

EN

EN

EN



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 20.12.2005  
SEC(2005) 1781

**COMMISSION STAFF WORKING DOCUMENT**

**Evaluation of the Performance of Network Industries Providing Services of  
General Economic Interest**

**2005 Report**

**Working paper of the Services of Mr Almunia and Mr McCreevy in cooperation with  
the services of Mr Kyprianou**

## Table of Contents

1.	Main Policy Developments and Evolution of the Legislative Framework .....	4
2.	Market Performances .....	6
2.1	Evolution of the Market Structure.....	6
2.2	Prices, Productivity and Employment.....	7
2.3	Resource Productivity and Eco-Efficiency .....	8
2.4	Long-term Effects .....	9
2.5	Investment .....	10
3.	How do the New Member States (EU10) Compare with the EU15?.....	12
4.	Consumer Satisfaction .....	13
4.1	Overall Satisfaction in the EU25.....	13
4.2	Specific Issues in the New Member States .....	14
5.	Conclusions .....	14

## Introduction

Since the 1990s, efforts to improve the performance of EU network industries have accelerated, the aim being to open them up to competition while at the same time promoting effective regulatory structures for those aspects of the networks requiring public policy intervention. The Lisbon process has given further impetus to these reforms as they can help to improve the competitiveness of the European economy by increasing the efficiency of these industries whilst guaranteeing the provision of high quality services.

This is the second horizontal evaluation report on network industries providing services of general economic interest produced in accordance with the methodology adopted by the Commission in its June 2002 Communication (COM (2002) 331). It covers developments in fixed and mobile telecommunications, energy, gas, air, rail and road transport and postal services in the 25 Member States of the EU.<sup>1</sup> Taken together, these sectors represent around 6-8% of the value added and 5% of EU employment.

This report does not attempt to cover all possible dimensions of performance in network industries. This could not be done in one single exercise. Key topics not dealt with here (for example the distributional effects of network industry liberalisation) will be introduced in successive versions of the report. In 2004, the first report presented an inventory of indicators for network industries in the EU Member States and included a broad section on the accessibility of services of general economic interest. This year's report, in addition to setting out the latest legislative developments, includes the results of new studies on long term effects of market opening. It also compares the performance of new and old Member States, and introduces some new horizontal issues such as investment and environmental effects.

The first section of this working paper presents the key policy and legislative developments which have occurred since the previous report was published in July 2004. Section two gives an appraisal of different aspects of the performance of these industries, including employment, investment, productivity, price evolution and environmental impact. This section also looks at the aggregate impacts across the economy. For the first time, an assessment of the situation of these sectors in the new Member States is presented. Section three discusses differences in prices, market structure, compliance with public service obligations in terms of affordability and quality between old and new Member States. The results of consumer surveys investigating the degree of satisfaction in relation to several aspects of the provision of services of general economic interest are described in section 4. Finally, section 5 presents the overall conclusions that can be drawn in view of the evidence presented.

This evaluation report is expected to contribute to an open and transparent debate on the performance of services of general economic interest, based on objective facts. It is important to note that this evaluation focuses on developments up to November 2005. The impact of new developments linked to recent oil price increases is therefore outside the time span of this report and cannot be anticipated at this stage.

---

<sup>1</sup> In some cases the water sector is also included due to the aggregation of data sources (e.g. in the area of employment the aggregated data for electricity, gas and water was used).

## 1. MAIN POLICY DEVELOPMENTS AND EVOLUTION OF THE LEGISLATIVE FRAMEWORK

**The general debate on the future of services of general interest has continued since the publication of the Commission's White Paper in May 2004.<sup>2</sup> However, a decision has not yet been taken regarding the need for a framework directive. In parallel with this, there have been a number of important developments in the evolution of the competitive and regulatory frameworks, notably for gas, electricity and public transport. At the same time, there are delays in the transposition of new directives in some Member States and a number of obstacles continue to hinder effective competition and integration of European markets. Therefore, regulators and competition authorities have to work hand-in-hand to ensure appropriate implementation of the various regulatory reforms. New developments are discussed in more detail below.**

In the area of services of general interest, the main developments are the follow-up of the White paper, the "Altmark package" and the initiative of the Commission on public-private partnership. The **2004 White paper** on services of general interest made a synthesis of the public consultation launched by the 2003 Green Paper. The European Economic and Social Committee<sup>3</sup> and the Committee of the Regions<sup>4</sup> adopted their opinions on the White Paper in February 2005. The advisory bodies were generally supportive of the basic principles set out in the White Paper. At the same time, they both called for a horizontal legal framework for services of general interest at European level. The European Parliament has not yet given its views on the White Paper. However, the role of services of general interest has been an important issue in the debate on the proposed Directive on services in the internal market in the European Parliament and in other forums.

**In July 2005, the "Altmark package" of State aid rules on the financing of services of general economic interest was adopted by the Commission.** The package increases legal certainty and reduces administrative burden, especially for small and local providers of services, as they are exempt from the notification requirement provided that the compensation for the public service covers only the real cost of its provision plus a reasonable profit.

**In November 2005, the Commission published a Communication on public-private partnerships (PPPs).<sup>5</sup>** Among other initiatives, the Commission proposed to develop an interpretative communication aimed at clarifying the application of public procurement rules for two given situations: firstly, for the establishment of mixed capital entities intended to perform services of general economic interest; and secondly, for the participation of private firms in existing public companies which perform such tasks. Under the current timetable, preparation of the interpretative document on PPPs is scheduled for 2006.

**In the field of telecommunications, the new EU regulatory framework provides technologically neutral regulatory principles** which, when fully operational in the Member

---

<sup>2</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - White Paper on services of general interest, COM(2004) 374 final

<sup>3</sup> CESE 146/2005

<sup>4</sup> ECOS-040 / CdR 327/2004

<sup>5</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Public-Private Partnerships and Community Law on Public Procurement and Concessions, COM (2005) 569 final

States, will help the market to deliver choice and value for consumers. The optimum timeframe for implementation is short but meeting this timetable is critical to the future success of the principles. The Commission has promoted implementation of this EU framework vigorously through reporting, co-operation with Member States, and, where necessary, infringement proceedings.<sup>6</sup> As of September 2005, most of the Member States have transposed the new EU regulatory framework.<sup>7</sup> In addition to promoting the implementation of the framework, the Commission has also investigated the behaviour of individual market players under competition rules (for example the price of wholesale international roaming tariffs charged between mobile network operators in two Member States). The effective application of EC competition rules will also play a vital role in the implementation of the regulatory framework for telecommunications.

**July 2004 was the deadline for the transposition of the new electricity and gas directives and for opening up these markets for non-household users.** The majority of Member States have already fulfilled many of the requirements of these new directives. However, as of September 2005, six Member States had still not fully notified the Commission about their legal measures to transpose them. In November 2005, the Commission published a report on the implementation of the Directives and the functioning of the Internal Market in electricity and gas.<sup>8</sup> It concludes that a number of improvements should be considered by Member States in the way that the Directives are being applied in practice. It also highlights the need for greater regulatory co-operation in order to improve access conditions to transmission and distribution infrastructure. Attention is also being paid to investment in the infrastructure required to ensure rapid development of the internal market, where the capacity to connect different networks is either insufficient or missing.

In June 2005, the Commission launched an **inquiry aimed at identifying distortions to competition in the electricity and gas sectors.**<sup>9</sup> Initial findings published in November 2005 highlight areas where gas and electricity markets are not functioning well. First, in many Member States markets in both sectors remain concentrated, creating scope for incumbent operators to influence prices. Second, many wholesale markets are illiquid either due to long term contracts (gas) or because companies are active both in production and in the retail market, limiting the need for wholesale markets (electricity). There is also insufficient unbundling of network and supply activities. Third, barriers to cross-border supply prevent the development of integrated EU energy markets. Finally, a lack of transparency benefits incumbents and undermines the position of new entrants. This lack of transparency also aggravates mistrust by industry and consumers in the price formation mechanisms on energy wholesale markets. A preliminary report will be presented in early 2006. The final results are expected in the second half of 2006.

In **postal services**, the transposition of the current Community framework is now largely complete. However, it may be necessary to monitor the authorisation procedures in Member

---

<sup>6</sup> See the Commission's 10th implementation report on the telecommunications regulatory package 2004, COM(2004) 759

<sup>7</sup> However it should be noted that the Commission has opened infringement proceedings against a number of countries for non-conformity and incomplete transposition of the framework, and is looking very closely into the issue of market definition.

<sup>8</sup> Further information on this report can be found on the following website:

[http://europa.eu.int/comm/energy/electricity/report\\_2005/index\\_en.htm](http://europa.eu.int/comm/energy/electricity/report_2005/index_en.htm)

<sup>9</sup> For more information on the enquiry, please see the following website

[:http://www.europa.eu.int/comm/competition/antitrust/others/sector\\_inquiries/energy/](http://www.europa.eu.int/comm/competition/antitrust/others/sector_inquiries/energy/)

States to ensure that they are not used to restrict competition unduly. These procedures may act as a possible barrier to market entry if they are difficult to comply with and therefore restrict the ability of new entrants to compete effectively with the universal service provider. These requirements may also explain in part the limited development of competition in the liberalised part of the EU's letter market. Postal services are characterised by significant economies of scale and scope, which are especially important when operators are required to provide minimum levels of service.

In July 2005, the Commission adopted a revised proposal for a Regulation on **public passenger transport services by rail and by road** (COM (2005) 319 final). It introduces clear and simple rules for calculating the financial compensation to be granted to public transport operators, favouring limited duration contracts with operators and transparent and competitive tendering processes. It thus offers the legal certainty needed to develop high quality public transport and to help improve the environment and mobility. A detailed analysis of the impact of a regulatory framework and market developments in **railway transport** will form the subject of a Commission Communication scheduled for the end of 2005.

## 2. MARKET PERFORMANCES

### 2.1. Evolution of the Market Structure

**The number of competitors in telecommunications has continued to increase. Despite this development, the market share of incumbents remains high not only in telecommunications but in the energy sector as well. Mergers and acquisitions (M&A), in particular in the energy sector, have resulted in the creation of large pan-European players. This increases the need for a thorough scrutiny of mergers by the relevant competition authorities, to ensure effective competition.**

Since the last report, the rate of market entry in **telecommunications** has increased, leading to changes in the market structures and reducing the market shares of incumbents. The number of authorised public fixed voice telephony operators doubled between 1998 and 2004 (from 635 to 1 237), but the number of major competitors remains low in most countries and the market shares of incumbents are still high. In **energy**, major obstacles to effective competition remain in most Member States, due to insufficient unbundling, the emergence of large pan-European players, network access problems, and lack of interconnection.

**In railways and in postal services**, the process of liberalisation remains far behind the progress made in telecommunications, electricity and gas. For example, in postal services, 25% of letter mail will be open to competition from 2006.<sup>10</sup> In railways, problems with access to the international network, an inadequate regulatory framework or simply the low attractiveness of the market limit the emergence of competition.

---

<sup>10</sup> This is an estimated figure. In practice, an opening of the addressed mail market varies from 100% (Estonia, Finland and Sweden) through around 50% (Czech Republic, Netherlands and Germany) to less than 10%. However, it is worth noting that the United Kingdom, the Netherlands, and Germany, which account for almost half of Community letter post, are considering the possibility of abolishing the reserved area before the end of 2007. When taking other Member States with no or minimal postal monopoly also into account, complete liberalisation of about 60% of EU letter post can be expected by the end of 2007.

## 2.2. Prices, Productivity and Employment

**There is wide variation in the evolution of performance depending on the sector and the country considered. Many factors, including technological changes, increasing oil prices and the quality of regulation, have an impact on current performance. The number of years since the start of liberalisation also influences the performance in these sectors.**

### Prices

Over the period 1996-2004, **the price of telecommunications fell and electricity prices increased by less than the consumer price index.** Telecommunications prices<sup>11</sup> fell by 35% and electricity prices by 6% in real terms over that period. **However, in more recent years, electricity prices have been rising.** One reason for the recent increase in electricity prices may be the increase in gas prices, as gas has become one of the major fuel sources for electricity generation and the introduction of the CO<sub>2</sub> emission trading scheme in 2005. Also, changes in energy taxation may have contributed to higher prices. **Gas prices for household consumers rose by 41% between 1996 and 2004 (20% in real terms).** Prices in the **transport** sectors have, by and large, stayed close to the general inflation rate since 1996.

**Telecommunications prices across Member States have been converging at a rate of between 10% (national calls) and 20% (local and international) per annum,** supporting progress towards achieving an EU internal market for telecommunications.<sup>12</sup> Cost-orientation obligations enforced by national regulators in relation to wholesale access and interconnection with the networks of the incumbent players may have contributed to price convergence. The Commission's analysis reveals a **slight convergence in Member States' prices of road and air transport** (about 4%) and of **electricity** (about 5%). However, **gas prices across Member States in the EU do not seem to be converging.** Reasons might include: the different pace of liberalisation in these sectors; the quality of the regulatory framework; differences in input costs and technologies; and insufficient interconnection infrastructure, etc. In this respect, the studies suggest that a sound regulatory framework is crucial for improved price performance.<sup>13</sup> The Commission's competition sector inquiries will explore further, amongst other things, the reasons behind the slow pace of market integration in the gas and electricity sectors.

From the limited data available, it appears that the benefits of price reduction might have not been shared equally among different categories of users, but the categories which might benefit most differ from sector to sector. For example, in telecommunications, some categories of users (e.g. those mainly calling locally or having low usage) may be - in the absence of special tariffs – paying higher prices in some countries as a consequence of the application of more cost-oriented retail tariffs. In the case of household users of gas and electricity, the data show that those households with low usage have generally benefited more from price changes than high usage households.

---

<sup>11</sup> A basket of telecommunication prices is analysed here. It should be noted that telecommunications includes many services beyond voice, such as internet (low and fast speeds) and data transmission.

<sup>12</sup> The convergence formula calculates the speed at which differences between the prices in individual countries and the average price for all EU25 countries diminished over the period 2000-2004. For details see section 2.2.2 of the Annexes to this report.

<sup>13</sup> This is also confirmed by a recent study of the ECB which shows that regulatory reforms have a substantial downward impact on prices in telecommunications, electricity, gas and air transport and that additional potential price cuts could be achieved by further market opening.

## Labour Productivity and Employment

While the effects of market opening on productivity are expected to be positive, the expected effects on employment can vary according to the time horizon considered. While the restructuring of incumbents may imply job losses in the short term, over the longer term the entry of new firms, efficiency gains and lower prices are likely to have a more positive impact on employment in these sectors. On the whole, the number of persons employed in EU15 network industries in 2002 (8.7 million people) has decreased by 50 000 compared to 2001 and is close to the level of employment in 1980. Job gains and losses vary across sectors and countries and it is difficult to find any direct link with market opening. In electricity, gas and water employment fell by around 17% between 1996 and 2002. However, over the same period it increased by 5% in inland transport, and 19% in air transport.<sup>14</sup> In telecommunications, overall employment increased by 24% between 1995 and 2001. Between 2001 and 2003 however, it fell by 6%.<sup>15</sup>

Of course, these figures reflect relatively short-term direct effects on the network industries concerned. They do not take into account spill-overs, which lead to increased employment in the wider economy.<sup>16</sup>

**According to the results of a recent study, the estimated overall, long-term effects on employment in network industries and across the economy appear to be positive, as will be shown below in section 2.4.<sup>17</sup>**

In terms of productivity, the conclusions of last year's evaluation remain valid, productivity per hour increased in all network industries throughout the 1980's and 1990's and the average growth of productivity outpaced the average performance of the economy as a whole. A recent study estimated that in many cases market opening has led to large and significant productivity improvements.

### 2.3. Resource Productivity and Eco-Efficiency

**On the whole, resource productivity and eco-efficiency has improved in the energy and transport sectors. This was the combined result of the use of better technologies, environmental legislation and the liberalisation of these sectors.**

Between 1990 and 2002, resource productivity (i.e. energy efficiency) of public thermal electricity production increased by almost 9%. Eco-efficiency, in terms of air emissions per kWh produced, improved even more substantially: the sulphur dioxide (SO<sub>2</sub>) and oxides of nitrogen (NO<sub>x</sub>) emissions intensity decreased by about 72% and 55% respectively. Liberalisation in the energy sector stimulated a switch from the use of coal towards natural gas, which has a lower carbon and sulphur content. However, with gas prices increasing since 1999, improvements in emissions intensity have slowed down as coal has again become increasingly competitive despite the CO<sub>2</sub> emission trading scheme, suggesting that the effect of liberalisation on the environment depends on the relative price of fuels. The substantial

---

<sup>14</sup> Figures refer to direct employment. Source: Groningen Growth and Development Centre, 60-Industry Database, October 2004, <http://www.ggdc.net>

<sup>15</sup> Source: Statistics in focus: Telecommunications in Europe, Eurostat, August 2005.

<sup>16</sup> In addition, this report does not cover qualitative aspects of employment development (e.g. changes of working conditions, qualifications required, job stability).

<sup>17</sup> Copenhagen Economics, Final Report "Market opening in Network Industries", September 2005.

reductions in the intensity of NO<sub>x</sub> and SO<sub>2</sub> emissions were not only a result of liberalisation. **Environmental legislation and available reduction techniques contributed significantly, thus showing the need for synergies between environmental and sectoral policies in order to improve the performance of these sectors.**

For the transport sector, a fuel switch has not yet been an option. Almost all transport depends on fossil oil-derived fuels, with only minor segments using alternatives (e.g. biofuels for road transport, non-CO<sub>2</sub> electricity for trams, trolley-buses, trains). However, new and **better technologies have led to improvements in resource productivity and eco-efficiency, especially in road transport and aviation.** The resource productivity increased moderately supported by increased competition, while eco-efficiency made more substantial progress assisted by environmental legislation. For rail, there is a small improvement in CO<sub>2</sub> intensity (due to changes in load factors) and a slight downward trend in NO<sub>x</sub> emissions (as a result of increasing electrification of the rail system). However, it should be noted that due to a modal shift from rail to road and aviation the resource productivity of the transport sector as a whole has not improved.

#### **2.4. Long-term Effects**

An attempt has been made to evaluate the cumulated impacts of market opening in services of general economic interest over the period 1990-2003. Previous studies on network industries providing services of general economic interest have reported on the evolution of the performance of these industries by looking at the evolution of prices, productivity, quality and other relevant performance variables. In principle, this improved performance can be linked to changes in the regulatory environment. But some have argued that they might be the result of changes in other variables, such as technology, cost of capital, etc.

The results of studies carried out for the Commission show that there is evidence supporting the view that performance improvements can be attributed to opening markets to competition. In addition, a recent study examined the impact of regulatory changes on user industries and on the economy as a whole. In this project, econometric techniques were used to identify and quantify the origin of those effects and impacts, and to test the causality of regulatory changes between 1990 and 2001.<sup>18</sup>

---

<sup>18</sup> The study: Final Report: "Market Opening in the Network Industries", September 2005, covered the old (EU15) Member States, seven network sectors (electricity, natural gas, telecommunications, rail transport, urban transport, air transport, and postal services), over the period from 1990 to 2003. It can be downloaded from the following website:  
[http://europa.eu.int/comm/internal\\_market/en/update/economicreform/index.htm#services](http://europa.eu.int/comm/internal_market/en/update/economicreform/index.htm#services)

The main findings of the econometric modelling are as follows:<sup>19</sup>

- After controlling for factors such as the cost of fuel in energy or the cost of capital (an important input in energy sectors), real-term **price reductions of 8% in the electricity** sector due to opening markets to competition.
- After controlling for factors such as technological change **in telecommunications**, market opening led to **price reductions of 22%**.
- **Price reductions of 25% in rail freight transport and productivity improvements of 47%**, both as a result of market opening.
- Accumulated **productivity improvements of 93%** can be attributed to market opening in mobile telecommunications.
- At the macroeconomic level, important benefits were estimated as a result of market opening. **The econometric simulation has shown that market opening resulted in a permanent increase in welfare (consumption) of 1.9% (€8 billion per year) and an economy-wide employment increase of about 500 000 jobs (0.3% of total EU employment).**<sup>20</sup> The simulated economy-wide increase in employment is very different to the short-term, industry-specific employment effect, as it takes into account the increased demand for the outputs of network industries resulting from lower prices, and the boost to employment in other sectors resulting from lower input costs. The telecommunications and electricity sectors were the major sources of the gains, as they account for most of the output in the covered network industries. The spill-over effects across non-network industries were slightly stronger for the service sector due to their relatively more intensive use of network services. Also, those Member States that initiated market opening early and that have opened markets more have gained the most.

## 2.5. Investment

Critics of liberalised industries have highlighted examples of liberalised network industries where underinvestment or supply failures have been observed. However, the reasons behind these problems are complex and are not simply due to liberalisation (e.g. California blackouts in 2000). Instead, they often were the result of deficiencies in the regulatory framework or problems with market operators adapting to a changing environment. **Therefore, a strategy has been developed by the Commission to encourage infrastructure investment, in particular to develop cross-border interconnections. But Member States have to put in**

---

<sup>19</sup> The price reductions, productivity improvements, consumption increases or job gains presented here have been calculated as changes compared to the situation without market opening in the EU economy. Therefore, an 8% electricity price reduction means that prices are 8% lower than they would be without market opening; the increase in the number of jobs means that the EU economy had 500 000 more jobs than it would have had if the market opening had not taken place, etc. It is important to note the difference between these results and those reported in section 2.2 above. Here we report the impact of regulatory reform on prices after controlling for other factors that have also had an impact on the price evolution reported in the previous section. If those factors had not been present, this would have been the observed variation in prices.

<sup>20</sup> It should be noted that the estimated employment increase is based on an econometric model. All such models require certain assumptions to be made and the results are subject to a degree of uncertainty.

**place appropriate measures to ensure optimum investment, taking into account short and long-term requirements.**

Survey data on the **adequacy of infrastructure in network industries supplying services of general economic interest show that Nordic countries tend to score highly on the provision of transport and energy infrastructure.** This is interesting to note, because the Nordic countries have achieved a high degree of market opening in electricity and gas. France, Germany and Austria have also scored highly on most aspects of infrastructure provision. **The new Member States, on average, tend to lag behind the old Member States.**

**The Commission has been playing an active role in encouraging infrastructure investment.** It has developed a strategy to provide better cross-border interconnections, particularly in energy and railways, to complete the internal market and to link the new Member States better to the infrastructure of the EU15. In electricity and gas, it has proposed a Community framework to support long-term investment in the networks in order to avoid congestion problems and ensure security of supply. However, in accordance with the subsidiarity principle, the responsibility for addressing many of the issues identified lies at Member State level. Therefore, the Commission has focused on ensuring compliance with the “*acquis*” and on issues where, due to market failures and government coordination problems, EU action is necessary (e.g. in the case of the financing of railway cross-border bottlenecks).

Cohesion policy co-finances investments focusing on the least well-off regions and on countries where needs are greatest. Therefore, investments in transport, energy and telecommunications infrastructure – all areas where the market has difficulties in supplying services at an affordable cost and an adequate level, especially in the new Member States and in remote and rural areas - occupies a prominent place in the present programme period (2000-2006) and is a high priority for the future (2007-2013). Community funds are nevertheless limited and therefore the Strategic Community Guidelines<sup>21</sup> establish a number of guiding principles that indicate the Community’s priorities.

The Commission is continuously working with Member States to identify areas where the regulatory and competitive framework can be improved. A challenge for national regulatory authorities is **to ensure that the regulatory and competitive framework provides the appropriate incentives for investment in monopolies regulated by price controls, taking into account the short and long-term needs.** This shows how important it is for Member States and regulatory authorities to cooperate with each other and to share information on best practices.<sup>22</sup>

---

<sup>21</sup> COM(2005) 0299 - Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013.

<sup>22</sup> In telecommunications for example, the Commission and the national regulators are promoting an ‘investment ladder’ approach. Under this regulatory approach, alternative operators are provided access to the services of the incumbent operators allowing them, in a first stage, acquiring a critical customer base, so that they can, in a second stage, make use of their turnover to invest in own infrastructures once the take up of their services and their revenue streams provide a business case for such investment. Such investments can also take the form of acquisitions of companies having already made infrastructure investments.

### 3. HOW DO THE NEW MEMBER STATES (EU10) COMPARE WITH THE EU15?

**There are some differences in the market performance of network industries between the new and old Member States. The market structure in the ten new Member States appears more concentrated than in the EU15. Although significant price differences exist between the new and old Member States in nominal terms, the difference is modest once expressed in terms of purchasing power parity (except for transport). However, the budgetary effort that households have to make to pay for these services is higher in the new Member States, although the situation is improving. Finally, regarding the quality of services, the scarce data available show that many problems are similar in the old and new Member States.**

**Market structure** in the network industries of new Member States appears more concentrated than in the EU15. The biggest operators have larger market shares in the new Member States. This may be partly explained by the fact that market opening started later in the EU10 than in the old Member States. Furthermore, markets in those countries are smaller than in many EU15 Member States. But only a certain market size allows companies to profit from potential economies of scale. Countries with an overall smaller market size might therefore be less attractive for new competitors. As a result, the market shares of incumbents remain high.

**Prices** of these services in the EU15 and the EU10 show large differences only in transport, where prices are on average about 30-35% cheaper in the new Member States, once the general price levels are taken into account. For telecommunications and energy, the difference in prices is very small between old and new Member States.

After taking into account **price and income levels**, electricity and gas services are generally much more affordable in the old EU15 Member States than in the ten new countries. However, affordability of services in the new Member States continues to improve more dramatically than in the old EU15. This is likely to have a significant impact on living standards in most new Member States.

The **resource productivity** (i.e. energy efficiency) of the electricity sector of EU15 was 8.1% ahead of EU10 in 1990. But **the gap narrowed to 6.9** in 2002. The **eco-efficiency** in terms of air emissions **increased more substantially nearly in parallel in EU15 and EU10**. However, in absolute terms, the SO<sub>2</sub> emissions are still twice as high in the EU10 as in the EU15. A similar analysis based on data is not yet possible for the transport system, but as the modal shift away from rail is extraordinarily strong it is unlikely that the resource productivity for the whole system is increasing.

In relation to the **quality of services**, there are not enough indicators for services of general economic interest to carry out a thorough comparison of performance in the EU15 and the EU10. Nonetheless, the scarce data available show a number of similar problems across the EU25.

- In the postal services sector, the available indicators do not detect important differences in the quality of domestic services between old and new Member States. In some countries, considerable improvements have been achieved between 2000 and 2003. However, some Member States faced a deterioration of performance – especially Hungary and France. Next day delivery exceeds 90% for domestic priority mail in more than half of the Member States, including four new Member States (the

Czech Republic, Estonia, Slovakia and Slovenia). It is not possible to compare cross-border letter post service, as at present not all new Member States have fully reliable systems to measure quality of service.<sup>23</sup>

- An analysis of the quality of air transport (based on punctuality of service and baggage performance) shows that for the majority of European airlines, from both old and new Member States, **there is room for improvement with regard to the punctuality of flight departures. In terms of missing baggage performance, airlines from new Member States are clearly fulfilling their obligations better.** This may, however, be related to smaller transit traffic at their airports.
- For the **quality of electricity supply**, there is only one available indicator: the share of renewable energy. There are **no distinguishable patterns for either new or old Member States**, as some countries from both groups perform well and some very badly. **However, these indicators are clearly insufficient to draw any conclusions on differences in quality performance between new and old Member States.**

#### 4. CONSUMER SATISFACTION

**The most recent surveys of consumer satisfaction confirm the results of previous assessments. Overall, the satisfaction of consumers is relatively high but there are important differences depending on the country and sector studied. Postal services receive the best appraisal and inter-city rail transport the lowest. Finally, consumers in the new Member States are concerned about possible price increases after accession.**

Two separate surveys were conducted to examine the different aspects of consumer satisfaction. The first opinion poll surveyed consumers' views on services of general economic interest in all EU25 Member States. The second survey was addressed only to consumers in the ten new Member States, in order to find out about: specific problems related to services of general economic interest in those countries; to learn about citizens' expectations related to EU accession; and to observe the effects of increased competition in these sectors.

##### 4.1. Overall Satisfaction in the EU25

The levels and trends of **overall satisfaction** in the EU recorded in previous surveys are confirmed: satisfaction with these services is relatively high, with postal services receiving the best appraisal from consumers, while transport services, especially inter-city rail, have the lowest level of satisfaction. Among the other services, fixed and mobile telephone services and electricity record more consumer discontent than gas. National results show that Italy leads dissatisfaction in six sectors out of eight. In France and Greece too, consumers are very dissatisfied with some sectors. The highest levels of consumer satisfaction were recorded in Cyprus, United Kingdom, Slovenia, Belgium and Lithuania.

---

<sup>23</sup> Performance comparison is sometimes difficult due to geographical constraints and the fact that population density can differ significantly.

**Price** is a criterion of high importance for consumer satisfaction. A majority of EU consumers think that services of general economic interest are affordable, and that they provide value for money. The best result is for postal services, with 77% of consumers across Europe expressing themselves satisfied.

As regards **the quality** of services of general economic interest, EU25 consumers are satisfied by and large, with the highest level of satisfaction recorded for electricity and gas (94%). However, the level of satisfaction with quality is much lower for transport services (with inter-city rail services scoring the lowest, with 74%). **Satisfaction with information** provided by service providers ranges from 72% (inter-city rail services and urban transport) to 81% (fixed telephone).

When comparing consumer satisfaction between old and new Member States, satisfaction levels in new Member States seem to be generally similar to those in the old EU15, despite the better overall performance of these services in EU15 countries. Consumers in new Member States are concerned by price convergence as a result of EU accession. But accession is also associated with expectations of quality improvements in these services due to more competition.

#### **4.2. Specific Issues in the New Member States**

Consumers from the new Member States were asked about their expectations regarding the **main effects of recent EU membership on the sectors of general economic interest** in terms of price and quality. 49% of respondents thought that **price increases** would be the main effect, followed by 27% of respondents who saw **quality improvement as the main effect**. 11% believed that prices would go down, and only 1% of consumers expected quality to dip.

When the respondents were asked **how the increased competition in services of general economic interest** would influence price and quality, a large majority of respondents thought that it **would push prices downwards and improve quality in all sectors**. The most optimistic are the Poles, while the least optimistic are the Hungarians and the Latvians.

### **5. CONCLUSIONS**

Significant milestones have been achieved in opening up network industries supplying services of general economic interest to competition. However, there remain many obstacles to competition and to completing the internal market, which the Commission is taking steps to address. In addition, competition policy still has an important role in ensuring effective competition. One noticeable development in the EU is the emergence of large pan-European market players, which will require thorough scrutiny by competition authorities to guarantee effective competition.

An appropriate regulatory framework is also important for competition and to ensure adequate incentives for investment. Again, the Commission is addressing some of these issues. But there is an important role here for Member States, as, in accordance with the subsidiarity principle, many of the decisions regarding the regulatory framework and investment are in the Member States' hands.

The assessment of market performance presented in this paper and its annexes clearly shows that Community policies in this area have had very different impacts in different sectors and countries. Sector and country-specific factors have a decisive influence on the magnitude and net balance of these impacts in terms of employment, labour and resource productivity and price reductions.

Improvements in resource productivity and eco-efficiency have coincided with increased competition in the transport and energy sectors. A combination of factors is responsible, including better use of new technologies, environmental legislation, and the liberalisation of these sectors.

This report confirms that the opening of markets to competition is responsible for much of the improvements in market performance within services of general economic interest. Lower prices and labour productivity improvements can be statistically explained by market opening and regulatory changes even after controlling for technological change and other contributing variables. In addition, countries with a high level of market opening tend to perform better over time in terms of price and productivity.

The benefits of market opening are not limited just to the markets being opened up to competition. They spill over into the rest of economy. Service sectors – which use services of general economic interest more intensively – are the main beneficiaries of the improved performance.

The report has also addressed a key question of market liberalisation in these sectors: What is the overall impact of market opening on employment? The answer appears to be positive: the econometric modelling indicates that over the period 1990-2001, the creation of half a million jobs throughout the economy is linked to regulatory changes in these sectors.<sup>24</sup>

A comparison of market performance in old and new Member States throws up interesting results in relation to prices and affordability but is inconclusive as regards quality levels. Although relative prices for these services are similar in new and old Member States, they are relatively less affordable in the new Member States. The affordability of such services in these countries has special importance because of the relatively low per capita income in most new Member States and the basic nature of the services concerned.

Economic integration normally entails price convergence, which suggests that the overall price level will tend to increase in new Member States that currently have relatively low prices. Therefore, it is essential that the new Member States ensure increased competition in industries providing services of general economic interest in order to control any inflationary pressures that occur as a result of the catching-up process. To this end, competition and regulatory authorities must keep a close watch on developments in the performance of these industries.

Overall, the degree of satisfaction with the provision of services of general economic interest is high, but it varies depending on the sector and country under consideration. However, the dissatisfaction rates must also be carefully assessed, since they express negative consumer perceptions in regard to services that are essential for the citizens' participation in the economy. Satisfaction levels in new Member States seem to be generally similar to those in

---

<sup>24</sup> See footnote 20

the old EU15, despite the better overall performance of these services in EU15 countries. Although consumers in new Member States are concerned by price convergence as a result of EU accession, the latter is also associated with a very positive vision in relation to quality improvements in these services and increased competition.