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**EIGHTH REPORT FROM THE COMMISSION  
on the Implementation of the Telecommunications Regulatory Package**

*European telecoms regulation and markets 2002*

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## 1. SUMMARY AND PRINCIPAL CONCLUSIONS

Following liberalisation in 1998, competition in European telecommunications markets has driven growth and innovation and the widespread availability of services to the public.

Between 1999 and 2001 the value of telecoms services in Europe rose 24% from €182 billion in 1999 to €225 billion in 2001. The mobile sector alone grew by 32% in 2000 and 21% in 2001 in terms of revenue, while the average mobile penetration rate in Europe is now 75%, from 70% in 2001<sup>1</sup>. At the same time consumers have a wider choice of operators, with new entrants driving prices downwards. Incumbents' tariffs for national calls have been reduced by around 50% on average since liberalisation, and those for international calls by around 40%. New entrants in many Member States now offer discounts over incumbent prices even for local calls.

Revenue indicators are still positive. Realistic estimates of growth in the telecoms services market for 2002 in the combined national markets of the 15 Member States vary from around 5%<sup>2</sup> to 7%<sup>3</sup>; a very healthy outlook in the light of average projected EU GDP growth of 1.0%<sup>4</sup> for 2002.

However, the market is somewhat fragile following the bursting of the dotcom bubble, the global economic slowdown and over-investment in backbone capacity, combined with high levels of debt resulting from expensive acquisition strategies and the cost of the transition to third generation mobile systems.. There is therefore clearly a concern that adverse conditions in capital markets will reinforce market consolidation following liberalisation, possibly driving entrants from the electronic communications market.

The Parliament and Council adopted in March 2002 the new package of sector specific regulation designed for more competitive markets and converging electronic communications technologies. The new framework links the imposition of regulatory obligations to the absence of effective competition. The new regulatory environment will enable regulators to focus their powers to promote competition, protect the citizen and consolidate the single market, while taking account of the need for innovation and the long-term sustainability of the sector.

The Commission now regards it as a priority to encourage a timely transition to the new framework. In addition to providing the legal predictability and regulatory flexibility necessary for continued investment in the sector, this will complement the eEurope objective of achieving competitive local access for internet services over broadband networks as cheaply as possible on a sustainable basis.

National regulatory authorities (NRAs) will clearly play a major role in the new regulatory regime, together with the national competition authorities. They will also have an important role under the new regime in helping to ensure that rules are applied consistently in all Member States, in cooperation between themselves and with the Commission. NRAs will in particular have to assess the degree of effective competition in relevant markets, and decide the regulatory obligations to be imposed on players with significant market power. Current

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<sup>1</sup> Based on total number of subscribers throughout the EU.

<sup>2</sup> Source: EITO (European Information Technology Observatory) 2002.

<sup>3</sup> Source: IDATE, Telecoms in Europe, November 2002.

<sup>4</sup> Source: European Commission services.

regulation, together with the rules of competition law, will clearly apply until that assessment has been made. The Commission believes as a general principle that a successful transition to the new framework depends on the full implementation of the current framework, including universal service and consumer protection measures.

This report, therefore,

- provides a balance sheet of market development after four and a half years of liberalisation, and
- examines the current status of the main regulatory obligations forming the basis for the transition to the new regulatory environment, with indicators of best practice where appropriate.

The report also gives a brief assessment of the state of preparation by Member States for the transposition of the new regulation into national law.

More detailed market and regulatory data, including an assessment of the implementation of the UMTS Decision, are contained in the annexes, which are in the form of a Commission Staff Working Paper.

### **Key conclusions on market development**

- The telecommunications services market is estimated to be growing at between 5% and 7% in 2002, down slightly from 9.5% in 2001. This compares with estimated average EU GDP growth for 2002 of 1.0% (actual average EU GDP 2001 = 1.5%).
- Carrier pre-selection has proved a highly successful means of opening competition in the fixed market, with twice as many (224) operators as last year using it to provide local calls to residential users and 27% more using it to provide long-distance and international calls.
- There has also been a 42% increase in the number of infrastructure-based fixed access operators between August 2001 and August 2002, with 50 more in the market.
- For consumers, there has been an overall fall in prices over the same period. Tariff rises for line rentals have been balanced by a 5% fall in the cost of national fixed calls provided by incumbents, and a 4% fall in international call prices since last year. While the rate of decline has slowed, the overall reduction for national calls has been around 50% since 1998, and for international calls around 40%.
- Prices charged by new entrant players are significantly lower than those of incumbent operators, with new entrant tariffs for national calls up to 56% lower and for international calls up to 65% lower in some countries.
- Competition in the retail mobile call market has brought average monthly consumer charges down by 23% over the period 2000-2002, with most of the reductions taking place in the last twelve months.
- While incumbent fixed operators lost market share for long-distance and international calls during 2001, their share of the local call market stabilised at around 89% of the market in terms of retail revenues.

- Despite a difficult digital TV market, penetration in the EU digital TV market rose slightly in 2002, to 21%.

*Overall, despite the difficult financial situation in the market, there are positive indicators of continued demand for services and of competitive activity in the market. While there has been a slight reduction in the number of new entrant operators authorised to provide networks and services, the number of direct (infrastructure-based) and indirect access providers<sup>5</sup> has increased. Overall, new entrants continued to increase their market share in terms of revenue.*

*For consumers, prices charged by incumbents for national and international calls have continued to fall, with new entrants' prices in many cases at levels considerably below them. Per capita expenditure<sup>6</sup> has, at least during 2001, continued to rise as the number of mobile and internet subscriptions continues upwards.*

### **Key regulatory conclusions**

- National regulatory authorities in all Member States have the independence, skills and authority to regulate markets as required under the directives. Some are still hampered by heavy national procedures, which may adversely affect their ability to enforce obligations under the new regulatory framework. Lengthy appeal procedures may also result. Numbers are well-managed in all Member States.
- Licensing regimes and fees in the fixed market are broadly compliant with the current directive, and should permit a smooth transition to the lighter regime in the new regulatory framework.
- Interconnection regimes have provided for the conclusion of a large number of interconnection agreements, to complement large-scale market entry. However, there are delays in the approval of reference interconnection offers in some Member States. Moreover, while overall the prices charged for interconnection allow market entry, there are complaints in a small number of Member States that reciprocity requirements imposed are damaging new entrants, or that price squeeze exists in the fixed market.
- While national regulatory authorities have made large numbers of determinations to clarify the regulatory framework for local loop unbundling, significant problems remain in particular with regard to pricing and non-discriminatory access to facilities. Nonetheless, there is, despite difficulties of capital financing, clearly substantial long-term demand for unbundling, complemented by large-scale requests for non-discriminatory access to the high-speed (bitstream) access service of the incumbent operators. Some regulators need to carry forward the efforts made on transparency and cost-orientation for interconnection and voice telephony in order to address the costing of unbundled local loops, taking into account their specificity.
- In the DSL market (high speed internet access over copper subscriber lines), of the 7.52 million retail customers, some 5.86 million are in the hands of incumbent operators, with around 1.66 million (22%) of retail customers subscribing to xDSL services from new entrants. Four percent of retail customers are served via unbundled lines. Difficulties for new entrants in obtaining unbundled lines and non-discriminatory bitstream access,

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<sup>5</sup> Indirect access means access via carrier selection and carrier pre-selection for voice telephony.

<sup>6</sup> Expenditure on telecommunication services and user communications equipment (terminals).

together with first-mover advantage and tariffing issues, have led to extensive market pre-emption by incumbents.

- The overall situation in broadband is somewhat different. Taking account of all platforms for the provision of access to high-speed internet services, including in particular cable modem, of the 10.79 million retail broadband customers in the EU, 4.45 million (41%) are served by new entrants and 6.34 million, mainly DSL, by incumbents.
- While there have been substantial improvements in delivery times for leased lines, in particular circuits used for the provision of internet access in the business market, significant divergences in prices for lines across the range of speeds indicate a continued lack of application of the cost-orientation principle.
- As regards cost accounting obligations for the enforcement of EU tariff principles, Member States are moving towards costing methodologies which are in line with EU recommendations. However, there is still considerable work to be done with regard to the verification and certification of accounts by national regulatory authorities, with resulting uncertainty in the market as regards compliance by incumbents with transparency and cost orientation.
- Difficulties in obtaining rights of way and building permits for infrastructure roll-out is a continuing concern, in particular as regards third generation mobile services. There are, however, encouraging signs of initiatives by Member States to improve co-ordination and consistency in this area.
- The provision of universal service is ensured without major problems in all Member States, although further work is needed in some areas such as measures for disabled users and users with special social needs and the provision of universal directory and directory enquiry services. The necessary measures to protect user and consumer interests are generally in place, although some requirements of the framework, such as for itemised billing, are still not fully met.
- There is a need for clarity from Member States regarding their overall approach to traffic data retention. The low level of harmonisation concerning retention periods and pending legislation to address issues of national security and criminal investigation, lead to an unclear situation for operators, especially cross-border operators, in particular regarding their increasing financial burden.

*After four and a half years of liberalisation of telecoms services, the regulation put in place at national level is very substantially compliant with the EU framework. Licensing and interconnection regimes have permitted large-scale market entry, complemented by carrier pre-selection and number portability; delivery times for leased lines have continued to fall; progress has been made in developing appropriate costing methodologies for the enforcement of EU tariff principles. The work done in this regard represents a substantial achievement by national regulatory authorities.*

*Nonetheless, there are areas where work remains to be done, in particular in relation to pricing and access issues surrounding local loop unbundling. Full implementation both of cost-orientation and non-discrimination principles are essential in this regard, and should extend to interconnection and the provision of leased lines, including interconnection leased lines.*

*The largely positive balance is confirmed by reference to the infringement proceedings currently open, which indicate two areas, cost accounting and universal directory services, where full compliance needs to be ensured in more than a few Member States. For the rest, the cases still pending represent clarification of points of relative detail, although the Commission will examine the need for further proceedings in the event of lack of further progress in relation to the substantive issues referred to above.*

*Finally, governments can, in the prevailing financial situation, assist in the roll-out of electronic communications services by examining a number of additional burdens on the sector in the form of specific taxes on telecommunications services, disproportionate fees for the placing of infrastructure, including mobile antennas, on public land, and radio emission restrictions going considerably beyond those recommended at European level.*

## **2. METHODOLOGY AND OBJECTIVES**

### **2.1. Methodology**

The Commission has submitted a series of reports to the European Parliament and Council on the transposition and implementation of the current regulatory package. The reports have included trend data on key aspects of the market such as growth, tariffs for retail services, leased lines and interconnection, local access and incumbents' market share.

In preparing this report the Commission's services held preparatory meetings in the capitals of the fifteen Member States, followed by hearings held in Brussels to which representative bodies of market players, national regulatory authorities, national competition authorities, ministries and consumer and user organisations were invited. The hearings took place from 10 September to 11 October 2002. Written submissions were made by some of the national authorities and by market players and associations.

Market and regulatory data were supplied by the national regulatory authorities on the basis of a questionnaire compiled by the Commission's services. They are the source of all data given in the Report, unless otherwise stated, and show the situation at 1 August 2002, again unless otherwise stated. The regulatory situation described is that at 1 November 2002, except where indicated to the contrary.

### **2.2. Objectives**

The new regulatory framework adopted in March 2002 and applicable from July 2003 is based on the principle that, in increasingly competitive and technologically convergent markets, national regulators should be able to assess levels of competition and apply ex ante regulatory obligations only where competition is not effective. The new framework also reduces the regulatory burden by lightening licence conditions and facilitating the rollout of infrastructure.

The transitional measures in the new regime specifically require Member States to maintain certain obligations under the current regulatory framework until such time as regulatory authorities have analysed markets and determined whether ex ante remedies are appropriate in accordance with the new framework. The regulatory authorities may then maintain, amend or withdraw the obligations in question. The obligations concerned apply to players with significant market power and relate in particular to access, non-discrimination, transparency, cost-orientation of tariffs, cost accounting and accounting separation. A number of further obligations arising under the current framework and applying more generally are carried over into the new framework, in particular relating to universal service and consumer protection.

A successful transition to the new framework depends on the full implementation of the current framework. The report therefore provides an assessment of the extent to which the key obligations of the current framework are actually in place in the Member States. Where regulatory bottlenecks were identified in the seventh report, the Member States in which they persist are identified. As previously, an overview of market developments is given based on

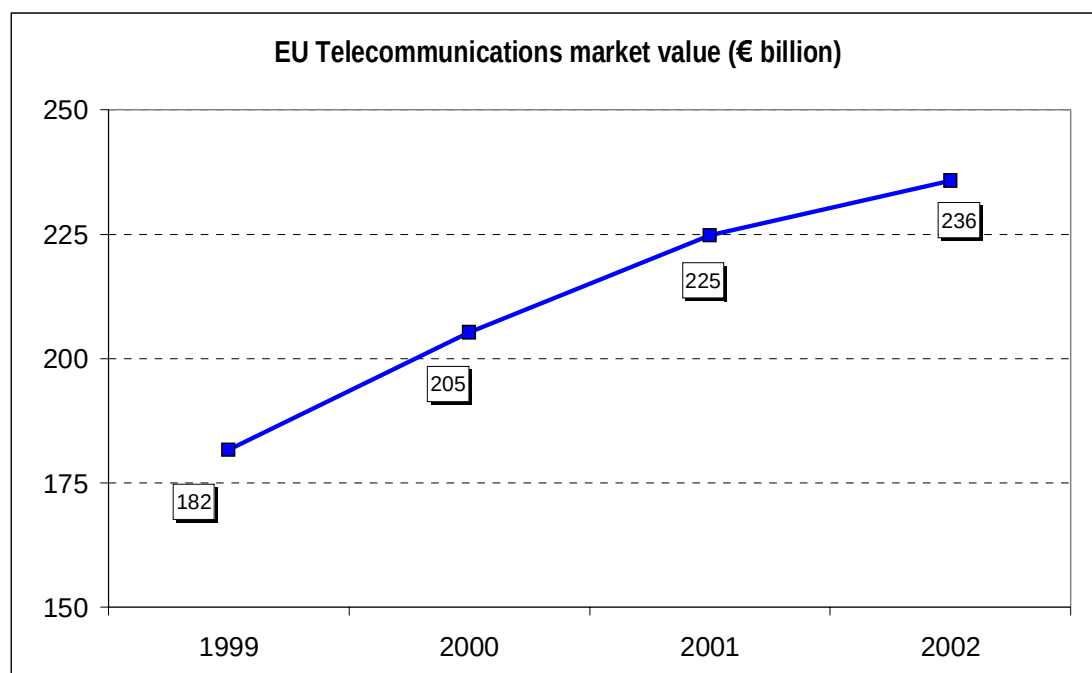


the more detailed data in the annexes. Finally, an assessment is made, in accordance with the Commission's reporting obligation, of the implementation of the UMTS Decision<sup>7</sup>.

### 3. MARKET OVERVIEW

#### 3.1. Fixed and mobile markets

The telecommunications services market continues to grow, at an estimated rate of between 4.9%<sup>8</sup> and 7%<sup>9</sup>, down slightly from an actual growth rate of 9.5% in 2001 (average EU GDP 2001 = 1.5%, estimated GDP 2002 = 1.0%<sup>10</sup>). The combined national markets of the 15 Member States will be worth an estimated €236 billion in 2002<sup>11</sup>.



Internet penetration in terms of households with access was 40% in June 2002 as against 36% in June 2001.

The mobile penetration rate has in some Member States almost reached saturation level (above 85% in four). Indeed, while the number of subscribers to mobile services continues to increase (there are currently 284 million), the rate of growth is now 6%, compared to 69% in 2000 and 36% in 2001.

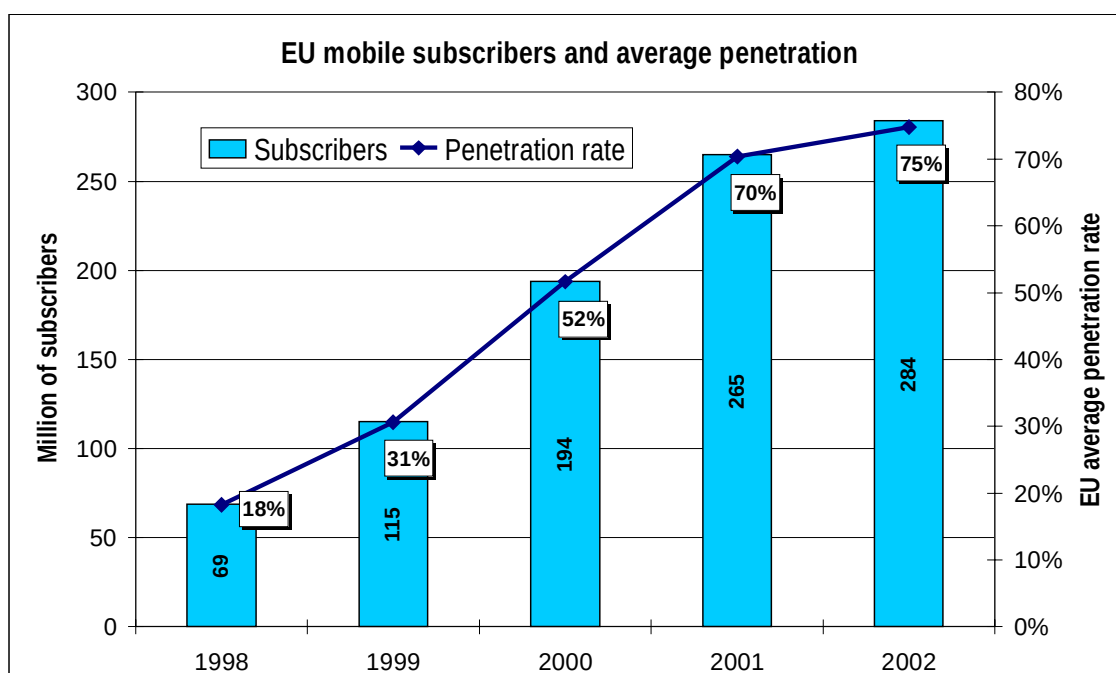
<sup>7</sup> Decision 128/1999/EC of the European Parliament and of the Council of 14 December 1998 on the coordinated introduction of a third-generation mobile and wireless communications system (UMTS) in the Community, OJ L 17, 22 January 1999, p.1

<sup>8</sup> Source: EITO (European Information Technology Observatory) 2002.

<sup>9</sup> Source: IDATE, Telecoms in Europe, November 2002.

<sup>10</sup> Source: European Commission services

<sup>11</sup> Source: European Commission services.



### 3.2. Consumer choice of fixed operator

Subscribers in all Member States can choose between providers of long-distance and international calls. In twelve Member States almost all subscribers can choose from among more than 5 alternative operators, while in two (Belgium and Luxembourg) the choice is more restricted (40% and 100% of subscribers respectively can choose between 3 and 5 operators).

As regards the percentage of subscribers *actually using* an alternative provider for long-distance and international calls, Finland and Italy have the highest proportion, with 65% and 50% respectively of subscribers not using the incumbent's network. In six Member States (Denmark, Spain, France, Portugal, Sweden and the United Kingdom) the proportion is between 20% and 30%.

However, the situation is much more complex in the case of local call services. Eight Member States (Spain, France, Ireland, the Netherlands, Austria, Portugal, Sweden and the United Kingdom) report that almost all subscribers can choose from among more than five alternative providers for local calls, whereas in Luxembourg and Italy the choice is between 3 and 5 operators. Finally, only 30% of German and 42% of Finnish subscribers can actually choose not to route local calls through the incumbent operator.

The percentage of subscribers *actually using* an alternative provider for local calls is on average 15%, and only Denmark (25%), Spain (17%), France (8.9%) and Italy (40%) have made significant progress.

### 3.3. Operators using proprietary infrastructure

Consumer choice of fixed operator, as referred to above, is possible either via direct access, i.e. via unbundled local loops or via direct connection of the user to proprietary infrastructure such as cable, or via carrier selection or preselection, i.e. routing of calls to the alternative operator's network on the basis of the use of a call-by-call prefix by the customer or by default routing to a pre-selected carrier or carriers.

Alternative providers of direct access services to residential users operate in all Member States, with an increase of 50 operators since August 2001 (42%). However, only two Member States (Denmark and Spain) indicate that almost 100% of subscribers have a choice between more than five alternative direct access operators. In Italy, 50% of subscribers can choose between two alternative operators, while in Belgium the percentage is 40%, in Finland 35%, in Luxembourg 18% and in Germany 18%. In France fewer than 1% of subscribers can actually choose not to use the incumbent operator for local calls. Furthermore, the *actual use* of alternative providers for direct access is very limited (4.5% on average, based on 10 countries), with the proportion varying from 17% in the United Kingdom to 13% in Denmark to much less in the other eight countries

### **3.4. Operators using carrier selection and pre-selection**

Overall, the number of operators using carrier selection and pre-selection to offer services to residential users has increased. The use of *carrier pre-selection* is spreading rapidly, with about 224 operators using it for the provision of local calls to residential users, i.e. twice as many as last year, and 272 for long-distance and international calls (an increase of 27%).

In addition, *carrier selection*, which is already heavily used for the provision of long-distance and international calls (412 operators) is increasingly being used also for the provision of local calls (334). In particular, carrier selection has now started to be used for local call services in Greece, France and the Netherlands. Taking into account figures for 12 countries, on average the number of operators using carrier selection for local calls has increased by 61%, and by 22% for long-distance and international calls (the United Kingdom has been excluded from the calculation since the data are not comparable over time).

The number of new entrants allocated an access code is 927 overall in the EU.

### **3.5. Retail mobile and fixed telephony prices**

In this section, all of the prices given are those of the incumbent player (fixed market) or leading player<sup>12</sup> (mobile market), except where indicated in 3.5.7. in relation to new entrants' prices.

#### **3.5.1. Mobile prices<sup>13</sup>**

##### **3.5.1.1. Personal profile:**

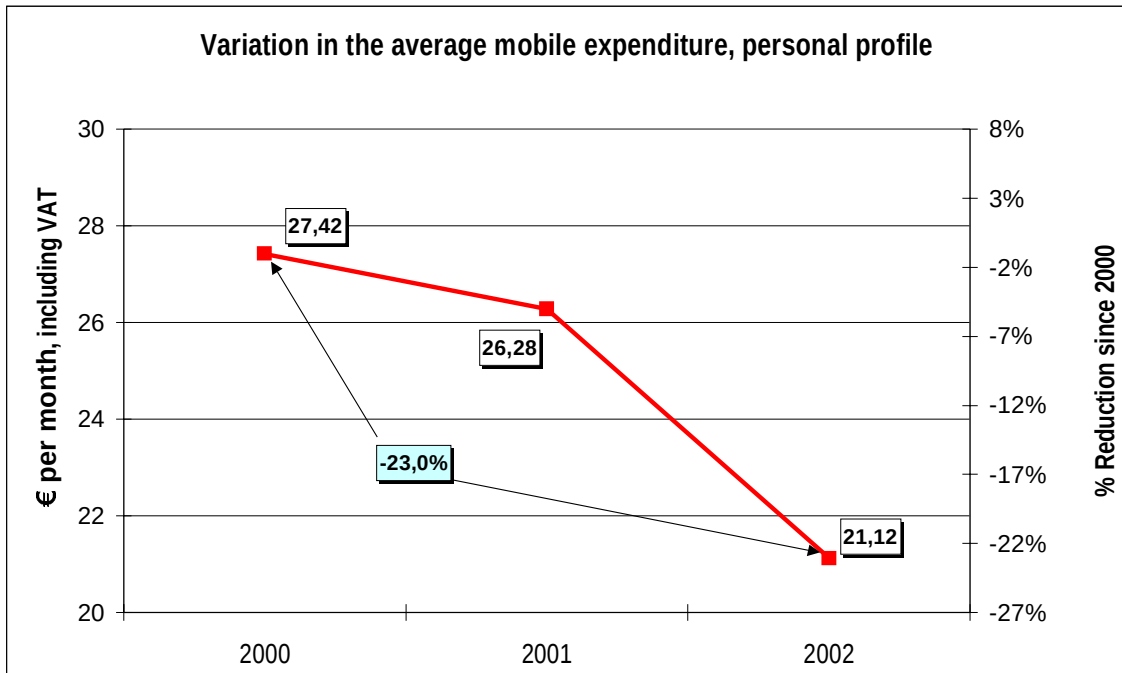
Over the period 2000-2002 the average monthly expenditure for a typical personal profile has gone down from €27.42 to €21.12. This represents a reduction of 23%, the most significant decreases having taken place over the last twelve months.

Countries where consumers have most benefited from these reductions since 2001 are Spain (45%), Austria (42%), Portugal (34%), Ireland (35%), Germany (28%) and Belgium (24%). The country with the highest average mobile expenditure is France (€31), where it is 47% higher than the EU average, followed by the United Kingdom (€25). The cheapest country is Spain (€10), which represents half of the EU average monthly consumption.

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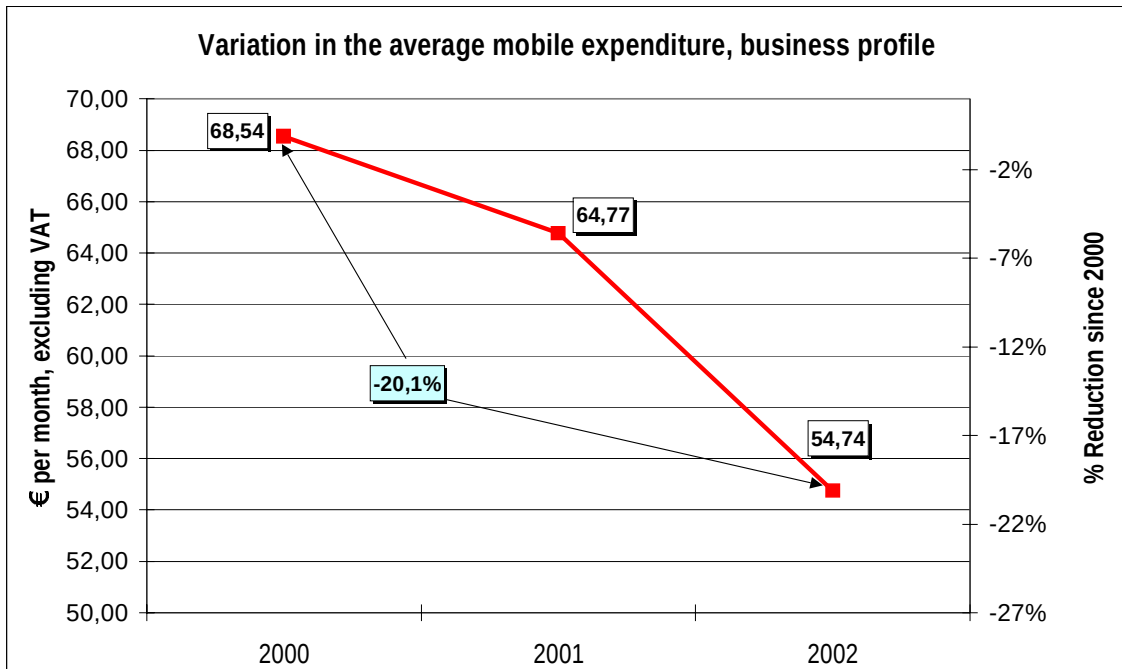
<sup>12</sup> In terms of number of subscribers

<sup>13</sup> For methodology, see Annex 1.



### 3.5.1.2. Business profile:

Over the period 2000-2002 the average monthly expenditure for a typical business profile has gone down from €68.54 to €54.74. This overall 20% reduction is lower than that of the personal profile, contrary to developments in fixed telephony for the same period. Again the reduction has been more significant over the last 12 months.



Countries with the highest reductions since 2001 are Belgium (60%), Portugal (34%), United Kingdom (29%), Spain (25%) and the Netherlands (22%). Sweden is the country where mobile expenditure for business is the highest (€81), 49% higher than the EU average, followed by Denmark (€80). The cheapest country is now Belgium (€20), which represents 38% of the EU average monthly consumption.

### 3.5.2. *Monthly fixed rental*

Monthly rental charges by incumbents increased between 2001 and 2002 by 5.4% for residential customers and by 7.3% for business users. For the period 1998 to 2002 there has been a global increase of 20% for residential and 16,6% for business users. At the same time there has been an overall reduction in tariffs for almost all calls, notably national and international; this is to be expected as part of the ongoing rebalancing of tariffs, the purpose of which is to eliminate anti-competitive cross-subsidisation of prices by dominant operators.

### 3.5.3. *Local calls*

In contrast to last year's situation, where tariffs charged by incumbents for local calls remained stable or underwent minor increases, there is a change in the trend for this segment. Prices for a three-minute call remain the same, but there is a slight reduction for a ten-minute call, breaking the upward trend of the 2000-2001 period. Austria registered an increase (21% for short calls and 8% for ten-minute calls). In other Member States prices remained stable, with reductions occurring in Denmark, Germany and in particular Greece (16%). Prices for both three-minute and ten-minute calls continue to be higher than the EU average in Belgium, Ireland and the United Kingdom, and in Austria in particular, where local calls are the most expensive (68% higher than EU average).

### 3.5.4. *National calls*

The tendency referred to in the 7<sup>th</sup> Report towards the reduction or elimination of price differences between regional and national calls continues, leading effectively to further reductions in incumbent's tariffs for long-distance calls. Since 1998, tariffs for three-minute national calls have decreased by 47% and for ten-minute calls by 49%. The cost of a three-minute call is now cent 35 and cent 109 for a ten-minute call.

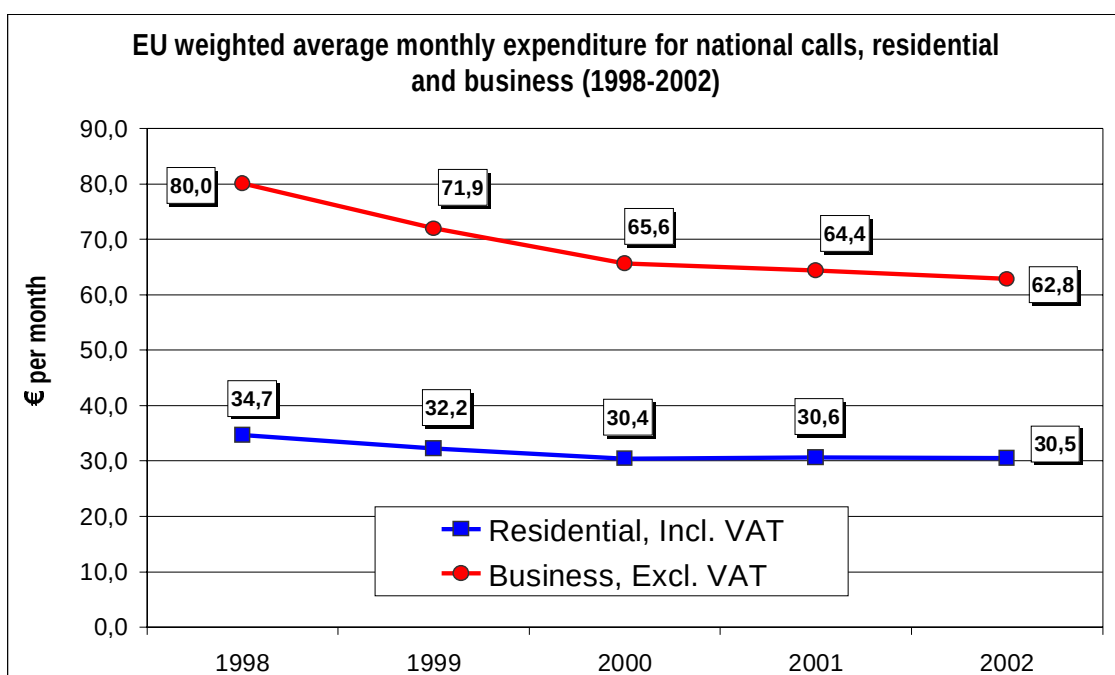
However, while this downward trend continues, the pace in 2002 is slower than in previous years, and reductions are half those in 2001 (5% this year against 11% in 2001 for a three-minute national call and 5% against 13% for a ten-minute call).

Germany, Portugal and the Netherlands saw an increase in the price of this type of call. There were reductions in Denmark, Greece, Italy, and in particular in Spain (38%). National call prices are still higher than the EU average in the United Kingdom, Italy, Portugal and Germany (the latter 26% more expensive than the EU average).

The OECD basket methodology<sup>14</sup> shows average monthly expenditure for national calls (local and long distance calls and fixed charges) went down from €34.7 to €30.5 (including VAT) between August 1998 and 2002 for residential users. Reduction rates were higher in 1998 and 2000 (13%), while in the last two years the average reduction has been only 0.4%. As for business users, reductions have been comparatively more noticeable, from €80 in 1998 to €62.8 (excluding VAT) in 2002, that is, a reduction of 23% over the period.

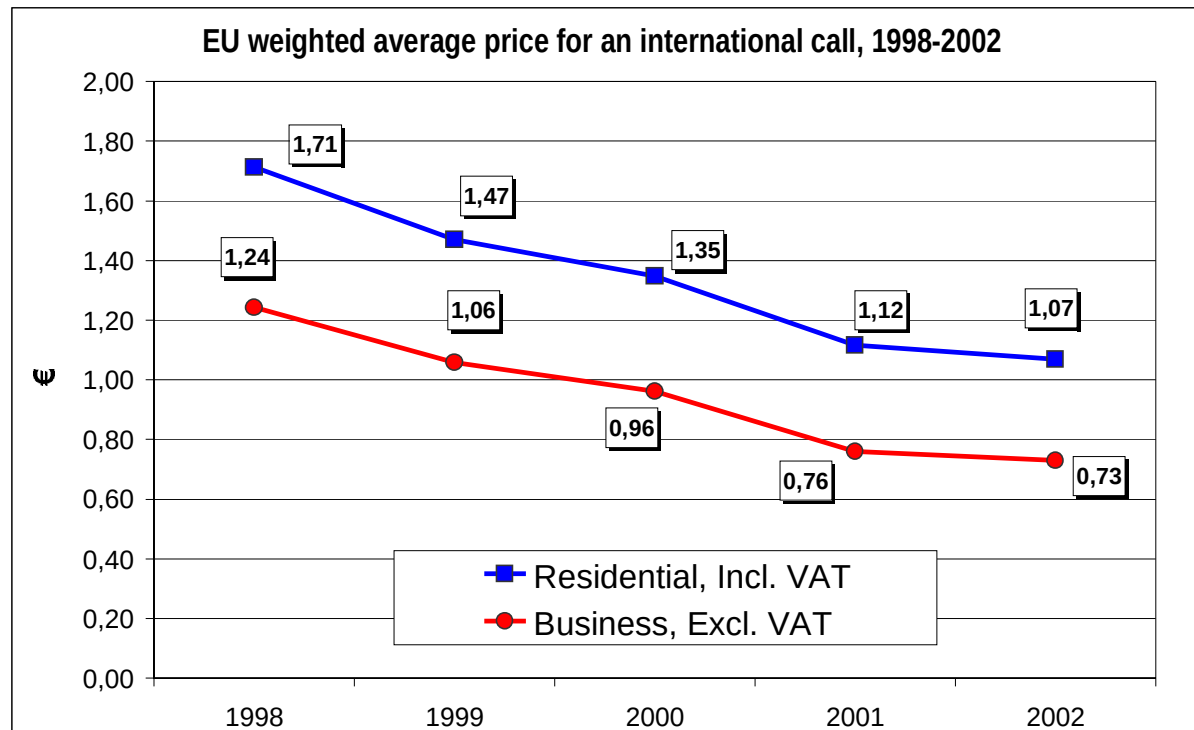
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<sup>14</sup> For methodology, see Annex 1.



### 3.5.5. *International calls*<sup>15</sup>

There has been a decrease of 4 % in the average cost of an international call since last year, from €1.12 to €1.07 for residential users (including VAT) and €0.76 to €0.73 for business users (excluding VAT). The overall reduction over the period 1998 to 2002 has been 38% for residential users, from €1.71 to €1.07, and 41% for business users, from €1.24 to €0.73.



<sup>15</sup>

For methodology, see Annex 1.

### 3.5.6. *Average monthly expenditure (composite call basket)*

The new OECD methodology<sup>16</sup> shows that the EU weighted average monthly expenditure for a composite basket of national, calls to mobile networks and international calls only decreased with respect to 2001 by 0.6% for residential users and 2.8% for business.

For residential users there were increases in Germany, Ireland, the Netherlands, Austria and Portugal. Prices went down in Belgium, Denmark, Greece, Spain, Italy and the United Kingdom.

Regarding business users, prices have increased in Germany, the Netherlands and Austria. Monthly expenditure is lower with respect to 2001 in the other Member States, with the exception of Luxembourg and Finland where it remains stable.

### 3.5.7. *New entrants*

All of the prices referred to above are those of incumbent players. New entrants usually charge considerably less, depending on the call type and duration. Competition in the local call segment has increased with respect to 2001, and new entrants now offer lower tariffs in 10 Member States, with reductions of up to 37.5% in Austria and 25% in Belgium. Reductions are much greater for national calls, with operators charging up to 56% less in the United Kingdom, 46% less in France and 35% less in Germany (longer calls in all cases).

Competition is fiercest in the international calls segment, where operators offer discounts of up to 65% (Austria) for calls to near EU countries as compared to incumbents' tariffs. Other examples for calls to near EU countries are France and Portugal (59% and 54% cheaper respectively). For calls to far EU countries, besides Austria, new entrants' tariffs are up to 42% lower in the United Kingdom and 38% lower in Luxembourg and France.

## 3.6. **Market structure**

### 3.6.1. *Fixed operators*

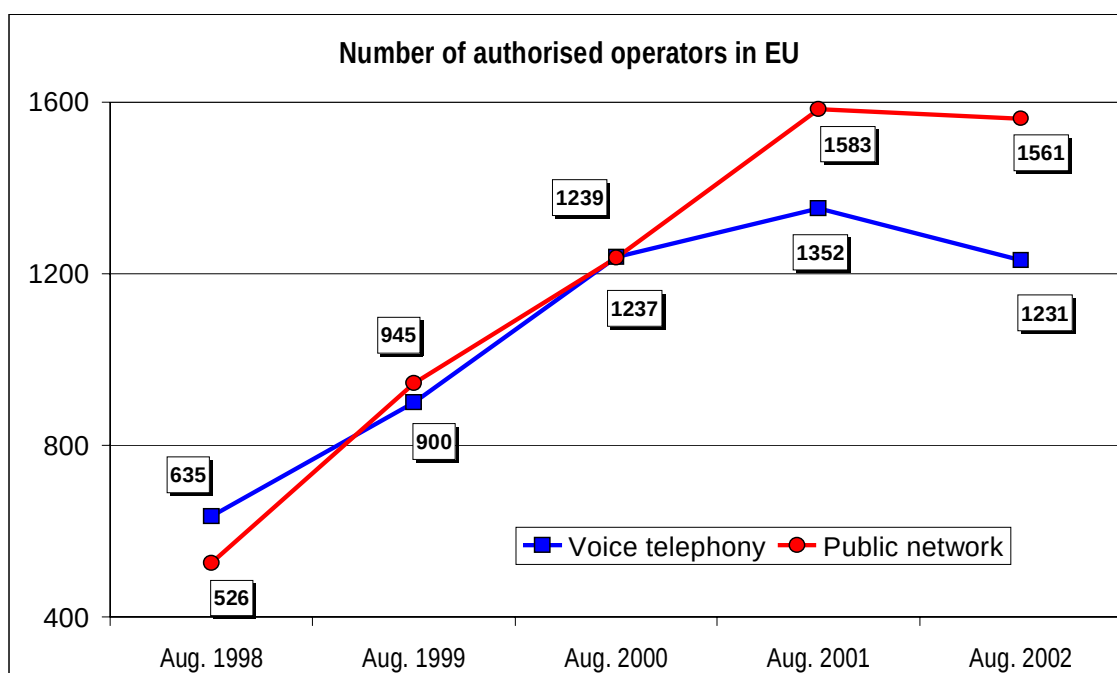
The number of operators authorised to offer public voice telephony at August 2002 was 1231 (325 local; 906 national). More than 600 (125 local and 478 national) are actually offering services.

The number of operators authorised to operate a public network and to provide public network services at August 2002 was 1 561 (654 local; 907 national). The numbers of operators actually providing local, trunk and international network services are, respectively, 429 (253 local and 176 national), 285 (59 local and 226 national) and 237 (44 local and 193 national).

While the number of authorised operators increased by about 50% per annum from 1998 to 2001, during the last year operators have started to reorganise their businesses, with a resulting concentration of activities in the market (in particular between cable operators). The stabilisation of the market and some bankruptcies have led to an overall decrease in the number of authorised operators of about 9% as regards voice telephony operators and 1.5% for public network operators.

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<sup>16</sup> For methodology, see Annex 1.



### 3.6.2. Mobile operators

A total of 79 national digital mobile licences (GSM and DCS 1800) have been awarded throughout Europe, and a total of 54 mobile network operators and 100 mobile service operators (mainly resellers) are active in the mobile markets.

Spain, Italy, Sweden and Finland still have analogue licences; phasing out is scheduled for Finland at the end of 2002, and for the other countries between end 2005 and 2007.

The Member States have awarded a total of 62 3G licences (48 have been awarded to operators already holding a digital licence).

### 3.6.3. Market shares

Incumbent operators' share of the public fixed voice telephony market in terms of retail revenues is estimated to be on average (at end 2001) 89% for local calls, 73.5% for long-distance calls and 67.6% for international calls.

It is estimated that from end 2000 to end 2001, incumbent fixed operators on average lost approximately 9% and 11% of market share for long-distance and international calls respectively, while market share for local calls remained more or less stable (-0.5%).

Apart from Greece, which started the liberalisation process later than the other countries, only the incumbents in Belgium and Germany still retain almost 100% of the local call market. In five Member States (Spain, France, Ireland, Italy and the Netherlands) the incumbent has between 80% and 90% and in the United Kingdom around 66%. As far as long-distance calls are concerned, the incumbent's share of retail revenues is estimated at 97% in Greece; 82% in Spain and approximately 50% to 75% in six Member States (Germany, France, Ireland, Italy, the Netherlands and Sweden) and in the United Kingdom at around 53%. For international calls, only the incumbents in Spain and Greece have over 80% of the market, in Italy and Ireland the incumbent's market share is 74%, while in four Member States it is between 61% and 68% (Belgium, Germany, France and the Netherlands), and in the United Kingdom and Sweden it is 45% and 43% respectively.



Market shares for Denmark, Luxembourg, Portugal, Austria and Finland are only available in terms of outgoing minutes of traffic. National market shares (local and long-distance calls) are 90% in Portugal, 87% in Luxembourg and 65% in Denmark. In Finland, local call market share is 92.5% and for long-distance calls it is 32%. For international calls, the market share in Luxembourg and Portugal is over 70%, in Denmark 53% and in Finland 54%. In Austria, the market share on the overall fixed telephony market is estimated at around 70%.

In five countries (Spain, France, Ireland, Luxembourg and the United Kingdom) the incumbent's market share for local calls to internet is below 80%.

The average market share of leading mobile operators (subsidiaries of the former incumbent in all Member States except for the United Kingdom) is 48% in terms of revenue. The leading operator's share is above 50% in only six Member States, as in 2001, but in three (Belgium, Ireland and Finland) there has been a reduction. On the other hand, the leading operators in Spain and Luxembourg have increased their market share.

### **3.7. Digital TV**

The EU digital TV market, which had a high growth rate until 2001, has been adversely affected during the past year. Companies providing digital TV, essentially pay TV operators, have faced economic difficulties leading to bankruptcies, notably in the United Kingdom, Germany and Spain, which are amongst the biggest national digital TV markets. The difficult market situation has led to mergers in the satellite and cable sectors, indicating that competition between several pay operators on the same national market is difficult to sustain. The national competition authorities and the Commission have recently been assessing intended mergers in Spain and Italy.

As a result of market problems, EU digital penetration has not increased at the pace seen in recent years, rising to around 21% compared with 18% in 2001. The figures annexed to this report do not necessarily reflect the latest bankruptcies, so that real penetration at the moment might even remain at the same level as in 2001.

Regardless of modest overall development, digital TV penetration has grown rather strongly during the past year in those Member States which are at an early stage of digital take-up. The divergent development in different Member States has evened out the market bias of previous years. In 2001, 90% of the market was represented by five Member States (Germany, France, Spain, Italy and United Kingdom), whereas by July 2002 their share of the total market (in terms of digital television households) has decreased to 84%.

The figures regarding development of different delivery platforms indicate that digital satellite TV represents 64% of the overall satellite TV market and digital cable TV represents 16% of the overall cable TV market. Terrestrial digital TV represents only around 4% of terrestrial TV services. The latest developments in the market suggest that future terrestrial services will rely more on the free-to-air concept than on pay TV in the short term.

## **4. STATUS OF IMPLEMENTATION OF REGULATION IN THE MEMBER STATES**

In previous reports the Commission has assessed progress in implementing key requirements such as those relating to NRAs, licensing, interconnection, tariffs, cost accounting, numbering and universal service, as set out in the range of directives and other instruments making up the current regulatory package.

Given the objective of this report of assessing progress in the implementation of regulatory obligations in the light of the way in which they are carried over into the new framework, it is considered logical to group them in accordance with the structure of the new directives.

#### **4.1. Regulatory framework**

##### *4.1.1. National regulatory authorities*

The central role of the national regulatory authorities (NRAs) in implementing the telecommunications regulatory framework has been stressed by the Commission on many occasions. In a situation where players may be affected by fragile financial markets, the ability of regulators to act effectively and impartially, thereby guaranteeing legal and regulatory certainty, is crucial. The way in which NRAs are organised and exercise their powers is clearly a matter for the national legal and administrative systems, provided the basic requirements of the EU framework are complied with. Detailed data on the organisation of the NRAs are given in Annex 2. Despite the resulting possibility of differences, overall the NRAs have done a remarkable job in regulating complex aspects of the current framework, and are in a good position to undertake the task of implementing the new regime. The following comments are intended as guidance in relation to matters which may require attention during the transitional period.

The new framework builds on experience gained so far by regulators and market players. The new directives further lay down clear provisions requiring Member States to ensure that NRAs are equipped with appropriate powers to carry out a variety of tasks including analysis of relevant markets, identification of SMP operators, dispute resolution, the imposition of regulatory and universal service obligations and the enforcement of authorisation conditions. Given the wide discretion conferred on the NRAs under the new framework, the safeguards established under the current framework in particular to ensure structural and operational independence from market players will continue to play an essential role.

Remaining concerns relating to *regulatory independence* under the current framework should be removed in Belgium with the forthcoming adoption of legislation designed to confer on the regulatory body powers currently held by the minister responsible for the State shareholding in the incumbent operator.

Two models for the *assignment of regulatory powers* have evolved. In some Member States an independent and autonomous body or agency exercises the full range of powers including those relating to licensing, interconnection, access, price controls, frequency assignment and numbering (Germany, Greece, Ireland, Austria, the Netherlands except for frequencies, Portugal), while in the others the regulatory body exercises regulatory powers to a greater or lesser extent with the relevant ministry. The dispersal of powers inevitably leads to a reduction of the regulatory certainty required by the market, in particular in cases where decisions by ministries relating to licensing or price controls may be seen by the market as being influenced by political considerations. Leaving aside such considerations, the overall performance of the independent body may quite simply be improved through the transfer of all regulatory powers from the ministry, as has been the case for example in Greece.

Lack of *resources* on the part of NRAs is still identified by the market as a brake on effective regulation. In this context market players believe that regulators could maximise resources by making greater use of moral suasion and publicity in combating anti-competitive behaviour. In two Member States, although the number of staff employed by the NRA is relatively high, only a small proportion deal with regulatory tasks relating to telecommunications (Belgium,

Luxembourg). In some cases, new entrants consider that there is room for *organisational improvements* to enable regulators to address issues in a timely and efficient manner (Belgium, the Netherlands, Finland).

Efficient mechanisms for *appeals against NRA decisions* are required under the existing and future frameworks. In almost all Member States appeals are lodged with a court, normally an administrative tribunal. Denmark is the only country which has established a separate appeals body which is not a court, while in the United Kingdom appeals against decisions by OFTEL using its concurrent competition powers are submitted in the first instance to the Competition Commission. In some further cases appeals are in the first instance dealt with internally in the NRA (Belgium, Spain, Luxembourg, the Netherlands), which may mean time and resources are diverted from pure regulatory oversight. In Austria, despite improvements through a new law providing for the establishment of an appropriate appeals mechanism, uncertainty persists in the absence of provisions regarding jurisdiction for cases already pending. In Germany, the length of the appeals procedure due to confidentiality rules is considered a barrier to competition.

The practice under the existing framework has in many cases been for the appeals bodies to examine process rather than substance. This situation must be remedied under the new regime, and is indeed changing: in France for example the Court of Appeal, assisted by an expert, can now examine the substance of an NRA decision in addition to its legality.

NRAs in all Member States appear to have sufficient *powers to regulate markets*, although further powers may be needed in Belgium in relation to retail tariffs and appeals against interconnection decisions, and in Finland regarding switched data transmission. In two Member States the NRA has to rely on the submission of a complaint (the Netherlands) or of a request (Germany) in order to address certain regulatory issues, leading to delays in reaching decisions (Germany). However, NRAs in virtually all Member States need to be better equipped to regulate on their own initiative in order, for example in relation to local loop unbundling, to ensure non-discrimination, fair competition, economic efficiency and maximum benefit for users.

Under the new framework, the NRA will need to address *disputes* within four months. At present, although all Member States have established dispute resolution procedures, in one case (Italy) the NRA has not always resolved the disputes brought before it. In certain cases the deadline has been exceeded (the Netherlands, Austria, Portugal, United Kingdom). In two Member States, the dispute resolution procedure is reported to be lengthy (Finland) or elaborate (France).

*Regulatory decisions* need to be effective and timely, and the balance is not always achieved. Difficulties appear to exist in certain cases in reaching decisions within the deadlines (Italy, Finland), or in taking full account of all comments made during consultation procedures (Greece, Ireland), or in giving the necessary time to operators to respond in consultation procedures (Sweden).

New requirements have been introduced (Denmark, Ireland) or are in the process of being introduced (Finland) to guarantee and improve the *enforcement* of operators' regulatory obligations. Most Member States have the power to impose penalties for non-compliance with licence conditions, although the extent to which it may be used is not always clear (Germany). In Finland the extremely high number of SMP undertakings creates difficulties for the NRA in ensuring that they are compliant with their obligations, leaving new entrants without the necessary regulatory guarantees.

*Co-operation between the NRA and the national competition authority (NCA)* in the enforcement of the current regulatory framework has generally improved since liberalisation and works well in practice in many of the Member States (in particular in Denmark, Greece, France, Ireland, Italy, the Netherlands, Austria, United Kingdom). Two Member States have already introduced formal procedures for such co-operation (Denmark, Ireland), while in two Member States the competition authority provides the NRA with non-binding opinions on matters which affect the competitive conditions of the market (Germany with the exception of SMP designation, where the opinion is binding, and Italy). In others the NCA does not get involved at all in the decision-making process but leaves it to the NRA (Greece, the Netherlands except for market analysis). In one Member State (Portugal) new entrants would like to see more intervention by the competition authority.

The greater focus on the assessment of effective competition which is demanded by the new regulatory framework means that cooperation between the two types of authority will become increasingly critical in the future (see section 6).

#### *4.1.2. Management of numbers*

The EU regulatory framework requires that numbering plans be controlled by the national regulatory authority. This is the case in all Member States.

A number of Member States have modified their numbering plans in the past few years to accommodate higher demand for numbers, in particular with the development of mobile services, as well as to promote fair competition.

The management of numbers does not seem to raise concerns from market players or consumer organisations. However, some numbers and number ranges in Austria do not comply with the numbering plan.

#### *4.1.3. Frequency management*

Considerable progress has been made across the EU in recent years towards greater consistency and transparency in the management of radio frequencies. In all Member States there is now a published national frequency plan and an authority designated with responsibility for frequency management, whether this is the same authority as is generally entrusted with the supervision of the communications sector or a separate, dedicated body. While individual problems continue to arise from time to time in relation to the assignment of spectrum for particular uses, no major outstanding problems of general frequency management have been reported. A number of Member States have recently taken initiatives or launched consultations regarding the future development of frequency management, touching on such issues as spectrum trading or the use of licence exempt frequency bands, which are increasingly topical at the EU level also.

### **4.2. Interconnection and access regimes**

#### *4.2.1. Interconnection*

Under the regulatory framework, NRAs must ensure that operators designated as having significant market power (SMP) on the fixed market publish a reference interconnection offer (RIO) including a detailed description of their interconnection offering. Fixed SMP operators are also required to charge cost-oriented tariffs for interconnection and access, supported by transparent cost-accounting systems, and must comply with the principles of transparency and non-discrimination. Operators designated as having SMP in the national mobile market are

also subject to transparency and non-discrimination obligations, while mobile operators with SMP in the national interconnection market must also comply with the cost orientation principle.

The effective implementation of these obligations has been a prerequisite for an open and competitive market by ensuring fair, proportionate and non-discriminatory conditions for interconnection, and is an essential precondition for the transition to the new regulatory framework. In practice, interconnection regimes function well across Europe, with interconnection offers generally oriented to market needs, and previous reports<sup>17</sup> have shown large numbers of agreements in place.

#### 4.2.1.1. Reference interconnection offer

Fixed SMP operators in all Member States have published a reference offer (RIO), although in two Member States access to the RIO requires the consulting party to identify itself (Austria, Germany). Problems with the completeness of the RIO appear to be resolved in all Member States, and all RIOs now cover the technical and financial conditions for origination and termination of voice telephony traffic at all levels of interconnection. However, in Finland problems with the tariff offer for interconnection at local level have been reported.

Although the RIO allows competitors to conclude interconnection agreements in all Member States, delays in the approval of the RIO by the NRA must be noted in five countries (Greece, Ireland, Italy, Luxembourg, Portugal).

#### 4.2.1.2. Interconnection leased lines

Interconnection leased lines (i.e. 64 Kbit to 34 Mbit leased lines connecting new entrants' infrastructure to customer premises) enable new entrants to provide end-to-end services to their customers in cases where their own networks are not yet sufficiently extensive to enable them to provide these services by means of their own infrastructure alone.

NRAs in all Member States have taken action to ensure the availability of interconnection leased lines and to supervise tariffs. However, with regard to Finland it is not clear whether all regional and local incumbents provide interconnection leased lines.

Annex 1 sets out data on the pricing of interconnection leased lines in relation to EU price ceilings.

#### 4.2.1.3. FRIACO

There are widely differing views as to the usefulness of providing flat rate interconnection for narrowband internet access. Some regulators consider it likely to encourage broadband take-up by accustoming users to flat-rate retail access, while others believe that it has now been overtaken by DSL (high speed digital subscriber line technology). At any event, flat rate interconnection must be offered to new entrants on a non-discriminatory basis by incumbents where they offer their own retail flat rate narrowband internet access to their customers. To allow market entry, it is particularly important that the FRIACO contract does not contain network architecture requirements which cannot be fulfilled by the majority of new entrants. It is also important that FRIACO is offered by the incumbent at levels of interconnection

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<sup>17</sup> <http://europa.int/information-society/topics/telecoms/implementation/index>  
<http://europa.eu.int/comm/competition/liberalization/others>

demanded by new entrants. This means that the non-discrimination principle needs to be applied not in a purely formal way but taking account of its underlying objective, which is to open up the market.

This objective has only been achieved in a fragmented way up to now. FRIACO is offered by the incumbent at the local and at higher than the local level only in two Member States (Italy, United Kingdom) and is offered at the local level in three further countries (France, the Netherlands, Portugal). In Spain the RIO for 2001 introduced a generalised capacity-based interconnection model (applying both to voice and to data), but difficulties have emerged with its implementation. In Germany, the NRAs has taken action to impose FRIACO without having so far been able to ensure its availability due to pending court proceedings. No FRIACO offer is available in some countries, despite the fact that the incumbents offer flat rate internet access to customers (for example in Finland) or flat rate internet access within certain time periods (for example on Sundays) as part of a bundled offer (Luxembourg).

#### 4.2.1.4. Interconnection tariffs

The principle of cost orientation in regard to fixed networks has been implemented by all Member States, although there are still problems in obtaining proof of costs based on suitable cost accounting systems. In only one country (Denmark) does the NRA still rely on best practice benchmarking to set the fixed interconnection tariff, although prices determined in accordance with an LRAIC<sup>18</sup> cost accounting system are due to take effect from 1 January 2003. Generally, interconnection tariffs appear to have moved to a level which permits market entry, although there are still complaints about high tariffs in particular in Finland.

In a number of Member States (Belgium, Greece, Spain, Luxembourg, the Netherlands, Finland), there are complaints of a price squeeze between fixed interconnection tariffs and the incumbent's retail tariffs and the discounts applied thereto. Not all NRAs have yet acted to eliminate the price-squeeze (for local level interconnection, remedial action in the Netherlands took effect recently; and will take effect in Luxembourg from January 2003).

Concerns still arise from the fact that in certain circumstances the charges which new entrants can levy for termination on their fixed networks are based on reciprocity (Denmark, Germany, Spain, Italy), despite the fact that those operators are not subject to the obligation of cost orientation and do not necessarily provide a similar interconnection service. Claims have also been made that interconnection tariffs for new entrants are discriminatory when compared to what incumbents charge between themselves (Finland). This shows the need to prevent abuse of a dominant position by incumbents also as purchasers of interconnection.

In two countries (France, Italy), the NRA is introducing a price cap procedure applicable as from 1 January 2003, to provide the market with greater predictability as to the future level of interconnection tariffs. This initiative constitutes an improvement in the stability of market conditions and has been widely appreciated by market players.

With regard to mobile termination, regulators have taken a range of measures within the margins set by the current framework to regulate tariffs. In Austria the NRA set mobile termination tariffs on the basis that prices should be "appropriate", by relying on an imposed cost accounting system (see below). In a number of Member States (the Netherlands, Portugal, United Kingdom), the NRA ordered a reduction in mobile termination tariffs on the

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<sup>18</sup> Long run average incremental cost

basis that it considered those tariffs to be excessive or unreasonable, although it had not designated the mobile operators as having SMP in the national interconnection market. In Finland, mobile operators have not been designated as having SMP in the national market for interconnection, but three of them have been designated with SMP in their own relevant markets, which under national law means that their interconnection charges must be cost-oriented. The cost-orientation of the interconnection charges of two of these operators has been investigated by the regulator. In other Member States the NRA has ordered a reduction which they regard as moving towards the principle of cost orientation, while the mobile operator(s) had been designated as having SMP in the national interconnection market (Belgium, Spain, France, Ireland, Italy, Sweden). In the remaining countries, mobile operators have not been designated with SMP in the national interconnection market and the NRA has not intervened in relation to mobile tariffs.

Most cost accounting models of mobile operators across Member States are currently at the stage of fully-distributed costing using historical costs. The two exceptions are the United Kingdom, where the NRA is the only one which has developed an LRIC model using a current cost basis, and Austria, where mobile operators are required to use a LRIC cost structure without however being subject to cost accounting verification. In Italy, the NRA has required mobile operators to move from a cost accounting system based on historical costs to a system based on LRIC from 2003 onwards. In Spain, the regulator has also recently approved the cost accounting systems of the two mobile operators designated as having SMP in the national interconnection market, although it was not in a position to approve interconnection tariffs on this basis due to lack of cost accounting data.

#### 4.2.1.5. SMP determination

The reasoning behind NRAs' determinations as to the existence of SMP has been made public in all Member States except one (Denmark).

It would appear that the principles governing SMP designation of fixed operators have been consistently applied within the EU, since Member States have designated the incumbent as having SMP on the fixed market. However, in one country (Finland), the relevant market for SMP designation is not the national fixed market, and parts of this market (local, long distance, international etc.) are used as the basis of a series of SMP designations.

A certain degree of consistency has also been achieved with regard to findings of SMP in the *mobile market*, although some variation exists. Thirteen Member States have designated at least the two leading mobile operators as having SMP in the mobile services market, on the basis that their market share exceeded the 25% threshold in the Interconnection Directive, and did not designate those below this threshold. In one of the remaining countries (Germany), the decision not to designate mobile operators as having SMP in the mobile market, even though they exceeded the 25% market share threshold, was based on the assumption of sufficient counter-veiling power on the part of end users. In the other remaining country (Austria) the reasons for the decision not to make an SMP designation in the mobile market have not been communicated to the Commission.

As regards designation of mobile operators with SMP in the *national interconnection market*, a certain degree of consistency in the application of the SMP principles has been achieved through use of the ONP Committee Explanatory Note on determination of SMP<sup>19</sup>. A number

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<sup>19</sup> ONPCOM 99-03

of NRAs relied directly on this note and based their SMP assessment on the market shares calculated by reference to total revenue generated by termination on fixed and mobile networks, including on-net calls. Mobile operators which exceeded the 25% threshold were designated as having SMP, while those below the threshold were not so designated, in five countries (Greece, France, Ireland, the Netherlands, United Kingdom), while further criteria were also examined. In a number of other Member States (Belgium, Austria, Portugal) the 25% market share threshold was also decisive. However, in these cases the NRAs did not calculate the market share fully in accordance with the above mentioned Explanatory Note. A number of Member States also designated mobile operators as having SMP in the national interconnection market, where those operators had a market share below the 25% threshold, basing their decision on the further criteria provided in the Interconnection Directive (Italy, Spain, Sweden). Finally, in some countries the market shares of mobile operators in the national interconnection market have not been calculated or the relevant decisions have not been published (Germany, Luxembourg).

#### 4.2.1.6. Mobile virtual network operator (MVNO) access

One aspect of access to electronic communications networks that is not mandated by the current regulatory framework, but that may be by individual NRA's under the new one, and which is likely to play a growing role in the future, is the provision of access to mobile virtual network operators (MVNOs). While in most Member States the MVNO model remains subject to commercial negotiation alone, there are a number of Member States which have incorporated provisions into their national telecommunications law to govern such access. For example, in Denmark the statutory provisions governing national roaming extend to MVNO access; in Spain a legislative amendment has established a new type of licence for MVNOs; in Ireland the offer of MVNO access was taken into account in selecting the winner of the 'A' Licence in the recent 3G licensing procedure; in Finland the draft new Communications Market Act includes a provision allowing for such access. In Austria the national regulatory authority has recently rejected a request for interconnection by an operator for the purposes of providing services as an MVNO, on the grounds that the current Austrian legislation does not allow for this possibility, although the regulator indicated it would welcome a change to the law in this respect.

Although the MVNO access model is increasingly being reflected in the national legal systems of Member States, its development on a commercial basis is still relatively limited, with few fully fledged MVNOs operational in the EU. This is likely to be due at least in part to the complex costing and pricing issues that such access gives rise to. However, as mobile network capacity and data applications increase with the development of the high-speed mobile market, it is likely that this form of access will grow and evolve accordingly.

### 4.3. Unbundling of the local loop

The objective of the EU Regulation on unbundled access to the local loop is to facilitate market entry and to develop competition in particular for high-speed internet access. Notified (SMP) operators must offer fully unbundled access, where the entire line is rented to a new entrant, as well as shared access, where the new entrant only rents the high frequency part suitable for high speed internet.

Notified operators must publish a reference unbundling offer (RUO) suited to market needs, which must therefore be sufficiently detailed to allow operators to choose only the network elements and facilities they require. Notified operators must meet reasonable requests for unbundling and apply transparent, fair and non-discriminatory conditions, meaning that they



must provide other operators with facilities equivalent to those provided to themselves and their subsidiaries. The tariffs charged for unbundled access must be cost-oriented.

#### *4.3.1. Reference unbundling offers*

In the 7<sup>th</sup> Report the Commission noted that progress in implementing the Regulation was unsatisfactory. The Commission then took action against five Member States where a RUO was unavailable for shared access. The situation was quickly remedied, and there is now a reference offer in all Member States covering both full unbundling and shared access. However, the Commission then (March 2002) took action against four Member States where the RUO was not sufficiently detailed, specifically insofar as there was no possibility to access the local sub-loop, the street cabinet near to a customer's premises necessary for the possible provision of VDSL or HDSL services. Again, action was taken in the Member States to remedy this failing.

Nevertheless, progress in regard to unbundling over the last year has still been slow, and has clearly been affected by the downturn in the telecommunications market and the difficulty for operators in attaining capital financing for investment purposes. By 1 October 2002, there were just over 1 million unbundled lines in the EU (out of a total of nearly 187 million subscriber lines), mostly fully unbundled lines (1 050 740) and a small number of shared access lines (27 700). Given that there were 600 000 unbundled lines at October 2001, the pace of unbundling is slowly picking up.

|                |                                                   | <b>Availability of wholesale access</b> |                            |                            |                      |
|----------------|---------------------------------------------------|-----------------------------------------|----------------------------|----------------------------|----------------------|
|                | Incumbent's PSTN activated main lines (millions)* | <b>Unbundled lines</b>                  |                            | <b>Wholesale DSL lines</b> |                      |
|                |                                                   | <b>Fully unbundled lines</b>            | <b>Shared access lines</b> | <b>Bitstream access</b>    | <b>Simple resale</b> |
| <b>B</b>       | 4.69                                              | 1 556                                   | 1 039                      | 140                        | 69.044               |
| <b>DK</b>      | 3.32                                              | 44 061                                  | 6 960                      | 250                        |                      |
| <b>D</b>       | 39.00                                             | 855 404                                 | 13                         | 0                          | 530 000              |
| <b>EL</b>      | 5.54                                              | 93                                      | 0                          | 0                          | 0                    |
| <b>E</b>       | 17.43                                             | 1 181                                   | 0                          | 166 413                    |                      |
| <b>F</b>       | 34.00                                             | 1 043                                   | 61                         | 8 000                      | 192 000              |
| <b>IRL</b>     | 1.70                                              | 26                                      | 62                         | 0                          | 0                    |
| <b>I</b>       | 27.33                                             | 82 100                                  | 19                         | 105 217                    |                      |
| <b>L</b>       |                                                   |                                         |                            |                            |                      |
| <b>NL</b>      | 8.21                                              | 18 629                                  | 10 478                     | 0                          | 0                    |
| <b>A</b>       | 3.14                                              | 7 300                                   | 0                          | 22 100                     | 0                    |
| <b>P</b>       | 4.27                                              | 20                                      | 0                          | 5 633                      |                      |
| <b>FIN</b>     | 2.85                                              | 35 000                                  | 7 500                      | 2 000                      |                      |
| <b>S</b>       | 6.50                                              | 2 818                                   | 1 568                      | 2 000                      | 80 000               |
| <b>UK</b>      | 28.70                                             | 1 509                                   | 0                          | 165 820                    | 0                    |
| <b>Tot. EU</b> | <b>186.68</b>                                     | <b>1 050 740</b>                        | <b>27 700</b>              | <b>477 573</b>             | <b>871 044</b>       |

\* For comparison purposes. However, not all of these lines are susceptible to unbundling.

However, the delays in overcoming regulatory obstacles, particularly the lack of non-discriminatory access conditions and cost-orientated tariffs, have caused considerable problems as new entrants were unable to attain a critical mass in the market before the economic downturn made investment much more difficult.

There have been modifications and improvements to reference offers in a number of Member States. Complete RUOs were finally published in 2002 by the notified operators in Belgium and the Netherlands (where some elements have yet to be approved by the NRA), while there were modifications to a number of RUOs following intervention by the NRAs (Denmark, Spain, France, Italy, Austria, Portugal and the United Kingdom). In Germany, on the other hand, a RUO for 2002 could not be agreed and the 2001 offer is still in force pending a determination by the NRA. Based on the disappointing results with regard to unbundling in a number of Member States, it appears that NRAs will have need of the intervention powers under the Regulation or the new framework for some time, in order to ensure that tariffs are transparent and cost-oriented and that conditions are complete and non-discriminatory.

NRAs have had to intervene most frequently with regard to tariff issues, both for the price of unbundled and shared lines but also for the tariffs applied to collocation and associated services. There have been improvements in the prices charged for unbundling over the last year, and the average monthly rental for full unbundling in the EU is now €13 and for shared

access €5.6. However, there are considerable variations in these tariffs and the associated charges, particularly the connection fee. When the average cost for a fully unbundled line is calculated (by amortising these charges over a year<sup>20</sup>) the EU average is €22.6 per month, with prices varying from €12 in Denmark to €32.7 in Finland. The same calculation for shared access gives an EU average of €16 with prices varying between €7 in Spain and €24 in Luxembourg. These prices are generally high, compared in particular with the level of the telephone line rental charged to the consumer by the incumbents. Along with discrepancies between retail and wholesale fees, the level of prices may in some cases point to diverging pricing methodologies.

**Prices for full unbundling<sup>21</sup>**

|                | B    | DK   | D    | EL    | E    | F    | IRL   | I    | L     | NL   | A    | P    | FIN   | S     | UK    | EU avg |
|----------------|------|------|------|-------|------|------|-------|------|-------|------|------|------|-------|-------|-------|--------|
| Monthly rental | 13,3 | 8,3  | 12,5 | 11,5  | 12,6 | 10,5 | 16,8  | 11,1 | 15,8  | 13,5 | 10,9 | 13,8 | 14,7  | 11,3  | 16,2  | 12,8   |
| Connection     | 79,9 | 45,4 | 70,6 | 123,4 | 20,0 | 78,7 | 121,5 | 91,4 | 185,6 | 79,0 | 54,5 | 82,9 | 216,0 | 165,2 | 140,3 | 103,6  |

The variations in the level of unbundling charges also seems to suggest inappropriate pricing methodologies, and cannot be explained merely in relation to differences in population distribution or the actual cost of network elements.

This seems to be particularly true with regard to shared access. It appears that the allocation of the costs of shared access is done in a number of different ways in the EU, and it has been difficult to establish whether the tariffs are truly cost-oriented or whether the costs have been correctly attributed. The variation is between allocating costs fully to the voice band of a telephone line while leaving only the avoidable cost to shared access, allocating them 50/50 between the voice band and the higher frequencies, or applying retail-minus pricing. It appears that each approach presents disadvantages and that it is very difficult to determine what costs actually are involved. However, the first methodology, implemented in some Member States, generally results in lower costs.

The manner in which fees for full-unbundled access are calculated relies in some Member States on a reconstruction of the cost of replication of the existing networks (current costs). Where current costs are used, new entrants generally argue that they lead to higher prices than those given by historic costs. Furthermore, the use of significantly different depreciation periods for similar network elements may provide another explanation for the variation of charges across the EU. Different allocation methods for joint and common costs may also explain the divergence of prices.

#### 4.3.2. Collocation

New entrants in a number of Member States are still experiencing problems in the practical implementation of collocation, particularly the conditions for effective co-location in the site of the incumbent (Germany, Ireland, Portugal).

<sup>20</sup> This amortisation period corresponds to the most common length of contract beyond which the operator has no guarantee that it will retain a customer.

<sup>21</sup> In some Member States, a different rental fee applies if new entrants are only going to use the voiceband element of the line; in this table the monthly rental for use of the full spectrum or, where applicable, for use of the broadband part of the spectrum, is indicated.

There is only limited experience of applying the principle of non-discrimination in practice to unbundling. One issue in several Member States is whether application of this principle should lead to 'co-mingling' instead of separate collocation, particularly where a new entrant only requires a relatively small surface area and where separate collocation space is proportionately much more expensive. It appears that the recent drop in demand for collocation space together with growing awareness of possible discrimination is leading to greater pressure for co-mingling, which is currently available in Belgium, Denmark, France, Spain and the United Kingdom. While there are some clear security concerns related to the siting of exchanges and the release of access codes, there seems to be little justification for blanket non-disclosure clauses. In France, following intervention by the NRA, the obligation to install separate collocation rooms has been removed, but the problem remains of those sites usually in areas of strategic interest, where such rooms have already been constructed and where new entrants are obliged to occupy (and pay for) these separate rooms.

The pricing of the rental of collocation space in the incumbent's premises raises difficulties. The Commission intends to examine this question further with the NRA's.

Another problem is the risk of discrimination where the marketing division of an incumbent may have access to information about customers who are thinking of changing provider when a new entrant seeks information about the addressing and technical feasibility of those potential clients.

#### **4.4. Bitstream access**

The Commission has consistently maintained that the non-discriminatory provision of bitstream access is essential to the development of competition in local access and particularly high-speed internet in the EU. Even before unbundling was mandated at EU level, Community law covered some forms of 'shared access' whereby SMP operators are obliged to adhere to the principle of non-discrimination when they make use of the fixed public telephone network and, in particular, use any form of special network access themselves. They must provide special network access facilities and information to others under the same conditions and of the same quality as they provide for their own services or those of their subsidiaries or partners. Furthermore they must meet all reasonable requests for access to the network including access at points other than the usual network termination points.

Bitstream access (provision of DSL services by the incumbent operator) refers to the situation where the incumbent installs a high-speed access link to the customer premises and then makes this access link available to third parties, to enable them to provide high-speed services to customers. The bitstream service may be defined as the provision of transmission capacity between an end-user connected to a telephone connection and the point of interconnection available to the new entrant. It does not include resale offers, as these do not include the provision of interconnection or transmission capacity in such a way as to allow new entrants to offer their own, tailor-made DSL services to their clients.

Where an incumbent operator provides bitstream (usually xDSL services according to the current state of technology) to itself, a subsidiary or to a third party, then, in accordance with the provisions referred to above, it must also provide such forms of access under transparent and non-discriminatory terms and conditions to new entrants.

#### 4.4.1. *Intervention of NRAs to ensure non-discriminatory access*

DSL services depend upon the copper loop, and in many cases the incumbent continues to be in a position to exercise *bottleneck* control over this facility, and new entrants cannot deploy xDSL technologies and services on their own. There is therefore a clear role for direct intervention by NCAs concerning access to wholesale DSL (bitstream and resale). In France the NCA concluded that there was an abuse, with the result that the NRA could oblige the incumbent to make a wholesale offer. In Italy the incumbent was prevented from launching any retail tariffs in the future until a corresponding wholesale tariff was approved by the NRA.

However, the task has fallen principally to NRAs to intervene in order to ensure that the incumbent does not completely pre-empt this market. In a recent decision, and following the withdrawal of the incumbent's wholesale ADSL offer, the Netherlands NRA made an important ruling on bitstream access. This strengthens the view taken in earlier decisions in Italy and France that while the incumbent may not be offering bitstream access at the DSLAM or the ATM switch to its own downstream arms, the market is constructed in such a way as to make it necessary to force the incumbent to supply bitstream access (and not just a resale product) at those levels.

#### 4.4.2. *Tariffs*

NRAs should ensure adequate accounting transparency of pricing schemes for access provided by incumbent operators, in order to avoid undue cross-subsidisation that could distort market conditions. Prices may take into account reasonable incentives for sustainable investments and compensation for risks associated with the launching of new innovative services, but regulatory oversight of prices should prevent the incumbent from taking monopoly or excessive profits on its access network business.

There are a large number of different retail, wholesale bitstream and resale offers for xDSL services in the Member States, with varying combinations of data rates and other technical conditions, with the result that it is very difficult to compare price levels in the EU. In fact the variation and complexity of these offers are in themselves a factor in inhibiting the development of competition, and in some cases it is hard for operators and NRAs to determine if there is a price squeeze between wholesale and retail products.

Among the countries that reported price data, the tariff for a 512Mbit/s ADSL configuration charged to a new entrant operator, for example, appears to be between €13.3 in Belgium to €25.4 in Austria, but even within this restricted comparison there are differences in technical parameters, not least the point of connection at which the service is delivered (local DSLAM or ATM switch).

### 4.5. **The regulatory aspects of developing competition in broadband: local access and high-speed internet access**

Since its Communication on Unbundled Access to the Local Loop<sup>22</sup>, the Commission has stressed the complementary role of full unbundling, shared access and bitstream access in the process of overcoming the limited competition in local access and in developing broadband access. Over a long period of time incumbent operators were able to roll out their local access networks, protected by exclusive rights and funded through monopoly rents. They therefore

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<sup>22</sup> COM(2000) 237 final, 26 April 2000

have a major advantage in developing xDSL services as the technologies are developed to maximise the use of the copper wire network, an infrastructure that it is very hard and costly for new entrants to replicate.

In light of the current situation regarding unbundling and bitstream access described above, incumbents' first mover advantage, coupled in some cases with predatory pricing and other anti-competitive behaviour, appears to be pre-empting the market for high speed internet services over the telephony network. The fact that new entrants control 22% of xDSL customers is encouraging. However, market penetration by new entrants is very uneven in different Member States and a strong regulatory effort is still required on price squeeze in bitstream access, as well as the general application of non-discrimination, if this market share is to develop. This in turn will create the critical mass in terms of market share to allow new entrants to make greater use of unbundling.

| Availability of incumbent's and new entrants' retail broadband access to Internet |                       |                                 |               |                  |         |                  |                                         |         |                |                                           |         |                  |
|-----------------------------------------------------------------------------------|-----------------------|---------------------------------|---------------|------------------|---------|------------------|-----------------------------------------|---------|----------------|-------------------------------------------|---------|------------------|
|                                                                                   | Incumbent's DSL lines | New entrants' DSL lines on PSTN |               |                  |         |                  | Incumbents' access lines by other means |         |                | New entrants' access lines by other means |         |                  |
|                                                                                   |                       | Full ULL                        | Shared access | Bitstream access | Resale  | Total            | Cable modem                             | Other*  | Total          | Cable modem                               | Other*  | Total            |
| B                                                                                 | 370 728               | 272                             | 100           | 140              | 69 044  | 69 556           |                                         | 953     | 953            | 308 351                                   | 4 246   | 312 597          |
| DK                                                                                | 216 000               | 44 061                          | 6 960         | 250              |         | 51 271           | 42 000                                  | 31 328  | 73 328         | 79 549                                    | 8 602   | 88 151           |
| D                                                                                 | 2 580 000             | 161 000                         | 13            |                  | 530 000 | 691 013          |                                         | 19 000  | 19 000         | 86 000                                    |         | 86 000           |
| EL                                                                                | 0                     | 93                              | 0             | 0                | 0       | 93               | 0                                       | 0       | 0              | 0                                         | 593     | 593              |
| E                                                                                 | 579 903               |                                 |               | 166 413          |         | 166 413          |                                         |         | 0              | 231 011                                   | 8 012   | 239 023          |
| F                                                                                 | 691 000               | 1 043                           | 61            | 8 000            | 192 000 | 201 104          | 47 560                                  |         | 47 560         | 186 031                                   | 1 000   | 187 031          |
| IRL                                                                               | 1 714                 | 49                              | 134           | 0                | 0       | 183              | 0                                       | 1       | 1              | 1 478                                     | 100     | 1 578            |
| I                                                                                 | 475 000               | 42 285                          | 0             | 105 217          |         | 147 502          | 0                                       | 330     | 330            | 0                                         | 117 798 | 117 798          |
| L                                                                                 |                       |                                 |               |                  |         |                  |                                         |         |                |                                           |         |                  |
| NL                                                                                | 221 676               | 18 629                          | 10 478        | 0                |         | 29 107           |                                         |         | 0              | 800 000                                   |         | 800 000          |
| A                                                                                 | 113 900               | 3 876                           | 0             | 22 100           | 0       | 25 976           | 0                                       |         | 0              | 220 000                                   |         | 220 000          |
| P                                                                                 | 5 155                 | 20                              |               | 5 633            |         | 5 653            | 75 104                                  |         | 75 104         | 42 548                                    |         | 42 548           |
| FIN                                                                               | 112 000               | 10 000                          | 7 500         | 2 000            |         | 19 500           | 16 000                                  | 29 400  | 45 400         | 25 000                                    | 4 600   | 29 600           |
| S                                                                                 | 264 000               |                                 |               | 2 000            | 80 000  | 82 000           | 55 000                                  | 3 000   | 58 000         | 0                                         |         | 0                |
| UK                                                                                | 232 014               | 1 509                           | 0             | 165 820          | 0       | 167 329          | 0                                       | 160 000 | 160 000        | 598 000                                   | 69 000  | 667 000          |
| Tot. EU                                                                           | <b>5 863 090</b>      | 282 837                         | 25 246        | 477 573          | 871 044 | <b>1 656 700</b> | 235 664                                 | 244 012 | <b>479 676</b> | 2 577 968                                 | 213 951 | <b>2 791 919</b> |

\* "Other" refers to WLL, fibre, leased lines and satellite connections

Luxembourg failed to report any data. Of the 187 million existing PSTN subscriber lines, 7.52 million (4%) are broadband lines, mostly xDSL lines. Many of these are operated by the incumbents (5.86 million lines), leaving 1.66 million (or 22%) of retail customers subscribing to xDSL services from new entrants through unbundling, bitstream access or resale. When it is considered that over 871 000 of these 'new entrant' lines are resale lines with little differentiation from the incumbents' own product, and that over 90% of the rest are in just three Member States, the real competitive situation is clearly one of significant dominance by the incumbents on the wholesale market.

The situation is somewhat less discouraging when considering competition across all access platforms. Taking into account both PSTN lines and all other means of access, especially cable modem connections, there are some 10.79 million broadband connections to customers in the EU at the moment. Of these some 6.34 million connections are in the hands of incumbent telecommunications operators, leaving approximately 4.44 million or 41% of all broadband connections in the hands of new entrants.

The Seventh Report already referred to the case of Germany, for example, where apparently healthy full unbundling numbers mask the fact that most unbundled lines are used for purposes other than the provision of DSL services, and where retail DSL appeared to be offered by the incumbent at below cost. This view was subsequently supported by the German Monopoly Commission which, in a report issued in December 2001, pointed to the virtual

monopolisation of DSL services by the incumbent for the reasons set out in the Seventh Report.

This is one example of the effect of market dominance of the incumbent in one market on another closely connected market, where new entrants are reduced to using unbundled lines for competing on the ISDN market because they cannot compete with the incumbent on the DSL market. In other countries, there has simply been no effective take-up of unbundled lines because of the inability of new entrants to compete with the incumbent's retail DSL offerings. The means of promoting access on the fixed line network are varied, but new entrants cannot establish a business case or justify investment costs if there is continued lack of regulatory clarity or certainty concerning the tariff policies being pursued by incumbents for its retail broadband services.

This situation is worse where the line rental charge is actually lower (as in the case of Germany, Greece, Spain, Ireland, Portugal, Sweden and the United Kingdom) than the unbundling charge to operators. In most cases, of course, the cost of the subscription increases if the end-user were to opt for a DSL connection from the incumbent, but it nevertheless appears to lead to a situation where there is effectively no margin for new entrants.

As stated above, full unbundling, shared access and bitstream access must be regarded as being complementary in opening competition in local access. In these circumstances it is clear that there can be no relaxation on the part of regulators in enforcing this access obligation to the full.

One issue that needs to be examined in detail by NRAs is the effect of the technical restrictions of incumbents' access offers on new entrants. Some incumbents believe that they are in conformity with the rule of non-discrimination by offering access only at that point where access is given to their downstream arm (at one extreme at the local DSLAM<sup>23</sup>, at the other at a national point of presence (POP)). But in practice, this may impose heavy transmission costs on a new entrant whose network does not have the same geographic coverage and topography or, alternatively, condemn it to the simple role of reseller if it cannot control the quality and data rate supplied to the distant customer connected through the incumbent's network to its POP. This is why access at the ATM level is of great importance to new entrants, along with access at DSLAM and POP where appropriate, in order to allow them to make full use of their own network (or alternative network offerings) and to control the technical characteristics of the connection to the end-user.

The need for regulatory vigilance will continue for some time, given that alternative forms of access are only slowly offering greater competition in broadband services in the majority of Member States. Aside from the notable success of cable modem, access through WLL, fibre, satellite and leased line connections has not developed in any significant way, although there are encouraging signs from the UK (leased lines) and Italy (satellite and fibre).

Cable modem access has had notable success in the Netherlands, Belgium, and the United Kingdom, while it is also quite strong in Spain, Austria and France. Cable network operators are faced with a series of regulatory and financial obstacles concerning the upgrading of their networks, which means that, outside of the above countries, they are not in a position to offer serious competition for the moment, nor to develop their broadband facilities at a pace sufficient to keep up with the speed of development of competing DSL providers.

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<sup>23</sup> DSL access multiplexer

Wireless local loop (WLL) has so far failed to live up to its promise, and a number of licence operators have failed to fulfil their licence obligations for roll-out and some have gone into liquidation or have had to return their licences. There are only small pockets of WLL connections in some Member States, offering little or no competition to the other forms of broadband access.

While the current economic situation and the lack of investment finance is having a very clear effect on the development of alternative access infrastructures, it is clear that the dominant position of incumbents on the fixed line access market is preventing the development of competition in broadband services as a whole. Far from furthering the objectives of eEurope, artificially low retail prices for DSL services offered by incumbent operators will tend to foreclose competition and in the long run lead to higher prices to consumers for broadband services.

#### **4.6. Leased lines**

The Commission has repeatedly stressed that the timely and efficient availability of a range of leased lines at cost-oriented prices is a necessary condition for the development of effective competition in particular in high speed access to internet. Under the current framework, notified (SMP) operators must provide a minimum set of leased lines (from voice bandwidth to 2 Mbit/s) according to specific technical standards at cost-oriented tariffs and on a non-discriminatory basis<sup>24</sup>.

Further, at least one operator must be subject to the obligation to supply a minimum set of leased lines at every point in the national territory. Therefore the question of whether an operator has SMP in the leased lines market, and for what types of data rates, is subordinate to this requirement to ensure supply of leased lines throughout the market. Given the development of transmission capacity and market needs since the legislation was drawn up, the question of whether such an obligation to supply is to be imposed for higher bandwidths needs to be determined by NRAs. In the Netherlands for example, the incumbent does not have SMP for retail lines above 2Mbit/s. In the United Kingdom in October 2001 the incumbent submitted a request to OFTEL to determine that it does not have SMP for high bandwidth leased lines, where OFTEL has been tackling the lack of competition at retail level by taking action at the wholesale level. In Denmark, the NRA has determined that obligations for the provision of international circuits could be removed and obligations regarding the provision of backbone networks could be gradually reduced.

The growing number of Member States where competition for high-speed transmission capacity is significant will result in fewer SMP designations for high-speed lines, starting with international circuits. At the same time, just as the EU moves to the new regulatory framework, NRAs must ensure that the regulatory obligations on short distance and end-circuits are fully applied, and also that a supplier continues to be designated for the minimum set of leased lines throughout their territory.

##### **4.6.1. Pricing**

Despite the fact that regulatory obligations have been applied at EU level for over ten years, new entrants often have to rely on retail tariffs with discounts or retail-minus pricing and

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<sup>24</sup> Meaning that they shall apply similar conditions in similar circumstances to organisations providing similar services, and on the same conditions and of the same quality as they provide for their own services or their subsidiaries



there are still Member States where the cost-orientation of leased line tariffs of the incumbent or its subsidiaries is still not fully ensured (Belgium, Austria). In Belgium a study concerning the costing model for leased lines is underway as well as another on possible operators with significant market power, while Ireland is undertaking a review of leased line pricing. In Finland, no obligation of cost orientation is imposed on operators with SMP as regards the provision of leased lines, on the grounds that effective competition already exists on this market. In Luxembourg rebates to customers bring tariffs below those set by the regulator, which cause problems for competitors.

#### 4.6.1.1. National leased lines

For 64 Kbit/s lines, the most noticeable development since August 2001 is that charges have become stable, with only a 0.5% average reduction for the three circuits considered (2, 50 and 200 km). This average reduction hides a slight increase (0.6%) in the price of local circuits, offset by reductions in 200km circuits (-2%). This stability breaks a 3-year downward trend that represented an overall decrease of 25% for the period 1998 to 2002 (20% reduction for local circuits and 30% for 50 km and 200 km circuits).

The United Kingdom continues to be the most expensive Member State for local and 200 km 64 Kbit/s circuits. As regards local circuits, prices in the cheapest country, Germany, are 64% lower than in the United Kingdom. Seven Member States are cheaper than the EU average for these lines, while only five are cheaper for 200km circuits. In 2002, Belgium and Austria saw an increase in charges, with reductions in Germany, Spain, and France.

For 2 Mbit/s lines the average reduction is larger (3.5%) than for 64 Kbit/s lines, mainly driven by price reductions in local circuits (almost 5%). The two other distances considered (50 km and 200 km) experienced 2.4% and 3.2% reductions respectively. However, overall the pace of the downward trend has slowed dramatically if compared with that for previous years, given that for the period 1998 to 2002 the average reduction for 2 Mbit/s circuits, all distances considered, was 37%.

Differences in rental charges between countries are more pronounced than for 64 Kbit/s lines. Two km circuits in Denmark (€1 956) are 85% cheaper than in the Netherlands (€13 363). Contrary to the 64 Kbit/s situation, the number of countries with charges cheaper than the EU average (7) does not change with the distance.

For 200 km circuits Spain is the most expensive country (€58 893) against €12 737 in Sweden, 78% cheaper. Austria saw an important reduction in local circuits, 46%, compensated with a 9% increase in longer circuits. In Spain the average reduction for local circuits and 200 km lines was 5.5%. Inversely, the impact of the huge increase in charges for local circuits in the United Kingdom (29%) was slightly moderated by a reduction in long distance circuits (15%).

#### 4.6.1.2. International leased lines

Contrary to national leased lines, average annual rentals for international half-circuits have continued to decrease in the EU over the last year. For 64 Kbit/s circuits the downward trend has continued at the same or increased pace for lines to distant EU countries and the USA respectively, but has slowed for lines to near EU countries. The average reduction with respect to August 2001 is 7.4%, with the greatest reduction in circuits to the USA (11%).

Greece continues to be the most expensive country for 64 Kbit/s lines within the EU. Belgium and the United Kingdom share the second most expensive prices, although these two countries, especially the United Kingdom, have seen huge reductions in circuits to the USA, along with Ireland and Finland. The cheapest countries are Luxembourg and Denmark. Prices to distant EU countries in Luxembourg are 64% cheaper than in Greece.

Reductions for 2 Mbit/s lines have maintained the trend of previous years, regardless of distance. Greece, Sweden and Portugal are again the most expensive countries regarding distant destinations. At the other extreme Luxembourg and Finland offer the cheapest prices. For near EU destinations Greece and Spain are the most expensive and Denmark is by far the cheapest.

#### *4.6.2. Delivery periods and quality of service*

In the preparation of the annual Leased Lines report, the Commission's attention has been drawn to the possibility of significant improvements in delivery times towards the end of 2001 and in the beginning of 2002 among countries that had had some of the worst records in delivery performance (Germany, Ireland, the Netherlands). Nevertheless, these hoped-for improvements have yet to be confirmed by annual statistics and there are still problems in these countries as well as in Austria across a range of leased line data rates compared to EU best practice countries.

The comparison of delivery times and other categories does raise, however, the question of the exact timing criteria used, where there is still doubt as to whether the delivery period is measured from the same starting point in all Member States. There have been some significant improvements in service level agreements (Ireland, France) in which incumbents commit themselves to quality of service levels and, just as importantly, where there are now strict penalty clauses established in case of failure to deliver according to the quality of service conditions applied.

As regards the delivery of ordinary or special quality voice bandwidth leased lines, the longest delivery times have been recorded in Ireland, where the situation has actually deteriorated since last year for ordinary quality lines. There have been significant improvements in the Netherlands and Austria, but together with Spain and Germany these countries still have among the longest delivery periods for national lines. In relation to 64 Kbit/s lines, Germany had the longest period for delivery, 90 days, while on the other end of the spectrum it was 21 days in France, and the French authorities have stated that a new regime of 14 days for delivery was introduced in 2001. In Germany, previous action by the NRA on tariffs was complemented in May 2002 by a decision setting binding timelimits for the delivery of leased lines in this category as well as 2 Mbit/s.

As regards 2 Mbit/s lines, which are a key product for the development of competition in local high speed access, delivery times have not decreased significantly since last year. Periods were again very long for Germany (168 days), compared to the relatively short periods reported in Luxembourg and Greece. The situation with regard to higher capacity leased lines is more difficult to judge, as some Member States were not in a position to report on the various categories supplied, in some cases because no SMP designation exists and therefore there is no obligatory reporting.

In judging the relative performance of Member States in the pricing and delivery of leased lines, a number of "best practices" can be identified. Denmark's incumbent has consistently attained the lowest prices across a number of data rates and distances for its leased lines, and

should obviously serve as a target for other countries. As regards delivery periods, and while Finland and the United Kingdom (Kingston) have attained a good result in a number of categories, Belgium appears to be the most consistent performer in ensuring speedy delivery of leased lines. Finally, and while there have been serious problems regarding delivery periods, Ireland now appears to have the most effective and comprehensive SLAs applying to its incumbent operator, which has also developed a widely welcomed on-line system for tracking the progress of an order.

#### **4.7. Numbering**

##### *4.7.1. Carrier selection and carrier pre-selection*

Carrier selection and carrier pre-selection should have been available in all Member States from 1 January 2000, except in countries which had been granted a deferment.

Carrier selection and carrier pre-selection are available for all calls to geographic numbers from fixed telephones, with the exception of Germany for local calls. Legislation has now been adopted; an infringement proceeding is still pending. Greece has a deferment until 1 January 2003. Calls to non-geographic numbers can be made via carrier selection and carrier pre-selection in seven Member States.

The implementation of carrier selection does not appear to pose major problems in any Member State.

The implementation of carrier pre-selection appears to be much more sensitive across the EU. In almost all Member States, new entrants complain about win-back campaigns from the incumbents. These are marketing efforts targeted specifically at recent converts to carrier pre-selection. New entrants also claim that the retail division of incumbents often uses privileged customer data provided by its network division when implementing carrier pre-selection. In order to limit this practice, the Spanish regulator, CMT, has adopted a Decision preventing operators who have lost a customer to another, pre-selected, operator from taking steps to recover that customer for a period of four months.

Several new entrants also request the inclusion of carrier pre-select calls on the incumbent's bill, in order to eliminate the barrier to entry constituted by the «double-billing» of customers.

Carrier selection and carrier pre-selection have proved to be very useful tools in developing competition in all Member States. In Finland however, carrier pre-selection has not contributed to local competition. After launching several infringement proceedings, the Commission is now generally satisfied with the implementation of carrier selection and carrier pre-selection across the EU.

##### *4.7.2. Number portability*

Number portability for fixed numbers was to be introduced in all Member States, except those with a deferment, by 1 January 2000.

Number portability for fixed numbers is available throughout the European Union, except in France for certain non-geographic numbers and Luxembourg for all non-geographic numbers. Greece has a deferment until 1 January 2003. Some Member States have achieved very good results for ported numbers. As of mid 2002 the United Kingdom had close to 4 million fixed numbers ported, Belgium 413 700, the Netherlands 363 300, Spain 327 250 and Denmark 364 000. Other countries had less than 100 000 numbers ported.

Mobile number portability is not mandated by the current regulatory framework, but will become compulsory under the new framework. Mobile number portability is currently offered in eight Member States, with a particularly high take-up in the United Kingdom (1.6 million), Spain (530 000), the Netherlands (250 000) and Denmark (214 000).

The cost of porting numbers is under criticism from new entrants in a number Member States, as they see it as a barrier to the development of their business cases. Customers are often not willing to pay the full amount requested to port a number, and competitors have themselves to bear part of the price. Even though the cost is fixed by the NRA according to the cost-orientation principle, it is still perceived as being too high by new entrants.

#### **4.8. Cost accounting and accounting separation**

Under Community law, NRAs are responsible for ensuring that the cost accounting systems of notified (mainly incumbent) operators are suitable for applying the tariff principles in the directives, in particular relating to transparency and cost orientation. Tables in Annex 2 provide further detail on the implementation of cost accounting and accounting separation. Reference to specific cost accounting requirements relating for example to leased lines, local loop unbundling and interconnection is made under the relevant sections of the report.

In its recommendations<sup>25</sup> on interconnection pricing, the Commission considered that the most appropriate approach is one based on forward looking long-run average incremental costs (LRAIC) – which implies an accounting system based on current costs – since this is most appropriate for a competitive market.

Whereas in most Member States current costs are used as the *cost base* for pricing interconnection and unbundled local loops, their use for leased lines and voice telephony is more limited. For interconnection charges, historic costs are still used in the systems applied by the notified operators in Denmark, Luxembourg, Portugal, Finland and Sweden, although most of them have started the process of migrating towards a system reflecting current costs. As regards Finland, it should be pointed out that there are more than fifty operators with SMP, with each of them developing its own model; the major player uses a current cost basis. Denmark is at present the only country still adjusting interconnection charges to an international benchmark of the interconnection charges applied in a few EU countries, although prices are due to be set by reference to a LRAIC model from January 2003.

Regarding the *cost standard* implemented for modelling interconnection costs, the LRAIC methodology is already applied in a first group of incumbents in six Member States (Germany, Greece, France, Ireland, the Netherlands for termination charges, and the United Kingdom). In Austria, the NRA uses a FL-LRIC model. Several other Member States are currently developing LRAIC models under the supervision of the NRA (Belgium, Denmark, Spain, Italy, Luxembourg). Sweden intends to move to LRAIC from January 2004 only, while Portugal and Finland have not taken any decision.

A key element of compliance with the principles contained in EU law regarding costing is the existence of a *verification process*, including an audit by an independent auditor or the NRA. The Commission has taken action in this regard, opening infringement procedures against

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<sup>25</sup> Commission Recommendation 98/195/EC of 8 January 1998 on interconnection in a liberalised telecommunications market, Part 1 – Interconnection Pricing, OJ L 73, 12.3.1998; Commission Recommendation 98/322/EC of 8 April 1998 on interconnection in a liberalised telecommunications market, Part 2 – Accounting separation and cost accounting, OJ L 141, 13.5.1998.

several Member States. Currently, audits are generally performed by external independent auditors, although in many cases the NRAs carry out additional verification procedures. Only three NRAs (in Germany, Austria and Finland) perform all verification procedures themselves in order to validate the systems used by their respective operators. All Member States have verified at least once the accounting systems of the notified operators, except Belgium (where the incumbent has not disclosed a description of its model and verification has taken place on the NRA's model only), Luxembourg and Finland (where the systems of some eighteen SMP operators have been verified out of a total of more than fifty SMP operators). In Greece the results of the first audit relate to 2001.

The *scope* of the audit is a key element in assessing whether the process put in place by the regulator allows verification of the suitability of the accounting systems used by the notified operators. This is usually comprehensive, including methodology, accuracy and volumes (see Annex 2). However, two Member States perform a high-level review of some part(s) of the model (Denmark and Finland).

The *timing* of the verification is an important part of the process; the gap between the last audited accounts and the period for which tariffs are calculated affects negatively the quality of the forecasts performed to set tariffs. In three Member States audits for the 2000 accounts have not been carried out yet for quite different reasons: in Belgium audits have not been imposed by the NRA; in Italy the auditor was appointed late and the audit is still under way and in Luxembourg no audit has been carried out until now. Statements concerning compliance for 2000 have not been published yet in France and Italy (where statements are published with lengthy delays), Belgium (where a statement has been issued regarding interconnection costs for 2001 accounts only) and Luxembourg (where no verification has occurred). In Finland the NRA issued a statement at the end of 2001 which does not distinguish between the SMP operators audited. In Greece the statement concerning the verification of the interconnection costs has not been published yet.

In conclusion, although the level of implementation of cost accounting varies across the EU, most Member States are working on improving the cost accounting models and cost orientation of charges and tariffs. However, the scope of the audits and missing reconciliations create uncertainty regarding the cost figures used to determine prices as well as the transparency of the information used.

As regards *accounting separation*, i.e. the requirement to keep separate regulatory accounts for the purposes of costing transparency and to prevent possible anti-competitive practices, in Germany separate accounts are prepared only in the context of specific bottom-up calculations, while in Austria a pending proceeding will require separated accounts for 2001. In Luxembourg accounting separation is being implemented. However, it should be pointed out that where separate accounts are prepared in a comprehensive way, these do not seem to include key elements such as transfer charges between business units (Greece, Spain, the Netherlands, Finland), costs or revenues. There are therefore still significant aspects to be improved across the EU before implementation of accounting separation can be regarded as satisfactory.

The implementation of cost accounting and accounting separation in Ireland and in the United Kingdom can be regarded as best practice in the EU as regards the approach and methodology used, the detail of the verification carried out by the regulators and the availability of information to third parties. All these elements result in greater transparency of the tariff determination process and contribute to establishing confidence in the cost accounting systems of the notified operators and indirectly in the cost orientation of tariffs.

## **4.9. Authorisations**

### **4.9.1. Conditions**

The current licensing directive gives an exhaustive list of issues which may be covered by licensing conditions, in particular relating to use of numbers, financial reliability, essential requirements, compliance with competition rules, universal service contributions, and other public interest requirements.

A number of improvements have been made since liberalisation to national licensing regimes regarding the conditions attached to licences and authorisations, and most Member States' licensing systems are now in line with the directive in this regard. Despite progress, Spain is still in a process of converting licences issued under the previous licensing regime, a situation that poses a challenge bearing in mind that current authorisations should be brought in line with the new Authorisation Directive by 25 July 2003. The French licensing system still imposes an obligation on licensees to invest a proportion of turnover in research and development, a condition not covered by the current directive. The Commission has re-opened an infringement proceeding against France on the matter. In general, market players did not complain about licensing conditions except in Italy, where satellite operators called for a further simplification of licensing conditions.

As regards mobile licences, the conditions in 3G network licences relating to roll-out and coverage requirements have been the subject of intense debate over recent months, in view of the difficulties experienced generally in the sector and the anticipated delays in the commercial launch of 3G services.

It should be recalled in the first instance that the existence of licence conditions relating to the deployment of mobile networks is compatible with the current and future EU regulatory frameworks, while the precise scope of those conditions currently remain to be determined by the Member States in accordance with national circumstances. Nevertheless, calls have been made for the relaxation of licence conditions and in three Member States (Belgium, Spain and Portugal) there has been a postponement of certain requirements of the original 3G licences relating to roll-out and coverage. In addition, in two Member States (Italy and France) the duration originally provided for the 3G licences has been extended (from 15 to 20 years).

In its Communication of June 2002 "Towards the Full Roll-Out of Third Generation Mobile Communications", the Commission stressed the need for stability of the regulatory environment, while acknowledging that adaptation of deployment modalities may become necessary. It stated that such changes need to be undertaken under transparent and objective conditions, which would imply a public consultation on the basis of a reasoned and justified proposal. The Commission also recommended that any changes to licence conditions be discussed with other national administrations in an appropriate forum, in order to facilitate the exchange of information and best practice and to work towards a co-ordinated approach throughout the EU.

Licence conditions in all Member States permit to varying degrees the use of network infrastructure sharing arrangements to facilitate the roll-out of 3G networks. Indeed in some cases the sharing of facilities such as masts may also be mandated at national level, for environmental and other public interest reasons. While these arrangements are subject to the application of the competition rules, and the extent to which they satisfy the deployment requirements of individual licences is a matter of national law, the Commission is in principle

in favour of this means of speeding up the availability of broadband mobile services to the public.

#### 4.9.2. *Fees*

Licence fees should seek only to cover the administrative costs incurred in administering the licence in question, and must be proportionate to the work involved<sup>26</sup>. A table setting out fee levels in the Member States for the provision of fixed voice telephony services is given in Annex 2.

A lengthy process to moderate the high one-off fees applied in Germany has now reached a solution. Following annulment of the previous regulation on licence fees by the Highest Administrative Court, a new regulation has now entered into force providing for licence fees covering the cost of the award of the licence.

In most Member States the level of administrative fees has remained unchanged since last year. Compared to 2001, administrative fees have been changed in four Member States (Belgium, Italy, the Netherlands and Sweden). In Belgium and Italy the fees in nominal terms have increased slightly in every category whereas in Sweden the increase has been somewhat bigger. In the Netherlands, the structure of the fees has been changed so that fees for SMP operators have increased whereas fees for other operators have either decreased or remained unchanged.

As far as numbering fees are concerned four Member States (Germany, Finland, France, the Netherlands) reported decreased fees, whereas two Member States have slightly raised numbering fees in nominal terms (Belgium, Italy).

The current level of administrative and numbering fees does not seem to be a major problem since, apart from concerns expressed by Italian satellite operators, market players have not raised fees as a problem. The Italian authorities envisage reviewing fees with the transposition of the new framework.

The level of spectrum charges applicable to mobile networks has largely remained unchanged since the time when the licences were granted. However, changes have been made in Spain, where the 2002 Budget Law provided for an average reduction of 65% of the spectrum reservation charges over 2001 for GSM, DCS and UMTS technologies, and the introduction of a cap on future increases of 5% on an annual basis until 2006. This followed the substantial increases in the spectrum reservation charges effected by the Spanish Budget Law for 2001. In France, following the failure to obtain more than two applications in the initial 3G licensing round in 2001, the price of the licences was altered to a once-off charge of €619m and an annual 1% levy on 3G turnover, in time for the second licensing round in 2002.

#### 4.9.3. *R-LAN Public Services*

An area which is of growing commercial interest to operators is the provision to the public of R-LAN (radio local area network) services as a complement to other broadband and mobile technologies. This is an activity which in most Member States is licence exempt, but in four Member States (Spain, Italy, Luxembourg and Greece) provision of R-LAN services to the

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<sup>26</sup> In addition, charges can be imposed to ensure the optimal use of scarce resources, which explains the differences between fee structures for fixed and mobile infrastructures and services.

public is not currently permitted, although there are indications that changes are being considered in this respect in those countries.

The Commission is considering issuing a Recommendation in this area, the main message of which will be that the provision of R-LAN access services to the public should be either licence exempt or subject to general authorisation only, and that no individual right should be required for the use of the spectrum necessary for the provision of such services. This is currently the subject of consultation with the Member States.

#### *4.9.4. Rights of way*

Market entry by network operators, and the development of the telecommunications market as a whole, depends on the conditions under which networks can be rolled out and new infrastructure installed. The EU regulatory framework therefore establishes a non-discrimination principle for the grant of rights of way and promotes facility sharing where the grant of additional rights of way is not possible as a result of applicable essential requirements, such as environmental protection and/or town and country planning objectives. Procedures for granting rights of way should be objective, timely, and transparent, with the independence of competent authorities ensured at all levels. These principles are effectively carried over into the new framework.

Previous reports have identified a variety of problems with regard to rights of way, such as the grant of specific rights to the incumbent, lack of transparency in regulations and procedures and the unclear division of competence between the different levels of authority with responsibilities in this field. This has led to disadvantages for new entrants and significant delays in the deployment of new infrastructure.

Difficulties and delays in obtaining rights of way and building permits for network infrastructure remain an important concern for operators across the EU, particularly as regards the roll-out of 3G networks. While there are legitimate environmental and public health concerns underlying some of these problems, and recognising that this is in many cases a matter for local authorities, it is clear that the situation is exacerbated by the multiplicity of regulation and a lack of consistency or co-ordination in the procedural and policy approaches adopted at local or regional level. In particular, problems persist in Greece and Austria (in relation to mobile networks, as a result of public health concerns), in France (as regards cable operators in particular), in Luxembourg (despite recent developments resulting from an infringement procedure), and in Belgium, Italy, Sweden and Spain. Special concerns arise in some Member States, such as Italy, in relation to the grant of discriminatory rights where local authorities retain control or ownership of undertakings operating telecommunications networks and services.

An additional concern is the risk of proliferation of taxes or other charges levied by local or regional authorities on mobile network infrastructure located in the public domain. This is particularly the case in Belgium, where legislation at regional level designed to impose taxes on fixed and mobile infrastructure is being contested at the Federal level. Concerns have also been raised at the possibility of a fee corresponding to a certain percentage of operators' revenue might be introduced by local administrations for the grant of rights to install facilities in Spain.

On the other hand, there are encouraging signs that the Member States are becoming increasingly aware of the need to tackle these problems, as evidenced by a number of national initiatives designed to improve co-ordination and consistency of rules in this area. For



example, the Danish, Austrian and Spanish telecommunications authorities have issued guidance to local authorities in this area; while the Greek, Irish and Netherlands authorities have set up working groups bringing together the relevant participants. The initiative by the Italian authorities to harmonise the different regional laws in this matter is particularly to be welcomed.

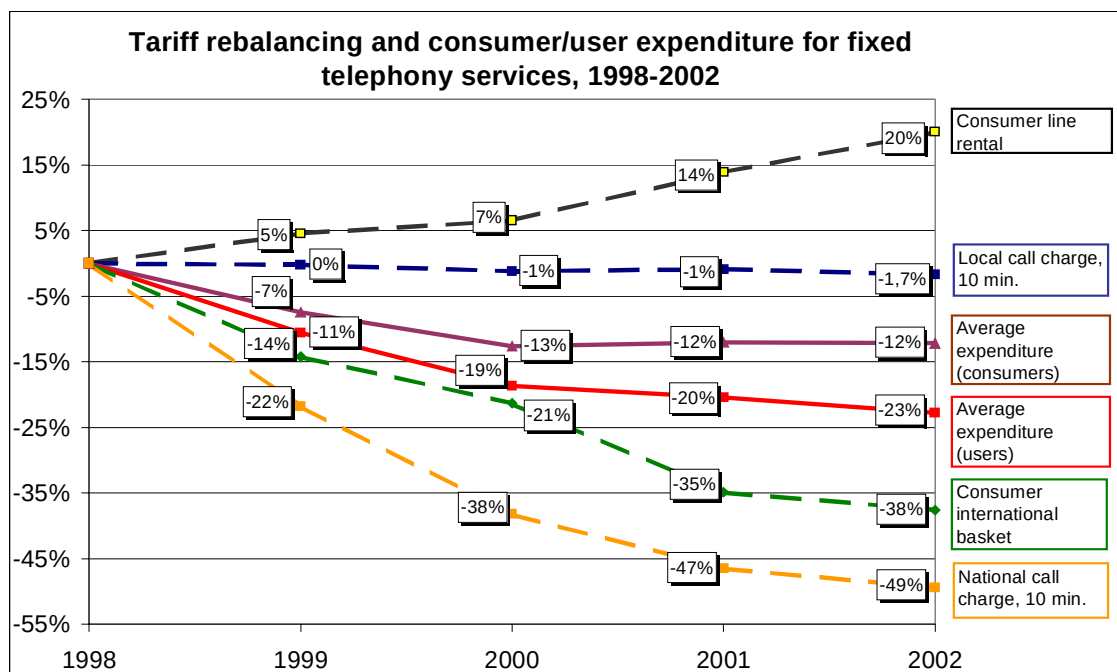
#### **4.10. Universal service, consumers, users**

##### *4.10.1. Retail prices*

##### *4.10.1.1. Cost orientation, cost accounting, special tariffs schemes*

Tariffs for use of fixed public telephone networks and services of organisations with SMP are required to follow the principle of cost orientation, to which purpose the verification of the operation of a consistent cost accounting system is crucial. Moreover, any discount scheme applied by these organisations to their users of the services must be fully transparent and be published and applied in accordance with the principle of non-discrimination. The implementation of these principles is essential if distortions of market conditions – such as price-squeeze - are to be avoided, and to enable prices to decrease as a result of competitive pressure.

Community law has therefore provided for a progressive rebalancing of retail tariffs towards costs, which appears broadly to have taken place, though to differing degrees in individual Member States. The data in Annex 2 and in the graph below show that since the liberalisation of voice telephony (1 January 1998), line rental charges have increased across the EU (around 20% for both residential and business users), while local call tariffs have shown less marked increases depending on call duration. In parallel, national and international call prices have decreased sharply (around 50% and 40% for business and residential users respectively). However, some Member States consider that tariffs have not yet been fully rebalanced (Belgium, Germany, Luxembourg, Portugal and Sweden). In other cases, the Commission has opened infringement proceedings when rigid price systems have constrained the rebalancing of tariffs, notably against Spain, where the case has been referred to the Court of Justice. Moreover, in a number of Member States there is a limited margin between the monthly rental for residential customers and the monthly rental of the full unbundled local loop for the provision of voice telephony services. In May 2002 the Commission sent a statement of objections to the German incumbent operator in this regard.



See footnote <sup>27</sup>

An active role for the NRA, especially in the verification of the cost-accounting system operated by the SMP operators, is obviously of great importance. NRAs must be suitably empowered to this end, which is not the case in Belgium, and must exercise their powers actively in this field, as is the case in Denmark, Spain, Italy, the Netherlands, and the United Kingdom. However, the risk of anti-competitive pricing inhibiting market entry and distorting competition is likely still to be significant at the date of application of the new framework.

Despite increasing competition, Member States still consider that the level of competition in most retail voice telephony markets is alone not sufficient to counterbalance the market power of the incumbent operator. Price cap systems are used in the majority of Member States to ensure tariff reductions, achieve effective competition and pursue public interest needs, such as maintaining the affordability of publicly available telephony services. Only Finland has removed the obligation of cost orientation for national and international calls.

#### 4.10.1.2. Universal service funding schemes

The principal aim of EU universal service policy and legislation in telecommunications is to ensure that a defined set of services is made available to all users, independently of their geographical location, and in the light of specific national conditions, at an affordable price, particularly with regard to disabled users and users with special social needs.

Although, in general terms, universal service seems to be provided in all Member States with no major problems, there are still some areas of concern. This is particularly the case with the implementation of specific measures for disabled users and users with special social needs, and the provision of directory services and directory enquiry services covering all subscribers.

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These variations are calculated on a PSTN basket, users/consumers are assumed to be using a PSTN service from the incumbent operator. See paragraph 8.3 of Annex 1 for detail of the composition of the basket.

Average expenditure refers to local and national calls only.

As far as specific measures for disabled users and users with special social needs are concerned, only a few Member States have introduced special tariff schemes for these groups of users (such as Austria, Germany and Italy). Data in Annex 2 show, however, that specific provisions have been implemented in most Member States, with the exception of France, the Netherlands and Austria, in order to facilitate the use of telephone services by disabled users (i.e. free calls to the directory enquiry services and braille bills for blind users).

On the other hand, the provision of directory services and directory enquiry services including all subscribers has proved problematic, leading the Commission to open infringement proceedings in a number of cases. Nevertheless, some improvements have been reported recently (e.g. in Greece, where new regulations have been approved, although not yet implemented) as shown in Annex 2. In this context, the setting up of a coherent system to gather subscriber data and provide them to any interested entities in a cost-oriented and non-discriminatory way is crucial for the provision of universal directory services.

Where the provision of all these services results in an unfair burden on the companies concerned, EU law allows Member States to finance the corresponding net cost by establishing a fund so that this cost can be shared amongst market players. For the calculation of that net cost, the implementation of a consistent cost accounting system is, of course, of great importance. Only providers of public telecommunications networks and/or publicly available voice telephony services will be requested to contribute to the provision and/or financing of universal service obligations and the method of allocation between them must be based on objective and non-discriminatory criteria.

The Court of Justice has given clear criteria in this field in its rulings of 30 November 2000 (case *Commission v. the Kingdom of Belgium*, C-384/99) and more recently of 6 December 2001 (case *Commission v. France*, C-146/00), which should facilitate the transposition of the new framework. The universal service principles are carried over into the new framework, but in a wider context, since the scope of the new provision is extended to all electronic communications services.

As incumbents' market shares decrease, there is an increased trend towards requests for funding of universal service provision. In the last year, the relevant operators have requested the funding of the net cost of the provision of universal service in Portugal, Belgium, Spain, Ireland and Austria (although in this last case the request was finally withdrawn). A public consultation on this subject has been conducted in Greece and France (as a result of the ruling of the Court of Justice).

However, for the time being only two Member States have required actual payments from other operators to the universal service provider (France and Italy), while two other Member States (Spain and the United Kingdom) have concluded that the provision of the universal service had not implied an unfair burden for the designated operator. More details are given in Annex 2.

#### 4.10.1.3. User and consumer issues

The framework has the objective of ensuring the provision of a set of basic consumer rights, such as transparency of information, quality telephone services, access to directories and itemised billing. There is broad continuity in these fields under the new framework.

Consumers must be physically provided with a contract by providers of fixed or mobile telephone service, while standard terms and conditions must be published under the

supervision of the NRA. This would appear to be the case in all Member States, following recent regulation in Luxembourg, against which an infringement proceeding regarding the lack of powers of the NRA in this respect has been running.

A list of indicators is defined at Community level for measuring the quality of voice telephony services. Those indicators are intended to allow NRAs to monitor quality of service and to take appropriate corrective measures, i.e. by imposing certain quality targets for SMP operators. SMP operators must keep up-to-date information concerning their performance based on those parameters. This provisions seems to be implemented in all Member States, as shown in Annex 2. Furthermore, in almost all of them the NRA has set quality of service performance targets for SMP operators (the exceptions are Ireland, Finland, Sweden and the United Kingdom) ; only in Belgium, Ireland and the United Kingdom have measurements of quality of service been published by the NRA for 2001. However, OFTEL has established comparable performance indicators (CPIs), which provide comparable quality-of-service information on a wide range of telecommunications operators in the United Kingdom, as well as quality surveys for the four mobile networks.

There is no doubt that one of the basic tools for improving consumer confidence is the provision of itemised billing. The current EU framework requires a basic level of itemised billing identifying each call to be provided to users on request at no extra cost in order to allow verification of the charges incurred and to monitor usage and expenditure. Where appropriate, additional levels of detail can be offered to subscribers at reasonable tariffs or at no charge.

As a result of previous reports, the Commission opened infringement proceedings against several Member States. Of those whose cases were still pending by the time of the Seventh report, Denmark, Greece and Luxembourg have already introduced provisions in their legislation in order to fulfil EU requirements, and the Netherlands is planning to do so in the near future. In the case of Austria the Commission has decided to refer the case to the Court of Justice. In Finland, according to recent information, it appears that, as a general rule, calls are not itemised individually in the bills provided free of charge.

As final protection for the user, any measures to cover non-payment of telephone bills for use of the fixed public telephone network must be proportionate, non-discriminatory and easily accessible to interested parties. Due warning of any consequent service interruption or disconnection must be given beforehand. No problems have been reported in this field.

Users should also have access over the fixed public telephone networks to selective call barring. Most of the Member States, with the exception of Austria, are in compliance with this provision, as can be concluded from data in Annex 2.

#### **4.11. Data protection**

##### *4.11.1. Storage for billing purposes and traffic data retention*

Under the current framework, traffic data must be erased or made anonymous on termination of the call. Traffic data may processed only for the purpose of billing and interconnection payments, up to the end of the period during which the bill may be lawfully challenged or payment may be pursued. The new directive on privacy and electronic communications includes a similar provision, extending the application to all electronic communications and creating further possibilities to store traffic data for marketing purposes and the provision of value added services, subject to consent.

It is clear that the periods during which operators need to store traffic data for billing purposes vary considerably between Member States, since the period during which a bill can be lawfully challenged is usually based on civil law, which itself varies significantly; it ranges from three months (Finland) to six years (United Kingdom). This may create obstacles for the functioning of the internal market.

Under the current framework, Member States may, however, adopt legislation deviating from the obligation to erase traffic data where it is necessary for instance for national security and the prevention or prosecution of crime. The new Directive takes over this provision, and adds appropriateness and proportionality to the necessity test, and it also explicitly states that national measures should be in accordance with the general principles of Community law. Moreover, it prescribes that the retention period shall be limited.

Available data on these issues are reflected in Annex 2. In a number of Member States (Belgium, Denmark, Spain, France, Luxembourg) legislation regarding the retention of traffic data for the purpose of criminal investigations has been adopted, while in all of those countries secondary legislation determining the exact retention period is still awaited. The retention period is set at a maximum of twelve months in the primary legislation of these countries, except for Belgium, where twelve months is the minimum. In Spain the retention obligation applies to information society services. In Germany traffic data retention for law enforcement purposes can be imposed on operators in individual cases and requires a court order. In the United Kingdom the time periods under consideration for retention of traffic data for national security purposes vary between six and twelve months. Regarding pre-paid cards and ISPs, there is an obligation in the Netherlands to retain a limited set of traffic data for three months for the purpose of criminal investigation.

It appears that the periods for the retention of traffic data for purposes other than billing and interconnection payment are still under consideration in a number of Member States, and that these periods tend to be shorter than the retention periods for billing and interconnection payment purposes. It is not clear whether the traffic data to be retained for purposes other than billing differ from the traffic data that may be retained for billing and interconnection payment purposes.

The low level of harmonisation regarding the retention of traffic data in the Member States, both for billing and other purposes, puts a financial burden on operators and has an impact in particular on cross-border players. It is often not clear to operators whether compensation for their financial burden is being considered.

Only in the past year has the impact of data retention legislation become more clear, which is probably due to the fact that after liberalisation, the focus was first on telecommunications issues such as licensing, interconnection and access to markets, whereas data protection issues were not regarded as being so important by operators. However, a few years after liberalisation, while a number of Member States have introduced or are considering the introduction of more stringent legislation (on the grounds of national security and for the purpose of criminal investigation), and in a situation where the financial markets are in a fragile condition, operators are now more focused on data protection issues and the consequences of national legislation and the low level of European harmonisation. There is a need for clarity from all Member States on their overall approach regarding the retention of traffic data.

#### 4.11.2. *Unsolicited calls, faxes and e-mails*

The current framework has an opt-in approach for unsolicited faxes. However, in Greece and Luxembourg there is no regime at all, which is not in line with the provisions of the Directive.

The current Directive also indicates that Member States can choose between an opt-in or an opt-out approach for unsolicited calls for the purpose of direct marketing, while e-mail is strictly speaking not covered by the Directive. Annex 2 shows that Denmark, Germany, Greece, Spain, Italy, Austria and Sweden have chosen an opt-in approach for both unsolicited calls and unsolicited e-mails. The United Kingdom has chosen an opt-out approach for both. Ireland applies an opt-out approach to unsolicited calls and none to unsolicited e-mails. The Netherlands applies an opt-in approach to unsolicited calls and an opt-out approach to unsolicited e-mails, whereas Finland has chosen the exact opposite approach. France has also chosen an opt-out applying to unsolicited calls and no regime applies to unsolicited e-mails. Belgium and Luxembourg have not made a decision as to what method to apply, which is in conflict with the current Directive, which requires Member States to adopt either an opt-in or an opt-out regime for unsolicited calls. Portugal applies an opt-out approach to unsolicited e-mails.

The new directive on data protection in electronic communications maintains a choice between an opt-in or an opt-out regime for unsolicited calls, while for faxes and e-mails (including all forms of electronic messaging systems such as SMS, MMS etc) for the purpose of direct marketing, an opt-in regime will be required. This means that a number of Member States will have to change their legislation in this respect in order to meet the provisions of the new Directive, which needs to be transposed in all Member States by the end of October 2003.

## 5. IMPLEMENTATION OF THE UMTS DECISION

All Member States have now effectively implemented the UMTS Decision<sup>28</sup>, since 3G licences have been awarded in all Member States, assigning frequencies allocated to 3G in accordance with the relevant ERC Decisions<sup>29</sup>, which in turn were adopted as a result of mandates given to the CEPT under the UMTS Decision. A more detailed report on the implementation of the UMTS Decision in the Member States can be found in Annex 2. This report, together with the Commission's previous communications on the situation in the 3G market<sup>30</sup>, fulfils the reporting requirements under the UMTS Decision.

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<sup>28</sup> Decision 128/1999/EC of the European Parliament and of the Council of 14 December 1998 on the co-ordinated introduction of a third-generation mobile and wireless communications system (UMTS) in the Community (OJ L 17, 22.1.1999, p. 1).

<sup>29</sup> ERC Decisions ERC(97) 07 (UMTS frequency bands); ERC(00) 01 (extending UMTS bands); and ERC(99) 25 (harmonised use).

<sup>30</sup> Communication on "The Introduction of Third Generation Mobile Communications in the European Union: State of Play and the Way Forward, COM(2001) 141 of 20 March 2001; Communication: "Towards the full Roll-out of Third Generation Mobile Communications", COM(2002) 301 of 11 June 2002.

## 6. STATUS OF PREPARATION FOR TRANSPOSITION OF THE NEW FRAMEWORK

The directives making up the main elements of the new regulatory framework for electronic communications networks and services<sup>31</sup> are required to be transposed into national law by no later than 24 July 2003. The new framework also stipulates that Member States shall apply those national transposition measures from 25 July 2003<sup>32</sup>, whereupon the Community instruments forming part of the existing regulatory framework which are to be superseded by those elements of the new framework, will be repealed<sup>33</sup>.

All the Member States are therefore in a period of intensive preparation of the legislative measures needed to transpose the new framework into national law. Most Member States have now launched public consultations on the implementation of the new framework and have published or are shortly to publish draft laws designed to achieve this. The legislative models which can be used to transpose the new framework range from the adoption of a comprehensive new communications law (as is contemplated in Belgium, Spain, France, Italy, Austria, Portugal, Finland, Sweden and the United Kingdom) to the making of the necessary amendments to the existing communications laws (as is contemplated in Denmark and the Netherlands). The Commission believes it is of the utmost importance for the orderly transition to the new framework that the necessary national transposition measures be adopted in time to ensure their application on 25 July 2003.

Once these measures are in place, it will then be possible for national regulatory authorities to complete the process of market analysis and assessment of effective competition which is needed to adjust existing *ex ante* regulation to the principles of the new framework. It is anticipated that this process of adjustment will continue over a period of months following the “date of application” referred to above, but it is a precondition for that process that the underlying administrative structures and legislative framework are in place. Some national regulatory authorities (for example those in Denmark, Greece, Spain, Ireland, Luxembourg, Finland, Sweden and the United Kingdom) have indicated that they should be able to carry out their market analyses in anticipation of the July 2003 application date, while others (such as in Germany and the Netherlands) have stated that they do not have the legal power to perform this function under national law until the new framework has been transposed. Although the Netherlands national regulatory authority does not yet have the necessary legal power to collect the relevant information needed for the market assessments, a legislative proposal has been drafted to deal with this issue on an interim basis.

One area which may require particular attention in a number of Member States is the relationship between the national regulatory authorities and the national competition authorities, since there will need to be close co-operation between these bodies at national level in order to ensure consistency of approach in assessing the conditions of competition in the relevant markets. Some Member States, such as Belgium, Italy and Austria, are considering the possibility that this co-operation should be governed by formal protocols between the two authorities, while others (such as the Netherlands and the United Kingdom)

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<sup>31</sup> These are Directive 2002/21/EC (Framework Directive); Directive 2002/20/EC (Authorisation Directive); Directive 2002/19/EC (Access Directive); and Directive 2002/22/EC (Universal Service Directive). Member States have until 31 October 2003 to transpose the requirements of Directive 2002/58/EC (the Directive on privacy and electronic communications) into national law. The Radio Spectrum Decision (676/2002/EC) does not require transposition by Member States.

<sup>32</sup> See for example Article 28 Framework Directive.

<sup>33</sup> See Article 26 Framework Directive.

are intending to combine both regulatory and competition functions within one, converged authority. Member States will also need to devote particular care to ensuring that the national regulatory authorities possess the requisite resources, in terms of both manpower and expertise, to enable them to carry out the process of market definition and analysis required by the new framework.

The Commission is actively following the preparations under way in the Member States and will take appropriate enforcement action in the event that the obligations of the new framework are not met in a timely fashion.

The consistent application of the new regulatory framework across the European Union also requires that close and regular co-operation takes place at the European level between the national regulatory authorities from all Member States and with the Commission. It is particularly important that national regulatory authorities seek to reach agreement on the types of instruments and remedies best suited to address particular types of situation in the market place, so that the single market in electronic communications can be achieved under equal and non-discriminatory conditions for all operators across the EU. Specific obligations in this regard are included in the new framework<sup>34</sup>, and mechanisms have been established within which this co-operation can take place (notably the Communications Committee and the European Regulators' Group, as well as the Radio Spectrum Committee and the Radio Spectrum Policy Group).

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<sup>34</sup> See Article 7(2) Framework Directive in particular.