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**REGULATORY GOVERNANCE: IMPROVING THE INSTITUTIONAL BASIS FOR
SECTORAL REGULATORS: KEY ISSUES IN THE DESIGN OF ECONOMIC REGULATORY
INSTITUTIONS
BY
CESAR CORDOVA-NOVION AND DEIRDRE HANLON***

1. Introduction

In recent years, many countries, both within the OECD and beyond, have reappraised their regulatory policy framework to determine whether it meets the challenges of the new regulatory environment. For utility markets previously characterised by stability and slowness to change, these challenges are arising from rapidly developing technologies, converging industries, the internationalisation of markets, and more informed and discerning consumers.

The reassessment and subsequent realignment of the regulatory approach has sometimes been done on the initiative of the individual country or in the context of international regulatory developments – as with several European Union member states. While both the literature and the work of governments show strong analysis of regulatory objectives and of regulatory instruments, there is relatively little evidence of strategic critique and policy advice on the institutional setting for sectoral regulation. Yet, as every policy-maker and regulatory practitioner knows, institutional setting has a determining effect on regulatory service delivery.

This report aims to identify and examine some of the key issues in relation to the design of the institutional framework for economic regulation, particularly in the infrastructure network industries, such as telecommunications, electricity, gas, water and rail.¹ Its purpose is to generate discussion of regulatory institutional design and to set a framework for understanding and determining best practice for the governance of these institutions.² As such, the report is constructed around various matters that typically underlie the deliberations of the central government policy-makers who design the institutional framework within which economic regulatory functions are executed.

The principal focus of this report is the institutional design of the administrative system charged with economic regulatory functions. It is clear that institutional design issues are not informed only from the public management or the regulatory reform perspectives; rather they are related to many other factors across the wider economic, political and administrative spheres within which regulation is carried out.

This report considers the economic regulatory context – regulation whose primary purpose is to facilitate, imitate or enhance markets by correcting for entry imperfections and dealing with price, quality and reliability of service, supplier market entry and exit, and infrastructure investment. Institutional design for other regulatory contexts (*e.g.* safety, public health, social or environmental regulation) is not considered in

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detail, except in so far as economic regulatory bodies are additionally charged with non-economic functions.³ Therefore, reference in this report to regulation should be understood to mean economic regulation, unless otherwise specified.

In the economic regulatory context, network industries represent the arena in which there has been the most recent and most rapid development in relation to regulatory frameworks. The rate of change in recent years in the regulatory environment for network industries – most notably in telecommunications, but also in energy, water, rail and postal services – across many OECD Member countries has generated a base of regulatory experience that contributes to a better understanding of economic regulation at the horizontal level.⁴

The financial services sector also provides valuable economic regulatory insights. However, because financial markets are characterised by high levels of systemic risk, economic regulation of financial services is highly influenced by prudential considerations, often to be observed in the regulatory focus on the integrity of the financial system rather than on competition or consumers.⁵ Financial services regulation can also be highly motivated by macro-economic policy, and in some instances is used as a tool of monetary policy. Although certainly economic, these prudential and monetary policy regulatory drivers are very particular to the financial services sector and do not typify economic regulation in the broader context; in particular, they can obscure the market-facilitating rationale for regulation. Therefore, this report primarily refers to network industries, rather than financial services.

This section has introduced the report in terms of background, purpose, focus and scope. In Section 2, the discussion progresses to consideration of the context of the report: the justification for economic sectoral regulation and developments in relation to the institutional setting for such intervention – specifically the trend in the transfer of regulatory functions from ministries to independent bodies.

Sections 3, 4 and 5 consider three elements in regulatory institutional design: independence, accountability and coherence. There is an examination of independence in the regulatory context that encompasses both the theory and many practical considerations in relation to the regulatory bodies' distance from government, industry and other stakeholders. This is followed by an exploration of the balancing effect of regulatory accountability and a reflection on the need to legitimise the regulatory process within the democratic system. The coherence of the regulatory institutional approach with existing political, administrative and judicial structures is also considered.

Section 6 considers the efficiency of the regulatory institutional design, with a particular emphasis on the flexibility-rigidity dynamic. The institutional design aspects of measuring the performance of regulatory bodies are also considered.

2. Economic regulation and network industries

2.1. Regulation – generic and sectoral

Regulation is an intervention between the parties to a transaction. Regulation, in the broad sense of the term, can facilitate transactions because it is the means used to provide the basic framework under which the parties can conduct their business in a secure environment. Such a framework includes the regulatory provision or guarantee of human rights, a judicial system, property rights, rules of contract and competition. Regulatory intervention of this kind is generic; it applies across the whole of the economy and society. Some of these regulatory interventions are so fundamental to the operation of a society and its economy that they are built into its political constitutions. Others are the subject of statute. More still are given effect through secondary legislation. They are all forms of regulation.

This report is concerned with a narrower definition of regulation. Its focus is regulation for a particular economic sector; rules that are specific to a certain group, or industry, or activity and that exceed those rules that apply to other groups in society or other transactions in economic life. This narrower concept of regulation constitutes not only intervention between parties to the transaction, but in fact, an interference with the manner in which events would unfold in the absence of the regulatory intervention. Viewed from this perspective, a regulatory intervention will complicate the transaction and give rise to costs, although it may be justifiable at least over a given time horizon.

Such intervention or interference is desirable – or in economic terms, efficient – only where it leads to an improvement in the outcome of the transaction and where the value of that improvement outweighs the costs involved.⁶ Measuring the improvement can often be difficult as the benefits may be manifest across one or more of a wide-range of fields – income redistribution, customer safety, public health, investor confidence, system integrity – and attributing a value to the identified benefits is a subjective exercise. Similarly, there may be problems in assessing the level of costs associated with the regulatory intervention. Firstly, the costs may be spread widely within the economy across the public sector, regulatees and consumers. Secondly, certain costs of regulation (*e.g.* reduced attractiveness of highly regulated areas to some foreign direct investment) are intangible and difficult to correlate correctly with the regulatory cause. Thirdly, costs may occur over time.

2.2. *Economic regulation and markets*

Economic regulation concerns those interventions whose purpose is related to improving the functioning of the market.⁷ In market economies, and certainly among most OECD Member countries, economic regulation is a means of facilitating the functioning of a particular market with a view to increasing its economic efficiency. In non-market economies, by contrast, economic regulation is actually the controlling mechanism that substitutes for a true market situation.

The traditional economic rationale for regulation concerns the maximisation of *efficiency in monopoly markets*.⁸ The significant economies of scale and scope attaching to certain activities can mean that competition between several supply-side operators (at least within a given region) would involve a wasteful use of resources that could be avoided by a single supplier – the natural monopolist. However, economic theory demonstrates that monopoly markets are inherently inefficient because, in the monopolist's rational search for super-normal profits, potential consumer welfare is unrealised. The economic basis for regulating markets, therefore, is to help realise this welfare loss, and thus increase economic efficiency.

A further economic rationale for regulation is to deal with the *market failure* in relation to externalities. Some transactions give rise to societal benefits or costs that are not factored into the market's pricing mechanism; these benefits and costs are said to be external to the market. They concern the wider, third party effects of certain transactions that the principal parties are not economically motivated to consider as part of their pricing analysis. Externalities related to the system integrity and market confidence are an important consideration in the regulation of financial services.

A more recent justification for regulation concerns the correction of power or *information asymmetries*. These occur where one side of the market is more organised or more powerful and has better access to information than the other; typically, the discussion concerns a supply side monopoly or oligopoly, but it can extend to other situations in which one side is, for example, at a significant informational disadvantage to the other.⁹ In such instance, regulatory intervention can be merited in order to strike an appropriate balance between the interests of producers (cost recovery, profit-maximisation, increased market share) and the interests of consumers (ready access, quality services, reasonable prices).

Finally, the case is often argued for regulatory intervention in *facilitating market transition* – although the argument may be based more on public management tenets than on economics. It applies in markets that previously were monopolies (natural or otherwise) and that are moving to competition, whether in whole or in part. In such instances, the incumbent former monopolist can use its dominant position to stymie or delay the market liberalisation process.¹⁰ A pro-active regulatory intervention in the market therefore may increase the effectiveness of the liberalisation programme. Often this intervention takes the form of the regulation of market entry, price and access to networks, with an emphasis on promoting competition.

2.3. *Deciding on the necessity of sectoral economic regulation*

A fundamental element for the successful operation of a regulator concerns the clear exposition of whether regulatory intervention – and, by extension, an institution charged with regulatory functions – is required at all. For most goods and services, the dynamics of the market combined with the facilities of basic economic framework laws, especially the competition law, are sufficient to deal with sectoral issues so that no special economic regulatory approach is needed.

In some circumstances, however, policy-makers come to an alternate conclusion.¹¹ They consider that the existing horizontal mechanisms are insufficient to permit market efficiency, ensure consumer protection or facilitate dispute resolution within their economic systems are insufficient, at least in the short-term. They argue that special instruments are required to help overcome the deficiencies of the existing legal and administrative systems in responding to the challenges of the relevant sectors. In other words, a sectoral regulatory response is required.

Policy-makers in different jurisdictions sometimes come to different decisions about similar situations, though. A notable example is New Zealand where, until recently, market forces, underpinned by the horizontal legal framework, were regarded as being sufficient for efficient operation of the telecommunications market; this contrasted with the view of most OECD Member countries that their own telecommunications industries required special regulation at that stage (See Box 1). Even within a single jurisdiction, the assessment of the desirability for specific regulation can change over time; the fact that a newly-liberalised network market may have required specific regulation five years ago does not imply that such intervention will still be required in a further five years' time.

Box 1. **New Zealand's regulatory approach to network industries**

In New Zealand, the approach to the regulation of network industries is based on the principle that access to essential facilities should be determined by negotiations between the parties rather than imposed by a regulator. Under this "light-handed" approach there are no price controls or other traditional forms of regulation nor are there industry specific regulators. Instead, the regime for network industries relies primarily upon general competition law administered by the competition authority, the Commerce Commission. This approach means that the courts play a greater role in the supervision of network industries in New Zealand than in most other OECD Member countries that have sector specific regulation. Industry specific information disclosure rules, which are designed to make transparent the operations of firms with monopoly power and administered by relevant ministries, are also important in monitoring enterprises. The main institutional players under the regulatory framework, therefore, are the Commerce Commission, relevant ministries and the courts.

Electricity

The Ministry of Economic Development has general responsibility for energy policy (apart from energy efficiency, which is dealt with by the Ministry for the Environment) and for the development of the industry. Its specific responsibilities in the area of electricity include: compilation of statistics and projections; administering the rules on disclosure of information by electricity companies; developing rules and codes of practice relating to the safety,

quality and measurement of electricity, and the promotion of health and safety in the electricity sector; and the registration and ongoing competence of electrical workers.

The Commerce Commission has been active in all aspects of competition law affecting companies in the electricity industry including: approval of mergers and acquisitions between power companies; authorisation of pricing mechanisms and other rules governing the wholesale market; examination of complaints regarding access to the network and other alleged cases of anti-competitive behaviour; and conducting educational programmes to inform and advise electricity companies of their obligations under competition law.

In 2000, the New Zealand Government announced plans to reform the regulatory framework for the electricity market. These include a reinforcement of the provisions that would allow government to regulate if industry performance is not satisfactory, a requirement to establish a transmission pricing methodology by the transmission company that will have to be approved by the government, and some provisions on electricity prices for small consumers.

Telecommunications

In relation to the telecommunications market, the Ministry of Commerce has the role of advising the government on the appropriateness of sectoral regulation, and the Commerce Commission oversees the telecommunications market based on the general competition law, the Commerce Act. In general, there is no sector specific regulatory requirement. However, there are some special obligations on Telecom New Zealand, “Kiwi Share Obligations”, that are set out in the company’s constitution and in effect regulate the price and availability of residential telephone service; in addition, telecommunications companies in New Zealand have established a Number Administration Deed mechanism to address future numbering issues.

While this light-hand approach would remain unchanged, the government powers to regulate the network industries would be reinforced. Earlier in 1991, the government issued a statement on its policy for competition in the telecommunications market, which threatened to impose sector specific regulation if the current system fails.

Source: IEA(2001) and OECD(2000b).

2.4. Economic regulation of networks

Regulation of the network industries or of utilities have been justified from one or many of the previous rationale underpinning the need to improve efficiency in imperfect markets. Traditionally, the network sectors have been characterised by the following traits:

- necessity for a supply/distribution network that had a large fixed element, that entailed high capital costs and whose life-cycle spans for decades;
- a huge infrastructural significance – the electricity, gas, water, rail and communications industries being the networks underlying economic development;
- derived, rather than an intrinsic demand for many network services; and
- asymmetry of market power with usually one or few powerful supply-side operators and many unorganised parties on the demand side.

2.5. Evolution of the institutional approach to network regulation

As a result of the above combination of characteristics governments developed specific institutional approaches to regulate network industries – some of which are still dominant in a number of OECD

Member countries. Following significant nationalisation initiatives during the first part of the past century, network services were often delivered through state ventures. Ownership was deemed a key element of the regulatory framework and public monopolies tended to be regulated directly by the shareholding line ministry through its influencing corporate and commercial decisions of the utility enterprise. The main rationales to put the public services beyond the scope of the private sector in many countries were the urgency to expand universal coverage and assure low prices of the services. Alternatively, in some countries the state control over delivery of utility services was effected through long-term franchise and concession arrangements with private monopolies. With the exception of the United States and Canada, where separate and independent utility regulatory commissions or boards involved in the regulation of private monopolies have existed for many decades, strict ministerial supervision of the market complemented the public sector involvement in service delivery.¹² Often a single line ministry was made responsible for the roles of policy-maker, service provider and market regulator for a given sector.

By the 1980s, the multi-function model of ministerial intervention in the network sectors was coming under criticism in some countries. On one hand, the shortcomings of state-ownership became increasingly visible. Of primary concern were management inefficiencies and structural rigidities that limited the exploitation of technological advances. Privatisation programmes were launched in an attempt to reduce fiscal pressures and refocus management of the state's ministries. On the other hand, the lack of regulatory transparencies related to direct control by the line ministry were exposed. The multiple roles of ministries in charge of formulating and implementing regulatory policy together with a variety of other social policies, (including those regarding sectoral development income distribution, and regional growth), fostered contradictions and conflicts in policies' aims. Moreover, the mix of economic, political and social policy considerations made it difficult either to distinguish or to evaluate objectively ministries' effectiveness and consequently created accountability concerns.¹³

The first notable deliberate amendment of the policy-maker/shareholder/regulator model of state involvement in utility markets was made in the United Kingdom. A simultaneous divestiture of the state interest in certain utility enterprises coincided with the establishment of dedicated utility regulatory bodies to oversee the operations of the newly privatised monopolies.¹⁴ Over the following two decades, many other OECD Member countries have reconsidered their approach to state involvement in the network utilities and have reorganised their involvement in the sectors accordingly (see Table 1). In some cases, particularly in the earlier years, the selected route was monopoly privatisation, driven by the fiscal restructuring undertaken by many economies in the 1980s and the early 1990s. Central to the decision were the fiscal considerations related to the cost of state's continuing to provide inefficient network services and the revenue benefits of realising state assets and market rights. In later years, the stimulus for change has often been associated with market liberalisation based on competition principles. Both scenarios – privatisation and liberalisation – demanded a reappraisal of the institutional approach to economic regulation of network markets.

Privatisation of state monopolies created a need for additional regulations to protect the consumer against the rational monopolist's search for super-normal profits, and to shield the economy from the inefficiencies to which monopoly operations – whether public or private. The privatisation of these old national champions without any unbundling of their activities secured them a huge market power. As these initiatives were accompanied with market liberalisation efforts for the sector to bring new players governments started to establish a fair arbiter to assure a level-playing field. With state shareholding powers no longer at its disposal in the privatised monopoly market, the line ministry often found that its existing capacities do not extend to the specialised, technical scrutiny required to oversee the private monopoly operator. Such supervision is particularly difficult if the utility enterprise is a vertically-integrated structure whose internal workings are non-transparent to the regulator.

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Market liberalisation also impacted on the institutional approach required. A central issue is the need to separate the state's interest in the incumbent operator and its role in regulating the market, when this operator – often considered as a “national champion” – continues to be (at least partially) in public ownership. Market confidence, particularly among potential new entrants, is severely impaired if there is no delineation between the functions of shareholder and regulator, and this can jeopardise the success of the market liberalisation initiative. Even the perception of preferential treatment by the regulator of incumbents constitutes a strong deterrence to investment.

Table 1. A selection of sectoral regulatory and competition authorities in OECD Member countries

	Telecommunication	Energy	Financial sector	Competition authority
Australia	Australian Communications Authority (ACA) (1997); Australian Competition and Consumer Commission (ACCC)(1995); ¹ Australian Broadcasting Authority (ABA) (1992).	Australian Competition and Consumer Commission (ACCC)(1995). ¹	Australian Prudential Regulation Authority (APRA) (1998); Australian Securities and Investments Commission (ASIC) (1998).	Australian Competition and Consumer Commission (ACCC)(1995).
Austria	Austrian Regulatory Authority for Telecommunications and Broadcasting (RTR GmbH) (2001){Formerly Telecom Control (TKC)(1997)}; The Telekom-Control Commission; The Austrian Communications Authority (KommAustria).			<i>Kartellgericht</i> (Competition Authority).
Belgium	Belgian Institute for Postal Service and Telecommunications (BIPT).	The Electricity and Gas Regulation Commission (CREG).		<i>Conseil de la Concurrence</i> (Competition Authority).
Canada	Canadian Radio-television and Telecommunications Commission (CRTC) (1968).	National Energy Board (1959).*		The Federal Competition Bureau.
Czech Republic	Czech Telecommunication Office (2000); Council for Radio and Television Broadcasting (1992). ²	Energy Regulatory Office (2001).	Czech Securities Commission (1998); ³ Czech National Bank.	Czech Office for Economic Competition (1991).
Denmark	National Telecom Agency (NTA) (1991). ⁴	Energy Supervisory Board (1999). ⁵		The Danish Competition Authority; The Competition Council (<i>Konkurrenceradet</i>) Pre-1990.
Finland	Finnish Communications Regulatory Authority (2001) {formerly Telecommunications Administration Centre (TAC) 1988}.	The Energy Market Authority (2000) {Formerly the Electricity Market Authority (SMK) (1995)}.		The Finnish Competition Authority (FCA) (1988).
France	L'Autorité de Régulation des Télécommunications (ART) (1997).	Electricity Regulation Commission (2000).		<i>Conseil de la Concurrence</i> (The Competition Council) (1

	Telecommunication	Energy	Financial sector	Competition authority
				December 1986).
Germany	Regulatory Authority for Telecommunications and Posts (Reg TP) (1 August 1996). ⁶		Supervisory Board for Financial Services (<i>Bundesanstalt für Finanzdienstleistungsaufsicht</i>) (May 2002).	<i>Bundeskartellamt</i> (The Federal Cartel Office).
Greece	National Post and Telecommunications Commission (EETT) (1998). ⁷	Regulatory Authority for Energy (1999).	Capital Markets Commission (1996).	Competition Committee (1991, strengthening an existing body).
Hungary	Communication Authority, HIF (1993).	Hungarian Energy Office (<i>Magyar Energia Hivatal, MEH</i>) (1994).		Office of Economic Competition, HCO (1990).
Iceland	Post and Telecommunication Administration (PTA) (1999).			
Ireland	Director of Telecommunications Regulation (ODTR) (1997). ⁸	Commission for Energy Regulation (2002). ⁹	Irish Financial Services Regulatory Authority (IFSRA) (2002).	Irish Competition Authority (1991).
Italy	Communications Authority (for telecoms, television, and publishing) (1997).	Energy Authority (1995).	<i>Banca d'Italia</i> (considered an independent authority only for its competition competencies); ISVAP; CONSOB.	Competition Authority (1990).
Japan			Financial Supervisory Agency (1998).	The Japan Fair Trade Commission (Pre-1990).
Korea			Financial Supervisory Commission (1998, unifying several separate bodies).	Korea Fair Trade Commission (1990, building on earlier bodies).
Luxembourg	<i>Institut Luxembourgeois des Télécommunications</i> (ILT) (1997).	Luxembourg Telecommunications Institute (LTI).		
Mexico	<i>Federal Telecommunication Comision Federal de Telecomunicaciones</i> (COFETEL) (1995).	<i>Regulatory Energy Comision Reguladora de Energia</i> (CRE) (1995).	<i>Banco de Mexico</i> (the central bank); the Banking and Security Industry Commission (<i>Comision Nacional Bancaria y de Valores</i>).	<i>Federal Competition Comision Federal de Competencia</i> (CFC) (1993).

	Telecommunication	Energy	Financial sector	Competition authority
Netherlands	Independent Posts and Telecommunications Authority (OPTA) (1997).			Netherlands Competition Authority, NMA (1998).
New Zealand				Commerce Commission (1986).
Norway	Norwegian Post and Telecommunications Authority (NPT) (1997). ¹⁰	Water Resources and Energy Directorate (NVE) (1986).	The Banking, Insurance and Securities Commission of Norway (<i>Kredittilsynet</i>) (1986).	The Norwegian Competition Authority (NCA) (1994).
Poland	Office of Telecommunications and Post Regulation (URT <i>i</i> P) (replaced URT (Office of Telecommunications Regulation, Oct 2000) on 1 April 2002.	Energy Regulatory Authority (1997).	The Bank Supervision Commission (1997); the Polish Communication Insurance Office; the Insurance Guarantee Fund; the National Insurance Supervision Fund; the Bank Guarantee Fund (1990, 2000); the Pension Funds Supervision Office (1997); the Health Insurance Supervision office (1997); the Spokesman of the Insured (1990, 1996).	Office for Competition and Consumer Protection (OCCP).
Portugal	<i>Autoridade Nacional de Comunicações</i> (ANACOM) (formerly ICP created in 1981).	<i>Entidade Reguladora do Sector Electrico</i> (ERSE).		The Competition Council.
Slovak Republic	Office of Telecommunications (2000).			
Spain	Commission for the Telecommunication Market (CMT) (1997).	National Energy Commission (<i>Comision Nacional de Energia</i>).	National Commission of the Securities Market, CNMV (1997, reformed).	<i>Direccion General de Politica Economica y Defensa de la Competencia</i> (Spanish Competition Authority); <i>Tribunal de Defensa de la Competencia</i> (The Spanish Competition Tribunal) (Pre-

	Telecommunication	Energy	Financial sector	Competition authority
				1990).
Sweden	<i>Post-och telestyrelsen</i> , the Swedish National Post and Telecom Agency (NPTA) (1994) (formerly Telestyrelsen, the Swedish National Telecom Agency, 1992).	Swedish National Energy Administration (1998).	Financial Supervisory Agency (<i>Fiansinspektionen</i>).	<i>Konkurrensverket</i> (Swedish competition authority) (1 July 1992).
Switzerland	Communications Commission (ComCom) (1997); Federal Office for Communication (OFCOM) (1992).		Federal Banking Commission.	<i>Commission de la concurrence</i> .
Turkey	Telecommunication Board (2000).	Energy Market Regulatory Board (2001).	Banking Regulation and Supervision Agency (1999); ¹¹ Capital Markets Board (1982).	The Turkish Competition Board (1994). ¹²
United Kingdom	Office of Telecommunications (OFTEL) (1984).	Office of Gas and Electricity Regulation (OFGEM) ¹³ (1999).	Financial Services Authority (FSA) (1986) under the Financial Services Act (renamed in 1997).	The Competition Commission; ¹⁴ The Office of Fair Trading (OFT).
United States	Federal Communications Commission (FCC) (1934).	Federal Energy Regulatory Commission (FERC) ¹⁵ (1977); different state public utility commissions.		Department of Justice (DOJ); Federal Trade Commission (FTC) (1914).

Note: The date corresponds to the year of creation or of last substantive reform.

In this table only autonomous ministerial agencies and independent regulatory bodies are listed. Other semi-autonomous institutions such as regulatory units within ministries or advisory bodies were excluded. For further discussion on the typology, see source below.

1. At the federal level.
2. Its powers were enhanced from 2001.
3. It has no rule-making authority but operates as an enforcer and monitor of the market.
4. Restructured with effect from 1 January 1998.
5. Created to replace the Electricity Price Committee and the Gas and Heat Price Committee.
6. The Regulatory Authority was set up as provided for by the Telecommunications Act, in force since 1 August 1996 but only took up its work on 1 January 1998.
7. Established in 1992 by Act 2075 under the name The National Telecommunications Commission (EET), EET actually commenced its operation in summer 1995. It was renamed as National Telecommunications and Post Commission (EETT) in 1998.
8. It was assigned regulation of postal services in 2000.
9. Formerly Commission for Electricity Regulation, CER (1999).
10. Established in 1987 as the Norwegian Telecommunications Regulatory Authority. It was assigned the monitoring of the postal market in 1997, hence the change of name.

11. Started to operate only on 31 August 2000.
 12. Started to operate only in 1997.
 13. Formed by combining the functions of the former Office of Gas Supply (OFGAS) and the Office of Electricity Regulation (OFFER).
 14. It replaced the Monopolies and Mergers Commission (MMC) on 1 April 1999.
 15. To replace the Federal Power Commission.
- Source:* OECD, various studies; IEA, *Regulatory Institutions in Liberalised Electricity Markets*, Paris; OECD (2002, forthcoming), *Governance of OECD Sectoral Regulators*, Paris.

Other rationale for setting up independent regulators. In addition to the argument of distancing regulatory functions from the political process and increasing transparency in the simultaneous exercise of ministerial roles in an evolving market, some countries have justified the creation of new institutions on technical reasons. According to this rationale, the exercise of regulation is now so much more complex than previously that it is best carried out by an independent expert agency rather than within the ambit of direct ministerial control. A counter argument advanced by some countries, is that many complex and technical tasks are still undertaken directly by governments and that economic regulation is not so special that it is beyond the capacity of the core civil service operating directly under ministerial control.

Lastly, some governments have justified the development of independent regulators from a pragmatic viewpoint. Setting up independent regulatory bodies have been considered a short-term strategies to avoid the inflexibility of the procedural and resourcing strictures that apply within government ministries. Often the creation of new institutions has been part of the policy advice provided to emerging countries needing to improve key areas of their public sector to attract foreign investment (see Box 2).

Box 2. Independent regulation in transitional economies

The rationale for regulatory independence can differ from country to country according to its existing economic, social, administrative and political circumstances. In economies that are coping with the introduction and embedding of fundamental structural changes, the regulatory framework for specific sectors such as the network industries often is linked to the economy's transitional status and to the condition of its existing structures of state.

Among developed economies, the purpose of regulation generally is related to consumer welfare. By contrast, the regulatory rationale in emerging economies is more often associated with protecting producer interests. Many transitional economies are dependent on private sector involvement – including foreign direct investment (FDI) – in the productive sectors and in the provision of the infrastructural services that underpin economic growth and development. Investors, however, want reassurance as to the security of their investment, the sustainability of the market, and the probability of an acceptable return; they are deterred by high-risk environments. Much of the World Bank's analysis of sectoral regulation and the need for regulatory independence is based on the particular challenges that face emerging and transitional economies in providing the economic and administrative stability to which private sector investment is attracted.

The establishment of regulatory institutions that are demonstrably distanced from the political process is often considered to be a critical step in dealing with these challenges. The creation of such bodies helps to engender confidence in a regulatory system that is objective, impartial and expert in the carrying out of its work. It also indicates a level of government commitment to breaking the link between regulation and the political cycle, and indeed, in breaking links with previous administrative structures. This can be important in circumstances where the existing public administration lacks the confidence of the market or even of the wider public. The establishment of new independent regulatory bodies can be a relatively speedy means of achieving investor confidence in the expertise, objectivity and ethics that apply to the regulatory system, without the necessity of awaiting the coming into effect of the wider-scale programme of public sector modernisation with which the emerging or transitional economy would also be engaged.

2.6. Designing the institutional framework

A central aspect in the design of a regulator is appraisal of the current institutional setting and the extent to which it meets new requirements, or whether it needs to be amended or even replaced with an alternative design. If the regulatory environment has changed significantly as a result of privatisation or market liberalisation, then it is likely that the existing regulatory institutional design will need significant revision. Often governments have designated the responsible line ministry to conduct such appraisal, impairing in practice its objectivity. In 1997, the United Kingdom tried to avoid such pitfall and commissioned the review to an *ad hoc* task force with a mixed membership. Transparency was further ensured by the publication of consultation papers before making policy decisions.

Coherence in the regulatory institutional redesign is even more important when a government embarks on economic structural reforms such as market openness and privatisation. Considerations of investor protection related to supporting market confidence and attracting foreign direct investment have influenced changes in regulatory institutional design.¹ Furthermore, governments have often decided they need to ostensibly create new regulatory institutions at arm's-length apart from central ministerial structures to underpin their commitment to market stability, development and ethical behaviour of regulators.

2.7. *Regulator's objectives*

Lack of clarity of regulatory objectives has important implications in the assessment of regulatory performance (see Section 5.1). Not only do policy-makers need to set regulatory objectives – those high-level aims of regulatory policy – they need also to consider the criteria, priorities and outcomes for which the regulatory body itself is directly responsible and accountable. Moreover, the regulator's objectives should be subject to periodic review and its performance measured.

In general, the function of an economic regulator is to ensure that the market functions and in particular that consumers have access to secure services at a reasonable price. But if market failures occur, does the fault lie with the regulator or with the regulatory framework set down by the policy-maker? Sometimes it can be difficult to ascertain which is the case, particularly if the regulator has been charged with multiple and competing policy objectives.

There is a variety of reasons for which regulators can be given a multitude of objectives rather than a clear, single, market-based mandate. In some instances, governments give insufficient attention to developing their vision of the purpose and objectives of regulation and this lack of clarity translates into the mixed range of functions that they transfer to the independent regulatory body. Occasionally, a government that wishes to avoid a difficult decision will offload a particular function to an independent regulatory body, regardless of whether the function is consistent with the existing objectives of the regulatory body.

Failure often arises when regulators have been given opposing objectives. Consider the case of an energy market regulator who is charged with promoting good environmental practice in the sector while expected to facilitate its expansion. The regulator may well make progress on both fronts, but to the extent that these objectives are competing rather than complementary, then trade-off decisions must be made. Because some of these trade-offs may not be transparent, it will be difficult to evaluate them, and hence to measure the performance of the regulator. A solution can be to provide the regulatory body with a set of parameters, together with clear priorities, accompanying its market-based mandate. These parameters could comprehend the social, regional and environmental policy that the government has set and within which boundaries the regulator is required to operate, but on which the regulator is not expected to make decisions.

Often, the regulatory institutions themselves take on additional objectives over time. An energy regulator, for example, may seek out new responsibilities in the environmental area related to energy efficiency and sustainable development in addition to the regulator's core competition role. Such "objective inflation" is a common feature of bureaucracies in general; the world of independent regulatory bodies may offer limited scope for "budget-maximising", but it does present opportunities for "bureaucratic empire-building".

Moreover, expansion of the independent institution's remit may also be inversely related to the need for economic regulation, which generally declines over time as competition develops in the regulated market. Rather than face extinction, regulatory bodies will advocate and assume additional tasks and functions that can help justify their continued existence.

Expansion of regulators' functions and objectives may be the result of collusion of politicians and regulators' interests. The resulting structure and split of responsibilities will cultivate poor public administration practices and blur accountability. If, for example, an independent regulator is given a social policy objective, such as improving the welfare of categories of consumers,² then a danger of duplication of effort between the regulator and the government agency charged with the social policy will arise. More significantly, the split in responsibilities on the policy will impact adversely on the overall fulfilment of a policy goal.

Whatever the motivation, recent experiences in OECD Member countries have shown that there are three critical elements of the institutional design: independence, accountability and coherence of the regulatory approach.³ It should be borne in mind that consideration of these inter-related issues is undertaken in an iterative fashion through a form of hysteresis. For presentation purposes, however, discussion of the three elements in the following sections of this report is necessarily linear and sequential.

3. Regulatory independence and institutional design

3.1. *A relative and multi-faceted concept*

Regulatory independence is a matter of degree rather than absolute. Constitutional setting can impose limits on the degree of discretionary powers that can be devolved from the government to ministries and from the ministries to arm's-length bodies. Often regulatory powers can be exercised exclusively by the central government implying a strict hierarchy and accountability chain of command.⁴ Regulatory independence is constrained by the reality that those who are charged with regulatory functions must interact with market, political and societal players in the efficient exercise of their duties.⁵

Independence is also a multi-faceted concept. It usually centres on distancing the design and execution of the regulatory function from many of the political and administrative pressures of central government. In parallel, independence connotes an arm's-length relationship with the interests of producers, consumers and other parties within the regulatory domain, such as financial institutions and employees. There is a correlation between each of these relationships and the institutional setting from which regulation is delivered. Under this complex approach, the transparency of rules is paramount to assuring the independence in the exercise and effect of regulatory functions.

3.2. *Independence, influence and institutional design*

Regulation affects many players in the market and in the wider society. If the players are rational – or more likely, act within the realm of bounded rationality⁶ – then they will seek to influence the regulatory process with a view to benefiting their own interests. Typically, the incumbents want to retain market share, new entrants want low cost interconnection to existing networks, employees want to retain their jobs, shareholders want maximised share value, customers want access to high quality service at low prices, politicians want to retain office, citizens want reduced taxes and accountable institutions of state. Each of these interests is legitimate and attempts by the parties to further these interests through the regulatory process are not, *prima facie*, improper. The difficulty, however, arises when the regulatory system is influenced in a non-transparent manner that reduces societal welfare and unfairly privileges particular interests.

The benefit of institutionally distancing the regulator from interested parties is that it provides protection against capture of the regulator by interests likely to bias the regulatory process and hinder its effectiveness. Independence can also support impartiality and neutrality in the exercise of regulatory

powers. The independence can be reinforced by transparency rules governing the exercise of the regulatory function.

3.3. *Independence from political and administrative influence*

As previously discussed, in the past 15 years the traditional institutional model has profoundly changed in many OECD Member countries. Today a proliferation of separate specialist regulatory bodies indicates that ministerial control of regulatory functions has been greatly reduced and in many cases eliminated.

The independence aims at creating a distance between regulatory decisions – in the design as well as in the adjudicating phase – and administrative and political processes eminently focused on short-term political considerations. The longer term perspectives for regulatory decisions are linked to the capital-intensive nature of the network sectors. Usually investors need to be assured of a long-term commitment to regulatory stability. They need to know that the regulatory process is protected from the vagaries of the political cycle.⁷ For example, few governments facing a general election would give sanction to an increase in utility prices regardless of whether such an increase were economically justified. Indeed, fewer opposition parties would like to support such a measure if it required the backing of the legislature. Such issues are of particular significance in jurisdictions where the public or producers lack confidence in the expertise or the objectivity of the public administration.

A second factor relates to the confusion of roles that occurs when the regulatory authority is at the same time the sectoral policy-maker and the shareholder of market operators. For example, the government may confuse the motivations for its actions approving a project that provides a poor rate of return for the utility company but which supports the government's regional policy objectives. Even where the government does not engage in deliberate cross-subsidisation, the public perception of regulation can be clouded by government's joint exercise of roles. The claims of regulatory bias – whether or not justifiable – may be even more patent when the state-owned operator is the historical incumbent inheriting strong "good will" and information on the market.

However, while the creation of an independent body removes the regulatory decision from the immediate political realm, it is not a guarantee of sufficient distance from all influences that would affect a regulating minister. Indeed, it can be argued that a technical regulatory unit within a ministry, or even a regulatory advisory body, may be more likely to generate apolitical regulatory solutions than an independent executive regulatory body; because the latter is publicly and directly identified with its own regulatory decisions and actions, it may be more reluctant to take decisions that are unpopular.

Strategic distance from difficult decisions. As in the case of central banks, independent regulators are sometimes important vehicles, for government and legislatures to pursue desired, but difficult or unpopular, policy direction. For instance, even when they accept market reform in principle, both the Executive and the legislature are often reluctant to be seen committed to the detail of reforms that will reduce market power of the incumbent operator – particularly if this market player is, or has been, a state-owned enterprise. Indeed, an independent regulator backed by government but operating, on a day-to-day basis, removed from the immediacy of the political milieu is less threatened by the electoral implications of different regulatory decisions. The Executive and the legislature are aware that they are less closely identified with the unpopular decisions that a market-liberalising regulator has to make.

3.4. *Forms of institutional independence*

There are several institutional models currently in use among OECD Member countries that provide varying degrees of regulatory independence from the political sphere.⁸

Where regulation still remains a ministerial function, its execution can be given a degree of independence by its separation from the sectoral policy-making and the shareholding roles also executed by the ministry. **Identifiable regulatory units** housed within central government ministries can gain an element of administrative – if not legal – independence in this way. This model injects some transparency into the regulatory process because pressures from the policy and shareholder functions become more apparent, at least to the regulating administrator if not outside the organisation.

In some administrative systems, regulatory independence is secured through the medium of **independent advisory bodies**. These bodies are established at arm's-length from the government to provide an external view to the responsible ministry that retains the executive regulatory powers. The function of the body is to provide advice, usually of an expert nature, to the regulating minister. While such bodies do not have decision-making powers, they can improve the independence of the decision-making process. In particular, if transparency rules allow their advice to be made public, the regulating ministry can come under public pressure to provide a justification for occasions on which it departs from the expert advice. Apart from their use in network regulation, such bodies are common in the area of health regulation where panels of medical and healthcare experts often are established to provide expert advice to regulating health ministers. However, independent advisory bodies may be vulnerable to capture, particularly if their members interpret their appointment as a representation of their professional discipline.

Another form of regulatory institution is an executive body, set at arm's-length from central government, but subject to powers of ministerial intervention – the **ministerial agency**. Typically, governments refer to such bodies as being autonomous. However, their independence of government is severely constrained if they are made subject to provisions which, for example, require ministerial approval of certain decisions (e.g. issue of licences), allow for ministerial direction in certain matters (e.g. access pricing principles) or designate a minister as the appeal body in cases of dispute.

Where the scope for ministerial intervention is removed, or at least restricted to the provision of advice or direction on non-economic matters, then the regulator is generally considered to be an **independent regulatory body**. In some cases, like in Italy, the independence can mean that the body reports directly to Parliament, short-circuiting the government and the Cabinet. Of course, regulatory bodies are never completely independent being variously subject to the legislature, government, industry, judiciary and the public in terms of governing legislation, appointment, financing, review of decisions and appraisal of performance – all matters relevant to the accountability discussion in the next section.

A further possible regulatory approach is that of **industry self-regulation**. However, the efficiency of this approach is correlated to the degree of market openness. In the monopolistic or nascent markets typical of the network industries – or even in some more developed utility markets where there are still natural tendencies towards oligopolistic behaviour – this approach tends to reduce societal welfare. The difficulty with this model is that the high degree of institutional independence from government, politics, consumers and other interests is not sufficiently counter-weighted by the regulatory proximity to the industry's self-interest.

3.5. ***Independence from regulatees***

In general, the regulator's relationship with the regulated industry is critical to the effectiveness of the regulatory process. A constructive working relationship between regulator and regulatee is necessary, but may hold the seeds of regulatory capture. While much of the relationship is contingent on the operational contact between the regulatory office and the industry, there are key aspects which are pre-determined by the regulatory institutional design.

Where there are few market players – as is typical of the supply side of network industries – the market operators tend to know more than the regulator about the state of the market, technological advances in the industry and the nature of their own activities.⁹ Information asymmetry is therefore often a critical issue in the regulatory environment.

Even when there are many market players, information dependence has a bearing. If the operators organise themselves together, they can develop into a strong lobby group and can have an economic and analytical power matching or even surpassing that of the regulator, regardless of whether the regulator is a ministry or an executive body. Technical complexities can reduce regulatory transparency, and can be used to screen market behaviour that is inconsistent with the principles of competition and consumer welfare. Technical arguments are commonly brought into play in discussions of security of supply, and it can be difficult for the industry-information-dependent regulator to discern the legitimate from the spurious invocation of such concerns as behavioural justification.

3.6. Further sources of influences

Apart from the obvious interests of the government and industry, there are several additional parties – financiers, employees, customers and others, including non-governmental organisations (e.g. environmental groups) who may seek to influence the regulatory process as far as their interest is concerned.

Financiers. In the case of the utility sectors, the interest of financiers stems from the high capital intensity of networks, and is likely to be associated with financial market reactions to the privatisation or market liberalisation policies that often underlie regulatory change. Depending on the economic climate, financiers may see change either in terms of new opportunities for investment or alternatively as the withdrawal from the market of the traditional government underpinning that, in most developed countries, provides stability and assurance to financial backers. In the particular case of financial services regulation, of course, the financiers are also the regulatees, which intensifies their interest and influence in the regulatory process.

Employees and labour unions. Typically, employees are well organised in the traditional incumbent utility. Not surprisingly they view regulatory change as a complement to industry restructuring, and thus a threat to the security of their employment. Where the incumbent is, or has been, a state-owned enterprise, there is probably a history of employee involvement – either formal or informal – in business-related decisions. In neo-corporatist political systems, the staff unions in the utility industries are often strong players in the social and economic decision-making process, and are accustomed to the exertion of their influence and to its being reflected in national and industry-related decisions.

Consumers. Consumers are directly affected by the price, quality and access to services provided by utilities and thus by the improvements that regulation is designed to provoke. Nevertheless, consumers are seldom organised as an identifiable group.¹⁰ The business customers are generally well organised usually in terms of trade or industry associations. However, retail-level, domestic or small business customers are less likely to form groups through which they can exercise influence.

Nonetheless, consumers of utility services comprise a very large sub-set of citizens and voters, and this put issues like utility prices high on the political agenda. When regulation is made more independent of government, however, the electoral channel for the manifestation of consumer concerns is removed. Both the designers of regulatory institutions and the regulators therefore often find themselves deliberately creating structures to increase consumer input into the regulatory process in contrast to their usual approach of trying to limit the scope for input from other, more organised, interested parties. Of course,

this can be problematic too, particularly where consumer groups are co-opted in which case they may not be truly representative of the consumer interest.

3.7. *Building independence into regulatory structures*¹¹

Past experience in the design and operation of independent regulators provide preliminary indications on key tools and procedures that can ensure independence. As often the case a combine use provides a better protection against capture, though the political, legal and administrative context of each country modifies their need and practical setting. A rapid enumeration of the main instruments is made in the following paragraphs.

3.7.1. *Legal and cultural basis for independence*

Nominal regulatory independence is usually, though not exclusively, provided through the legal system. In many countries, independence underwritten by statute (*i.e.* primary legislation) usually has more significance than independence given by ministerial or even presidential or cabinet order (*i.e.* secondary legislation). Political and administrative culture is also important, as the practice, even by regulators themselves, of upholding institutional independence is stronger in some systems than in others.¹² Moreover, the internal culture as well as the perception by the outside world of the degree of independence of a regulatory body will be often marked for many years by the behaviour of a charismatic leader.

3.7.2. *Regulation by individual or commission*

There are two basic structures for a regulatory body: either an individual or a group leading the institution. The former model is identified often with the United Kingdom approach. Nowadays, the latter model is the more usual approach. In both circumstances, the person or group at the top of the structure assumes the legal personality of the regulatory body. There are many governance facets to the individual vs. group debate in regulatory design.

The prospect of *consistency* in the decisions of a regulatory authority helps to contain the level of regulatory uncertainty in the operating environment. A central concern on this issue is the timeframe across which consistency is to be measured. Although the decisions of a single regulator may be more consistent than those of a board over one term of office, there is likely to be a discernible shift of focus following the changeover of office from one single-person regulator to the next. Longer term consistency is more likely where there are regulatory boards whose individual members have staggered terms of office. Staggering the terms of appointment may also augment independence by breaking the potential coincidence between the term of office of regulatory commissions and the term of office of governments. Staggering of appointment may also limit the loss of corporate knowledge when regulators depart, and avoid the regulatory uncertainty associated with complete changeover in commission membership.

The *speed* of the regulatory decision-making process may also be affected by whether the institutional design involves an individual or a commission. In general, individuals have the potential to execute their functions more expeditiously than groups. Conflict and delay may arise where there is a board or commission and particularly when different governmental bodies appoint the members. However, the rate of decision-making is also contingent on the nature of the decision procedures and is constrained by the imperative to follow due process.

There are conflicting arguments about whether individuals or groups are more vulnerable to regulatory *capture*. The successful capture of a single regulator will be fully effective but probably more transparent

than in the case of a board. In a group situation, the effect of the capture of some of the members will not be as complete, although it will probably be less apparent to the outsider and the capturing interest has a choice of persons on whom to exercise influence, some being more susceptible than others. It is also argued that the individual regulator structure leads to undue personalisation of the regulatory process, although there are many examples of commissions – regulatory and otherwise – whose chairperson is personally identified with that body.

The pool of suitable persons for appointment to regulatory positions, the level of financial *resources* available to support the board, or the size of the industry under regulation have also an impact on the appropriateness of a single or group structure at the head of the regulatory body.

3.7.3. Variations on top-level regulatory structures

There are several variations on the basic structural approaches to establishing regulatory institutions that try to combine the simplicity and efficiency of the individual regulatory model with the range and continuity of experience offered by the commission structure.

One possibility has been the setting up of a commission with both full-time Executive members and part-time non-executive members, similar to the normal structure of a board of company directors. This option allows for expertise at reduced cost while also keeping some of the top-level decision-making structure outside of the day-to-day operation of the body, thus reducing the potential for institutional self-capture. Nevertheless, this model may be more vulnerable than others to conflict of interest situations, as it can create additional challenges for the control of regulators' personal interests. Procedures for the management and control of potential conflicts of interest could have a particular pertinence in the context of part-time members who would be pursuing other activities in addition to regulating and adjudicating (see section below on regulators' interests).

Another option has been the establishment of a commission with scope for change in membership size. Such an approach has been adopted in Ireland for both the electricity and the airports regulatory bodies, and is proposed in the forthcoming amending legislation for communications regulation; the legislation in each case provides for the ministerial appointment of a commission whose membership shall be between one and three persons. This solution facilitates reassessment of the appropriateness of the individual/group structures in the light of changing circumstances. However, it might detract from the independence of a regulatory body if the possibility of changing numbers of ministerial appointments were to be perceived as a leverage on an existing commission.

3.7.4. Selection of candidates for regulatory positions

In most cases regulators are protected from easy or undue removal so that independence is ensured. Consequently the selection of candidates and the design of the selection mechanism become paramount. Different approaches have been tried to guarantee a proper and efficient selection. Each of them having pros and cons. Following are some usual mechanisms:

- A variety of persons and bodies are charged with the responsibility of selecting candidates for top-level regulatory positions: the head of the administration, ministers, parliamentary commission or even opposition parties.¹³
- A selection committee is organised to take a unanimous or majority decision. The committee can comprise members of the legislative, Executive and/or judicial branches of the state.

- Selection bodies formed with “eminent persons” similar to those for non-political administrative appointments are created.

Certainly, a ministerial selection mechanism will not improve the perceived independence of the successful candidates. On the other hand, the use of special selection committees also raises questions as to the objectivity of the selection process and the independence of the committee itself.

The means of selection of individuals for top-level regulatory positions is probably of more significance to their independence than is the method of their appointment. If the selection process is independent, then the appointment process is largely ceremonial and its politicisation will not detract significantly from the regulator’s independence. Nevertheless, the appointment process can also have an effect on regulatory status; regulators appointed by a head of state or government are perceived as being more powerful than those appointed by a minister, for instance.

3.7.5. *Skills and experience required*

Objective selection criteria for regulatory positions reinforce independence of regulatory bodies. Network regulatory issues often require extensive knowledge of regulatory economics and administrative and legal acumen and experience. However, it is debatable whether prior in-depth knowledge of the regulated industry or of regulation itself is of more direct relevance to a candidate’s ability to be a successful industry regulator. Will an experienced manager (in whatever field) or a relevant expert make the better regulator? There is unlikely to be a fixed answer. In selecting for positions on regulatory boards, a mixed approach may be adopted taking into account dedicated expertise and generic management experience. However, sometimes having an overrepresentation of experts and specialists in the regulated field can lead to perceptions that the board members defend particular interests in a partial and non-objective way.

Another important issue concerns the difference between the skills required for an individual regulator and that sought in a member of a regulatory commission. In the former case, there is usually a strong emphasis on individual motivation and responsibility, and ability to take on leadership of the regulatory organisation. The latter case, on the other hand, requires strong skills in working as part of a team. The commission chair needs to have particular skills in chairing groups, and these requirements vary according to whether there is an even or an odd number of commissioners. Furthermore, if there is a provision for the rotation of the chair between the commission members (in order to balance the power between them over time), then it needs to be taken into account in the selection of the commission members, that all of them need a certain level of group chairing skills.

The requirements are not static though. Different phases of the regulatory process require different skill sets and leadership styles. In its start-up phase, for example, a regulatory institution can benefit most from a strong and charismatic leader who is ready to firmly carve out and defend the institution’s mandate and assert its independence. Conversely, regulatory retrenchment will be assisted by a leader, whose perspective is broader than building and strengthening the institution, and who is willing to desist from regulating where the benefits of such intervention no longer justify the costs.

3.7.6. *Term of office and reappointment*

Constant or unwarranted dismissal of regulators can be seen as a profound breach of the principles of independence. On the other hand, the permanence in office of the same individual or board members may lead to rigidities and help develop an intimacy with stakeholders incurring the danger of capture of the regulatory institution. Therefore, many countries have fixed the term of appointment of regulators and bringing “new blood” to regulatory bodies is considered essential too. However, there is no optimal length

of service for a regulator. Less than three years is probably too short, and over 10 years probably too long. Similar arguments can be made in relation to re-appointment. In practice, some systems limit the opportunity for the reappointment of regulators following the expiry of their initial term of office.

3.7.7. *Removal from office*

As a mechanism of imposing accountability, a provision for the removal from office of regulators is included in most regulator statutes. To balance the need of regulatory independence, however, removal powers are frequently reserved to a limited range of circumstances – typically, personal incapacity, of grave misdemeanour. In general, regulatory independence is better ensured if the removal of a regulator requires the approval of the legislature.

3.7.8. *Restrictions on personal interests*

Possibility of conflict between their regulatory authorities and other interests of regulators and their staff is real in the network industries due to the very specialised knowledge and expertise required. Charged with tasks that have major consequences for the various stakeholders, the regulator's personal integrity is vital in reinforcing public confidence.

Increasingly, explicit provisions are written down to constrain regulators from pursuing interests in conflict with their regulatory functions during and after their tenure in the regulatory institution. In jurisdictions where public office ethics rules already exist, regulators are often subject to them and in some cases to additional disciplines regulating the financial interests and ethical conduct of regulatory appointees. A particular requirement set up by some governments has consisted in developing specific constraint on former regulators from undertaking potentially conflicting activities, such as employment within a regulated industry, during a fixed period after the expiration of a term of office. Compensatory financial arrangements are often required to offset such a restriction.

Finally, it should be noted that, while the potential for conflict of interest arises in relation to all regulatory appointments, the potential is particularly strong in the case of part-time regulatory posts. In such cases, the reasons for which individuals are considered suitable for appointment as regulators – such as their relevant experience – are also likely to be matters that can lead to activities of conflict of interest.

3.7.9. *Resourcing*

Financing and staffing are critical issues for the independence of any organisation and of regulatory ones in particular. The nominal independence of a regulatory institution needs to be underpinned by ready access to adequate resources, before it has real effect.

Adequate financing plays a central role in the overall efficiency and independence of the regulatory body. In some cases regulatory bodies are financed from central exchequer funds; in other instances the regulatory body raises its **funding** from levies or fees imposed on the regulated industry; a further option is the imposition of tariffs on consumption of the regulated good or service. Financial dependence on the government budget can detract from a regulator's political and administrative independence. Conversely, regulatory financing by consumption taxes may make a regulator over-sensitive to short-term public opinion at the expense of long-term economic efficiency.

Even where regulatory bodies have secure access to finance, this may render them liable to pressure, for instance, from the central government or Finance Ministries that perceive the regulators' revenue-raising

powers as a macro-economic tool of government. In order to avoid such a situation, in some cases, the statute distinctly clarify the role of the Treasury department in relation to the funding of the regulator.

Just as the independence of a body is impaired by lack of funding, a regulator imposed with a too rigid *staffing* policy may not function effectively. The effective exercise of economic regulation requires access to expertise in several highly technical fields (*e.g.* pricing of interconnection charges and tariffs) which is often in short supply. Even in the case of a comparatively large pool of expertise, regulators often need to compete for the best technicians with wealthy private companies and other regulators. To countervail this situation, some governments and legislatures, like in Greece, have exempted some or all regulatory bodies from standard civil service pay and allow their employees to enjoy a higher payroll.

A number of different approaches to the staffing of independent regulatory bodies have been adopted under different circumstances. They have included direct recruitment of ex-ministerial staff, secondment of civil servants, secondment of regulated industry personnel and the medium-term hiring of expert consultants. Each of these arrangements creates different effects on independence, budgetary cost, administrative burden and flexibility of the regulator.

Securing the autonomy in the selection and hiring of its own staff and the power to set their terms and conditions (including pay) has been particularly critical in building confidence in the regulator of the market and of the parties affected by regulation. In transitional economies where the legal and market frameworks are very immature and where producers and consumers cannot wait for the general public service modernisation programmes to take effect, such arrangements have been used to overcome more speedily the weaknesses associated with the existing public service structures and systems.

3.8. Weaknesses of regulatory independence

Institutional independence is not a panacea for regulatory framework challenges. Independent regulatory structures have potential and inherent disadvantages that need to be taken into consideration in the design of a regulatory architecture.

First, the new body can be seen to be a feeble offshoot of the ministry. This perception is often linked to the independent regulatory body's distance from the central policy-making function – both as regards to the specific sectoral policy and other related areas, like competition policy – and hence, its reduced influence on policy development. Remoteness from cabinet can breed negligence of the regulators' authority from other strong political players in the executive or legislative branch. Ultimately, it can impair confidence in the strength of the body and in the significance of its work. The lack of market confidence in the institution, whose purpose is to overcome market deficiencies, in turn, precludes it from supervising and regulating the markets effectively.

Secondly, it can also be argued that, being smaller and more focused than a ministry, the independent regulatory institution is more vulnerable to capture. This again can be a matter of perception rather than reality, but in relation to regulatory capture, the mere perception of vulnerability often is sufficient to undermine confidence in the structure.

A third weakness of independent regulatory structures is, paradoxically, related to strength. There is a possibility that an independent agency can become too strong, or “too independent” though time and becomes a “governments in miniature”.¹⁴ If unrestrained, an independent body may act beyond the role envisaged for it at the time of its establishment. A case in study is Canada, in which the degree of independence of many regulators has been progressively reduced and/or constrained by accountability measures and co-ordination mechanisms (see Box 3). For instance, bureaucratic inertia and strong lobbying

by the regulator may provide it with a longer life expectancy than the one justified by the market conditions in the sector.

Box 3. Regulatory independence in Canada

Contrary to the trend of establishing independent regulators in most other OECD Member countries, about 20 years ago Canada started to reduce the degree of policy-making powers of the independence enjoyed by its existing cohorts of fairly autonomous regulatory bodies.

Between the 1930s and the late 1960s, the Canadian Government progressively increased powers of specialised sectoral regulators until it had established veritable “governments in miniature” where regulators had a broad range of powers and instruments with which to regulate the energy, transportation and communication sectors. These bodies had both comprehensive regulatory decision-making powers and an independent capacity as primary policy-makers in those sectors. They possessed a mix of functions that included regulation making, licensing, adjudicative, quasi-judicial, subsidy or spending roles, policy, and policy-making and monitoring roles. Though supervised by the courts and the Cabinet, these regulatory bodies enjoyed considerable autonomy within the federal government.

During the last two decades the Canadian Government has largely reclaimed the policy-making powers formerly exercised by the independent regulators, moving the model toward one more typical of the ministerial accountability usually found in a Westminster-style parliamentary system. As a result there was a general reduction of the degree of independence enjoyed by these bodies. Today, only the Canadian Radio-television and Telecommunications Commission (CRTC) retains its former status and power. Its counterparts, the National Energy Board (NEB), which regulates the gas, oil and electricity, and the Canadian Transport Agency (CTA) have had their range of powers and functions contracted and their membership and staff greatly reduced.

The reduction of institutional autonomy has been accompanied by a rise in the accountability of ministers. Ministerial accountability to Parliament has been enhanced by requiring, amongst other things, that the minister, and not the regulator, tables its annual report in Parliament. Accountability to the public has also been enhanced by the adoption of extensive consultation with interested parties regarding proposed changes to regulations and through the widespread use of public hearings.

A reinvigorated competition authority comprising the Competition Bureau and commissioner, and the Competition Tribunal, has also strengthened the new framework. In transport, electricity and natural gas, the bureau has played an important role in bringing about pro-competitive regulatory reform through reducing the scope of sector specific regulation in favour of broader general policies. The bureau’s advocacy occurs (on its own initiative or on request from the regulator) through interventions before the industry-specific regulator as well as by providing policy advice to Parliament and to the government departments overseeing the industry in question. Also, the bureau can file submissions in support of greater competition and possibly participate in regulatory hearings and consultations conducted by the regulators. The Competition Bureau has also articulated a number of principles related to assigning and co-ordinating its roles and responsibilities with those of various regulators.

Source: OECD (2002, forthcoming), *Regulatory Review in Canada*, Paris.

Moreover, additional risks can be associated with independent regulators, which may reduce longer term regulatory quality in vital infrastructure sectors:

Democratic accountability may be sacrificed. Too much independence is inherently incoherent with the concept of democratic accountability and it needs to be balanced with accountability mechanisms. Accountability can be maintained through various mechanisms, including executive oversight and powers of direction, strict procedural requirements, reporting obligation, public consultation and substantive judicial review.¹⁵

Independent regulators may slow structural change, resulting in the loss of potential gains to consumers. Regulators are often established along sectoral lines and may tend to obstruct convergence between sectors and the emergence of new business models. It can therefore hinder technology advancement and impair market efficiency. Similarly, as regulators proliferate, other institutional rigidities may increase.

Government-wide coherence of policies may be reduced. Independent regulators may contribute to the inconsistency among governmental agencies and policies, in particular in the case of its interacting with the competition authority. As sectors restructure and become more competitive, sector-specific issues become less important *vis-à-vis* general competition issues. Ideally this requires a transfer of powers to the overarching competition authority but inertia and resistance from the regulator is likely to impede the transition.

4. Designing regulatory governance for accountability

Experience in several OECD Member countries indicate that the development of independent regulators can be balanced by important and more efficient accountability mechanisms. In this section, the adequate balance between these two central aims will be explored.

4.1. Independence and accountability

There are many parties to whom regulators can be made accountable: the industries they regulate, the Executive who establishes them, the legislature who makes their governing legislation, the judiciary who applies the law of the land, the consumers of the regulated industries, the citizens who constitute the political society from which all administrative power originates. The challenge for regulatory institutional designers has been to make the regulatory system simultaneously accountable to each of these parties according to their interests, without compromising the operational independence of the regulators that sets them at a remove from the interested parties.

Accountability provides a restraint on regulatory independence and a means of remedying the democratic deficit created in devolving regulatory functions from the centre of political power.¹⁶ However, it is also true that accountability is a means of underpinning regulatory independence by integrating the regulatory function into the existing structures of state and giving regulators not only the duty, but also the right, to make account of themselves.¹⁷ This integration, if successful, can countervail the weakness of independence arising from the regulators' remoteness from the centre of the government as noted previously.

4.2. Updating the accountability mechanisms

Accountability concerns the obligation to explain, answer for, and bear the consequences of the manner in which one has discharged duties, fulfilled functions and utilised resources.¹⁸ When regulatory functions are moved from the policy-making centre of government and into independent institutions there is usually a severing of the political accountability mechanisms that previously applied in respect of exercise of the regulatory function delegated to representatives of the people such as the legislative or ministries. In theory, once an independent body is charged with a set of regulatory objectives, then the relevant minister should stop to be answerable to government, Parliament or the electorate for such matters.

A consequence of setting up independent regulators is thus a reappraisal of existing accountability mechanisms and the development of new suitable ones. Those old and no longer suitable mechanisms that do not lapse of their own accord should be deliberately dismantled; if they remain, they will compromise the independence of the new institution because they will blur the link between responsibility and accountability. New accountability mechanisms then need to be built in order to ensure that the safeguards to accountability and to regulatory independence are in place under the new regime.

The accountability mechanisms for new regulatory institutions are however extremely tricky to establish. New and unexpected moral hazards arise through the regulatory intervention and liberalised markets.¹⁹ For instance, in the event of a regulatory failure in a regulated market, who should be made accountable: the market players who exploit regulatory rules, the regulators who made those rules in the first place, the politicians who, conscientiously or not, created the regulator as an escape from taking difficult decisions? In markets that are liberalised, the regulator may take over from the *ex state monopoly* the responsibility for ensuring universal services without the budgetary means. But in a situation of supply interruption and a reduction of supply of universal service, neither the government nor the regulator should expect the private regulatees to continue acting as an agent of the state, but rather as a free market player operating within the bounds of the regulatory rules.²⁰ In fact, as the regulatory framework becomes more complex and responsibilities are shared between law-makers, ministers, regulators, judges and competition authorities, it is harder and harder to assure a proper accountability of the network of entities.

Basically, accountability of the regulatory process can be ensured through mechanisms related to each of the three branches of government: the Executive, the Parliament and the judiciary. Administrative accountability concerns how, as a government-sponsored process, regulation should comply with fair and transparent procedural practices, reporting systems and controls. Accountability through the Parliament ensures that the regulators are answerable not only to the government of the day, but also to the broader spectrum of the political democracy. Accountability through the judicial system can help ensure the impartiality and the probity of the regulatory process.

4.3. Administrative accountability

Quality of regulation. Regulators are responsible for their final product: a regulation of high quality. Some governments have made the regulators subject to regulatory policies or incorporated in their status quality criteria for their rule-making processes. For instance, most of Canada's sectoral regulators need to comply with the Federal Regulatory Policy (fundamentally alike to the OECD *Recommendation of the Council on Improving the Quality of Government Regulation*),²¹ which provides the guiding principles for the development of regulations and imposes certain requirements, including that:

- regulatory authorities demonstrate both that a problem or risk exists and that federal intervention is justified;
- all possible means – whether regulatory or non-regulatory – of addressing the problem or risk have been considered;
- stakeholders – industry, labour, consumer groups, professional organisations, other governments and interested individuals – be consulted on all phases of the identification of problems, and the development of the regulatory solution;
- intergovernmental agreements be respected and that opportunities for intergovernmental co-ordination have been exploited;
- benefits and costs of the regulatory interventions under consideration be assessed, that the benefits justify the costs, and that limited government resources are used where they will do the most good;
- adverse impacts on the economy are minimised;
- systems are in place to manage regulatory resources effectively;

- compliance and, when appropriate, enforcement policies be implemented; and
- the regulators have the resources for monitoring compliance and enforcing the regulations.²²

Procedural transparency. OECD governments have also developed several methods of improving the transparency and hence strengthening the accountability of the regulatory process operated by independent regulators. They often include requirements relating to decision-making processes such as public consultation procedures, publication of information and the application of formal freedom of information laws.²³

Transparency rules are important in underpinning regulatory accountability. They allow an independent regulatory body to demonstrate its independence and thereby boost public and industry confidence in the regulatory process. Transparency rules are also an effective deterrent to regulatory capture. And even where capture is avoided, they can provide an avenue to independent regulators for publicly revealing any inappropriate pressures exerted on the regulatory process. It is for this reason that some regulators have opted, on an administrative basis, to make their regulatory operations more transparent than formally required by their legal framework.

On the other hand, procedural transparency rules are an unusual accountability mechanism in that generally they are non-prescriptive concerning to whom the accountability is to be rendered. For example, a requirement that a regulator should make publicly available its decisions and their reasoning makes the regulator accountable to whoever might have an interest in a decision. This is achieved without either the policy-makers or the regulator having to specifically identify and report to each of the interested parties, who vary over time and according to the matter under consideration. General rules concerning notice and comment arrangements, such as those in effect in the United States, or pre-publication requirements, such as those in Canada, have similar effects. In this regard, advances in technology and the growing use of Internet facilities reduce the costs associated with information dissemination and publication. They however do not solve problems arising from over-consultation and information overload, which do not necessarily improve the quality of the decision-making.

Reporting to ministers. For many independent regulators, and in particular for ministerial agencies, the responsibilities are often split between minister(s) who is in charge of regulatory policy and framework design and the independent regulator who is responsible of implementing the policy within the framework.²⁴ In such cases, the accountability mechanism usually takes the form of the preparation of an annual report by the regulator to the policy-setting minister(s) or the Cabinet. In order to preserve independence of the regulators from its reporting agency, however, many countries have provided the possibility for the regulator to make public the report at the same time of its submission to the political authorities.

Financial control and audit. Compliance with good financial practice by independent regulatory institutions is a central safeguard against any abuse prompted by an unchecked institutional situation. In most OECD Member countries, independent regulators are subject to the auditing apparatus and the strong tradition of financial control and audit procedures applicable to budget funded institutions. In the case of independent regulators that are self-financed by fees or fines from regulatees, countries have opted for additional auditing by and/or reporting procedures to private or public accounting institutions.

4.4. Accountability through the Parliament

Parliamentary oversight is a mechanism through which regulators are held accountable to the legislative branch of the state. Usually it takes place through two routes: presentation of reports and evidence to committees.

Parliamentary oversight mechanisms. A typical instrument used in Ireland, Italy and many other countries is to require presenting periodic reports to Parliament, either directly by the regulatory body itself or through the relevant ministry. Such presentation of reports may not be a rigorous accountability mechanism in itself, particularly if it only involves sending a copy of a report to the parliamentary library. Moreover the lack of adequate technical or personnel capacities on the Parliament side can weaken this requirement (see below). However, it does send out an important symbolic signal that the regulator is in a clear reporting relationship with the Parliament and identify the right of Parliament to take an interest in regulatory matters.

In some jurisdictions, regulators are called on before parliamentary committees to give evidence on developments in the regulatory arena. The parliamentary power of calling regulators to account for their actions and policies – generally in public and in a question and answer format – is sometimes specifically stipulated in the legislation establishing the regulatory body. While explicit statutory provision is not always necessary, these hearings need clarity to avoid a potential conflict between regulatory independence and a parliamentary scrutiny motivated by an economic situation or prompted by interest groups.

Influences on effective oversight. The effectiveness of parliamentary oversight is contingent on several factors including the culture of parliamentary oversight, the legal framework for exercise of the oversight, the availability to Parliament of adequate resources to facilitate its undertaking of the oversight task, and – more generally – parliamentary interest in regulatory affairs.

In the most general terms, parliamentary participation is often required in establishing the legal basis for independent regulatory institutions. Parliament thus secures the legal basis for overseeing the general performance of those regulatory bodies. The extent to which such power is executed depends, of course, on the conventions ruling the relationship between the Parliament and the Executive.

In relation to parliamentary resources, the two core issues are probably time and research assistance. In certain cases, a third issue arises concerning access to technical expertise. In the normal course of events, the availability of parliamentary time for the consideration of sectoral regulation is often quite limited. Many countries have increased it substantially, by the extended use of parliamentary committees. It is argued that a selected committee, which can probe regulatory and sectoral developments and build up some expertise in such matters over time, is more suited to discuss regulatory affairs, than a plenary session of Parliament, which is more adept at political debate. On the other hand, countries like Ireland have found that the availability to parliamentarians of research and administrative assistance in overseeing regulatory issues – or, indeed, any other developments that the Parliament is charged with overseeing – is a basic concern in exercising effectively Parliament's oversight powers.

Parliamentary interest in regulatory oversight is often correlated to the ebb and flow of the electorate's interest in the affairs under regulation. In addition, experience has shown that, the interest and commitment of the parliamentarians increase as the committee builds up expertise in the subject matter and in the exercise of oversight powers in general.

Designing parliamentary oversight of regulators. Policy-makers involved in designing the regulatory architecture are well aware of the effectiveness of the Parliament as a channel of imposing accountability and a check on an unbridled independence. However – perhaps for protocol reasons related to the separation of powers between legislature and Executive, or perhaps because their remit is regulatory institutional design and not design of the general structure and institutions of the state – they are often constrained from assessing formally or commenting on the matter. For example, a line ministry whose task is to develop regulatory policy is probably not at liberty to comment on the capacity (or willingness) of Parliament to undertake effective oversight of the regulatory process. Yet, it is important to note that such factors must be taken into account in designing the regulatory framework.

Some civil servants, who have been constrained from formal consideration of these issues in designing the regulatory framework, have developed alternative mechanisms. In systems, where the political Executive is a subset of the Parliament, the relevant minister is in a position to comment on such matters at the political level and to have such comment taken into account as part of the administrative level consideration of regulatory design. In some presidential systems, the executive branch has included the legislature in the policy-making process through a consultation process either formally with the legislature itself, or informally through contacts with the political groups represented in the legislature. Such an inclusive approach, in most cases, has helped consider the issue of parliamentary oversight in designing the regulatory framework.

4.5. Accountability through the judicial system

Balanced regulatory governance can provide for mechanisms to ensure that regulatory decisions are in compliance with natural justice and with the law of the land, without creating a shadow regulatory system that undermines the formal institution (see below). The matter of regulatory appeals is important to regulatory accountability and can be split into two parts: review of the legal compliance of regulatory decisions and actions, and appeal of regulatory decisions on the merits of the case.

Judicial review. Legal systems vary across OECD Member countries in terms of the scope of and procedures for judicial review. It is thus difficult to prescribe general practice for the subjection of independent regulators to the scrutiny of the courts in relation to their compliance with the rule of law in the execution of their functions, the exercise of their powers and the fulfilment of their duties.

In principle, regulatory bodies are subject to less stringent judicial review than are other institutions of the state within the jurisdiction. The danger is undermining regulators' authorities and independence through the creation of a super-regulator in the judiciary (*i.e.* a judge) functioning as the regulator of last resort of the sector. Especially in countries where independent regulatory bodies are relatively new and need to earn industry and public confidence, specific procedures have thus been set up to regulate the circumstances and manner in which they are subject to judicial review. In addition, in some jurisdictions, where a general administrative law in this regard does not exist, there are detailed provisions in the regulator's statute governing the relationship between the regulatory body and the courts.

There is an important debate concerning the status of regulatory decisions while under judicial review: do they stand or are they suspended? This is a matter that varies among jurisdictions with important consequences for the efficiency of the regulatory system. If, for example, a regulatory decision is automatically suspended when application is made for judicial review, then market players might be tempted to use the review provisions to delay implementation of regulatory decisions where such delay would afford them market advantages over other players. Conversely, if decisions stand while under review, should the regulator or the state be exposed to compensation claims from market players who suffer a loss by acting on the basis of regulatory decisions that are later found to be legally unsound?

Appeal on merits. An appeal of a regulatory decision on the merits of the case extends the review of the decision beyond whether it was properly legal to whether it was correct, given the facts. Appeal on merits is a fundamental procedure whereby the facts of the case are reheard and subject again to adjudication.

The existence of a system of substantive appeal has significant consequences for the operation of the regulatory process. If the sectoral regulator is to no longer have the final word in deciding on economic regulatory issues, the question needs to be addressed as to who should have such power: the ministry, thereby eroding the regulator's independence; the courts, who are competent in matters of law but usually not in economic analysis; or a special appeals body with relevant expertise? The latter option is probably

the preferred one, but it can raise its own problems regarding the constitution of the appeals body, its independence, and its procedures.

A system that allows widespread appeal of regulatory decisions on their merits can seriously undermine the regulatory body should the appeal body become the *de facto* regulator. As with judicial review, there is also the possibility that the instigation of appeals could be used as a delaying tactic to postpone the effective implementation of regulatory decisions.

These disadvantages need to be balanced against market players' right to redress for regulatory decisions that are unfair, although procedurally and legally not incorrect.

The review/appeal system. A fundamental test of the review/appeal system for regulatory decisions is the extent to which its design leads to improvement in the regulatory decisions. Because regulatory decisions often hinge on economics rather than law, and involve matters of degree rather than absolutes, it can be difficult to assess whether an appeal system improves the outcome. For example, is an appeal body's determination that an interconnection price should have been set at \$3.20 any better than the regulator's initial decision that it be \$3.10? Are the costs arising from the time taken for the appeal process justified by the change wrought by the appeal body's determination?

One regulatory review/appeal framework experimented recently consists of establishing the explicit provision for strong judicial review, combined with a restricted provision for appeal of decisions on their merits. The scope of the latter provision was limited to a list of specific categories of case deemed by policy-makers to merit this means of redress. Such a system makes it clear that regulators are always accountable for the legal correctness of their decisions while, except in limited circumstances, acknowledging and deferring to their expert technical analysis on questions of regulatory fact.

Interaction between the regulatory and judicial systems. In systems where regulators have quasi-judicial powers, often regulators are required to have relevant expertise and experience for this judicial role. Similarly, in those countries the procedures of regulatory institutions are framed by principles generally underpinning judicial procedures within the jurisdiction.

In countries where a provision for referral of regulatory issues to the courts exist, a significant issue affecting the efficiency of regulators concerns the capacity of the courts to deal with such matters. In this sense, capacity can relate both to the courts' time involved in dealing with regulatory cases in view of their existing workload, and the judiciary's understanding of the economic issues underlying sectoral regulation. For governance reasons discussed in the accountability section, some countries have addressed these issues as potential barriers to regulatory effectiveness. Typical initiatives have included the creation of a specialised unit within the judicial system, the appointment of additional judges, and the training of the judiciary in economic and regulatory issues.

5. Designing regulatory coherence and integration

Regulatory institutions need to fit into the political, administrative, social and economic environment and be in accord with the governance system within which they operate. This does not prevent the new institutions, though, to impose and challenge aspects of the existing set-up. A central element of good regulatory design depends thus on a clear statement on the purpose, objectives and scope of the regulator, the time frame and yardsticks for measuring progress on achieving regulatory objectives, and the modalities for its independence and accountability.

5.1. Objectives, timeframe and regulatory withdrawal

Economic regulatory bodies have a variety of functions. In most cases, only some of them are purely economic, others are social and others are administrative. The regulatory time horizon for each of the types of function differs. Theory indicates that the need for sector specific economic regulation decreases over time when the market becomes competitive. And in some cases this has happened. There are examples where the regulatory body withdraws progressively through mergers with other regulators and/or a reduction of powers from intervening in sub-markets as the market moves progressively to competition.

However, there are rarely cases where the regulator withdrew or sunset entirely from its regulatory activity. There are important political considerations involved of course but an equally important reason is that in most cases economic regulation is not the only matter with which the regulatory body is engaged. In the case of a telecommunications regulator for example, apart from its core economic responsibilities, in many cases, it also involves:

- management of scarce national resources, such as the allocation of radio spectrum;
- administrative tasks that underpin the operation of the particular market, such as management of the telephone numbering system; and
- social policy implementation, particularly in relation to universal service and other public service obligations imposed on the regulated industry.

The need for the exercise of these functions will not necessarily reduce over time. It is possible that some of them (*e.g.* managing an integrated numbering system) become more complex as the market develops and competitive forces emerge as experience across OECD Member countries has shown.

Policy-makers in OECD Member countries have started to realise the importance of the issue of regulatory withdrawal. Different strategies and mechanisms have been explored. Regulatory withdrawal can be automatically provoked by fixed sun-setting provisions in the legislation establishing the regulatory body. However, setting a fixed life-span for a regulatory body, anticipating the advent of competitive markets by the end of the period may lead to unforeseen results, if no contingency is made in case the market liberalisation process resulted merely in a move from a monopoly to an oligopoly. In addition, the rate of compliance with regulations may decrease as the sunset deadline approaches.

Countries have also found that external and periodical reviews of the institutional structure help challenge the necessity of continuation of regulatory activity beyond the stage where the efficiency benefits of the intervention exceed the costs associated with the interference. This can be achieved through a set of institutional flexibility tests that focus on examining whether the circumstances have changed and thus an adaptation of the regulatory body is required. Lastly, an alternative mechanism can be the decision of the regulator itself to desist from continued intervention in a market, or it may be a policy decision from the central government effected by a legislation that removes the regulator's power to intervene in that market.

A key consideration in the issue of regulatory withdrawal concerns the assessment of the level of competition in the network industry market. For instance, in contrast to the telecommunications case discussed above, some economic regulations will continue to be required in the energy market in respect of management of the transition network, which is still considered to be a natural monopoly. Similar circumstances apply, at least on a regional basis, in respect of both rail and water. Furthermore, any market that is only partially liberalised gives rise to potential difficulties in managing the interface between the market's segments with or without competition. If problems within the interface reduce societal welfare,

then they need to be managed, whether that be done by a sectoral regulator, a competition agency or otherwise.

As mentioned before, it is worth noting that so far there are few, if any, examples of instances where regulatory withdrawal – whether effected by prior provision for sun-setting, the introduction of new legislation or the regulator’s decision to desist – has resulted in total abolition of the regulatory institution. More commonly, regulatory withdrawal involves the merger of regulatory institutions, or perhaps loss of regulatory scope, change in institutional mandate, or constraint on independence. In addition, real life examples of regulatory withdrawal are mostly related to sub-markets. The typical case is the cessation, in a few countries, of continued economic regulation of long distance telephone calls after a certain level of competition has been achieved in the sub-market.

5.2. Scope of the regulatory institution

Regulatory institutions have been established to focus either on an industry, a group of related industries comprising a sector, or a group of sectors. Trends among OECD Member countries show that industry level regulation, where it has existed, is currently giving way to **sectoral regulation**.²⁵ This enables a single institution to regulate a group of related industries in a manner that does not constrain the emergence of competition between converging industries whose former distinctions become blurred as a result of technological advances. It also helps to reduce the distorting effect that occurs when potential competitors are subjected to different regulatory regimes according to their industry. Sectoral regulation also simplifies the position of a single firm, operating in a number of related markets, which otherwise would have to be subject to several regulatory bodies.

Although it can be argued that healthy competition between institutions may foster beneficial regulatory innovation, a multiplicity of regulatory institutions has been associated with inefficiencies due to duplication, contradictions and a too narrow mandate. Furthermore, narrowly focused regulatory bodies are often more vulnerable to capture by interested parties than are regulatory bodies with a wider remit.

Some countries have thus created **generic utility regulatory bodies** with responsibility across a number of utility markets: an approach sometimes being taken at state level within the United States (see Box 4). In a relatively small economy, regulators of this type present an efficient method of regulation that reduces the administrative burden and budgetary costs associated with creating a number of distinct regulatory offices. A multi-utility regulator facilitates also the sharing of learning and experiences across the different operational fields within the body, and creates synergies in enforcing activities. A single generic regulator has also been regarded as an effective way of maximising the application of specialised network regulatory expertise, especially when such expertise is in short supply or when its price (*i.e.* salary) is high, as the regulatees compete with the regulators for the hiring of such resources.

As discussed, where markets develop over time, the rationale for regulatory intervention declines. At that stage, the arguments for housing multi-sectoral regulatory responsibility within a single independent institution might gain even more support. Alternatively, it may be considered appropriate to transfer the residual regulatory functions to a line ministry.

There are some difficulties with the generic utility regulatory model, however, including the argument that it can give rise to an unwieldy regulatory structure that is unlikely to sufficiently tailor its regulatory approach in response to the different needs of the various industries within its ambit. A stronger but less discussed argument against multi-sector regulation is that the regulatory body can become too powerful – perhaps rivalling a small ministry in its scope. Especially if its cross-sectoral ambit spans the policy remit

of several ministries, a multi-sector regulator may grow more independent than originally intended as a result of its blurred accountability lines to several ministers.

Coherence between sectoral regulators. Multi-utility issues – matters simultaneously affecting different industries regulated by different regulatory bodies – are difficult to handle in the context of a number of bodies each with an industry or sector specific regulatory interest. This situation is exacerbated by powerful convergence forces driven by technology and mergers of industry participants. Governments have grappled, for instance, with questions on how the various regulatory institutions deal with the regulation of a commercial venture running both telecommunications cables and gas pipelines. Lack of coherence and co-ordination among the regulators leads to uncertainty for industry and investors. Policy-makers need to take into account such matters when designing the institutional framework. If the institutions are not designed in such a way that they are able to cope with multi-utility developments, the regulatory structure may actually hinder over time technological and market development.

5.3. Regulatory authorities and competition agencies²⁶

Designing the interface between sectoral regulation and general competition rules is an important consideration concerning the regulatory environment and the performance of network regulatory regimes. In general terms and in most OECD Member countries, competition law usually applies on a *post hoc* basis whereas much sectoral regulation is applied *ex ante*. Yet, in theory sectoral regulation needs to be built on competition principles.²⁷ Across OECD Member countries, two basic approaches have been taken addressing the issue: housing of both sector specific regulation and competition enforcement functions in a single institution; or separate institutions carrying out sector-specific regulation and competition law enforcement

Joint competition and regulatory body. One method of managing the overlap between competition law enforcement and sectoral regulation has been to situate both functions within the same body. This institutional arrangement reflects a vision of sectoral regulation as a transitional phase in the move from restricted markets to liberalisation and competition. The structure has some significant advantages. It facilitates the eventual regulatory retrenchment; it provides a sense of security to the regulatory staff, who do not need to fear that regulatory forbearance will deprive them of their employment, as there is a possibility of their being re-deployed to other areas within the competition/regulatory body.

Internalisation of the conflict and tension between competition and regulatory functions through the co-location of them in the same body has however not always produced the desirable outcome: transparency may be reduced, competing viewpoints are hidden and debate may be suppressed. Consider, for example, a corporate merger proposal in a regulated industry. A joint regulatory structure will tend to reduce the transparency in relation to a conflict of perspectives between the competition law and the regulatory rules; the former may find the proposed merger acceptable because it does not break the rules on abuse of market dominance, whereas the latter may wish to reject the proposal because it hinders vertical dismantling (“unbundling”) of the significant market players.

A further issue in relation to having a joint competition/regulatory body is that giving a body this breadth of scope can lead to the emergence of a very powerful agency. The political reservations about the creation of such agencies at arm’s-length from central government have already been referred to above.

An example of this model is to be found in Australia at the federal level where the agency charged with competition law enforcement also has responsibility for some economic (but not technical) regulation of various network sectors. In the Australian case, the concentration in one organisation of power across

competition and sectoral law is balanced by the fact that the institution does not have rule-making power (see Box 4).

Separate competition enforcement and sectoral regulation. Most OECD Member countries have adopted a different model from the Australian one though: one under which competition law enforcement and sector-specific regulation are carried out by separate institutions.²⁸ This approach raises a number of issues, mostly related to effective co-ordination of approaches among the respective bodies.

Firstly, there should be a clear delineation of the respective roles of the competition agency and of the sectoral regulators at the policy level. In this regard, a number of countries have clarified the delineation through statutory provisions laying down the principles as to when competition rules are to apply in the regulated sectors.

Secondly, governments have developed pragmatic mechanisms to facilitate the co-ordination between the competition law and the sectoral rules in order to ensure that they do not create undue regulatory uncertainty for market players. To a large extent, relevant institutions themselves should work this out in the course of their interaction, but the policy-makers have an important role in making sure that necessary legislative provisions are in place to support the institutions in this regard. For example, some countries have introduced legislations to allow competition bodies to share confidential information with sectoral regulators, or to allow one body to defer to another in taking action in a particular case. Ordinances and directives have also clarified the extent to which it is desirable to mandate the bodies to consult with one another in matters of joint relevance.

Box 4. Cases of multi-sectoral regulators

The Australian Competition and Consumer Commission (ACCC).

The Australian Competition and Consumer Commission (ACCC) was formed on 6 November 1995 by the merger of the Trade Practices Commission and the Prices Surveillance Authority.

An independent statutory body, the ACCC is responsible for administering and enforcing the Trade Practices Act 1974 and the Prices Surveillance Act 1983. The TPA is the primary regulatory mechanism for dealing with anti-competitive and unfair market practices, including misuse of market power, secondary boycotts and anti-competitive mergers. The PSA provides for the surveillance and monitoring of prices in industries identified for prices oversight by the government. While the ACCC is responsible for enforcing the TPA, individuals and companies may commence their own legal proceedings and seek damages and other remedies against parties that allegedly breach the TPA.

In addition to its core “competition” function, the ACCC has a number of key “economic regulatory” functions including responsibilities in relation to the terms and conditions of access to certain essential infrastructure facilities such as telecommunications, gas and electricity and in monitoring prices in industries where competition is weak. Under the general or “economy wide” access regime for essential infrastructure facilities established under the TPA, the National Competition Council (NCC) advises the government as to rights of access and, where these are established, the ACCC acts as an “arbitrator of last resort”. That is, the ACCC has the power to arbitrate access disputes and determine the final terms of access (including price) if access seekers and owners of essential facilities fail to reach a commercially negotiated settlement. More specific “economic regulatory” functions are performed by the ACCC under the access regimes for telecommunications and for gas transmission pipelines (with the exception of those in the State of Western Australia). The gas role includes monitoring compliance with ring fencing obligations and approving access arrangements (covering services, reference tariffs, trading and expansions) in accordance with an industry code. The ACCC also plays an important regulatory role in the electricity industry, including setting revenue caps for electricity transmission networks. It also has a quality of service monitoring role in respect of airports.

Other significant aspects of economic regulation, such as the granting of licences are typically administered by industry specific regulators or by more general government regulators. Technical regulatory issues that do not have a significant competition element are typically administered by industry specific regulators or may be subject to goods and services standards set by Australia's principal standards organisation, Standards Australia.

The California Public Utilities Commission (CPUC)

Under the Californian Public Utilities Code of 1912, the CPUC has a general mandate to supervise and regulate all utilities within the state including telecommunications, natural gas, electricity, water, railroads and marine transportation.

The CPUC regulates the rates and services of privately owned utility companies. It is responsible for ensuring that California's utility customers have safe, reliable utility service at reasonable rates, for protecting utility customers from fraud and for facilitating a healthy economy for the state. In pursuing these goals, the Commission establishes service standards and safety rules, and authorises utility rate changes. It monitors the safety of utility and transportation operations, and oversees markets with a view to inhibiting anti-competitive activity. In its efforts to protect consumers, it governs business relationships between utilities and their affiliates, prosecutes unlawful utility marketing and billing activities, and resolves complaints by customers against utilities. It implements energy efficiency programmes and public service programmes in relation to utility rates for low income customers and utility access for customers with disabilities. It oversees the merger and restructure of utility corporations, and enforces the California Environmental Quality Act for utility construction. The CPUC works with other state and federal agencies in promoting water quality, environmental protection and safety. It also intervenes in federal proceedings on issues that affect California utility rates or services.

Source: "Creating Effective Regulators for Public Utilities", Michael Cosgrave, speech at the Beijing Workshop of the APEC-OECD Co-operative Initiative on Regulatory Reform.

As an interesting development, the United Kingdom has recently taken this approach. In 2000 it granted to several of the utility regulatory bodies concurrent jurisdiction with the competition body in the application of the competition law. It also established a committee comprising representatives from all these institutions as part of the arrangements for managing the co-ordination among the agencies.

Reflection of ministerial portfolios. The scope of a regulatory body often mirrors the distribution of policy remits at central government level.²⁹ This distribution at the central level translates into the type of relation and the degree to which an integrated approach is taken between competition law enforcement and sectoral regulation. In states where sectoral policy is institutionally separate from competition policy, in most cases, there has been a predisposition to sectoral regulation's being assigned to agencies that are separate from the competition agency.

5.4. Political jurisdictions and market openness

The organisation of regulatory institutions – as bodies of the state – reflects nations, state, provinces and even municipalities boundaries rather than trading areas. An inevitable element of the regulatory framework is that mismatch between the boundaries of political jurisdiction and the scope of the market impacts on effective sectoral regulation. A phenomenon intensified by globalisation.

Federal and regional systems. The fit between regulatory bodies and other institutions is further complicated in countries that have a federal system of government. In such instances, regulatory institutions are often organised at one of three levels: individual state; group of states sharing a common interest;³⁰ or federal level. Countries with a federal system tend to have many more regulators than would be the case in a non-federal jurisdiction. A key issue in these countries has therefore been the development of appropriate co-ordination mechanisms between the various bodies. The co-ordination necessary for a

well functioning free market between levels of government has tended to reflect not only the remit of each of the bodies, but also the relative ranking in the hierarchy of institutional structures.

Related problems have arisen in non-federal countries where inadequate institutional arrangements for co-ordination among municipal, regional and national level structures hamper the effectiveness of the regulatory process. For instance, overlap, contradiction inconsistencies between sectoral regulators' remit and those of local regulators in charge of local regulations (such as environmental and planning approval ones) create difficulties when managing grids. In some countries, sectoral regulators must also co-ordinate with municipally owned utilities.

International context. The effects of increased trade liberalisation, freedom of establishment and free movement of capital between countries have reached utility markets – although at a later stage and at a slower rate than markets in traditionally traded goods and services. This trend has been facilitated by the development of technologies in several of the former non-traded utility sectors. The internationalisation of markets presents a particular challenge to regulation at the national level. If the government's position is to support the international liberalisation of markets, for example, then the manner in which regulation is delivered – including the institutional framework – needs to take account of this policy.

Even where sectoral regulation is not designed to actively promote the internationalisation of markets, the phenomenon has raised questions not yet answered. Which regulatory authority has jurisdiction over internationally traded activities? Which regulatory body has jurisdiction over industries that have negative or positive externalities for other countries? These are not new problems; they have been encountered before in cases of different rail gauges across national borders, downstream pollution by upstream industries on international rivers, and the lack of international recognition of education and qualifications. Furthermore, the international dimension of markets will continue to impact to incorporate this on regulatory approach. International co-operation between regulators and competition authorities has been considered as an essential first step. For instance, the World Bank established the International Forum for Utility Regulation (IFUR) on an informal and voluntary basis to serve as both umbrella and catalyst for these kinds of initiatives.³¹

The European Union is also an example of a group of nations who, in addition to creating a free trade area, has also addressed regulatory approaches to sectoral regulation. It is interesting to note that EU regulatory developments in the utilities sectors have been directed at the adoption of common principles and some harmonisation of national rules. For the most part, however, the rules remain national and the EU has not yet created a sup-national sectoral regulatory institution, so differences of approach still remain among its member states (see Box 5).

Box 5. WTO and EU framework

National approaches to sector-specific regulation are often linked to international agreements. Though not focusing on institutional building, the box looks at two such sets of rules adopted on a collective basis by groups of states: the WTO Agreement on Telecommunications Liberalisation, and the EU provisions on the opening of the electricity market, as both agreements bare indirectly on independent institutional approaches

WTO Agreement on Basic Telecommunications Services

The World Trade Organisation's Agreement on Basic Telecommunications Services, which is an annex to the Fourth Protocol of the General Agreement on Trade and Services (GATS), commits participating countries to open their telecommunications services markets. This agreement took effect on 5 February 1998, although several countries were allowed to delay implementing the terms of the agreement until 2000 or later. All WTO members have endorsed the agreement.

By becoming party to the agreement, countries commit to a set of regulatory principles. These principles include the prevention of anti-competitive practices of suppliers; the ensuring of interconnection with a major supplier at any technically feasible point in the network under non-discriminatory terms, at a transparent manner and at cost-oriented rates; that universal service obligations should be administered in a transparent, non-discriminatory and competitively neutral manner and are not more burdensome than necessary for the kind of universal service defined by the member; the public availability of licensing criteria; and that allocation and use of scarce resources should be carried out in an objective, timely, transparent and non-discriminatory manner. In addition, countries make specific commitments to open up their telecommunications services markets. These specific country “offers” vary, but ultimately the objective is a completely open market.

Article 5 (entitled “independent regulators”) defines the nature of independent regulators in the WTO context: “The regulatory body is separate from, and not accountable to, any supplier of basic telecommunications services. The decisions of and the procedures used by regulators shall be impartial with respect to all market participants”.

EU Internal Electricity Market

The Council of the European Union adopted a directive on the internal market for electricity (EC 96/92) on 19 December 1996 and came into effect three years later.

The directive provides for the progressive liberalisation of electricity markets within the EU. By 2000, the largest users accounting for 30% of consumption had the right to choose supplier. This percentage has to increase to 35% in 2003. Some member states are accelerating the pace of liberalisation in their markets.

Access to the network is via a transmission services operator who must be separate (at least as a separate business unit) from generation and distribution businesses. EU member states can choose from three different procedures for access including “regulated third-party access”, “negotiated third-party access” and “single-buyer” system. There are two options – the “tendering” procedure and the “authorisation” procedure- for adding generating capacity.

The directive provides that member states may impose public service obligations to ensure “security, including security of supply, regularity, quality and price of supplies and ... environmental protection”. It permits member states to impose a requirement that up to 15% of fuels to be used in the generation of electricity come from indigenous sources.

Because the cross-border transactions are a major bottleneck in the development of the internal EU electricity market, the EU Commission has also launched an initiative – known as “the Florence process” – to establish common rules for cross-border transmission within the EU that are consistent with the development of the internal market.

Source: IEA (2000).

6. Assessing institutional effectiveness

6.1. An ongoing requirement

The effectiveness of regulatory institutions is not a matter for consideration at a fixed point in time. Rather it should be assessed both at the design stage (albeit in the abstract) and again in the light of experience of implementation and of dynamic environments. Regulatory structure that is considered adequate at the design stage will not necessarily continue to perform satisfactorily if there has been a significant change in the operating environment. The regulatory scene is dynamic so that the responses should not be static.

As the case of Canada illustrates (see Box 3 above), setting independent regulation does not foreclose central government’s ongoing involvement in regulatory affairs. Although government may no longer be the regulator, it is still the policy-maker and has this important role of steering the development and regular

updating of the framework within which independent regulators are to operate. For instance, as competition develops in different areas of the economy, the range and degree of regulation required necessitate a constant and periodic review by the government.

6.2. Regulatory review

Regulatory institution is a “means” and not an “end” of state intervention. The institution is merely a tool of regulatory policy, but not a policy objective in itself. The higher level objectives of the policy (see Section 2.7) are thus the crucial outcomes to be monitored. A consequence of this is that the more opaque, the bigger the ambiguity and/or the larger the number of objectives the regulators is assigned the more difficult and discretionary the measurement of the performance of the institution will be.

However, as regulatory environment evolves, objectives may change over time. Either the objectives have already been achieved, either they have become obsolete or due to the rapid rate of change in regulatory arenas a new economic situation has emerged. When this happens the institutional regulatory approach needs to be reassessed with a view to determining its continued appropriateness. Some countries have thus established a formal system of periodic review of regulatory policy.

Ideally, such review involves an evaluation of past regulatory performance, an analysis of the regulatory environment, and the refocusing of regulatory direction and objectives to meet the needs of the present and the future.³² Nonetheless, performance reviews are fraught with data problems and value conflicts. For instance, should performance be measured in terms of prices and quality of outputs in the utility market or innovation of market participants? How to measure the optimum degree of competition? Is the size of market players’ profits an appropriate indicator? How to evaluate transparency and accountability are the regulators? Furthermore, assessment of the effectiveness of regulatory institutions has been vulnerable to problems inherent to institutional and bureaucratic processes: inertia, agenda creep, empire building by budget maximising bureaucrats. Lastly, the confidence on the review’s results is related to the objectivity of the reviewer. If the review is built on self-assessment, and external parties have not been called upon to participate, the outcome may be less than optimum.

More focused reviews, such as the one launched by the government of Ireland, tried on the other hand to identify the general governance aspects of the creation of new public sector entities (see Box. 6).

Box 6. Ireland’s review of the regulatory framework

In September 1999, Ireland’s Minister for Public Enterprise launched a public consultation process on the governance and accountability aspects of the framework for regulation of the communications, energy and transport sectors – the network industries – in Ireland. By that stage, Ireland had two independent regulatory institutions for these vital infrastructure sectors: the Director for Telecommunications Regulation had been established two years earlier and the Commission for Electricity Regulation was just a few months old. Also, plans were at an advanced stage for the introduction of independent regulation for aviation (airports), and proposals were under consideration for independent regulatory arrangements for the postal services, gas and public transport areas. The minister considered that the time was appropriate to review the institutional and governance arrangements for these new bodies with a view to ensuring that they were appropriate to the needs of the sectors and consistent with the existing structures of state.

The need for the review stemmed from the significant changes that had been taking place in the network industries in Ireland – particularly in relation to market liberalisation, some changed ownership arrangements and the introduction of independent regulation. Within the regulatory arena, the governance mechanisms – the set of systems, structures and processes by which regulation is carried out – were transforming. It was recognised that the transfer to independent statutory bodies of regulatory powers involved a delegation of power from the centre of government, and that the interests of democracy demanded that such delegation of responsibility to regulators be accompanied by clear and defined accountability mechanisms.

In March 2000, the Minister for Public Enterprise published her document, “Governance and Accountability in the Regulatory Process: Policy Proposals”, which identified accountability issues arising from governance changes in the regulatory process and considered some methods by which these issues could be addressed. The policy proposals drew on the views expressed in the submissions received in response to the public invitation to comment. They were also informed by the experience that had been gained in the independent regulation of utilities in Ireland, and by relevant international experience. Matters discussed in the paper included:

- achieving the optimal balance between the independence and the accountability of regulators;
- rectifying the perceived democratic deficit in relation to transparency and means of redress in the regulatory process; and
- how regulatory structures should reflect the regulatory needs of the relevant sector.

The proposals contained in the paper are being effected in sector-specific legislative measures that the minister has been bringing forward for the regulation of the various individual sectors within her scope. The legislative measures further advance the principles that govern regulation in these key sectors that are at the core of Ireland’s economic infrastructure.

The paper strongly emphasised the importance of the line ministry’s putting in place arrangements to maintain an overarching perspective on regulatory policies and principles. It also identified the need for a formal mechanism for periodic review at national level to ensure that the rationale for utilities regulation be kept to the forefront of regulatory policy. It was proposed that these review mechanisms would involve all the other interests concerned, *e.g.* other ministries, regulators, the competition authority, the consumer affairs office, industry and employee interests, utility customers and community groups. Given the changing nature of technologies and evolution in markets, it was concluded that the formal reviews should take place on a regular and systematic basis, possibly every three to four years, though some aspects of telecommunications might require more frequent review.

Sources: Department of Public Enterprise (2000), Department of Finance (2001).

Another dimension of reviewing regulators’ performance focuses on the value added for taxpayers. In these cases, reviews may concentrate on the fiscal costs of the institutional structures compared to a system based on line ministries. Sometimes the expenses associated with an elaborate system of independent institutions may not be justified by its benefits. In such a case, the interests of taxpayers or the levied utility consumers need to be taken into account in assessing the continued appropriateness of the institutional model and whether an alternative – including, possibly, reversion to the line ministry model – is warranted.

6.3. *Measuring performance of regulators*

In order to assess the performance of regulators, governments have developed some key tools and methods. In many OECD Member countries, regulatory institutions regularly publish their strategy statements and other documents to report on progress and to map their future course of development. These reports can also increase the focus of the regulator’s management and staff and enhance transparency of the regulatory process. They can, in fact, become the information building block where performance assessment systems can be devised. The reports provide important insights into the general performance of the body and answers a whole set of relevant questions: Is the direction of the regulatory body’s work in alignment with the desired policy direction for the sector? Is the regulatory body setting up a realistic set of targets for the desired pace of liberalisation, or for the assurance of a certain degree of public service? Are these targets being achieved?

Another commonly used instrument for monitoring performance of institutions among OECD Member countries is the preparation and publication of annual reports of progress, medium-term strategy statements or even annual work programmes. These tools have often provided an important input into the performance management process but on the other hand they fall short of providing objective benchmarks of regulatory performance as they are mainly based on self-generated targets and reports.

7. Conclusions

The past decade has witnessed the proliferation, across OECD Member countries and beyond, of independent institutions in charge of the regulatory supervision of vital economic sectors. This trend has been most evident in relation to the network sectors that provide the communication, power and transport infrastructures that support economic and social development. Increasingly, governments are deciding to separate economic regulatory activities from the other functions of central government and to delegate them to new arm's-length bodies. These independent regulatory institutions are now key players in the economic life of many countries. They are involved in facilitating market liberalisation, reducing market inefficiencies and correcting market failures.

This report has examined some of the reasons for the creation of independent economic regulatory institutions and why many governments and international agencies now consider them particularly desirable (at least over a certain time horizon) for the network sectors. Regulatory accountability has also been discussed in detail, primarily in terms of its balancing effect on independence. Institutional coherence has emerged as the third critical consideration in the design of the regulatory framework.

The differing political, administrative, economic and social circumstances of countries and of markets means that there will be no universal best practice model for regulatory design. However, this report's consideration of theory and practice in the establishment and functioning of independent economic regulatory bodies, may provide a starting point from which to develop some "good practice principles" that can inform policy-makers involved in the design of independent regulatory institutions in the future."

NOTES

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1. This report constitutes the first output in the *Regulatory Governance: Improving the Institutional Basis for Sectoral Regulation* project. Several other areas of current OECD work, including projects that come within the Horizontal Programme on Regulatory Reform (*e.g.* studies of the role of public agencies in the administrative framework, the interaction between competition policy and sectoral regulation, and individual economic sectoral developments) are of particular relevance. Knowledge and insights from such projects can contribute to an enhanced understanding of the institutional dimension of economic regulation.
 2. In the past few years, OECD has been studying different aspects of institutional design, see OECD (1999), OECD (2000a), and OECD (2000b). The recently published IEA (2001) *Regulatory Institutions in Liberalised Electricity Markets*, merits particular mention.
 3. There are, of course, aspects of the institutional approach in the economic regulatory context that are of direct relevance to the other, non-economic, regulatory situations and in relation to which some of the analysis in this report will be applicable.
 4. The discussion in this report is intended to be generic, although many of the illustrations of regulatory institutional design issues are drawn from either the telecommunications or the energy sectors, which have been the main focus of the OECD's existing body of regulatory analysis.
 5. Kay (undated), "Why regulate securities".
 6. For a discussion of the costs and benefits associated with regulatory intervention, see Hahn (2000).
 7. This report does not intend to imply that economic regulation is an autonomous intervention carried out in isolation from other political, social and administrative life. On the contrary, economic regulation is informed and, in part, influenced by these neighbouring domains. The discussion in this report concerns regulatory bodies and functions whose *primary emphasis* is economic; this is not to suggest that their sole concern is economic or that they are devoid of secondary emphases that lie outside the economic sphere.
 8. Eberlein (1998).
 9. A power imbalance can also be weighted in favour of the demand side, perhaps in the form of a monopsony.
 10. The horizontal rules (*e.g.* competition or anti-trust law) underpinning the market can be invoked to resolve this problem. However, new market entrants will be disadvantaged relative to the incumbent if it takes a long time for the horizontal remedy processes to come into effect.
 11. This discussion is limited to circumstances of an objective rationale for economic regulation. It does not extend to circumstances, such as those described by Stigler (1971), where regulation is introduced by captured politicians at the behest of a self-interested industry.
 12. In the case of the United States, the history of independent regulatory institutions dates from 1887, when the Inter-State Commerce Commission was set up to limit the discriminatory pricing by railway companies.

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13. The lack of transparency of rationales also made it difficult to evaluate the performance of the service provider.
 14. See Pollitt (1999) for details of developments in the United Kingdom regarding network ownership and regulation over the last 20 years.
 1. The interests of producers and consumers are different. If both investor protection and consumer welfare are economic regulatory goals, they will conflict at some stage, thus complicating further the regulatory agenda.
 2. The economic argument for regulation of monopolies (and oligopolies) is based on removing the inefficiency associated with the loss of consumer welfare that is inherent in the monopoly market structure. A distinction should be made between the economic concept of “consumer welfare” in this context, and the general idea of the “welfare of groups of consumers”, which, in relation to networks, is often associated with network access and pricing of categories of consumer based on income, location or level of social inclusion.
 3. These three elements are the key to any institutional architecture; their significance is not confined to the regulatory context.
 4. For this reason, some countries (*e.g.* the Czech Republic) require constitutional change in order to permit the establishment of an independent regulatory body.
 5. “Utility regulation is not undertaken in an academy. Regulators must contend with pressures and demands from diverse stakeholders.” Gray (1998).
 6. Simon (1957).
 7. For discussion of policy credibility, with particular reference to the regulatory context, see Majone (2000).
 8. For details of the institutional setting for *electricity supply* industry regulation in each of the member countries of the International Energy Agency, see IEA (2001). Details of the institutional framework for *telecommunications* regulation in the OECD Member countries can be found in OECD (2000*b*).
 9. Kay (2000).
 10. For exploration of the reasons for the non-formation of interest groups despite an obvious interest shared by a large number of individuals see Olson (1965).
 11. The following discussion draws heavily, but not exclusively, on Chapters 3 and 4 of Department of Public Enterprise (2000).
 12. Smith (1996).
 13. The legislation governing some regulatory commission appointments in the United States limits the number of commission members that may be affiliated to the same political party. See IEA (2001), p. 93.
 14. See Shultz and Doern (1998).
 15. See Majone, G. (1993) *Controlling Regulatory Bureaucracies: Lessons from the American Experience*. EUI Working Papers in Political and Social Sciences, European University Institute, Florence, Italy.
 16. For a discussion of democratic deficit in the context of utilities regulation, see Ferris (2000).

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17. Majone (1994).
 18. Department of Public Enterprise (2000), *op. cit.*, p. 1.
 19. Jacobs (1999).
 20. It is interesting to consider the diversity of opinion as to causality of and culpability for the recent problems in relation to California's regulated electricity market. See, for example, AEI-Brookings (2001).
 21. OECD (1995). The purpose of the checklist is to help improve the quality of regulatory interventions by providing a framework for analysis of the problem, the justification for action, the need and level of government involvement, the benefits and costs involved, and the likely repercussions of taking a certain course of action. The checklist can be applied at several levels within the regulatory process. In this instance, its use is advocated for the high-level, periodic evaluation of the continued need for government-sponsored regulation of a network sector, and the suitability of the approach and the institutional setting for any such intervention. (The checklist is also suitable for use by regulators themselves in relation to specific regulatory interventions. In such cases, it would also help to ensure also that regulatory decisions have been subject to a form of impact assessment and take account of alternatives to direct intervention approaches).
 22. See Canada Federal Regulatory Policy, <http://www.pco-bcp.gc.ca/raoics-srdc/>
 23. See Everson *et al.* (1999), pp. 46-51, for a discussion of procedural methods of ensuring transparency, with particular reference to statutory provision in this regard in the United States (including the *Administrative Procedures Act*, the *Freedom of Information Act*, and the *Government in the Sunshine Act*).
 24. The model is simplified for discussion purposes. The split of responsibilities between ministerial policy formulation and regulatory policy implementation is seldom so precise in reality, given the dynamics of the formulation-implementation-review loop that generally applies to policy development.
 25. This trend is particularly evident in the energy sector. In some countries (*e.g.* the United Kingdom) the separate electricity and gas regulatory bodies are merged into a single energy regulator. In other countries (*e.g.* Spain, Ireland) the remit of the existing independent electricity regulator is extended across the energy sector.
 26. See OECD (1999).
 27. Some of the challenges facing the sectoral regulator who is under pressure to facilitate the speedy move of a market from monopoly to a competitive state is discussed by Kahn (2001).
 28. OECD (1999).
 29. For a general (*i.e.* not a regulatory specific) discussion of the determining effect of existing political structures on the creation of new structures, see Moe (1990).
 30. The United States has several examples of multi-state regulatory approaches to water regulation, including the Mississippi Delta Project and the Tennessee Valley Authority.
 31. <http://www.worldbank.org/html/fpd/psd/ifur/index.html>
 32. For instance, see the recent initiative in the United Kingdom (Better Regulation Task Force, 2001).

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