



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 12.07.2007
SEC(2007) 1024

COMMISSION STAFF WORKING DOCUMENT

**Evaluation of the Performance of Network Industries Providing
Services of General Economic Interest
2006 Report**

1. INTRODUCTION

Article 16 of the EC Treaty requires the European Community and the Member States to safeguard services of general economic interest (SGEI) while respecting the principle of undistorted competition in the internal market. The network industries, which provide most of the services of general economic interest, account for around 7.5% of the EU15's total value added. In the new Member States, this share is much higher, ranging from 9.8% in Hungary to 14.3% in the Slovak Republic¹. In 2005, slightly more than 10.5 million people were employed in EU25 network industries, corresponding to about 5.4% of the total workforce². However, output and employment figures understate the importance of the network industries, since the whole of society depends on the inputs and services provided by them.

This report constitutes the third horizontal evaluation exercise produced in accordance with the methodology adopted by the Commission in its June 2002 Communication (COM(2002) 331). The sectors covered are telecommunications, electricity, gas, transport and postal services. The report attempts to give a general overview of the performance of the industries in question, focusing in particular on the compatibility of market outcomes with the economic and social objectives of the European Union. The report seeks to address the sectors covered and all the Member States in a comparable, comprehensive and balanced way. Given the diverse scope and quality of the background material, however, this cannot be guaranteed.

As envisaged in the June 2002 Communication, the methodology and its application in the horizontal evaluation reports are currently being assessed. The main objectives of this assessment are to evaluate the need for horizontal evaluations at the EU level, to provide analysis on how this process could be improved and to determine whether the Commission services are best placed to carry out these evaluations.

The second section presents policy and legislative developments since the publication of the last report. Section 3 examines the extent to which the market opening of the different sectors has influenced the evolution of their structures and characteristics and how selected performance indicators have evolved. Section 4 analyses the degree of market integration in EU network industries and presents an illustrative set of remaining barriers to integration. The fifth section analyses the distributional effects of market opening in network industries on different groups of households and regions. Section 6 examines how public service obligations and quality have evolved in the industries covered. The results of consumer satisfaction surveys are presented in section 7. It should, however, be noted that developments in the structure and the performance of the sectors covered by this report have been influenced by many factors unrelated — or only indirectly related — to market opening. This should always be borne in mind when interpreting the indicators.

2. MAIN POLICY DEVELOPMENTS

The year 2006 has seen a number of developments in the legal and regulatory framework of network industries, aimed at improving market functioning. These developments include approved measures, notably in the field of transport, as well as

¹ Based on data for 2003 from the Groningen Growth and Development Centre, 60-Industry Database, October 2005. Electricity, gas and water supply are included as one sector.

² Eurostat Labour Force Survey.

proposed measures including a new postal Directive proposal and recommendations based on the energy sector inquiry. Furthermore, the Commission has been monitoring on an ongoing basis the proper transposition and implementation of the legal framework while at the same time playing its role as a competition authority.

Following the adoption by the European Parliament of its opinion, the Commission is expected to present early in 2007 its **follow up to the White Paper on services of general interest**³.

In April 2006, **the Commission submitted an amended proposal for a directive on services in the internal market**⁴. This proposal, subject to amendments, was adopted in legislation by the European Parliament and the Council in December 2006⁵. Its aim is to remove obstacles to trade in services, thereby promoting the development of cross-border operations. As a result, this should improve the competitiveness of service enterprises and, by extension, of European industry as a whole. Most services of general economic interest are subject to most of the requirements of the amended proposal. They are, however, explicitly exempted from the application of Article 16 of the Directive dealing with the freedom to provide services. Rules established by sector-specific Community instruments in any case prevail over the provisions of the services Directive.

In the field of telecommunications, the Commission issued in February 2006 a report on the implementation of the regulatory framework and the state of competition in the electronic communications markets⁶. By the start of 2006 all Member States had transposed the 2002 telecom rules. Generally speaking, the national regulatory authorities are becoming more effective in implementing the necessary regulation, but there are still significant delays in the notifications of some markets, leaving gaps in the effectiveness of implementation of the rules. However, where the rules are being implemented effectively, they are clearly opening up markets to new entrants and thereby promote competition while stimulating investment and the take up of new services, such as broadband.

In June 2006, the Commission launched a consultation on the review of the EU regulatory framework for electronic communications networks and services⁷, outlining possible changes to the regulatory framework. Overall, the Commission aims to complete Europe's internal market and to commit to better regulation for the benefit of citizens. The Commission services also launched a public consultation on the draft second edition of the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation⁸. In the context of the report on universal service, Member States and the majority of stakeholders have endorsed the Commission's view that there is at present no need to extend the scope of universal service to mobile and high-speed internet services. In June 2006, the Commission adopted a proposal⁹ to cap the roaming charges for carrying calls from foreign networks on mobile networks.

³ COM(2004) 374 final

⁴ COM(2006) 160 final

⁵ Directive 123/2006 of 12 December 2006 on services in the internal market, published in the J.O. L 376 of 27.12.2006. The three years implementation period will expire on the 28 December 2009.

⁶ Communication on Market Reviews under the EU Regulatory Framework – Consolidating the internal market for electronic communications (COM(2006)28 final)

⁷ COM(2006) 334 final

⁸ SEC(2006) 837

⁹ COM(2006) 382 final

In the field of energy, the Directive on measures to **safeguard security of electricity supply and infrastructure investment**¹⁰ was published in January 2006. The objective of this Directive is to improve the functioning of the internal electricity market by ensuring an adequate level of generation capacity, an adequate balance between supply and demand and an appropriate level of interconnection between Member States. On 26 April 2006, the Commission released a guidance document¹¹ following the decision of the Court of Justice relating to preferential access to transport networks under the electricity and gas Internal Market Directives¹². According to the Court, the existence of long-term supply and capacity reservation contracts prior to the entry into force of the Directives does not justify the granting of priority allocation of transport capacities. **The guidance establishes that the reasoning of the Court is also applicable to the gas sector.** Ratified by participating states, the Energy Community Treaty entered into force on 1 July 2006. As a result, the relevant acquis communautaire on energy, environment and competition will be implemented in the Balkan states, as well as Romania and Bulgaria.

Although the framework for energy regulation is largely in place in the Member States, **there remain significant problems of application** – both in terms of effective unbundling of wholesale and retail operators and in view of the **need to open up retail electricity and gas markets** in line with the Community timetable. Indeed, in March 2006, the Commission opened infringement procedures against 17 Member States. Active competition for household consumers remains the exception in the electricity sector and is almost totally absent from the gas sector. In a number of countries the regulator does not have power to issue or modify licences.

The preliminary report on the Commission's **energy sector inquiry** was published in February 2006 and the final report was issued as part of the **energy package** in early 2007¹³. The inquiry assessed the functioning of competition in energy markets and drew attention to key areas in which this was not satisfactory. Based on these findings, the Commission's **energy policy review** concludes that a clearer separation of energy production from energy transport and distribution must be achieved, and calls for stronger independent regulatory control, taking into account the European market, as well as national measures to deliver on the European Union's target of 10% minimum interconnection levels, by identifying key bottlenecks and appointing European coordinators. Following an analysis of the state of implementation of cross-border interconnection projects by putting the emphasis on underlying structural problems and obstacles to investment, the Commission has also adopted a **priority interconnection plan**¹⁴ in which it proposes measures to improve the situation.

The Commission has continued to enforce the Community competition rules in individual cases. A number of surprise inspections were carried out in May 2006. These investigations are ongoing.

In the field of transport, the European Court of Justice confirmed in January 2006 the validity of EU legislation on **air passengers' rights**. This legislation, which came into force on 17 February 2005, has improved the protection of air passengers' rights in the European Union in the event of denied boarding, flight cancellation or long delays. In June 2006, the

¹⁰ Directive 2005/89/EC of the European Parliament and of the Council

¹¹ SEC(2006) 547

¹² Decision C-17/03 of 7 June 2005 of the Court of Justice

¹³ COM (2006) 851 final

¹⁴ COM(2006) 846 final

Council adopted a Regulation strengthening the rights of disabled persons and persons with reduced mobility when travelling by air¹⁵. In March 2006, the Commission adopted a first **list of airlines banned in the European Union**¹⁶, which has since been updated on a quarterly basis. During the past 18 months, the Commission and EU Member States have brought more than 400 **bilateral air services agreements** into legal conformity with European Community law, following the 'open skies' judgment by the European Court of Justice in 2002. In July 2006, the Commission adopted a **proposal to modernise the Single Market legislation for aviation**¹⁷, designed to ensure transparency in fares announced to passengers and to prevent pricing that discriminates on the basis of residence. The proposal simplifies the “third aviation package” adopted in 1992, streamlining the financial conditions that all EU airlines have to fulfil and the monitoring of these by Member States.

In May 2006, the Commission published a report on the implementation of the **first railway package** in the Member States. The package aimed in particular at a gradual opening of rail freight markets and providing railway undertakings with a non-discriminatory access to rail infrastructure. Such access had to be guaranteed mainly through the separation of essential functions (capacity allocation, infrastructure charging and licensing) from transport operations and through the establishment of national regulatory bodies responsible for the monitoring of the proper functioning of the railway markets. As regards the implementation of the **second railway package**, which provides for the full opening of the market for international freight transport by rail as of 1 January 2006 and of the domestic rail freight markets by 1 January 2007, five Member States received a reasoned opinion for failing to notify the Commission of their transposition measures. In July 2006, the Council issued a Common Position on the proposals of the **third railway package**. This package contains provisions for the opening of the market for international passenger transport by rail, improving the rights of passengers using international railway services and establishing a certification system for locomotive drivers. In January 2007, the European Parliament adopted its recommendation on the proposals of the third railway package in its second reading. The Commission also undertook various legislative actions to improve **cross-border railway interoperability within the EU**. Firstly, measures on the simplification of the certification of railway vehicles, including a proposal to recast the existing Railway Interoperability Directives and a proposal to modify the Regulation establishing a European Railway Agency and the Railway Safety Directive, were adopted in December 2006. Furthermore, the Commission adopted technical specifications for interoperability for five subsystems of the conventional trans-European rail system. In April 2006, public consultations were organised on the **rights of passengers in international bus and coach transport**.

In the field of postal services, from 1 January 2006 services may only be reserved for correspondence up to a weight of 50g. Public undertakings providing postal services are subject to the **public procurement** procedures laid down in Directives 2004/17/EC and 2004/18/EC. These Directives should be implemented by the Member States by 31 January 2006. In October 2006, the Commission issued a proposal to open EU postal markets fully to competition by 2009, in line with the agreed target date set out in the original Postal Directive while maintaining the current provisions on Universal postal service and improving consumer protection.

¹⁵ [Regulation \(EC\) No 1107/2006](#)

¹⁶ Commission Regulation (EC) No 474/2006

¹⁷ COM(2006) 396

3. MARKET PERFORMANCE

3.1. Market structure and competition

Network industries are generally still characterised by high levels of market concentration and a slowly developing state of competition. While competition has picked up most in the telecommunications sector, the electricity and gas sectors are still largely dominated by incumbents, who often benefit from an insufficient level of separation of their supply activities on the one hand and their transmission activities on the other. This simultaneous control tends to discourage new entrants and consequently hampers the development of competitive markets.

Market opening and regulatory framework reforms implemented over the past decade have paved the way for changes in the **market structure of network industries**. However, the timing, speed and depth of this opening process have varied across industries and by Member State. As a result, the national and sectoral market structures and the intensity of competition currently observed are quite heterogeneous.

In the telecommunications sector, the number of market players continued to increase between 2004 and 2005. While the market share of the incumbent operators is in many cases still high, it has nonetheless been falling as the number of major competitors in nearly all the Member States has increased, suggesting that competition is developing well as a result of entry. Competition is stronger in mobile than in fixed telecommunication markets.

The electricity and gas markets are best described by the main findings of the energy sector inquiry. First, they are highly concentrated and remain national in scope. Incumbents often retain firm control of the liberalised markets, and there is little new entry. Second, the degree of unbundling – the separation of supply and generation activities on the one hand from the transmission, distribution and storage (gas) infrastructure on the other hand – is inadequate. The control of the essential infrastructure by some firms that are themselves active in generation and supply effectively discourages competitors, who experience or fear discrimination in accessing this infrastructure. Consequently, there is still much need and scope for further unbundling in the EU energy sector, and ownership separation is indeed the form of unbundling that is most likely to put aside any conflicts of interest that are characteristic for vertically integrated firms. Third, European gas and electricity markets are still insufficiently integrated. Their large national and dominant incumbents are often reluctant to compete on their neighbours' territory. A fourth characteristic is the lack of market transparency. There is a lack of timely and reliable information for both competitors and consumers. Besides constituting a barrier to entry, this undermines confidence in trading and stops consumers from making informed choices. Finally, there is the key issue of how prices are set. While price formation is affected by many factors it has to be ensured that anti-competitive practices are not among them.

In the railway sector and in postal services, where some segments are still protected from competition, market opening is not yet as advanced as in the other network industries. Nonetheless, in the railway sector concentration appears to be slightly lower in those Member States which have opened up their markets earlier. Likewise, a recent survey of national regulatory authorities and universal service providers in the postal sector suggests that perceived competition is strengthening.

3.2. Prices, Output, Employment and Productivity

Price developments in the different sectoral and national network industries have exhibited large variations in sign, magnitude and volatility over the past decade. Recent increases in gas and electricity prices have received particular attention and can partly be attributed to rising oil prices and to insufficient application of good regulatory practices. On the other hand, telecommunication prices have been falling, facilitated by intensifying competition in the sector and technological innovation.

Over the period 1996-2006 **price developments** in the different network industries have varied in sign, magnitude and volatility. The telecommunication price index has fallen at an annual average rate of 2.4% over that period, although the rate of decrease slowed down somewhat after 2002. This price fall has occurred in parallel with both increasing competition and technological progress. In the electricity sector, the price index remained constant between 1996 and 2000, but has been rising at an annual rate of 4.2% thereafter. The increase between January and November 2006 was particularly strong (6.2%). In marked contrast to these two sectors, the gas price index has increased by an annual average of 8.1% since 1996. The increase has been particularly strong since 2004 and can partly be attributed to the oil price hike. The price of rail and air passenger transport has slightly increased relative to the all-economy inflation rate observed since 1996, while the price index for postal services has progressed in parallel with it.

Measured as a share of value added, the size of network industries has generally been decreasing in the EU as a whole over the past decade. Most of the decline can be attributed to the electricity, gas and water supply and inland transport sectors. As far as electricity and gas are concerned, this decline reflects the steady downward trend in the energy intensity of the EU economy (energy consumption per unit of GDP) and is therefore to be welcomed from the point of view of sustainable growth policy. On the other hand, the relative importance of the communication (telecommunications and postal services) sector in the total output of network industries is noticeably increasing, and is particularly pronounced in the new Member States.

With slightly over 3% of the workforce, transport (and in particular land transport) is the largest employer among the network industries, followed by post and telecommunications (1.6%), and electricity and gas (0.7%). In general, the share of network industry employment is significantly higher in the new Member States (about 7.4%) than in the EU15 (about 5%). Taking a long-term perspective the **employment level** in the EU15 network industries has roughly remained stable since 1980.

Employment trends have varied across network industries. In the EU25 telecommunications sector, employment increased at an annual average of 1.5% between 1995 and 2004, although there was a slight decline between 2003 and 2004. In the electricity, gas and water supply sectors, employment has decreased in both the EU15 and the new Member States. This pattern is mirrored in most Member States. Only a few – Luxembourg, France, Portugal and Slovakia – have registered modest employment increases in these sectors. In postal services, employment has globally remained stable. Employment in EU15 transport industries expanded at an annual average of 0.6% between 1996 and 2003, an increase that can be attributed to inland and air transport.

Between 1993 and 2003 in the EU15, **labour productivity** in communication (telecommunications and postal) services (average annual growth rate of 7.6%), and in electricity, gas and water supply combined (5.9%) grew at a considerably faster pace than in

the economy as a whole (1.8%)¹⁸. Transport productivity developments were similar to those of the economy as a whole. It is also noteworthy that after 1996 the demand growth was higher than the productivity growth in communication services and air and inland transport, thus leading to employment increases. This underlines the fact that there is not necessarily a trade-off between productivity and employment growth. The strong increase in productivity in communication services – one of the most competitive network industries – also occurred in the new Member States, although there it was accompanied by declining employment. The other sectors grew at the same speed as the economy as a whole.

4. MARKET INTEGRATION

In general, network industries are still organised to supply national markets, and integration at the EU level is, by many measures, low. While some physical and technical barriers to integration are only slowly being removed, it is often in the interest of governments and incumbents to keep markets segmented. There is thus a need to provide adequate incentives for increased cross-border investment and ensure level playing fields between actual and potential competitors regardless of their nationality and location. In that respect, there is a need to improve consistency in the implementation of EU sector-specific regulation across Member States in order to provide greater legal certainty for market players seeking to operate at a European level. Extensive and increasing cross-border ownership in network industries do, however, suggest that firms are increasingly adopting an EU perspective when formulating their business strategies. As such, mergers can act as catalysts for market integration.

Market integration is not only a political goal of the EU and its Member States, but also has the potential to affect the performance of industries directly and significantly. While producers can increase their efficiency by taking advantage of economies of scale that could not be achieved at the national level, industrial restructuring and a more efficient geographic allocation of economic resources, together with more intense competitive pressure, should keep prices down and ensure a better quality of service for consumers.

A substantial number of barriers continue to hamper market integration of network industries. They include technical and physical barriers such as the lack of interconnection capacity between Member States and compatibility problems which prevent national networks from operating with each other, legal and regulatory barriers, inconsistency in the implementation of EU regulation across the Member States, consumer inertia, some practices and inherited advantages of incumbent firms which tend to perpetuate the segmentation of markets along national lines, such as the privileged access to the network infrastructure, and the protectionist behaviour of governments vis-à-vis their domestic incumbents.

Quantitative indicators, such as price dispersion indicators, provide mixed conclusions regarding market integration in network industries. While differences in the prices for goods and services are likely to persist even in completely integrated markets, one would nonetheless expect to see some convergence in prices and in price co-movements. However, very big price differences across Member States can currently be observed in most network industries. Even though indicators of price dispersion in the electricity and gas sectors

¹⁸ Groningen Growth and Development Centre, 60-Industry Database, October 2005. Electricity, gas and water supply are included as one sector.

between 2001 and 2006 are suggestive of some price convergence in the EU25, a clear and convincing trend is hard to discern. Despite the fact that average prices generally fell significantly price disparities in the telecommunications sector, by some measurements, seem a lot higher than in electricity and gas. Price convergence seems to hold only for phone calls to certain destinations. However, one should consider the price-disparity indicators in telecommunication with caution, since they may be distorted by the increasing trend to bundle offers of voice, data and video services. Price differentials and sluggish price convergence in EU network industries hence underline the incomplete state of market integration.

Other indicators for market integration relate to the intensity of cross-border merger and acquisition (M&A) activity. Indeed, as a consequence of liberalisation and the development of the internal market, one would expect to observe two effects in the M&A trends in EU network industries: firstly – following the development of new M&A opportunities, resulting from the break-up or privatisation of former monopolies – an increase in network industry M&A activity both in absolute terms and relative to all M&A activity; secondly – as a result of reduced market barriers – an increase in the share of EU cross-border M&A deals. Both hypotheses are supported by the data, showing that the share of network industry deals in all M&A deals in the EU increased considerably – from 4.3% in 1993 to 9.2% in 2005. At around 25%, the cross-border share in all network industry deals is comparable to the cross-border share in economy-wide deals. Whereas the proportion of EU cross-border deals in all sectors has increased smoothly from around 15% in 1993 to around 25% currently, it developed much more abruptly in network industries in the mid-1990s, when it jumped from 15% to around 25% where it stabilised. This sudden increase coincides with the launch of the first electricity and gas directives, and the adoption of the so-called "1998 package" in the telecommunications sector – supporting the idea that market opening may have contributed to an integration effect.

5. DISTRIBUTIVE EFFECTS OF MARKET OPENING

Market opening in network industries is likely to have heterogeneous effects at both the household and the regional level. Since low-income households tend to spend a higher share of their outgoings on network industry services, they are likely to be most affected by price changes. However, the increase in the share of household expenditure on network industry services observed in most Member States over the past decade can be attributed to changing consumption patterns rather than to price increases. Two case studies suggest that the dispersion of household electricity prices within individual Member States has diminished. Territorial cohesion within the EU has been enhanced by the opening of the air passenger transport.

Changes in the regulatory environment and the liberalisation of network industries are likely to affect different household types asymmetrically, since households with little income usually spend a higher share of their outgoings on network industry services. In absolute terms, however, higher-income households tend to consume more network industry services than those with a lower income. The extent of consumers' adjustment to price changes also depends on their initial consumption and their level of income.

To analyse the distributive effects of market opening in more detail, a study carried out for the Commission services examined the effects on five groups of households with different income levels over the last decade. Changes in overall household expenditure are split into two parts. Firstly, the direct price effect measures the impact of price changes on the share of

expenditure for services of network industries, holding the consumed volumes constant. It provides an estimate of how much households' spending on these services would have changed if they had continued to consume identical volumes. Secondly, this direct price effect is complemented by observed changes in volumes consumed, be it in reaction to price changes (e.g. with lower prices leading to increased demand) or as a result of technological progress and other changes in consumers' habits. The overall effect thus shows the change in the share of household expenditure on network industry services over time. The following conclusions can be drawn from this analysis:

- In a majority of EU15 Member States, between 1994 and 2004 the direct effect of price changes (holding volumes constant) would have led to a decrease in the share of expenditure for all network industry services. This can mainly be attributed to price cuts in telecommunication services which outweighed price increases for other services.
- The direct price effect is more pronounced for low-income households than for high-income households. On the other hand, low-income households are also more affected by price increases as they generally spend a higher share of their outgoings on network industry services.

When monitoring the development of the actual share of household expenditure spent on network industry services, direct price effects need to be complemented by the observed changes in volumes consumed.

- Overall, in 14 of the EU15 Member States, the share of household expenditure for network industry services increased during the last decade, in some countries considerably. This increase, is dominated by a substantial rise in the volume of telecommunication services purchased, which is not only a reaction to substantial price cuts but can also be attributed to technological advances (such as the emergence of mobile telephony and internet usage), network effects, new services offered, etc. In other sectors, the effect of price increases on average prevailed over changes in volumes consumed.

One of the objectives of government intervention is to contribute to territorial cohesion. While a comprehensive analysis across all Member States would be desirable, this is unfortunately not possible due to data constraints. An analysis of the electricity sector in Germany and the UK, two countries with a medium to high level of market opening, gives the following results:

- The opening of the electricity market in Germany was accompanied by converging prices across regions for three out of five household types, classified according to their consumption levels. For households with a median consumption level, price dispersion remained unchanged since 1997, while it actually increased for households with high consumption levels.
- In Germany, the average annual increase in domestic electricity prices was rather modest (on average 3%). As regions with low electricity prices experienced faster price rises than the more expensive regions, prices converged to a higher level.
- Industry prices for electricity in Germany decreased for most consumer types. The considerable increase in price dispersion between 1995 and 2003 could indicate the existence of tailor-made packages for certain regions or cities.

- In the UK, household prices for electricity fell significantly between 1995 and 2004 by up to 5%, in particular for households with low to medium consumption. As prices are very close across UK cities, price differences between cities are much smaller compared to Germany.

Concerning the railway sector, data for the UK in the period 1995 to 2005 illustrate how the sector developed after market opening.

- Rail fares for all standard classes increased at an average of 2.9% per year between 1995 and 2005. Regulated fares developed very similarly, so that there is practically no price difference between operators. For unregulated fares, a growing disparity can be observed over the years, with long-distance operators accounting for the highest price increases.
- Over the same period, rail traffic has risen in general at a more or less steady pace. Between 1995 and 2005, the overall increase was between 30% and 60%.

In the air transport sector, the number of international non-stop city pairs within the European Union has doubled since 1992, corresponding to a 6.6% average annual increase. This result and the growth in passenger numbers at European airports can be traced back to low-cost carriers, which have in fact become major players in European aviation in a relatively short space of time.

In summary, territorial accessibility by air has been considerably enhanced across the EU following the market opening process in the air transport sector, through the development of regional airports and rapid growth in passenger traffic from and to more varied origins and destinations.

6. FULFILMENT OF PUBLIC SERVICE OBLIGATIONS

Community and national legislation may impose obligations of particular universal services on network operators. Compared to previous years, the accessibility of these services of general economic interest has not substantially changed. The affordability of these services has remained fairly stable for electricity and improved somewhat for gas. In the new Member States, affordability has continued to improve rapidly for both sectors. While the quality of these services has shown some improvement, there is still scope for further progress.

The notion of public service obligation (or Universal Service Obligation) has been defined in Community legislation as the permanent and obligatory provision of a range of services easily accessible to users. Such services may also have to meet specified quality targets and be available at affordable prices. Member States have wide discretion in defining the detailed specifications relating to these aspects.

The available indicators show that **accessibility of services of general economic interest has not changed significantly over the last few years**. In terms of social accessibility (including access to these services for people with disabilities, special tariffs for people on low incomes or with special social needs), there have been some improvements but the incompleteness of data makes it impossible to draw overall conclusions.

- In the **telecommunications sector**, there have been positive developments in facilitating access to telephone services for users with disabilities. However, there is scope for improvement. Overall telephone access in the EU has been stable at the historical maximum level of 97%. For fixed telephones, a slight decreasing trend has been observed, due mainly to their substitution by mobile phones. Besides telephony, there is a need to further improve the performance of all forms of electronic communications by reducing exclusion from the information society notably for reasons of disability and age.
- In the **energy sector**, some Member States have established indicators for certain universal service standards and vulnerable customers. It is, however, difficult to draw general conclusions owing to lack of complete data.
- The **rail** density at the EU level has not changed greatly since 2000. The stock of rail vehicles decreased by 14% between 2002 and 2005 but, since the capacity of rail transport has remained constant, this may be a sign of technological changes rather than worsening accessibility.
- Overall accessibility of **postal services** has not changed significantly since 2000. The number of postal outlets has been slightly reduced. However, compared to developments prior to 2002, the reduction has slowed down. Regarding delivery requirements, the situation in most Member States has been stable for the last few years. From the available evidence, here is no clear relation between the degree of liberalisation of the postal sector and the accessibility of postal services.

The analysis of **affordability** shows, as in the 2005 Report, that even though relative prices for services of general economic interest are similar in new and old Member States, these services are relatively less affordable in the new Member States. It can be noted **that affordability in the EU15 has been fairly stable for electricity and showed a slight increase for gas, while in the new Member States, despite their initially higher levels, affordability continued to improve more rapidly for both sectors.** It is particularly important to ensure the affordability of these services in the new Member States, given the relatively low per capita income in most of those countries and the special nature of the SGEI as basic services for households.

As regards the **quality of services, the data available for some sectors point to some improvements, although there is still room for progress.**

- The quality of postal services has been constantly improving and reached a high level in 2005, although there are differences between Member States. The transit time targets (D+1) have been made more demanding, particularly in the new Member States. Progress has also been made in cross-border mail delivery.
- The overall arrival and departure punctuality of EU airlines has slightly improved, by 1.2% and 0.6% respectively, but the share of delayed flights between the best and the worst performer varies a lot across Member States. This indicates that there is significant room for improvement in the under-performing companies.
- For the **electricity sector**, some improvements with regard to the reliability of supply have been observed, with the number and duration of unplanned interruptions showing a downward trend for most countries where data are available. Even the countries in which interruptions have previously been of short duration and few in number have been able to

make further improvements. Regarding the share of renewable energy in electricity production, there is still much room for improvement in order to reach the targets.

7. CONSUMERS' VIEWS

In general, consumers perceived improvements in access to and affordability of network services. A majority of consumers consider their interests to be "well protected".

The Commission services have carried out three separate studies examining consumer views on the provision of services of general economic interest. The first study measures consumer satisfaction using a survey and a statistical analysis of the results.¹⁹ The second study²⁰ is a Eurobarometer opinion poll that was conducted to survey consumers' opinions on various services of general economic interest. This poll is complemented by a qualitative study²¹ based on focus group discussions, concentrating inter alia on telecommunications and postal services.

The consumer satisfaction study classifies consumers as being "satisfied" or "dissatisfied" with a sector, according to a commonly used method in such surveys. A comparison across sectors reveals that consumers are most satisfied with mobile telephony, followed by gas and electricity supply, and postal services. Urban and extra-urban transport (rail services) are at the end of the list.

A statistical analysis of results reveals that the three main **drivers of consumer satisfaction** are quality, image and price²². A **socio-economic analysis** of results indicates that consumers in the higher age group tend to be more satisfied, while retired consumers are the most satisfied of all groups. The least satisfied consumers are the self-employed and students, who are systematically more critical in their views.

A country analysis of the results and a **comparison between the EU15 and new Member States** reveals no clear pattern since consumers' views differ according to the service in question. Consumers in the new Member States are less satisfied with fixed telephony and urban transport, but they are more satisfied with mobile telephony, gas, electricity, postal services and extra-urban transport.

As regards consumers' **access** to services of general economic interest, the situation has improved since 2004 for nearly all services, with consumers indicating that they have fewer access-related difficulties. The findings of the focus group support the results of the opinion poll. An examination of **usage** reveals that services of general economic interest are becoming more and more important in consumers' lives, with usage having increased since 2004 for all surveyed services. This usage ranges from 97% for electricity to 54% for passenger rail services.²³ A closer examination of the **importance** of some network industry services (fixed telephony, mobile telephony and post) in **consumers' daily lives** shows that that they are all

¹⁹ http://ec.europa.eu/consumers/topics/facts_en.htm

²⁰ http://ec.europa.eu/consumers/cons_int/serv_gen/cons_satisf/index_en.htm

²¹ The study also covers internet and bank accounts, which are outside the scope of this evaluation. It can be accessed on: http://ec.europa.eu/consumers/cons_int/serv_gen/cons_satisf/index_en.htm

²² The statistical model explored a range of factors influencing consumer satisfaction such as market expectations, personal expectations, (dis)confirmation of expectations, complaints, commitment to the providers, alternatives to the providers and others.

²³ On international mobile roaming, a different survey (Special Eurobarometer 269, November 2006) found that 78% of those who have a mobile phone either use it less when abroad or do not use it at all.

perceived as "very" or "fairly" important, with percentages ranging from 69% for mobile telephony to 82% for postal services.

The **affordability** of these services is an issue of great importance for consumers. On a positive note, according to **users'** views, most services have become more affordable. Most improvement is seen in urban and extra-urban transport and mobile telephony. Consumers however indicate that both electricity and gas have become less affordable. Polling citizens who are **non-users** of network industry services gives a picture of the scale of **exclusion** resulting from excessive prices. The percentage of citizens among the non-users who find prices excessive or non-affordable ranges from 21% in the urban transport sector to 39% in the electricity sector – where the percentage of non-users is admittedly very low (3%).

The pricing used by different service providers makes **comparisons of different offers** by different providers very difficult for consumers. Looking at the telephony market, a rather high percentage of consumers (38%) admit that they find it difficult to **compare offers** between different providers. Consumers can take advantage of competition by **switching** providers or changing tariffs, yet many of them do not do so. A socio-economic analysis of the Eurobarometer results shows that better educated and informed consumers are more likely to switch service providers.

Looking at **protection of consumers' interests** in general, 50%-70% of consumers consider their interests to be "well protected", depending on the service in question. The results show that country results differ significantly.

8. CONCLUSIONS

In general, a majority of the public is satisfied with the performance of network industries. The data on prices and the available information on the quality and coverage of service indicate that the performance of most of the industries is improving or at least being maintained.

The notable exception is rising energy prices. The current level of energy prices partly reflects the situation on world markets for oil and gas but is also in part attributable to a lack of competition. Lower-income groups are particularly badly affected by high energy prices and Member States may need to take steps to alleviate this problem, for example by helping low-income households to improve their energy efficiency and to take advantage of increased competition by switching to cheaper suppliers.

In all the industries surveyed, the slow pace of integration at the European level is putting a brake on the development of more competitive markets, particularly in gas and electricity. To promote market integration and competition, there is a need to improve incentives to invest in infrastructure, especially cross-border interconnections, and to ensure that the available infrastructure is efficiently used and open to all. In its recently presented "Energy package"²⁴, the Commission has put forward proposals for obligatory ownership unbundling of networks and supply activities in order to achieve these objectives. In e-communications and energy the Commission is also reviewing the options for promoting market integration through better coordination of national regulatory authorities or the creation of EU-wide regulatory agencies.

²⁴ Communication on an energy policy for Europe (COM(2007)1 Final

Electronic communications are the major success story of liberalisation but even here further improvements could be made, not only through better coordination of regulators but also by removing unnecessarily restrictive regulation (e.g. in radio spectrum allocation) that not only hinders market integration but can be an obstacle to the development of innovative services and technologies.