



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 20.2.2006  
COM(2006)68 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL,  
THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND  
SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**EUROPEAN ELECTRONIC COMMUNICATIONS REGULATION AND  
MARKETS 2005 (11TH REPORT)**

[SEC(2006)193]

## 1. INTRODUCTION

The Commission's i2010 initiative<sup>1</sup> stresses the crucial role of information and communication technologies (ICTs) in achieving the growth and jobs objectives of the Lisbon strategy. These objectives are underpinned by a European electronic communications regulatory framework designed to drive competition in the market, bringing investment and innovation, with choice, quality and lower prices for the consumer. The Member States have made considerable progress in implementing the rules. There are, however, still gaps, and it is now a priority to get the regulation fully in place.

The sector has always been defined by rapid technological and market change. The lines between content, services and applications are now becoming increasingly blurred. At the same time, traditional markets are maturing and competition is driving players to invest in new technologies to deliver innovative services based on convergence between broadband networks, audiovisual media and electronic devices, with consumers benefiting from higher data speeds and improved quality.

This Communication highlights market, regulatory and consumer developments in the sector in 2005 and identifies the main implementation issues that still require attention. It is based on a Commission services' working document adopted in parallel, and complements recent Communications on spectrum policy and market reviews<sup>2</sup>. It supplements the Commission's monitoring of progress by Member States towards the Lisbon strategy goals, presented in its Report to the Spring European Council<sup>3</sup>.

The regulatory situation described here is that at 1 December 2005. Market data, unless otherwise indicated, cover the period up to 1 September 2005 (1 October 2005 in the case of broadband data).

## 2. MAIN MARKET DEVELOPMENTS

The e-communications services sector continues to represent the largest segment of the overall ICT sector, accounting for 44.4% of the total value, up from 43% last year. The sector was worth €614 billion in 2005, €273 billion of which derived from e-communications services.

Overall revenue growth continued strong at estimated levels of between 3.8%<sup>4</sup> and 4.7%<sup>5</sup>. The production and use of ICT accounts for around 40% of productivity growth and one quarter of overall growth in Europe.

---

<sup>1</sup> COM(2005) 229.

<sup>2</sup> COM(2005) 411; COM(2006) 28.

<sup>3</sup> Time to Move up a Gear - The new partnership for growth and jobs; COM(2006) 30, 25 January 2006.

<sup>4</sup> EITO, 2005.

<sup>5</sup> IDATE.

**Broadband** take-up has grown rapidly to nearly 53 million lines, a rise of almost 20 million during 2005. More providers are in the market, with prices falling as transmission speeds increase. New entrants now have market share of almost 50%; although many rely on incumbents' networks to provide services, there is a significant move to unbundled local loops, with increased service quality and differentiation.

In **mobile**, while take-up continues to increase, in particular in the new Member States, there are signs that the voice market is maturing. Revenues have, however, continued to grow at an estimated 5.9%<sup>6</sup>. Prices for international roaming nonetheless remain high. 3G voice and content services are now rolling out, with around 15 million subscribers.

Revenues in **traditional voice services** continue to decline gradually, but remain the largest source of revenue to players in the fixed market. Consumers continue to benefit from falling call prices as more players enter the market. Voice over IP (VoIP) is challenging further the market position of entrenched players. It remains to be seen to what extent the challenge is compounded by services provided by internet software and search companies.

Competition is driving fixed and mobile players to invest in new technologies to reduce costs and position themselves in a converged environment. Operators are beginning to offer portfolios of services, with different combinations of low-cost voice (including mobile), internet access and audiovisual content to attract and retain customers. After dipping significantly in 1999-2001, investment levels are recovering, with capital expenditure for the sector as a whole conservatively estimated to exceed €45 billion<sup>7</sup> in the EU in 2005, an increase of approximately 6% compared to 2004 and the third annual increase running. While the investment-to-revenue ratio for incumbent operators is approaching its historical levels of 15%, the ratio for the mobile sector as well as for cable operators is higher, pointing to strong future competition for new high-value added services.

Despite the challenges to business models, the biggest operators have recorded larger profits for the year to mid-2005, driven primarily by cost reduction and revenue growth in some segments. In the mobile sector in particular, results for the first and second quarters indicate that many operators managed to increase their profits on 2004, on the back of increased penetration and traffic flows and generally higher revenue per user.

---

<sup>6</sup> EITO, 2005.

<sup>7</sup> Based on data from ETNO, ECTA, ECCA, OECD and Infonetics Research.

Underpinned by increased regulatory certainty, cross-border investment, in terms of capital expenditure and acquisitions/mergers, is again becoming a key feature of the EU market for electronic communications. In 2005, M&A activity in particular increased significantly, and cross-border transactions - driven by the search for economies of scale and the implementation of pan-European strategies - can prudently be estimated at an overall value of more than € 70 billion, the highest level since 2000<sup>8</sup> (in the past, M&A activity has proved a good indicator for the overall level of foreign direct investment<sup>9</sup>). The largest European incumbent players had non-domestic EU revenue shares of on average 15% - ranging from 5% to 27%<sup>10</sup>. Most of the larger players are present in other national markets and there has been a notable trend in investment in the new Member States by some of the more established players as well as by pan-European and local new entrants. More players are developing activities in different countries and combinations of services. While significant levels of debt remain in some cases, this contrasts with previous cycles of acquisitions, when many operators became heavily burdened. Investments in telecommunications infrastructure occupy a prominent part in the cohesion policies in remote and rural areas and in a number of new Member States.

### *Fixed broadband*

There was a significant increase in broadband take-up in 2005, with average EU penetration (lines per 100 population) reaching 11.5% in October, compared to 7.3% in October 2004 (with average EU 15 penetration up from 8.4% to 13% over the same period). This equates to over 52 000 new broadband lines per day across the EU, up from 38 000 per day in 2004.

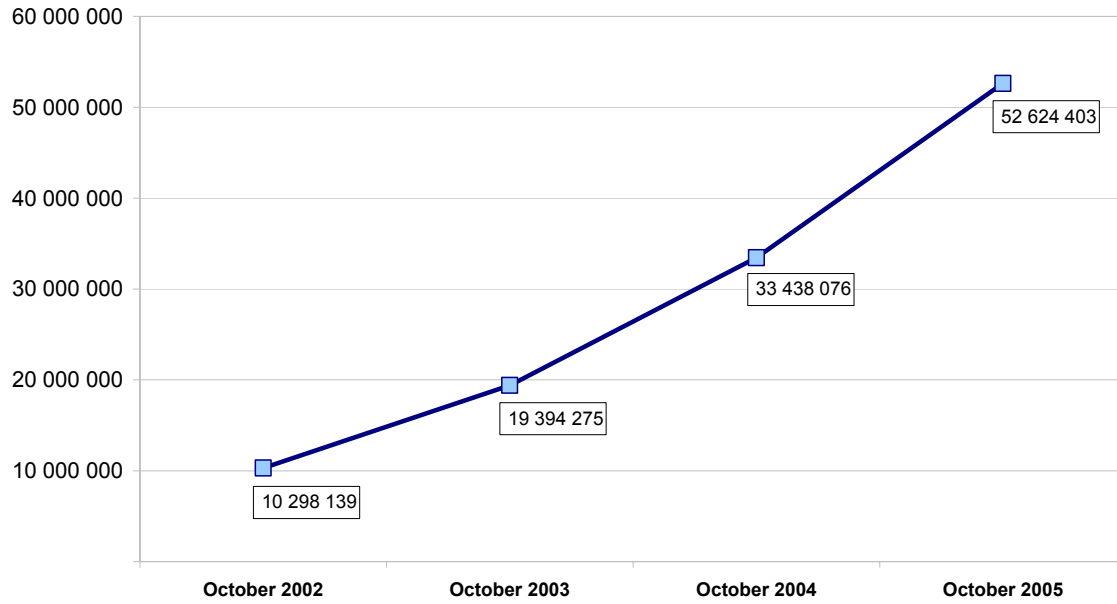
---

<sup>8</sup> Based on data from Thomson Financial, Dealogic and UNCTAD.

<sup>9</sup> Foreign direct investment (FDI) is a broader measure than simple portfolio investment or M&A transactions, and includes capital expenditure for physical assets, for instance.

<sup>10</sup> It should be noted that smaller incumbent operators are often even more diversified across the EU. Moreover the largest mobile operator (the second largest company ranked by foreign assets in the world) has not been taken into account, to avoid distortions.

EU Total broadband fixed access lines



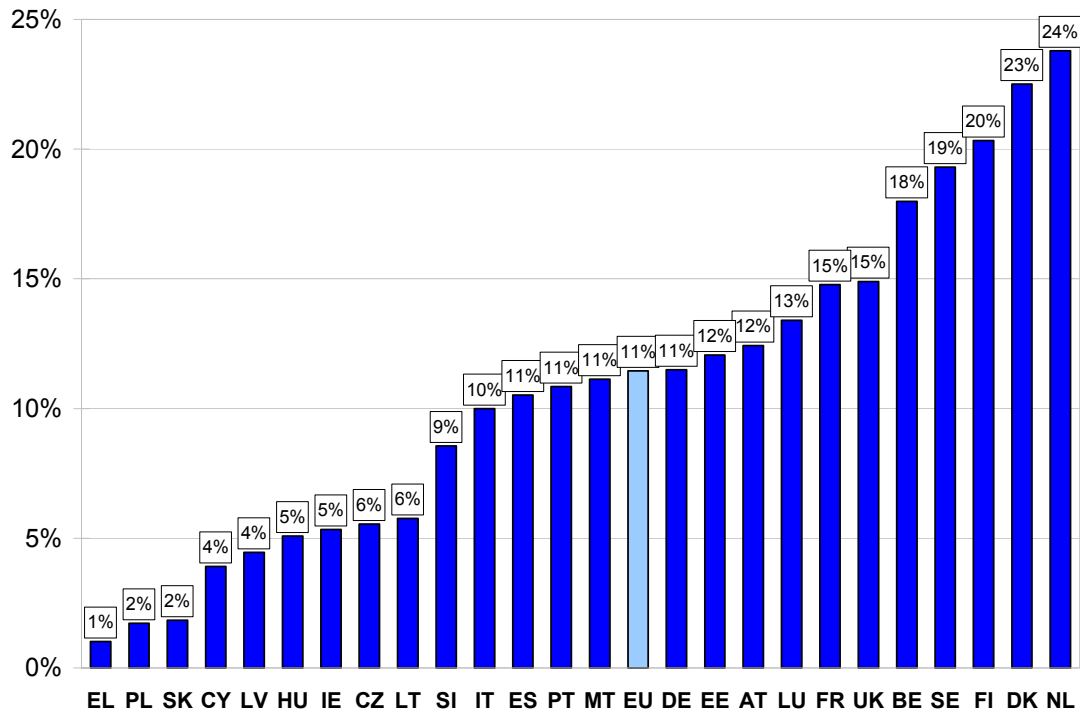
Source: Commission services based on COCOM data

There are now almost 53 million fixed broadband lines in the EU. Revenues for fixed data services have increased significantly, by an estimated 8.3%<sup>11</sup>. Although this figure includes data services such as leased lines as well as broadband, this would suggest that the consumer is benefiting from lower broadband prices as volumes grow.

---

<sup>11</sup> EITO, 2005.

### EU Broadband penetration rate, 1 October 2005

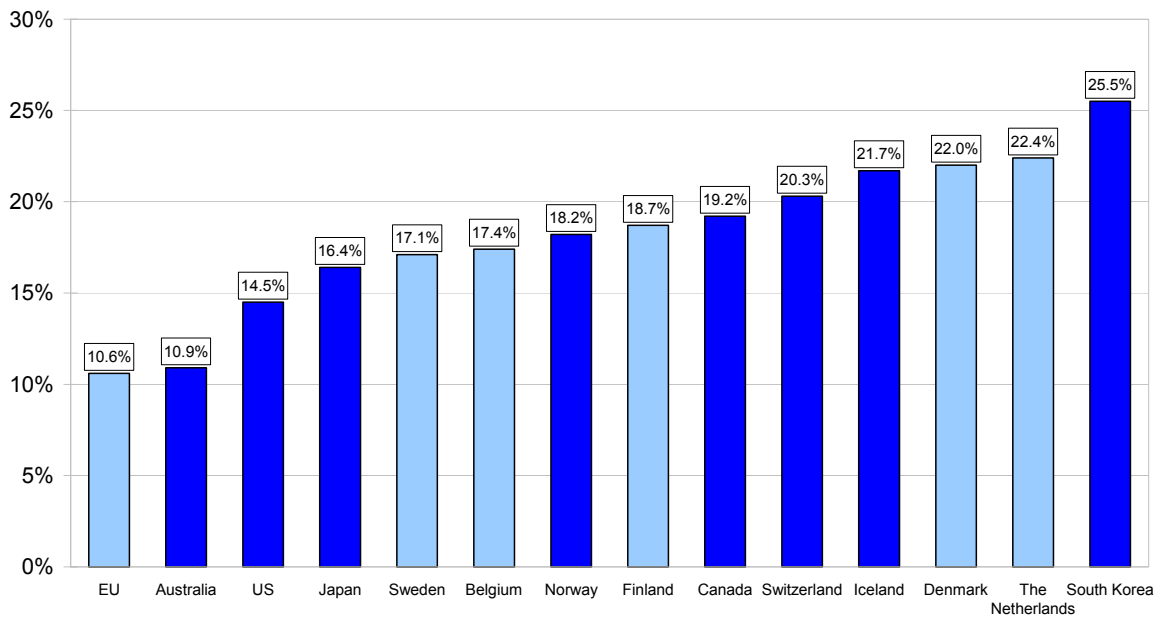


Source: Commission services based on COCOM data

However, growth has been uneven across the Member States, and 23 percentage points now separate the best from the worst in terms of penetration. Among the EU10, Estonia and Malta are performing well.

A comparison of broadband performance in mid-2005 shows that, while the EU as a whole lags behind some other OECD countries, the five best-performing Member States (Netherlands, Denmark, Finland, Sweden and Belgium) outstripped the United States (15%) and Japan (16%).

International broadband penetration rate, June-July 2005



Source: Commission services based on COCOM and OECD data

New entrants' broadband market share has increased steadily, to 49.8% for the EU25. Market share in fact differs from country to country, ranging from 25% incumbent market share in the UK to 100% in Cyprus.

#### *Factors contributing to broadband rollout*

While many factors contribute to broadband take-up, competition is one of the most important. The extent and nature of competition seems to vary significantly across the EU. For example the countries with the highest penetration (above 15%) all have high cable penetration but often also well-developed access regimes such as for ULL or bitstream.

There have also been some notable successes such as France, the United Kingdom, Austria and Estonia, where a combination of competing infrastructure and effective regulation have stimulated competition and resulted in relatively high broadband penetration.

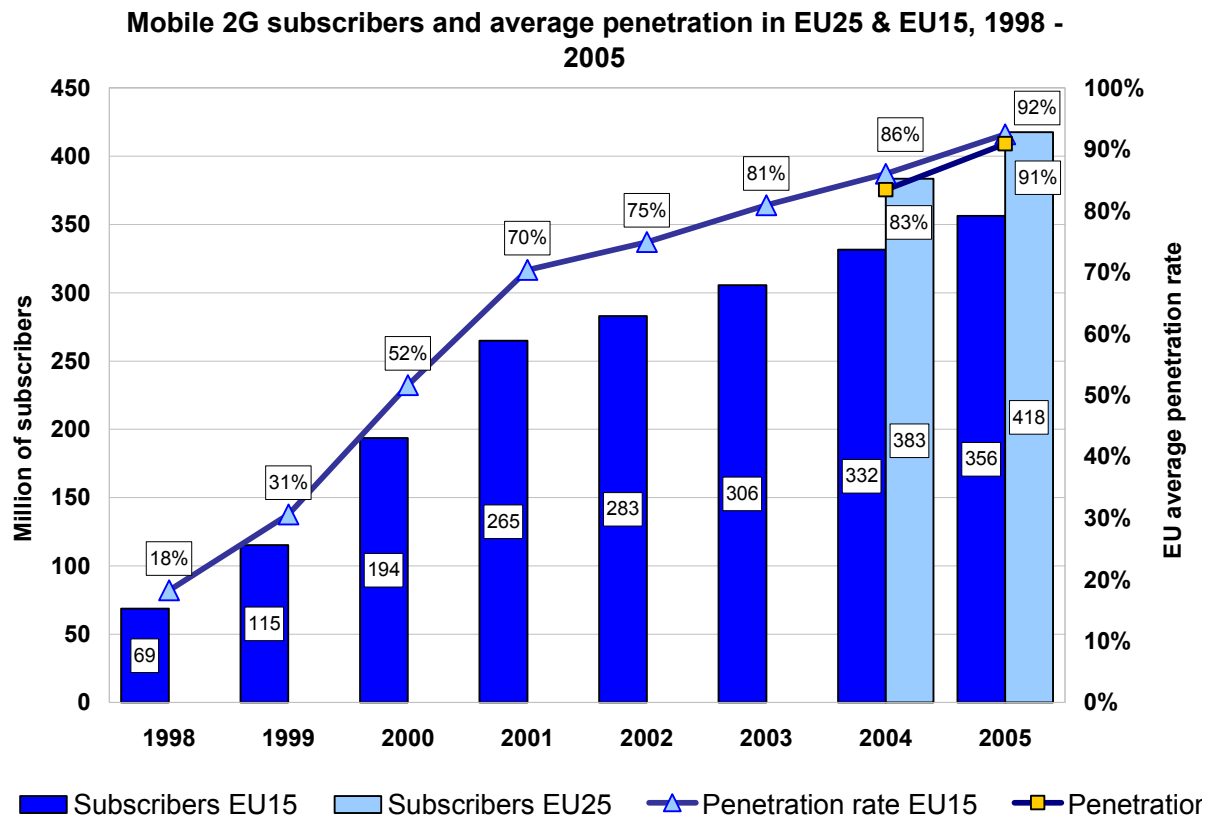
#### *Wholesale access to incumbent networks*

There has been a significant shift in the pattern of access to incumbents' networks over the year. New entrants are gradually shifting from resale and bitstream access towards local loop unbundling in the provision of broadband services. The growing demand for new services and the trend towards packages of services (such as 'triple play') has made unbundling a more attractive option for new entrants.

Perhaps the most striking feature is that the number of shared access lines has tripled over the year. This has been a catalyst for broadband growth in the United Kingdom, France and Denmark, where the number of shared access lines has increased dramatically following the reduction of unbundling fees by the NRAs. Many operators may have a preference for shared access because the unbundling process is easier and they can provide VoIP as an alternative to switched voice.

## Mobile services

Average EU penetration of mobile services reached 92.8% in October 2005, with faster growth in the EU10, of which three, the Czech Republic, Estonia and Lithuania, exceeded the notional 100% mark for the first time. There are now 79 2G network operators in the EU, together with 214 service providers, up from 166 in 2004. Penetration tends to be highest in countries with a greater number of service providers.



Source: Commission services based on NRA data and EMC estimates

By September 2005 there were around 15 million subscribers to 3G services in the EU, with most in Italy and the United Kingdom; 58 operators now offer commercial services, including internet access, content services including news and sports highlights, video telephony and downloads.

The market share of the leading mobile operators has continued to fall in nearly all Member States as competing network operators and service providers increase competitive pressure.

The main component of revenues for mobile operators remains voice calls and rentals, although a significant growth area is data services, including SMS. Laptop cards, although currently accounting for no more than 2% of revenues, are a growing source of income.

There have been significant reductions in prices to consumers for national calls in the majority of Member States, in particular for low and medium users in Belgium, Luxembourg, the Netherlands, Poland, Portugal, Finland and Sweden.



Prices for international roaming remain high in most Member States, with in many cases high wholesale tariffs and markups at retail level. A website launched by the Commission is providing a lead on consumer transparency in this area, while regulators are taking their own initiatives at national level under the aegis of the European Regulators' Group. The Commission plans to build on this initiative and will enhance and update this website in April to bring further transparency and thereby further competitive pressure. It will also continue to work closely with the national regulators on their related transparency measures.

In terms of regulation, until the end of 2005 only one NRA, that in Finland, had analysed the relevant market in accordance with the regulatory framework, and has not found dominance in this market.

More progress from the industry is needed in this area. The Commission is watching developments closely and will consider options for the most efficient and timely pan-European action.

Billing is in many cases also a concern to consumers, in particular where it is not clear whether prices are calculated on a per minute or per second basis, and whether there is a call set-up charge.

Prices for calls by users of fixed networks to mobile subscribers also remain high, at eight to ten times the level for calls to other fixed network subscribers. However, fixed tariff structures do not necessarily reflect downward movement in the mobile termination rate. Regulators have intervened to bring termination rates down further in 2005; they fell by around 40%<sup>12</sup> between 2001, when regulators began addressing the issue seriously, and 2005. Most NRAs have set a period ('glide path') for bringing rates down to a cost-oriented level.

Mobile number portability, which is an important tool for stimulating competition, has doubled during the year. Overall, 25.1 million numbers have been retained by customers changing supplier in the EU.

#### *Fixed voice services*

Despite the fact that revenues in traditional fixed voice are falling at around 1.6% a year, this remains an attractive market for new entrants. Indeed it is still the largest source of revenue for fixed operators, with a value in 2005 of €85.8 billion.

The influx of players into the market, after a slight dip between 2001 and 2003, has led to a further fall in incumbents' market share. However, incumbents retain an overwhelming presence, in particular as regards local access and calls.

Currently, only 8.3% of subscribers can be accessed directly by new entrants using cable, unbundled local loops or other technologies such as wireless. Competition is accordingly largely based on carrier selection and preselection imposed under the transitional provisions or following market analysis. Many NRAs have also imposed wholesale line rental obligations to enable new entrants to provide a single billing service to their customers.

---

<sup>12</sup> SMP operators.

The rate of growth of subscribers using alternative operators has begun to slow. This is possibly the result of win-back campaigns by incumbent operators but also, in a market moving towards integrated bundles of services such as voice, internet access and audio-visual content, because the provision of voice alone via carrier preselection may not be a sufficiently attractive proposition.

Market dynamics are maintaining the pressure on NRAs to weigh decisions relating to the pricing of regulated access products very carefully, in order to ensure that entrants investing in moving closer to the customer, for example through local loop unbundling, are suitably rewarded in the level of the price they pay.

IP telephony services (e.g. VoIP) are now available in most Member States. Although they have not yet had a dramatic effect on traditional fixed voice revenues, the potential market entry of formidable new providers of VoIP services is inducing existing players to respond with their own VoIP products or packages which include voice.

The Commission supports a light regulatory touch and welcomes the fact that a number of NRAs have taken a forward-looking stance, which reflects the Commission approach, on regulatory treatment of VoIP. The Commission has agreed with a number of NRAs that VoIP is part of the calls market, and has expressed a preference for light-touch regulation. Regulation of VoIP in the Member States has accordingly been very measured so far. In practice there appear to be low barriers to market entry.

### **3. REGULATORY ENVIRONMENT**

Some Member States have virtually completed the legislative and regulatory process ensuring implementation of the framework; the remainder have made substantial progress.

Greece adopted primary transposition measures only in January 2006, and the adoption of some secondary legislation is still awaited in a few Member States. A number of Member States have also not yet made a start on the notification of market reviews, which are a key aspect of the framework; there are also concerns relating to the length of time that can elapse in some cases between the start of a market review and its completion.

#### *NRA independence*

Independence of the NRA from commercial interests is in general ensured, although concerns remain in Cyprus, Slovakia and Slovenia as regards separation of ownership and regulatory functions, and this issue has re-appeared in Belgium. It is important that NRAs should be unencumbered in their day-to-day decision-making so as to be able to exercise their powers impartially and transparently. Questions in regard to NRA impartiality remain open in a small number of countries, and the Commission is examining these carefully.

### *NRA powers*

The Commission remains vigilant concerning possible limitations on NRA powers in Ireland, Malta and the Netherlands through directions issued by the ministry, where the latter has not been notified as an NRA. There are also concerns relating to possible limitations on the powers of NRAs to enforce their decisions, due to limits on the level of fines that can be imposed. In Germany the power of the regulator to impose the full range of obligations in relation to retail and wholesale markets is limited, and in Finland there is a similar limitation in particular in relation to the mobile termination market.

### *Converged NRAs*

Most Member States have established converged regulators with powers covering the whole e-communications sector (although not necessarily content). Where this has not been done, there is a risk of regulatory uncertainty in a converged environment encompassing traditional telecoms and broadcasting transmission. This is the case in particular in Belgium.

### *Appeals*

The way Member States have implemented the obligation to put in place an effective appeal mechanism is a matter of increasing importance in view of the concerns indicated not only by operators but also the authorities in a number of Member States. The Commission is considering the various issues involved, including the length of time taken for appeals to be settled and the fact that in a number of Member States the NRA's decision is often suspended automatically in accordance with national practice. Following Commission infringement action, automatic suspension is being abolished in Poland.

### *Economic regulation*

Where regulatory obligations are imposed following market analysis or under the transitional provisions, competition will be opened up only where these are implemented fully. Generally, the NRAs have been effective in ensuring that the necessary regulation is in place, and indeed reference unbundling offers for example are now available across the EU.

The most striking issues, which the Commission is examining, relate to

- local loop unbundling, which does not appear to be working in practice in Estonia, Cyprus, Lithuania, Latvia, Malta, Poland, Slovenia and Slovakia;
- effective interconnection, which continues to be an issue in Estonia, Lithuania, Malta, Poland, Slovakia and Slovenia;
- cost accounting systems suitable for ensuring cost-oriented interconnection in Luxembourg, Malta, Poland and Slovakia.

The Commission considers that the cost accounting systems put in place in a number of other Member States are still underdeveloped or lack transparency.

### *NRA involvement*

It is important for market players and consumers that NRAs conduct well-ordered public consultation in relation to regulatory decisions. In a number of Member States the consultation process does not provide sufficient feedback to market players, or is not transparent as regards the comments made.

NRA involvement is key to ensuring that, as market players build out their infrastructure and move from one regulated product to another, thereby increasing their control over the quality of the product they offer to consumers, they are able to ‘migrate’ those consumers to the new infrastructure without unnecessary hindrance. This involves examining both pricing and the practical processes. Spain and Italy have addressed the issue in specific regulation; in the United Kingdom the NRA has appointed a ‘telecoms adjudicator’ whose main role is to oversee migration to unbundling.

### *Rights of way*

Separation of regulatory and ownership functions in the granting of rights of way is increasingly important, given the trend in certain Member States towards local authority participation in the rollout of broadband infrastructure.

Implementation of EU rules relating to transparent and non-discriminatory granting of rights of way is a persistent concern in a number of Member States. The Commission is examining whether there is discrimination between market players in Cyprus and Greece, together with the degree of transparency of decisions by the relevant public authorities in those countries.

## **4. THE CONSUMER INTEREST**

### *Universal service*

As regards designation of the universal service provider, Member States must ensure that the mechanism is efficient, objective, transparent and non-discriminatory, and that no undertaking is *a priori* excluded.

The Commission has concerns in France, Hungary and Finland that players may be excluded *a priori*, and is examining similar issues in Belgium, Cyprus, Lithuania and Austria, together with the procedure followed in Poland and the Netherlands. It is concerned that in Portugal the incumbent has been designated until 2025 without a tender procedure.

The Commission notes that all Member States that have made a designation have selected the fixed incumbent operator.

### *Special social needs*

The i2010 vision of an inclusive information society is encapsulated in the objectives set for NRAs in the framework and the service that people with special social needs can expect as part of the universal service.

While those objectives are generally well transposed, action tends to be *encouraged* rather than mandated. As far as prices for users with disabilities are concerned, most Member States appear to make adequate provision. However, more could be done as regards practical access to services.

Member States are active as regards users with low incomes. For example, the Austrian State finances special tariff schemes, and in Hungary a fund has been set up to assist low income subscribers.

### *Consumer regulation*

Experience has shown that fixed and mobile number portability and carrier selection and preselection have increased competitive pressure.

Number portability is now fully operational in most Member States, with the exception of the Czech Republic, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. Carrier selection and preselection is now available throughout the EU, with the exception of Slovakia, although there are concerns in some Member States that the associated interconnection costs are hindering the development of the service.

### *Directory services*

Users want ready access to a directory and enquiry service covering all subscribers who have not chosen to keep their number private. The increasing number of subscribers giving up their fixed line and using a mobile service only are likely to want the option of having their mobile number included in a directory.

The Commission is concerned that a comprehensive directory and/or enquiry service is not provided in the Czech Republic, Greece, France, Cyprus, Latvia, Malta, Poland, Portugal, Slovakia and the United Kingdom.

The high costs facing competing providers of enquiry services for access to comprehensive data from operators is also an issue. The ECJ has held<sup>13</sup> that such data should be provided on a cost-oriented basis. The Commission will examine cases coming to its attention.

---

<sup>13</sup> Case C-109/03 KPN Telecom BV v OPTA [2004].

### *112 European emergency number*

The ability of citizens travelling within the Union to call the emergency services using a single number is key.

The number can now be used free of charge throughout the EU, from fixed or mobile phones. Many Member States are also upgrading the organization of their emergency systems to provide a better service to those calling the number.

Finland for example has centralized emergency centres with a maximum response time of 90 seconds. In the Czech Republic the emergency operator can transfer calls depending on the language knowledge of the operators in different centres.

In Spain the regions have dramatically improved the quality of their emergency response by ensuring that caller location data is available to the emergency services. The Commission is examining whether a number of Member States are in compliance with the requirements of the Universal Service Directive in this respect. It is also monitoring the situation to ensure that citizens are informed adequately about 112, particularly that they can use it in other Member States when travelling.

## **5. CONCLUSIONS**

The framework has required the Member States to make substantial changes to national legislation and practices. While this Communication shows there are some shortcomings in implementation, most of the necessary work has been done. The evidence suggests that intensifying competition is bringing increased consumer benefits and that the outlook for innovation and investment within Member States and across borders is positive. The Framework notably assures the citizen that basic services are provided at an affordable price and that special social needs are catered for.

A review of the current framework is now under way and, although it is a statutory requirement that this commence during 2006, the level of progress in implementation of the current framework provides a good basis for consumers, market players and all major stakeholders to assess the need for reform, particularly in the light of future technological, market and societal developments.