Government still holds a 'golden share' in the incumbent, and an infringement proceeding is pending in this regard.

Portugal occupies fourth place in the EU in terms of bundled subscription offers. There are different triple-play offers in the market, including a widespread cable service, one service based on wireless local loop (WLL) with limited coverage, and three services over DSL (two from alternative operators and the incumbent's offer). The triple-play offer recently launched by the main cable operator includes a VoIP service with geographic numbering. During 2007, retail mobile prices decreased while voice fixed telephony tariffs remained stable and among the highest in the EU.

Broadband

Market situation

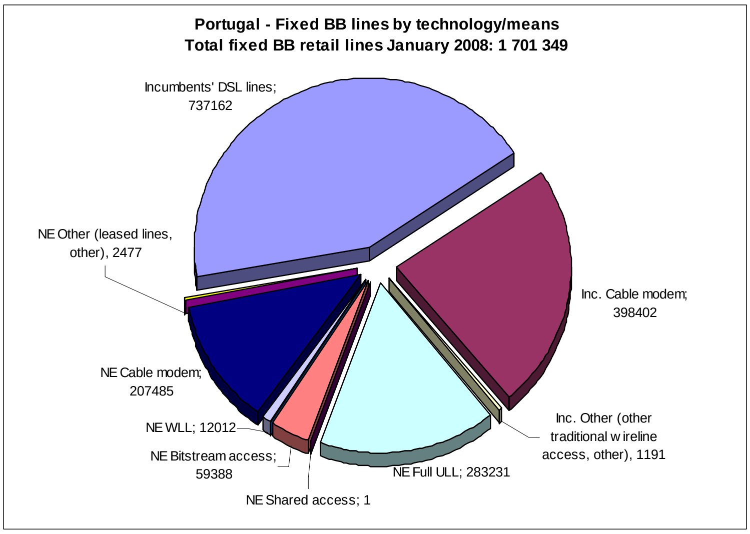


Although fixed broadband penetration grew to 16.05% by January 2008, it was still below the EU average (20.04%). In fact, the Portuguese fixed broadband market has one of the lowest growth rates in the EU. The shares of the different technologies have remained unchanged: DSL has the highest percentage of broadband lines (63.5%), although cable (35.6%) is still a significant means of access. This situation might evolve in the future following the ownership separation of the incumbent's copper and cable networks. Mobile broadband is being increasingly used in Portugal with 4.5% of the population active customers as of October 2007[103]. A recent study of broadband availability shows that the digital divide between the national average and rural areas in Portugal in terms of DSL coverage is 10 percentage points (94% and 84% of the population, respectively), although cable coverage in rural areas is the highest in the EU (48% compared to the 80% national average)[104].

Since the beginning of 2005, the incumbent's share of the retail broadband market has been declining. Its major competitor reinforced its position during 2007 through the acquisition of a

103 ICP-ANACOM's 3Q report.
104 'Broadband coverage in Europe', IDATE, October 2007 (data as of 31 December 2006).

fixed competitor and the residential part of another. However, before the spin-off of the incumbent's cable subsidiary in November 2007, the incumbent still held seven out of ten broadband lines. Following the spin-off, the incumbent's former cable subsidiary now has approximately a quarter of the market (23.4%), with the incumbent still holding a 43.3% market share. The regulator would need to evaluate effects of the spin-off on competition in the market.



Alternative operators are increasingly investing in fully unbundled lines (shared access is still not used) for the provision of broadband services, which constitutes an encouraging trend for increasing competition in this important market. The number of unbundled local loops grew to over 291 175 unbundled lines in January 2008 compared to 68 608 two years earlier, while the number of bitstream accesses decreased slightly to 59 388 in January 2008. During 2007, the second mobile network operator (MNO) started investing in LLU.

Regulatory issues

Although no further change to unbundling fees was introduced last year, LLU prices are among the lowest in the EU. The regulator is concerned about the efficient use of collocation space in local exchanges, which might improve following the recent acquisitions in the market and the new rules established by the regulator in April 2007 to implement the 'use it or lose it' principle. Alternative operators indicated that there is room for improvement in the prices for collocation and service level agreements (SLA).

In July 2007, ICP-ANACOM called upon the incumbent to include 'naked DSL' in the bitstream reference offer (known as Rede ADSL PT), aiming to have this operational by February 2008 the latest, without the need for further regulatory intervention. The incumbent has recently published an updated reference offer including 'naked DSL', which is currently being examined by the NRA. To avoid margin squeeze problems, the regulator has maintained a retail-minus obligation on the incumbent, for which the methodology was revised in October 2007.

Mobile markets

Market situation

Mobile penetration continues to grow in Portugal and had reached 122% by October 2007. The market shares of the three MNOs have remained more or less constant, and the incumbent's mobile subsidiary still leads the market. Portugal makes very intensive use of mobile services, with 58% of overall voice traffic originated in mobile networks and one of the highest proportions of prepaid customers (78%).

The Portuguese mobile market is also characterised by low churn and high customer loyalty, so the figure for ported mobile numbers is still low (156 490 as of October 2007). Mobile operators have launched upgraded broadband access services and extended the coverage of advanced mobile networks.

Regulatory issues

As of October 2006, all mobile termination rates had converged to a target of €0.11 following the glide path established by the regulator at the beginning of 2005. However, this rate is currently above the EU average. In October 2007, ICP-ANACOM notified the Commission of an amendment to the price control remedies for the voice call termination market, establishing a new glide path for the year 2008 to further reduce mobile termination rates (MTRs), though applying asymmetry, with the aim of addressing network effects and traffic imbalances. Although the regulator expects to implement cost orientation in 2008 as envisaged in its first notification of 2004, MTRs are still based on benchmarking.

The NRA has not yet notified the mobile access market, but it is evaluating the possible existence of joint dominance in this market. In addition to three commercial agreements signed during 2006 with mobile service providers, the postal incumbent launched commercial services in November 2007 following the signature of an MVNO agreement.

International roaming

The implementation of the Roaming Regulation in Portugal has run smoothly. All three mobile network operators in Portugal have opted to offer a tariff in line with the maximum ceilings. No problem has been detected in the Portuguese outermost regions as operators are offering national mobile tariffs. The regulator is preparing legislation to establish deterrent sanctions in the event of non-compliance.

Fixed

Market situation

The incumbent was still dominant with 74% of the fixed voice market in terms of revenue in December 2006, though its share was gradually decreasing. During 2007, its major competitor reinforced its position through the acquisition of two other competitors.

The use of alternative operators for the provision of fixed voice services has significantly increased in the last two years, due to the existence of cable providers, operators investing in LLU, and above all the provision of fixed telephone services using mobile frequencies. In particular, all three MNOs have now been authorised to use mobile frequencies for the provision of fixed telephone services under certain conditions (e.g. using numbers for fixed services and a limited number of network cells). As of July 2007, 23% of subscribers were using a provider other than the incumbent operator for direct access, which constitutes a significant increase compared to 15.1% one year earlier and the 13.5% EU average.

Regulatory issues

In May 2007, ICP-ANACOM reduced interconnection prices by 10% under the reference interconnection offer (RIO), in order to adapt to the new universal service tariffs. The annual review in November 2007 resulted in an additional 2% decrease. Since the beginning of 2007, the incumbent is offering capacity-based interconnection, in addition to the metered interconnection model, and so far one alternative operator is using it.

The offer for wholesale line rental (WLR), known as ORLA, was updated in November 2006, enabling alternative operators to provide access together with telephone services. As its implementation proved to be problematic, the regulator previously banned retail offers in which the incumbent bundled subscription and calls. As certain improvements were subsequently introduced for WLR, the regulator permitted these bundled offers from March 2007. There were about 168 000 access lines under the WLR offer in October 2007, compared to 120 000 one year earlier. The NRA has now finally included ISDN access and clarified, among other things, the conditions for service suspension by the incumbent in the event of non-payment. The NRA has also published an amendment to the regulation on selection and preselection to eliminate certain inefficiencies in relation to service request cancellation and compensation for delays.

Some operators have complained to the NRA about phones installed for free by the incumbent for exclusive use via the incumbent's phone cards. In May 2007, the regulator imposed a fine of €60 000 (later reduced to €40 000 by court decision) on the incumbent and requested a new offer to be submitted to it. According to the latest information from the regulator, the discrimination issue has been solved but the cost orientation analysis is still ongoing.

Broadcasting

Market situation

Although the main platform for the provision of broadcasting services is analogue terrestrial TV, cable constitutes the second most important means of access followed by satellite and, with only marginal shares, IPTV and WLL. In addition to two analogue terrestrial networks, Portugal has one of the most widespread cable networks, covering almost three in every four households, with some regional cable operators and one main nationwide cable operator. The incumbent operator is very much present in the broadcasting market as well: in addition to its current IPTV offer, it will shortly launch satellite TV services and participate in the tender for digital terrestrial television (DTT) frequencies following the spin-off of its cable unit.

The policy for DTT is being revaluated in Portugal, although there is no concrete date for the launch of DTT services yet. Analogue switch-off will tentatively take place between 2010 and 2012 in Portugal, following a regionally staggered timetable. Frequencies for mobile digital television are not expected to be assigned until analogue switch-off has been completed.

ICP-ANACOM has recently launched a public consultation before launching a public tender for the assignment of frequencies for DTT, both for free-to-air (including certain must-carry obligations) and for pay-TV channels.

Regulatory issues

In August 2007, ICP-ANACOM adopted final measures regarding the market for broadcasting transmission services. The regulator considered only the analogue terrestrial television broadcasting to be a wholesale market susceptible to *ex ante* regulation. As a result, the obligations under the concession granted to the incumbent until 2025 have been maintained and further obligations to ensure transparency and accounting separation have been imposed. In future, the development of DTT networks could be facilitated by these measures.

Horizontal regulation

Spectrum management

The regulator has been very active on spectrum issues during the previous year, launching public consultations on DTT, Broadband Wireless Access (BWA) in the 3.4-3.8 GHz band, and mobile services in both the 450-470 MHz and 900/1800 MHz bands. For BWA, the regulator might launch auctions next year while for other spectrum assignments it prefers to launch public tenders. The regulator envisages the gradual introduction of neutrality in terms of spectrum use. Following the renewal of the GSM licence of one mobile operator in 2006, ICP-ANACOM renewed the GSM licence of the incumbent's mobile subsidiary in 2007 (the third licence will not expire until 2012).

Under the national frequency allocation plan (known as QNAF), all rights of use for frequencies may be transferred, subject to the NRA's approval in accordance with the terms established under national law. However, some stakeholders are requesting more specific conditions for it to be applied in practice. The Portuguese authorities are currently studying options for a general policy on secondary spectrum trading. An internal study on spectrum trading was commissioned by the regulator, which plans a public consultation on this matter in 2008.

In order to implement the remaining Commission Decisions adopted under the Radio Spectrum Decision and other decisions taken on spectrum management, the regulator published an updated QNAF in July 2007. It had already repealed the exclusive use of the 900 and 1800 MHz bands for GSM technologies, although they are still reserved for mobile services and are subject to decisions at EU level.

Administrative charges

The administrative charges and spectrum fees paid by operators cover the administrative costs of ICP-ANACOM, which is both the postal regulator and the electronic communications regulator. It is evaluating the possibility of establishing accounting separation for these different activities. In 2007, it submitted to the Government a proposal on administrative charges and spectrum fees. The Commission services are closely following this issue.

Rights of way and facility sharing

Under national law, the concessionaire is obliged to provide a reference offer for access to ducts and associated infrastructure (known as ORAC), whereas previously the regulator had intervened to guarantee access to ducts on an ad hoc basis. Although the implementation of ORAC took some time, there are currently 14 undertakings using the reference offer. In September 2007, moreover, ICP-ANACOM consulted operators on the possibility of including ducts and other infrastructure in an inventory in order to facilitate infrastructure sharing.

THE CONSUMER INTEREST

Universal service

Under the current concession contract, the incumbent operator continues to provide universal service until 2025. Since, in the view of the Commission, this unduly excludes any other operator from being designated as a universal service provider, the Commission started infringement proceedings. The Portuguese authorities have indicated their intention to launch a new universal service designation process before the concession expires, with a public consultation in October 2007 being the first milestone. However, there has been no such consultation so far and it has been further postponed to 2008.

So far the regulator has always rejected the incumbent's claims for compensation for the cost of universal service: prior to 2001 on the basis that the market had not been fully liberalised, and subsequently on the basis that the data provided were incomplete. In December 2007, the regulator adopted a draft decision rejecting once again the costs submitted for the years 2001-2003. However, it plans to launch a public consultation on the methodology for net cost calculation and the definition of unfair burden.

The residential tariffs for fixed telephony services (connection, monthly and call fees), which are subject to price caps under the universal service obligation, were revised in February 2007. As a consequence, wholesale interconnection and WLR prices were decreased in order to meet the retail-minus obligation. After the Portuguese government decided to stop paying the 50% discount on subscription fees for retired people, the universal service provider has been obliged to carry these costs itself.

Two mobile operators have not yet supplied their subscriber data to the universal service provider. Consequently, a comprehensive directory and a directory enquiry service covering all subscribers of telephone services are still not available in Portugal. Infringement proceedings were brought before the ECJ in June 2007 (C-458/07).

While the appeal against its decision of December 2003 was still pending, the regulator issued a new decision to enforce the existing obligation on all mobile operators to provide subscriber information to the universal service provider. Although there were bilateral negotiations in 2007, the necessary agreements between the relevant operators have not yet been reached.

Number portability

Fixed number portability has started to be used as a competition tool, with 610 000 ported numbers by October 2007. However, the use of mobile number portability remains low (156 490 numbers by October 2007). At wholesale level the maximum price for a ported fixed number had significantly decreased by November 2007 to €5.39, while remaining €15 for a ported mobile number though with volume discounts.

There is a period of eight days for porting fixed numbers and five days for porting mobile numbers, as from the date when the recipient operator submits the request to the donor operator.

Consumer complaints

The NRA has set up a specific unit to deal with complaints and requests for information, which is gradually becoming operational. However, the regulator cannot issue binding decisions on conflicts between end-users and operators. It provides information, identifies areas for regulatory intervention, and sanctions possible breaches of legislation and regulatory decisions.

European emergency number 112

In April 2006, the Commission started infringement proceedings against Portugal due to the fact that caller location information was not available to emergency services for calls from mobile phones. The situation changed following the adoption of a 'push' solution for mobile calls, and caller location information became available throughout Portugal as from 31 July

2007. ICP-ANACOM has played an important role as a mediator among the emergency authorities and the mobile operators. The infringement proceedings were consequently closed in October 2007.

Moreover, an improved solution for fixed calls has been implemented to give Public Safety Answering Points (PSAPs) direct access to the subscriber database, which is updated at least once a week. The Portuguese authorities are considering an overall reorganisation of the 112 service for the future. It should be noted that, for the fixed services provided via mobile frequencies, emergency authorities will receive the registered address. The National Institute for Medical Emergency (INEM) has recently launched an awareness campaign about false emergency calls to 112.

Must-carry

The Media Regulatory Authority, ERC, has so far not reviewed the channels that should have must-carry status, and ICP-ANACOM has not yet imposed any must-carry obligations on transmission operators. The current must-carry obligations imposed on cable operators to provide two national and two regional public channels derive from the previous regime. The awarding of DTT frequencies, expected for 2008, may include further must-carry obligations. The Commission services will closely monitor compliance of any must-carry obligation with Article 31 of the Universal Service Directive.

Data protection

The transposition of the Data Retention Directive (2006/24/EC) is under way and the text was sent to Parliament in September 2007. Portugal did not request the postponement of its application to internet data, and the new law will come into effect immediately for all network operators and service providers. The retention period is one year and the costs will be borne exclusively by market players.

In cooperation with other national organisations, ICP-ANACOM is working on a national strategy to fight spam. The initiatives planned include cooperation with internet service providers and the promotion of an awareness campaign.

ROMANIA

INTRODUCTION

Romania, with a population of 21.6 million inhabitants, had an electronic communications market with almost 2000 operators in 2007, including many local cable operators, and an annual turnover of almost €3.8 billion. Romania has the lowest fixed line penetration and one of the lowest broadband penetration rates in the EU27, although mobile penetration is growing rapidly.

Romania does not appear to have taken full advantage of the liberalisation of the sector. Access to Infrastructure bottlenecks still seems to be limited. No market analysis has yet been notified to the Commission, and ensuring the provision of universal service is a particular challenge for the regulator.

REGULATORY ENVIRONMENT

Main regulatory developments

Following a decision in 1998, the Romanian electronic communications market was liberalised on 1 January 2003. The transposition of the 2002 regulatory framework, without previous transposition of the ONP regulatory framework, has been carried out in several stages. The primary legislation comprises several legislative acts[105]. Following the launch of an infringement procedure in April 2007 for incomplete transposition of the Universal Service Directive, the Romanian authorities also notified the European Commission on 12 October 2007 of the 'Government Decision on the general terms regarding the inter-operability of interactive digital TV services as well as of the consumers' digital TV equipment', thereby completing transposition of the regulatory framework. The infringement proceeding was subsequently closed.

In 2007, the main regulatory task was to start the first round of market analysis under the Article 7 procedure. Since Romania had transposed the 2002 regulatory framework before its accession to the European Union, the ANRCTI had already carried out market analyses taking into account the EC Recommendation and Guidelines. However, the draft measures were not notified to the European Commission as Romania was not a member of the European Union at the time. Consequently, the ANRCTI started the market review process directly after Romania's accession. So far, no draft measure has been notified, but preparatory work has been undertaken by the ANRCTI to review the wholesale markets for fixed call termination and broadcasting transmission services. In June 2007, however, it notified the Commission of a draft measure on remedies for fixed call termination under Article 5 of the Access Directive.

Organisation of the NRA

105 'Law 304/2003 on universal service', 'Government Emergency Ordinance 79/2002 on the general regulatory framework for communications' ('EO 79/2002'), 'Government Ordinance 34/2002 on the access to public electronic communications networks and to the associated infrastructure as well as their interconnection', 'Law 239/2005 on the amendment and completion of several normative acts in the field of communications', 'Government Emergency Ordinance No 70/2006 on amending and completing several normative acts in the field of electronic communications and postal services, approved by Law no. 133/2007' and the 'Law 506/2004 on the processing of personal data and the protection of privacy in the electronic communications sector'.

Regulatory tasks are performed by the National Regulatory Authority for Communications and Information Technology of Romania (ANRCTI), while the Ministry of Communication and Information Technology (Ministry) is responsible for national policy in the electronic communications sector and prepares legislation relating to the sector. On 25 April 2007, the ANRCTI also took on the specific tasks of the General Inspectorate for Communications and Information Technology (IGCTI) in relation to spectrum management.

Over the last two years, the ANRCTI has undergone several substantial changes, which have not helped to establish legal certainty and stability for the market players. The president and the two vice-presidents are appointed by the Prime Minister for a five-year term. The president and the vice-presidents may be dismissed by the Prime Minister only for objective reasons defined in law. However, under the law approving Government Emergency Ordinance No 134/2006 on the establishment of the National Regulatory Authority for Communications and Information Technology, adopted by the Chamber of Deputies on 9 October 2007, the ANRCTI was to pass under the control of the Chamber of Deputies of the Parliament and was to receive binding instructions from the Ministry of Communications and Information Technology on how to implement national policy. At the same time, the Romanian State would remain an important shareholder in the fixed incumbent and the 100% shareholder in the national radio and television transmission company. The President of Romania refused to approve the law for constitutional and other reasons and sent it back to Parliament on 5 November 2007 for re-examination. The Commission's services have opened a dialogue with the Romanian authorities on this matter, as the proposed amendments could have threatened the independence and impartiality of the NRA. Following close cooperation with the Romanian authorities, amendments to the draft law will be proposed in order to address the Commission's concerns.

The ANRCTI has approximately 646 employees and is fully financed from own revenues collected from the market players.

Decision-making

Before accession to the EU, the ANRCTI had already analysed all the markets with the exceptions of the wholesale markets for mobile international roaming and for broadcasting transmission services and the retail market for leased lines. While the work of the ANRCTI in 2007 was in general found to be fairly efficient by some market players, others have voiced criticisms as to its failure to analyse the wholesale or even retail mobile access markets.

The ANRCTI has been confronted with refusals or delays in sending statistical data in the course of the market review process. Consequently, it has imposed fines on a number of operators.

Proposed draft measures relating to the market analysis are subject to a public consultation of at least 30 days. In urgent cases, the consultation period must be at least 10 days.

The Administrative Division of the Bucharest Court of Appeal has first-instance jurisdiction with respect to the ANRCTI's decisions. Appeal against an administrative decision does not have automatic suspensory effect. Approximately 10% of ANRCTI decisions are challenged before the appeal court. These appeals reduce legal security and predictability in the market since Romanian courts are overburdened and a final decision by a second-instance court (High Court of Cassation and Justice) can take several years. Third-party appeal is possible in Romania.

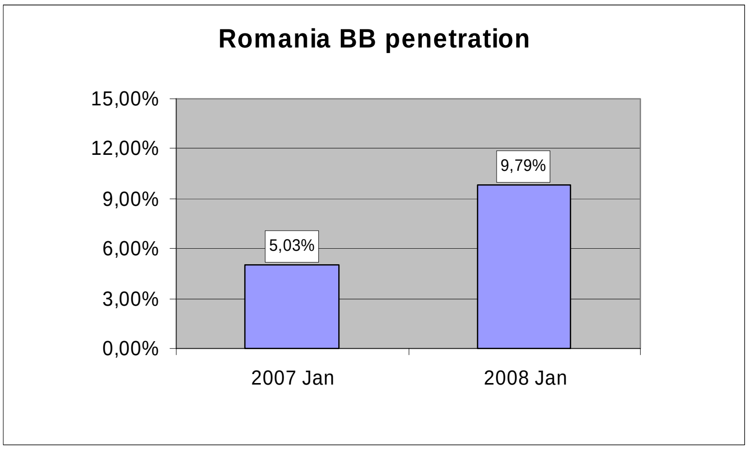
MARKET AND REGULATORY DEVELOPMENTS

There has historically been one fixed-line operator (fixed incumbent) in Romania with special and exclusive rights for the provision of public fixed telephony. The privatisation of the fixed incumbent was carried out in two steps (in 1998 and 2003) with the Greek incumbent operator taking over 54.01% of the fixed incumbent and the Romanian state holding the remaining 45.99%. The ownership rights of the Romanian state in the fixed incumbent are exercised by the Ministry. Further privatisation of the fixed incumbent was announced in 2005 but has not yet taken place. The fixed incumbent had lost its special and exclusive rights with the liberalisation of the market in January 2003.

In Romania, fixed-line penetration has been historically low and constantly decreasing, standing at only 19% in July 2007 (20.4% in July 2006). It is the lowest in the EU27, whereas cable penetration at 16.8% is very close to the fixed-line rate. Fixed voice traffic is also continuing to decrease in the face of constant increases in mobile voice traffic and mobile penetration, reaching 96% in 2007.

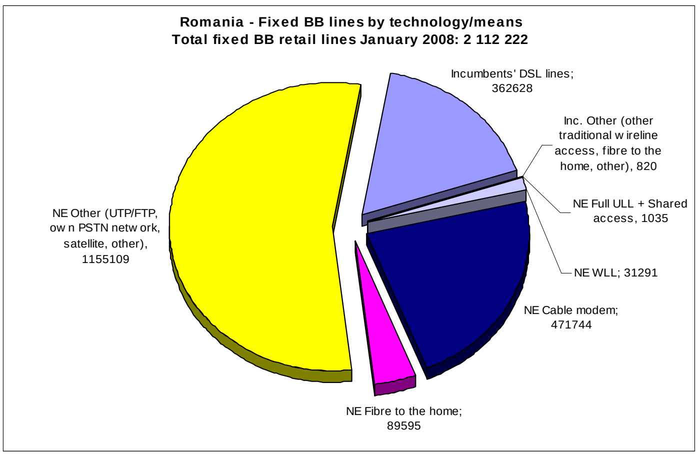
Broadband

Market situation



Despite rapidly increasing broadband penetration and the decreasing interest in dial-up Internet access, the broadband penetration rate in Romania was 9.79% in January 2008 (compared to 5.03% in January 2007), which constitutes one of the lowest broadband penetration rates in the EU.

In Romania, platform competition is flourishing as fixed broadband services are provided via xDSL, radio, cable and UTP/FTP connections (neighbourhood networks). While cable and neighbourhood networks account for 22.3% and 56.8% of the market, respectively, in comparison to only 17.2% for xDSL in January 2008, the number of xDSL and radio connections significantly increased in 2007 and the roll-out of the FTTH network has also begun. One of the two major cable operators is in a position to offer quadruple-play services since it is the holder of a UMTS license.



Regulatory issues

Despite the significant platform competition between the different network operators, the Romanian cable market is not regulated in accordance with a market analysis. In the market analysis carried out before 1 January 2007, the wholesale broadband access market was considered by the ANRCTI to be an emerging market. SMP operators have therefore not been designated and consequently no bitstream access offer is available.

As regards the local loop unbundling (LLU) market, the fixed incumbent was designated as an operator with SMP. Transparency (publication of a reference unbundling offer — RUO — for both full and shared access), non-discrimination, cost orientation, accounting separation and access obligations were imposed. The RUO of the fixed incumbent was determined on the basis of the 'retail minus' methodology. By January 2008, only 1035 local loops were fully unbundled (compared to 729 in January 2007) while no shared access was reported. While wholesale fees for LLU are basically in line with the EU average, alternative operators point to the low margin between the wholesale prices and retail prices of the fixed incumbent as explaining the low level of LLU.

A national broadband strategy has not been adopted so far. In order to extend broadband coverage to remote areas, the introduction of fixed wireless access is under consideration. Nevertheless, the organisation of competitions for licences in the 3.7 GHz and the 3.5 GHz bands has been delayed and is not expected until 2008.

Mobile markets

Market situation

In Romania, there have been five mobile network operators (MNOs) since the third UMTS licensee launched commercial operations at the end of 2007. Three are Romanian subsidiaries of foreign MNOs and one is an operator of a CDMA network in the 450 MHz band, with market shares of 44%, 40.6%, 13.3% and 2.1%, respectively, in 2007 (compared to 46.2%, 44.3%, 7% and 2.5% in 2006). Since the beginning of 2007, the third MNO has significantly increased its subscriber base, announcing on 31 October 2007 that it had exceeded 3 million. In parallel, mobile penetration reached 96% in October 2007 (68.8% in June 2006) with fixed-line penetration and fixed-line traffic constantly decreasing.

Three MNOs (the two leaders and the fourth in terms of market shares) and one of the two major cable operators have a UMTS licence (granted in 2005 and early 2007). Three of these licensees have started providing 3G services. The third MNO has challenged the decision refusing it a 3G license.

Regulatory issues

The wholesale mobile access and call origination market has not been analysed yet and there are no virtual mobile network operators (MVNOs) in Romania. However, some interest has been reported by market players. In addition, a new numbering domain has been defined in the national numbering plan for MVNOs.

The application of the second stage of a glide path imposed on the two major MNOs before Romania's accession to the European Union as a result of the mobile termination market review, leading to symmetry of the MTRs of the two main mobile network operators, was postponed by one year in December 2006. Subsequently, MTRs were fixed at 7.21 cents per minute for 2007 (6.4 cents as of 1 January 2008 and 5.03 cents from 1 January 2009). Only transparency and access obligations have been imposed on the third and fourth MNOs. The review of this market is planned soon.

Following interruption of the interconnection link between the third and fourth MNOs, the ANRCTI adopted an interim measure on 2 March 2007, in the course of a dispute resolution, imposing an interconnection obligation on the fourth MNO in order to maintain end-to-end connectivity between the end-users of both undertakings.

Roaming Regulation

Three MNOs are reported to have implemented the Roaming Regulation[106] in time. The tariffs were set at the maximum ceilings both for receiving and making phone calls within the EU within the deadline set by the Roaming Regulation. The fourth MNO, a CDMA operator in the 450MHz band, is reported not to provide international roaming services in the meaning of the Roaming Regulation.

Fixed

Market situation

The fixed incumbent's market share has significantly decreased. In January 2007, on the basis of outgoing call minutes it had an 80% market share for all types of national calls (93% in 2006) and 42% for international calls (57% in 2006).

The alternative offers are provided mainly by cable operators. 35 alternative operators offer public voice telephony services mainly using their own infrastructure while 10 offer services via LLU. The Romanian cable market is very fragmented as there are approximately 600 cable operators. The consolidation of the cable segment of the market has been very slow to start, explaining the large number of relatively small local cable service providers. Cable operators provide triple-play services at relatively low retail prices. One of the two major cable operators is also in a position to provide quadruple-play services as it holds a UMTS licence.

Regulatory issues

All fixed wholesale markets and retail markets, with the exception of leased lines, were analysed by the NRA prior to Romanian accession to the European Union. On all these markets the fixed incumbent has been designated as having SMP and remedies have been imposed accordingly.

CPS became effective on 30 June 2006. Interconnection tariffs for call origination (including CS/CPS) are set by the ANRCTI based on a LRIC model. Nevertheless, alternative operators mostly do not provide electronic communications services via CS/CPS. Only around 74 500 of the 1.1 million subscribers served by the fixed alternative operators were using this facility as of 1 July 2007.

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[106] Regulation 717/2007/EC of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC (OJ L 171 of 29 June 2007 p. 32 – 40).

On 28 May 2007, the ANRCTI adopted a price cap formula setting out the details of the price controls imposed on the fixed incumbent before 1 January 2007 to ensure that the prices it charged for services or service packages were not predatory.

Fixed-to-fixed interconnection charges are well above the EU27 average[107]. The RIO of the fixed incumbent was amended in 2007 in order to include, among other things, the conditions for associated services necessary for interconnection.

Following several complaints about refusal of interconnection between the end-users of one of the two major cable operators and other operators, putting at risk end-to-end connectivity, the ANRCTI took a decision on 6 August 2007 obliging the major cable operator, not designated as an operator with SMP, to interconnect its network with other network operators if so requested, including conditions and the interconnection fee. The draft measure was notified to the European Commission under Article 5 of the Access Directive. Despite a fine of RON 100 000 (€30 000) imposed by the ANRCTI, however, the major cable operator has not fully applied the decision so far, raising the question as to whether the level of the fine was sufficiently dissuasive[108].

Broadcasting

Market situation

In Romania, broadcasting transmission services are provided via several platforms: analogue terrestrial, cable, satellite and IPTV. The major television and radio transmission company is 100% state-owned with the ownership rights of the Romanian state being exercised by the Ministry. The future privatisation of the national television and radio transmission company is currently under consideration by the Romanian state.

The national coverage of analogue terrestrial transmission is approximately 99% of Romanian territory. Digital switchover is expected to be implemented by 2012. However, a national strategy for digital switchover does not yet exist.

Approximately 52% of Romanian households subscribe to cable TV services (76% in urban areas). The cable market is very fragmented with approximately 600 service providers, although the two major cable operators serve over 2/3 of cable subscribers. The dominant platform is analogue cable for broadcasting services since digitisation is still very low.

Satellite broadcasting services using DTH platform are provided to approximately 13.1% of Romanian households by foreign satellite broadcasting operators. IPTV services are provided only in Bucharest by one alternative fixed operator (ISP using its own infrastructure).

Regulatory issues

Romania has not yet notified the draft measures concerning the wholesale market for broadcasting transmission services to the European Commission.

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107 €1.02, 1.18 and 1.29 for the local, metropolitan and national levels, respectively.

108 Fines are limited to 2% of the annual turnover of the operators (5% in cases of repeated breaches).

Horizontal regulation

Spectrum management

The ANRCTI administers and coordinates the management of the entire spectrum of radio frequency bands. It manages and monitors only the frequency bands with non-governmental usage, according to the National Table of Frequency Band Allocation. The management and monitoring of radio frequency bands with governmental usage is the responsibility of government bodies. Spectrum trading is permitted under the Romanian legislation governing the electronic communications sector, but under strict conditions — operators may only transfer the license as a whole, cannot transfer individual rights of use arising from the license, and need to obtain the prior approval of the ANRCTI.

Most of the radio spectrum harmonisation decisions are reported to have been partially or fully implemented, although Decisions 2005/50/EC on 24 GHz automotive short-range radars, 2007/90/EC on WAS/RLANs and 2007/131/EC on ultra-wideband have not yet been implemented.

In order to extend broadband coverage in remote areas, the introduction of fixed wireless access is under consideration.

Numbering

Following several ANRCTI decisions published on 4 September 2007, fixed telephone numbers are to be composed of 10 digits as of 2008. In addition, the ANRCTI has introduced tariffs for the use of numbering resources. Different tariffs are established for each category of numbers in the National Numbering Plan. Charging for the right to use numbering resources is intended to ensure more rational use of numbering resources by operators.

Administrative charges

The monitoring tariff for 2007 was set at 0.171% of the annual turnover of Romanian electronic communications network and service providers, compared with a monitoring tariff of 0.125% for 2006. Operators are concerned about the constantly increasing administrative charges. Under Romanian law, the monitoring tariff can not exceed 0.4% of the annual turnover of operators, while operators whose annual turnover does not exceed €100 000 are exempt.

Rights of way and facility sharing

The application of the rights of way regime has raised certain difficulties in practice. MNOs reportedly face repeated refusals from local municipalities to install their masts and antennas, as required in their respective 2 and 3G licences, and also face delays in the granting process. The ANRCTI is reportedly aware of several cases where local network operators have complained about discriminatory and unreasonable price conditions imposed by private and public land owners.

In order to put an end to the discriminatory application of Romanian law in such cases, a proposal for a 'Law on the electronic communications networks infrastructure' is to be submitted to Parliament. A facility sharing obligation was also imposed on the operator with SMP on the wholesale fixed-line markets in the course of the market review before 1 January 2007.

In order to put under ground the aerial cables installed throughout Bucharest with or without the permission of the competent authorities, the installation of an optical-fibre network using a single duct is being considered by the municipality of Bucharest. The installation and operation of the network would be under a public-private partnership between the municipality of Bucharest and the operator designated at the end of September 2007 following a tendering process. A concession for the network will be granted to the designated operator for 49 years against payment of 12% royalties to the municipality of Bucharest. At the same time, several fixed-line operators have reported refusals from the municipality to accede to their requests to install both underground and aerial networks in Bucharest. The Commission services will closely follow these matters.

THE CONSUMER INTEREST

Universal Service

Taking into account the low fixed-line penetration, Romania has implemented the universal service obligation mainly via a ‘Tele-Centre’ approach. The mid-term objective is to have 600 Tele-Centres installed and operated in villages of more than 400 inhabitants before the end of 2008, so as to allow citizens to make calls, receive calls and voice messages, use fax services, have broadband Internet access and make round-the-clock free-of-charge emergency calls on the basis of community rather than individual access. The Tele-Centres are operated by electronic communication service providers in cooperation with the local administrations, the operator being selected on the basis of public tenders for a period of 3 years. So far, 6 tenders have been awarded for 461 Tele-Centres, with 253 already operational. Many different operators are involved in the installation and management of the Tele-Centres.

In villages with fewer than 400 inhabitants and with no public payphone (approximately 3600 villages of this kind exist in Romania), the installation of public payphones was envisaged but so far no provider has been designated, since the sole participant in the pilot tender organised in 2007 was disqualified for failure to comply with the minimum requirements of the tender.

There are no comprehensive directory and directory enquiry services yet, since no directory enquiry service numbers have so far been allocated in Romania. The universal service provider for the provision of comprehensive directory and directory enquiry services is expected to be designated by the ANRCTI in 2008.

The fixed incumbent provides a social scheme for retired persons with low incomes, while disabled users are offered a monthly amount to cover their electronic communications needs.

With regard to the financing of the Tele-Centres, the final net cost of providing the service is the net cost of the winning tender, covering, among other things, the installation and operation of the access link and the procurement and installation of the equipment. As for the intangible benefits, it is estimated that they will have a low impact on revenues, so they are not taken into account in the estimation of the net cost[109]. A Universal Service Fund has been set up by the ANRCTI and is financed by the market players with an annual turnover exceeding €3 million. For 2006, the actual percentage of the contribution to the Fund was 0.389% (the

109 In establishing the estimated net cost, the ANRCTI considers that the intangible benefits are negligible, as the Tele-Centres are installed in areas with low economic potential. However, in the tender process, each tenderer, in calculating the net cost, can use its own estimations of the cost and revenue elements, including the intangible benefits.

ANRCTI decision capped the contribution for 2006 to a maximum of 0.5% and no more than €3 million) of the market players' turnover, less the revenues from interconnection and inbound roaming. Although the Universal Service Fund is active, the ANRCTI decided not to collect the contributions for 2007.

The Commission services are examining the conformity of these measures with the Universal Service Directive.

Number portability

Number portability does not exist in Romania, neither for fixed nor for mobile numbers. Although number portability is provided for under Romanian legislation, it is expected to be available only in 2008[110]. The Commission services are looking into this matter.

European emergency number 112

By law, Romanian electronic communication service providers must guarantee free access to emergency call services, including the single European emergency call number 112. Operators must also make available caller location information to the emergency authorities. However, as caller location information is in practice not provided to the Romanian emergency authorities from mobile networks, the European Commission sent a letter of formal notice to the Romanian authorities in November 2007.

Must-carry

Under 'Law 504 of 11 July 2002 on Radio and Television Broadcasting' ('Law on Broadcasting'), broadcasting service distributors using electronic communication networks are required to include in their commercial offers, free of charge, the channels of the Romanian Television Company, along with other radio and TV stations operated by private broadcasters, up to a limit of 25% of the total number of programs distributed on the given network. The fact that general interest objectives are not defined by the Law on Broadcasting and that no periodic review of such an obligation is provided for has led the Commission services to examine concerns about the conformity of the Romanian legislation with the provisions of Article 31 of the Universal Service Directive.

Data protection

The Data Retention Directive has not yet been transposed, although the Emergency Ordinance transposing the Data Retention Directive is expected to be adopted by the end of January 2008.

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110 The decision on the technical and commercial conditions for the implementation of number portability was adopted by the ANRCTI on 19 December 2007. Number portability must be available within nine months following the entry into force of the decision.

SLOVENIA

INTRODUCTION

The positive trends from 2006 have continued, in particular in terms of growth on the broadband and mobile markets (including 3G). Thanks to effective price regulation, both broadband penetration and local loop unbundling have grown substantially since the last report. In autumn 2007 the third mobile network operator entered the market, increasing competition for provision of bundled services. However, fixed telephony remains largely non-competitive, with a risk of concentration of market power in the case of provision of IP-based services.

The national regulatory authority (NRA) has been quite effective and has dealt with a number of regulatory challenges resulting from market and technological developments. However, non-price-related aspects of regulation as well as the introduction of incentives to reduce the discriminatory behaviour of operators with significant market power will be crucial to further improve and strengthen competition, especially in the fixed sector.

REGULATORY ENVIRONMENT

Main regulatory developments

The amendment of the primary legislation came into force late in December 2006, with changes focusing on the supervisory powers and the mediator role of the NRA. This has boosted confidence on the part of market players, resulting in an increased number of interventions by the NRA. There were also major legislative changes in the universal service obligations (USO), the assignment of radio frequencies for digital broadcasting and data retention. Secondary legislation was adopted on functional access speeds for the internet, number portability and the quality of universal service, aiming to increase consumer benefits. The new Law on Digital Radio Broadcasting was adopted in October 2007, with the aim of streamlining activities in Slovenia in the years before digital switchover.

Organisation of the NRA

The Agency for Postal and Electronic Communications (APEK) has 80 employees; eight employees are authorised as inspectors and three of them deal with daily market monitoring and supervision in the area of electronic communications. In the area of broadcasting, the NRA assigns radio spectrum and monitors pluralism and content obligations.

The NRA's independence to exercise its statutory tasks remains unchallenged. The NRA has been active not only in solving disputes but also in providing advice to end-users, notably via a free-phone line. However, alternative operators continue to point to difficulties in their dialogue with the NRA, in particular to the fact that their comments are disregarded during consultations in the context of market analyses, citing lack of precision concerning the obligations imposed on operators with significant market power (SMP) as one of the key issues hampering effective regulation. The NRA is further criticised for lacking initiative when acting in its capacity as supervisor of remedies imposed on operators with SMP.

Cooperation between APEK and the Competition Protection Office (NCA) is minimal and mainly limited to market analyses. The NCA faces severe human resource difficulties and has limited *ex-post* regulation to the minimum, with one or at most two decisions taken per year. The Commission services are looking into the current situation, where persistent failure to combine effective *ex-ante* and *ex-post* regulation could irreparably affect further development of competition.

Decision-making

The NRA started the second round of market analyses, re-analysing six markets, and continued to supervise implementation of remedies. In the second round, APEK has moved from a fully allocated cost (FAC) accounting model to a long-run incremental cost (LRIC) model (top-down approach) on all wholesale fixed call markets, the wholesale unbundled access market and the wholesale mobile call market.

Regarding implementation of remedies, however, the nature of the NRA's supervisory powers was questioned following findings by the Ministry of the Economy (the former administrative appeal body) that some measures exceeded the supervisory nature of the role of the NRA and should have been determined in the course of APEK's market analysis. Nonetheless, decisions have generally been observed by the SMPs and have contributed to improving market access.

One alternative operator has asked the Commission's services to intervene on issues related to compliance by the SMPs with the remedies imposed. In the meantime, APEK has addressed some of these issues by adopting interim measures. Further supervision activities had been announced at the time of writing this report. The Commission's services are looking into this matter.

The NRA can impose fines of up to €83 460 on legal entities and up to €1 250 on individuals.

MARKET AND REGULATORY DEVELOPMENTS

A total of €191 million was invested in the electronic communications sector in Slovenia in 2006, of which fixed alternative operators invested €38.5 million, roughly half the incumbent's total investment and more than half the mobile operator's overall investment. In recent years, the telecommunications sector in Slovenia has performed decidedly better than the rest of the economy. Revenue in the telecommunications sector in 2006 totalled €1 048 million, which was €98 million more than in 2005. In 2006 revenue from the fixed market stood at €382 million, while the mobile market generated some €502 million.

As the Slovenian authorities' original plan to privatise 49.13% of the incumbent appeared incompatible with the rules on free flow of capital and right of establishment, following intervention by the Commission services, the Government amended both the strategic guidelines for privatisation and the criteria for participation of bidders. The winner was due to be selected early in 2008 from the group of seven European and non-European bidding operators that have been invited to present their official and binding offers.

The management of the incumbent, however, not too concerned with the outcome of the privatisation, continued with its heavy investment cycle focusing on the roll-out of a fibre-to-the-home (FTTH) network and an upgrade of the existing network capacity.

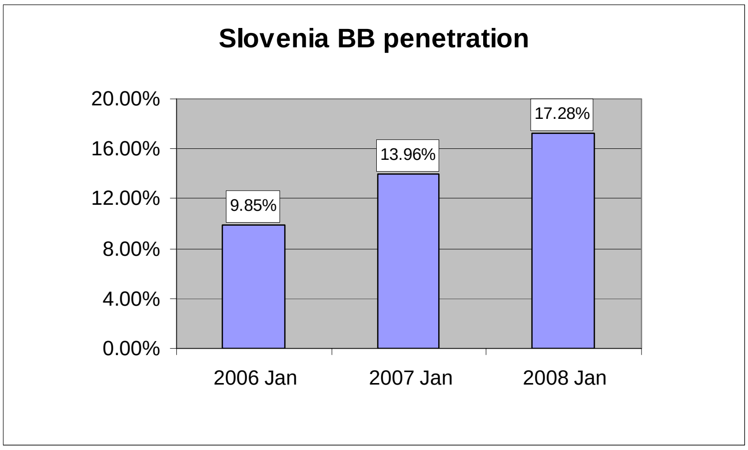
The number of alternative operators on the market has decreased for the first time in years. A few smaller internet service providers (ISP) have pulled out of the market and contributed towards market consolidation by selling their customer base to the incumbent. The incumbent has also consolidated its activities by integrating its ISP daughter company in its core business model. The expected impact of this change has prompted calls for clearer separation of functions within the incumbent.

Furthermore, consolidation activity has increased amongst the cable operators, the major protagonist being the biggest cable operator, which has acquired a couple of regional market players. The operator currently offers triple-play services (TV, internet and voice), while it has also benefited considerably from the introduction of number portability.

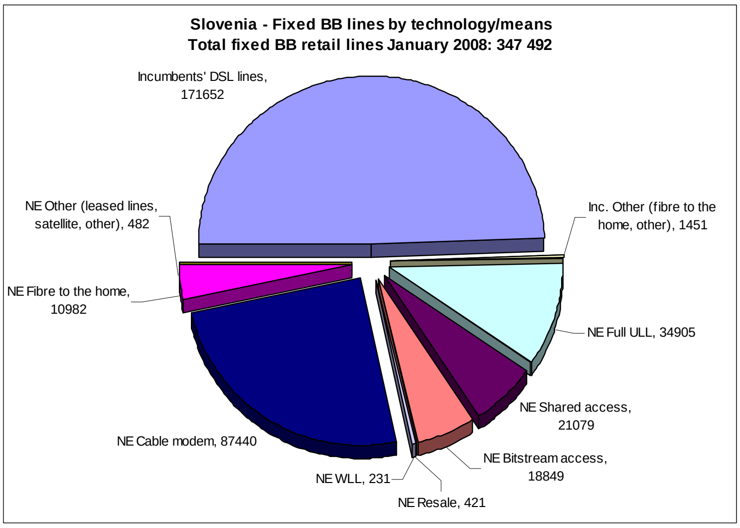
Two alternative operators have launched lawsuits against the incumbent for alleged abuse of its dominant position. The cases are still pending before the administrative court at the time of writing this report.

Broadband

Market situation



Broadband penetration stands at 17.3%. There were 347 492 fixed broadband lines in January 2008, many of these based on high-capacity ADSL2+ and VDSL2 technology, compared with 279 660 lines in January 2007. The market is offering more and more products based on alternative technologies such as optic fibre. However, growth remains stronger on the regulated DSL segment. Not surprisingly, fibre-technology-based retail products are significantly cheaper than DSL products, whereas the main competitor on fibre segments appears to be nearly two times cheaper than the incumbent and has thus managed to win more than 85% of all subscribers on this platform.



The market share of the alternative operators grew from 47.1% in January 2007 to 50.2% in January 2008, but the DSL retail broadband market remains dominated by the incumbent, which controls 69.5% of the DSL market, down from 76% in January 2007.

Alternative operators are increasingly using unbundling in densely populated areas: 22.7% of all DSL connections are based on LLU (14.2% in January 2007 and 0.7% in January 2006), which demonstrates a significant improvement in terms of infrastructure competition and places Slovenia amongst the best performers in terms of LLU lines per capita in the Member States.

Partly as a result of more effective LLU implementation and of new platforms (FTTH) appearing on the market, the share of cable has decreased, in relative terms, to 25.2% in January 2008, down from 29.2% in January 2007, with a total of 87 440 lines.

There is a relative digital divide, since only 78.5% of the population in rural areas has broadband DSL coverage and 24.3% has cable coverage. This is being addressed by a broadband strategy. The gap between broadband coverage in rural areas and the national average is greater in the case of cable (24.8%) than for DSL (9.7%).[111]

Regulatory issues

Despite a significant delay, regulation has put in place a framework for competition. However, in spite of the relatively early introduction of the reference unbundling offer (RUO) dating back more than two and a half years, various amendments to it and measures stemming from supervisory control have failed to address several facets of the incumbent's significant position. Price regulation, though, has shown some improvement. For example, monthly rental fees for full LLU have dropped below the EU average and currently stand at €8.77, whereas the prices of shared access remain slightly above the EU average, at €3.27 per month. Nonetheless, despite a number of recent measures by the incumbent which improved some technical, non-price-related parameters of the reference offer, based on regulatory decisions by the NRA – focusing on improving equal treatment (such as financial compensation for non-compliance with SLA deadlines), transparency and reducing requirements concerning the size of co-locations – the incumbent is continuing to behave evasively with respect to providing access to its infrastructure under equal conditions for all.

Newly identified areas of discriminatory behaviour include difficulties with migration of customers from bitstream to LLU and favouring the incumbent's customers over those of the alternative operators. Moreover, a number of co-locations made available to the alternative operators are not connected to the network with dark fibre, causing significant service provision delays for alternative operators attempting to compete alongside the incumbent for the same customer base. As access to the fibre backbone is not a regulated market, the NRA instructed the incumbent to grant alternative operators access to the co-locations with their own networks.

Given the significant number of complaints about malfunctioning of unbundled local loops and following a series of mutual allegations between the incumbent and one alternative operator, the NRA decided to call in an independent organisation that will impartially measure the functioning of local loops and give expert opinions to the NRA to facilitate its decision-making and speed up its arbitration process.

Alternative operators have also reported that the incumbent is continuing to make changes to the RUO, without having sought the explicit approval of the NRA, while some of these changes appear to be fundamentally affecting competitors' business models and plans. In a few instances, the NRA has duly intervened.

APEK recently amended price regulation of the two broadband markets, in order to avoid the possibility of a price squeeze. As a result, on the wholesale unbundled access market the incumbent is required, in addition to the cost-orientation-based obligation on the LRIC model, to charge LLU a monthly rental below the price of the PSTN monthly rental, while for the

[111] IDATE, October 2007: Broadband coverage in Europe – data are for the end of 2006.

wholesale broadband access market retail minus (with a substantial 66% reference mark for speeds of 20 Mbit/s and over) has been introduced from October 2007 on. The incumbent intends to appeal against the proportionality of the latter measure.

Mobile market

Market situation

Actual (handset) penetration stands at 94% and the market is approaching saturation point. The incumbent's mobile arm holds 67% of the customer base (if the market shares of the two resellers are added, its market share is close to 75%), while the main competitor controls 25% of the market. The market share of the market leader in the business segment is even higher (around 85%). The number of pre-paid users is continuing to decrease and now stands at less than 40% of all customers, whereas the resellers have benefited most on the pre-paid segment from the introduction of number portability.

The second largest mobile network operator (MNO) recorded a significant increase in subscribers on the post-paid segment, with half of gross add-ons being net new subscribers and the other half the market leader's churn. There was no equivalent growth in its market share of revenue, however, mostly because low on-net prices have been maintained.

Both the revenues of the operators and their EBIDTA have been affected by the entry into force of the Roaming Regulation, since a substantial part of the Slovenian customer base is roaming in countries not applying the regulation.

The new entrant MNO, that is also active in providing fixed telephony services, started providing GSM services in autumn 2007, based on a national roaming agreement with the market leader. Recently launched pre-paid packages claim the lowest per-minute retail tariffs on the market.

The market leader has started offering a flat-rate post-paid package for €5.99 with calls free of charge at off-peak times. This has been imitated by the new entrant MNO. The market leader is continuing to promote unregulated UMTS services. For instance, calls using the video-call service are completely free of charge. The second largest market player, which was awarded a UMTS licence in 2006, is covering the most densely populated areas (25% of Slovenia's territory), whereas the other new holder of a UMTS licence has not yet started providing services.

Regulatory issues

For much of 2007 mobile operators continued to charge higher termination charges for calls originating in fixed networks. Amongst other things, this largely allowed them to cross-subsidise their retail activities, leading to a situation where the prices of on-net calls of mobile operators are nearly two times lower than the termination rates charged to alternative fixed telephony service providers. However, following the NRA's decision, equal fixed-to-mobile and mobile-to-mobile termination rates have been applied since 1 September 2007.

Despite an obligation on the market leader to provide access and call origination, one of the alternative operators has not been able to reach an agreement for nearly two years. According to the SMP operator, the alternative operator has continuously failed to define its cooperation model, whereas the alternative operator perceived the SMP operator's discriminatory wholesale pricing as the main reason for the unsuccessful negotiations. The NRA finally managed to bring this lengthy dispute to an end towards the end of October 2007, forcing the SMP operator to grant access and setting the price threshold for call origination (and transmission) at 6.73 euro cents/minute, which is the price also charged to other MVNOs or MNOs in cases of national roaming.

APEK has analysed, for the second time in less than two years, the wholesale termination mobile market and, yet again, imposed asymmetric remedies on the two largest MNOs. However, it significantly reduced the asymmetric termination rates ratio to 1:1.40, down from 1:1.64 in 2006. The glide path, gradually levelling out imbalances in market power between the two SMPs, aims to ensure symmetric mobile termination from March 2009 on.

GSM gateways are another important issue for mobile operators. In particular, some VoIP service providers terminate international calls at rates more than two times lower than the official termination rate for international traffic. The NRA is following this issue closely, even though the possibility of intervention remains largely outside the scope of its responsibilities defined by the Electronic Communications Act (ECA).

Towards the end of 2006 the NRA decided to replace some of a new entrant's "inherited" DCS 1800 frequency range by a reserved extended GSM 900 frequency range without a competitive selection procedure. Both the large two MNOs and the holder of a newly acquired UMTS licence – all of which initially aspired to this bandwidth, but were not allowed to compete – launched an appeal before the administrative court for lack of transparency. The court took a decision, based on the ECA, in summer 2007, when it ruled in favour of APEK.

Roaming

All GSM operators appear to have implemented to a satisfactory level the requirements set in the Roaming Regulation. According to APEK, in the second half of 2007 retail international roaming prices were generally falling to the Eurotariff levels.

Fixed market

Market situation

On the market for traditional PSTN and ISDN technologies the incumbent still holds a share of nearly 98% of traffic generated. Only 5% of subscribers use alternative providers for voice telephony services. The introduction of carrier selection and carrier pre-selection (CS/CPS) a few years ago has been beneficial for competition on international calls, but not on national calls. Only one alternative operator is using the CS/CPS services for domestic calls.

At the same time, the number of VoIP connections keeps growing fast, thanks to convergence of services. There are eight IP providers of voice services. Penetration of residential fixed telephone lines is 75% of all households in the case of PSTN and ISDN, while VoIP takes nearly 9%. The largest cable operator, in cooperation with a smaller fixed alternative operator, has also started providing voice services using IP.

Increases in call charges and monthly rentals during 2007 had no significant effect on the purchasing power of end-users. For example, in the 10-minute national calls segment, Slovenia still remains one of the cheapest Member States.

Recently, two numbering ranges of 100 000 non-geographical numbers were assigned to the incumbent.

Regulatory issues

With growing investment in IP-based telephony, which has remained unregulated, a gradual, but resolute, migration away from TDM-based technology towards an IP-based network (largely built on fibre) has led to increasing concern and uncertainty amongst the market players.

VoIP termination rates charged by the incumbent (2.5 euro cents) are significantly higher than the traditional TDM-based termination rate at local level (1 euro cent). In addition, calls originating from alternative operators' networks and terminating within the numbering range of an integrated ex-ISP branch are considered as calls to ported numbers, with the result that alternative operators are charged for technically unjustified transit over the incumbent's network. At the same time, the incumbent succeeded to delay the access of alternative operators to its copper-based network, by attaching a set of complicated conditions to the RUO, which thus lacks a sufficient degree of service unbundling. It is the Commission's services' view that the markets for call origination and termination on networks at a fixed location require particular regulatory attention.

Currently nine operators interconnect with the incumbent, with two more negotiating. However, only one alternative operator accesses the network of the incumbent at local level, while three interconnect at regional level and a couple more are expected to migrate in the near future. Wholesale interconnection charges in general remain above the EU average.

The incumbent amended the existing reference interconnection offer (RIO) following an interim decision by the NRA. Although the updated RIO introduced some improvements, such as an overall reduction in CS/CPS prices and an option to terminate international traffic at regional-level switches, it is still impossible for alternative operators to terminate international calls at local level.

The second analysis of the market for call termination on the networks at a fixed location (including IP telephony) provides for designation of seven alternative operators with SMP status, in addition to the incumbent, and, amongst others, establishes a mechanism of cost-oriented prices. It also allows alternative operators to introduce prices based on a glide path and to apply initial asymmetry of 1.40 to termination of the calls, calculated at the national level, compared with the termination rate of the incumbent. In situations where the alternative operator interconnects at local level, this could increase the asymmetry to 3.11 in favour of the smaller operator.

The WLR obligation is one of the new measures imposed on the re-analysed retail access markets and its full impact remains to be seen.

Broadcasting

Market situation

Terrestrial TV is watched by 48% of households in Slovenia and cable by 39%. However, the newly emerging IPTV segment has grown much faster than cable, with growth of 7.3% in the last year. The main drawbacks of cable are its low-capacity analogue transmission technology and its inability to provide HDTV and services such as video on demand (VoD).

After a public consultation in the framework of the Slovenian digital television forum in October 2006, APEK issued a licence for the first digital terrestrial television (DTTV) network in November 2006, including an obligation for the licence-holder to use the MPEG-4 AVC video compression standard.

Under the new Law on Digital Radio Broadcasting adopted in October 2007, simultaneous digital and analogue transmissions will start when the coverage of at least one DTTV multiplex reaches 90% of the existing analogue coverage and TV content providers in the area will have had a possibility to be on the DTTV multiplex. Nevertheless, the switchover period will start in June 2009 and will be limited to a maximum of 18 months. At the end of 2010 all analogue licences will be revoked. Once all analogue networks are switched off, eight new digital networks are expected to be authorised.

Regulatory issues

In November 2005 the Government passed a law on public service broadcasting allowing allocation of a multiplex to a public service broadcaster (without any tender), which should ensure broadcasting of public content. In August 2007 the NRA launched a public consultation on the assignment of radio frequencies for the second, commercial, digital video broadcasting terrestrial (DVB-T) network. APEK has received four answers from interested parties. No tender procedure had been launched at the time of writing this report. The operator of the new digital network, once selected, will hold a multiplex (frequency) licence for a period of ten years and will have to provide the capacity necessary for the media content broadcasted also through the multiplex administered by the public service broadcaster, while the remaining capacity of the multiplex will be used freely for commercial broadcasters. This is the first of the two planned digital networks (multiplexes) that will not be directly assigned to the incumbent transmission service provider. The other planned multiplex network is reserved for HDTV or mobile TV and will not offer national coverage in the beginning.

Horizontal regulation

Spectrum management

In late 2006 APEK began using software for coordinating and managing the frequency spectrum for both radio communications management and broadcasting spectrum management. In 2007 the NRA continued to monitor development of events and technologies in the areas of UWB (broadband application as a continuation of wireless applications), WAPECS (development of the next generations of access systems), FWA with emphasis on WiMAX technology (3.5 GHz frequency band) and mobile satellite.

Slovenia has implemented all the Commission decisions on spectrum harmonisation.[112]

THE CONSUMER INTEREST

Tariff transparency

APEK continues to run its web-based price comparison platform (www.komuniciraj.eu), providing comparison facilities for end-users looking for the best service in terms of price, capacity, security and quality.

Universal service

The fixed incumbent was appointed as universal service (US) provider for a period of five years back in 2004 and, since January 2006, is also under an obligation to provide US to disabled and disadvantaged users.

Number portability

The availability of number portability has not significantly affected the behaviour patterns of Slovenian consumers, who continue to prefer their first-choice operator. Less than 4% of numbers have been ported since the introduction of number portability in 2006. Some 52 000 fixed and 48 000 mobile numbers had been ported by December 2007.

The prices for porting numbers cannot be considered high. However, the incumbent operator requires that they be ported in blocks only. This is considered, in particular by alternative operators, as an obstacle to further development of competition. The NRA had not yet started to look into this matter at the time of writing this report.

European emergency number 112

Despite the absence of any regulatory obligation, only two "Skype"-type voice applications, out of a number of VoIP service providers, do not provide any possibility of calls to the single European emergency number (112).

112 calls are answered by a call centre (public safety answering point) managed by the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, a body within the Ministry of Defence. Operators at the call centre are able to answer calls in Slovene. English is also widely available. The single emergency number (112) has been available in Slovenia since 1997. Citizens have been informed about its availability and how to use it via notices in payphone booths, advertisements on ambulances, telephone directories

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[112] Commission decisions on the 169 MHz, 5 GHz, 24 GHz and 79 GHz frequency bands were implemented in 2006. Six additional decisions were implemented in 2007. These include Decisions 2007/344/EC on harmonised availability of information regarding spectrum use within the Community, 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community, 2007/98/EC on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services, 2007/90/EC amending Decision 2005/513/EC on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs), 2006/804/EC on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band and 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

and via the webpage www.sos112.si. Several information campaigns have been conducted in the media over the last few years.

Must-carry

Only television and radio channels of the national broadcaster and programmes with “special significance” status must be transmitted free of charge. However, the obligation to broadcast the content of local channels creates difficulties for cable operators that continue to distribute TV programmes using analogue transmission technology. This problem should gradually disappear with the introduction of digital transmission standards.

The new Law on Digital Radio Broadcasting adopted in October 2007 reiterates the must-carry obligations already laid down in the media legislation for the digital terrestrial network (multiplex) operators.

Data protection

The Data Retention Directive (Directive 2006/24/EC) has been substantially transposed and the decision has been taken to require market players to store the data for 24 months.

SLOVAKIA

INTRODUCTION

The broadband market shows signs of inter-platform competition. However, the incumbent's position in the DSL section remains unchallenged. The level of competition on the mobile market has risen considerably, with a new entrant launching its commercial service at the beginning of 2007. The fixed market has remained in the hands of the incumbent, while the largest mobile operator entered the fixed market with a substantial roll-out of FTTH infrastructure.

The NRA has been active in completing the process of imposing remedy obligations in the markets analysed in the first round of market reviews. It has also initiated a second round of reviews. However, the regulation currently in place in some markets does not so far appear to address the competition deficits fully and effectively. The reference offers of the incumbent contain conditions that are not accepted by the other market players, and as such are not conducive to achieving the results intended by the regulation.

REGULATORY ENVIRONMENT

Main regulatory developments

By 2006, the Slovak regulator, TÚSR, had completed the analysis of 16 markets defined in the previous Recommendation. Throughout 2007, it has continued to impose remedies on those remaining markets analysed in the first round of market reviews which were found not to be effectively competitive, and where the remedies have not yet been applied. A second round of market reviews has been initiated for five markets (based on the previous Recommendation) and the Commission has received three notifications. A new notification of the wholesale market of trunk segments of leased lines was withdrawn again.

The Ministry of Culture, in cooperation with the Ministry of Transport, Post and Telecommunications (hereinafter referred to as "the Ministry"), has drafted a new Digital Broadcasting Act which took effect in May 2007. The Act establishes national rules for the transition from analogue to digital broadcasting and sets out the procedures for broadcasting in digital format only. An amendment to the Electronic Communications Act, effective from December 2007, concerns *inter alia* the transposition of the Data Retention Directive. The amendment furthermore specifies the provisions relating to regulation of the relevant markets, prices, numbering and financial penalties (by raising the maximum limits). The latest numbering plan issued by the NRA takes account of the Commission's Decision on the 116 range of harmonised numbers.

Organisation of the NRA

TÚSR appears to be facing continuing difficulties due to lack of resources, in the areas of both personnel and finance. The NRA is funded out of the Ministry's budget. There has been no progress with the mechanism for appeals against decisions made by TÚSR. An administrative appeal against a first-instance decision therefore still results in an automatic suspension of the decision's effects. The Commission is examining the mechanism's compatibility with the EU regulatory framework. Given that first-instance decisions are always appealed, the entry into effect of regulatory decisions is delayed in every case.

A structural separation of the regulatory function of the Ministry in the area of universal service financing and frequency allocation table was not ensured from its ownership and management of 34% of the incumbent's shares throughout the reporting period. The Commission had addressed the issue via an infringement proceeding. The Slovak authorities took corrective measures to address the issue in December 2007. As a result, the shares were transferred to the Ministry of Economy in January 2008. The infringement proceeding in this regard was closed shortly thereafter.

Decision making

The NRA continued to complete the process of imposing remedy obligations in the markets that had been analysed during the first round of market reviews. Throughout 2007, new remedies were introduced for the markets for the minimum set of leased lines, fixed transit services, wholesale broadband access and broadcasting transmission services. A full set of remedies, including price regulation, has thus been imposed on the markets for fixed wholesale termination, fixed wholesale transit, wholesale broadband access and broadcasting transmission services. The NRA has also been closely involved in the monitoring and subsequent lowering of interconnection prices charged by the incumbent.

TÚSR has been working on the second round of market reviews. In this regard, it has initiated analyses for five markets. Market analyses for both fixed retail access markets and the fixed wholesale call origination market have already been notified to the Commission. The Commission notes that the remedies proposed for the retail markets do not differ from the remedies imposed in the first round. As the original remedies do not appear to have been fully effective in resolving the competition issues on the markets in question, the regulator has been invited, in the context of the Commission's comments, to reconsider whether the scope of the remedies as proposed, especially regarding price control mechanisms, is sufficient to address the issues at stake. Similar comments were already made to TÚSR with respect to remedies imposed in these markets in the first round of market reviews.

Overall, it appears that a more pro-active and comprehensive approach by the NRA towards regulation would be beneficial to advance the level of competition on the Slovak market. The regulation currently in place for some markets does not appear to have fully addressed the competition deficits as yet. Such an approach may, *inter alia,* facilitate the implementation of CPS, LLU and bitstream access, which the alternative operators have so far not taken up and implemented in practice, even though the relevant reference offers have been made available. Reassessment of the incumbent's reference offers in terms of prices and other practices employed, in particular as regards facilities collocation, may assist in resolving the competition shortcomings identified in the market analyses.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the telecommunications sector was €1.72 billion as of 31 December 2006. The revenue from the fixed market was €463.8 million, whereas the revenue from the mobile market reached €1.1 billion. The total value of tangible investments was €387.2 million, of which €141.4 million came from mobile operators, €20.8 million from fixed alternative operators, and €65.7 million from the incumbent operator.

The biggest mobile operator has made significant investments in the deployment of a new NGN network (FTTH), covering certain parts of all eight district cities plus three additional cities. The declared intention was to cover approximately 200,000 households (representing

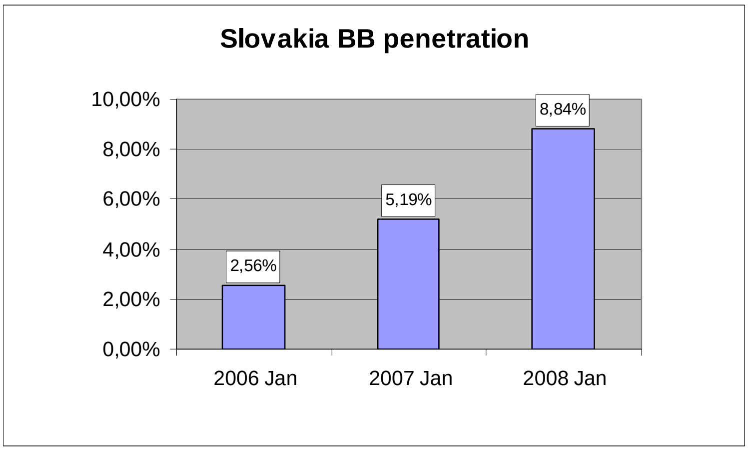
9% of all households) by the end of 2007. The commercial services on the network were launched in September 2007 offering fixed voice telephony, broadband services and digital TV. The incumbent has announced significant investments in the development of an NGN network (FTTB and FTTH). As at the end of 2007 the network covered approximately 50,000 households.

Triple-play services (fixed voice, broadband and television) are offered by the fixed incumbent (IPTV) as well as by the biggest cable and mobile operator and several new entrants.

In 2007, four alternative operators established new access networks for the provision of voice, data and Internet services in the FWA 3.5 GHz band. The access points are available in all district and county cities (272 access points available).

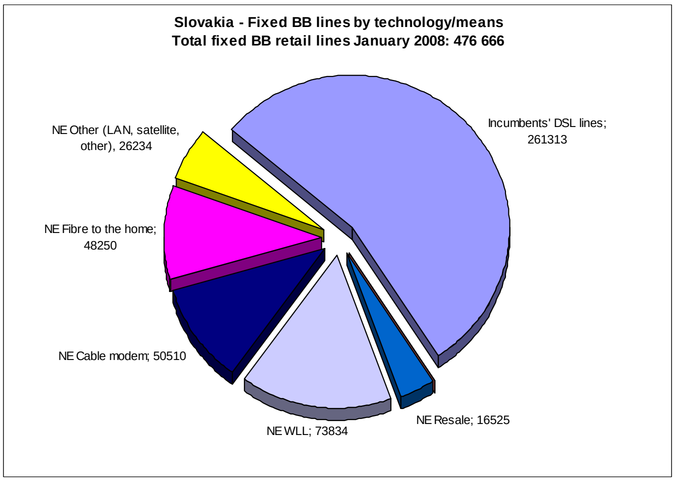
Broadband

Market situation



The total fixed broadband penetration has increased by 3.65 percentage points, but its current rate of 8.84% is still one of the lowest in the EU.

The broadband market appears to be showing signs of increased competition. The market share of new entrants by fixed retail access lines for all platforms has increased from 34% in 2006 to 45.2% in January 2008. The new entrants provide broadband services mainly by WLL (15.6% of total fixed retail lines), cable (10.6%) and FTTH (10.1%). The biggest growth in access lines on the part of new entrants was for WLL. Of all the technologies present, DSL lines experienced the most rapid growth in terms of the number of access lines.



The position of the incumbent on the overall broadband market is still very strong, at 54.8% of total fixed retail lines. At the same time, DSL technology, with a 58.3% share of the fixed retail market, remains the single most important platform providing broadband services. It is almost wholly in the hands of the incumbent (a 94% market share of all DSL retail lines), which maintains a relatively stable position on the DSL market. Naked DSL has been available on the market since 2006. No progress has been achieved in terms of the provision of unbundled lines or bitstream access. No unbundling or bitstream agreement has been signed yet.

DSL coverage in rural areas is low: 29.5% compared to 65.7% at national level[113]. However, in the context of broadband coverage it should be noted that broadband access in rural areas is also available by other technological means.

Mobile broadband services appear to be gaining in importance, especially when the low fixed penetration rate is taken into account. Flarion mobile broadband is offered by the smaller mobile operator. The larger operator has introduced a bundled offer of its fixed broadband over NGN network with its mobile broadband services.

Regulatory issues

Remedies in the form of transparency, non-discrimination, accounting separation, and access and interconnection, including co-location and facility sharing, were already imposed on the incumbent in 2005 following the analysis of the LLU market. Price regulation was not included. The prices for fully unbundled local loop and shared access fell significantly in 2007 as a result of pressure from the NRA, but remain above the EU average. Despite the falls in price, there has been no movement towards LLU implementation.

A full set of remedies (access, transparency, non-discrimination, accounting separation and price regulation) was imposed on the wholesale broadband access market in April 2007. The reference offer was published in September 2007. Cost orientation is based on the historically allocated costs. The NRA took account of the Commission's comments, and the remedies thus include access at both IP and ATM level.

Despite the fact that the reference offers are available for both the LLU and bitstream access, none of the alternative market players has so far accepted them. The terms of these offers are said to be commercially unacceptable in both cases. Amongst others, collocation appears to be a key issue, along with unclear pricing and complicated ordering processes. Given the importance of these key markets for further broadband development, the Commission advised the TÚSR in its comments to re-examine the existing reference offers so as to ensure effective implementation of the obligations imposed on the incumbent.

A new round of market analysis was initiated for the LLU market. The results have not yet been notified to the Commission.

Mobile markets

Market situation

There are three mobile operators present on the market. The third GSM market player launched its commercial services in February 2007. It provides both pre-paid and post-paid services, as well as data services. The new player has agreed a partial infrastructure sharing arrangement with the other two players. The entry of the new operator and the resulting competitive pressures appear to have facilitated an increase of more than 15 percentage points in mobile penetration, bringing it up to the current level of 101.6%.

All three mobile operators provide GPRS and EDGE services. Investment in 3G by the two commercial providers has slowed down, with the result that the coverage has increased only

113 Source: IDATE, October 2007, Broadband coverage in Europe. Figures as of 31 December 2006; coverage relates to percentage of population.

slightly compared to 2006. Both 3G operators use HSDPA and UMTS TDD technology for 3G provision. The 3G coverage of one of the operators has reached 51.1%, whilst the other operator has achieved coverage of 8%, focusing more on the provision of mobile broadband via Flash-OFDM technology (70% population coverage). The latter has merged the services it provides via 3G, Flarion, GPRS and EDGE into an interchangeable service in order to achieve greater coverage. This operator also provides for national roaming by the new entrant. The new entrant is expected to launch 3G services commercially at a later stage. There are no MVNO present on the market.

Regulatory issues

The mobile access market was assessed as being effectively competitive and therefore regulation is not imposed.

Transparency, non-discrimination, accounting separation, and access and interconnection were imposed on the mobile call termination market in 2006. Mobile termination rates appear to be relatively low, even without price regulation. The Supreme Court ruled on the appeal by the smaller operator against the remedy, confirming the regulator's decision.

Roaming

All three GSM operators appear to have implemented the requirements laid down in the Roaming Regulation to a satisfactory level. The possibility for the NRA to impose penalties in this regard has been enshrined in national primary law by means of an amendment to the Electronic Communications Act.

Fixed market

Market situation

The fixed market has undergone significant consolidation, thereby reducing the number of effective market players Alternative fixed operators are therefore less likely to go ahead with strategic decisions. At 21.7%, the fixed penetration rate is low. The incumbent's position on the market remains unchallenged, with 94.4% of the market share by retail revenue. The fixed alternative operators provide their services mostly via CS, leased lines or their own infrastructure, focusing in the main on the business segment of the market. New entrants do not offer voice services via CPS or LLU. Wholesale line rental is not available on the market. Only 1.7% of all subscribers actually use an alternative provider for direct access. Publicly available telephony services are provided by the biggest cable operator. VOIP services are offered by the biggest cable operator, other alternative fixed operators and the incumbent.

An important development has been the entry of the largest mobile operator into the fixed market. Commercial services over its new NGN network (FTTH) were launched in September 2007.

The State continues to own 49% of the incumbent's shares. The ownership and management of 34% of the state shares was transferred to the Ministry of Economy in January 2008. The National Property Fund owns the remaining 15% of the state shares.

Regulatory issues

All of the relevant markets for fixed telephony from the previous Recommendation have been assessed as non-competitive, with the incumbent having the SMP.

Access markets have been regulated by CS/CPS, non-discrimination and service unbundling since 2005. New analyses of these markets were notified to the Commission in August and October 2007. Apart from cost orientation of the interconnection for CS/CPS in the residential segment, the proposed remedies have not changed from those imposed in the first round of market reviews. However, the proposed price control can only be implemented by applying an appropriate methodology for cost calculation, which was not specified in the notification. Since the remedies imposed in the first round have not been effective in resolving the competition problems, it may be useful to reconsider the details of the proposed obligations.

On the fixed retail call markets, the remedies of non-discrimination, service unbundling and a ban on charging excessive prices were imposed in 2006. Remedies imposed in the market of the minimum set of leased lines in 2007 include price regulation.

As regards the fixed wholesale markets, a full set of remedies including price regulation (bottom-up FLRAIC) has been applied on the fixed call termination market since 2005. In 2007, the interconnection prices for terminating calls on the incumbent's network fell significantly (by 40% for peak time at local level, for example). Price regulation is not included in the set of remedies for fixed origination. The NRA notified a new analysis of this market in December 2007. The scope of proposed remedies includes cost-orientation on the basis of the FL LRAIC bottom-up model. In its comments, the Commission also invited the regulator to consider imposing a wholesale line rental remedy, which is not present on the market.

Again, given the continuing strong position of the incumbent on the fixed market, and in order to facilitate the opening of the market to effective competition, the Commission has advised the regulator to re-assess the conditions in the relevant interconnection reference offer to ensure an effective compliance with the obligations imposed.

Broadcasting

Market situation

Broadcasting is dominated by terrestrial transmission (53.2%), with an estimated share of 52% for analogue terrestrial transmission and 1.2% for digital terrestrial transmission. Cable is next with 28.6%, and satellite transmission with 17.5%. Only 0.1% of households receive national TV programmes via IPTV.

Pilot digital TV broadcasting continues to operate in three major cities and their neighbouring areas. Regular digital broadcasting is foreseen to begin in 2008-2009.

Regulatory issues

Access, transparency, non-discrimination, accounting separation, and cost orientation by FAHC were imposed on the broadcasting transmission services market in 2007.

A new Digital Broadcasting Act took effect in May 2007. It sets out the legal provisions for the process of digital switchover and further broadcasting in digital format only. The current wording of the Act allows analogue broadcasting until the end of 2012. The NRA has prepared a technical plan for digital broadcasting and plans to launch tenders for multiplexes in the near future. The technical plan covers three national multiplexes for the transitional period until the end of 2012. There is only a limited set of frequencies available at the moment for the first multiplex that initiates the process of regular digital broadcasting.

Horizontal regulation

Spectrum management

The Slovak authorities have signalled the full implementation of the Radio Spectrum Harmonisation Decisions adopted by the Commission (Decisions 2005/513/EC, 2005/928/EC, 2006/771/EC, 2006/804/EC and 2007/98/EC). The implementation of Decisions 2004/545/EC, 2005/50/EC, 2007/90/EC and 2007/131/EC is under way. The NRA plans to implement these Decisions in 2008. Primary law provides for the possibility of secondary spectrum trading, subject to the approval of the NRA. So far, two approvals have been issued in this regard.

CONSUMER INTEREST

Universal Service

The incumbent was designated as the sole universal service provider in 2006. The current scope of the universal service covers all elements envisaged in the EU regulatory framework. In June 2007, the NRA gave new details of the provision of public payphones and special measures for disabled users. A further review of the other elements is indicated for a later stage. Designation was set for an unspecified time period. However, any operator may request a re-evaluation of the universal service obligations.

The legislation provides for the possibility of universal service financing from a fund financed by contributions from the market players. The designated operator requested compensation for the first time in December 2007. The NRA is yet to take a decision on the existence of an unfair burden.

Number Portability

Once fixed number portability became available for all operators, the Commission closed the related infringement proceeding in June 2007. Fixed portability is based on bilateral agreements amongst operators, but is not a part of the RIO as such. Certain cumbersome procedures regarding customers' applications to port were abandoned by the incumbent following pressure from the regulator. The incumbent was fined for non-compliance with several requirements laid down by the NRA. As of October 2007, more than 91 000 fixed numbers had been ported.

Mobile number portability became available in 2006 for the existing mobile players. The number of ported mobile numbers continues to increase (it is currently over 10 000). The porting system in place is based on the specific customer data collected by the operators. In order for the new market player to take part, a solution had to be found to reconcile the different approaches to data-gathering by the established players and the new entrant. The NRA played an active role in the process. It is expected that mobile number portability will become fully available for the third player in the first quarter of 2008. It should be noted, however, that the current delays are preventing customers from enjoying the full benefits of this important tool of consumer choice. The porting itself may take up to 20 days.

European emergency number 112

The single European emergency number, 112, is accessible from both fixed and mobile phones. It is available free of charge from all publicly available telephone services, including payphones. When using payphones, it is not necessary to have any means of payment such as coins or cards.

112 calls are answered by the coordination centre for integrated rescue systems (eight centres located in each district city). The technical equipment of the coordination centres is currently being upgraded to minimize the response time to the point of emergency. This will enable faster and more effective help. The upgrade was due to be completed by the end of 2007.

Caller location information is only partially available from both the fixed and mobile networks. The Commission has referred Slovakia to the European Court of Justice in this regard. Full availability of caller location information is expected once the upgrade of all coordination centres is completed.

Citizens are informed about the existence and use of 112 via notices in payphones and in phone books. There are also regular information campaigns on this number on TV and in newspapers at national and local level. The Ministry of the Interior, in cooperation with the Ministry of Health, has launched an information campaign called 'Get to know the 112 number and learn how to use it properly', which primarily targets schools.

Must-carry

An amendment to the Law on Broadcasting and Retransmission, effective from May 2007, aims at a better transposing of the requirements set out in the Universal Service Directive. The changes restrict the must-carry regime to cable retransmission operators only. The Broadcasting Council has been given the power to grant exemptions from the obligation to provide must-carry channels in a defined set of circumstances.

Data protection

An Amendment to the Electronic Communications Act was adopted, effective from December 2007, in order to transpose the Data Retention Directive.

FINLAND

INTRODUCTION

In the Finnish telephony markets, fixed subscriptions and traffic have shrunk considerably as a result of fixed-to-mobile substitution. Mobile networks have been expanding their coverage, offering cheap 3G services, including data transmission. Regulatory pressure and agreements between operators have again pushed down mobile termination rates. With Europe's highest growth rate in 2007, Finland belongs to the top countries in the European broadband penetration ranking.

The NRA has already examined several important markets in the second round of market analyses. A series of amendments to the Communications Market Act have reinforced the NRA's regulatory tools and led to better compliance with the regulatory framework in general.

REGULATORY ENVIRONMENT

Main regulatory developments

Amendments to the Communications Market Act entered into force in 2007 that are intended to strengthen the consumer's position in the area of contracts with electronic communications providers. Another amendment, addressing the Commission's concern regarding a priori exclusion of operators from the possibility of becoming USO operators, also entered into force in 2007. It includes provisions which give the NRA, *Viestintävirasto* (FICORA), powers in the field of cost accounting methodologies. A third amendment gave FICORA the power to introduce glide paths and symmetry in mobile termination price regulation. In December 2007, another amendment was adopted by Parliament which seeks to address the Commission's concerns that the NRA does not have all the potentially necessary regulatory tools as envisaged by the Regulatory Framework (the Commission sent a supplementary letter of formal notice to Finland in 2006 in this regard).

In late 2007, amendments to the must-carry regime — partly as a result of the mandatory review according to the law, partly in response to the Commission's letter of formal notice (see the 12th Report) — were also adopted by Parliament.

Organisation of the NRA

Finland now has a special Minister of Communications within the Ministry of Transport and Communications (where previously there was one minister with responsibility for both the transport and communications sectors). While the division of labour and the assignment of complaints could at times be complicated, the cooperation between FICORA and the competition authority continues to be good.

Decision making

In the second round of market analysis, important markets such as LLU, wholesale broadband access and wholesale mobile termination were examined at an early stage. In the second half of 2007, FICORA focused to some extent on fixed interconnection and was able to notify its draft decisions on the markets in fixed call origination, termination and transit services to the Commission.

Operators are still concerned that vague SMP remedies create legal uncertainty and lead to excessive appeals. In the autumn of 2007, a total of six decisions under the Communications Market Act were indeed under appeal, none of which concerned the old, first market analysis round. Two of these cases concerned the wholesale broadband access market. Some spectrum assignment decisions have been appealed, but none suspended.

In Finland, district courts handle appeals against decisions under the Communications Market Act and operators are very concerned about the lack of resources and expertise of and time taken by these courts (with procedures lasting up to 18 months). Since January 2006, decisions relating to SMP obligations are appealed directly to the Supreme Administrative Court, a change that has been welcomed by operators.

One of the mobile operators had previously complained to the Supreme Administrative Court regarding the decision not to regulate the market for mobile access and call origination. The case was withdrawn because the operator in question eventually discontinued further legal proceedings, considering the market more competitive. The Supreme Court had stated in an interim decision that the operator, as a third party, did not have the right to appeal and had referred a question in this regard to the Court of Justice. The Commission is looking into this matter.

In 2007 the competition authority handled and approved a couple of merger cases, one of which concerned the takeover of the smallest mobile network operator by the new group of six operators.

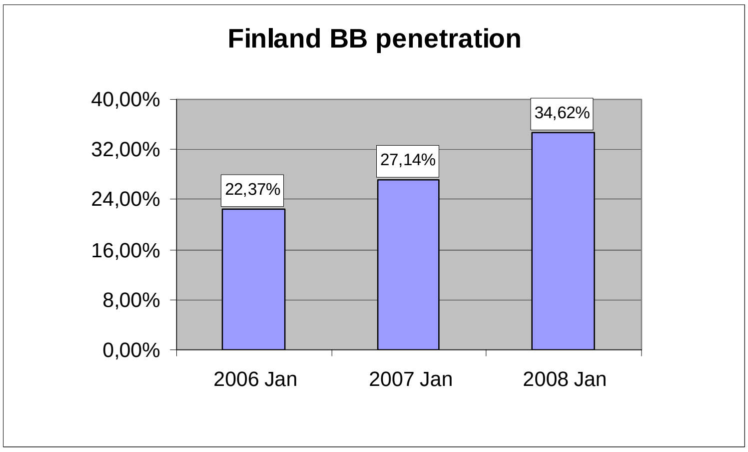
MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Finnish telecommunications sector was €4.51 billion as of 31 December 2006; revenue from the fixed markets was €1.33 billion and from the mobile markets €2.26 billion. The total value of tangible investments in telecommunications networks was €0.38 billion.

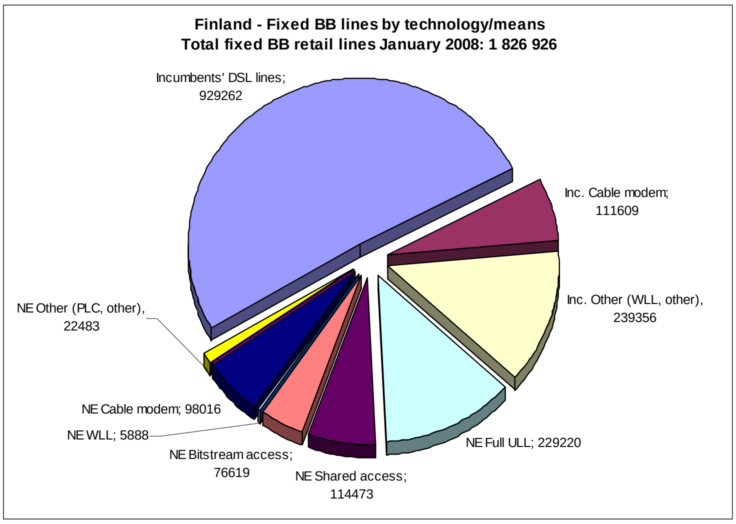
The structure of the Finnish market changed at the end of 2006. While the bulk of the communications infrastructure was previously controlled by three groups, each of them with its own mobile, trunk and access networks, the association of local telephony operators, the smallest group, was effectively split in two. In order to create a new group, the six largest operators of the association left, taking control at the same time of the old association's mobile network business by purchasing the remaining shares from the other operators. A venture capital group has acquired some of the shares in the new group. One Nordic alternative operator remains (without its own traditional incumbent area in Finland).

Broadband

Market situation



With Europe's highest growth rate (which has been even increasing to nearly 7.5 percentage points between January 2007 and January 2008), Finland has become second best performer in terms of the European broadband penetration ranking (34.6% in January 2008). Broadband infrastructure competition is potentially restrained by the fact that local telephony incumbents often own the local cable networks as well. In several local areas there is still only one DSL provider. However, some of the local operators have rolled out WiMAX inside as well as outside their own incumbent areas. Nonetheless, WiMAX subscriptions represented less than one percent of total subscriptions in 2007.



While local operators state that their networks are capable of providing broadband via cable TV, xDSL remains the absolutely dominant form of consumer broadband access in Finland (nearly 80% of all lines). The main incumbent groups, but also to some extent other operators, have broadband trunk networks of their own, and use them for reaching the local loops they rent in other incumbents' areas. Any alternative operator that considers providing services through the use of wholesale bitstream access is increasingly faced with the disconnection of fixed phone lines in favour of mobile telephony. This leaves the alternative operator with having to pay the LLU unbundling price in addition to the bitstream access-related price component.

The network based on the "Digital 450" licence (wireless broadband data communications licence for the 450 MHz band granted in 2005) was launched in April 2007. It aims to cover every household as well as holiday cottages (attaining a 100% coverage in Finland).

Competition seems to be increasing as subscription speeds are rising while retail prices remain stable. Average speeds are relatively low, but increasing (only 28% of broadband subscriptions had a connection speed of over 2 Mbit/s in the second quarter of 2007).

DSL rural coverage is 82%. The gap with respect to the national coverage is 9.8%.[114]

Regulatory issues

LLU delivery times are to various degrees perceived as a problem but seem to have improved. LLU connection charges have decreased, but are still at relatively high levels. SMP operators have generally outsourced LLU connection activities to contractors. It appears that in at least some cases, the charges paid by SMP operators to contractors exceeded the regulated connection price. One regional administrative court has ruled that this fact does not exempt the SMP operator from only charging the regulated LLU connection price. The NRA — not convinced that the contractors' prices reflect efficiency by definition — is examining the matter.

Some of the competition authority's margin squeeze investigations regarding the provision of wholesale bitstream access have been closed without finding any abuse of a dominant position. Two major competition law cases have been under the scrutiny of the Market Court for three years and are expected to be settled in spring 2008. In one specific case, the margin squeeze on the offered wholesale price has been so large that it has in fact been treated as a case of refusal to supply.

Mobile markets

Market situation

While fixed calls continued to decrease, mobile minutes and number of calls each grew by approximately seven percent between the second quarters of 2006 and 2007. During the same period — shortly after the temporary amendment to the Communications Market Act allowing subsidisation of 3G phones (until March 2009) — the use of mobile data (excluding SMS and MMS) more than quadrupled. All operators have also introduced flat-rate mobile internet access.

While prices for retail mobile services increased slightly last year — at least partly as a result of operators introducing per-call fees — they still appear to be among the lowest in Europe. The market share of the largest mobile operator shrank by 4 percentage points between 2006 and 2007 (down to 40% by June 2007), while those of the second and third operators grew (to nearly 39% and 20% respectively). No separate data on market shares for 3G traffic is available.

The larger fixed network operators without their own mobile network have been able to negotiate MVNO agreements with one of the mobile network operators.

Mobile penetration is high (more than 108%). Pre-paid card usage in Finland remains very low compared with the EU at large.

As described in the 12th Report, mobile network operators have favoured UMTS-900 over UMA-type solutions (Universal Mobile Access) which combine fixed and mobile access.

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114 IDATE report (October 2007): Broadband coverage in Europe. The data used in the report refer to December 2006.

The major alternative operator introduced in the autumn of 2007 a wireless LAN/mobile service for corporate customers. With this service, users are on the (virtual) mobile network when outside the office, but automatically switch to the W-LAN IP telephony service when entering the office.

UMTS networks are now being rolled out to cover most of the population. The extension of coverage should be facilitated by the use of UMTS-900 in the near future. HS(D)PA is available and is being built out together with the UMTS networks.

Regulatory issues

A 2007 amendment to the Communications Market Act provides the NRA with the power to introduce glide paths and symmetry in mobile termination price regulation. While it was anticipated that the calculated mobile termination fees would be lower with the new "FIFAC" current cost accounting model developed by the NRA, the mobile operators — actively encouraged by the NRA and under the potential threat of even lower, regulated rates — were able in February 2007 to agree to reduce their mobile termination rates by following a glide path to the year 2010. The asymmetric mobile termination rates will be reduced to €0.05 and €0.06 in 2008, and to a yet to be decided, even lower symmetric rate in 2010 by the latest. The agreement places Finnish mobile termination rates among the EU's lowest. In the meantime, FICORA continues developing its cost model for the 2009 rates.

As Finnish international roaming rates were relatively low prior to the Roaming Regulation's coming into force, mobile operators have been less concerned over the retail element and more over compliance with the wholesale element of the regulation. Some operators have signalled delays in implementing the "push" roaming price information solution of up to a few months.

Fixed

Market situation

Fixed calls fell by 22% in number and by 29% in minutes between mid-2006 and mid-2007. Household PSTN penetration, in continued decline, was according to Statistics Finland at 41% in the first quarter of 2007.

Finnish local call prices are among the lowest in Europe. The incumbent that has the most remote and sparsely populated areas found it appropriate however to raise subscription prices (to various degrees depending on the area) as a result of higher per-unit running costs due to the continued decline in PSTN subscriptions.

As in 2006, Fibre to the Home or other access forms continue to replace traditional fixed telephony copper lines in new homes. While broadband telephony is not widely used, around 20% of broadband subscribers were using IP-telephony software, inter alia to make inexpensive calls abroad.

Regulatory issues

In October 2007, FICORA notified its draft decisions on the markets of fixed call origination, termination and transit services to the Commission. While the latter market was declared to be effectively competitive, the NRA's conclusions for the first two markets were roughly identical to those of the first round of market analyses: almost the same undertakings were thus designated as having significant market power.

Broadcasting

Market situation

Approximately 80% of Finnish TV households were using some kind of digital TV reception in August 2007. The national terrestrial analogue network was switched off on 1 September 2007, but the large majority of terrestrial households were already receiving digital broadcasts long before then (by mid 2007, 85% of households had digital antenna reception). Cable television providers will definitively switch to digital signals by the end of February 2008.

An open digital terrestrial network (DVB-H), exclusively aimed at wholesale customers such as content providers, was commercially launched at the end of 2006. However, copyright issues delayed the start of mobile TV services by several months. While TV services are also offered over the 3G networks, the still unclear copyright situation — not least as regards public service programming — has surrounded the provision of mobile TV with uncertainty.

While there are IP-TV offerings (e.g. in the Helsinki area, using LLU), this type of TV service has yet to break through on a large scale in Finland. However, it can be noted that the provision of IP-TV has not faced the same difficulties with copyright as mobile TV.

Regulatory issues

An additional DVB-T multiplexer came on line after analogue switch-off on 1 September 2007. DVB-H programming licences have been issued by FICORA to minor service providers.

Horizontal regulation

Spectrum management

A workgroup set up by the Ministry of Transport and Communications has been tasked with making proposals on how to allocate the digital dividend created by the switch-off of the analogue terrestrial television network on 1 September 2007. Another workgroup was set up by the Ministry in August 2007 in order to prepare spectrum liberalisation.

In 2006, the Finnish government had announced its decision to allow the use of the 900 MHz frequencies for UMTS, with better characteristics for area coverage and indoor use ("UMTS-900"). The right to provide 3G services in the 900 MHz and 1800 MHz bands would be reserved to those operators that have the right to offer 2G services in these bands. On 31 October 2007, FICORA issued a decision on the re-assignment of the 900 MHz band between the existing licence holders. The decision provides that the three mobile network operators have equal and sufficient spectrum resources and contiguous 900 MHz frequency bands for the purposes of GSM and UMTS operations in the 900 MHz band. The building of the UMTS 900 network can be started immediately. This makes Finland Europe's first country to enable the concurrent use of 900 MHz frequencies for second and third generation mobile communications. The operators' mutual transition arrangements will be implemented by the end of 2009.

The licence holder of the "Digital 450" licence started up its network in 2007 in densely populated areas and in parts of Lapland. According to the licence conditions the mobile network is open for all service providers and the licence holder itself does not offer retail communications services. The licence holder is also required to build out the network in rural and remote areas within a certain time frame. Pilots carried out for the provision of broadband services by an incumbent will result in commercial launch in December 2007.

All 3.5 GHz licences for fixed wireless access have now been assigned. While the use and coverage of WiMAX by local or municipal operators has increased significantly in the last couple of years, the operator with the largest number of regional 3.5 GHz licences — covering most of Finland — has not yet launched services and intends to focus on mobile WiMAX (version e, still not commercially available).

Several mobile operators are concerned about radio spectrum interference from Russian mobile operators in the remote areas near Finland's eastern border, where many have summer homes. As a result, in a number of cases subscribers of Finnish operators have been erroneously charged significant amounts for roaming on Russian mobile networks. FICORA is trying to resolve these coordination issues with its Russian counterpart.

Implementation of spectrum decisions

Finland has fully implemented the Commission spectrum harmonisation decisions.

THE CONSUMER INTEREST

Universal service

An amendment to the Communications Market Act, addressing the Commission's concern regarding the a priori exclusion of operators from the possibility of becoming USO operators, entered into force in 2007. The Commission's infringement proceeding in this regard has therefore been closed. FICORA is preparing decisions concerning the designation of universal service providers. In that process, the starting point has been technological neutrality, in particular as regards fixed versus mobile access solutions. Between 2 and 4 percent of the population relied exclusively on a fixed subscription in 2007. An important question will be whether the decline in fixed subscriptions will accelerate price rises, creating a vicious circle leading to the demise of the PSTN network in remote areas.

Number portability

Finland has the highest percentage of ported mobile numbers over the total of mobile subscribers (68%). Fixed number portability to the contrary is rather limited. The price for fixed porting (between operators) is above the European average (€17.95).

Consumer complaints

In March 2007, amendments to the Communications Market Act entered into force that are intended to strengthen the consumer's position in the area of contracts with electronic communications providers. For example, consumers are entitled to standard compensations in the case of faulty communications, and operators are relatively limited in their right to amend the terms of a communications service agreement. It is not entirely clear to what degree operators can be held responsible for faults in communications (e.g. in the case of a stolen mobile phone), but they have an obligation to compensate the user unless the fault was a result of the user's "gross negligence". An appeal lodged by one of the operators was expected to add clarity to the legal provisions. The Act also contains provisions relating to the unauthorised use of communications services.

European emergency number 112

112 is the main internal emergency number in Finland but only 44% of Finns appear to be aware of the existence of this number for calls to emergency services anywhere in the EU. The national 112 Day is a yearly event on 11 February that draws attention to safety.

Caller location information is provided for all calls, both mobile and fixed.

Must-carry

As required by Finnish legislation, and following the letter of formal notice sent by the Commission to Finland in June 2006, Finland started reviewing its must-carry regime. The proposal tabled in Parliament was expected to be in force by end-2007.

Data protection

Implementation of Directive 2006/24/EC on data retention has not been a great source of concern for operators in Finland, as the State is to fund the necessary implementing measures. According to the proposal, operators will be obliged to retain traffic and location data for 12 months.

FICORA has received additional funding for the Computer Emergency Response Team (CERT) function and has been able to employ a further 6 personnel, resulting in better critical infrastructure services (involving the major operators). It has also started a revision of its e-mail regulation, and in doing so applies technology neutrality in preparing for possible mobile privacy threats. A public awareness campaign regarding mobile internet privacy has been run. Although traffic from certain IP addresses is being blocked, threats from outside the EU remain the biggest problems.

SWEDEN

INTRODUCTION

During 2007 mobile and broadband services, and the underlying convergence processes, continued to drive developments in the electronic communications sector in Sweden. Infrastructure competition has brought greater benefits for consumers. At the same time, digital switchover has been completed.

While these developments have been fuelled by a strong investment cycle on the part of larger market players, alternative operators' entry and expansion plans have remained largely dashed, due to longstanding broadband competition problems. Despite stronger attempts by the Swedish authorities to remedy regulatory delays, neither the sector-specific regulation nor the general competition law appear to provide solutions and the number and length of appeal procedures and suspensions are continuing to cast uncertainty and to hold back further market developments.

REGULATORY ENVIRONMENT

Main regulatory developments

With some important exceptions which will be explained below, the regulatory environment remains essentially unchanged from a year ago. 2007 was mainly a year of work with major legislative proposals, based on the early experience with application of the new regulatory framework in Sweden. Working on the second round of market analyses, the national regulatory authority (NRA), Post- och telestyrelsen (PTS), focused on the interconnection markets, which are to be notified in 2008.

In February 2007 PTS published a new broadband strategy setting out the initiatives necessary in order to achieve the PTS's proposed political goal of broadband access for all by 2010 in line with the i2010 framework. In particular, the strategy document called for a model that would ensure equal treatment of operators seeking access to the broadband infrastructure, achieving competition on retail markets for broadband services and striving for broadband to be perceived as a universal service. Thereupon, the Government appointed PTS to submit a report and recommendations on a new sector-specific remedy in the form of functional separation. The report, presented in June 2007, proposed functional separation of the incumbent with a view to achieving the objective of furthering competition. A proposal on amendment of the Electronic Communications Act was expected to be referred to the Council on Legislation (Lagrådet) for consideration in January 2008. A Government bill on amendment of the legislation was to be submitted to the Swedish Parliament in the first quarter of 2008.

Organisation of the NRA

Since 1 July 2007 PTS has a new organisational structure, designed to use its resources optimally and to prepare for the future better. While the previous structure provided "Chinese walls" between regulatory functions such as market analysis and dispute resolution, the new set-up is intended to make more efficient use of available knowledge, including by establishing a new horizontal strategy department. The National Competition Authority (NCA) is continuing to work with PTS on the second round of market analyses.

The Consumer Agency, after being relocated away from the capital, has now been able to fill its posts in the electronic communications sector. It has five staff working on electronic communications, focusing on broadband. As this area is a priority, the Agency plans further increases in the number of personnel dealing with it. It plans a general investigation into the broadband market in 2008.

Although some court cases have now been closed, systematic appeals remain – as in the last couple of years – a key concern and source of uncertainty in the marketplace. For instance, more than three years after significant market power (SMP) decisions on the market for wholesale mobile termination, the regulated termination rates are still subject to appeals by all operators. As a consequence, since July 2004 operators have been living in uncertainty about the levels to be applied. Moreover, as court decisions on SMP obligations cannot be enforced retroactively, operators file interconnection disputes with PTS so that they can obtain retroactive compensation on the basis of the dispute resolution decision.

Based on the findings of the "Karlström Commission" mentioned in the 12th Report, in June 2007 the Government submitted its proposal for amendments to the Electronic Communications Act in order to improve the long-term situation. The amendments have been approved by the Parliament and have been in force since 1 January 2008. They include a limit on the number of appeal instances from three currently to two, appointment of experts to the courts in cases concerning electronic communications regulations, limits on the introduction of new evidence in a procedure and stating in the law itself that special account must be taken of the purposes of the law when considering suspension of a decision. Besides this, SMP operators will be liable for damages resulting from non-compliance with regulatory obligations.

In October 2006 the Commission had sent a letter of formal notice to Sweden, since Swedish law appears to impose stricter conditions on who has the right to appeal against decisions by the NRA than the Framework Directive. In Sweden, operators other than SMP which are affected as a result of a withdrawal of or change to the SMP obligations have no right to appeal against such decisions. In June 2007 the Commission decided to proceed with a reasoned opinion against Sweden, reaffirming its position that Swedish law infringes the Framework Directive in that regard.

Decision-making

As described above, dispute resolution procedures are very often used to secure the retroactivity of final decisions following appeals against decisions on regulated interconnection rates.

Since February 2007, when the Supreme Administrative Court finally ruled in favour of the NRA's decision on the wholesale broadband access market, PTS has been focusing on establishing conditions which would allow alternative operators to gain access to the regulated product. However, intensive dialogue with the incumbent, formal compliance control and numerous interventions had failed to produce a reference offer and conditions that would result in take-up of bitstream access lines by the time of writing this report. On the other hand, according to PTS, second-generation SMP decisions on interconnection, LLU and wholesale broadband access were to be taken during 2008. In parallel, a new strategy for the long-term interconnection price regulation is being formulated together with the operators. This strategy is expected to be implemented in the third generation of SMP decisions beyond 2008.

However, it has come to the Commission's services attention that, further to a recent ruling by the Supreme Administrative Court, PTS appears to have limited authority when it comes to resolution of disputes between operators over contract terms and conditions regarding regulated products and services. The Commission's services are looking into this matter.

Fewer complaints than in the previous year were received by the NCA, but it is examining new complaints regarding access to dark fibre and SMS services. During the last year, the NCA has also examined and allowed acquisitions of a mobile service provider and an internet access provider (respectively) by two of the leading Nordic groups.

MARKET AND REGULATORY DEVELOPMENTS

Revenue in the telecommunications sector in 2006 totalled €6 269 million, of which the fixed market generated €2 122 million, while the mobile market contributed some €1 831 million. Operators invested a total of €1 109 million in the Swedish electronic communications sector in 2006. Alternative operators invested €192.5 million and mobile operators some €235.5 million, whereas the incumbent invested €276 million.

The consolidation process, started a couple of years ago, continued during 2007 resulting in three Nordic groups emerging as main players. The demand for bundled products is increasing and, as a consequence, it is becoming more important for operators to be able to offer a full communications package including both fixed and mobile services.

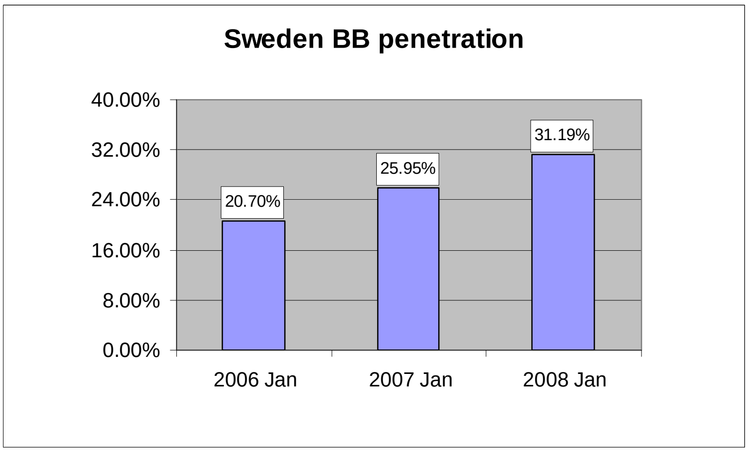
The Government has begun selling off the State's holding in the incumbent. Out of its 45.3% remaining stake, 8% was sold to institutional investors in May 2007. The incumbent has not yet publicly announced any major initiative to roll out the next generation network.

Sweden's historically very high level of fixed telephony subscriptions is continuing to decrease, but is still high (5.55 million at the end of 2006). Mobile phone ownership appears to be the highest in the EU, and while fixed minutes are in significant decline, more calls and called minutes are being registered for mobile phones. The share of the population that use only a mobile phone is continuing to increase, while called mobile minutes grew with a corresponding reduction in the proportion of fixed minutes. All this indicates that fixed-to-mobile substitution has gained momentum in Sweden. In autumn 2007 the incumbent launched a universal mobile access (UMA) service – previously tested by the same operator on the Danish market – where once a mobile phone reaches the home of the user it seamlessly switches to a "femtocell", a very low-powered base station for the home. In theory, this service allows spectrum efficiency gains for the operator and lower calling costs for the user.

PTS has undertaken a number of recent studies on interconnection. These have concluded that, despite the relatively low mobile termination levels in Sweden, there is still a high level of cross-subsidisation from fixed to mobile networks due to the differences between fixed and mobile termination levels. The studies have also shown that the level of termination revenue in relation to total revenue is much higher for mobile operators than for fixed operators. In the light of converging technologies and possibly converging business models, PTS sees a need for further adjustment of the current interconnection regulation with a view to ensuring predictability and neutral incentives to invest for all operators.

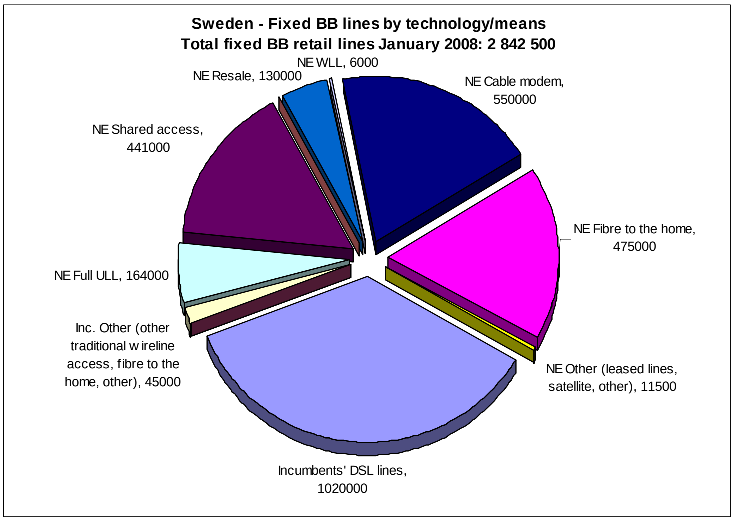
Broadband

Market situation



In January 2008 broadband penetration in Sweden, in terms of fixed lines per 100 inhabitants, was 31.2%, placing it fourth in the EU but still last among the Nordic countries. The number of fixed broadband lines in Sweden grew by 5.2 percentage points between January 2007 and January 2008, despite a decrease in the number of newly added local loop unbundling (LLU) lines. The share of technologies other than DSL has grown from 33% to 38.3% in the last 24 months. The incumbent's share of retail broadband lines was 37.5%, while the incumbent began with trial HDTV broadcasting via its broadband network in late November as the first major broadband operator in Sweden. Two of the UMTS operators now also offer HSDPA.

The opening of MDFs for co-location has been slow. Practical application of the September 2006 agreement between alternative operators and the incumbent on a local exchange access framework in the form of a "manual" (including cost sharing for co-location, adaptation of exchanges, rearrangements and space sharing) does not appear to have been a great success so far.



More than 150 locally established companies are running urban or local networks, including significant fibre-to-the-home (FTTH) installations to Swedish households as described in the 12th Report. The vast majority of such companies are owned by the municipalities, and there is no common business model. According to PTS, more than half of these local companies do not offer wholesale transmission products such as fibre, wavelength or leased lines. Consequently, there is less local wholesale competition with the incumbent in, for example, DSLAM and CMTS[115] backhaul, reducing the scope for competition at retail level.

115 Cable modem termination system.

DSL coverage in rural areas is 84% compared with 95.3% at national level. For cable, where rural coverage is limited (17%), the coverage gap between non-urban and national level is 31.3%.[116]

Regulatory issues

Although the decision to regulate the wholesale broadband access market was taken in 2004, it was not until 31 January 2007 that the case was finally decided when the Supreme Administrative Court dismissed the SMP operator's appeal. Although a reference offer has been produced since then, no alternative operator has been able to accept it. For example, the number of access points required in the offer for full national coverage was around 203, while PTS had proposed 13. In August 2007 PTS ordered the SMP operator to offer alternative operators bitstream access products that would enable alternative operators to offer retail products that corresponded to the SMP operator's own retail products. However, a regulated, legally resolved bitstream access offer still appeared remote at the time of writing this report, and the NCA's broadband access margin squeeze case against the incumbent was still being considered by the court, three years after the authority lodged the case there.

As last year, in spite of the industry's efforts, LLU compliance control remains a major challenge for PTS. Connection prices for fully unbundled local loops (€69.2, down from €157.7 in 2006) are still above the EU average (€63), as are monthly rental fees for shared access (€4.5, down from €5.4 in 2006, compared with the EU-27 average of €3). According to PTS, planned co-location investments have been cancelled because of absence of fibre to connect the node. In July 2007 PTS ordered the SMP operator to provide dark fibre for connections to co-located LLU equipment, as an ancillary service on the LLU market. After the fixed incumbent removed fibre product offers, PTS is also analysing the general market situation as concerns dark fibre, which is not regulated except on the LLU market.

Networks financed with the help of State and EU funds are subject to "openness" conditions. Compliance with these is to be monitored by the County Administrative Boards. PTS is concerned that such co-financed networks, in particular when owned by the municipalities, are not always "open" in the sense of providing equal access to wholesale transmission products for alternative operators, but are at the same time used by municipal companies for providing retail services. Generally, although alternative operators could make use of the rules on rights of way, this process can take between 6 and 12 months in a situation where customers need to be served at short notice or else could be lost. The NCA is investigating whether there is discrimination between municipalities in this regard and is cooperating with PTS on examining this area of the market.

Largely as a result of the broadband strategy's call for an equal treatment model, in April 2007 the Government gave PTS the assignment of drafting a legislative recommendation aimed at the LLU and wholesale broadband markets. The suggested remedies are to enhance protection against discrimination, via separation and equality of input, and to provide PTS with the possibility of accepting voluntary undertakings. Over the course of only a couple of months – as required by the tight deadline – such proposals were drafted and finally presented to the Government in mid-June 2007. One result was the proposal to introduce a regulatory remedy – functional separation – to be imposed as an SMP obligation where justified on the basis of market analysis. Partially drawing on the ideas behind similar projects in the United

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116 IDATE, October 2007: Broadband coverage in Europe – data are for the end of 2006.

Kingdom, Italy and Poland, the solution would allow imposition of a separate access network unit or undertaking, providing the same services using the same ordering routines and information and support systems. In September 2007 PTS officially informed the Commission of its proposal by sending the report and recommendation on the new remedy. The Commission's services expressed concerns about whether the amendment of the Electronic Communications Act (ECA) would be adopted under the current regulatory framework, without having taken into account the criteria for functional separation introduced in the review of the regulatory framework. This entails, amongst other things, that before considering imposing functional separation, which is a far-reaching regulatory obligation, PTS should give existing remedies sufficient time and carefully examine whether they are efficient to resolve the competition problems, while also making an impact assessment of functional separation.

Meanwhile, the incumbent initiated a number of measures to correct supply problems on the LLU market. It also restructured its organisation, adding a new international wholesale broadband services division and, as of July 2007, a new infrastructure unit at the base of the organisation in Sweden.

Mobile markets

Market situation

Mobile market penetration, measured as number of active SIM cards, is high on 108%, while competition is continuing to put pressure on mobile tariffs. In particular, the consumer usage baskets of the second largest mobile operator are amongst the most affordable in the EU. Dwindling subscriber growth in recent years, due to market saturation, has been counter-balanced by greater consumer take-up of mobile data services, made possible by significant investment, in particular in HSPDA networks. However, strong competition between mobile network operators has led to falling call prices and ARPU, not yet compensated for by data use. While there are four mobile network operators providing GSM services, four mobile network operators providing UMTS (3G) services and one operator using CSDMA-450, the market share of mobile service providers (virtual network providers and resellers) remains low. The incumbent’s market share is 42.9%, slightly down on 2006. In 2007 all four 3G operators covered at least 99% of the population. By autumn 2007 HSPDA was available in the biggest cities and being rolled out by operators.

DVB-H[117] pilot studies were conducted in 2006 and 2007 by three different consortia of mobile operators and broadcasting transmission operators. UMTS operators in Sweden currently offer commercial mobile TV services based on 3G streaming. While services feature commercial Swedish TV channels and several international ones, retransmission copyright issues have reportedly prevented inclusion of the public service channels.

A 2006 Government investigation into mobile TV suggested that no broadcasting licence would be necessary for transmission via the mobile network, but that a licence (in addition to the spectrum licence) would be needed for DVB-H transmission and should be subject to “open access” conditions for all content providers. PTS, which manages the Swedish radio spectrum, has not yet issued any licences for DVB-H.

117 A standard for a separate network for mobile phone TV.

Regulatory issues

The legal uncertainty regarding mobile termination regulation partly persists. The SMP decisions by PTS on the wholesale mobile termination market in 2004 made all mobile network operators subject to regulation. The decisions are still subject to appeal procedures, but remain in force. The July 2007 regulated mobile termination levels – SEK 0.55 or approximately 6 euro cents for all operators – are currently among the lowest in Europe.

Roaming

All GSM operators appear to have implemented the requirements set by the Roaming Regulation to a satisfactory degree. According to PTS, in the second half of 2007 retail international roaming prices were generally falling to or below the Eurotariff levels.

Fixed

Market situation

42.5% of subscribers were using an alternative operator for voice telephony services in 2007, while 9% have used an alternative operator for direct access. According to data from PTS, some 400 000 telephony subscribers (out of a total of around 5.55 million) were using broadband telephony[118] at the end of 2006, which was double the number the year before.

The incumbent's share of the national and international calls market, measured in terms of revenue, stands at 56%, while the prices of 10-minute national calls on the incumbent's network remain flat at 29.4 euro cents and are higher than those charged by the larger competitors.

Regulatory issues

The price control decision regarding wholesale fixed termination, upheld by the first court but re-appealed against and suspended, is still before the courts. Nonetheless, the regulation of the fixed termination market seems to have worked efficiently, since the current interconnection charges for terminating calls on the incumbent's network with single and double transit are the lowest in the EU-27 (0.12 euro cents, down from 0.4 euro cents in 2006 and 0.18 euro cents, down from 0.73 euro cents in 2006), significantly below the average marker.

Broadcasting

Market situation

Platform competition between terrestrial, cable, satellite and IPTV is intensifying. Approximately 24% of Swedish households were watching terrestrial TV, 26% satellite TV, 48% cable TV and 2% IPTV by July 2007. Digital switchover in Sweden, undertaken region by region, was completed nationwide with the fifth and final stage in October 2007. In June 2007 there were 41 channels in the terrestrial digital broadcasting network, counting regional channels. There are currently five national multiplexers and one regional multiplexer in the terrestrial network, which is also used for HDTV trials. The analogue terrestrial broadcasting licences expire in February 2008.

118 IP-telephony over broadband networks (for example, cable TV and new local area networks).

According to a study by the Swedish Radio and TV Authority, there were four big IPTV operators on the Swedish market in 2007. Two of them were using their own separate infrastructure, the others mainly locally established companies running urban or local fibre networks. IPTV take-up has increased significantly over the last year. According to PTS, there were 53 000 IPTV subscriptions in July 2007. How this trend will affect the analysis of the broadcasting transmission market remains to be seen.

A commission appointed to monitor developments on the electronic programming guide (EPG) has received no complaints and may be discontinued. Although a 2006 questionnaire from the Radio and TV Authority indicated that application program interfaces (APIs)[119] and EPGs were growing in importance in comparison with 2005, since then the Authority has found that market players have lost interest in API, which has been overtaken by the internet as the preferred venue for interactivity with users.

Regulatory issues

Although decisions on obligations for the SMP operator (the State-owned provider of terrestrial transmission services) on the markets for analogue and digital terrestrial television were taken in December 2005, they are still subject to appeal (but not suspended). In October 2007 PTS removed the market for analogue broadcasting transmission services from regulation and lifted the obligations on that market.

As mentioned in the 12th Report, in the infringement procedure regarding exclusive broadcasting transmission rights, in October 2006 the Commission had taken Sweden to the Court of Justice for failing to change its rules giving a State-owned company a monopoly to provide access control services on the digital terrestrial broadcasting (DTTV) network. Since then the Swedish Parliament has adopted a new regulation to address the matter that will enter into force on 1 February 2008. At the time of writing this report, the proposal was being examined by the Commission's services.

At the time of writing this report, the NCA was examining a complaint against the terrestrial digital TV access monopoly from an operator who wished to provide SMS services via the DTTV network. The NCA has postponed consideration of this complaint awaiting the new regulation.

Horizontal regulation

Spectrum management

On 19 December 2007, following switch-off of the analogue terrestrial TV network in October 2007, the Government took a decision regarding the digital dividend. The re-planning of the UHF band in 2008 provides for the 470-790 MHz band to accommodate six multiplexes for digital terrestrial TV. The 790-862 MHz band will be set aside for electronic communications other than broadcasting. That band will be licensed by PTS under the Electronic Communications Act. This is expected to take place during 2009. In addition to the six multiplexes in the UHF band, there will also be one multiplex in the VHF band (174-230 MHz) available for digital terrestrial TV, subject to re-planning by PTS.

[119] The software interfaces between applications, made available by broadcasters or service providers, and the resources in the enhanced digital television equipment for digital television and radio services.

PTS has requested that the ECA be changed to allow spectrum leasing (sale of licences, subject to regulatory approval, is already allowed) and easier use of auctions.

The Government has appointed a commission – led by the former head of PTS – to formulate a policy on accessibility to mobile and other wireless communications, to investigate current conditions for authorisation and to examine if and how those who currently use spectrum for free should pay for it.

In November 2007 PTS announced the completion of an auction of regional wireless broadband licences in the 3.6 GHz-3.8 GHz bands, suitable for WiMAX services. On offer were four 15-year technology-neutral licences per municipality; two frequency division duplex (FDD) licences of 2×20 MHz each and two time division duplex (TDD) licences of 40 MHz each (a total of 1 160 concessions). Permits carrying no rollout obligations have been assigned, amongst others, to the incumbent fixed-line operator and to the second largest broadband provider, which won concessions in all 290 municipalities in Sweden.

Sweden has implemented all the Commission decisions on spectrum harmonisation.[120]

THE CONSUMER INTEREST

Tariff transparency

PTS continues to run its web-based price comparison service. The service includes price comparisons for fixed, mobile and internet for different user profiles (low, medium and high usage). There are also plans to introduce quality-of-service parameters in the database.

Universal service

Fewer complaints were received in 2007 than in previous years. This could be partly due to a "fixed-mobile" offer introduced by the fixed-line incumbent for homes in remote locations, providing fixed telephony and internet functionality using a mobile network. In February 2007 the Stockholm County Administrative Court overruled PTS's universal service designation decision. PTS eventually decided not to appeal. The Commission's services are looking into this matter.

The incumbent has closed nine small MDFs in remote locations particularly affected by the powerful 2005 "Gudrun" storm that had attracted many complaints and replaced them with the "fixed-mobile" service. It also plans to replace some long individual subscriber lines on poles with the same service (without closing more MDFs). These measures could improve resilience to extreme weather conditions in future.

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120 Commission decisions on the 169 MHz, 5 GHz, 24 GHz and 79 GHz frequency bands were implemented in 2006. Six additional decisions were implemented in 2007. These include Decisions 2007/344/EC on harmonised availability of information regarding spectrum use within the Community, 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community, 2007/98/EC on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services, 2007/90/EC amending Decision 2005/513/EC on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs), 2006/804/EC on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band and 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

Another study on “Broadband in small villages and remote areas”, commissioned by the Government, is to be concluded in April 2008. As explained in greater detail earlier, in February 2007 PTS published its broadband strategy for Sweden calling, *inter alia,* for broadband to be perceived as a universal service. It proposes a USO financing model based on allocation of the net service costs between operators. It would also like to introduce a social planning responsibility for municipal authorities, including an obligation to supply data on existing and planned networks.

The goal of PTS’s work on disability is for disabled users to have access to a broad range of communications services and to new technical solutions within electronic communications when such solutions appear. After a broad-ranging call for proposals in early 2007, PTS has selected several new ideas for trial studies, such as video-mail and symbol-based communication via mobile and fixed networks. Electronic communications services already procured by PTS include relay services for text and video telephony, telespeech, health care information services for text telephone users and communication services via databases for the deaf/blind.

Number portability

By October 2007, 2 585 024 mobile numbers (i.e. 26.3% of all mobile numbers) had been ported since the introduction of this consumer facility. As regards fixed number portability, 646 653 numbers had been ported by 1 October 2007. Prices for porting numbers are amongst the lowest in the EU.

Consumer complaints

The number of complaints to the Consumer Authority was stable from last year for both broadband and mobile. The Consumer Ombudsman – within the Consumer Authority – can bring cases before the Market Court. No cases related to broadband have been tried by that court in the last year. The Consumer Authority refers many complaints to the Consumer Bureau for Telecom and Internet, which was set up in late 2006. The Authority also holds coordination meetings with the Bureau four times a year. Providing a form of alternative consumer dispute resolution mechanism, the Consumer Bureau for Telecom and Internet has also relieved PTS of consumer counselling and complaints-related work to a significant degree.

European emergency number 112

112 calls are answered by 18 integrated regional public safety answering points (PSAPs) and have to be answered, on average, within 8 seconds. Operators are able to answer calls in Swedish and English. The new technical platform to be installed during 2008 will make it possible to handle calls in other languages. Sweden has also provided a facility to use translators if other languages are needed.

Citizens are informed about the availability of 112 and how to use it via telephone directories, websites (www.112.se and www.sosalarm.se), magazines, posters, fairs, conferences and in cooperation with schools and popular artists. Target groups include, in particular, children in nurseries and schools, immigrants and the elderly. General awareness about the 112 number is very high in Sweden (97% of the adult population), but about 10% lower among the elderly.

Data protection

The Consumer Authority has received around 70 000 complaints regarding spam over the course of the year. Addressing them successfully seems to be a challenge. The first problem is that the sender of the spam is not identified in about half the complaints. If identified and approached by the Authority, the senders normally claim that there was consent on the part of the recipient. In many cases, however, the sender is unaware how or under what circumstances consent was given, and the criteria for consent become an important issue. Another major barrier to enforcement is that most senders are located outside the country. To overcome this, the Consumer Authority is cooperating with the Contact Network for Spam Authorities in the EU.

At the time of writing this report, a proposal for a law implementing the Data Retention Directive (Directive 2006/24/EC) was expected. A proposed amendment to the current rules should also empower operators to improve filtering of e-mail and internet traffic as appropriate – such as in order to remove spam – without express agreement by customers in each individual case.

Mobile e-privacy does not seem to be a major issue so far, but developments are being monitored by the authorities and operators.

UNITED KINGDOM

INTRODUCTION

In 2007, the electronic communications sector in the United Kingdom saw continuing robust retail price competition. There was strong progress in local loop unbundling, which in turn had an impact on the take-up of wholesale line rental and the use of carrier pre-selection. The fixed incumbent started the roll-out of next generation access networks in new residential development sites. The mobile market was characterised by a significant increase in the take-up of 3G.

The most significant regulatory issue in 2007 remained the implementation of the fixed incumbent’s undertakings in the framework of functional separation. Ofcom’s second Telecoms Strategic Review Evaluation, published in December, highlighted the need for stronger financial incentives to improve the quality of service provided to alternative operators by the fixed incumbent’s regulated wholesale access division.

REGULATORY ENVIRONMENT

Main regulatory developments

Ofcom was one of the first regulators to begin the second round of market reviews. In 2007, it completed the review of the wholesale mobile termination market, which resulted in a number of appeals to the Competition Appeal Tribunal (CAT), and it notified a review of the wholesale broadband access market to the Commission. At the same time, the announced leased lines and SMS market reviews have been delayed.

An important issue for alternative operators is the future regulation of Next Generation Access Networks, on which Ofcom has taken a proactive stance. In September 2007, it launched consultation on, inter alia, specific remedies that may be appropriate to address the concerns raised by next generation access networks, which give their owners significant market power (SMP) in the relevant markets

The implementation of the fixed incumbent’s undertakings made headway, although some specific milestones were revised at its request and following consultation with Ofcom. A few milestones have been reported as missed in the process. The Equality of Access Board (EAB), established by the fixed incumbent to oversee functional separation, has detected a number of breaches, mostly related to information sharing between the fixed incumbent’s regulated wholesale and retail divisions; these were subsequently remedied. Overall, some alternative operators appeared more critical than a year ago regarding the effectiveness of the regulatory and institutional system established to ensure the implementation of the undertakings given.

In 2007, Ofcom took further action in relation to number portability, which will be based in the future on a common database to be established by the industry. At the same time, it also provided for further gradual reductions in mobile number porting times with a view to making the process even faster and recipient-driven.

As regards the future use of GSM spectrum, Ofcom launched a consultation which, amongst other options, included a proposal to take away some of the GSM spectrum holdings from its current assignees and to release it to other users.

A number of measures were taken to strengthen the regulation of VoIP services, starting with improved transparency as to the provision of access to emergency services, plus an obligation placed on certain categories of VoIP providers to ensure access to emergency numbers as from 8 September 2008.

Ofcom also took measures in the area of non-geographic numbering services with the aim of curtailing call charges and making them transparent.

Organisation of the NRA

The independence of Ofcom is generally recognised, even to the extent that some market players would like to see a stronger oversight of Ofcom and a wider choice of remedies to challenge its decisions. The CAT has an established reputation as a competent appeal body, but its procedures are regarded as too costly for smaller players.

Ofcom is in a position to attract and employ qualified staff, although there has been some concern over the fact that several key people have recently left. One area of its activity that prompted criticism from certain market players was the quality of its regulatory impact assessments. Specifically, this concerned Ofcom's decisions to introduce pre-call announcements for calls to certain non-geographic numbering ranges, which had had to be re-examined as a result of implementation problems.

Decision-making

Apart from Ofcom, a number of regulatory or implementing bodies are relevant to the telecommunications sector, such as the premium rate regulator PhonepayPlus (formerly ICSTIS), the Office of the Telecoms Adjudicator (OTA2), the industry organisation NGN UK and the Equality of Access Board (EAB) of the fixed incumbent. However, Ofcom is the only body with binding powers to resolve disputes, while the others have a more supervisory and advisory character. Although Ofcom has to deal with a growing number of disputes, it is generally acknowledged that it adheres to the four-month time limit prescribed by law for resolving disputes.

It was noted by several market players that, in 2007, Ofcom strongly focused its activity on the residential markets and private consumers. These consumer-related actions also had effects on operators providing services to business clients. According to some alternative operators, the increased focus on retail regulation should not be at the expense of continued and rigorous wholesale regulation.

A number of cases reported in the previous Implementation Report are still pending either in Ofcom or on appeal. In particular, Ofcom has yet to issue a final determination to resolve disputes between the fixed incumbent (and universal service provider) and alternative providers of directory services. This determination is also expected to lead to a review of regulatory policy in this area. Another example is the case concerning the status of GSM gateways, where, following a CAT judgment in 2006 which gave a purposive interpretation of the domestic law applicable to mobile operators' licences in the light of Community law, Ofcom finally succeeded in obtaining leave to appeal to the Court of Appeal.

There have been a number of disputes between smaller terminating communication providers and the fixed incumbent or mobile network operators (MNOs) over call termination rates. For example, Ofcom is dealing with a dispute between a number of terminating communication providers and the fixed incumbent concerning the call termination rates for the recently reorganised ‘0870’ non-geographic numbering range. In one reported case, the High Court issued an injunction imposing interconnection between a mobile VoIP provider and a MNO under the Competition Act without, however, specifying the termination rate due, which remains to be determined.

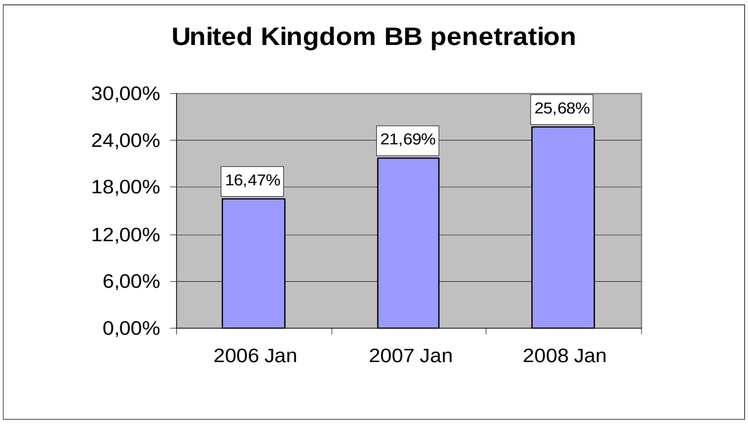
MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the United Kingdom telecommunications sector was about €67.1 billion as at 31 December 2006; the revenue from fixed services was about €23.2 billion, and that from mobile services was about €23.1 billion.

In 2007, around one third of United Kingdom households used bundled services and around 2.2 million people used triple or quadruple-play services, including broadband, voice telephony, IP TV and mobile telephony. There was intensive retail price competition to the extent that a number of operators are offering bundles of converged products including “free” broadband connection**.**

Broadband

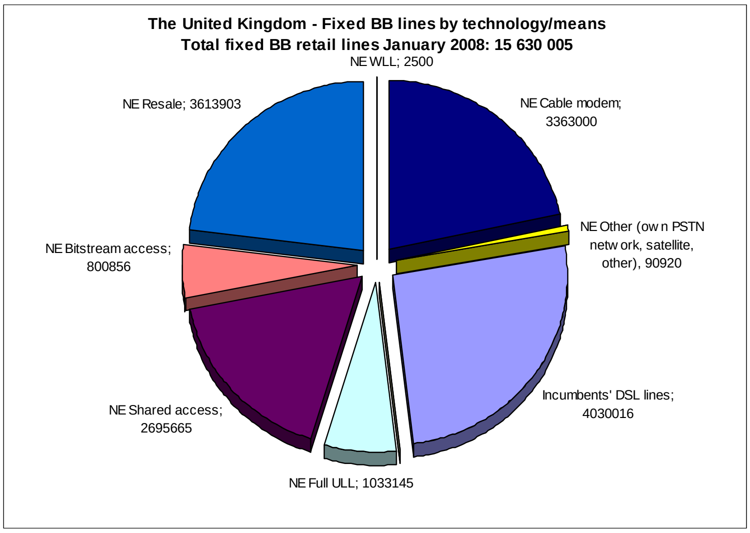
Market situation



The UK broadband market saw another year of strong growth. The broadband penetration rate rose to 25.68% in January 2008 compared to 21.69% in January 2007. Although still above the EU average, this growth rate of 3.99 percentage points is still less than the 5.22 percentage points reported for a similar period a year earlier. As of 31 December 2006, the difference in broadband coverage between urban and rural areas was 4.5 percentage points in the case of DSL coverage (95% coverage in rural areas compared to 99.5% at national level) and 45.3 percentage points in the case of cable coverage (4.8% coverage in rural areas compared to 50.1% at national level)[121].

[121] IDATE report from October 2007: Broadband coverage in Europe

Local loop unbundling (LLU) continued to make strong progress during 2007, with the number of LLU lines approaching 4 million in January 2008 compared to about 1.5 million in January 2007. The fixed incumbent's 25.8% share of the retail broadband market, though slightly higher than a year ago (23.7%), remains among the lowest in the EU. Compared to other Member States, the United Kingdom continues to have the largest market share of resale of the fixed incumbent's broadband offering, although that share has decreased significantly from 34.7% a year ago to 23.1% in January 2008.



In 2006, at the request of alternative operators, the fixed incumbent had launched a consultation on a wholesale offer of 'naked DSL'. However it subsequently received no expressions of interest from the industry and therefore planned to issue a 'closure statement'.

Regulatory issues

The OTA2 reported regularly on the service level agreements/service level guarantees (SLAs/SLGs) review and facilitated the negotiations between the fixed incumbent and alternative operators. These negotiations were intended to lay down an improved set of SLA/SLG components within contracts for LLU, wholesale line rental (WLR) and Ethernet products that would create enhanced incentives to improve quality in provisioning and repair timescales and processes. However, the matter was eventually referred to Ofcom. The key unresolved issues were the automatic payment of compensation to WLR2 operators, which was not accepted by the fixed incumbent (whereas it is provided for operators using the new WLR3 product), and the compensation offer to be included as part of the provision and repair SLGs for Ethernet products. In December, Ofcom launched a consultation on its proposals to strengthen the existing SLAs and the levels of compensation to be paid to alternative operators in the event that the required levels of service are not satisfied.

As regards Next Generation Networks (NGNs), Ofcom launched a consultation in September 2007 on the policy approach to next generation access to seek the views of stakeholders on the system of remedies that could apply in the NGN environment so as to allow alternative operators to use the fixed incumbent's fibre infrastructure. This issue is important to the alternative operators, who are concerned about how equivalence of access will be guaranteed in the NGNs. To encourage discussion in the area, Ofcom established an industry body - NGN UK - in 2006; since then this body has increased its membership and has made progress in agreeing the technical arrangements for NGNs.

The second-round review of the wholesale broadband access market, on which Ofcom launched a consultation at the end of 2006, was submitted to the Commission in November 2007. In this market review, Ofcom proposed to define certain sub-national wholesale markets based on the level of competitive entry and population density in exchange areas, and to deregulate parts of the national territory.

Mobile Markets

Market situation

Mobile penetration was 119% in 2007 (up from 109% in 2006) with 72.2 million subscriptions. The take-up of 3G progressed to reach 8.3 million users, or 11.6% of all mobile subscribers, in October 2007. The four established network operators continued to have market shares within a few percentage points of each other, while the new entrant was the largest 3G operator in terms of subscribers. The mobile market has seen the biggest falls in prices due to the strong price competition between the providers to attract users as market growth slows. The United Kingdom also has a relatively large number of mobile virtual network operators (MVNOs) and other service providers active on the mobile market, which provide services to a growing number of customers.

Regulatory issues

A second-round review of the mobile termination market was completed by Ofcom in 2007. As a result of the market analysis, Ofcom introduced a set of new charge controls on mobile call termination rates that would run for four years from 1 April 2007. Ofcom concluded that each of the five MNOs still had significant market power for termination of voice calls on their networks and decided to impose charge controls on the mobile termination rates set by each network. Both the MNOs and the fixed incumbent have appealed against this decision. The SMS market review, which was also planned for 2007, was deprioritised and has not been started.

In December 2007, Ofcom introduced monitoring procedures to boost confidence in the MNOs compliance with the charge controls. From March 2008, in addition to the Compliance Return that the MNOs currently provide in private to Ofcom, the MNOs will produce and publish documentation describing how the return is prepared. Additionally, from 2009, the MNOs will procure and publish an assurance report from Independent Accountants on these documents.

In 2007, Ofcom issued determinations to resolve a number of mobile termination rate disputes between the fixed incumbent on the one hand and MNOs on the other, as well as between MNOs. Appeals against some of these Ofcom determinations have been made to the CAT. Ofcom has also resolved a number of disputes on number portability, concerning the "donor conveyance charges" payable by the recipient network operator to the donating network operator for the routing in relation to calls made to ported mobile telephone numbers. An appeal against one of these Ofcom determinations has been lodged with the CAT. The appellant has asked the CAT not only to set aside the decision and to oblige Ofcom to take a new decision, but also to provide for an industry-wide solution. Although there are plans to introduce direct call routing to ported numbers, the new system will be introduced gradually, with the deadline for mobile numbers being 1 September 2009; this means that the donor conveyance charges issue will persist for some time.

An important development in 2007 was the consultation launched by Ofcom in September on the re-farming of GSM radio spectrum, proposing removal of the existing limitation confining the use of this spectrum to GSM and allowing for a wider range of uses, including high-speed mobile broadband services using 3G. Amongst other options it consulted on a proposal to withdraw some of the 900 MHz spectrum from its current assignees and re-assign it to new users in order to reduce the risk of a reduction in downstream competition.

Roaming

The Roaming Regulation has been implemented, but four of the United Kingdom's five MNOs have appealed to the High Court against the Government's secondary legislation implementing the Regulation as a means of challenging the Regulation's validity. The High Court decided in December to make a reference to the ECJ for a preliminary ruling.

Fixed markets

Market situation

According to OTA2, in January 2008 there were 4.56 million WLR lines and 5.89 million telephone numbers using carrier pre-selection (CPS). The growth in the number of WLR lines has slowed considerably and the number of CPS enabled lines continues to decline as operators are switching CPS and WLR customers onto their LLU networks. The intensity of competition in the fixed telephony market is shown by the fixed incumbent's decreasing market share, which dropped to 49.3% by retail revenue in December 2006 and is the lowest in the EU. Interconnection charges for call termination on the incumbent's fixed network also remain among the lowest in the EU countries in all three categories (local, single transit and double transit).

Regulatory issues

As regards the implementation of the fixed incumbent's undertakings, a major milestone in 2007 was the placing on the market of the WLR3 product. Although it was made available in June 2007, take-up was slow as only very few alternative providers switched their clients to this new product. The fixed incumbent is required to move its customer base gradually onto WLR3, whereas others are able to choose when to do so.

It was noted that since the fixed incumbent's retail division had moved its clients to WLR3, it became more difficult for competitors to get those customers to switch to their services, which are based on WLR2. While automatic payment of compensation for breach of SLAs is laid down for WLR3, the same is not the case for WLR2. This issue was one of the reasons for the failure of negotiations on the SLAs/SLGs between the fixed incumbent and the alternative operators that were subsequently referred to Ofcom.

Broadcasting

Market situation

The take-up of digital television continues to increase, with around 80% of households now having digital television. Digital terrestrial television (DTT) is currently available to around 73% of the population. High Definition services have attracted nearly 450 000 subscribers.

Regulatory issues

The United Kingdom's analogue television signals will be switched off, region by region, between 2008 and 2012. Ofcom consulted on the use of the digital dividend in December 2006 and published a statement in December 2007 setting out its approach to the allocation of this spectrum. It was already decided in 2003 that 70% of the spectrum currently used for analogue television should be reserved specifically for use by DTT (i.e. 256 of 368MHz). According to this latest statement, Ofcom will auction most of the digital dividend in a way that allows users to decide how the spectrum should be used. The auction of the cleared spectrum could be held in the first half of 2009.

Concerning access to content, the fixed incumbent and three other companies have made a submission to Ofcom to investigate the pay TV industry and to consider whether to make a market reference to the Competition Commission under the Enterprise Act 2002.

Horizontal regulation

Spectrum Management

Ofcom has continued its programme of making spectrum available to the market – generally through auctions of tradeable licences on a technology- and application-neutral basis. In 2007, Ofcom awarded 1785-1805 MHz spectrum in Northern Ireland, in parallel with a similar auction in the Republic of Ireland. Ofcom also announced auctions to be held in 2008 for parts of the 10, 28, 32 and 40 GHz bands; for the 1452-1492 MHz band, which is of interest to proponents of mobile TV services; and for the 2.6 GHz and 2010 MHz bands. The 2.6 GHz band is particularly interesting for service providers wishing to use UMTS and WiMAX technologies. Ofcom's statement on the liberalisation of the current GSM spectrum is expected in 2008, as are detailed proposals for the award of the UHF spectrum released by the switchover from analogue TV.

The framework for spectrum trading was established in 2004. All new licences that are awarded are tradeable, and a number of existing licence classes have been made tradeable. Ofcom intends during 2008/9 to extend the number of licence classes which are tradeable to include high volume business radio licences. The volume of spectrum trades has continued at a modest level, influenced by the ongoing programme of awards of new spectrum bands.

Apart from organising auctions, Ofcom also issues many licences to small businesses for use in limited areas in the 400-450 MHz band. There is a plan to simplify the assignment process by reducing the number of classes of licence, abandoning the specific types of licence for each kind of use and making certain uses licence-exempt.

Wireless devices are exempted from licensing where there is no danger of harmful interference, and certain bands are allocated for general licence-exempt use. In 2007, Ofcom published its Licence Exempt Framework Review, which determined that spectrum above 100 GHz was likely to be suitable for licence-exempt devices, and setting out policies for exempting low-power devices at lower frequencies.

Ofcom does not license the spectrum used by the Government, but is working with the Government to optimise radio spectrum rights. This will enable the State institutions to trade their spectrum, thus enabling it to be used more efficiently. In July 2007, Ofcom published a consultation document containing proposals to extend market mechanisms in order to improve the management of public sector spectrum holdings.

The United Kingdom has implemented the Commission's decisions on radio spectrum harmonisation, with the exception of high-power aspects of Decision 2005/928/EC, on which Ofcom issued a consultation in October 2007, and Decision 2007/98/EC on which Ofcom intends to issue a consultation early in 2008.

Taxation of the telecommunications infrastructure

The Department for Communities and Local Government issued a consultation document in July 2007 concerning the taxation of the local loop. It argued that it would be too difficult and burdensome to assess LLU network operators and that it was therefore preferable to have the fixed incumbent continue to pay the tax on the local loops. This approach has been contested by some market players, who pointed out that a different methodology was being applied to the fixed incumbent compared to alternative operators for the purpose of assessing the tax base. The new system would apply from 1 April 2008 and, as an interim measure, the fixed incumbent is considered to be in occupation of the local loops.

CONSUMER INTEREST

Tariff transparency

In 2007, Ofcom continued its work on reorganising the system of non-geographic numbers, which has been the subject of considerable public concern. Several business models have been built on the use of non-geographic numbers and Ofcom's plans to change the rules may have a significant impact on a number of operators. Ofcom reviewed the '070' numbering range and required a free pre-call announcement to improve pricing transparency as from 1 September 2007 if the call charge exceeded a certain amount. Moreover, it was planned that, as from 1 February 2008, '0871' numbers – for which the call charge may not exceed a fixed amount – would be subjected to regulation by the premium rate regulator, PhonepayPlus. Calls to '0870' were also to be charged at national rates as from 1 February 2008 and a pre-call announcement was to be made if the charge exceeded the charge for a national call.

These proposals were subject to public consultation. However, after the implementation of pre-call announcements for '070' numbers, technical problems were reported with the reliability of certain safety related services. Ofcom therefore decided to withdraw the requirement for announcements and also to reconsider its decision to apply announcements to '0870' numbers. It planned to issue a new consultation on this matter in Spring 2008.

Universal Service

After sending a Reasoned Opinion in June 2007, the Commission closed the infringement proceeding against the United Kingdom in October 2007 after the United Kingdom authorities agreed with the mobile industry on a number of corrective measures to allow mobile subscribers to be included in the comprehensive directory and directory enquiry service if they so wish.

On the other hand, Ofcom has still to issue the final determination in two disputes between the fixed incumbent and directory providers which opened at the end of 2005 and the beginning of 2006 respectively. As proposed in the draft determination (already published), Ofcom may find the universal service obligation to be unlawful. Ofcom expects to publish the determination on the disputes in early 2008 and is likely to call for a policy review and public consultation on the appropriate regulatory framework for the delivery of directories and directory services. The Commission will continue to follow this process closely.

Number portability and switching

In 2007, Ofcom resolved a number of disputes concerning donor conveyance charges that currently apply between operators for routing calls to ported mobile telephone numbers. Acknowledging the problems arising from the current number portability system, Ofcom carried out consultations and decided to change the system so that calls to ported numbers are routed directly to the consumer’s new provider, as is common practice in other Member States. In July, Ofcom decided that the industry should create a common number portability database and, at the same time, it reduced the maximum porting times for mobile numbers to two working days as from 31 March 2008. In its second statement issued in November 2007, Ofcom specified the implementation timetable for the new number portability system that is due to become operational by 1 September 2009 for mobile numbers and by the end of 2012 for fixed numbers. At the same time, it further reduced the maximum porting time for mobile numbers to just two hours with effect from 1 September 2009. It now remains to be seen how these requirements will be implemented by the industry.

At the end of 2006, Ofcom issued a statement on switching broadband providers, which placed an obligation on service providers to issue customers with Migrations Authorisation Codes (MACs) within five working days. Availability of this code has made it easier for consumers to switch between DSL broadband services, including to LLU providers.

Consumer complaints

The increasing ease of migration from one provider to another has also given rise to the problem of mis-selling – or arbitrarily switching providers without the customer’s consent. Ofcom receives about 500 complaints every month on fixed line mis-selling in which customers complain about being moved to another provider without their consent. To deal with the problem, Ofcom issued a statement in 2007 on protecting consumers from mis-selling of telecommunications services, which imposed an obligation on providers to establish and adhere to a code of practice for sales and marketing.

European emergency number 112

In March 2007, Ofcom amended the General Conditions imposing transparency obligations as regards service reliability and access to emergency numbers. It also made number portability dependent on whether or not the service enabled access to emergency numbers. Following a new consultation in July, Ofcom issued a Statement in December which further amended the General Conditions on this issue. As a result, VoIP services – which provide access to ordinary telephone numbers – will also be required as of 8 September 2008 to ensure access to emergency numbers. This is a valuable initiative, particularly in the light of the Commission’s regulatory framework review proposals in this regard and the general increased attention within the Community concerning access to 112.

Data Protection

In August, a letter of understanding was signed between Ofcom and the Information Commissioner's Office (ICO) – the institution that is responsible, inter alia, for ruling on complaints and taking enforcement action on the basis of the Privacy and Electronic Communications (EC Directive) Regulations 2003. Given that Ofcom also exercises enforcement powers in areas covered by these Regulations, this letter sets out the principles according to which Ofcom and ICO will decide which organisation is best placed to investigate issues of suspected non-compliance.

Directive 2006/24/EC on the retention of data was transposed in the United Kingdom by Data Retention (EC Directive) Regulations 2007.