

Horizontal Approach to Network Industries in Croatia

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More than two decades ago in the European Union law, competition has started entering economic activities, organised traditionally under the concept of services of general economic interest. Special and exclusive rights have gradually been abolished in important industries like telecommunications, postal services, energy or railways. European Union policy has opted to prioritize efficiency over social issues in those industries by adopting liberalisation agendas. Previous monopolies have undertaken long restructuring processes to meet upcoming competition. However, entering and positioning in the market has not proven to be a short process for new-comers either. Although network industries display differences among themselves, there are common trans-sector issues which allow a horizontal approach. This brings into focus the actual role of different national regulatory and competition authorities in different stages of market regulation and the ways of coordinating their function in multisector patterns

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in the future. In this respect and as a way to move ahead, we propose an integrated institutional pathway, allowing more expertise sharing (*shared services*) among national regulators and their better positioning in the Croatian society and economy.

Key words: Network industries, regulators, multisectoral regulation, competition, SGEI

1. Introduction¹

Network industries have a particularly important place in the political, economic and social life since they relate to strategically important communication and transport infrastructure, they are one of the most important employers and generator of GDP and have direct influence on the consumers' living standard.² Traditionally organized as State monopolies, network industries have been subject to liberalisation processes in the EU with the aim, among others, to complete the European single market and achieve a connected continent.³ Legal provisions of the Treaty on the functioning of the European Union (TFEU) which are of importance for the positioning of network industries in the single market are primarily articles 101-109 in the chapter on competition, relating to rules which apply to undertakings and rules on aids granted by states. These rules prevent undertakings from concluding anti-competitive agreements or abusing their dominant position and putting in place a merger control procedure. The possible State's economic influence on the market is controlled via

¹ This paper was presented at the IPSA International Conference – Europeanization of public administration and policy: sharing values, norms and practices, April 2013, Dubrovnik, Croatia. The author's views expressed in this paper are personal and do not necessarily reflect the views of HAKOM and ARTZU, where the author is employed as Council member. Formerly he was also Council member at AZTN

² Network industries are characterised by the delivery of products or services to final customers via a network infrastructure linking upstream supply with downstream customers. It refers mainly to eight major network industries: telecommunications, postal services, energy (electricity and natural gas), transport (urban, air and railways) and water (EC, 1999: 15).

³ See in particular the Proposal for a Regulation of the European Parliament and of the Council laying down measures to complete the European single market for electronic communications and to achieve a connected continent, and amending Directives 2002/20/EC and 2002/21/EC and Regulation 1211/2009/EC and 531/2012/EC, COM(2013) 627 final, where notions such as »European electronic communications provider« or »Single European Union authorisation« are being introduced.

state aid control procedures. Among those, article 106 is to be highlighted as it is the legal basis for liberalisation of network industries. It states that, in case of public undertakings to which Member States grant special or exclusive rights, Member States shall neither enact nor maintain in force any measure, contrary to the rules in the Treaties; in particular rules relating to discrimination on grounds of nationality (art. 18) and competition (art. 101–109). To that end the European Commission shall adopt, where necessary, appropriate directives or decisions addressed to Member States. This has to be read in conjunction with article 3 of TFEU which states that the EU shall have exclusive competence in several areas, among which – the establishing of competition rules, necessary for the functioning of the internal market. In addition to this, article 4 of TFEU provides, among other, that Member States shall facilitate the achievement of the EU tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives. The EU has so far passed several legislative packages in these sectors aiming at liberalisation. We are not going into detail of either of them, since they are not an objective of this paper, to mention just some which have historically triggered these processes at the time: in the Energy sector the Directive 96/92/EC and Directive 98/30/EC on common rules for the internal market in electricity and natural gas respectively, in the electronic communications sector Directive 90/387 on the establishment of the Internal market for telecommunications services through the implementation of Open Network Provision (ONP), Directive 97/33/EC with regards to ensuring universal service and interoperability through the application of the ONP principle, Directive 98/10/EC on the application of ONP to voice telephony and on universal services for telecommunications in a competitive environment, etc. In the postal sector there is Directive 97/67/EC on common rules for the development of the Internal market of Community postal services and the improvement of quality of services. The railway sector started with Directive 91/440/EC on the development of the Community's railways. Over time (phasing out of public undertakings' exclusive rights), competition in network has become the rule subject to the exceptions provided in article 106 (2) TFEU necessary for the unhampered provision of services of general economic interest (SGEI). According to articles 69 and 70 of the Stabilisation and association agreement between the European Communities and its Member states and the Republic of Croatia, ratified in December 2001 by the Croatian Parliament (NN 14/2001), Croatia had to undertake all necessary legislative alignment in the area of network industries even before becoming an EU Member state in July 2013.

2. General approach to network industries

In Croatia is the market regulatory function institutionally fragmented in relation to liberalisation processes in network industries. It is organised and split among the national competition authority (*Agencija za zaštitu tržišnog natjecanja – AZTN*⁴), and specific national sectoral regulators in electronic communications and post (*Hrvatska agencija za poštu i elektroničke komunikacije – HAKOM*),⁵ energy services (*Hrvatska energetska regulatorna agencija – HERA*),⁶ and railway services (*Agencija za regulaciju tržišta željezničkih usluga – ARTZU*).⁷ General competition rules in Croatia are implemented by AZTN. Their orientation is predominantly *ex post* application and they cover prohibited agreements, abuse of dominant position, merger control and, in a wider sense, state aid control. Regulatory rules are normally part of specific laws implemented by HAKOM, HERA and ARTZU respectively in this case. They mainly cover particular issues related to functioning of these industries, such as market and network access and services of general economic interest. Their application is predominantly *ex ante*. Modern societies recognise network industries being vital for social, cultural and economic development. Transport, energy and digital connectivity is seen as a precondition for EU market to grow and is recognised by the term – Connecting Europe Facility (CEF Regulation prop., COM 2011, p. 1) Organised societies strive to allow all citizens social inclusion, by accessing different transport infrastructures and networks for the provision of services like energy or electronic communications. Thus building, maintaining and developing of these technical and technological recourses are of public interest. The higher the usage value of networks, the larger is the geographical coverage since it is available to greater number of users (network effects).

Generally, on the basis of criteria of special usage it is possible to differentiate between so-called large or primary networks that need important physical space (ground, air) like railways, motorways, power transmission lines on one side, and narrow or secondary networks like cables or pipes on the other. The characteristics of the latter are that they can be easily integrated with the former ones, e.g. laying cables along motorways

⁴ www.aztn.hr

⁵ www.hakom.hr

⁶ www.hera.hr

⁷ www.artzu.hr

or railways. Considering the aforementioned, some authors speak of the appearance of a new – Administrative Law of Infrastructure in the future (Hermes, 2000: 223–243). One particularity of the sector of electronic communications is the legal notion of – right of way (Framework Directive 2002/21/EC, art. 11). The right of way is a form of property right allowing building networks on public property or private real estate for a yearly regular fee in return. The idea behind planning investment in urban areas and introducing new or replacing existing communal infrastructure (such as gas installation, water system, sewages, public lighting, etc.) is to link it to new generations of electronic communications networks so as to build - integrated infrastructure, as far as possible (art. 2, Government decree on benchmarks on development of electronic communication infrastructure and other connected equipment – Uredba o mjerilima razvoja elektroničke komunikacijske infrastrukture i druge povezane opreme). Network industries are generally technical structures and systems supporting modern urban social life. They have become an inseparable part of economy and society, so the term – network enterprise is being more and more used. The basic economic unit is not anymore individual (an entrepreneur) nor collective (the capitalist class or the State) but it is the technological network as a circle of economic units with virtual network culture (Castells, 2000: 214). The network in its technical meaning is a group of transport lines and nodes where they intersect. Transport lines may be telecommunication cables, power lines, railways and airline routes or pipelines for different use. Nodes may be telecom switches, electrical substations, railway stations, airports, etc. Network industries are therefore characterised by a net of lines and the more it is spread, the more are the network effects present.

Scheme 1. *Networks – lines and nodes* (Popović, 2012: 105)

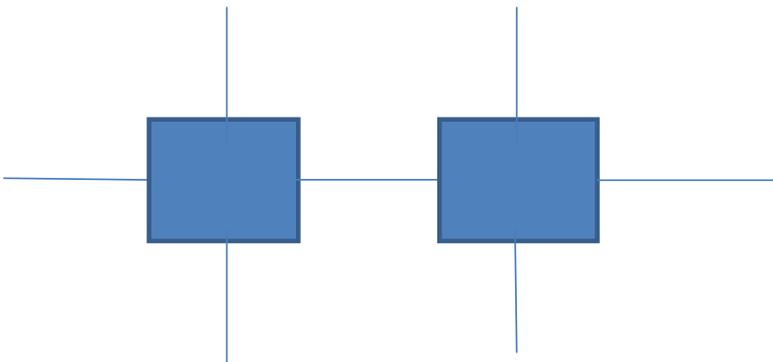


Table 1. *Interchangability of networks and services (Crampes, 1999: 98)*

MAIN FEATURES	one way electricity, gas	trains	two-way telecom, postal service, airlines	local networks water, urban public transport (u.p.t.)	Notes
1. Lines					
1.1. Infrastructure	■ no duplication	■ no duplication	■ duplication possibilities ■ competition (postal service, airlines) imperfect competition (telecom)	■ no duplication	duplication can be justified by: * jurisdiction * differentiation * dynamics * security
1.2. Substitutes	■ partial substitution	■ wrong substitution	■ low substitutability for telecom (but internet...) ■ wrong for postal services (fax)	■ no substitute for water ■ strong substitutes for u.p.t.	pollution and congestion in urban areas.
2. Nodes	■ gas is storable at nodes	■ stations are monopolies	■ airports are local monopolies	■ depollution units have Minimal Optimal Scale	terminal nodes and intermediary nodes can have a very different status with respect to competition
2.1. Upstream	■ electricity not storable ■ competition in production for electricity ■ gas storage can be competitive	■ multimodal competition in dispatching	■ multimodal competition	■ multimodal competition for u.p.t.	
2.2. Downstream	■ distribution monopolies	■ multimodal competition	■ telecommunications and postal services are switching from monopoly to multitechnological competition	■ water: competition in treatment ■ natural monopoly for water distribution	
3. Externalities	■ Kirchhoff law ■ need for dispatching	■ congestion ■ need for co-ordination	■ club externalities in telecom, ■ congestion	■ congestion, ■ quality variations	* indirect club externalities everywhere * problem of compatibility

Table 2. *Services chain of production and distribution (Crampes, 1999: 98)*

Network Taxonomy	Entry Mode	Lines and Nodes			Exit Mode
Electricity	generation	transformati on	transport (dispatching)	transformati on	local distribution
Gas	generation	storage	pipeline (dispatching)	storage	local distribution
Water	pumping, treatment	distribution/collect (basin regulation)			treatment, dumpin g
Postal Service	clearance	sorting	transport (international co-ordination)	sorting	local distribution
Telecom	local loop	switch	long distance (allocation of audio-frequencies + co-ordination)	switch	local loop
Airlines	intermodal	airport	transport (traffic control)	airport	intermodal
Railways	intermodal	station	transport (traffic control)	station	intermodal

Key : competitive activity
 mixed activity
 monopolistic activity

What network industries have in common are not the technical characteristics of individual networks, but rather the economic ones – rules of use, like the economies of scope and scale and the comparable legal framework governing, i.e. issues such as the – access to the networks. Therefore the horizontal approach to network industries may be asked for more in the economic and legal domain and less on the technical side. From the technical side networks normally meet four functions. These are interconnection, interoperability, capacity management and system management. Interconnection stands for physical connection of different networks with the same or similar function. Interoperability refers to organised interaction and use of different network elements. Capacity management has to ensure efficient and impartial distribution of scarce network resources (i.e. network neutrality), particularly for services used in real time as in some electronic communications services. System management ensures free and secure flow of traffic particularly through congestion points respecting relevant quality standards (Finger, Kunneke, 2006: 4).

From an economic point of view, rather high investment needed may be a factor limiting the potential number of investors who are ready to enter markets where network is an essential resource. This is particularly noticeable in the case where new entrants attempt to build their own network on a large scale. Hence the economics of network industries are based on building network parts and connecting them at points of connection to existing networks usually owned by incumbent operators. This makes the investment less risky and allows entering the market step by step. A related issue is cost and other conditions under which new entrants have the right of access to the legacy network of former monopolists. This concerns in particular the distribution part of the network, in which are the replication costs the highest, i.e. local loop in telecoms (Sabolić, 2007: 8). The potential risk of one-off large scale investments is that in case of exiting the market, investments might be hard to recover (sunk costs) since the facilities built have in principle no alternative use. The same goes for stranded costs, where it was not possible to recover costs of stocks (power plants, trains, plains, etc.) as planned under the regime of exclusive rights due to liberalisation processes, or by reason of fast change of technology i.e. fibre line instead of copper line and accompanying facilities in electronic communications. Besides, doing business in network industries requires important maintenance costs of the network, billing systems, customer care, high marketing costs, etc. Therefore, in general, network businesses start with higher costs and continue with lower marginal costs. The average costs of doing business diminish proportionally

to the rise of services usage according to the economy of scope and scale. This can be noticed in electronic communications where several services are offered through the same network. Liberalisation processes naturally lead to the change of the market structure from monopoly to duopoly or oligopoly. Developing sustainable competition may be a challenging task for regulatory authorities across all network industries, particularly when implementing e.g. cost-allocation procedures necessary for price control (Leveque, 2003: 73). Vertical integration is another characteristic of network industries and it relates to the situation where one and the same operator manages two or more levels of the distribution chain. It can be that the same undertaking produces goods or services, does the transport over a particular infrastructure and does the distribution to users (Owen, 2011: 365).

Dynamic technological developments may change the perception of particular industries as natural monopolies, as is the situation with fixed electronic communications, where mobile communications are likely to take the lead over time and change the historical set up. However, in other network industries developments are scarce, as for instance in water procurement or railway freight transport. Therefore such industries are – technologically static. As long as full infrastructure substitution is not financially viable or achievable, the access of competitors to the legacy infrastructure is ensured through a set of rules historically widely known in the electronic communications sector as – open network provision. Network access conditions need to ensure equality of business for the historical operator and its competitors. Regulation of the scarce parts of infrastructure (i.e. bottleneck) is done by account separation of the infrastructure part from the service provision part. In other words wholesale and retail businesses of vertically integrated operators are separated in order to avoid unlawful cross-subsidisation among them. Financing of potential losses of retail business from the wholesale part is not allowed, i.e. cross-subsidising as this puts competitors on an unequal footing. The most efficient way seems to be the structural division of the infrastructure under a separate legal entity as this is done in the railway sector in Croatia, where the former monopolist was divided into four companies under a holding company umbrella at the outset of the liberalisation, i.e. infrastructure, traction, freight and passenger transport (art. 1, Law on dissolution of company Croatian railways/Zakon o podjeli trgovačkog društva HŽ – Hrvatske željeznice). The main value of the networks and services offered through them is the large number of users and geographical destinations thus connected. This influences the intrinsic value of network since all

of its users are technically connected (positive externality). However, if a large number of users overload the network, this can have detrimental effects on the quality of the service concerned, such as delays in various traffic modes (negative externality). Network industries besides having individually an important social role, are an unavoidable input for all other industries and undertakings. The cost of services like energy, electronic communications, postal or other transport services influence the overall competitiveness of the economy. Often investments in network industries are taken as a correlation to the expected growth of GDP.

A synonym for convergence nowadays is the – Internet. It has a hybrid nature and connects electronic communications with electronic media (networks based on the Internet protocol, IP). Apart from network convergences, other convergences occur among technical appliances, industries and institutions (OECD convergence and NGN, 2008: 7). Thus is created a new level for multisectoral approach in the sense that electronic communication operators are offering TV services. Convergence of this type is – deep, and can be noticed in telecoms, audio-visual services and information-communication technologies. On the other hand - loose convergence can be found in the sectors of electronic communications and electricity where there may be occurrence of common infrastructure, but with clear distinction between services. Such undertakings are named – teleelectric companies. The postal sector shows as well some innovation, i.e. hybrid mail (Geradin, 2001: 115), but also new commercial offer of bundled postal and TV services, as is the case in Croatia. It is worth mentioning business cooperation among different transport sectors as well, which is not convergent in the technological sense, but is based on the benefits of intermodal transport. Road and railway transport are a classical example but not the only one. Cooperation may be found between air carriers and railway companies, where airports are being connected with railway lines in order to better serve the needs of passengers in a way that they use airlines for longer distance and rail for shorter distance. Common reservation systems and logistical coordination help save time and costs to passengers, as well as raise incomes of transporters. Large companies with a portfolio of network services (multi-utilities) and the building of smart grids⁸ enable the bundling of commercial services for final users. A company of that type is the French Vivendi active in electronic commu-

⁸ www.smartmeters.com/the-news/1377-deutsche-telekom-planning-to-expand-into-smart-metering-.html

nications, energy, water supply, multimedia and construction.⁹ This may make us rethink the classic regulation of a single network industry by a single national regulatory authority and explore the ways of multisectoral regulation and integration of existing national regulatory authorities in the future.

A very recent example of institutionally converged approach to infrastructure and multi-utilities can be found in the European Commission Proposal on measures, the aim of which is to reduce the cost of deploying high-speed electronic communications networks (Proposal for a Regulation, COM 2013, 147, final). The definition of network operator also includes, beside the electronic communication network provider, as well undertakings providing physical infrastructure intended to provide production, transport or distribution of gas and electricity, including public lighting, heating, water and sewage, transport services including railways, roads, ports and airports (article 2). The article 3 of the Regulation proposal follows on by adding »Every network operator shall have the right to offer access to its physical infrastructure in view of deployment of elements of high-speed electronic communications network«, and »Upon written request of an undertaking authorised to provide electronic communications networks, any network operator shall have the obligation to meet all reasonable requests for access to its physical infrastructure under fair terms and conditions, including price, in view of deploying elements of high-speed electronic communications networks«, and »Every refusal of access shall be based on objective criteria, ..., the network operator shall state the reasons for any refusal within one month from the written request for access«. The Regulation proposal foresees that a national dispute settlement body shall issue a binding decision to resolve any dispute arising from aforementioned and including determination of fair terms, conditions and prices where appropriate, within four months at most (article 3). The national dispute settlement body is expected to be the national regulator for electronic communications (NRA). The Commission proposal has a clear policy objective, which is to address any physical infrastructure (electricity, gas, water, sewage, heating and transport services) suitable to host electronic communications network elements and to widen-up electronic communications NRA competences by making it the competent body for dispute resolution arising from any access to multi-utilities physical infrastructure.

⁹ www.vivendi.fr

3. Overview of individual sectors

3.1. Market context

Electronic communications. Historically the provision of voice, data or TV services was organized over different network platforms to reach the customers. Technological progress has made it possible to offer all these services through one and the same network (next generation network, NGN) based on IP protocol. The construction of such networks is mainly linked to the issue of return on investment. In principle building fibre to the home (FTTH), taking into account the profit expectation of operators, makes the investment viable in the mid-term only in highly urbanised areas (Lovrek, Pecur, 2006: 6). As a parallel, convergence takes place in the mobile networks where voice and data traffic are accompanied by video and TV content. This is possible due to the greater bandwidth in mobile communications named – long term evolution (LTE). Technological improvements make cutting costs, raising speed of data transfer (fibre lines), and development of information technology that creates new services for users, possible. However, one of the central questions in electronic communications which still remains is the access to the last mile of the network (local loop), owned mostly by the historical operator. In order to reach the final user, new telecom operators need, except when they own a particular distribution network, access to the network of the infrastructure of the (usually) historical operator. Conditions of access, technical and financial, are publicized by the incumbent operator and available to potential competitors. This document, legally binding on the infrastructure operator is called (in electronic communications) – the reference offer (RIO – reference interconnection offer, RUO – reference unbundling offer, etc.).¹⁰ Depending on the level of network interconnection in electronic communications, the alternative operators may offer their own services based on the so called unbundled local loop, bitstream or simple resale of incumbent services. The deeper the interconnection takes place in the incumbent network, the more costly is the investment required, and the higher is the potential margin for the new entrant.

In case of problems in getting a fair access deal with the former monopolist, the new entrants may turn to the sectoral regulatory authority and

¹⁰ As a comparison a similar document in the railways sector, published by the railway infrastructure manager is titled – the network statement.

initiate necessary proceedings for the protection of their legal rights. Since potential abuses of market power have to be prevented in advance, in order for competition to grow, regulation of significant market power operators (SMP) needs to be done in advance on particular product and service markets (EC, 2007: 1). National regulation is coordinated on the European Union level through BEREC¹¹ (Body of European Regulators for Electronic Communications) where the European Commission is also represented. Current issue dealt with in electronic communications is primarily how to boost investment in the sector in relation to new generation networks.¹² Linked is the subject of developing fixed broadband fibre networks, the costs and prices of NGN whether fixed or mobile (Falch, Markendahl, 2010: 2). For the latter one, what matters is the freeing-up of the digital dividend due to digitalization of TV and use of this spectrum for mobile communications services.¹³ In Croatia, initiatives for extending broadband in rural and scarcely populated areas have been prepared with the goal of balanced development of so called broadband ecosystem (Carić et al., 2011: 30–31). The electronic communications are a liberalized sector with leading experience in the transition from monopoly to competitive market. Several regulatory frameworks passed in the EU have served this purpose since 1998 and the opening of the market onward. Since then, legal and economic regulatory techniques and methodologies have been developed, that can serve in other network industries facing liberalisation processes.

Postal services. The postal sector is a classical example of gradual market opening to competition. Universal postal service, accessible to everyone, has been traditionally financed through the reserved postal area (parcels under 50 grams at the final stage) for the incumbent operator. Liberalisation of the market started with the first EU postal directive (Directive on the common rules for the development of the internal market of Community postal services, 97/67/EC, p. 14), and the final opening and levying of exclusive rights was set by the third EU postal directive (Directive with regard to the full accomplishment of the internal market of Community postal services, 2008/6/EC, p. 3). Programed market liberalisation had the essential aim of allowing sufficient time to the historical operator to

¹¹ www.berec.europa.eu

¹² I want half of EU citizens to have very fast Internet of 100 MB/s by 2020, says Nellie Kroes, commissioner for information society in a speech titled »Giving Europe a mobile broadband boost«, speech 12/124.

¹³ www.itu.int

restructure and lower down its operation costs (Geradin, Humpe, 2002: 91–109). The postal service in its technical aspect consists of several phases: collection, sorting, transport and delivery of parcels. Collection is organised at postal access points, at the premises of the sender by personnel of the postal operator and through other means set in the general contract provisions of the operator. Sorting refers to grouping mail according to destination areas and recipients addresses. Transport is necessary to physically move postal items (except in cases of hybrid mail where electronic communications are used to a certain extent). Mail delivery happens at the addressee's place of residence or premises or at the postal box. Natural monopoly is considered the latest phase, i.e. delivery which is labour intensive and bound to quality standards, no matter the geographical location. A potential competitor will find it hardly viable to duplicate the delivery part of the postal network on larger geographical scale. Therefore competitors will normally have an interest in accessing, at a particular point, the network of the historical operator. The distribution part of the postal network is comprised, as a difference to electronic communications, of human workforce. It is estimated that the labour force participates with up to eighty per cent in overall fixed costs of an average historical operator. Economies of scope are hence easily discernible with postal services as well and have a predominant role in price setting. However, technological developments like e-invoicing, e-banking, or e-mail, present a strong competitive constraint on the traditional postal service.

In the postal sector, competitors are mostly active in providing services to business clients with large postal requirements like banks, insurance firms, telecom companies and others, generating thousands of individualised postal items. This can easily lead to concentrating on the most lucrative segment of the market (cream skinning) which renders the fulfilment of the postal universal service obligation (USO) more demanding for the incumbent operator. To compensate for the USO net cost, competitors are usually required by regulations to participate in a fund dedicated to USO services. This is necessary after exclusive rights of the incumbent operator in the reserved area elapse, since State budgets are normally not able to cover postal USO costs. One of the essential parts of organizing USO financing is transparency of accounts of the USO operator. They has to prove that USO is a burden to their business activities and entails net cost which would be avoided if he had no USO. The main issue in postal liberalisation remains the financial stability of the historical operator which is not possible without vast restructuring, reducing fixed costs (labour),

which entail social –consequences and problems to the State, that is most often the owner of the national post company.

Energy services. Electricity can be on the one hand produced in different ways (water, tide, coal, wind, sun, etc.), but on the other hand it cannot be stored. That points to the fact that competition might rather simply arise in the production phase. Thus produced, the electrical energy needs to be transported over long distance power lines and finally distributed to the industrial and residential users. Hence there are several phases of production-distribution chain. The historical operator has full vertical integration, and the transport and distribution phases are seen as natural monopolies to which competitors should have access. As in other network industries where there is no functional or structural separation of the infrastructure operator, accounting separation needs to be implemented in order to ensure fair and non-discriminatory treatment between competitors and the own production branch. EU Member states when starting liberalisation had a choice between two models with regard to access to the transmission and distribution infrastructure. The first was – third party access, and the second – single buyer system. In the first model, the producer and the buyer may negotiate directly the terms of access to the network and the provision of electricity. Another way is that the producer and the buyer (large one) are standing directly in business relation but cannot negotiate the terms of access since these are defined and published in advance. The first is referred to as negotiated third party access and the second regulated third party access which finally prevailed in EU (Growitsch et al., 2005: 169). The second model mentioned above is the single buyer model, where one legal person is responsible for running the transportation system and securing continuous provision for a fee. In Croatia there is one electricity market. In the initial phase of the market opening, the model of bilateral market has been chosen and the electricity trading has been carried out through bilateral contracts among market participants. Besides, adequate contracts have to be concluded with the operator of the transmission or distribution system.¹⁴

The European commission has highlighted few reasons hampering the common market for electricity. The first is an insufficient integration among the national markets due to lack of infrastructure limitations and interconnections capacities creating saturation. The second is the high concentration of national electricity industry, low switch of residential

¹⁴ www.hrote.hr

customers and small participation of competitors. The third is the application of different models of separation of production, transport and distribution, and it entails different ownership over the network. The lack of correlation between demand and supply reflected in the ill-developed price formation process (Morgan, 2007: 220–221) is also noticed. As regards provision of gas, in short, the system is similar as on one side stand large buyers and on the other one suppliers. It requires a central coordination point as well. Gas pipelines are natural monopolies, where construction costs are high and amortization may take long considering the low marginal value of gas transportation. An advantage of gas is that it is storable.

Railways services. Railways consist, in general terms, of infrastructure (steel rails, switches, signals, bridges, building and structures, electric traction equipment, etc.) and operating assets (locomotives, freight wagons, passenger coaches, etc.). When railways first started, customer options and competition in both freight and passenger markets were limited and a monolithic model (infrastructure and operating services under unified control) was possible. As competition has grown it has become harder for unitary management on the rail side to compete with cars, buses and air in the passenger markets and with trucks and barges in the freight markets. Generally, rail vs. rail competition (intra – as opposed to intermodal competition) can be a significant mechanism in limiting the potential market power of railways especially in the freight market (Morgan, 2007: 354–356). Furthermore, railways are historically of strategic interest to every State. This may explain somewhat slower liberalisation processes and the existence of five different systems of electrification in Europe (Radionov et al., 2011: 57). Interoperability is a prerequisite for further development of common EU railway system. Railways are seen as a way of reducing land transportation and of being ecologically more acceptable. Besides, introducing competition in railways means reducing workforce in the former monopolist, which may result in social tensions between the trade unions and the government. Competition is feasible in cargo and passenger railway services. In three states, the UK, Romania and Estonia, market shares of alternative operators in cargo transportation were more than 40% at the end of 2008 (Commission Communication concerning the development of a Single European Railway Area, pt. 1.1). Competitors may be confronted with various discrimination practices, when attempting to access the network of the former monopolist. Therefore, the infrastructure part of the incumbent can be structurally separated as a legal person within or outside the historical national railway company. In the coming

20 years it is expected that demand for railway services will grow, but will mainly still be depending on the national transport policy and chosen priorities (Thompson et al., 2007: 402).

3.2. Access to the market

One of the first steps undertaken by investors is the assessment of the conditions for starting the business. Do they need to get an individual licence or a general authorisation (registration) suffices?

When it comes to electronic communications, in Croatia, the difference is generally whether the operator is engaging in activities that need radio spectrum or not. In the latter case, according to the relevant EU Directive (art. 3, Authorisation Directive, 2002/20/EC), a general authorisation is required for most electronic communication services. It relates to setting up, using, leasing and offering electronic communication services. A company needs to notify the regulatory authority before starting their business (art. 4, Rulebook on electronic communication services – Pravilnik o obavljanju djelatnosti elektroničkih komunikacijskih usluga). The regulator issues a confirmation of receipt within 8 days of receipt of the notification.

In the former case, since the spectrum is a scarce resource, the operator needs to get an individual licence with a spectrum band they are allowed to use according to the regulations (Rulebook on conditions of granting and use of radio spectrum – Pravilnik o uvjetima dodjele i uporabe radiofrekvencijskog spektra, art. 3). The award of spectrum is usually organised through auction procedures where the price is a dominant criterion, beauty contest where other criteria are assessed as well, and a random choice in the lottery system. Auction is favoured by governments as it raises most funds to the *fiscus*. In the postal sector in Croatia, the historical operator has the obligation to provide universal services in the next 15 years (art. 67, Law on postal services – Zakon o poštanskim uslugama, ZPU). Competitors may provide so-called exchangeable service and additional services (Idem, art. 16). Universal services refer to collection, sorting, transport and distribution of defined postal services (Idem, art. 15). Exchangeable are those services which serve the same purpose of a universal service from the position of users, but may deviate to a certain extent as well. The regulatory authority confirms the status of exchangeable services by the decision made after consulting the national competition authority. In case of providing exchangeable services, competitors have to contribute to a universal service fund proportionally to their incomes.

In the energy sector in Croatia, if an undertaking is to run an energy business, it needs to obtain a licence from the national regulatory authority (HERA). The undertaking has to have a legal registration for the relevant energy activity, be technically qualified, employ a sufficient number of competent employees, have adequate financial resources, and meet other listed conditions (art. 17, Law on energy – Zakon o energiji). The expiry of a particular licence is defined by Minister's decree. The licence can be withdrawn in itemised situations (Idem, art. 18). In railways, in order to operate a public transportation service, an undertaking has to seek a licence from the Croatian relevant Ministry and meet a number of conditions, i.e. legal registration and an office in Croatia, financial capability, necessary rolling stock, qualified crew, insurance policy, etc. (art. 52, Law on rail – Zakon o željeznicama, ZŽ). As from the date of accession of Croatia to the European Union, licences awarded to railway operators from other relevant authorities in the EU are valid. The same is valid for licences issued in Croatia. The licence however does not give the right of access to the railways network. This is a separate procedure conducted before the infrastructure operator which results in an accession contract. As a final prerequisite, the prospective undertaking needs to meet particular transportation security conditions and receive a security authorisation from the Railway Security Agency (art. 9, Law on Railway Security Agency – Zakon o agenciji za sigurnost željezničkog prometa).

3.3. Access to the network

Essential facilities refer to anything necessary to run a particular economic activity. In case of network industries, infrastructure and network components are *condition sine qua non* for operators. Generally two legal frameworks deal with the right to use essential facilities. One is competition law and the other one is sectoral regulatory law. The first one ensures in certain cases the right of the weaker market player to access the facilities of the dominant market player. It concerns the situation of the so called – refusal to deal, where the competition authority decides on a case by case approach. The second one is based on – *a priori* access rules, where technical and financial conditions of access are defined in advance by a regulatory authority. The first framework is usually referred to as *ex post* since the law applies after the situation of refusal to deal occurs, and the second one as *ex ante*, since the framework for access is set in advance.

A typical example of competition law case with regard to essential facilities is *Sealink/B&I*,¹⁵ where the European commission has decided that *Sealink* has abused its dominant position as an owner of the maritime port facilities, by giving access to it on less favourable terms to its competitor. Namely, *Sealink* had to align its departure hours in order to allow equal and fair treatment of its competitor. Thereby, *Sealink* was not allowed to pass its market power on one market (port) to the other (ferry service). This is a situation of vertical integration where the same undertaking operates both on upstream and downstream market and is able to drive its competitors out of the market by setting abusive prices and other conditions on the wholesale or/and retail market. The following statement is instructive »If one competitor possess something necessary to other competitors to run their business, what they cannot procure on their own or elsewhere, the EU law obliges one who controls essential facilities to allow access to third parties under fair terms« (Temple, 1994: 439).

In a network industry as electronic communications, if investments carried by operators are to be profitable, their network has to be connected to similar existing networks so as to allow users from all networks to exchange communications. There are three types of interconnection: parallel, vertical and horizontal interconnection. The first one is a situation where two operators dominant on their own market in different territories connect their networks. The second one is a situation where a dominant operator allows a third party the access upstream necessary for its operations downstream. The third one is a situation where operators compete on the same market due to convergence of technologies, as is the case of fixed telecommunications and cable television (Cave, 2002: 387–388). Due to positive network externalities, connection between operators is a standard in this industry. However, when there is a visible difference in market power among competitors, this may not be so evident. Interconnection is covered by agreements between operators. If they cannot agree, they may bring the matter before the relevant regulatory authority. In Croatia HAKOM has competence to solve any dispute arising out of the Electronic Communications Act (art. 20, Law on electronic communications – Zakon o elektroničkim komunikacijama, ZEK).

It is necessary to differentiate symmetrical from asymmetrical access. The first one relates to the obligation to mutually interconnect as a reason of

¹⁵ *Sealink/B&I* – Holyhead, IV/34/174, 11 June 1992., *Sea Containers* – *Stena Sealink* OJ L 15/ (1994).

rational transaction cost. The second is in function of market competition protection. In the symmetrical case the economics of cost of transportation of communications impose interconnection without difference to the market power. The asymmetrical one is concerned with ensuring sustainable competition considering the risks of abuse by significant market power operators. Asymmetrical regulation relies on a set of legal regulatory instruments known as regulatory obligations. The first is access and use of parts of networks. The object of the access may as well be the local loop connecting the final user to the network. This process is known as unbundling of the local loop, where the competitor rents it fully or partially from the incumbent. At the same time, the incumbent or the infrastructure operator has to guarantee wholesale services of a defined quality by entering a service level agreement with the access seeker. The second is transparency. It means that the regulated operator has to publish a reference offer in relation to access and interconnection on upstream markets, with relevant accountancy data, technical specifications, network details, prices, etc. The third one is non-discrimination. This obligation is, in principle, complementary to other ones and addresses possible failures when the SMP operator is not treating competitors on equal terms with its own retail arm. The fourth is separation of accounts, where the vertically integrated operator has to make its wholesale prices and internal transfer prices transparent in order to prevent cross subsidisation among different services. This should eliminate the risk that SMP offers low prices on the competitive market, and then makes up for it on the other non-competitive market through a high price. The fifth regulatory obligation is price control and cost account obligation. This measure applies to situations where the SMP operator might attempt various price abuses like excessive prices, predatory prices or margin squeezes. The SMP operator has to prove that their prices are cost based. The sixth regulatory obligation is retail price control. In principle this measure applies only when previous wholesale measures are not effective. The regulatory authority may price cap the retail prices of the SMP operator, control the cost orientation, etc. The seventh regulatory measure is functional separation of vertically integrated operators. This is a last resort measure in case there are sever obstacles to develop sustainable competition. It consists of separating the wholesale services of the vertically integrated operator into a separate business unit. This business unit must provide wholesale services to every operator on equal terms including the retail arm of the company it belongs to. The management and employees have to be independent of the rest of the company and have separated assets and payroll policy (art. 64, ZEK).

When deciding what set of regulatory measures the regulatory authority will impose on the SMP operator, certain guidelines will have to be observed (Revised ERG position on appropriate remedies ECNS framework, 2006: 52). The first guideline requires the regulator to argue properly the motives of their decision. The regulatory measures have to be proportional to the obstacles existing on the market. That means defining the relevant market in advance and finding out whether there is an SMP operator. A public consultation procedure on draft measures is hence a standard in electronic communications. In order to have better coordination among national regulatory authorities, BEREC has been set up to harmonise practices among different Members state of EU. The second guideline promotes infrastructure access of competitors in case infrastructure competition is not viable. However, the right of access has to allow the infrastructure operator a fair return on investment in order to stimulate them to invest further in the network and technology. The third guideline develops the situation further, where infrastructure replication is possible. It introduces the notion of the – ladder of investment, meaning that the competitors should move up the infrastructure ladder over time and rely less on the infrastructure of the SMP operator. This should be possible if in the beginning competitors start their business with their own limited infrastructure and lease the incumbent network under fair terms. Later, when they reach a critical mass of users and through constant technology developments, they will have to invest further in their own network elements and have lower wholesale cost. The fourth guideline underlines that regulatory measures should give an incentive to the regulated company to comply with them without need for the regulator to use sanctioning powers. Thus the cost of regulation would be reduced and there would be no need to trigger procedures before the judiciary.

In the energy sector the third party access describes the situation where a competitor has the legal right to access and use the electricity grid of the vertically integrated operator. The EU rules mention unbundling as an efficient remedy to the incentive of the vertically integrated operator to discriminate third parties versus its own retail branch (Directive concerning common rules for electricity market, 2009/72/EC). Without adequate separation of network management from production and supply, there is a permanent risk of discriminating competitors. Refusing access to the network may take the form of margin squeeze, mismanagement of the network capacities, degradation of service quality, strategic underinvestment, etc. In Croatia it can be differentiated between public services and market services. Public services encompass the security and quality of

electricity supply, protection of final users, environment protection, etc. Market services cover other electrical energy services, these are negotiated (quantity, prices) and contracted freely on bilateral basis i.e. contracting of electricity purchasing, network usage contracting (art. 6–7, Law on electric energy market – Zakon o tržištu električne energije).

In the railways sector, the rights and obligations of the railway infrastructure operator and the transportation operator are set in a contract concluded for a period not shorter than 3 years. The access contract stipulates the capacity allocation, the access fee and other issues related to transport safety and environment protection (art. 23, ZŽ). The access fee is based on direct cost of the infrastructure operator for network management and maintenance of the infrastructure. International practice shows different ways of obstructing competitors when trying to access the infrastructure of the historical operator. One way may be the application of price discounts at the advantage of the historical operator. Competitors, when entering the market, obviously use lesser routes than the incumbent. Therefore, the quantity rebates need to be objectively set. Setting short time to run a particular distance may place operators with powerful and expensive traction in a better position. Allocation of capacity, setting of technical standards, regulating severe qualifications for key personnel (locomotive drivers) may indirectly disadvantage new comers on the railway market (Weidmann, 2008).

In the postal sector, according to the Croatian postal legislation, the provider of universal services has the obligation to allow access to its network and associated services to other postal operators. The conditions of access have to be known in advance and published and applied equally to all interested parties. The regulatory authority defines the access points and conditions, content of the access request and the contract, pricing principles and other related issues in a separate by-law. The access provider has to decide on the access request within 30 days of its receipt. When setting the price of access, avoided cost must be taken care of if operators requesting access have themselves completed some operations beforehand. The request may be declined only in case if it would endanger the fulfilment of its universal service obligation. In any case of dispute between the operators related to network access, the regulatory authority shall decide within four months of starting the procedure (art. 53, ZPU).

4. Services of general economic interest

Services of general economic interest (SGEI) are present all over the network industries. The liberalisation of network industries has incited the transfer of providing and financing of SGEI from the state to the private sector under market conditions. This has allowed the reform of the way these services are financed (Commission Communication: A quality framework for SGI in Europe, 2011: 5). On a strategic and political level this process may be seen as withdrawing of the socially motivated State and outsourcing of these services to the market and not excluding privatisation. Some scholars describe this as a new form of European capitalism where democracy and efficiency are combined at the expense of some social values (Koprić et al., 2008: 649). The new model of European capitalism is at the root of these processes, and furthermore is part of the new economy with global connotations and is manifested with different pace in various parts of the economy. What matters to services of general economic interest are their sustainability, quality and accessibility. The particular position SGEI occupy in the legal order is visible in article 106 of the Treaty on the functioning of EU (TFEU) where it is provided that competition rules apply as far as they do not obstruct the performance of SGEI. A similar disposition exists in the Croatian national competition law.¹⁶ SGEI would not be provided if pure market economy logics were applied. This is why they are linked to the notion of – market failure. The prices charged for the provision of these services cannot hence be based only on the criteria of demand and supply, but other social and political considerations are to be taken into account as well (Waelbroek, 1996: 452). The Green paper on SGEI has pointed to an ever evolving role of these services for the community, its social and territorial cohesion, and the high standards for the final users of network industry services, in particular energy, transport, electronic communications (Green paper on SGI, 2003: 5). Financing of these services has to be arranged on neutral basis and distorting of competition should be avoided. See in particular EC rules relating to state aid control.¹⁷ Open and competitive market and

¹⁶ Law on protection of market competition – Zakon o zaštiti tržišnog natjecanja, NN 79/09, art. 3.

¹⁷ Commission Communication on services of general economic interest, OJ C 8, 11. 1. 2012.; Altmark case, CJ, C-280/00.; Commission Regulation on de minimis aid, OJ L 114, 26. 4. 2012.; Commission Decision on services of general economic interest, OJ L

accessible SGEI should not be mutually exclusionary goals (White paper on SGI, 2004: 7).

Member states have a rather vast choice of defining SGEI. They do not necessarily have to belong to network industries being in the process of liberalisation, but also to various economic activities like water procurement, urban transport and other utilities. The accent is on the European model of society that recognises differences among Member states with regard to how SGEI are organised (Communication SGEI, 2007: 3, 10). Few points, however, have to be observed. First, neutrality of the property over companies providing SGEI, meaning that privatisation is not a prerequisite. Second, exclusive or special rights awarded to SGEI operators need to comply with article 106 TFEU. The third state interventions need to be proportional with existing market failures, meaning that overriding reasons of general interest have to be shown. Such approach should balance competition rules with SGEI rules in the TFEU (art. 106 and 14).

The concept of SGEI is known in network industry legal framework under the term – universal services. Universal services should evolve to reflect advances in technology, market developments and changes in user demand. This approach is particularly relevant when trying to adapt standard definition of universal services, as in electronic communications for example (Universal Service Directive, 2002/22/EC),¹⁸ to recent technological and policy developments reflected in the case of broadband Internet access as proposed by the Digital agenda initiative for Europe 2020 (Commission Communication, Europe 2020, 2010: 14). Sustainable economic and social benefits from the Digital Single Market are based on fast and ultra-fast internet with broadband access for all by 2013, and access for all to speeds above 30 Mbps by 2020, and 50% or above of European households subscribing to internet connections above 100 Mbps.

5. Multisectoral regulation and competition law

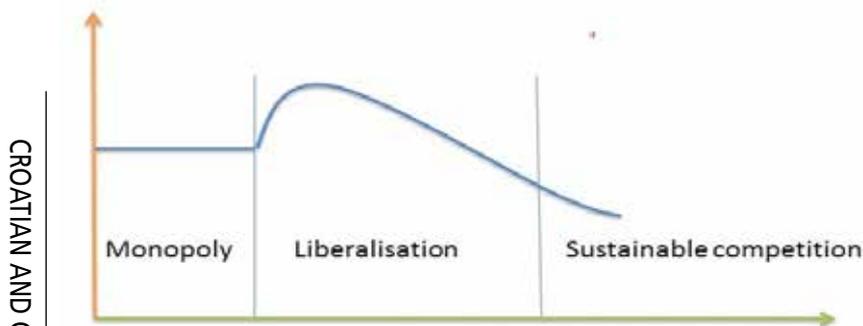
As previously mentioned HAKOM, HERA and ARTZU have the role of opening the market for competition, ensuring level playing field and liber-

7, 11. 1. 2012.; Commission Communication - state aid framework for SGEI, OJ C 8, 11. 1. 2012.

¹⁸ In electronic communications, universal services refer to: 1) provision of access at a fixed location and provision of telephone services, 2) directory enquiry services and directories, 3) measures for disabled users, 4) affordability of tariffs, 5) public pay telephones.

alising the provision of services offered so far by incumbent undertakings on the basis of special or exclusive rights. AZTN has a pronounced horizontal role of ensuring the general protection of market competition in the economy. All of these institutions together have the function of market competition protection. However, it is our opinion that it is possible to differentiate between provisional and permanent function of market competition protection. The provisional and sectoral function are associated with the three mentioned national sectoral regulatory authorities, whereas permanent and general function address to the national competition authority. The function of national sectoral regulators is provisional in the sense that once the competitive structure of the market is achieved, the *ex-ante* regulation of dominant (SMP) market undertakings is abolished. What remains is the *ex post* protection of market competition ensured normally by the national competition authority. This can be more easily depicted by the following scheme.

Scheme 2. *Market stages, Bergman, 1998.*



Monopoly with a single service provider operating on the ground of exclusive rights is the first phase. Liberalisation is characterised by arrival of competitors but a dominant incumbent operator is still present. Sustainable competition exists where market players exert on each other sufficient pressure as none of them is able to abuse its market power.

An important point is that regulatory intervention is increased in the liberalisation phase and decreases over time as competition takes over. A general distinction between sectoral regulatory law and competition law can be found in the different timing of application (*ex ante* vs. *ex post*). Consequently, regulatory law uses proactive instruments of market competition protection, while competition law uses reactive prohibitive in-

struments, as for instance, cartel prohibition or abuse of dominance prohibition. Vice-versa, regulatory law can be enforced by *ex post* monitoring through inspections and fines. The same goes for competition law when merger control is conducted *ex ante*. Regulatory law is intrusive by its legal nature. The regulatory authorities *ex officio*, as necessary, change the wording of legal acts of SMP operators. This may relate to precise legal dispositions, deadlines, prices or other conditions. As a result the free legal disposition of SMP operators is limited for the sake of market competition.¹⁹ Competition authorities, when passing a condemnatory decision, will normally require the defaulting undertaking to redress its behaviour by a more general legal order such as to »modify tariffs«²⁰ without going into specific figures, as a sectoral regulator might do. To put it briefly, the general competition law puts the accent on the sanctioning of the abuse and redressing of the market injury, while sectoral regulatory law puts the emphasis on market abuse prevention.

Regulatory authorities can be organised as individual bodies in charge of particular sectors, or several sectors can be served by cross-sector competences of one single regulatory body. Thus is possible the sharing of common recourses, professional and administrative. Nowadays this practice is known under the term *shared services* (Melchior, 2008). Professionally it allows more efficient economic regulation across different liberalised sectors on horizontal level, i.e. price control, cost orientation, obstacles to competition removal, legal procedures *vis as vis* incumbent operators, data collection, etc. Our experience is that economic and legal expertise gained in one network industry is in an appropriate way easily fitted into another. A positive case in Croatia is the merging of the regulator for electronic communications and the regulator for postal affairs in 2008. One might ask what phone or internet provision has to do with postal delivery? One might as well think it to be a purely political and unfounded decision. Indeed, substantially these are alienated services serving different ends, but in the context of the process of bringing the provision of all of these services from a monopoly situation to a competitive self-sustaining market condition proves them to be very much alike. Therefore a horizontal approach is possible and in our opinion beneficial, in particular when we speak about economics and law. This is however not so when it comes to

¹⁹ An example can be found in the dispositive section of HAKOM Decision amending a reference offer, dated 21 July 2011, UP/I-344-07/11-01/31.

²⁰ Dispositive section of AZTN Decision Dubrovnik Airline d.o.o., Dubrovnik vs. INA – Industrija nafte d.d., Zagreb., dated 19 May 2011. UP/I 030-02/2009-01/035.

technical matters where technical attributes differ from one network industry to another, where vertical differences are obvious. In any such case matrix organisation may be of assistance, since it facilitates horizontal flow of skills and information, where different sectors (electronic communications, post, energy, railways) are interconnected through working teams with different functional units according to disciplines (legal, economic, technical). Thus a functional unit may be subordinated to several sectors simultaneously (Christensen, 2007: 25). We will not go into detail of organisational aspects of a multisectoral regulator at this point, but continue with some liberalisation policy considerations.

Understanding the policy of network industry liberalisation and that means ending the monopoly concept and moving it to an efficient competition concept, makes it reasonable, in our opinion, to look for more efficient institutional settings. Financial independence of regulators i.e. fee collection from the market players improves their competences by motivating skilled staff to pursue their carriers with the regulator. It allows employment, remuneration and education opportunities usually not comparable with standard national civil service. These benefits place also a responsibility on the regulators to act promptly in order to redress market malfunctioning or misuse of market power of dominant market players.

In the same vein, the national judiciary, the executive and the legislative power need control over legality of the work of regulatory bodies since they may have vast authorities such as penalty imposing on undertakings, by-laws passing and quasi-judicial dispute resolution powers.²¹ Market regulators' main role may be generally defined as serving the needs of market economy development on the basis of impartiality, efficiency and competence. This means, speeding up the drafting of necessary market rules, speeding up the resolution of conflicts among undertakings and speeding up the fining of deviating undertakings within one and the same public regulatory authority. These are the main advantages from the point of view of market economy, compared to the fragmented role and relatively lent response of the legislative, executive and judicial power to market needs in the everyday life.

It is thought that joining regulatory bodies can reduce the risk of regulatory capture, particularly corporative capture. Eventual interventions

²¹ See in particular the standing Decision of the Zagreb Commercial Court (Rješenje Trgovačkog suda u Zagrebu, 9.P563/13, 28. 5. 2013), confirming ample competences of the National regulatory authority HAKOM with regard to solving civil-law disputes related to the sector specific SMP regulatory obligations.

(lobbying) in newly liberalised markets shall be better resisted by multi-sectoral regulator since they have considerable experience with sectors in mature phase of liberalisation. A larger power portfolio strengthens the regulator and builds its credibility towards the business community. Generally, setting up of multisectoral regulator from the outset and adding new sectors is more favoured to merging them later (Smith, 1997: 1–2). In the former case, new sectors immediately benefit from knowledge and experience gathered in mature sectors. In the latter case, it is expected to have resistance from individual regulators boards since they fear losing their office and powers in a newly merged entity. The experience in Latvia has shown that fragmented regulatory institutions are less efficient in conducting liberalisation policy and are more prone to lobbying. In 2001 Latvia started an institutional regulatory reform by merging existing regulatory functions, which were scattered in different line ministries, into a single entity named Public Utilities Regulation Commission on the basis of the Law on regulators of public utilities (Sepp et al., 2007: 8). It has gathered telecoms, energy, post and transport.²² A similar model of multisectoral institutional regulation can be found in Luxembourg and Germany where telecoms, energy, post and railway sector are under the *Bundesnetzagentur*²³ and *Institut Luxembourgeois de Regulation*.²⁴ In Slovakia one regulatory body is in charge of the energy sector and water procurement,²⁵ and in Austria telecoms, electronic media and postal services are gathered under the Austrian Regulatory Authority for Broadcasting and Telecommunications.²⁶ Finally and briefly we would like to mention that in parallel to merging individual sector regulators, another phenomenon takes place and relates to merging national competition authorities with sector regulators, as is the situation in the Netherlands and Spain. In the former one, the Independent Post and Telecommunications Authority is merging with the Netherlands Competition Authority and the new entity is named The Netherlands Authority for Consumers and Markets (CN-MC).²⁷ In the latter one, a super regulator is being set-up and is named National Commission for Markets and Competition. It merges eight for-

²² www.sprk.gov.lv

²³ www.bundesnetzagentur.de

²⁴ www.ilr.public.lu

²⁵ www.urso.gov.sk

²⁶ www.rtr.at

²⁷ www.nma.nl

mer market regulation agencies.²⁸ As an answer to an EU parliamentary question, in January 2013, Ms Kroes on behalf of the EU Commission stated: »Independence of national regulators is a fundamental principle of the EU regulatory framework and is crucial for effective functioning of a single market. Member States have a considerable degree of autonomy in deciding how to set up their regulatory bodies. The Commission attaches great importance to the requirements regarding the alignment of the tasks carried out by the regulatory authorities with the policy objectives and regulatory principles contained in EU frameworks«. The Commission is in contact with the Spanish authorities regarding this draft law to ensure independence of the new authority (CNMC) and to ascertain that it has sufficient powers to fulfil its functions under EC law.²⁹

6. Conclusion

Greater competition is seen as a way of improving choice, quality and prices of services. The preoccupation of the European Union is not only the continuation of provision of SGEI but also the overall financial stability of former state monopolies. The cooperation of the EU and the Member states is reflected in politically negotiated timeframes of opening individual network industries to competition and different transitional periods allowing historical operators to exercise special or exclusive rights. The lengths of these periods need to be well-balanced in order to enable necessary restructuring of former state monopolies, often burdened by inefficiency, social considerations and state aid dependency.

This paper had as objective to present, in a horizontal way, a brief overview of commonalities noticeable in different network industries undergoing liberalisation processes. It aims at finding a common denominator amongst Croatian national sectoral regulatory authorities and proposes institutional innovation in the future accordingly. Historical operators losing their special and exclusive rights have to undergo restructuring to improve their efficiency. As a result SGEI have to be organised and financed in accordance with market economy principles. New competitors are free to enter liberalised markets after registering their trade with national reg-

²⁸ www.iberianlawyer.com

²⁹ Answer E-010396/2012 to the Parliamentary question E-10181/2012, 15 January 2013.

ulatory authorities or after obtaining necessary licences or authorisations from competent national authorities. Before starting their business operations they will have to interconnect to a particular network, own their own facilities or have access to dominant (SMP) operator's facilities and infrastructure under fair terms. The balance between promoting competition and sustaining investment in technology and network modernisation needs to be struck somehow. This may not be easy to achieve as it is obvious nowadays in electronic communication. The quest for more Internet broadband and implementing new generation networks in globally declining economy are also quite visible. At the same time alternative operators in Croatia have a hard time staying in the market in the first place. Similar issues are confronted in the energy sector which is oriented at energy diversity, environment friendly sources, and stability of supply. Railways should become a serious alternative to road transport, and postal services are looking for new opportunities in the digitalised e-society, like e-commerce. Investment promotion is a common denomination for current policies across these sectors. However, competition needs to be built and preserved likewise, so pressure on regulators is very intense today. Hence, as described, it can be concluded that major issues are common to network industries, i.e. access to the market, access to the network, cost allocation, SGEI policy.

Our conclusion is that, although electronic communications, energy, postal services and railways exhibit clear differences of technical nature, they still have a lot in common when it comes to the domain of economics and legal affairs in particular with regard to competition or civil law. Competition law is the common law of network industries (Geradin, 2001: 125). This conclusion is very important when it concerns introducing competition in formerly monopolised network industries, as one sector regulator can learn a lot from the other ones in devising the right economic and legal regulatory instruments. It is therefore our opinion, since we are witnessing a major convergence of some network industry services,³⁰ that convergent factors of regulation and regulatory institutions should not be neglected. Considering mergers of national sector regulators and developing *shared services*, particularly in small countries with limited resources

³⁰ A recent example in Croatia is the announcement made by Hrvatski telekom (the Croatian electronic communications incumbent operator, part of Deutsche telekom group, DT) to enter the Croatian electricity and gas market, www.poslovni.hr, 24. 4. 2013. A similar commercial offer already exists in Hungary where Magyar Telekom (DT) has been offering also energy services to residential customers with discounts if they subscribe to both telecom and energy services from the same provider (press release, 30. 3. 2012., www.telekom.hu).

as Croatia, would be a way to rationalise the number of existing market regulation institutions on one hand and to strengthen their independent position *vis a vis* the dominant market players and the governments on the other.

Building on the assessments in this paper, as a first step, we propose merging in a phased manner the three Croatian sectoral regulators ARTZU and HERA with HAKOM, into a new multisector regulator. In the second step, we propose this new multisector regulator to merge with the Croatian competition authority AZTN. In parallel, new decision-making mechanisms should be devised for this multisectoral integrated regulatory environment.³¹ This would integrate regulatory law and competition law since they naturally belong to the same, *ex ante* and *ex post*, function of market protection. Multisectoral regulators exist today in small (Latvia, Luxembourg) and large EU countries (Germany). It is our opinion that it is worth contemplating the opportunities for regulatory convergence and assessing possible benefits it could bring in terms of competence, independence and cost cutting in Croatia. Nowadays, processes of merging sectoral regulators as the first step are followed by merging them with competition authorities in the next step. These examples are known from the Netherlands and Spain. Institutional design of independent regulators in the future, their growing economic role and declining traditional role of national governments in modern market economy will undoubtedly doubt present a political and constitutional challenge for the administrative science and the theory of tripartite separation of State powers.

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³¹ The subject of integration of the function of protection of market competition and proposed options is dealt by the author in a separate paper, not yet published.

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HORIZONTAL APPROACH TO NETWORK INDUSTRIES IN CROATIA

Summary

In European Union law, competition was initially introduced to economic activities organised under the concept of services of general economic interest more than two decades ago. Special and exclusive rights have gradually been abolished in important industries like telecommunications, post, energy or railways. The European Union policy has opted to prioritize efficiency over social issues in those industries by adopting liberalisation agendas. Previous monopolies have undertaken long restructuring processes to meet the upcoming competition. However, entering and positioning in the market has not proven to be a short process for newcomers, either. Although network industries display differences among themselves, there are common trans-sector issues that allow a horizontal approach. This brings into focus the actual role of different national regulatory and competition authorities in different stages of market regulation and the ways of coordinating their function in multisector patterns in the future. In this respect and as a way to move ahead, we propose an integrated institutional pathway, allowing more expertise sharing (shared services) between national regulators and their better positioning in the Croatian society and economy.

Key words: network industries, regulators, multisectoral regulation, competition, services of general economic interest (SGEI)

HORIZONTALNI PRISTUP MREŽNIM INDUSTRIJAMA U HRVATSKOJ

Sažetak

Prije više od dva desetljeća u pravu Europske unije konkurencija se počela uvoditi u niz gospodarskih aktivnosti koje se nazivaju službama od općeg gospodarskog interesa. Posebna i isključiva prava države su postupno ukinuta u važnim industrijama kao što su telekomunikacije, pošta, energija ili željeznice. Politika liberalizacije Europske unije je dala prioritet učinkovitosti nad socijalnim pitanjima. Prijašnji državni monopoli su morali proći dugačke procese restrukturiranja kako bi bili sposobni odgovoriti zahtjevima nadolazeće konkurencije. Ulazak i pozicioniranje na tržištu se nije pokazalo kao brz postupak niti za novopridošle aktere. Iako između raznih mrežnih industrija postoje razlike, ipak postoje zajedničke transektorske karakteristike koje omogućuju horizontalni pristup. On dovodi do skretanja pažnje na ulogu nacionalnih regulacijskih tijela u raznim fazama regulacije tržišta i načina koordinacije njihovih funkcija u ovom multisektorskom području. Kao način na način unaprijeđenja stanja u radu se predlaže jedan integrirani institucionalni put koji bi omogućio širu razmjenu znanja (kroz zajedničke službe) među nacionalnim regulatorima, a time i njihovo bolje pozicioniranje u hrvatskom društvu i gospodarstvu.

Ključne riječi: mrežne industrije, regulatori, multisektorska regulacija, natjecanje, službe od općeg gospodarskog interesa