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PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**EUROPEAN ELECTRONIC COMMUNICATIONS REGULATION AND MARKETS
2006 (12th REPORT)**

[SEC(2007) 403]

1. INTRODUCTION

The Commission's overarching initiative for information society and media policies, i2010¹, confronts the challenge of rapid convergence and technological change with a regulatory framework for electronic communications that promotes competition, investment, innovation, the single market and consumer benefits.

However, in order to realise the full potential of the internal market, more consistency of application across the EU and a strengthening of the framework in areas such as spectrum management are needed. The Commission is now reviewing the framework, and will come forward with proposals in mid-2007.

This Communication examines market, regulatory and consumer developments in the sector in 2006, and complements the i2010 Annual Report² and the forthcoming report on market reviews. It is based on a Commission services' working document adopted in parallel.

The regulatory situation is that at 31 December 2006. Market data, unless otherwise indicated, cover the period up to 1 October 2006.

2. MARKET DEVELOPMENTS

Overview

E-communications services continue to represent the largest segment of the overall ICT sector, accounting for about 44.5%³, around the same as the previous year. Of sector revenues of approximately €649 billion³ in 2006, €289 billion³ were derived from fixed telephony, mobile telephony, fixed data services and cable.

Overall revenue growth was estimated at 2.3%⁴, lower than the rate for 2005 of between 3.8% and 4.7%; traffic volumes increased in all segments.

The sector continues to be highly dynamic. New players such as internet companies are entering the market for IP telephony and are leveraging their large customer bases to gain competitive advantage. They thus exert pressure on traditional fixed and mobile providers to develop new strategies, including investment in broadband and next generation networks to create new, more lucrative, revenue streams from, for example, content services.

¹ COM(2005) 229

² i2010 – Annual Report on the Information Society 2007

³ EITO, 2006

⁴ EITO, 2006 and IDATE, 2006

Fixed voice telephony has continued to decline but still remains the most important source of revenue in the fixed market. Intensifying competition and substitution by mobile services (and to a lesser degree VoIP) are the primary factors. The decrease in revenues from fixed services in 2006 is estimated at between 4.5%⁵ and 5.1%³.

Broadband is the fastest growing segment, with revenue growth estimated at between 7.8%⁵ and 8.5%³ helping to offset the decline in voice revenues. More than 20 million broadband lines were taken up in 2006, an increase of 39% on 2005. Infrastructure-based competition and effective regulation continue to be key drivers.

Revenue from **mobile services** grew at 4.6%³, slower than in 2005. While take-up and use of mobile phones continued to increase, the mobile voice market is showing signs of maturing. Prices have continued to fall as a result of intensifying competition: OECD baskets of prices of domestic mobile services for typical consumption patterns show EU-wide decreases of up to 13.9% between 2005 and 2006.

Sector finance, investment

In 2006, investment in the electronic communications sector, measured in terms of capital expenditure, is estimated to have risen to more than €47 billion, 5% up on 2005. This was the fourth consecutive year of increased year-on-year investment levels since 2003⁶.

The typical fixed incumbent invested around 13.3% of its revenues, whereas the typical leading mobile player invested approximately 12.7% of its revenues. The five largest markets accounted for about 70% of total EU 25 investment⁷.

Europe invests more in absolute terms than either the US or Japan. European growth was also more robust in 2006⁸.

⁵ IDATE, 2006

⁶ Commission estimates based on data from Goldman Sachs, ETNO, Cable Europe and ECTA. Investment figures refer to capital expenditure only (maintenance and expansion)

⁷ Goldman Sachs

⁸ EU investment in absolute terms exceeded that of the US and Japan in 2005; EU growth estimates for 2006 were also greater (source: Infonetics Research, November 2006)

Mergers and acquisition activity remained important. In 2006, total transactions in the EU are however estimated to have fallen slightly short of last year's €70 billion⁹. Typical factors driving deals were the need to achieve pan-European scale, a shifting emphasis from voice to data and a continued inflow of speculative capital from private equity groups profiting from low interest rates.

Cross-border activity

On average, one third of revenues accrue from activity in a Member State other than the operator's home country. This development is changing the business orientation and policy views of the operators concerned.

The major source of intra-EU geographical diversification is the mobile sector. The average European fixed incumbent in 2006 remained predominantly wedded to its home turf; the European businesses of the Swedish, Spanish and French incumbents were most diversified by this measure (approximately 41% or more EU activities abroad).

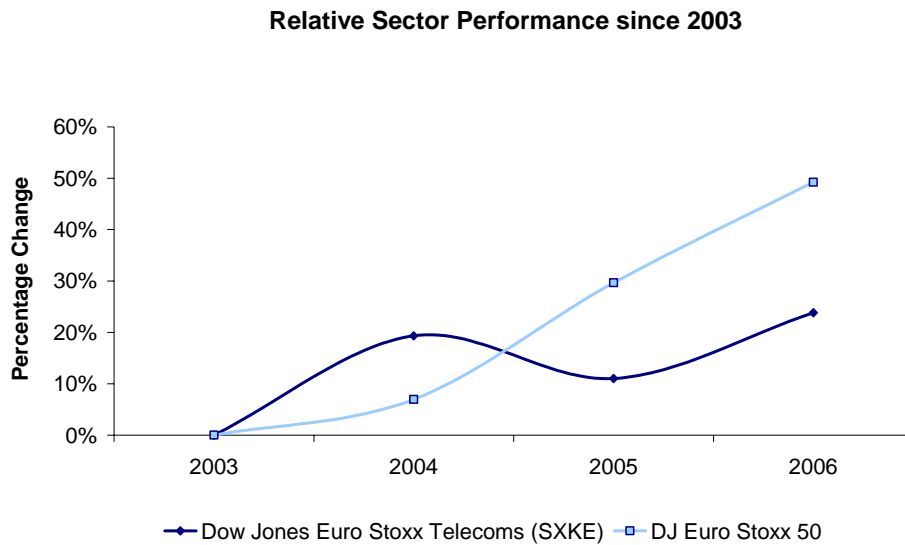
Thus, although the European telecoms sector compares favourably with others, there is significant scope for strengthening the internal market in this respect.

After a difficult year in 2005, the financial outlook for the major players in European electronic communications brightened slightly in 2006. As measured by the Dow Jones Euro Stoxx Telecoms Index, the value of the sector in 2006 increased by 11.53%; over three years, the increase was 23.84%¹⁰.

⁹ Commission estimate; Morgan Stanley; ING

¹⁰ The Dow Jones Euro Stoxx Telecommunications Index (SXKE) increased from 378.4 (end 2003) to 468.6 (end 2006) points, whereas the Dow Jones Euro Stoxx 50 Index increased from 2760.66 to 4119.94 points over the same period

Chart 1:



One reason for the volatile performance of the sector since 2003 may be uncertainty over future business models. EU incumbent operators are still dependent for approximately 60% of their EBITDA¹¹ on their traditional voice and access businesses.

In the mobile sector, meaningful revenue streams from next generation services are materialising only slowly. However, although in mid-2006 European operators' non-voice revenue (mainly SMS) was estimated at 17.1%, this was significantly higher than the comparable figure for the US¹².

Convergence

Most fixed and mobile operators are gradually upgrading existing infrastructures to enable higher data speeds and converged services.

Next generation networks will allow more efficient provision of multiple services over the same infrastructure. Content is becoming a more important factor, with the development of services such as IP-TV and mobile TV, in allowing market players to differentiate offers.

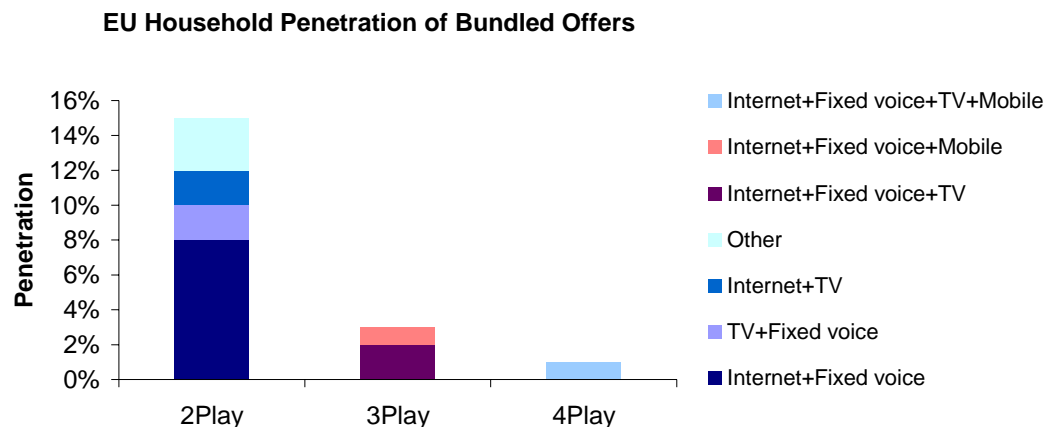
There is a clear trend towards bundled products, where operators offer a variety of services for a single flat price. An EU survey¹³ shows that 19% of EU households subscribe to at least one bundled service and that the most frequently purchased service package is a 'double play' offer of fixed voice and internet.

¹¹ Earnings before interest, taxes, depreciation and amortisation

¹² Merrill Lynch, 24 June 2006

¹³ E-Communications Household Survey (March 2007), Special Eurobarometer, European Commission

Chart 2:

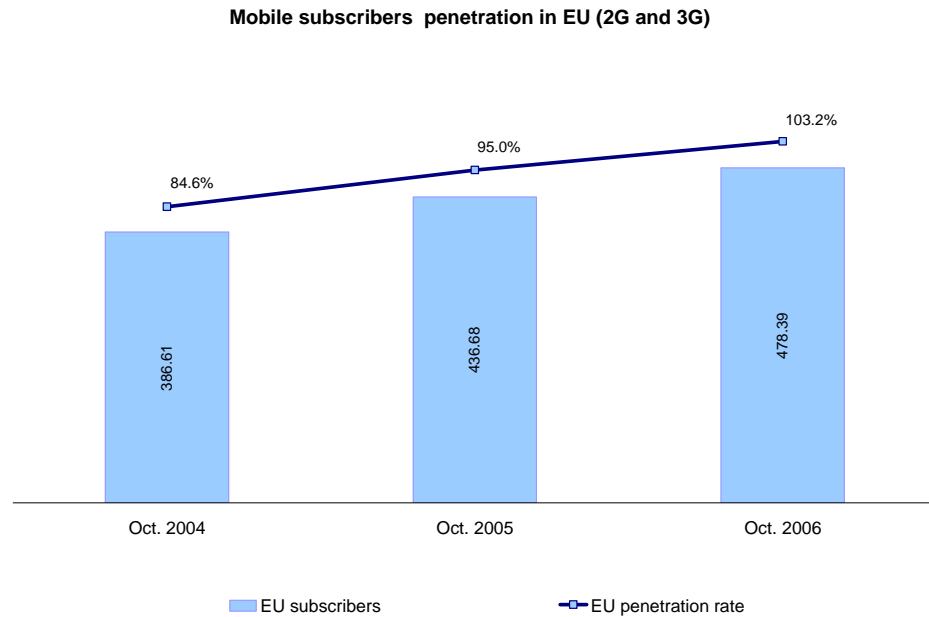


Mobile

The overall value of the mobile services market in the EU is estimated at €133 billion¹⁴. Penetration has now exceeded the notional 100% mark and stands at 103%, compared to 95% last year. There are now 478.4 million mobile users in the EU.

¹⁴ EITO, 2006

Chart 3:



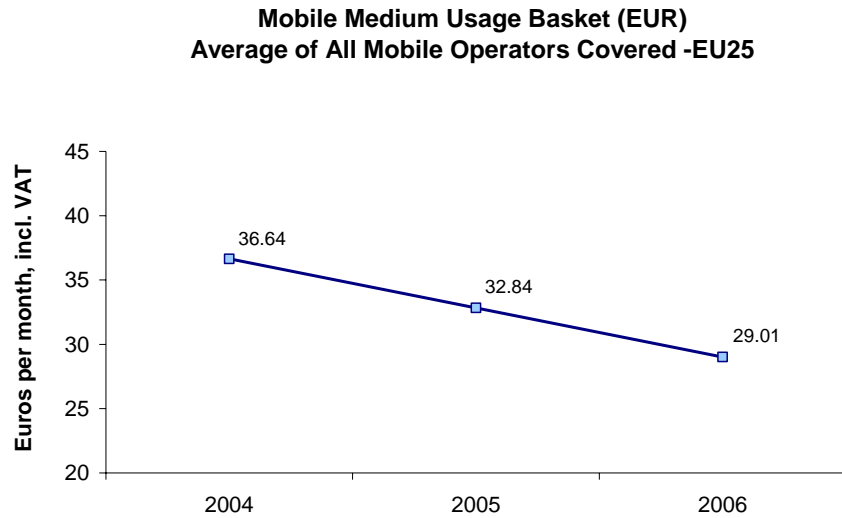
Luxembourg tops the list with 171% (including commuters from neighbouring Member States), followed by Italy with 134% and Lithuania with 133%. Growth has however been less than in 2005, suggesting a maturing market.

The number of mobile service providers (MVNOs, enhanced service providers, simple resellers) has continued to increase, with the highest number in the UK (70) and the Netherlands (60). The total has increased over the year by 76, and now stands at 290.

While there is scope for even greater progress, increased competition is driving lower prices. Simple average prices per month for a medium usage basket of national voice calls/SMSs¹⁵ show the following trend:

¹⁵ OECD methodology, two largest operators per Member State, monthly rental included

Chart 4:



3G

There are signs of increased 3G take-up: in Italy, for example, the regulator estimates there are around 12 million 3G subscribers, compared to 2.6 million at the end of 2004. Between 10 and 15% of European mobile subscribers have a 3G phone.

Roaming

Average retail prices for calls made while roaming continue to be significantly higher than the equivalent prices for domestic mobile calls, despite initiatives to increase transparency of tariffs, including the launch of a consumer website by the European Commission. These differences in price cannot be explained by differences in cost incurred by the operators.

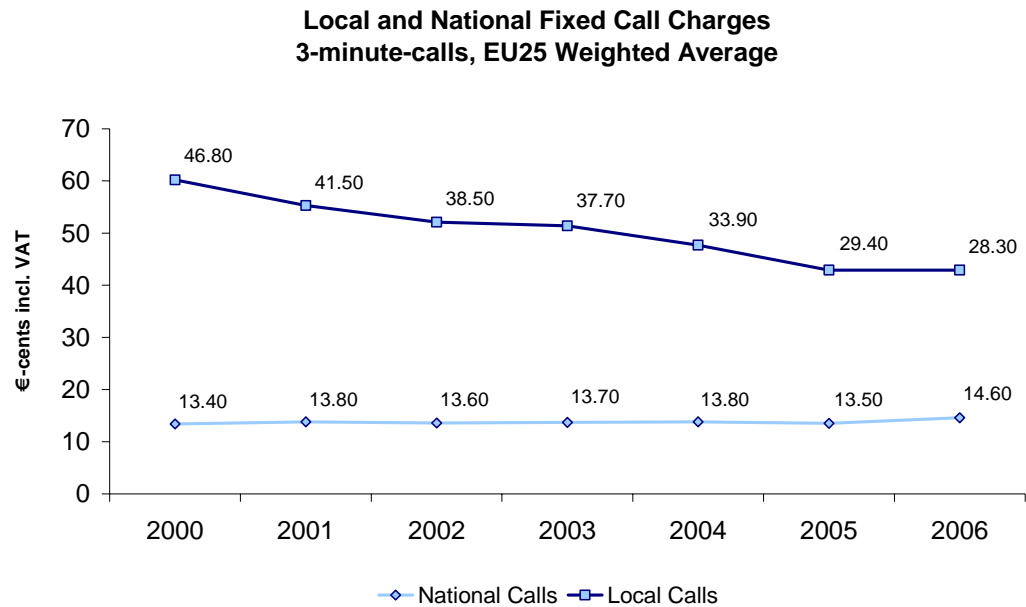
The Commission believes, as confirmed by the conclusions of the last Spring European Council, that the benefits that would accrue to consumers, SMEs and business users from lower roaming prices would in turn benefit the whole EU economy, and accordingly proposed in July 2006 a single market measure in the form of a Regulation on roaming within the Community. The proposal is currently under discussion in the European Parliament and Council, and should be approved by summer 2007.

Fixed voice

The overall value of fixed voice in the EU is estimated at €83 billion¹⁶.

Competition in the fixed market has continued to intensify over the year, with prices for national and international calls decreasing further. Fixed number portability continues to contribute to market competitiveness.

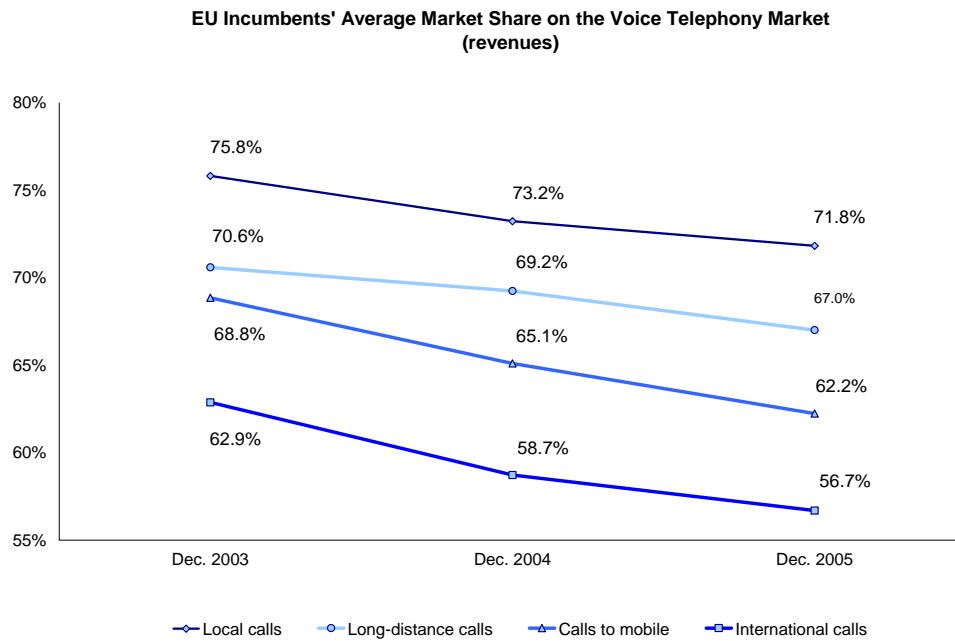
Chart 5:



Incumbent operators continue to lose market share in their home markets, while a number of new players have started to offer services. However, in a number of cases the most significant competition is provided by large operators, including BT, Deutsche Telekom, France Telecom, Telefónica and Telecom Italia, continuing to establish and increase their presence in Member States other than their home markets.

¹⁶ EITO, 2006 and IDATE, 2006

Chart 6:



Broadband

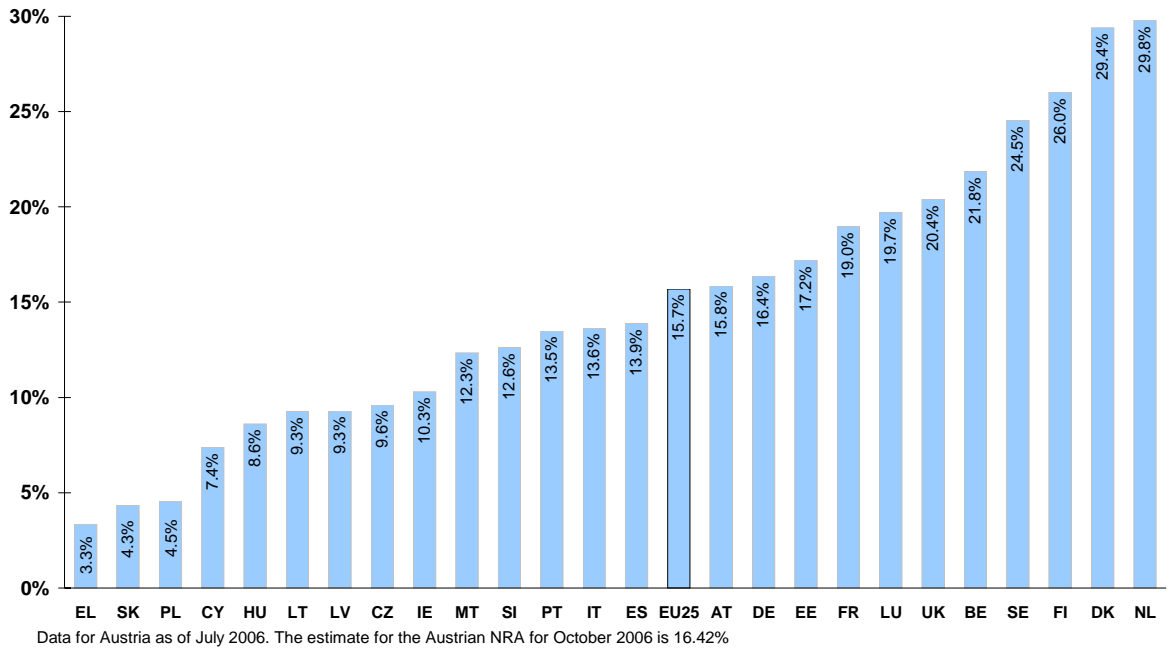
The overall value of the fixed data market in the EU is €8.5 billion¹⁷. Broadband take-up continues to grow strongly, with more than 20 million lines added from October 2005 to October 2006.

Take-up has reached 15.7% of the EU population (almost 73 million lines), up from 11.4% last year.

¹⁷ EITO, 2006

Chart 7:

EU Broadband penetration rate, 1 October 2006



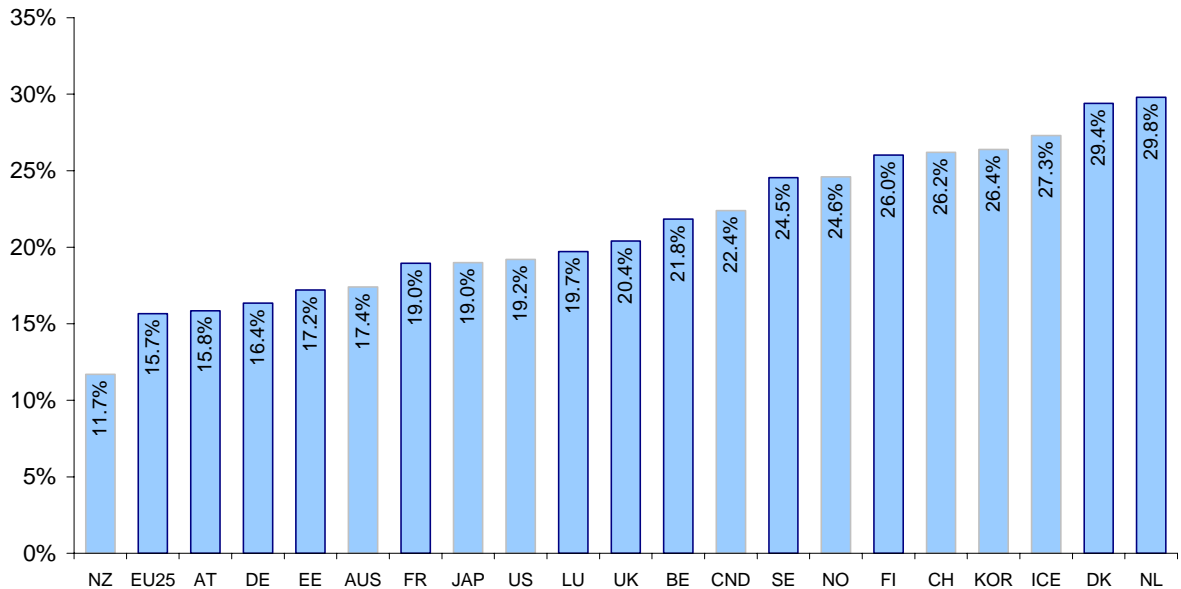
However, the gap between the best-performing Member States and those performing less well continues to increase as the Member States with higher penetration rates grow more rapidly. Eight have penetration lower than 10%.

International comparison

The best-performing EU countries are world leaders: in six Member States take-up exceeds 20% of the population, and is growing faster than in other places such as Japan and South Korea.

Chart 8:

**International Broadband Penetration Rates
(EU - 1 October 2006, 3rd countries - 30 June 2006)**



Data for Austria as of July 2006. The estimate for the Austrian NRA for October 2006 is 16.42%.

Broadband transmission speeds vary across the EU, which on average still lag behind the US, Japan and Korea¹⁸. To some extent this can be explained by the high population density in South Korea and Japan, and the presence of more high capacity cable networks in the US compared to several major EU countries. This gap could close as increased competitive pressure in the EU drives investment in high speed networks.

Factors affecting roll-out

On average, new entrants now have 52% of the market, up from 49.8% last year (if resale products are excluded, new entrants have market share of 40.7%). There is a general consensus that competition is a major driver of broadband take-up. Member States such as the Netherlands and Denmark, where there are competing infrastructures, appear to be the best performers. Effective market regulation permitting access to the incumbent's infrastructure also stimulates competition, and decisive regulatory action in France and the United Kingdom, for example, has clearly been important.

¹⁸ The predominant speed in the US is 2.5 Mbps - 10 Mbps, but 512 kbps - 2 Mbps in the EU (sources: IDATE, FCC)

Apart from improving market conditions, good regulation enables alternative operators to move gradually from service-based to infrastructure-based competition. In contrast, performance gaps can be observed in Member States where poor regulatory policy is combined with the absence of competing infrastructure.

Price levels for both fully unbundled and shared access continue to decrease EU-wide, although the drop is less pronounced for fully unbundled access. Whilst it is true that growth in broadband resale arrangements was particularly pronounced in 2006 (up by 124%), alternative providers continued to climb the ladder of investment, with more than 4.1 million new fully unbundled local loops (up by 79%) bringing several billion euros of investment into new infrastructure.

Auctions for WiMAX, CDMA, UMTS, HSDPA and LMDS licences were held in a number of Member States in 2006. This will reinforce broadband take-up and accelerate the catching-up process in remote or sparsely populated areas and new Member States.

3. REGULATORY ENVIRONMENT

National legislation

Transposition of the regulatory framework into the national law of the 25 Member States was completed in 2006 with the adoption of primary legislation by Greece. The two new Member States have also notified primary legislation, which in the case of Romania relates to the entire framework and in the case of Bulgaria covers a part.

Improvements to national legislation have also been made, notably in Denmark (appeal procedures), the Netherlands (rights of way), and France and Spain (consumer protection).

The Commission is concerned on the other hand that the amendment of the German Telecommunications Act will exempt new markets from regulation under conditions less onerous than those set out under Community law.

Deregulation

In some countries, voluntary commitments by dominant players have been accepted by the regulator as an alternative to full regulation (United Kingdom), or legislation adopted to enable the enforcement of such commitments (Italy). Flexibility has also been the aim of the functional separation of the fixed incumbent's access network from its retail and other business, such as that in the United Kingdom or under consideration in other Member States.

While reviews of many relevant markets have, as might be expected in the first round, resulted in the imposition of obligations on dominant players, a core of markets can be identified where deregulation has been possible.

This has been the case in several Member States where obligations were removed as a result of a finding that the mobile access and international calls markets were competitive. In some cases the regulatory burden has been reduced in the light of market conditions, for example in Belgium, Spain, France and the Netherlands in the residential fixed telephony market.

NRAs

Independence

In general the NRAs have consolidated their authority and independence. Doubts have been expressed, however, in the case of Slovakia regarding separation of regulatory functions and control of State ownership of market players. A fresh concern regarding the independence and impartiality of the new NRA has arisen in Poland, moreover, in the light of the abolition of its predecessor and the scope of the government's powers of dismissal. The extent of political influence over day-to-day regulatory decisions in some Member States is an issue calling for further examination. New entry and cross-border investment will only reach their full potential where the independence and impartiality of the regulator can be relied on by the market.

Market reviews

The process of notification and consultation of the Commission and other NRAs under Article 7 of the Framework Directive is a key tool for ensuring that the benefits of consistent regulatory policy feed through to all European users.

Most NRAs have now completed the first round of market analysis and notified the results to the Commission and other NRAs. There are however delays in implementing remedies in a number of Member States, for reasons ranging from procedural considerations such as appeals, to the fact that in some cases remedies are imposed only some time after a finding of significant market power (for example in Germany), or are not sufficiently detailed to produce an immediate effect in the market place.

Furthermore, a number of inconsistencies have emerged between the remedies imposed in a given market situation by different NRAs. For example bitstream access offers are not yet available on a consistent basis across the EU, and call termination rates continue to diverge. Given the fact that market players generate around one third of their revenues in Member States other than their own, further cross-border growth would be enhanced if greater consistency were achieved.

The Commission will address each of the issues arising here in relation to independence, procedure and consistency of regulation in the review of the current framework.

Appeals

The right of appeal against NRA decisions is a fundamental principle of the framework. However, the length of the appeal process is an issue in a number of Member States, for example Italy and Portugal, where proceedings can last from four to six years, and Greece, where the highest administrative court has not yet issued decisions despite the fact that some cases have been pending since 2001.

In some jurisdictions (Belgium, Cyprus, Estonia, Hungary, the Netherlands, Slovakia, Sweden), market review decisions are appealed systematically, and action may be necessary to incentivise a more reasonable approach by market players.

Spectrum issues

The total value of e-communications services dependent on the use of spectrum is estimated to exceed €200 billion, making efficient spectrum management a critical factor for the success of the EU economy. Recent research shows that effective spectrum management across all Member States could generate up to 0.1% of GDP growth¹⁹.

¹⁹ Benchmarking Impacts of EU Policy - Options for Economically Efficient Management of Radio Spectrum, SCF Associates, December 2006, not yet public

More flexible and liberal management of radio spectrum has been undertaken by a number of Member States in relation to technology- and service-neutral use, auctioning, shared use and general authorisation. Secondary trading has been introduced in others. However, diverging approaches between Member States remain on each of these issues.

Furthermore, implementation of several Commission spectrum harmonisation decisions, for example on short-range car radar equipment and on wireless access systems, remains to be completed.

The Commission is examining these shortcomings in the context of the review, in order to increase the potential of the internal market.

Broadcasting

Terrestrial networks remain the main delivery mechanism for receiving television content (over 50% of households in the EU) in the majority of Member States, followed by cable and satellite. IP-TV, still a niche market, grew in a number of countries in 2006.

The switchover from analogue to digital terrestrial transmission has now been set in most Member States within the time limit recommended by the Commission (2012), although some continue to experience difficulties in doing so.

Remedies imposed by NRAs often target terrestrial broadcasting, except for highly-cabled countries. The analysis of broadcasting transmission services markets, less familiar to many NRAs, is still not complete.

Numbering for VoIP

The numbering schemes available for VoIP services vary greatly. Several Member States (Germany, Greece, Spain, Ireland, Lithuania, Portugal, Slovenia, Sweden, Finland, United Kingdom) allow VoIP providers to offer both geographic and non-geographic numbers. Others limit the availability of geographic numbers to certain types of VoIP services.

These shortcomings limit the ability of market players to offer Europe-wide services, and the Commission will be seeking ways of addressing these and other numbering issues in the review of the regulatory framework.

Monitoring and enforcement

During 2006 the Commission opened proceedings focussing mainly on the non-availability of caller location information to emergency authorities for calls to 112, and the failure of some NRAs to ensure timely completion of market reviews.

At the same time the Commission was able to close proceedings following action by Member States relating inter alia to NRA independence, implementation of the market review procedures, suspensory effect of appeals and the designation mechanism for the universal service provider, and consumer issues such as directory services, number portability and caller location in certain cases.

4. CONSUMER DEVELOPMENTS

Universal service

Several Member States designated universal service providers in 2006. The Czech Republic, Estonia and Poland have used open tender procedures, with Ireland and Slovakia opting for a public consultation process. Both approaches appear to promote transparency and non-discrimination.

While incumbents continue as the most commonly-designated undertakings, the tender process in Estonia has resulted in the designation of a new entrant, while in Belgium and the Czech Republic elements of the service are provided by entrants alongside the incumbent.

Special social needs

Given that the current framework leaves wide discretion to the Member States with regard to the needs of the disabled and those with low incomes, the Commission has focussed on encouraging best practice in the Member States.

In Ireland the regulator has established a forum to promote the needs of disabled users. In Sweden the NRA, in addition to encouraging market players to offer services tailored to users with special needs, provides eight specific services for such users, including sign language translation based on 3G video calls.

Emergency services - 112

Three Member States (Sweden, Denmark, the Netherlands) have now designated 112 as their sole emergency number.

However, the provision of caller location information remains a problem, and the Commission opened proceedings against 13 Member States during 2006.

Member States have used a range of methods for making citizens aware of 112 and its use, including references in payphones, directories, bills, police notices and newspapers, together with dedicated campaigns, websites, radio commercials and TV clips. In Sweden, 112 information is provided on milk packages, and in Latvia and the Czech Republic, TV programmes bring 112 to a wide audience.

While the availability and quality of the basic service now appear to be ensured quite widely, the Commission's powers in this regard are limited under the current framework. Any improvement will depend on strong support in particular from the co-legislators in the regulatory review process.

Tariff transparency

Several Member States have begun taking a more proactive approach to tariff transparency. Web-based price comparisons or listings are available in Denmark, Estonia, Portugal and Sweden, for example, and a price simulator is under construction by the Belgian regulator. The Irish, Hungarian and Slovenian regulators have all extended the scope of their price comparisons to cover fixed, mobile and broadband services. These public services are supplemented in some Member States by market players' own transparency offerings.

On the other hand, there are complaints regarding price transparency in a number of Member States, including Germany, Austria and Lithuania, and widespread dissatisfaction on the part of consumers regarding roaming tariffs.

e-Privacy/security

The e-Privacy Directive has now been transposed by all Member States. In 2006 a separate Directive on traffic data retention for law enforcement purposes was agreed, for transposition by Member States in 2007.

Network and information security, including protection against spyware and other malicious software (malware) is gaining in importance. As spam and malware are increasingly used in combination for criminal profit, enforcement action in these two fields is becoming linked. More effort is needed, including increased user awareness²⁰, given the significant social and economic impact of illicit activities in this area.

²⁰ See Commission Communication on fighting spam, spyware and malicious software, COM(2006)688

Number portability

Member States report increased use of number portability by subscribers, and in Denmark, Spain, Sweden and Finland mobile ported numbers were over 20% of the total subscriber base. Significant growth in mobile ports has been reported in Estonia, Greece, France, Ireland, Lithuania and Luxembourg, and in fixed in France, Sweden and the Netherlands. Number portability continues to be a key element for competition in all Member States.

5. CONCLUSIONS

The implementation of the regulatory framework is working overall to bring competition to e-communications markets, with resulting benefits to consumers in terms of prices and innovative converged services. Examples of best practice are available from every Member State across the range of regulatory and market issues.

However, a number of areas remain where a single market for e-communications services is not attainable under the current framework. The full range of tools for ensuring consistent regulation across the single market is not currently available, and the Commission will examine institutional, numbering and spectrum issues in particular in its proposals for a revised framework. As regards roaming prices in the Community, the Commission has already proposed an amendment to the framework.

More detailed adjustments will also be considered where issues remain in connection with, for example, the enforcement of NRA decisions, appeals procedures, privacy and security, the single European emergency number 112 and the provision of services to special social groups.