

Market Functioning in Network Industries – Electronic Communications, Energy and Transport

Network industries, such as electronic communications, energy, and transport, are of vital economic importance because the infrastructure and services that they provide underpin the functioning of modern economies.

To improve the functioning of markets in these essential sectors, the EU has pursued a three-pronged strategy: to introduce competition into economically inefficient monopolistic structures; regulate infrastructure; and transform fragmented national markets into a larger, more efficient, integrated EU market.

The main objective of this report is to provide a comparative assessment of market functioning in EU Member States in the electronic communication, energy, and transport sectors. It assesses Member States' progress in market opening and competition and highlights potential market distortions that can hinder the proper functioning of these markets.

The first part of this report analyses how well national electronic communication, energy, and transport sectors are functioning, paying particular attention to the existence of market distortions and the progress that Member States have made towards liberalisation. The analysis shows that, overall, more progress has been made in the electronic communications sector than in energy or transport but the picture varies considerably across the EU. Over the last two years, however, sizeable improvements have been made to the regulatory and competitive environment in all sectors, although there remains room for further improvements as market concentration levels remain high in energy and transport and the uptake of high-speed broadband is still low in many Member States.

The second part of the report focuses on specific aspects of the three network industries under consideration.

The section on electronic communications delves into the economic impact of structural reforms designed to foster the deployment of wireless high-speed broadband in the EU through adequate, competition-enhancing, and investment-enhancing radio spectrum frequency allocation. Spectrum auctioning is found to be associated with lower bills for mobile phone users, perhaps because of its indirect competition-enhancing effect on market concentration. Modelling shows that lower mobile telephony prices improve GDP growth.

In the energy sector, a key problem in a number of countries is that electricity generators are losing money because regulated tariffs are set below costs, a situation known as a 'tariff deficit.' This problem affects not only electricity producers in Spain, Portugal and Greece, but also in France, Bulgaria, Malta, Romania and others. Power companies in Germany, Latvia, Hungary and Italy have also suffered from temporary loss-making periods. Tariff deficits have emerged as a result of the poor interaction between market liberalisation and state support for renewable energy and retail price regulation.

Empirical analysis of the main drivers suggests that enabling markets to function better could help avoid the emergence of permanent electricity tariff deficits. To improve electricity markets, energy regulators need to consider the full cost of regulated activities in the electricity system, which includes a variety of activities such as network operation, support for renewables and other Public Service Obligation Public SO activities. Retail price regulation, very often implemented to protect vulnerable customers, can prevent electricity producers and operators from covering their costs and lead to tariff deficits in the electricity system. Thus, it is more economically efficient to support vulnerable consumers through the welfare system, or at least to limit regulated prices to selected groups. The cost of the support to various energy sources and/or customers' needs to be made explicit in the system and transparently allocated across consumers. If not, the risk is that costs will not be fully covered and losses will be generated, which might have a negative impact on public finances. The capacity of the market operators to access financing might also be hampered. Any financial support system for power generation needs therefore to be designed carefully to avoid both overcompensation and excessive costs. State support should also avoid distorting the electricity market and comply with EU state aid rules.

The section on transport focuses on railways. The EU has been pursuing policies to encourage competition between rail operators sharing the same railway lines. The process of market opening started in the freight sector but has more recently extended to the international passenger segment. The study finds that market entry to rail freight markets is free in all Member States and that the sector is generally more open than the sector for international passengers. The difference in the degree and timing of market opening between the freight and passenger sectors is reflected by the respective market share of the incumbent rail operators. While the share of the incumbents is still high in both sectors, it is particularly high in the passenger segment, where it is still 100 per cent in most countries.

An important aspect, in the context of market openness in the European rail sector, is the degree of independence between the companies managing railway infrastructure and those operating rail transportation services. By 2012, most EU Member States had separated their railway infrastructure manager from rail transport companies, however, seven Member States have railway sectors that are either fully vertically integrated or only partially separated. Empirical analysis confirms that market opening is an important driver of competition and indicates that the impact of market opening reforms on competition is stronger if vertical separation is implemented.