International Insights for the Better Economic Regulation of Infrastructure

Rob Albon and Chris Decker

Series Note

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Preface

Utilities and network infrastructure are crucial elements of all modern economies, and major sectors in their own right. However, the questions of whether, and how best, to regulate such sectors are of enduring interest to policy makers and participants in regulatory processes in all developed countries, and in an increasing number of developing economies. This paper presents the key findings of a major study of seven key infrastructure areas (energy, telecommunications, postal services, water and wastewater, rail, airports and ports) across seventeen countries; including the ten largest economies in the Organisation for Economic Cooperation and Development. These countries have been chosen to give a sample encompassing a wide range of physical, economic and social conditions.

The paper compares and contrasts the regulatory processes and practices of the seven infrastructure areas and the seventeen countries, with a view to distilling insights for the continuous process of review and development of Australia’s regulatory processes and practices. We hope these insights will also be of interest in other countries as they reconsider their own regulatory arrangements or, in the case of some developing countries, put new arrangements in place.

The work on Better Economic Regulation of Infrastructure – International Insights has been performed since 2008. Initially this was under the auspices of the Australian Competition and Consumer Commission’s Infrastructure Consultative Committee (2008 to 2009). In 2012-13 the project was a strategic priority for the ACCC and Australian Energy Regulator (AER). Throughout it has been managed within the ACCC’s Regulatory Economic Unit (formerly the Regulatory Development Branch).

This is the tenth ACCC/AER Working Paper. The working paper series was established in 2009 to allow staff and commissioned consultants working on research projects to make a contribution to the public policy debate. The views expressed are those of the authors and not necessarily those of the ACCC/AER. Nevertheless, the ACCC/AER considers that these working papers are part of its important brief to disseminate material that will inform and educate.

Cristina Cifuentes
ACCC Commissioner and AER Board Member
Authorship and Acknowledgements

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Authors’ Acknowledgements and Disclaimer

The views expressed in the paper are those of the authors and should not be taken to reflect the views of the ACCC or the AER; or of any persons named in these acknowledgements. Bryn Lampe provided valuable assistance with drafting and research. The authors also acknowledge with thanks the input of Margaret Arblast, particularly for her specialist advice on transport-related insights.

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The authors also acknowledge the contributions of the following members, past and present, of the advisory committee providing oversight to the project on Better Economic Regulation of Infrastructure – International Insights: Cristina Cifuentes, Joe Dimasi, Harriet Gray, Tim Grimwade, Michelle Groves, Richard Home, Tim Lear, Mark Pearson, Susan Philp, Anne Plympton, David Salisbury and Peter Toy. In addition, Simon Harrington has provided valuable encouragement and advice that has helped ensure the progression of this project.

As with previous ACCC/AER Working Papers, the production has benefited greatly from the experienced copy editing of Genevieve Pound.
List of Acronyms and Abbreviations

ACCC  Australian Competition and Consumer Commission
ACER  Agency for the Cooperation of Energy Regulators
ACM  Autoriteit Consument & Markt (Netherlands)
ACT  Australian Competition Tribunal
AEMC  Australian Energy Markets Commission
AER  Australian Energy Regulator
AGCOM  L'Autorità per le garanzie nelle comunicazioni (Italy)
APIA  Australian Pipeline Industry Association
ARCEP  L’Autorité de Régulation des Communications Électroniques et des Postes (France)
ARTC  Australian Rail Track Corporation
BEREC  Body of European Regulators for Electronic Communications
BNetzA  Bundesnetzagentur (Germany)
BT  British Telecommunications
CAA  Civil Aviation Authority (UK)
CAR  Commission on Aviation Regulation (Ireland)
CAT  Competition Appeal Tribunal (UK)
CCNZ  Commerce Commission (New Zealand)
CER  Commission for Energy Regulation (Ireland)
CMA  Competition and Markets Authority (UK)
CNMC  Comisión Nacional de los Mercados y la Competencia (Spain)
COAG  Council of Australian Governments
COFEMER  Comisión Federal de Mejora Regulatoria (Mexico)
COFETEL  Comisión Federal de Telecomunicaciones (Mexico)
ComREG  Commission for Communications Regulation (Ireland)
CPA  Competition Principles Agreement (Australia)
CPUC  California Public Utilities Commission (US)
CRE  Commission Régulation de l'Energie (France)
CRTC  Canadian Radio-television and Telecommunications Commission
CTA  Canadian Transport Agency
DOJ  Department of Justice (US)
EMA  Energy Market Authority (Singapore)
ENA  Energy Networks Association (Australia)
EUA  Energy Users Association (Australia)
FAA  Federal Aviation Authority (US)
FCC  Federal Communications Commission (US)
FERC  Federal Energy Regulatory Commission (US)
FMC  Federal Maritime Commission (US)
FTC  Federal Trade Commission (US)
ICASA  Independent Communications Authority of South Africa
IDA  Infocomm Development Authority of Singapore
IFETEL  El Instituto Federal de Telecomunicaciones (Mexico)
JRG  Joint Regulators Group (UK)
KCC  Korea Communications Commission
KEPCO  Kansai Electric Power Company (Japan)
KFTC  Korea Fair Trade Commission
KRRC  Korea Regulatory Reform Committee
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<th>Abbreviation</th>
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<tr>
<td>MIC</td>
<td>Ministry of Internal Affairs and Communications (Japan)</td>
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<td>MLIT</td>
<td>Ministry of Land, Infrastructure, Transport and Tourism (Japan)</td>
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<tr>
<td>MLTM</td>
<td>Ministry of Land, Transport and Maritime Affairs (Korea)</td>
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<td>NARUC</td>
<td>National Association of Regulatory Utility Commissioners (US)</td>
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<td>NBN</td>
<td>National Broadband Network (Australia)</td>
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<td>NCP</td>
<td>National Competition Policy (Australia)</td>
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<td>NEB</td>
<td>National Energy Board (Canada)</td>
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<td>NERSA</td>
<td>National Energy Regulator of South Africa</td>
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<td>NRA</td>
<td>National Regulatory Authority (in EU)</td>
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<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>Ofcom</td>
<td>Office of Communications (UK)</td>
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<td>Ofgem</td>
<td>Office of Gas and Electricity Markets (Britain)</td>
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<td>OFT</td>
<td>Office of Fair Trading (UK)</td>
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<td>Ofwat</td>
<td>Office of Water Services (in England and Wales)</td>
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<td>OPTA</td>
<td>Onafhankelijke Post en Telecommunicatie Autoriteit (Netherlands)</td>
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<td>ORR</td>
<td>Office of the Rail Regulator (Britain)</td>
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<td>NCP</td>
<td>National Competition Policy (Australia)</td>
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<td>PRC</td>
<td>Postal Regulatory Commission (US)</td>
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<td>PTS</td>
<td>Swedish Post and Telecom Authority</td>
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<td>PUC</td>
<td>Public Utility Commission (US)</td>
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<td>RCC</td>
<td>Regulatory Reform Commission (Korea)</td>
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<td>RSTAC</td>
<td>Railroad Shipper Transportation Advisory Council (US)</td>
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<td>SCT</td>
<td>Secretaría de Comunicaciones y Transportes México</td>
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<td>SOE</td>
<td>State-owned enterprise</td>
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<td>STB</td>
<td>Surface Transportation Board (US)</td>
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<td>TCF</td>
<td>Telecommunications Carriers Forum (New Zealand)</td>
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<td>UKRN</td>
<td>UK Regulators Network</td>
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<td>VEMW</td>
<td>Vereniging voor Energie, Milieu en Water (Netherlands)</td>
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Executive Summary

This Working Paper is an output of the project titled Better Economic Regulation of Infrastructure – International Insights (BERI). The BERI project aims to achieve a greater overall knowledge and understanding of the practice of the economic regulation of infrastructure, and the extent to which this practice is contextualised by the specific institutional, legal and market structures in which regulators operate. The project has been conducted in two main stages.

The first stage produced descriptive overviews of the regulatory institutions, practices and processes of seventeen comparator countries (all members of the Organisation for Economic Cooperation and Development (OECD), with the exception of Singapore and South Africa), covering seven key infrastructure areas (energy, telecommunications, postal services, water and wastewater, rail, airports and ports). These overviews are collected together in the Country-based Review, published in August 2013.¹

In this work, reflecting the second stage of the BERI project, there is a look across jurisdictions for the purpose of identifying general themes, trends and insights regarding economic regulation internationally, including insights that may have specific relevance to Australia. A particular focus of this review is on identifying how different jurisdictions strike a balance between the competing interests of the regulatory process, for example: timeliness, transparency of information, consultation, and overall effectiveness. Consistent with a long line of research in institutional economics, a central theme to emerge from the review is that the regulatory choices made in different jurisdictions in relation to these trade-offs appear to reflect a range of contextual factors such as: economics, geography, history, political considerations, the availability of natural resources and the wider ‘culture’ of a particular country.

This review does not consider broad issues of regulatory policy, except for contextual purposes. Neither does it detail the specific regulatory tools used by agencies, such as their: pricing methodologies; approach to the weighted average cost of capital (WACC); or methods for defining and measuring subsidies. Further, it is not an explicit aim of this review to evaluate the effectiveness of different approaches to economic regulation. Rather, the focus is on drawing out insights, moderated by contextual considerations, from the arrangements which exist in the countries surveyed.

Chapter One explains the nature of the research project, Better Economic Regulation of Infrastructure – International Insights, and the purpose of the two main outputs flowing from the project – the Country-based Review (published in August 2013) and this Working Paper. Chapter One describes the process of selection of the comparator countries and the salient features of these countries (geographic, economic, political, cultural and legal) that may influence regulatory institutions and practices.

Chapter Two covers broad issues in design of regulatory and competition agencies; comparing and contrasting the different approaches across countries. Particular consideration is given to: the independence of regulatory and competition agencies from government; the objectives (‘remit’) of regulatory and competition bodies; the breadth of coverage of institutions (for example: industry-specific; single-sector; multi-sector; and combined competition and regulatory functions); the relationship

¹ ACCC/AER Working Paper No. 8, August 2013.
between regulatory and competition bodies; and the roles of national and sub-national agencies in economic regulation.

Chapter Three considers the ways that regulatory and competition agencies engage with interested parties, particularly: infrastructure owners; their wholesale customers; and their consumers (household/industrial). The focus is on: examining the legal obligations to consult and engage; the formal institutional arrangements for engagement that have emerged; why regulators engage with interested parties; what types of engagement regulators tend to focus on; similarities and differences in the approaches observed across infrastructure areas and across countries; the organisation of interested parties into bodies and how their input is integrated into the regulatory process; and the effectiveness of the engagement process. The chapter highlights the present international interest in ‘customer engagement’, and the implications for engagement of the increasing trend towards consolidation of regulatory, competition and consumer agencies.

Chapter Four focuses on matters relating to the information that regulators and competition agencies need to perform their functions against a general background of ‘information asymmetry’. In particular, the discussion in this chapter considers: the powers and practices of agencies in collecting information from those involved in various regulatory processes; the uses to which information collected can be put; the powers and procedures for dealing with information that is claimed to be commercial-in-confidence; and the relationship between information collection and timeliness of decision-making.

Chapter Five considers approaches to the review of regulatory decisions (‘appeals’). In particular, it considers the types of appeal mechanisms observed across the seventeen countries and the forms of appeal. A particular focus is on the circumstances in which appeals involve a determination of the legality of the decision (sometimes called ‘judicial review’), and those that involve a review of all aspects of a decision’s merits. The chapter includes findings as to facts and the exercise of due discretion, and how this impacts on other regulatory objectives such as timeliness, certainty, accountability and consistency.

Chapter Six draws out the main ‘insights’ for Australia from international practice. In this respect the key insights, described more fully in chapter six, are as follows:

- Independent regulatory agencies are a common feature of the surveyed jurisdictions. The precise nature of ‘independence’ varies across the comparator countries, and is a function of design choices, such as the criteria for appointment to agencies, and funding. Ministerial involvement in regulation is evident in a few of the comparator countries.

- Regulators in most surveyed jurisdictions are assigned efficiency-based objectives. Regulators in some jurisdictions, however, have broader remits, including the promotion of social and environmental objectives; and this has raised issues, in some cases, of conflicts between regulatory objectives.

- In terms of assignment of regulatory functions between national and sub-national governments, there has been a trend towards national regulation of national markets (energy, communications and national rail), and of markets where there are inter-jurisdictional externalities (non-urban water and wastewater). Urban water and wastewater, airports and ports, are more frequently subject to sub-national regulation.
• The collection of regulatory responsibilities for a number of infrastructure industries in a single institution, at least to the sectoral level (for example, energy and communications), is widely observed across the comparator countries. This appears to reflect perceived advantages in enabling regulatory decisions to take account of inter-relationships along the supply chain, and, institutionally, of economies of scale and scope.

• Multi-sectoral regulatory institutions are a feature of some of the surveyed jurisdictions, and are a common feature of regulation at the sub-national levels (such as the state regulators in the US and Canada). In four of the five surveyed jurisdictions where multi-sectoral regulators exist at the federal level, the multi-sectoral regulator also has responsibility for the conduct of competition policy. Indeed, there appears to be a trend towards such a single-institution model with Spain and the Netherlands both combining regulatory and competition activities in a single agency in recent years.

• There is substantial international interest in the role and involvement of end-consumers in regulation. Regulators in a number of jurisdictions surveyed are placing an increasing emphasis on establishing processes of more effective ‘engagement’ with such users. Various mechanisms exist in this respect, some with a long history, and others of more recent provenance, including: legislatively established consumer representative bodies; advisory councils/panels within regulatory agencies; specialised offices of consumer advocates; guidelines for negotiated settlement, and various other mechanisms which allow consumers to engage directly with utility businesses.

• The surveyed jurisdictions have taken different approaches to: issues of information asymmetry between regulators and those they regulate; balancing the trade-off between broad information collection powers; the protection of commercial-in-confidence (c-i-c) information; and timeliness in regulatory processes. The experience in some jurisdictions indicates that shifting the burden of information collection in relation to some aspects of regulatory processes (such as consultation with users) may assist with reducing the timeframes of such processes.

• The survey reveals that innovations such as ‘alternative dispute resolution’ and negotiated settlements, can potentially speed-up regulatory outcomes if they are successful in avoiding the full, formal regulatory process. However, the survey indicates more generally that speedier decision-making may, in some circumstances, come at the cost of diminished consultation and sometimes, transparency.
1. Background and Scope of the Working Paper

The BERI project and the purpose of this Working Paper

The Better Economic Regulation of Infrastructure project is an on-going project of the ACCC into the economic regulation of infrastructure in seventeen countries and the European Union. The current project builds on, and updates, earlier research conducted in 2009. It is hoped that the outputs from the project will provide important insights and information for regulators, legislators, service providers, consumers and their respective representative bodies. Specifically, having access to such insights about regulatory arrangements and processes in other jurisdictions might provide opportunities for: benchmarking local practice; informing review and reform processes; encouraging partnerships and cooperation between jurisdictions; and stimulating analysis of the factors influencing competitiveness and capacity to meet local and international demand.

To this end, the current study builds on the descriptive overviews of the regulatory institutions, practices and processes of the seventeen comparator countries presented in the Country-based Review, published in August 2013. Specifically, it:

- explores general trends in industry and sectoral regulation for the seven infrastructure areas;
- provides information on the extent of integration of regulatory and competition agencies in the surveyed countries, and the pros and cons of separate agencies;
- investigates the objectives set for regulatory agencies;
- presents an overview and analysis of the different approaches to engaging customers and other interested parties;
- provides an analysis of information collection, management, dissemination and confidentiality practices; and
- presents an overview and analysis of the review and appeal mechanisms operating in the jurisdictions studied.

Scope of the Working Paper

What is meant by ‘economic regulation’?

For the purposes of the country-based review we considered ‘economic regulation’, as used in the utility industries, to refer to government interventions in a market relating to matters, such as: price; allowed rate of return; output; market entry or exit; quality and competition. The infrastructure areas subject to economic regulation are typically network-based, such as electricity, gas, telecommunications, rail and postal services; aspects of which display natural monopoly characteristics.

Specifically this project is interested in the following broad types of intervention:

- Regulation of the rate of return or prices allowed to be realised by an infrastructure provider, including requirements to achieve only ‘cost recovery’.
- Determination of whether particular components of the production chain should be subject to (regulated) access by others, including competitors – variously called ‘declaration’, ‘designation’ or ‘coverage’.
• Control or other influence on the price and non-price conditions of access to infrastructure, including quality-of-service monitoring applied to an access service.

• Approval procedures for the deployment of new capacity or for capacity enhancements.

• Restrictions or prohibitions on businesses that an infrastructure provider can deal with (included related businesses) or activities that it can engage in, including prohibitions on cross-subsidisation of activities, divestiture requirements and orders requiring a productive entity to undergo structural or operational separation.

• Regulation of some or all of the retail prices of a vertically integrated infrastructure provider, including through price-caps and interventions associated with universal service obligations (USO) and community service obligations requirements.

• Quality-of-service monitoring, particularly where price regulation occurs, so as to establish that reduced prices for retail or wholesale services are not being achieved by reducing quality.

Other forms of regulation, such as social justice and environmental protection, are not considered to be ‘economic regulation’ for the purposes of this project, even where they have economic implications.

*Infrastructure areas covered*

The industry and sectoral areas covered in this project are the key ‘utility’ or ‘infrastructure’ areas that are typically subject to economic regulation. These include:

• Energy (electricity and gas)

• Telecommunications

• Postal services

• Water and wastewater – including urban and (where applicable) rural water and wastewater provision

• Rail – emphasis on national and international rail systems rather than urban transit

• Airports

• Ports.

The convention used is to describe an area such as electricity or rail as an ‘industry’ or ‘subsector’, and a combination of all similar areas as a ‘sector’. For example, electricity and gas together are described as the ‘energy sector’ and the combination of rail, road, airports and ports is called the ‘transport sector’. The word ‘sector’ is sometimes also used in a more generic sense, as in ‘private sector’ and ‘public sector’, again reflecting broader divisions for the word ‘sector’. On some occasions, the term ‘infrastructure area’ is used.

*How was the Country Selection Made?*

The seventeen countries covered in the country-based review were chosen in consultation with the Advisory Committee to reflect a variety of legal, institutional and geographical features that may help shape the regulatory environment.
Approximately half of the countries are from Europe, and as those countries are also member states of the European Union (EU), the regulatory approach and influence of the EU is also surveyed in a separate chapter in the country-based review. The countries considered are:

- Africa: South Africa
- Asia: Japan; Singapore; and South Korea
- Australasia: Australia; and New Zealand
- Europe: European Union; France; Germany; Italy; Ireland; Netherlands; Spain; Sweden; and the UK
- North America: Canada, Mexico and the US.

Relevant Contextual Considerations

A country’s regulatory regime is likely to be influenced by a range of economic, geographic, political, and legal factors. The salient factors in considering international designs include the following:

Economic Size and Development

All but two countries chosen (South Africa and Singapore) are members of the Organisation for Economic Co-operation and Development (OECD). The countries selected include those from the full range of sizes of economy, ranging from the three very largest OECD economies (the US, Japan and Germany), through to medium-sized economies such as the UK, France, Italy, Spain, Canada and Australia, and down to three of the smallest developed economies (Singapore, Ireland and New Zealand). Countries selected are from all of the continents having OECD members (North America, Europe, Asia and Australasia) and from Africa. Most of the countries have highly developed economic infrastructure and mature regulatory institutions, and higher gross domestic product (GDP) per capita than the world’s average (only South Africa was lower than average). According to the Central Intelligence Agency (CIA), the average world GDP per capita (purchasing power parity (PPP)) in 2013 was US$ 13100. The GDP per capita of the seventeen countries in 2013 ranged from US$ 11 500 (South Africa) to US$ 62400 (Singapore); with the remaining fifteen countries being in the range of approximately $30 000 to $52 000.2

Geographic Size and Resources

The geographic size of countries surveyed varies; ranging from geographically large countries such as Canada, the US, Australia, Mexico, South Africa and Sweden, to smaller countries such as Singapore, the Netherlands and Ireland. Geographic size can affect the relative importance of infrastructure industries and hence the need for, and approach taken to, regulation. For example, while universal service provision is a general concern across telecommunications and postal services, it is a particular priority in countries such as Australia and Canada that have a large geographic mass and low population density.

The resources possessed by a particular country (such as minerals, agricultural land, forests, conventional and non-conventional gas, water, and physical location) will

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influence both the infrastructure it establishes, and the regulatory focus it takes. For example, countries that are rich in mineral resources, such as South Africa, Australia, Canada, Mexico and the US, may have particular issues with respect to mineral supply-chains, often needing to combine rail and port infrastructure effectively to achieve efficient outcomes. This can impact on regulatory design. Similarly, the extent of natural gas and water resources can also play a large role in the development of institutions and markets, and it follows, in the regulation of those industries. Strategic location also feeds into the regulatory framework: the structure of regulation in the EU is heavily dictated by the proximity of each member state; and, in the US, regulation has developed in some areas in order to coordinate economic activity with Canada and Mexico.

**Political Systems**

All surveyed countries are broadly ‘democratic’. In countries with a federal structure (Australia, Germany, Canada, Mexico, and the US) some powers are shared by national and state governments as prescribed by a constitution. The national governments in these countries, in particular, face challenges for the achievement of national goals where their powers are shared with state governments representing local interests. There are also different political and legal systems in Europe, and as member states are adapted to a common European Union system, this has led to gradual centralisation of power to national governments, or required greater coordination among state or local governments within a member state. The country-based review contains a detailed account of the nature of the EU, with a particular emphasis on its role with respect to network infrastructure.

**Legal Context**

A country’s legal context may influence a number of aspects of the regulatory regime including: the regulator’s jurisdiction and the extent to which regulators’ decisions may be appealed, and by which bodies. For instance, with the exception of New Zealand and the UK, each country’s legal framework is set out in a written constitution.\(^3\) Among other things, the constitution typically allocates powers in relation to regulatory matters to the various layers of a country’s government. In the US, the regulatory regime for telecommunications is influenced in part by the constitutional role of the states in the provision of intrastate telecommunications. In the case of France, the 1946 Constitution\(^4\) requires public ownership for all enterprises ‘with the character of a public service or de facto monopoly’, reflecting the underlying political ideology.

**Degree of Dirigisme**

Another issue regarding an economic regulator’s authority arises in relation to its control or influence over infrastructure investment. For example, a regulator may be required to approve any installation of an electricity-generating facility; the construction of a gas pipeline; or the establishment of a high-speed broadband network. This type of regulatory power applies particularly in energy and

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\(^3\) Although New Zealand and the UK are constitutional monarchies, there is not a single written constitution. Instead, the constitution of New Zealand consists of a collection of statutes, Treaties, Orders-in-Council, Letters patent, decisions of the Courts and unwritten constitutional conventions. The UK’s unwritten constitution consists of statutes, common law and practice.

\(^4\) Available at: [http://www.equalrightstrust.org/ertdocumentbank/Preamble%201946%20ENG.pdf](http://www.equalrightstrust.org/ertdocumentbank/Preamble%201946%20ENG.pdf) [accessed on 5 March 2015].
telecommunications, but also arises in relation to: ports; water and wastewater; airports; rail; and postal services. Perhaps the most potent examples come from countries that emphasise *dirigisme*, ‘nationalism’ and ‘nation building’, such as Japan, South Korea, and France. Such powers are also more common where there are externalities involved in the development of infrastructure activities, such as in the integrated development of river basins in Japan and the EU.

**Restructuring and Liberalisation of Infrastructure Provision**

In a number of the surveyed jurisdictions, the provision of infrastructure services has been restructured and/or liberalised. This has taken various forms including: corporatisation of state-owned enterprises, privatisation of utilities, vertical and/or horizontal separation of activities in the supply chain, and the introduction of competition in certain activities in the supply chain.5

*Corporatisation and Privatisation*

The extent of corporatisation and privatisation observed in the surveyed countries appears to reflect a number of factors including: the extent to which they have liberalised their markets; the infrastructure area; and wider regulatory and political ideals.

A number of countries surveyed use state-owned enterprises extensively in the infrastructure industries, and in this regard, have generally chosen corporatisation over privatisation. For example, South Africa’s experience, given the extensive government ownership, indicates how regulatory ideology can influence the use of corporatisation. In some jurisdictions, corporatisation of productive units to form what are known as government business enterprises (GBEs), or State-owned enterprises (SOEs), are a typical first stage in a broader restructuring process.

The transfer of ownership of government-owned assets to private owners, has been an element of infrastructure liberalisation in a number of the surveyed jurisdictions. In the UK, Australia and New Zealand, there has been a relatively strong commitment to privatisation. Continental Europe has also seen some privatisation, although some countries have retained SOEs rather than privatised fully. The US and Canada have strong traditions of private ownership. In the US, all infrastructure areas either have a mixture of public and private provision of services or are mainly private. For instance, telecommunications started as a private monopoly in the US; whereas in other countries such large-scale infrastructure was originally government-owned and then privatised.

In some countries there has been considerable political opposition to privatisation initiatives. For example, in France, incumbents remain largely state-owned, reflecting *dirigiste* beliefs and the strength of organised labour. Similarly, in some Australian states, there has been political resistance to privatisation of infrastructure assets. Strong state-owned incumbents – such as in South Africa and Mexico – appear also to be able to resist vertical separation and exposure to competition.

*Structural Reform and the Introduction of Competition*

Three main kinds of structural reform have been observed in jurisdictions that have allowed competition in certain network activities: separation of commercial

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operations from regulation; the vertical separation of natural-monopoly elements from potentially competitive activities; and the horizontal separation of activities to create a number of smaller independent business units.

Structural reform and liberalisation have raised issues regarding the terms on which providers of core infrastructure services provide access to providers of other services in the supply chain; including where such access-based providers operate as competitors to the core infrastructure supplier in certain markets.

To address issues associated with access, and to promote competition in related activities, various forms of separation policies have been introduced across the surveyed jurisdictions. Broadly, these include:

- accounting separation – the maintenance of separate financial records for the infrastructure service and upstream/downstream service;
- functional/operational separation – the separation of business units, and the imposition of operational rules on the business units (such as controls on sharing of staff and information);
- legal separation – the creation of a separate legal entity to provide the infrastructure service, but allowing cross-ownership between that entity and another entity that provides an upstream/downstream service; and
- ownership separation – where there is no cross-ownership between the entity that provides the infrastructure service, and any entity that provides an upstream/downstream service.

Accounting separation is required by a number of countries across a number of industries studied. In South Korea, for example, accounting separation is required of the incumbent in the electricity market, KEPCO, across its transmission, distribution and sales businesses. There are similar requirements for gas. In Europe, EU Directives initially required national regulators to impose accounting separation on telecommunication providers with significant market power (SMP) in relation to certain services; and later reforms allowed for other forms of separation. In relation to postal services: South Africa requires accounting separation between reserved and non-reserved services; Spain requires accounting separation between USO and non-USO services; and Ireland also has accounting separation requirements in this area. In rail, accounting separation is mandatory in the EU, and legislation provides for optional functional or operational separation. In England, the Ofwat requires water businesses to publish an ‘accounting separation methodology statement’.

Various forms of functional or operational separation can also be observed. For example, in the Japanese electricity market, the establishment of the Electric Power System Council of Japan was partly an attempt to increase the functional separation of the vertically integrated incumbents. Further, recommendations have been made to require functional separation of the generation and distribution businesses. In the US there are functional separation requirements in both the electricity and gas markets. Licensing for the rail system in Japan allows for operational separation, although most operators are vertically integrated monopolies. The Netherlands exceeds minimum EU requirements by requiring operational separation for rail. There is functional separation in Italy between infrastructure and service provision of rail, but both entities involved in these activities are owned wholly by the state. In Australia, a gradual structural separation of Telstra’s fixed-line business is a feature of the
National Broadband Network (NBN). In New Zealand, separation requirements in the telecommunications market initially included operational separation for network, wholesale and retail services, and this was replaced by structural separation in 2011. Japan has enforced functional separation in telecommunications, with the traditional incumbent split into six entities in 1990. EU members have the option of enforcing functional separation in telecommunications, on businesses with significant market power. However, the Swedish telecommunications incumbent voluntarily separated functionally, and BT also voluntarily underwent functional separation of its wholesale and retail services in 2005.

At the other end of the spectrum, ownership separation has been prevalent in a number of energy markets, including Australia, New Zealand and the UK. In England and Wales, for example, the electricity industry was horizontally and vertically separated at the time of privatisation. A similar separation of the rail industry in the UK also occurred at the time of privatisation. In the Netherlands’ energy markets, regulatory requirements exceed the mandatory separation legislation imposed by the EU, and require structural separation of network activities from supply activities in the same market. That is, an entity cannot provide gas network and supply services, but can provide gas network and electricity supply services.

In the countries surveyed, it is unusual for the regulator to have the power to require full legal or ownership separation. Separation of this type has typically been implemented by government, usually, but not always, at the time of privatisation. For instance, the requirement for legal separation in European energy markets generally derives from EU Directives, rather than from country-level regulatory bodies. A wide discretion to accept undertakings may also provide regulators with some scope to implement structural solutions. For example, in the UK, the Ofcom accepted an enforceable undertaking from BT to separate legally its wholesale and retail functions. In the US, the Department of Justice and AT&T reached a settlement in 1982 in an antitrust case where AT&T agreed to divest its local operating companies. In Australia, regulatory bodies have only limited powers to alter market structures. In some cases, however, the government has influenced structure to address competition concerns. For example, the Australian airports regime, put in place by the government at the time of privatisation, prohibits cross-ownership of airports.
2. Institutional Design for Better Regulation

The seventeen countries surveyed for this project demonstrate a variety of institutional designs for the economic regulation of infrastructure and for competition regulation. In part this diversity in institutional design reflects inherent differences in the economic, legal and political contexts in which economic regulation and competition law are applied. For example, in some jurisdictions and infrastructure areas, the infrastructure operators are privately owned; while in other jurisdictions they are predominantly government-owned. However, the survey reveals that the diversity in design also reflects different choices that have been made regarding key design aspects of the regulatory framework. This chapter considers some of these key design aspects.

Specifically, in this chapter the following institutional design issues are discussed:

- The extent to which regulatory and competition agencies are ‘independent’ from government influence.
- The degree of discretion that an agency has in performing its functions.
- The narrowness or broadness of an agency’s remit, including in particular whether this extends beyond efficiency and/or competition objectives.
- The extent to which regulatory functions covering different industries and activities are combined: industry-specificity or sector-specificity or multi-sector regulators.
- Whether responsibility for the enforcement of competition (antitrust) law is combined with the economic regulation of infrastructure.
- The assignment of regulatory functions by level of government (national and subnational).
- The ability of the regime to adapt to changes in regulatory context.

Regulatory Independence

Independent regulation is a feature of a number of surveyed jurisdictions, although the concept of independence is not an absolute one. Broadly, formal independence is indicated through features such as: the criteria for appointment of members to the regulatory body; financial and operational independence from government; and other factors, such as the terms of enabling legislation.

The American tradition of independent regulators – such as the Federal Communications Commission (FCC); the Federal Energy Regulatory Commission (FERC) and the Federal Trade Commission (FTC) – is a long one, dating back to the early days of utility formation, with some regulatory bodies established at the state level in the late nineteenth century and early twentieth century. In other parts of the world, however, independent infrastructure regulators are a more recent phenomenon. The UK, in addition to countries that adopted British institutions of government and administration (including Australia, New Zealand and – to some extent – Canada) often had infrastructure functions embedded within government departments or...
statutory commissions under direct government control until the 1980s or 1990s. The establishment of independent regulatory bodies in these countries has therefore involved separating the productive function from the oversight function that is performed by a ministry or statutory commission.

Notwithstanding the growth in the establishment of independent regulatory agencies in many jurisdictions, a small number of developed countries – in Asia and in Europe – still have ministerial regulation of some infrastructure services. In some cases, a ‘separate’ regulatory agency may have been established, but it is not fully independent and is subject to substantial ministerial direction. Japan, Singapore, South Korea, and France especially exhibit these characteristics in some infrastructure areas. Where regulation occurs within, or in concert with, government ministries, various functional designs are evident including: separate regulators with advisory roles only (Mexico; France in relation to price regulation in some infrastructure areas); statutory boards under the supervision of ministries (Singapore); and specialist commissions within ministries (Korea).

There is also considerable diversity across infrastructure areas in the extent to which independent regulatory agencies are established. For example, independent regulators are a common feature in telecommunications, even in those countries where independent regulators are not the norm (Korea, Japan, Mexico). This differing regulatory approach for telecommunications, relative to other infrastructure areas, may reflect the high rate of technological change in the industry. Conversely, independent economic regulatory agencies are relatively rare in the area of water and wastewater services, and ministerial departments and local governments tend to play a much bigger role in this sector; even in jurisdictions where independent regulators exist elsewhere.

Where a regulator is independent of government, decision-making is usually the responsibility of a board or commission comprising appointed members. The number of members appointed varies (from two to ten) across the jurisdictions and infrastructure areas surveyed but, more usually, falls between five and seven members. Countries sometimes have arrangements governing member appointments to the regulator that appear to be intended to foster cooperation between various levels or sides of government; and/or to reduce the potential for political bias in decision-making. For example, appointments to the Japanese telecommunications regulator are made by the relevant Minister, with consent from both houses of the Japanese parliament. In France, the power of appointment of members to the telecommunications and postal regulator is split between the President of the Republic, the President of the National Assembly and the President of the Senate. In the US, no more than three of the five commissioners appointed to a federal regulatory agency can belong to the same political party.

The survey indicates that particular issues around regulatory independence can arise in relation to the regulation of state-owned enterprises (SOEs). This is because the regulator may feel its independence is constrained by pressure from government departments, such as treasury, where such departments own the regulated entity. If such enterprises provide services in competition with others, there can also be pressure to provide regulation that gives the SOE a competitive advantage. For instance, in Japan, the postal USP (currently being privatised) is able to process mail through customs more quickly than its competitors due to priority regulation. Further,
there may be pressure to exempt such SOEs from regulation altogether, as is the case in Singapore.

A separate question arising from the independence of regulatory agencies from government, is the independence of such agencies from those they regulate. In this respect, the survey demonstrates instances where regulators have the potential to be unduly influenced by those they regulate. For instance, in most large European airports, ground-handling service provision is regulated independently, but with a large amount of input from the airport managers and users. In France an airport manager can apply to have ground-handling services limited to two providers, with the manager being automatically considered as one of the providers; a procedure claimed to give undue influence to the large airport users, and to provide an incentive for the airport manager to apply for a limitation in the case where it also provides these services.

As a final, more general observation, the survey reveals that the degree of independence of a regulator from government can depend substantially on context, including the degree of private ownership and liberalisation in a particular infrastructure area. Socio-political factors also seem important; including the strength of *dirigisme* versus more free-market tendencies.

**Regulatory Discretion**

The survey indicates that the delegated discretion of a regulator can vary considerably across sectors and countries. At one extreme, some regulatory regimes delegate a broad discretion to a regulator to set a price according to criteria such as it being ‘fair and reasonable’. For instance, the KCC, when approving telecommunications rates in South Korea, only requires the rates to be ‘fair and reasonable’ and to be calculated using a method that is ‘appropriate and transparent’. Similarly, in New Zealand, access to networks must be provided to competitors on a ‘fair and reasonable’ basis. At the other end of the spectrum, some jurisdictions seek to constrain the discretion of the regulator through tightly specified pricing or revenue formulas, such as the yardstick-regulation practices applied in some sectors in both Japan and Germany.

The extent of regulatory discretion also appears to be influenced by the political context, which, in some jurisdictions can set bounds on the way an agency operates and how it exercises its discretion. In the UK, for example, existing regulatory regimes are based on ‘principles’ that guide regulatory design and practice. South Africa has also implemented a ‘principled approach’ in regulating energy and telecommunications, although, unlike in the UK, this is not coordinated on an inter-regulator level. Consistency in the exercise of regulatory discretion is particularly important where there are multiple bodies responsible. As such, a big part of the EU’s policy development is aimed at providing principles for its member states to follow across the different infrastructure areas. For instance, the EU has developed principles and procedures to be applied with regard to: the setting of, and charging for, infrastructure; and the allocation of network capacity in its railway and energy directives. Principles in regulation can range from being quite explicitly stated, to being less prescriptive. For instance, some countries include principles requiring decisions to be ‘non-discriminatory’ or ‘fair and reasonable’ rather than providing a...
more defined framework for determinations (such as in the UK or South Africa). In
general, it appears that the regimes that follow a ‘principled’ approach to the exercise
of regulatory discretion are more coherent and consistent than regimes in countries
that have not taken this path.

The surveyed jurisdictions vary in the extent to which the economic regulator has a
role in policy formation or rule-making. The extent to which regulation, policy and
rule-making is separated also varies across infrastructure areas. While most
regulatory bodies do not have a role in policy formulation, there are exceptions. For
example, the French rail regulator is charged with providing advice to the Minister of
Transport on: network access complaints; how the railway network is accessed; and
the design, creation and use of infrastructure and railway transport equipment.
Similarly, the French telecommunications regulator can provide opinions on draft
legislation, decrees and regulations concerning postal services and telecommunications. Some countries surveyed have developed separate institutions
for rule-making and enforcement. For example, in Australia, the Australian Energy
Market Commission (AEMC) has the following mission:8

The … [AEMC] is the rule maker and developer for Australian energy markets. As a
national, independent body we make and amend the detailed rules for the National
Electricity Market (NEM) and elements of natural gas markets. … [W]e also provide
strategic and operational advice to the … Ministerial Council on Energy.

In New Zealand, the multi-sectoral regulator has a recommendatory role in relation to
the application of price controls to an industry. It also recommends to the Minister
which telecommunications services should be regulated and the form that such
regulation should take. In Sweden, the relevant economic regulator is responsible for
drawing up regulations in relation to rail and airports. In the US, the regulator of
postal services is required to establish a modern system of rate and mail class
regulation for postal services, and, in rail, the STB is authorised to formulate
regulations.

Each of the surveyed jurisdictions with independent regulators has had to determine
the extent of discretion the regulator has in exercising its power. This design issue
has required a balance to be struck: a high level of prescription creates the risk that the
regulator will be required to make a decision that is not tailored to the circumstances
of an individual case, however, a high degree of discretion can potentially create
uncertainty, and raise the risk of the misuse of that discretion (Sappington and
Weisman 2012). The question of the appropriate balance is not an easy one to resolve
in the abstract, although greater discretion and flexibility is likely to be more
important in areas in which there are rapid changes to market conditions (such as
through technological innovations in telecommunications); and less important where
the regulator has a prior pattern of consistent and appropriate decisions. In a number
of countries surveyed, when regulation is highly prescriptive, it usually takes the form
of strong ex ante price and quality controls that must be submitted to the relevant
regulatory authority for approval. Less stringent measures include a combination of
looser ex ante controls and ex post monitoring, that provide ex ante caps on revenue,
and then ex post transfers based on how well the business performed relative to the
rest of the market. Negotiate-arbitrate models, which are a feature of the regulatory
arrangements in some jurisdictions, provide another alternative. These models require
some ex ante legislation requiring ‘fair and reasonable’ access provision, or often a

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standard contract offered by infrastructure owners. The regulator then leaves most access and price decisions to negotiations, and only steps in as a mediator *ex post* when negotiations fail.

The Regulatory Remit of Infrastructure Regulators

In most of the comparator countries, economic regulators of infrastructure are charged with a range of economic objectives: achieving economic efficiency; mitigating monopoly power; promoting competition; and ensuring cost recovery/the financial viability of infrastructure providers. In some of the jurisdictions surveyed, however, the remit of infrastructure regulators is broader and includes objectives relating to: the environment; social welfare (conceived more broadly, or, in some cases, more specifically, than the promotion of competitive markets and economic efficiency); long-term resource security; and universal service.

For example, the UK energy regulator (the Ofgem) has a general duty when making decisions, to have regard to government’s social and environmental policies. These policies include: addressing fuel poverty; curbing climate change; and considering the needs of vulnerable consumers. Further, the Secretary of State may give the Ofgem guidance on the contribution that the Ofgem should make to the attainment of those policies. Similarly, the water regulator in England and Wales (the Ofwat), has a general duty to consider sustainable development and the environment. In Ireland, the energy regulator is legally required to promote renewable energy forms, while in Canada, energy-market regulation must promote good environmental practices. Some countries also focus on the provision of services to specific groups that may be disadvantaged socially or economically. In South Africa, for example, where the apartheid system led to widely variable telecommunications infrastructure development across different parts of the country, operators are now required, under their licence conditions, to deploy services in under-serviced areas, and to contribute to a ‘Universal Service Fund’. Similarly, the South African energy sector must provide cross-subsidies to low-income customers. In Spain specific areas are also subject to regulation, to balance development levels across the different regions.

Some regulators charged with multiple objectives have identified a potential for conflict between their various objectives. For example, the Ofgem in its *Sustainable Development Report*, states that its ambit to reduce fuel poverty is potentially in conflict with its environmental objectives (p. 3), and that (p. 27):

> rising wholesale energy prices and the Government’s environmental policies are likely to result in further increases still to consumers’ energy bills and push more households into fuel poverty.

Potential conflicts have also been recognised between universal service obligations (USOs), the protection of disadvantaged and low-income consumers, and the pursuit of environmental objectives, such as the abatement of climate change, with efficiency-based regulatory objectives (for example, a USO may require inefficient cross-subsidies to be present in pricing).

The experiences of regulators balancing competing objectives also indicate an impact on time, resources and regulatory processes. For example, the British energy regulator’s sustainable-development objective, has necessitated wider consultation and the use of Environmental Impact Statements. The Irish energy regulator has changed the manner in which it processes applications for generation licences, to

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facilitate the connection of renewable generators to the transmission and distribution systems, in a timely manner (the energy regulator being legally obliged to promote renewable energy forms). Other regulators have established panels to represent the interests of vulnerable consumers in regulatory processes, implying some financial and resource-diversion costs. Engagement with consumer groups, and their role in the regulatory process, is discussed further in the next chapter.

Finally, competing statutory objectives may increase the potential for, and frequency of, appeals from regulatory decisions. This issue is further considered in chapter five.

The Degree of Conglomeration of Economic Regulation of Infrastructure

The institutional arrangements for economic regulation of infrastructure vary across countries surveyed, with examples of: industry-specific regulation (for example, the rail regulator in the UK and the postal services regulator in the US); sector-specific regulation (common in energy and communications, and increasingly in transport); multi-sectoral regulation (BNetzA in Germany); and a national competition authority with concurrent regulatory responsibilities over main infrastructure areas (ACCC/AER in Australia;\(^{10}\) the Commerce Commission in New Zealand; the Authority for Consumers and Markets in the Netherlands;\(^{11}\) and the CNMC in Spain\(^ {12}\)). As seen previously, several countries have retained ministerial economic regulation of infrastructure in some infrastructure areas; most often in water and wastewater, and in transport. There are also many ‘in-between’ examples, where ministers retain substantial power in relation to regulatory decisions. The clear trend across the seventeen countries surveyed has been towards greater conglomeration of regulatory functions in the past ten to fifteen years. Similar to the findings of Jordana and Levi-Faur (2010), this trend to ‘agentification’ has been strongest in smaller countries and in Europe.

As noted, the impetus to conglomeration has dominated in recent years, and the most common arrangement across the countries surveyed is to have economic regulation of infrastructure primarily undertaken by sector-specific regulators; often formed by combining industry-specific regulators, in at least energy and communications. Almost all energy regulation is sector-specific, with the regulators jointly responsible for regulation of both electricity and gas markets. Canada, France, Ireland, Japan, Mexico, Singapore, South Africa, Sweden, the UK and the US, all have regulators that are sector-specific. The remaining countries have regulators that have a focus on regulating across multiple sectors. An interesting case is that of the Italian AEEG which is responsible for energy and water regulation; a combination that is only observed in one other country surveyed (Ireland).

\(^{10}\) The Australian Competition and Consumer Commission (ACCC) was formed in 1995. The introduction of the National Energy Law and National Energy Rules in 1996, provided for the Australian Energy Regulator (AER) (formed in 2005) to be the economic regulator for Queensland, New South Wales, ACT, Victoria, South Australia and Tasmania. Subsequently the AER’s regulatory role has been extended to retail markets.

\(^{11}\) The Autoriteit Consument & Markt (ACM or Authority for Consumers and Markets) enforces the Netherlands and EU competition law, and is responsible for the economic regulation of energy, telecommunications, postal services, rail and airports.

\(^{12}\) The Comisión Nacional de Mercados y Competencia (CNMC) (National Commission on Markets and Competition) resulted from the amalgamation of seven industry-based regulators (in energy, telecommunications, postal services, audio-visual industries, railway and air transport, and gambling) with Spain’s Comisión Nacional de la Competencia (CNC).
Communications is generally considered to comprise telecommunications, postal services, and radio and television broadcasting. South Africa, Japan, Singapore, France, Ireland, Sweden, and the UK, all regulate telecommunications and postal services jointly. In Italy, while the AGCOM is responsible for regulation of telecommunications and other broadcasting, regulation of postal services falls under the responsibility of another body. In Canada’s case there is no specific regulator for postal services. Mexico and the US have industry-specific regulators for postal services.

Few countries regulate water and wastewater on a sectoral basis, either splitting regulation across municipalities or across sub-sectors within the water and wastewater sector. South Africa, Singapore, New Zealand, and the Netherlands, tend to have regulation of different facets of water management managed by one body; although this is on a municipal level. Since 2004, Sweden has been divided into five water districts, with one water authority in each appointed as the water authority for that district. There are concurrently County Administrative Boards and 91 Municipal Boards. These organisations operate within a three-tier system in which the water authority has primacy. Japan, South Korea, and France, have multiple bodies responsible for different areas, such as: water-basin management; river management; water supply; and wastewater management.

Where transport infrastructure is regulated, it is usually separated along the lines of rail, airports and ports. This is true for France, Ireland, Italy, the UK, and the US. In some circumstances, two or all three of these industries are regulated by the one body, such as: in Japan, the MLIT; in South Korea, the MLTM; in Sweden, the STA; in Canada, the CTA; and in Mexico, the SCT. Regulation of airports and ports tends to be significantly ‘lighter-handed’ than regulation of rail; arguably reflecting perceptions of greater competitive pressures for the services of airports and ports.

The imperatives of consolidation have led either, to even broader groupings of regulatory functions within a single entity, or to other coordination mechanisms. For example, the UK’s Joint Regulators’ Group (JRG) was formed for the heads of the regulators to meet four times a year to discuss issues of mutual concern and to report on recent developments in their own areas. In Germany, the BNetzA was formed in 2005, with primary responsibility for economic regulation of gas, electricity, rail, postal services, and telecommunications services. However, decision-making authority does not reside with a single body. Instead, nine determinative bodies, called ‘Ruling Chambers’, are organised along industry and activities lines. Each Ruling Chamber makes decisions autonomously from the rest of the organisation for matters within its jurisdiction; although informal consultation may occur. In this regard, the German regulatory decision-making process has some of the characteristics of industry-specific regulation. According to the BNetzA, this structural design allows for a greater focus on specialisation and a close relationship between the Ruling Chambers and the specific activities being regulated. Each of Italy and Ireland has, in recent years, added regulatory responsibility for water and wastewater to the functions of its energy regulator. Australia, New Zealand, the Netherlands, and Spain, all combine their main regulatory functions for infrastructure with their competition functions. The issues surrounding these broader conglomerations are discussed in the next section.

The question of the extent of conglomeriation of economic regulation is not only relevant for independent regulatory agencies, but also when infrastructure areas are
regulated by ministries. Thus, for example, the South Korean government moved towards ‘mega-ministries’ in 2008, aimed at facilitating the implementation of integrated infrastructure policies and regulation.

The trend towards conglomeration appears to reflect a number of factors, including traditional theoretical principles that regulators with broader jurisdiction are less prone to regulatory capture. Particularly in the case where the regulator becomes responsible for regulating only one operator, the reasons for capture (industry-specific regulation) also suggest the solution (regulators with broader jurisdiction). There are, however, also potential efficiency advantages in the gathering of more industries under a single regulator, particularly at the sectoral level.

The efficiency case for sectoral regulation is particularly related to ensuring the avoidance of inefficient ‘piecemeal’ decisions. Infrastructure-based services within a sector cannot usually be analysed in isolation for at least two main reasons. Firstly, there are substitutability and complementarity relationships at play, which can mean that partial analysis leads to inappropriate policies. For example, regulating the price of electricity will have implications for substitutes (particularly gas) and complements (such as air conditioners); such that a partial analysis may miss vital efficiency implications. Secondly, infrastructure services are usually produced along a supply chain such as road-interchange-rail-port, in transport, and generator-transmission-distribution, in electricity. The extent of monopoly power is primarily dependent on the least competitive links in the supply chain; implying that all production components in the chain are best considered together, for an efficient outcome.

Consistency is seen as another rationale for conglomeration. While the different infrastructure areas have unique features, many of the economic regulation issues raised are similar across a range of regulated industries. As all industries compete for investment capital, inconsistent approaches to the cost of capital could lead to distortions and inefficient investment. For example, as emphasised in Australia’s National Competition report, a history of separate state regulation has inhibited the creation of national markets, and distorted investment:

it has been argued that different regulatory measures and infrastructure investment decisions in the various States have led to the sub-optimal use of Australia’s gas reserves.

State-based regimes are incapable of dealing effectively with access issues affecting inter-state or national facilities, and different approaches or pricing principles adopted in different States have the potential to impede the development of efficient national markets for electricity, gas, rail and other key industries.

In this context, a concern for consistency in regulation is strongly linked with the objective of increasing allocative efficiency and productivity. In addition, conglomeration may reduce the risk of duplication in regulation and enhance synergy in regulatory practice.

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13 The early analysis of the economics of regulation, most notably by George Stigler (1971), had concerns about ‘regulatory capture’ where the regulated entity influenced regulatory decisions in its favour by developing a close relationship with the regulatory body.


15 This is a central theme in Australia’s original national competition policy report. See: Independent Committee of Inquiry (F Hilmer, chair), National Competition Policy, AGPS, Canberra, 1993, p. 198; p. 248; see also pp. 227, 228. Available at: http://ncp.ncc.gov.au/ [accessed on 5 March 2015].
There may also be economies of scope from staffing an organisation covering related services. Skilled personnel for regulatory agencies may be scarce, both at the staff level (regulatory economists and lawyers) and at the commission/board level (for informed decision-making incorporating all of the interests involved in the decision). However, much of the required skill-set is common across the different infrastructure areas.

On the other hand, international experience shows that the consistency achieved in the conglomerate approach, may come at the cost of agency-specific experimentation that allows new ideas to be tested and then applied more broadly. For example, the industry-based and sector-based regulators in the UK have displayed marked differences in approach from one another, and can be seen to have been ‘innovative’ in their approach. The airports regulator has experimented with ‘constructive engagement’, an approach which has since also been applied in the energy and water and wastewater sectors.

**Separation of Competition Law Enforcement from Regulatory Responsibilities**

The trend towards conglomeration has extended beyond the combining of infrastructure regulators. Australia; New Zealand; the Netherlands, and Spain, combine the economic regulation of infrastructure with competition-law enforcement. While this level of amalgamation raises similar issues to those considered in the previous section, there are additional issues that need to be considered. In particular, competition policy and infrastructure regulation may pursue different objectives, and may take different approaches.17

Thirteen of the seventeen countries retain separate institutions to enforce general competition law (sometimes called ‘anti-trust’ or ‘fair trade’) from those that practice economic regulation of infrastructure. Of the thirteen countries that do not combine infrastructure regulation and competition functions, twelve have one dedicated national competition authority or ‘fair trade commission’,18 and on the other hand the US is unique in having two competition bodies at the federal level: the Federal Trade Commission’s (FTC) Bureau of Competition, and the Antitrust Division of the Department of Justice (DoJ).

In Australia, the combination or amalgamation of competition law and regulatory responsibilities occurred in 1995 with the formation of the ACCC, following the National Competition Policy report.

Economic regulation in New Zealand is primarily the responsibility of the national competition authority, the Commerce Commission (CCNZ); however, it shares responsibility for regulation of electricity with the Electricity Authority. A separate body, the Rulings Panel deals with dispute resolution and enforcement of New

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16 See generally Laffont (2005) on this point in the context of small developing countries.

17 The general issue of the appropriate interaction between competition law and sectoral regulators has been widely examined. See, in particular, OECD, *Relationship between Regulators and Competition Authorities* (1998) and International Competition Network, *Interrelations between Antitrust and Regulatory Authorities* (Report of Subgroup 2, Bonn, June 2004).

18 These are the Competition Commission in South Africa; the Japan Fair Trade Commission; the Competition Commission of Singapore; the Fair Trade Commission in South Korea; the Competition Council in France; the Bundeskartellamt in Germany; the Irish Competition Authority; the AGCM in Italy; the Swedish Competition Authority; the Competition and Markets Authority in the UK (formed by merging the Office of Fair Trading (OFT) with the Competition Commission); the Competition Bureau in Canada; and the Federal Competition Commission in Mexico.
Zealand’s electricity rules and regulations. New Zealand’s postal services are ‘regulated’ by the Ministry of Economic Development through a Deed of Understanding between New Zealand Post and the Crown.

In the Netherlands, the regulatory institutional structure in 2013 underwent substantial change with the formation of the Autoriteit Consument & Markt (ACM, or Authority for Consumers and Markets) that commenced operations on 1 April 2013. It was formed by the merger of the Nederlandse Mededingingsautoriteit (Netherlands Competition Authority, or NMa); the Onafhankelijke Post en Telecommunicatie Autoriteit (Office of Post and Telecommunications, or OPTA); and the Consumentenautoriteit (the National Consumer Authority). The ACM enforces the competition law of the Netherlands and the EU, and, through separate chambers, is responsible for the economic regulation of energy, telecommunications, postal services, and transport (excluding ports). And the ACM has enlarged powers relative to its predecessors.

In Spain, the Law of June 4th 2013 created the Comisión Nacional de los Mercados y la Competencia (CNMC) (National Commission on Markets and Competition), which had the effect of amalgamating seven industry-based regulators (in energy, telecommunications, postal services, audio-visual industries, railway and air transport, and gambling) with Spain’s Comisión Nacional de la Competencia (CNC) to create a sole supervisory body. The objective was to create a regulatory regime within Spain that is more consistent and which avoids duplication. The new body may also review new sectoral legislation on competition grounds before the legislation is adopted.

The international trend towards conglomeration appears to reflect perceptions of the advantages of the approach, including: the weakening of ‘capture’ opportunities; a pro-competitive approach to regulation; a focus on an integrated and consistent approach to regulation across infrastructure areas; and economies of scope from conglomeration that help achieve greater consistency and lower costs. (These scope issues have much in common with those relating to conglomeration of industry and sector regulatory functions, and were discussed in the previous section.)

The case for conglomeration can, however, be weakened if the objectives of competition law enforcement and economic regulation of infrastructure are not closely aligned. For example, in some of the surveyed countries, infrastructure regulators are directed to pursue broad economic efficiency objectives (encompassing both producer and consumer welfare), while competition bodies are directed to pursue consumer-only welfare goals (see, for example, Huschelrath and Leheyda, 2010).

In those countries where competition-law enforcement and regulatory responsibilities lie in separate agencies, procedures have usually been put into place to deal with situations where enforcement and regulatory responsibilities overlap or are duplicated. In Japan, coordination mechanisms between the Japan Fair Trade Commission (JFTC) and the relevant industry or sector regulators include: guidelines issued by the JFTC about appropriate behaviour of infrastructure owners in increasingly liberalised markets; a coordination division within the JFTC that must consult with other government bodies to ensure that new legislation and policies will not have anti-competitive effects; and guidelines issued jointly by infrastructure regulators and the

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JFTC in energy and telecommunications regulation. The Korea Fair Trade Commission (KFTC) plays a strong role in regulation of competition matters; often developing memoranda of understanding with other regulatory bodies in order to establish the roles, duties and functions of each body. For instance, the KOREC and the KFTC have developed memoranda of understanding since 2001 for the electricity industry. In other industries, such as in telecommunications, the relevant authority must consult with the KFTC on some issues, such as mergers. Legislation in South Korea ensures that businesses are not fined twice for the same conduct. In Ireland, the energy regulator (CER), the communications regulator (ComReg) and the Commission for Aviation Regulation (CAR), have all implemented co-operation agreements with the Irish Competition Authority. These provide for exchange of information and guidance in situations in which both bodies are able to exercise their regulatory functions.

In the US, there is the potential for regulated entities to be subject to concurrent processes. Most US economic regulators have powers to enforce competition law within their areas, including powers to approve mergers. Potentially, regulatory and antitrust agencies might concurrently conduct their own investigations and, in some instances, a matter may require approval from all relevant agencies before being allowed to proceed. These concurrency arrangements have sometimes led to claims that it involves unnecessary duplication of effort and cost, and can create uncertainty by requiring firms to be subject to different processes.20

In addition, US state regulators are involved in competition-law matters and, in some states, merger proposals must also be approved by the regulator and the state attorney general. The Department of Justice (DoJ) and the Federal Trade Commission (FTC) have concurrent power and jurisdiction and generally divide their enforcement roles by industry. There are no formal procedures to guide a decision as to which agency will investigate a particular matter. A decision as to whether the FTC or the DoJ will investigate a matter, where there are concurrent powers and jurisdiction, is made following significant discussion and negotiation between the agencies. The agencies effectively ‘compete’ for cases. (For monopolisation cases the DoJ can institute criminal proceedings, while the FTC can only take civil action.21)

Stronger procedures exist in the UK, where the Concurrency Guidelines issued by the Competition and Markets Authority (CMA) govern any concurrency issues in practice. These guidelines specify that matters will generally be investigated by the authority which is best placed to undertake the investigation. Historically, the competent industry-specific or sector-specific regulator was generally considered to be better placed than the OFT (the predecessor to the CMA) to investigate agreements or conduct relating to its industry or sector, while the OFT may be better placed to undertake an investigation relating to matters concerning more than one industry or sector. Other relevant factors include prior experience of dealing with similar issues. The Concurrency Working Group was established in order to coordinate this process, however, following the introduction of the Enterprise and Regulatory Reform Act 2013, the CMA is to take a more active role in coordination. This includes the power

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20 See, for example, Chemtob (2007) and Blumenthal (2006).
to decide which body should lead a case and take over a case from a regulator (even when an investigation has started). 22

In summary, conglomeration of competition and regulatory institutions raises similar issues to those considered in the previous section on conglomeration of regulatory bodies. There are, however, some additional issues that need to be considered. In particular, competition policy and infrastructure regulation may pursue different objectives and may take different approaches. In comparator countries where regulatory and competition agencies/institutions are separate, a number of approaches have been adopted to avoid issues of concurrency and duplication. Informal ‘negotiation’ between agencies for jurisdiction over a matter in the US can be compared with the more formalised concurrency rules and processes in the UK.

In terms of regulatory design, the most usual practice (in 13 of 17 countries) is the assignment of infrastructure regulation to a separate institution from that conducting competition regulation. However, one trend that can be observed is that, in recent years, the Netherlands and Spain have each decided to combine their regulatory and competition functions within a single agency. While there are obvious synergies between some competition and regulatory issues, these are absent for others.

**Role of the Sub-national Economic Regulators**

The approach to the assignment of regulatory functions, to different levels of government, varies across the surveyed jurisdictions and across the different infrastructure areas. In particular, experiences differ between countries that are federations with strong sub-national governments (such as Australia, Germany, Canada, Mexico, and the US) and those that are not (the UK, and New Zealand). Europe has moved towards a quasi-federal system with the formation and development of the European Union (EU). Japan also has strong sub-national government, with prefectures involved in key areas of economic infrastructure. Spain appears to be unique amongst the countries surveyed, in that it has a national competition commission that enforces national competition law as well as other competition commissions that enforce regional competition laws, on the local level. There is also some sub-national regulation in Spain in the areas of water and ports; both of these areas typically do have sub-national regulation on some level.

Generally speaking, in relation to the assignment of regulatory functions to different levels of government across infrastructure areas, sub-national governments are more likely to be involved in the regulation of water and wastewater, ports, and airports, and these are also areas where the degree of regulatory independence is less clear. On the other hand, energy, telecommunications, and postal services, tend to be more strongly influenced by national governments. Postal service is the only area where there is no sub-national role in any country surveyed. The governance of water and wastewater in some countries has been problematic because of the involvement of governments at different levels. Externalities across state borders often give rise to a compelling case for greater centralisation of regulatory power, as was introduced in Australia in 2007.

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Sub-national economic regulators sometimes have a role in regulating the distribution and retail segments of energy markets. For example, while the National Energy Board in Canada regulates inter-province gas pipelines, energy development, and national and international trade; the economic regulation of intra-provincial energy producers and providers is the responsibility of provincial regulators. In the US, responsibility for regulation is also split between national and state-level regulation, with regulation of energy involving inter-state trade conducted by the Federal Energy Regulatory Commission, yet with state public utility commissions (PUCs) also playing an important role. Finally, in Germany, sub-national authorities regulate retail prices in energy unless the prices are levied nationwide.

Telecommunications regulation is, in nearly all surveyed countries, a national responsibility, however in the US, very broadly, the Federal Communications Commission is responsible for interstate and international communications, while the state PUCs are responsible for intra-state communications services. In the EU, member states of the European Union are responsible for telecommunications regulation within their own jurisdictions, however this is underpinned by a common legal and regulatory framework in the form of EU Directives and Regulations. As mentioned above, regulation of postal services is on a national basis for all countries surveyed, and is typically (although not always) part of regulation of the broader communications sector. Typical features of postal regulation readily lend themselves to national regulation. For instance, Universal Service Obligations would be harder to implement if regulation occurred at a regional level. As already mentioned, New Zealand and Canada are unique in having no postal regulator.

Water and wastewater utility services in all countries are provided at the local and/or state level. The operators are usually under municipal or state ownership, and subject either to basic economic regulation, such as retail price controls unrelated to costs of provision, or to no economic regulation (a notable exception being operators in England and Wales, which are privately owned and subject to price regulation). Local operators usually enter into some form of association with others for the supply of bulk water, and the disposal and treatment of wastewater. There is evidence, however, that local management and regulation has been inadequate for broader issues within river basins, such as: deciding between competing users; pollution; flood control; and managing hydroelectricity production. As a consequence, there has been an increasing tendency (including in the EU) towards an integrated approach across an entire river basin.

In Australia, because of the traditional role of the states in management of intra-state railways, access to these networks is governed by the relevant state or territory regime; while access to interstate rail and declared services is governed by the national access regime. In Europe, the division of responsibilities is made on a different basis: international freight, passenger transport, and national freight transport, is governed by EU legislation. National passenger transport is under national jurisdiction. Given the importance of rail for the European economy, the EU recognises the need for a coordinated approach to regulation, especially for rail at the borders of EU members.

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23 The division is a broad one; powers and responsibilities over telecommunications services may vary across the states.
24 Currently one line in the Pilbara region is a declared service.
Finally, in relation to airports, there is generally a greater role for sub-national regulatory authorities across the countries surveyed. An interesting case is that of Germany where the regulation of airports is split between national and sub-national governments with legislative, policy and supervisory functions vested in the relevant federal minister, but administrative and economic regulatory responsibilities significantly devolved to the state transport ministries.

The assignment of regulatory functions to different levels of government is reasonably straightforward in principle, but the practice is often problematic. Some of the considerations relevant to the division of responsibilities between different levels of government include: economies of scale and scope in the implementation of policy; jurisdictional externalities; the need to adjust to local conditions; and the value of experimentation.\textsuperscript{25} Energy, communications, river-basin governance, and national rail operations, broadly satisfy the conditions for centralised regulation. Urban water, urban transit, airports and ports, tend not to satisfy these conditions. Problems from shared responsibilities between different levels of government can be observed in all seven infrastructure areas covered by this research, with the issues being particularly strong in relation to water and wastewater and rail.

The political context is obviously also important in determining the division of regulatory functions between levels of government. The survey suggests that sub-national governments are less suited to the regulation of national infrastructure, such as communications, a national electricity market, or an inter-city rail network. Urban water, urban transit, airports and ports, are more normally assigned to sub-national governments. Questions arise as to the efficiency of sub-national allocations in some areas, particularly in relation to rail and the governance of a water basin that crosses jurisdictional boundaries.

**Decision-making Processes**

The characteristics of the decision-making processes employed by regulatory agencies in the surveyed countries appear to be related to the more general institutional design of those agencies, and to the regulatory framework within which regulatory agencies operate. The determinative body of many regulators is a commission or board. As already noted, the number of commissioners or members comprising these determinative bodies can vary from as few as three (the CER in Ireland) to as many as ten (the CRTC in Canada). Regulators have provisions for governing majority votes, casting votes, and quorums for decision-making. For instance, the NERSA in South Africa forms committees based around specific work areas. A decision is made based on the majority of votes cast by the members present at the committee meeting. In Mexico, all decisions by the energy regulator (the CRE) are made by majority vote of the commissioners. In the communications sector, a majority of members is required to be present to vote for any particular decision of the KCC (South Korea) and the IDA (Singapore). Mexico’s IFETEL (previously COFETEL) and South Africa’s CCC (an independent committee of the ICSASA), require the commissioners or members (respectively) in full to decide by majority vote. The Energy Market Authority in Singapore requires a quorum of at least one third of members to be present, and that quorum must have a simple majority vote for any decision. In Italy, the energy regulator’s Collegio makes all decisions by majority vote. For communications in Italy, a vote can take place as long as a majority of the commissioners is present, along with the President to ratify any decision. In Spain,

decisions generally require a minimum number of votes, rather than a simple majority, from the board of commissioners. Some infrastructure areas in Mexico are constitutionally required to be operated by the state, and, in these areas, decisions are guided strictly by regulations and law.

The decision-making functions of determinative bodies are, in rare cases, delegated. In the US, for example, the Federal Trade Commission (FTC) and the Federal Energy Regulatory Commission (FERC) delegate some responsibilities to the Office of Administrative Law Judges. When work is delegated by the Bureau of Consumer Protection (which partly performs the FTC’s anti-trust work), administrative law judges can: issue orders; resolve pre-trial litigation; conduct administrative hearings; and issue Initial Decisions. The FERC’s Office of Administrative Law Judges, traditionally resolved contested cases as directed by the Commission, either through impartial hearing and decision, or through: negotiated settlement; conduct of investigations as directed by the Commission; performance of various ADR procedures as directed by the Commission, including mediation, arbitration, facilitation, and acting as settlement judge; and presiding over ADR procedures at the request of the parties in cases assigned for hearing. These practices were reviewed in 2013, and the new role places stronger emphasis on the Office’s role in ADR processes. As already noted, in Germany, there are a number of determinative bodies within the regulator rather than a single determinative body. These bodies, known as ‘ruling chambers’, are organised along industry lines (electricity, gas, telecommunications, postal services), and also according to specific activities within the industries (system charges, general regulation and access issues, wholesale charges, and unconditioned local loop charges). This structure enables the decision-makers within each chamber to develop specialisation in the area they are regulating.

As discussed earlier in this chapter, in most infrastructure areas in the majority of the countries surveyed, regulators make decisions ‘independently’ of government. The main exceptions to this are: Japan, where ministerial control remains common, other than in respect of telecommunications disputes; France, in telecommunications, where some of the ARCEP’s functions require ministerial approval; in the postal industry in Ireland where ministerial consent is necessary for the ComReg to set uniform tariffs; and South Korea, where there is strong ministerial control of regulation, except in telecommunications.

It is common practice for regulators in most countries surveyed to make their decisions, and reasons for decisions, publicly available. There is some variation in decision length which may reflect the detail of reasoning (for example, a decision report on energy matters can range in length from a standard fifteen pages in a CRE determination in France, to hundreds of pages in NEB determinations in Canada). The decision length can reflect a number of other important factors: requirements around timely decision-making; the need to consult with stakeholders; and, if the decision is a review, whether the review is judicial or merits-based. It is also common practice for some regulators to issue draft decisions (or proposed decisions or preliminary views), with reasons, and invite submissions prior to making a final determination (the CER in Ireland, the Ofcom, and the Ofgem in the UK).

In summary, decision-making processes of regulatory agencies appear to be related to the general institutional design of those agencies. The ultimate determinative body in many cases is the governing commission or board. Various rules dictate voting regulations within specific countries. Commonly this means a majority vote of either
the full board, or quorum of the members present. In some cases, there can be more than one determinative body within the regulator. The majority of regulators make their decisions with reasons publicly available, although there is some observed variation in decision length which may reflect differences in the detail of reasoning. Many regulators issue draft decisions and invite submissions prior to making a final determination. The extent to which such submissions influence final regulatory decisions is considered more fully in the next chapter.

Adapting to Changes in Regulatory Context

Across all the jurisdictions and infrastructure areas surveyed, the context in which regulation is practised is constantly changing in response to factors such as: technological advances; changes in input costs; changes in the availability of resources (for example, gas and water); shifts in user demand; and changes in public policy, for example, in relation to the environment. These dynamic changes in context are seen to require the continuing review of the design of regulation to ensure that it remains: fit-for-purpose; proportionate; and does not impede changes that may bring wider long-term benefits. While this is particularly important in energy and telecommunications, it is also present to greater and lesser extents in the other five infrastructure areas surveyed.

There are several ways in which the institutional design of regulatory regimes in the surveyed countries attempts to ensure that changes in context are monitored and accounted for. In some countries specific bodies are established for this purpose. For example, in Korea, a Regulatory Reform Committee (RCC) has been established to evaluate regulation, and consider and recommend relevant reform. In Mexico, a single better regulation agency is responsible for reviewing all regulatory proposals; while in other jurisdictions there more ad hoc reviews of regulatory arrangements and the need for regulatory reform (for example, the UK).

In Europe, initiatives at the EU level guide regulatory regimes in member states through the development, issuing and ‘enforcement’ of numerous directives relating to the regulation of key economic infrastructure. Countries, such as Germany, Italy, Ireland, the Netherlands, Spain, Sweden, and the UK, have largely transposed EU directives into national law and are implementing regulatory regimes that are in compliance with them. At least some of the changes that have occurred in some European regulatory regimes may be the result of implementing EU directives, rather than responses to internal political or economic pressures for change. European regulatory development is also influenced by the various pan-European associations. Often EU legislation requires members to participate in these bodies, which aim to ensure that EU legislation is consistently implemented across countries.

In contrast, the development and reform of the regulatory regimes in some countries, has been less systematic and planned. For instance, the regulatory institutional structure in the US is complex; drawing upon a long history of experiment and pro-competitive reforms dating back to the early twentieth century, particularly for rail. The evolution of the regulatory system in the US is also apparent in the layered structure of regulation, and the complex relationships between different regulators. There is a significant amount of regulation at the state level, typically by PUCs, with various national bodies put in place to regulate under particular circumstances, where a more integrated approach is necessary. In order to provide consistency across state

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regulators, the National Association of Regulatory Utility Commissioners has been developed. Further to this, competition policy is managed by two bodies, each with different abilities to deal with anti-competitive behaviour: the Department of Justice Antitrust Division, which is guided by legislation laid down in the late nineteenth century; and the Federal Trade Commission, established later in 1914. This means that, in some circumstances, regulated entities can fall under the regulation of three separate bodies.

In Australia, a major influence on regulatory reform was the National Competition Policy (NCP) reform agenda, which was agreed in April 1995. The NCP is underpinned by three intergovernmental agreements including the Competition Principles Agreement (CPA), which is intended to guide governments in the reform and regulation of economic infrastructure. Implementation of the NCP, mainly through the Council of Australian Governments (COAG), has required ongoing bipartisan co-operation between the three layers of Australian government. Within this context, bodies such as the Productivity Commission have undertaken reviews of the appropriateness, and impacts of, regulation in different infrastructure areas, including: telecommunications; the gas access regime; airports; electricity; and ports.

**Key Points on Institutional Design**

The international review reveals a variety of institutional arrangements, usually influenced by a number of structural factors, such as: the size of the country’s economy; its stage of market and regulatory development; and the influence of socio-political factors, including the relative strength of dirigisme versus more free-market tendencies. In larger economies, there appear to be benefits to specialisation in regulation; it can be unwieldy to have one regulatory body, and it can become difficult for decision-makers to have the required knowledge across all regulated areas. Regulation takes place in a dynamic context, and most countries have mechanisms for the review of their regulatory institutions in the face of changes in technologies, market conditions, and broader policies.

The largest of the seventeen economies, the US, has the most complex organisational structure, although there is a strong commitment to independence of the regulators. Because communication and energy utilities have some state-level oversight, the activities of the Federal Communications Commission (FCC) and the Federal Energy Regulatory Commission (FERC) are closely monitored, and state regulators participate in the FCC and the FERC proceedings through intervention, and the filing of comments. Both national and state regulators may be involved with merger issues, and there is a certain level of overlap between the functions of economic regulators and the Federal Trade Commission and the Department of Justice – most national US economic regulators have competition-law powers under their enabling legislation. The size of the US and the relatively significant role the states play in regulation also suggest that conglomeration of regulatory responsibilities within a single ‘mega regulator’ seen elsewhere, is unlikely to be feasible. Canada, a middle-sized economy, has been influenced by its proximity to the US, and its state and federal divide impacts on the institutional structure. Interestingly, in some sectors in Canada, the breadth of regulation, and the extent of discretion of the regulators, are left up to the sub-national regulators. For instance, regulators of energy in Alberta and Ontario

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27 This was initiated by the Report of the Independent Committee of Inquiry (F Hilmer, chair), *National Competition Policy*, AGPS, Canberra, 1993.
both have different regulatory tools at their disposal, with varying emphases placed on regulation through market mechanisms in different provinces.

The UK structure is diverse, encompassing, inter alia: industry-specific regulators (water and wastewater, rail and airports); sector-specific regulators (energy and communications); the Competition and Markets Authority (resulting from the merger of the OFT and the Competition Commission); and the specialist independent Competition Appeal Tribunal. The formation of the CMA is expected to enhance coordination; currently pursued with concurrency guidelines, committees (for example, joint regulators’ group) and conventions (for example, the Concurrency Working Party). The current UK system is characterised by some conglomeration of regulatory bodies, although only up to the sectoral level (traditionally, regulation was typically industry-specific in the UK), as it is considered by some that the benefit of maintaining sectoral regulation is that regulation can be more refined and specific. The UK’s political structure gives little scope for regulation by sub-national entities; although water is regulated separately in Scotland; and the Northern Ireland Utility Regulator is responsible for water, gas, and electricity.

Another of the large economies in the survey, Germany, has a multi-sector regulatory body (the BNetzA), and a cartel agency. Distinctive characteristics of the BNetzA are the compartmentalisation of regulatory areas and functions; and a separate decision-making structure. The six regulatory divisions are divided by both industry and function into tightly scoped areas of activity. The nine Ruling Chambers are organised according to different industries or sectors, and also according to specific activities. Each Ruling Chamber has complete autonomy to manage and decide matters within its remit. There is no formal requirement for one ruling Chamber to review, or even view, the decisions of other Ruling Chambers. In a highly controversial decision, the President of the BNetzA will typically be notified but will not intervene. The system places great weight on a sophisticated understanding of a specialist area of activity. This system seems to capture the benefits of conglomeration of regulation into one body, whilst sidestepping one of the issues of such conglomeration faced by larger countries. As with other federations, there is a significant role for sub-national regulation of some areas in Germany. Interestingly, the rules determining which level of government is responsible for regulation, depend on whether the regulated business spans state boundaries (which is common) and, less commonly, on the size of the regulated business.

Japan, Korea, and France are different again. While they have a diversity of institutions, they have a less well-developed pattern of independent regulation. The reliance on regulation through non-independent sources is often strongly tied to the political history of the nation; this is particularly true of France. Italy also has a diversity of institutions.

Spain, Australia, and the Netherlands, are the largest economies to have a mainly conglomeration institutional structure. New Zealand also has a national competition authority with responsibility for economic regulation in key areas. This tends to suggest that conglomeration may be somewhat related to the size of the country. For small countries, the gains from scale in regulation (for instance, not needing to duplicate specific regulatory roles across sectors) are still comparatively large compared to the costs. Adaptation of regulatory systems is also quite apparent in all

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of these countries: Spain and the Netherlands have transitioned to regulation by one body; the Australian Government is conducting a review of regulatory and competition policy; and New Zealand has performed various reviews of regulation.

The other smaller economies – South Africa, Singapore, Ireland, Sweden, and Mexico – continue with a diversity of institutions, but are all undergoing significant regulatory development.29 Industry-specific directives from the EU have clearly impacted upon regulatory design in Ireland and Sweden, but variations in application can be observed. The Irish Competition Authority has overlapping functions with the regulators for energy, communications, and airports; and co-operation agreements provide guidance about which party should have priority in exercising particular regulatory functions. The Swedish Competition Authority coexists with separate sectoral regulators, and three consumer authorities.

29 Recent changes in Mexico have involved the granting of new powers to the antitrust agency and the creation of a telecommunications and broadcasting regulator with powers to enforce competition rules in both the telecommunications and broadcasting sectors (Delgado and Mariscal, 2014).
3. Engagement with Interested Parties

An increasingly important aspect of the decision-making process, with respect to the economic regulation of infrastructure, involves consultation and engagement with interested parties. It is agreed that one way in which regulatory decision-making can be made more balanced, more efficient, and more transparent, is to take into account the interests of all stakeholders. This chapter considers: the relevance of regulatory engagement with interested parties, noting its increasing prominence in many jurisdictions; how differences across infrastructure areas impact on the type, and range, of interested parties in regulatory processes, and the matters on which engagement occurs; how interested parties themselves are organised, and interact with regulators; the nature of engagement with interested parties in retail-price controls, wholesale-price controls (access price determination), complaints or dispute resolution, and policy; and, briefly, the available evidence on the effectiveness of engagement processes.

The Reasons for Engagement

Regulators in many jurisdictions are placing an increasing emphasis on the process of consultation. This appears to have been partly motivated by a desire to better inform decision-making, and also to improve the transparency of decision-making, consistent with various ‘better regulation’ initiatives introduced around the world. Regulators in most countries surveyed now have a statutory duty to consult in regulating certain infrastructure areas. There has also been a growing focus (particularly in Australia, New Zealand, and the UK) on the ‘effectiveness’ of engagement processes (particularly in relation to end-consumers) and on how institutional arrangements might improve the capacities of interested parties to engage in regulatory decision-making, or to create incentives for, regulators to take into account views and information obtained through engagement processes. This can be seen as a shift in focus from ‘consultation’ to ‘engagement’; the latter notion encompassing a more active, effectual, two-way interaction between a regulator and interested parties. The increased focus on engagement processes appears to reflect a number of factors.

Firstly, liberalisation has resulted in a wider range of parties being affected by regulatory decisions, and therefore with views relevant to regulatory decision-making. In addition, in some jurisdictions, regulators need to take account of the wider impacts of their decisions, for example, in relation to the environment or vulnerable consumers; and this also requires consideration of a broader range of views.

Secondly, an increasing political focus on the impacts on end-consumers of rising prices (particularly in energy, transport and water) has led some governments to reconsider the efficacy of existing arrangements for taking consumers’ views into account, in regulatory processes.

Finally, a view has emerged in some quarters that regulators may not be best placed to represent different interests, particularly consumer interests. This has led to the consideration of the merits of alternative regulatory arrangements, including those adopted in North America, which allow the direct involvement of consumers and other interested parties in regulatory settlements.

An increased focus on engagement with interested parties is often seen as a positive development, in so far as it raises the expectation of ‘better outcomes’ (more balanced and efficient) and greater transparency. However, engagement also raises time and
cost considerations. Higher levels of engagement with a wider range of interested parties can lengthen the time taken to reach a regulatory decision and result in additional costs. Issues also surround the capacities of interested parties to engage in highly technical matters, and the degree to which those who do engage have an impact, or are capable of impacting, on particular outcomes. If engagement is perceived as fruitless, this can have wider implications for the legitimacy of a set of regulatory arrangements.

**Differences across Infrastructure Areas**

The different economic and physical characteristics of each infrastructure area, and the different policies that have been pursued with respect to market opening and competition, impact on the number and type of ‘interested parties’ in an area.

Interested parties in regulatory processes for electricity can include: generators of various types, including renewable energy bodies; transmission network operators; distribution network operators; electricity supply businesses; system and market network operators; large industrial users; consumer representatives; and other bodies such as environmental groups, and community groups representing aged or vulnerable consumers. In jurisdictions where short-term wholesale trading markets have developed (such as the US, New Zealand, Australia, the Nordic countries, and the UK), participants in such markets may also constitute interested parties for certain types of governance or regulatory decisions. Similar types of interested parties can exist in the gas industry, although obviously, it is gas producers, and third-party gas shippers and traders, that have an interest in regulatory processes in that industry. Specific policies can also influence who has an interest in the decisions of energy regulators. For example, in Europe, the EU has established targets for reductions in greenhouse gases, and for increases in generation from renewable sources and energy efficiency. Therefore, environmental bodies may have an interest in the processes of economic regulators. Finally, in federal systems, where energy systems/infrastructure cross state borders, states are likely to have an interest in certain federal regulatory decisions (and vice versa). In the jurisdictions surveyed, the principal regulatory processes in which interested parties might be engaged in relation to energy are: *ex ante* retail-price control processes; *ex ante* price-control processes in relation to wholesale transmission and distribution tariffs; determinations of price and access conditions by regulatory dispute resolution or by the investigation of a complaint; and processes for the development of network codes.

In telecommunications, the interested parties in regulatory processes can include: the various fixed-line and mobile-network infrastructure operators (the access providers); providers of competing infrastructure (such as cable or satellite companies); various types of access users who do not own their infrastructure; providers of content which use the network infrastructure; large business users of communications services; and end-consumer representatives. Again, specific policies impact on who has an interest in telecommunications regulation. In the EU, for example, in the context of aspirations for a single European telecommunications market, the European Commission and a pan-European regulator’s group (BEREC) must be consulted in relation to certain regulatory decisions of telecommunications regulators in member states. Further, the characteristics of telecommunications (and as technology develops, market power can shift rapidly) mean that, in some jurisdictions, regulators must engage with anti-trust/competition authorities in conducting regulation. Finally, because governments increasingly perceive a correlation between effective
telecommunications infrastructure and positive economic outcomes (reflected in Australia’s National Broadband Network, and ‘Broadband for All’ in Europe), specific government departments and business groups could include interested parties in the decisions of economic regulators in this particular area. The principal regulatory processes in which interested parties might be engaged, vary across the surveyed countries. A continuing regulatory task, therefore, in some jurisdictions, and particularly in member states of the EU, is the periodic assessment of areas of substantial market power in different markets and the imposition of regulatory remedies or obligations on providers of those services or infrastructure, including access and price regulation. Retail-price regulation processes are also evident in some jurisdictions in relation to some services.

Regulatory processes for postal services vary, depending on whether certain services continue to be provided by statutory monopoly; or whether competition has emerged, creating requirements for regulation of access to a dominant provider’s postal network. In liberalised postal markets, the interested parties in regulatory processes can include: incumbent postal operators; entrants into specific services (such as bulk mailing or parcels); large users of postal services; and representatives of consumers. Regulatory processes in which interested parties may be engaged include: the ex ante setting of retail prices for a dominant postal operator or for certain universal service activities; and the regulation of access of competitors to a dominant provider’s postal networks.

Regulatory processes in water and wastewater tend to include fewer ‘market participants’ than in other areas, reflecting the limited vertical separation and market opening that has been pursued. Interested parties tend principally to include: the water and wastewater operators; representatives of large users (such as industrial and commercial users); and, in some jurisdictions, final-consumer representative bodies. Economic regulators sometimes engage with other bodies, such as those representing health and safety (drinking water quality), and environmental regulators. Regulatory processes in which engagement might occur include: retail-price regulation; access pricing; and water-management decisions.

Where market-opening policies have been pursued in rail, the processes in which interested parties may be involved include: setting or supervising passenger and/or freight tariffs; determining access requirements, including capacity-allocation; and approval of rail-infrastructure projects. Interested parties can include: the rail-track infrastructure owners (access providers); train operating companies, including passenger and freight companies; large users; and representatives of end-user groups.

Interested parties in airport matters include: airport operators; airlines; other users of aeronautical services; ground-service providers; ground-service users; and representatives of end-users of air transport services (for example, airline passengers). The principal regulatory processes evident in relation to airports are: ex ante price control processes for airport charges; determinations of prices and access conditions via regulatory dispute resolution or by the investigation of a complaint; and the processes for selection of ground-handling providers and other airport charges.

Interested parties in the economic regulation of ports include: port authorities; commercial providers of port services (such as pilotage, towing, and mooring); any concession holders of port land; and port users. The principal processes of interest in relation to ports are tariff setting (for both port access and the provision of port
services) and the processes for the selection of port-service providers and for determining the number of such providers.

The Organisation of Interested Parties, and their Interaction with the Regulator

Consumer-representative Bodies and Advocates

Consumer-representative bodies exist in many of the jurisdictions surveyed and they exhibit diversity in relation to their status, composition, and the nature and frequency of their interaction with regulators (including their standing in regulatory processes). A particular distinction can be drawn between consumer groups which have a broad representation, and are intended to represent all types of consumers, and those which focus on specific types of consumers (such as vulnerable consumers, the aged, and consumers in a specific industry). In some of the countries surveyed, consumer-representative bodies are established voluntarily, while in others such bodies are established or recognised by legislation and have a legislative remit. For example: in France, a Federal Union of Consumers is the main consumer-advocacy group for all infrastructure areas, and is established voluntarily; in the UK, Consumer Futures is established by statute to represent consumers across a number of regulated areas; in Australia, in energy, a statutorily established Consumer Advocacy Panel is tasked specifically with granting funds for consumer advocacy and research on electricity and gas issues. The Swedish Consumer Agency is a government agency. Statutory representative bodies may be formed outside the regulator, or may sit within the regulator, but operate at arms-length. For example, in Britain the Rail Passengers Council (Passenger Focus) is an independent consumer body in the railway industry, which is external to the regulator, and is a non-departmental public body sponsored by the Department for Transport. In the US, a legislated consumer advocate provides an alternative model for consumer representation in the regulatory process in certain infrastructure areas. Such consumer advocates may be established within a regulatory office, or be constituted as a separate body, and have standing to represent, and advocate for, consumers in formal regulatory processes and in informal regulatory settlements. For example, in California, the independent Division of Ratepayer Advocates’ (DRA) statutory role is to advocate on behalf of the customers of regulated utilities. The DRA participates as a party representing consumers in CPUC proceedings, including: rate settings, investigations; rulemakings; CPUC-sponsored working groups; advisory boards; workshops; and other forums.

In some jurisdictions, regulators have established consumer panels, councils or committees to represent consumer interests in consultation processes, and/or to provide an additional informal avenue of consultation with consumer representatives. Such panels have sometimes been established in recognition of the difficulties that less well-organised consumers, such as household consumers or particularly vulnerable consumers, face when engaging in the regulatory process. For example, in Britain, the energy regulator’s Consumer Panel works with the Ofgem on policies before public consultation. In the United States, a Consumer Advisory Committee within the Federal Communications Commission advises it on relevant consumer issues and seeks to facilitate the participation of consumers in regulatory processes. In Singapore, a Water Network Panel represents different stakeholders and the community in the water agency’s projects and programmes. As an alternative model, in the England and Wales water industry, the infrastructure operators themselves are required to establish consumer panels and engage with this panel before commencing formal regulatory processes.
The number of members on such panels varies, from under ten to over 100 (for example, the Ofgem’s ‘consumer first panel’). The composition of consumer panels also varies, and some panels and advisory committees are populated by a broad cross-section of interests, such as people of different genders, age, and disabilities. In some cases, the regulator has an MOU with the panel in relation to their interaction (for example, the Ofcom has a MOU with the Communications Consumer Panel).

Consumer representation is sometimes concentrated in a single ‘peak’ body intended to represent consumers across a number of different regulated areas or jurisdictions. There is a trend in some jurisdictions, such as in Australia and the UK, towards a consolidation of existing representative bodies into such a peak body. For example, the UK has amalgamated a number of sectoral consumer representative bodies into a single body (Citizens Advice) to represent consumers’ interests in regulatory processes across a range of different areas. In the Netherlands, two major consumer groups provide consumer advocacy on energy and water matters. The Association for Energy, Environment and Water (VEMW) represents the industrial users of electricity, gas and water, and is part of the so-called ‘user platform’ being consulted by the energy sector and the regulator on defining tariff and non-tariff supply conditions. The Consumer Council (Consumentenbond) aims to protect consumer interests broadly across the economy.

With respect to funding, some bodies, particularly those established by statute, are funded centrally by the state or via a levy on operators, while other consumer-representative bodies, particularly voluntary ones, tend to be funded by: donations or membership subscriptions; private sources; or through government grants related to particular initiatives. In Canada, the Office for Consumer Affairs can allocate funding to non-profit consumer groups (up to CA$500,000 a year) for research projects. New Zealand’s Electricity Authority is required to consider providing limited funding assistance for consumer representatives where it considers that this may improve the quality of decision-making. Few of the surveyed countries appear to have provisions for ongoing public funding of external groups representing consumers. Consumer-advocate groups that are integrated within regulatory agencies are typically funded by their own independent budgets. Where regulatory arrangements require infrastructure operators to establish end-user panels, the operators bear the cost of these arrangements.

Infrastructure-operator Representative Bodies

Infrastructure-operator representative bodies are typically funded by the infrastructure operators, and are generally active both in responding to regulatory-consultation processes and in the development of regulatory policy in their area. In some countries, infrastructure-industry bodies are established or recognised by legislation and may have a legislative remit. These bodies may also be recognised, or consulted, in relation to matters outside of specific regulatory processes. One way in which regulators engage with infrastructure representative bodies is through participation on representative councils or forums (described below). Infrastructure representatives also play a role in the development and implementation of network codes (multi-party modifiable agreements applying to all of those who access particular infrastructure). Such arrangements for the governance of network codes can be seen, in particular, in energy (the UK and Europe), and in telecommunications. For example, the Telecommunications Carriers’ Forum (TCF) in New Zealand can prepare and propose draft access codes for certain telecommunication services to the CCNZ.
Representative Forums and Advisory Councils

In a number of countries regulators interact with a range of interested parties – user groups, access seekers, producer bodies and other interests – through bodies variously known as: ‘representative councils’; ‘forums’; ‘committees’; or ‘advisory panels’. Such bodies are most common in energy and telecommunications, but also occur in other infrastructure areas. In Japan, the Ministerial energy regulator engages with an Electricity Utility Industry Council, composed of academics, utilities, new entrants, end users and social groups. In New Zealand, the Government Policy Statement on electricity governance requires extensive use of advisory groups to develop industry arrangements and make recommendations concerning regulations and rules. In France and Ireland, the energy regulator coordinates and facilitates meetings of various ‘work groups’, which are intended to maintain dialogue between network operators, producers, distributors, suppliers, consumers and the regulator; and to advise on work relating to different aspects of market design and policy. In Japan, the MIC is required to consult with a Telecommunications Council (comprising representatives of different interest groups) in relation to charges and other matters. The French telecommunications regulator participates in meetings of a telecommunications consultative committee, which hears reports from end users, producers, government and all other industry participants. In the Netherlands, market participants in telecommunications have established a voluntary forum operated entirely by market participants designed to deal with issues on access and interconnection outside the formal regulatory process.

The frequency of interactions of such councils with regulators can vary significantly. In some instances, regulators are required to consult with such bodies as part of regulatory processes, while in others, relations with these bodies are informal and operate outside of specific regulatory processes and matters. The composition of these forums can also vary, and may reflect diverse interests and national characteristics such as workers’ unions in France. While different councils have different functions, in general, such bodies may have a role in apprising regulators of current issues facing participants in their particular infrastructure areas, and facilitating decision-making that is informed by a broad consensus or understanding of specific issues. International experience suggests such bodies may be of particular use in the early stages of liberalisation, and in infrastructure areas characterised by rapid technological innovation.

While the operation of advisory councils or forums appears to be less common in areas other than energy and telecommunications, some examples exist in water and wastewater and rail. In Japan, a water council represents a broad range of interests such as industry bodies, the housewives association; energy interests (hydroelectricity) and trade unions. Rail industry participants in the US are represented by the Railroad-Shipper Transportation Advisory Council (RSTAC) that advises on regulatory, policy and legislative matters relevant to small shippers and small railroads. In the ports industry, the interests of various groups, including port users, may be represented more directly through structural arrangements relating to the port authority. For example, in France, port authorities are headed by a council with 26 members, 13 of which represent the principal users of the port. In Singapore, a statutory board, which sets fees and charges, is comprised of eleven members from: business; the union movement; academe; and government.
The Nature of Engagement with Interested Parties

Engagement in Setting of End-user or Retail-price Controls

The principal interested parties in retail-price control processes are end-consumers, consumer representative bodies and entities supplying the retail product. Governments can also have an active interest in these price-setting processes. In some jurisdictions, certain services – such as energy and telecommunications – are no longer subject to formal end-user price controls. At the other end of the liberalisation spectrum, particularly in water and wastewater and rail in many jurisdictions, there are high levels of government ownership and control, and retail prices tend to be set administratively, with typically more limited engagement reflecting perceptions of a less diverse range of relevant interests. In between, there are various ways in which regulators engage in relation to retail-price matters.

Regulation of retail energy tariffs can take different forms, including: the setting or approval of prices; price-cap regimes; or simple notification requirements (Japan). For example, 18 EU member states still regulate end-user prices, particularly in electricity. Engagement with interested parties can vary depending on whether regulators set end-user tariffs ex ante, or do so in the context of resolving a dispute. Where end-user price controls are set ex ante, engagement may take the form of open consultation with interested parties. In the US, end-user tariff changes are typically dealt with as a dispute to be resolved between the parties, and are subject to the formal regulatory process only if negotiation fails. In this respect, engagement needs to be considered both in the negotiating process and in the formal regulatory process. In negotiating a settlement between the parties, a statutory representative – the Office of the Consumer Advocate – may represent consumers, and this body will typically be a party to the settlement agreement. The agreement between the parties needs to be approved by the regulator, but this process does not typically involve a full regulatory hearing where interested parties might seek to participate/intervene. Nevertheless, the extent of engagement evident to the regulator in formulating/reaching the negotiated settlement will go to the question of whether the agreement satisfies the statutory criteria for approval.

If a dispute is not resolved through negotiated agreement, and goes to a formal dispute-resolution process, participation will be limited to those with standing as ‘intervenors’, including the statutory consumer representative. Similarly, in Alberta, the regulator provides and encourages ADR for parties as an alternative to regulatory or litigated decision-making. This may include a pre-hearing meeting, the design and goals of which are created to suit the particular dispute. The regulator facilitates such meetings on the basis that, even when they do not result in a final resolution, they further define and narrow the disputed issues and raise awareness of the hearing process.

In jurisdictions where formal retail-price controls have been removed, regulatory supervisory and information-collection activities related to retail markets are typically evident, and engagement with interested parties is sometimes observed. For example, Britain’s Ofgem completed its Simpler, Clearer, Fairer retail market review in 2013 that involved open consultations, followed by more detailed discussions with stakeholders, including suppliers and consumer groups. Ireland’s energy regulator has established panels to advise on retail-market issues in the deregulated electricity retail market, including the Retail Electricity Market Industry Governance Group (comprising the regulator, suppliers, the transmission system operator and the assurance body) and the Retail Market Development Group (which comprises supply
and network business representatives and has a supplier-to-customer focus) to assist the regulator in its role of policy formulation. In the Netherlands, retail-market suppliers must submit their prices to the regulator for monitoring purposes.

The regulation of retail prices in telecommunications is a feature in some jurisdictions; with variation in the extent of engagement with interested parties in the regulatory process. In Mexico, retail tariffs are determined by a government department; rather than by a regulator (that only gives an opinion on authorisation). At the other end of the spectrum, any interested party in Canada has a right to participate in applications for general rate increases. In some other jurisdictions, participation rights are not automatic.

Consumer panels or committees in telecommunications can provide advice or advocacy in consumer and end-user matters, both in terms of general policy, and at the level of individual regulatory decisions. Again, there is variation in the composition, status and manner and frequency with which such bodies interact with regulators across jurisdictions and infrastructure areas. In South Africa, a legislatively established Consumer Advisory Panel provides advice on consumer affairs matters and promotes and protects the interest of the public. In France, a Consumer Affairs Committee provides consultation and acts as a forum for discussion of consumer issues within the portfolio of the regulator. The UK’s Communications Consumer Panel advises the regulator on the consumer interest in the markets it regulates, with particular attention to vulnerable consumers (for example, rural consumers, older people, people with disabilities and those on low incomes or otherwise disadvantaged). Similarly, the US federal telecommunications regulator has a Consumer Advisory Committee to make recommendations regarding consumer issues within the regulator’s jurisdiction, and to facilitate the participation of consumers (including those with disabilities and under-served populations such as Native Americans and people in rural areas) in proceedings before the regulator, including rule-making processes.

The extent of involvement of interested parties in retail price regulation of postal services reflects the extent of liberalisation. Where statutory monopolies operate in relation to the provision of certain letter services, this impacts on the process for retail price setting. In Canada and South Africa, for example, a gazetting system operates, whereby proposed changes to postal regulations or certain postal rates are published and subject to a consultation period, or a period in which the public can make objections (60 days in the case of Canada, 30 for South Africa). In South Africa, a public hearing may also be held. In the US, a 45-day public-notice period is required before any rate adjustment of ‘market dominant’ products. The regulator must also approve the rate change as compliant with the price cap on market-dominant products – and the public will have 20 days from the filing for this approval with the regulator to provide comments to the regulator. If the regulator determines the rate proposal is not compliant with the price cap, the monopoly provider must propose the action it will take to comply with the requirement and the public will have a further ten days to submit comments. Further, the regulator will designate an officer to represent the interests of the general public in the process for approving the rate proposal. Where the regulator determines the rate proposal is non-compliant it must explain the basis of its determination to the provider and suggest a remedy. In contrast, the designated postal provider in Korea must only consult with the relevant Ministry in determining postal rates.
Where postal services have been liberalised and statutory monopoly removed (as in the EU), the price-control process typically only applies to the designated universal service provider (in relation to its universal service activities) or to any dominant service provider. Differences in the process of engagement can be observed across member states. The UK’s Ofcom publishes its proposals and engages with a number of committees and advisory bodies representing different interest groups, including committees representing the aged and disabled, and representing the different countries that comprise the UK. Similarly, in Germany, competitors, consumer groups and other interested parties can comment on the regulator’s draft decision in relation to the proposed price-cap procedure of the dominant provider. In Sweden, the regulator supervises the prices for universal services and is required to act in the best interests of consumers. Outside Europe, engagement with interested parties in price-control processes in liberalised postal markets varies – in New Zealand, there is no *ex ante* control of retail prices, while, in Japan, universal services are provided at regulated rates, but no public consultation is evident.

Australia, Italy, England and Wales, Scotland, and some US states have an independent economic regulator involved in retail-tariff setting or approval processes for the supply of water and wastewater services. The Italian regulator determines tariffs for water services, and is statutorily required to protect the rights and interests of users. It consults with operators and the associations representing interested parties including consumer groups, environmental groups, trade unions and business associations. This consultation involves the circulation of documents and collection of written observations, and collective and individual hearings. The various state public utility commissions in the US follow the processes that apply in relation to other infrastructure areas. Thus, for example, in a rate-approval hearing of the Californian PUC (CPUC), the Division of Ratepayer Advocates within the CPUC represents the interest of consumers. Informal resolution is encouraged before formal processes, where participation of interested parties will depend on standing. In Washington State, where the rates of privately owned water businesses are regulated, proposed retail rate increases are determined by the regulator at an open public hearing.

The most elaborate system for engagement with interested parties in retail price-setting in water and wastewater is in England and Wales, where the involvement of consumers has been a particular focus post-privatisation. For the forthcoming price review from 2015, measures for consumer involvement included the following. First, there were requirements that each business undertake ‘local engagement’ to understand its customers’ views and to inform the development, and test the acceptability, of its business plan. ‘Local engagement’ obliges businesses to test consumers’ views on the acceptability of their overall business plan through the collection of quantitative evidence. Such evidence needs to include consumer views in relation to: billing; complaints handling; tariffs; metering; and local-service level issues (such as reliability of supply and sewer flooding). Second, customer-challenge panels charged with ensuring that the overall package is acceptable to consumers were established. These panels consider the evidence on the extent of direct customer engagement, and how the business has responded in its business plan to any issues raised. The membership of the customer-challenge group is intended to be diverse and to include: consumer representatives (such as the Consumer Council for Water); customer and community stakeholders (including local authorities and businesses); and representatives of particular segments of society (such as the elderly, through Age UK). Third, an industry-wide customer advisory panel was created. In relation to the
customer-challenge panels, the water businesses are responsible for establishing their own panel. The regulator (Ofwat) will not be a full-time member of the customer-challenge group, but may attend meetings occasionally, and will ‘take account’ of the panel’s advice when considering the companies’ business plans. The Ofwat expects that the customer-challenge panels will be able to tell it how effective a company’s engagement with consumers has been, and how the priorities identified by customers have been taken into account in its final business plan.

In those jurisdictions where there is no separate economic regulator, retail water tariffs are set by local authorities, or by water businesses supervised by their local authority owners (Netherlands, France, Japan, Spain, Germany) or by administrative means. While there is no evident obligatory engagement with interested parties in these pricing processes, legislated pricing principles are evident in some jurisdictions — these may reduce the need for such engagement in pricing processes. In South Africa, basic water supply and sanitation is legislatively required to be free of charge. In Korea, most farmers are exempt from water charges, while, until 2015, there were no domestic water charges in Ireland.

There is limited independent economic regulation of retail passenger and freight tariffs for rail services in the jurisdictions surveyed. As a consequence, retail tariffs tend to be determined by government departments or are set administratively. Exceptions include Korea, where passenger fares are subject to a price cap, and where studies of consumer groups, and public opinion obtained from public hearings, are considered when setting the cap.

In all jurisdictions other than South Africa, there is no independent economic regulation of ports in terms of setting port access charges, and little regulation of the charges for other port services (such as pilotage, towage, and mooring). Accordingly, most port authorities and other port-service providers set their own charges subject to the requirements of any industry-specific legislation and the competition-law framework. Statutory requirements to engage or consult with port users and other interested parties before setting tariffs are not widespread. More common are notification requirements (for example, to display new charges publicly) accompanied by specified objection periods (for example, UK, Ireland, Canada). In South Africa the economic regulator for ports has to approve tariffs annually – stakeholders are engaged by the regulator in the period running up to the tariff application. Industry clusters, particularly on the cargo-owner and transport-facilitator sides, are engaged before the tariff application to ensure that adequate awareness exists about the tariff processes and timelines. In Canada, a public port considering a change in pricing must give all service users a reasonable opportunity to provide ideas or proposals to improve the services to which the fees relate. The US’s federal independent regulator has a specific remit in relation to the regulation of certain ports known as ‘public ports’. While it does not regulate port fees or access to these ports, in relation to transportation related to foreign trade, it must approve agreements between port authorities, and between port authorities and ocean carriers, to discuss, fix or regulate rates, or engage in exclusive, preferential or cooperative working arrangements. Interested parties can submit written comments.
Engagement in the Setting of Wholesale Price Controls and Access Prices

In most jurisdictions the tariffs charged by electricity and gas transmission and distribution operators are regulated. In many jurisdictions (including: Ireland, the UK, Australia, Canada, South Africa, and New Zealand), the access provider is typically engaged in the first instance by submitting a pricing proposal, and other interested parties are engaged during assessment, typically in the form of public consultation. Consultation most commonly takes the form of an opportunity for stakeholders to make submissions in response to draft decisions, regulatory applications, issue papers or consultation documents. Consultation may also occur through a right or opportunity to participate in an oral hearing. In New Zealand, network businesses (except consumer-owned businesses) are subject to price-quality paths, and interested parties can give views in the regulatory processes establishing, amending or approving Input Methodologies for these paths. Consultation may occur through formal or informal mechanisms or a combination of the two, and some regulators conduct additional consultation outside formal consultation timelines. For example, the UK energy regulator engages in pre-consultation with stakeholders to ensure that it has a clear understanding of the issues before commencing formal consultation. Similarly, Ireland’s energy regulator publishes a consultation paper only after holding discussions (and sometimes an open hearing) with regulated entities and other interested parties. At this hearing, regulated businesses present their submissions and respond to questions by interested parties. In South Africa, public hearings are held in all provinces to encourage participation in these processes.

As wholesale prices affect end-user prices, specific initiatives have been developed in some jurisdictions to enable final consumers (such as households) to be involved. These initiatives have tended to be a response to perceptions that final consumers were unable to participate in existing consultation processes. For example, in Britain, transmission and distribution businesses are now required to engage (and are rewarded for engaging) with end consumers of their services on various parts of their business plan, which they submit as part of the price-control process. The regulator and the regulated businesses have established processes to facilitate this engagement with users. In particular, open workshops seek to define the ‘outputs’ that stakeholders, including consumers, wish to see addressed in the company’s business plan. The regulator has also established a ‘consumer challenge panel’ to ensure that access/wholesale price-control settlements are in the best interest of consumers. In Australia, the Australian Energy Regulator has established a purpose-specific Consumer Reference Group and a Consumer Engagement Guideline developed to align the provision of network services by energy network businesses with the long-term interests of consumers.

In the US and Canada wholesale tariff determination in energy generally takes the form of dispute resolution. Tariffs are expected to be negotiated between relevant parties, and recourse to mediation or other forms of ADR (which may be private) are encouraged prior to a formal regulatory process. In the gas industry in Canada and the US, the federal energy regulatory agencies seek to discourage use of the formal regulatory process (which involves public hearings) for pipeline tariff-setting by issuing guidelines to facilitate negotiated settlement between pipeline businesses, producers, shippers, government and other interested parties. The regulator must still approve the agreement, but if the guidelines are followed, is likely to do so without a full regulatory hearing. Engagement with interested parties and consensus-building is inherent in the negotiated-settlement process. In the US, where wholesale tariff issues
go to formal processes, this process provides opportunity for participation by ‘intervenors’ (those with a legally recognised right affected) and consumers (or the public) represented by state regulators or by consumer advocates or other consumer-representative bodies.

Regulators in some jurisdictions (for example, the BNetzA in Germany) have a high-level statutory duty to take into account the views of, and impacts on, consumers and other affected parties. Engagement is also influenced by regulatory architecture. In Mexico, consultation is undertaken at one remove from the determinative body – a commission for regulatory improvement must consult with interested parties and issue an expert assessment on any draft regulatory decision.

In telecommunications, the wholesale access price may be determined *ex ante* by a regulator or be set through negotiation between the parties (that is, the access seeker and the access user) with resort to regulatory involvement only where negotiations fail. Where a regulator is responsible for determining a wholesale access price *ex ante* (such as for fixed-to-mobile services, certain origination and termination services, and mobile-to-mobile services), it typically will engage in consultation. In many cases, as the access prices are being determined on the basis of estimates of long-run incremental costs, the regulator may issue a consultation paper which sets our details of these estimates, and seek responses on how the estimates have been arrived at. In Europe, National Regulatory Authorities are also required to notify the European Commission, and BEREC (a group of pan-European regulators) of its proposed decision. Moreover, if the European Commission expresses ‘serious doubts’ about the proposed decision notified, it may initiate a second-phase investigation. In such situations, the BEREC gives advice with regard to the serious doubts of the European Commission. If a second-phase analysis is launched, the BEREC creates a working group comprising experts from different member states that formulates advisory notices.

In cases where a regulator sets access prices in the context of resolving a dispute, broad engagement of interested parties is uncommon; and participation in such access dispute processes is frequently limited to the parties to the dispute, or, in some cases, to those with a ‘substantial interest’ in its outcome. In addition, where ADR is used, this may impact on participation in processes. For example, in Ireland, if a dispute proceeds to formal dispute resolution, interested parties will have an opportunity to provide comments on the regulator’s draft determination. However if a dispute is resolved informally, only the parties may be involved. There is also potential for informal dispute resolution to occur through industry forums or public consultation. In Sweden and Spain, consultation outside the parties to the dispute is not evident, and such matters are typically conducted privately. The UK regulator consults on the outcome of the dispute when the issue is of interest to a large number of stakeholders. Otherwise, consultation is limited to the parties involved in the dispute.

Consultation or engagement outside a specific dispute-resolution process may indirectly affect resolution of disputes. For example, in Mexico, where a network operator can ask the regulator to intervene to set an interconnection rate if agreement cannot be reached, there is no evidence of consultation outside the disputing parties. However Mexico’s *Better Regulation* body must approve the regulator’s cost-model criteria for interconnection, and holds a public consultation process, when doing so.

In the US, where networks have been unbundled and interconnection obligations are mandated, the parties negotiate agreements on the terms of interconnection and resale,
with provision for state regulators to arbitrate if they cannot agree on price conditions. In some jurisdictions, it is possible for other interested parties to participate in dispute-resolution proceedings in certain circumstances. In Germany, participation in disputes in relation to non-price terms of access can be open to those who can show their rights have been significantly affected. In Italy, the regulator may establish working groups with incumbents, licensed operators and interested parties, including consumers, in resolving a dispute.

In jurisdictions with liberalised postal industries, regulators deal with the issue of access to the postal network for competing providers of sorting and delivery services. Some jurisdictions have ex ante regulatory processes in relation to access to postal networks. For example, in relation to access regulation in the US, the dominant operator can propose a ‘workshare discount rate’ for ex ante regulatory approval. The regulator will consult publicly in assessing this rate. In the UK, the regulator will consult in its access determinations, while in Ireland the regulator must take into account the views of interested parties, who statutorily include ‘representatives of postal service providers, users, consumers and manufacturers’. The Irish regulator summarises the submissions it receives and responds explicitly to the views expressed in submissions. In Italy, the regulator may hold a public hearing and include interested parties, including organisations representing common interests.

In the other jurisdictions with liberalised letter-service markets, there is no ex ante regulation of access prices and terms. Access arrangements are negotiated in the first instance between the operator of the postal network and access seeker, subject to any legislative requirements. Only in the event of failed negotiations will a regulator intervene to set access terms. Similarly, in Australia, the dominant postal operator is not subject to the national access regime that applies in other infrastructure areas. However, those seeking a ‘bulk interconnection service’ from Australia Post can notify the regulator (the Australian Competition and Consumer Commission; ACCC) of a dispute. The ACCC conducts an inquiry and reports to the relevant Minister – who can direct the incumbent to act in accordance with the recommendation in the report. In New Zealand, where access obligations on the incumbent arise under a Deed of Understanding between the dominant postal operator in the letter market and the Crown, the Minister deals with any alleged non-compliance with the Deed. However, the incumbent has established a five-member Postal Network Access Committee, where four members are independent of the incumbent, to oversee access arrangements including resolving disputes.

In England and Wales, the water regulator will only determine the terms and conditions of access if negotiation between the access seeker and provider fail. In this dispute-resolution process, interested parties have an opportunity to comment on the draft determination. In Australia, where a water or wastewater service is declared under the access regime, any dispute between the access provider and seeker concerning access pricing or conditions is arbitrated privately by the regulator. While there is no requirement for engagement with other interested parties, in practice the views of specific parties (such as state regulators) may be sought.

The engagement of interested parties in the determination of wholesale train access charges varies according to the extent to which competition is allowed, and whether prices are determined by an independent regulator ex ante, or are negotiated through bilateral agreement. In some jurisdictions the regulator and the infrastructure operator (access provider) conduct the process of engagement jointly. In the UK, an extensive
The process of engagement with interested parties is undertaken, and consultation is conducted at a number of stages of the process. The regulator first consults with the public in the development of the ‘high level output specifications’ that the government will require to be delivered in the price review. In the formal regulatory-review phase, the network operator produces a strategic business plan in response to the high level output specifications, and the regulator consults (including by holding consultation events and workshops) before making a determination on the network operator’s outputs, access charges and the regulatory framework that applies during the price-control period. The regulator has also set out a framework for access negotiations between the network provider and rail companies that involves engagement with interested parties. While the parties are encouraged to hold informal discussions with stakeholders prior to entering into draft access arrangements, formal consultation must take place once a draft arrangement has been made. Consultation may include: hearings; oral representation; written submissions; and informal meetings. The parties must aim to resolve concerns raised during consultation where possible. When the network operator and rail business have agreed on the terms of an access arrangement, and consultation with stakeholders has been exhausted, the arrangement may be submitted to the regulator, who will accept the arrangement if all stakeholders’ concerns have been resolved. However, if, at any stage of the negotiation process, an access seeker believes it is being unfairly treated, discriminated against, or is, in any other way, aggrieved in connection with its entitlements under an access arrangement, it can appeal to the regulator, which will then undertake its own consultation to determine the outcome of the dispute. Similarly, where there are unresolved objections to the access arrangements made by third parties, these will be considered by the Office of Rail Regulation in making its final determination.

Business-led engagement also features in Sweden, where each infrastructure manager, in drawing up its annual network statement (which sets out the conditions of access to the network and procedures and criteria for allocating capacity) must consult with all stakeholders (including those who have previously applied for capacity and potential future service users). If the parties cannot agree on the terms of the track-access agreement, the regulator may, on request, determine the terms and conditions.

In Australia, where the ACCC approves access undertakings from network operators in relation to interstate rail networks, a national track authority conducts industry consultation in the first instance and provides a draft undertaking to the regulator. The regulator publicly releases the undertaking and an Issues Paper for written submissions. A draft decision is then issued and written submissions invited in response, with all submissions and other documents published on the ACCC’s website. Informal consultation is restricted by the administrative law requirement to provide procedural fairness (natural justice), which, to avoid the appearance of bias, generally requires all affected parties be given an opportunity to respond to material.

In the Netherlands, the regulator will conduct a public hearing before determining a dispute about the price and non-price terms of access set out in a network operator’s annual network statement, which includes, as an annex, a standard access agreement setting out price and non-price terms of access, including capacity allocation and charges. In France, while the regulator can hold a public hearing in disputes regarding network access, it will not do so if jointly requested by the parties to the dispute. Public hearings are also a feature of the arrangements in the US, where the federal regulator is involved (through dispute resolution) in access pricing issues for
railroads with market dominance over the traffic involved. Disputes that proceed to the formal process will usually involve a public hearing at which aggrieved and interested parties can make a statement. Parties to the dispute will need to have considered a voluntary arbitration process prior to bringing the dispute to the regulator. This arbitration process may involve, in addition to the parties directly involved in the dispute, industry bodies and consumer groups such as: shipper associations; railroad associations; freight railroad and agricultural shippers; government departments; and other interested parties. In Canada, engagement with interested parties in dispute resolution depends on whether the parties to the dispute seek resolution by the regulator (interested parties may make submissions), or opt for Final Offer Arbitration (a confidential process).

Less engagement is evident in access regulation processes in rail in other jurisdictions. In Italy, where state ownership defines the industry, the Ministry consults only with the infrastructure operator in setting tolls and access terms. The Competition Authority may, however, intervene to ensure potential entrants have access to the rail network. In New Zealand, where access arrangements are specified in long-term contractual arrangements, resolution of any dispute between the access provider and access seeker is by an individual appointed under the contract.

In six of the jurisdictions surveyed (South Africa Japan, Singapore, Ireland, the UK and Mexico) the regulator sets or approves airport charges or maximum charges \textit{ex ante} on a periodic basis. In the UK, this process involves a substantial level of engagement with airlines, via a process called ‘constructive engagement’. Specifically, the Civil Aviation Authority (CAA) has described constructive engagement as a ‘process for structured discussion and negotiation between airport operators and airlines’ which produces information relevant for the CAA’s economic regulation of airports, resulting in negotiated outputs, that are fed into the price-control determination. However, the outcome of the constructive engagement process is advice to the regulator, which is not binding. The process has not involved end-consumers to date. Nevertheless, the UK airport regulator has established an Aviation Consumer Advocacy Panel, with internal independence from the regulator, to champion the interest of consumers/airline passengers in all the regulator’s activities. In Ireland, engagement in price-cap determinations for airport charges takes the form of consultation with interested parties, all of whom may make a representation. The consultation period must be at least a month and the regulator’s final decision must provide reasons for accepting or rejecting any representations by the public. All regulatory proposals in Mexico – including airport charge determinations – must be reviewed by another body, which consults before issuing an assessment of the proposal. Consultation obligations are not evident in \textit{ex ante} price or price/revenue cap setting processes in the airport industry in South Africa or Singapore. In Japan, no engagement with airlines or other stakeholders is required in processes for \textit{ex ante} approvals of airport fees; and airlines do not appear to have a right to all relevant information on the methods used for determining fees and for assessing proposals.

In some jurisdictions, although airport charges are not set or capped in advance, the regulator sets, or approves, certain parameters or input methodologies for tariff-setting by airports. Engagement with interested parties in these processes varies. In France, Germany and Italy, the charging formula for airport operators (such as the parameters of the price cap regulation formula) are set out in periodic concession contracts concluded between airport operators and government. In France, the airport operators propose this contract after consulting their users. The proposal is then submitted to an
independent Airport Consultative Committee to: evaluate the proposal; conduct public hearings; and formulate its own proposal. The Committee reports to the Ministry that decides on the overall economic-oversight formula. While a role for consultation with stakeholders in relation to the concession contracts in Germany and Italy is not evident in the survey material, consultation requirements apply to certain large airports in these countries under a European Union (EU) directive. In member states of the EU, certain large airports (those handling more than five million passengers a year, and the largest airport in each member state) must have a procedure for regular consultation (this will be yearly, unless there is a multi-year agreement in place) between airport operators and users or their representatives in relation to the operation of the system of airport charges, the level of airport charges and quality of service provided.

The breadth of consultation required in different jurisdictions can vary. In New Zealand, for example, airports must only consult with ‘substantial customers’ (essentially a customer who pays more than five per cent of an airport’s annual revenue for identified activities) before setting certain airport charges. In jurisdictions where airports have power to determine their own tariffs (even if subject to consultation requirements or pricing parameter/methodology frameworks) the regulator may only be involved in the case of a complaint or dispute about prices or conditions. In the US, dispute-resolution processes for airport fees do not necessarily involve consultation. The participants at a hearing are the complainant (who must be ‘substantially affected’ by the respondents action/inaction), the respondent, and the regulator. Intervenors may be permitted if their participation will not unduly broaden the issues or delay the proceedings; and if the person has a property or financial interest that may not be addressed adequately by the parties. Other persons may petition for leave to participate, but their participation will be limited to filing post-hearing briefs and reply.

In most jurisdictions port authorities can limit the number of entities providing port services and there is little evidence of engagement in the selection of service providers. A European Commission review concluded that, in many EU countries, port authorities make ‘closed door’ agreements for the provision of port services. In the Netherlands, in recognition of the fact that pilotage is effectively a monopoly service, the regulator sets a system that the pilots can use to allocate costs to tariffs, and annually approves the pilotage tariffs. In Italy, where port authorities are excluded from participating in port activities, and must enter concession arrangements, legislation requires each port authority to consult with a committee of the businesses that have concession arrangements in the port. The five-member committee keeps the port authority informed of the needs of concession holders and other stakeholders and can report to the ministry any concerns not adequately addressed by the port authority.

Engagement of Interested Parties in ex post Complaints about Conduct

Interested parties may be engaged in dealing with complaints regarding the conduct of regulated businesses; in particular, allegations that the regulated business has breached particular commitments or codes, or is in contravention of ex post competition law. Engagement with interested parties in this respect has two potential dimensions: who has standing to lodge/file a complaint; and who can be involved in any investigation of the complaint/the dispute-resolution process.
An example from the energy sector where interested parties can become involved in investigations of code breaches is New Zealand, where any participant to the Electricity Network Code may seek to become part of an investigation into a breach of that code. Further, if the complaint goes to the Ruling Panel, that code participant will have a right to: be present; be represented; call and cross-examine witnesses; and, if affected by the Ruling Panel’s decision, apply for judicial review.

In telecommunications, interested parties can also be engaged in complaints in relation to suspected breaches of obligations. In the UK, when the communications regulator (Ofcom) investigates complaints that an ex ante condition on a telecommunications provider has been breached, or that competition law has been breached, it will typically consult with interested parties in accordance with statutory requirements. By contrast, in the US, there is limited evidence that consultation is conducted with parties other than those directly affected in complaints lodged with the Federal Communications Commission that a carrier has violated obligations or regulations.

In postal services there appear to be some jurisdictions in which engagement with interested parties occurs in relation to complaints. In the US, for example, rate and service complaints against a statutory monopoly provider of postal services can be lodged by any interested person (including an officer of the regulator representing the interests of the public). The engagement of interested parties in the resolution of rate or service complaints depends on whether the regulator categorises the complaint as ‘formal’ or ‘informal’. The latter may be settled under informal procedures without a proceeding on the record or opportunity for hearing.

In water and wastewater, there is some evidence of wider consultation on complaints received. For example, in England and Wales, depending on the nature of the issue, the regulator may engage with certain interested parties. For example, if a complaint relates to the quality of drinking water, the regulator may seek external advice from the Drinking Water Inspectorate, with which it has an MOU. If the dispute involves issues such as pollution control, it will consult with the Environment Agency. If the complaint involves consumer-protection issues, the regulator will consult with the relevant Consumer Council for Water (CCWater) committee. In the US, complaint-resolution processes in water and wastewater depend on the relevant state, but typically will involve attempts at informal resolution between the parties, before resort to the more formal process, in which participation rights will depend on standing. There is no evidence of engagement in complaint-resolution processes in water and wastewater in the other jurisdictions surveyed.

In cases of complaint about rail, interested parties are often able to lodge a complaint in certain circumstances, and provision for a body to investigate and settle the dispute. However, there is usually no explicit requirement to consult widely. In Japan, the Association of Japanese Private Railways represents private railways ‘in dialogue’ with the government. In South Korea, there is scope for the regulator to settle disputes over usage rates after receiving a request from either the infrastructure provider or the rail operator. This is also the case in Spain, Sweden and the UK. France implements a procedure where any complaint received by a person authorised to do so in the case of inequitable treatment is investigated independently of the board of the regulator. In the Netherlands, a complaint from an access seeker about the tariffs and access conditions will result in a public hearing, and the regulator will send information to the affected parties, allowing the parties to respond. In Canada,
complaints over poor service, abuse of market power, tariffs, and access are handled through arbitration. In the US, there is provision for complaints to be handled by the Surface Transportation Board, but all complainants must consider a voluntary arbitration process first.

Engagement with interested parties in investigations of complaints or resolutions of disputes for airports varies. In the UK, the regulator will hold a consultation period in which interested parties can make written representations in relation to an investigation of a complaint/dispute. The regulator also engages the airport under investigation and the complainant in formulating a remedy. If the regulator intends to impose a condition on an airport operator it must give that operator a month to submit a response to the proposed condition. If the airport offers an undertaking in lieu of the remedy proposed, the complainant must be consulted on whether it will be an effective remedy. In France, any party may appeal to an administrative court if it considers an airport’s action is in breach of its Economic Oversight contract; while in the Netherlands, stakeholders are consulted in competition investigations into regulated airports.

Finally, in relation to ports, there is typically potential for a complaint to be lodged in respect of port charges, either under industry-specific legislation or competition law or both. In the UK, where legislation provides a ‘reasonableness’ test for the level and application of certain port charges, any interested party can lodge an objection with the Secretary of State. However, there is no evidence of compulsory engagement of interested parties, including the complainant, in resolution of the matter. Similarly, in Canada, anyone can bring a complaint in relation to a proposed fee change by a public port and, if not satisfied with the regulator’s proposed resolution, can request the issue be referred to an independent advisory panel. In the US, resolutions of disputes in relation to complaints about certain port practices can involve different levels of participation, depending on whether the dispute is resolved through ADR or goes to the formal litigated process. Mediators are expressly authorised to conduct private sessions with parties. Arbitrations are subject to ex parte communication rules. If a dispute goes to formal resolution, the parties will be the proponent, the protestant and the regulator. Intervenors may be permitted if they have a substantial interest in the matters covered in the proceedings. In jurisdictions in which port charges and access are only regulated ex post through competition law, the participation of interested parties in these questions will depend on the specific arrangements in relation to competition investigations in each country.

Engagement of Interested Parties in other Regulatory Processes

In some jurisdictions, engagement with interested parties also occurs outside formal price-setting and complaint/dispute resolution processes. These processes vary widely and can include engagement in relation to: the development of policy and general rule-making; network planning and development; the development of network codes; market power assessments; and more general, on-going engagement between the regulator and interested parties.

Engagement on wider policy implementation issues

Regulators and other government departments sometimes engage interested parties in matters relating to wider policy development and implementation. Given the ad hoc nature of these interactions, there does not appear to be a general process followed.
However, there are ways in which, and issues on which, interested parties have been engaged across the different infrastructure areas.

In the US energy sector there is an opportunity for members of the public, interested businesses and third parties to petition the Federal Energy Regulatory Commission and some state regulators (such as the CPUC in California) for rulemaking. Such processes are a direct means for stakeholder participation in regulatory processes. At a less general level, particular policies have engendered engagement in the energy sector in some jurisdictions. For example, in many jurisdictions, there has been a requirement to expand the transmission grid to connect to often-remote sources of renewable generation. Regulatory engagement with interested parties has been a part of this process in some of the surveyed jurisdictions. For example, in Germany, which has a grid-expansion acceleration plan to connect renewable generation, and where the regulator has to approve potential route-corridor proposals of transmission businesses, the regulator has held a number of public consultations on matters relating to grid expansion, new-generation capacity proposals, and renewable-energy regulations. Similarly, in Britain, the regulator has conducted a number of reviews of charging arrangements for transmission networks and connection arrangements to facilitate timely connection of new generation. These reviews have involved engagement of stakeholders, including through public workshops and the establishment of independent advisory panels, and engagement of academics.

In telecommunications, there are requirements in some jurisdictions that all significant decisions of the regulator, including those relating to supervisory activities, must be published and interested parties given an opportunity to respond. For example, if the Swedish regulator, as part of its supervisory activities, makes decisions that are generally applicable, those affected, and other interested parties must be given ‘reasonable time’ (typically no more than four weeks) to respond to the published proposal. Similarly, in France, the regulator is required to notify the public of any decision which will have a significant impact on the market, and receive and publish submissions of opinion and comment. In the US, the Federal Communications Commission will seek public comments on any proposed rule-making and rule-changes and a Notice of Proposed Rule Making may go through various iterations in response to comments received. When the Canadian telecommunications regulator is considering a policy issue, or amending regulations, it holds a public hearing, whereby members of the public can submit written comments by an announced deadline. Interested parties also have an opportunity to express their views in an oral process (which may be by teleconference). When holding a public inquiry into certain regulatory matters, the South African regulator must invite interested parties to indicate whether they require an opportunity to make oral representations.

In postal services, there are instances of engagement with interested parties on general policy issues. In Japan, before a postal-services incumbent is allowed to enter into new business areas, approval must be gained by a committee that considers the potential damage to the interests of private-sector competitors in the markets the incumbent enters. In France, the regulator calls for public submissions in relation to research being conducted, or general investigations being undertaken, as part of its function as industry supervisor and information provider.

The regulatory-policy framework that is applied to ports has been subject to review in some jurisdictions, and this has resulted in the engagement of interested parties in studies and investigations considering alternative regulatory arrangements. For
example, in Europe, the lack of a framework for common European seaport access or charging led the European Commission to undertake a ‘port policy’ review, including consultation, in relation to regulation of the major EU Ports. In Ireland, the Competition Authority held a public consultation on competition matters related to ports as part of a broader study into competition in Irish ports that was published in November 2013.

Engagement in Network Planning and Development

The German regulator has held public consultations on energy matters relating to: grid expansion; new-generation capacity proposals; and renewable-energy regulations.

There are numerous examples of engagement with interested parties in water management and planning processes. In New Zealand, councils responsible for water and wastewater services must consult the Maori and wider community on Regional Policy Statements and regional plans. Further, in a stakeholder-led process to consider reform to New Zealand’s freshwater management system in 2009, there was broad public engagement on the resulting report’s recommendations. Singapore’s Water Network Panel represents different stakeholders in the water industry and the community in relation to the Water Agency’s projects and programs. In the EU, where member states are required to develop river-basin district plans for each substantial water body, consultation with interested parties is a requirement in creating these plans. For example, in France in 2008, Grenelle for the Environment was a national debate on the environment involving national and regional consultations, which allowed for comments from the general public and local stakeholders. In Mexico, the Basin Council for each water basin must have 50 per cent of its representatives nominated by users and NGOs.

There is evidence of some engagement with interested parties in relation to permissions for construction, or improvements to railway infrastructure; for example, in Ireland and Korea.

Ongoing Engagement and Market Monitoring

In a number of jurisdictions there are examples of ongoing forms of engagement between the regulator and various interested parties; including advisory bodies and work groups. Another mechanism through which engagement with interested parties arises is in relation to various periodic market-monitoring exercises that might be conducted by a regulator. Market monitoring is a particular feature of the regulatory arrangements in the Netherlands and involves: interviews with market parties; surveys; and information-gathering from infrastructure managers. Regular market assessments are also a feature of the postal industry in the US, where the regulator conducts an annual assessment of the compliance of the dominant postal operator with legislative and regulatory requirements. As part of this process, the regulator seeks comments from interested parties.

Engagement in the Development of Network Codes

A wide range of interested parties participate in the development and maintenance of various industry/network codes in sectors such as energy and communications. For example, the New Zealand Electricity Authority must consult on any amendments to the industry Code, and may engage in pre-consultation with advisory groups within the authority before publishing a draft consultation paper. Some telecommunications regulators have established various technical, industry panels or committees to guide the regulator in terms of access/interconnection issues: Canada’s Interconnection
Steering Committee; France’s Interconnection and Access Committee; and New Zealand’s Telecommunications Forum can propose, or be invited by the regulator to propose, telecommunications access codes to the regulator for approval.

**Engagement about Regulatory Processes**

Some regulators engage with interested parties about regulatory processes. In South Africa, the regulator has sought to engage stakeholders on the question of the regulatory framework for Extra Territorial Offices of Exchange, particularly on the threat to the sustainability of the incumbent. In Japan, when no private sector operator applied for a licence to operate in the liberalised general correspondence delivery business, the ministry set up a study group on Reserved Areas and Competition Policies in the Postal Market.

**Engagement in Market Power Assessments**

EU directives have had an impact on engagement requirements of regulators in different infrastructure areas, such as energy, telecommunications, and transport. In telecommunications, in particular, EU directives require national regulators in member states to undertake national and Community consultation on any regulatory measures they intend to take in relation to electronic communications. Accordingly, where member states’ regulators carry out their obligatory regular market analyses to determine whether one or more operators have substantial market power (SMP) in a telecommunications market and to impose access obligations on those identified (or accept an undertaking in lieu), they must do so in consultation with industry, the EC and a pan-European regulator’s group, the Body of European Regulators for Electronic Communications (BEREC). Consultation frequently takes the form of the regulator publishing draft decisions and inviting submissions from interested parties (for example, in Sweden, Netherlands, UK, Ireland). There may be multiple consultation periods (for example, Sweden), and engagement with interested parties may commence prior to formal consultation periods (for example, the Netherlands).

Interested parties who make submissions to National Regulatory Authorities (NRAs) in relation to a proposed regulatory measure may also be engaged at the European level. Specifically, in assessing a regulatory measure proposed by a national regulator of a member state, the EC will seek access to submissions received by the regulator in its consultation process and, if the EC expresses ‘serious doubt’ about a proposed measure, it may then meet with the interested parties who responded to the consultation process. In addition, BEREC, which is comprised of the heads of the telecommunications regulator in each member state, must be consulted in relation to determinations of NRAs on access issues.

**Key Points on Engagement with Interested Parties**

Separation and liberalisation of activities in the production chain has caused the range of interested parties to broaden, and as a consequence few regulatory decisions are made by a regulator in isolation. At a minimum, notification and objection periods operate, and, more frequently, consultation processes require the consideration of submissions prior to the finalisation of decisions. Political realities require regulators to engage with other bodies in certain processes, including with: competition authorities; different levels of government; and, in the EU, supra-national authorities.

There is growing concern in some jurisdictions about the effectiveness of consultation processes in relation to end consumers. One response has been the inclusion within the regulator of representatives of particular groups to provide more effective input
into consultation mechanisms or to shape policy prior to the use of such mechanisms. Another approach is to provide incentives to regulated entities to engage with interested parties prior to any specific regulatory process. Most US states have established offices of consumer advocates to represent consumer interests in regulatory settlements and wider issues.

The survey reveals that the extent, and nature, of engagement with interested parties can vary across different regulatory processes. Engagement with interested parties in retail price-control processes is less common than engagement in access price-control processes. In many jurisdictions, retail-price controls do not apply to services in all areas, and where they do apply, they may be administratively set or subject to statutory rules. Where engagement does occur, it typically takes the form of: consultation with end-users or their representatives; consultation with consumer panels or committees representing the interests of end-users; or the direct intervention in price-setting processes or negotiated settlements of organised representatives of consumer interests, such as offices of consumer advocate. For access pricing, the extent and form of engagement with interested parties depends on whether prices and terms are set \textit{ex ante}, or whether the regulator only becomes involved when resolving a dispute following failed negotiations, or in investigating a complaint. \textit{Ex ante} processes tend to involve engagement with a greater number of interested parties, including, in some cases, providing an opportunity for end-users, or their representatives, to engage. In contrast, when access prices are determined by negotiation, or by the regulator acting as arbitrator in a dispute, the matter is more commonly dealt with privately, and other parties will typically need to satisfy particular criteria (such as a material interest in the decision) before obtaining any participation rights. Similarly, regulatory processes in relation to complaints or disputes regarding the conduct of regulated businesses are typically (but not always) confined to the complainant and regulated business. Regulators in some jurisdictions frequently engage with a wide range of interested parties outside formal regulatory processes, on issues including: the development of policy; network planning and development; the development of network codes; the imposition of \textit{ex ante} access obligations, and regulatory processes themselves. In addition, some regulators engage with interested parties on a more general, ongoing basis through: internal representative panels; work groups; advisory councils; and industry forums.

Finally, an issue in some jurisdictions is how regulators settle differences, or reach consensus, with other government agencies and regulatory bodies with which they must engage, or with which they may have concurrent jurisdiction in some areas. This issue may become more prominent as sectoral regulatory policies increasingly interact with wider public policies relating to matters such as: the environment; social policies; and policies directed at market integration in some jurisdictions.
4. Information

The economic regulation of infrastructure often involves the application of sophisticated economic and technical analysis using detailed empirical information. Such quantitative data-based analysis is widely regarded as essential for various aspects of regulation including: assessment of the effectiveness of competition; the determination of revenue allowances over a forthcoming regulatory period; and the cost modelling for the \textit{ex ante} setting of access prices for the use of essential facilities by an incumbent’s competitors. Regulators also need to undertake this type of analysis ‘to make an informed decision of the extent to which regulatory controls can be altered or relaxed’ (Sappington and Weisman, 2012).

Some of the information necessary for these analyses is generally available, while other data are more specific to the regulated entity or infrastructure area under consideration. Examples of the more general data are information on economic activity from the statistics bureau; and the financial information used in estimating the weighted cost of capital (WACC). Examples of business-specific information include data on expected future costs and demand that are used in a price determination; and detailed engineering data used in constructing a cost model underlying setting access prices. This latter information may be collected on a continuing basis or sporadically, for the purposes of a particular matter.

The collection, use and dissemination of private information can be fraught. One of the most difficult issues associated with the economic regulation of infrastructure is the ‘information asymmetry’ that a regulator faces when developing and applying different regulatory strategies. Analytical work, particularly in the 1980s, showed that, in the face of such an information asymmetry, businesses can have incentives to retain their ‘information monopoly’ and not voluntarily disclose private information to the regulator. The incentive not to disclose information arises, in part, because of concerns that any information revealed might be used to develop a more stringent regulatory regime. In addition, for those activities where liberalisation has occurred, regulated businesses may be reluctant to provide certain information, which, if placed in the public domain, may put them at a competitive disadvantage.

In practice, most economic regulatory frameworks have developed ways to incentivise or compel businesses to divulge particular types of relevant information. These include regulatory strategies which reward (or punish) businesses for providing accurate (inaccurate) information, and legal mechanisms which require businesses to supply particular types of information on request and within specific timeframes. In principle, the information collected through such means can allow the regulator to make better and more informed decisions. Moreover, if information used in regulatory decisions is made public, this can potentially allow for more transparent decision-making (that is, stakeholders can understand how particular regulatory decisions have been arrived at). However, given that information provided for regulatory processes is often proprietary to the business, requirements that compel businesses to submit information to the regulator can raise difficult issues surrounding confidentiality and disclosure.

\footnote{See, in particular: Loeb and Magat (1979); Baron and Myerson (1982); Baron and Besanko (1984); Laffont and Tirole (1986); and Armstrong and Sappington (2007).}
Against this background, this chapter describes the different approaches to issues surrounding information collection and disclosure adopted by regulators in the seventeen countries surveyed.

**Information Collection**

*The Scope of Powers and Mechanisms Adopted to Facilitate Information Collection*

Regulators typically have a range of information-collection powers that are deemed necessary to perform their duties. These powers can be derived from general administrative law or from legislation specific to a particular area, although the extent of these powers can vary across jurisdictions. The scope of a regulator’s information collection powers can depend on: the specific institutions within a country; the general regulatory framework; and the degree of formality in the regulatory process. Among the types of formal powers that regulators can have to obtain information revealed in the survey are powers to: obtain access to premises; compel the production of documents; conduct interviews; and summon attendance at hearings. In addition, a number of countries require specific information to be submitted on a yearly basis, either due to a supervisory role of the regulator or for its price-setting duties.

The type of information collected, and the mechanisms used to collect it, often reflect the scope of regulation at the infrastructure area level. Areas that are more heavily regulated often have regulators with a greater scope for information collection. For instance, ports and airports, where there is often no national-level regulator, are generally not subject to the same information-collection processes as in telecommunications and energy. This variability in information-collection powers according to the scope of regulation is well illustrated by the arrangements in Australia, where the ACCC’s powers of information collection vary across infrastructure areas. In energy matters, the AER can: seek a search warrant; require a person to provide information or documents; and require regulated businesses to provide specified information on an annual basis. In addition, to facilitate the decision-making process in access determinations, the regulatory regimes prescribe detailed information that must be submitted by the regulated business with any access proposal. In contrast, in rail, the ACCC has no formal power to compel a person to provide information in respect of a proposed rail undertaking. Having said this, and as discussed below, information may be provided to regulators in the absence of formal powers, and specifically may be encouraged through aspects of regulatory practice.

The international survey reveals that some factors relating to the general regulatory environment may also be significant in determining the extent to which information is requested from, and provided by, regulated entities. One potentially relevant factor is the extent to which there is a cooperative or litigious relationship between the regulator and the companies it regulates. In France, the ARCEP reports that it is rare for there to be objections to questionnaires sent to regulated entities in dispute-resolution processes, or at other times as part of ongoing surveillance. Another potentially relevant factor is the extent to which information can be shared between regulatory bodies and divisions, which can impact on the extent to which additional information needs to be requested from, and provided by, regulated entities. For instance, in Australia the AER and the ACCC are able to share information. Similarly, any information that the ACM in the Netherlands obtains in relation to the performance of any one of its duties, may be used for the performance of other duties.
attributed to it by different legislation. For example, any information which the Authority for Consumers and Markets receives in the context of its regulatory powers under the Electricity Act or Gas Act may also be used for its tasks under the Passengers Transport Act 2000, the Railway Act, the Postal Act 2009 and the Telecommunications Act. In Germany, information sharing between the BNetzA and the competition authority, the Bundeskartellamt, is codified and the Bundeskartellamt is mandated to share all data compiled from its monitoring activities with the BNetzA without delay. More generally, in some EU countries, national regulatory agencies may provide information to the European Commission or other competent authorities upon justified request by these authorities.

In order to improve the process of information collection, some regulators have adopted specific practices to assist their information-collection activities. For example, in UK telecommunications, where an information request is complex, the Ofcom will issue a draft information request and allow three days for identification by stakeholders of the practicality of providing the information before the specified deadline. In the Netherlands, the ACM seeks to provide transparency in the use of its access and information collection powers by publishing operational protocols which set out its methods of operation in relation to company visits, accessibility and the submission of documents. It also publishes its method of operation for exercising its power to inspect and copy digital data. A less formalised approach to information gathering is used in some countries. For instance, rather than developing operational protocols, the ACCC has developed guidelines that set out the type of information that should usually be provided.

**Regulatory Discretion and the Ability to Impose Sanctions**

The relative discretion afforded the regulator in determining the criteria for obtaining relevant information varies across the countries surveyed. For example, in Ireland, the telecommunications regulator (the ComReg) can only require the production of documents where it has reasonable grounds for believing this to be necessary, while in Spain the rail regulator may request any information which is necessary for the exercise of its activity. In France, the energy regulator (CRE) has the right to such information as is necessary for its mission. In New Zealand, the CCNZ can compel production of any materials it thinks necessary or desirable. In South African communications, an inspector appointed by the regulator (ICASA) has the power to enter and search premises and seize documents or things that have bearing on alleged non-compliance with licencing laws.

In a number of countries, such as the Netherlands, Sweden, and the UK, regulators are empowered to impose fines on regulated entities for failing to provide information requested, although there is some evidence that these are imposed infrequently in practice. In other jurisdictions, failures to disclose relevant information can lead to other sanctions. For instance, in Japan the MIC may refuse the registration of a business whose application fails to include important information required. Regulatory practice and processes can also be used to incentivise regulated entities to provide information. For example, in the Australian rail industry, where the regulator (the ACCC) has no power to compel a person to provide information in relation to a proposed rail undertaking, the ACCC nevertheless indicates to the service provider the type of information that should be submitted in support of a proposed undertaking. This is seen to provide an incentive for parties to provide the requested information as the absence of information may lead the ACCC to draw an adverse inference.
A difficult issue that arises for many regulators in the countries surveyed relates to delays in the provision of information by regulated entities. Some initiatives can be identified which attempt to prevent delays and encourage businesses to submit relevant information on a timely basis. In the English and Welsh water industry, for example, the Ofwat has stated that, ‘in order to deter regulatory gaming’, it may decide to proceed on the basis of available facts if parties do not provide information within its specified timescale. The US federal rail regulator, the STB, has mandated that failure to provide information in response to a complaint in a timely fashion results in the claims made in a complaint being admitted. The STB has also established discovery standards in the context of litigation (in order to prevent delays by the incumbent by extending discovery proceedings).

**On-going Information Collection Processes**

Annual or ongoing information-provision obligations exist in a number of countries across a range of infrastructure areas; particularly Australia, France, the Netherlands, the US, the UK and Sweden.

In some cases, such provisions reflect the surveillance remit of a regulator. For example, the Swedish postal and telecommunications regulator (the PTS) collects information continually. Ongoing information collection may also reflect the particular regulatory approach applied, such as where benchmarking and comparative competition approaches are used. For example, in the England and Welsh water industry, the Ofwat must collect a range of information from regulated entities on an annual basis to compare the performance of providers, and to ensure they are meeting the outputs assumed in the price controls. The most comprehensive annual information-collection exercise identified in the survey was in the Netherlands, where the ACM follows its forerunners in conducting major annual market monitoring exercises in energy, telecommunications and rail. For energy, the exercise requires regulated entities to collect and submit a range of private information such as details of generation supply, including bid data to the pool, and information on marginal costs. The market-monitoring exercises are driven by a statutory duty on the ACM to monitor relevant markets closely and to report to the relevant Minister on the extent to which market forces operate and effective competition occurs in various markets. The exercises are facilitated by the ACM’s substantial information-gathering powers.

In summary, regulators typically have a range of information-collection powers. However, the scope of these powers, the ability of regulators to enforce collection and to impose sanctions for non-cooperation are contextually specific, and often reflect the general legal and regulatory framework. As such, the information-collection powers vary across infrastructure area and country. The timely provision of information by regulated entities was identified as an issue in a number of countries, in particular because of the incentives that incumbents may have to delay determinations on access matters. In some jurisdictions, regulators have attempted to address this issue by disadvantaging those who do not provide information within relevant timeframes. Finally, annual or ongoing information-provision obligations exist in a number of countries, and may reflect the surveillance remit of a regulator, or may be required on the basis of particular regulatory arrangements, such as benchmarking or yardstick regulatory processes.

**Transparency and Third-party/Public Access to Information**
There is a general trend across the countries surveyed for increasing transparency in regulatory processes and for greater public access to documents collected and used in these processes. In EU member states, this trend appears, in part, to be being driven by EU directives, such as the EU Framework Directive for Telecommunications which requires that the majority of documents submitted and relied upon in the decisions of NRAs be made accessible to the public. Individual country initiatives also play a role.

While transparency is broadly viewed as a laudable goal for regulators, there can be a potential tension between the goal of maximising the amount of information that is publicly available and providing information in a manner that is useful for stakeholders. In addition, tensions can exist between full transparency and the protection of confidential or commercially sensitive information. For these reasons, many of the countries examined exclude certain information from public disclosure.

Notwithstanding the general trend towards greater transparency in regulatory processes across many countries, the trend is more evident in some infrastructure areas than others. For example, regulatory processes in telecommunications appear to have high levels of transparency in all countries; even in Japan where regulatory processes in other areas tend to be less transparent.

The methods for facilitating greater transparency in regulation also appear to vary across countries. In the UK, consistent with its aspiration of ‘best practice regulation’, some statutes contain regulatory principles that include, among other things, requirements that processes and outcomes be transparent. While this means that there is greater transparency in regulatory operations, it also means there is a need for a consultation process with the parties involved beforehand, in order to identify any confidential information.

Requirements imposed under Freedom of Information and Data Protection statutes to provide access to information also apply in a number of countries surveyed. In the US, Freedom of Information (FOI) legislation mandates public access to the information and records of Federal agencies unless the information falls within a specific exception to the Act. Similar legislation applies in some European countries, such as the energy sector in Italy where, in disclosing information, the regulator follows the Regulations Governing the Guarantees of Transparency of the AEEG. In Ireland, the confidentiality and disclosure of information obtained by the aviation and rail regulators are governed by the Freedom of Information (FOI) Acts. In the UK, third parties may also be able to access information as required by the Freedom of Information Act 2000 and the Data Protection Act 1998, unless that information is covered by exemptions under those Acts. All Mexican regulators must comply with the Federal Law of Transparency and Information Access and each agency or ministry of government must have a unit of transparency. Citizens are entitled to access information of such agencies unless the information is specifically exempted from disclosure as confidential, privileged, and commercially confidential or reserved for a period of time.

The degree to which the information of regulated entities will be made available to third parties may influence regulatory processes. In some cases it can potentially alter the incentives for businesses to reach agreement. For example, in Germany, where, as noted, formal regulatory processes are conducted in the public domain, the BNetzA considers that the high willingness of parties to participate in its pre-lodgement
mediation process reflects (at least in part) a desire by regulated entities to avoid the requirement for publication of details of proceedings.

In summary, there is a general trend for increasing transparency and greater public access to documents used in regulatory decision-making, although this trend is more evident in some infrastructure areas than others. In some cases, tensions have been identified between, on the one hand, the goal of making as much information as possible publicly available and providing information in a manner that is useful for stakeholders, and, on the other hand, protecting commercial interests.

Dealing with Commercial-in-Confidence Information

Most countries surveyed exempt certain information obtained by the regulator from third-party disclosure requirements. This typically includes information assessed as being commercial-in-confidence (‘c-i-c’). However, additional exemptions from disclosure also exist in some countries surveyed. For example, the energy regulator in Ireland is obliged to keep confidential not just commercially sensitive information, but also any information which could adversely affect a party’s interests. In the UK, exceptions to publication vary across infrastructure industries, but may include: commercially-sensitive information; information obtained by a third-party under a statutory power; and confidential information and information that might seriously and prejudicially affect a person’s interests.

Identification and Designation of c-i-c Information

The exact process for determination of c-i-c information varies across countries, ranging from processes that appear to be quite subjective (allowing the regulator some discretion in its decision as to what constitutes c-i-c information) to processes that are more formalised (as in North America, where what constitutes c-i-c material tends to be legislatively defined). In those jurisdictions where the regulator is given some discretion in determining what constitutes c-i-c, there often needs to be a mechanism where regulated entities can negotiate with the regulator around what information is considered to be c-i-c. In Singapore, parties are asked to identify any c-i-c information and the Competition Commission assesses these requests. If the Competition Commission rejects the party’s claim for confidentiality, or is of the view that it must share confidential information with third parties, it may require the party to re-submit a non-confidential version of the application that includes the information. In Germany, the BNetzA makes a ‘case by case’ assessment of c-i-c material and no standard rules are applied. In the Netherlands, if the ACM and the parties disagree about whether or not certain information is confidential, the ACM shall not make this information public until one week has passed after the announcement of a decision to this effect, allowing for parties to commence legal proceedings requesting an injunction against publication.

As noted, in some North American jurisdictions (Canada, California), c-i-c material is given statutory definition, including information, the disclosure of which will ‘prejudice a competitive position’ (Canada) or place a provider ‘at an unfair business disadvantage’ (California). In South Africa, the communications regulator (the ICASA) is required to treat a range of information as confidential, although a

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32 It might, for example, ‘prejudice a competitive position’ or cause ‘an unfair business disadvantage’.

33 Among the information which must be treated confidentially includes: trade secrets; financial, commercial, scientific or technical information that is likely to cause harm to the party if disclosed; information that could reasonably be expected to put the party at a disadvantage contractually or during
business may apply for information outside this range to be treated as confidential. Where such applications are made, the ICASA must determine the request and provide written reasons for the determination, and parties may withdraw information if the request is refused.

Where alternative dispute resolution (ADR) processes are used, the parties can be encouraged to establish their own confidentiality regime. Such arrangements usually provide for access to the c-i-c information to be limited to regulatory personnel and external lawyers and consultants, and to impose obligations to maintain the information securely and use it only for specified purposes. Such arrangements are permitted or encouraged in telecommunication disputes in Canada, and in ADR proceedings in the federal jurisdiction in the US.

Some regulators recognise that confidentiality issues are more likely to arise under some regulatory arrangements than for others. For example, in Germany, where incentive regulation has been introduced, the BNetzA anticipates an increase in confidentiality issues in the energy sector as network operators seek to examine how they have been ‘benchmarked’ against other operators.34

Finally, an appeal from a decision to publish c-i-c material is available in some countries (Ireland, the Netherlands). For instance, as already noted, the publication of information in the Netherlands is delayed by one week to allow for parties to seek an injunction against publication from the relevant court. In Ireland and Canada, decisions in relation to certain information requests by third parties in the energy sector, can be appealed to the respective information commissioners in those countries.

**Disclosure of c-i-c Information when it is in the ‘Public Interest’**

While, in general, c-i-c material may be exempt from publication, in a number of common law countries (such as Australia, Ireland, the US, Canada, and the UK) a claim for c-i-c (or other claim against disclosure) can potentially be overridden if it would be in the public interest to disclose such information.

The countries surveyed have developed different processes for making a public-interest determination. In some countries and infrastructure areas, the process is explicitly defined, as it is for postal services in Australia where the ACCC has issued principles about how it will assess whether a claim of confidentiality by Australia Post in relation to its annual financial information is justified, and whether disclosure is in the public interest. In other countries and sectors the regulator may have more scope to decide how it approaches this determination. For instance, in Ireland, the energy regulator must notify the relevant party and any third parties who may be impacted by a decision to publish sensitive or confidential information based on a public interest in disclosure, and provide them with an opportunity to respond.

The specific criteria applied in a ‘public interest’ test also vary across countries. For example, in the UK, the test seems to be closely aligned to the question of whether disclosure of the information will ‘facilitate the carrying out of the regulatory role of

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34 Efficiency benchmarking carried out by the BNetzA has been subject to a number of legal proceedings in the Regional Courts. In relation to confidential cost data used, the Regional Courts ruled that the data are considered to be confidential business information that merits protection, and therefore should not be published.
the regulator’. The ‘public interest’ test may also be shaped by the extent of liberalisation of a sector. For example, in the US postal industry, the industry-specific regulator, the PRC, weighs the nature and extent of the likely commercial injury to the US Postal Service against the public interest in maintaining the financial transparency of a government establishment competing in commercial markets.

In summary, the identification, and treatment, of c-i-c information is an important issue in regulatory arrangements across countries. Sometimes, the designation of material as c-i-c is within the discretion of the regulator, whereas in other cases c-i-c material is legislatively defined. Where the regulator has some discretion, specific administrative practices have been adopted to offer guidance on how c-i-c information will be identified by regulators and any public interest test conducted. In some countries, a claim for non-disclosure of c-i-c will be defeated by a determination that disclosure is in the public interest. In countries that place emphasis on forms of ADR, the dissemination of c-i-c information is often up to the parties involved in negotiation.

**Storage and Access**

Regulators’ information collection activities and obligations raise storage and access issues, including such matters as the secure storage of confidential information received electronically or in hard copy by regulators; and the use of, and access to, computer models used in regulatory proceedings.

*Storage of Information Collected*

Some regulators have published operational protocols setting out their methods of operation in relation to such matters as company visits, accessibility and the submission of documents, and for inspecting and copying digital data. Other regulatory agencies have developed and introduced formal information security policies, including creating secure electronic evidence environments and upgrading document management systems. In addition, data-protection legislation impacts on storage and access requirements for information held by regulators in an increasing number of countries where it is in place. Such legislation typically places restrictions on the use of personal data relating to individuals.

Regulators in some countries have adopted specific administrative practices for dealing with third-party requests to access confidential information, or in relation to how any confidential information will be published. In Canada, for example, the communications regulator (the CRTC) may order: that a document not be placed on public record; publication of an abridged version of a document; or that a document be disclosed to parties at a hearing to be conducted in camera. In Ireland, the communications regulator (the ComReg) generally requests that confidential information be submitted separately to a main submission (which will be published on its website). In the UK, the energy regulator will exclude, as far as practical, the publication of commercially-sensitive information. As a result, it does not routinely publish reports and papers provided for consideration at the Gas and Electricity Markets Authority (GEMA) meetings. Another UK regulator, the Ofcom, has commented that a blanket marking of a document as confidential is unhelpful and time consuming for both the Ofcom and the submitter, suggesting it has experienced problems with ambit claims of confidentiality. This problem may be less likely in the US where parties designating material as confidential must do so in good faith.

*Access to Computer Models*
To provide timely and appropriate access to computer models or simulations employed as part of regulatory proceedings, some regulators have introduced formal access procedures. These include requirements regarding: the type of supporting information that must be provided with the model; requirements that any modifications to the model be provided to all access parties; and, finally, that the model be made available on a timely and reasonable basis for the purpose of the proceedings.

In California, the CPUC has established formal procedures relating to access to computer models used as part of a proceeding. The CPUC rules provide procedures to enable a party to access a computer model or database used as testimony or exhibits by another party. Access to the model must be provided on a timely and reasonable basis to those seeking access for the purpose of the proceedings. Specifically, information must be provided in relation to the model sufficient to enable an experienced professional to understand the logical processes of the model and any post-processing requirements. The CPUC rules specify that the information provided with the computer model must include a detailed description of the source of all input data. The procedures include requirements for those seeking access to the computer model to explain (in writing) why they require access and various requirements as to when and where such access should take place. The rules also state that if a sponsoring party modifies its computer model or the database, and sponsors the modified results in the proceeding, such party shall provide the modified model or data to any requesting party who has previously requested access to the original model or data base.

**Review and Reform**

Some initiatives with respect to storage and access matters were identified in the international survey. In New Zealand, the CCNZ, which administers information-disclosure regimes in respect of electricity, gas and airport services, undertook a security review for storing and accessing confidential information in 2006-7. The review resulted in an information security policy, a new visitor log system and improved practices for handling electronic information. A secure electronic evidence environment and upgraded document management system were put in place.

In England and Wales, all information gathered by the Ofwat is stored in its library. In 2005, the Ofwat launched a long-term project, *Project Reservoir*, to restructure the office-wide software suite used to collect, process and store regulatory information. *Reservoir* uses open-source software to make the Ofwat’s systems transparent and freely available to stakeholders.\(^{35}\)

In Sweden, information received by the transport regulator is stored in a digital case-management system and all documents that are received or drawn up on paper are scanned. The agency reports that this has increased its capabilities for rapid and correct information.

In summary, various initiatives in relation to storage of, and access to, confidential information received by regulators can be identified, including the use of information security policies and the establishment of formal procedures relating to access to computer models used as part of a regulatory proceeding. These typically deal with practical issues of excising confidential information from non-confidential

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\(^{35}\) Ofwat, *Data Collection*. Available at: [http://www.ofwat.gov.uk/regulating/reservoir/](http://www.ofwat.gov.uk/regulating/reservoir/) [accessed on 5 March 2015].
information that can be made generally available, or offer guidance on how information will be identified by regulators and any public interest test conducted. Finally, some countries have implemented specific reforms aimed at better information management and storage.

**Timeliness of Decision-making and Information Collection**

Generally speaking, the information-collection process is a significant factor in the timeliness of regulatory decision-making. Regulatory decisions and processes that need a significant amount of information to be collected, or where parties do not have incentives to provide information, can impact on how quickly a decision can be made. In addition, requirements to consult can extend the information-collection requirements in decision-making. In this respect, the international survey suggests that more timely regulatory decisions can be facilitated by: strict deadlines for the provision of information, including strict consultation period deadlines; or by shifting the burden of information collection from the regulator to regulated businesses through requirements for pre-lodgement negotiations or the use of negotiation/arbitration mechanisms.

**Decision-making Timeframes and the extent of Consultation and Information Collection**

As a general observation, the review of international experience suggests that the time taken to conduct a regulatory process can be related to a number of factors. These include the type of matter under consideration (pricing, investigating breaches of conditions, non-price terms, etc.); the extent of requirements to consult; the extent of the involvement of different parties in the process; and, the industry or sector being regulated. In countries where formal timeframes for decision-making exist, regulatory processes tend to range from between four and twelve months. However, shorter timeframes than four months have been set for many regulatory determinations, covering: energy and rail-access disputes in France; energy and telecommunications non-price access in Germany; energy access disputes in Ireland; telecommunications access, categorisation, and breaches of the code in energy in New Zealand; regulation of postal services and the airport in Singapore; telecommunications regulation in South Korea; and postal regulation in Australia.

Reviews of past decisions in some of these countries suggest that timeframes can be quite short, with timeframes less than four months achievable. However, they can also be substantially longer: in South Africa a review of decisions by the energy regulator (the NERSA) found the majority to have been made within three to four months, but some took up to eight months; while decisions made by the Singapore communications regulator (the IDA) had, in some cases, been made within one month, but in others, had taken up to eight months.

While short decision-making and consultation timeframes are prescribed for particular regulatory processes, provisions may exist to extend the timeframe where a matter is more complex than usual, or in other prescribed circumstances. Relatively simple decisions, such as access determinations, can also be made in a short timeframe. In Australia, the ACCC will make decisions around pricing regulation of the postal sector within 21 days, with the option of extending this time but only with the consent of Australia Post. Other countries with short timeframes have similar provisions to extend the timeframe where it is deemed to be a more complex decision than usual.

Of relevance to the current chapter is the observation that there is a potential interaction between the timeframe for decision-making and the ability of the regulator
to collect and assess information through consultation and other processes. Specifically, it appears that formal requirements that a regulatory decision-making process be shorter than four months may only be achieved by the curtailing of, or at least provision of a stricter framework for, consultation and information gathering.

**Placing the Information Burden on to the Parties**

Shorter decision-making and consultation periods can be observed in settings where there is an effective pre-lodgement process (such as Germany) or the regulator is arbitrating after private negotiations have failed (such as the CRE in France). Such short timeframes appear to be achieved mainly by putting the informational burden on businesses rather than regulators – given the businesses already have the information they need to negotiate, the need for time-intensive information collection by the regulator is avoided.

Initiatives involving shifting the burden of information collection to regulated businesses can be seen in other areas of regulation, particularly in Australia and the UK. In Australia, for example, the AER published a framework for better consumer engagement that suggested engagement should be undertaken primarily by the energy providers, to build better relationships between them and their consumers. Placing the burden of information and engagement on businesses is one way to expedite hearings, because less time and effort will need to be spent by the regulator in consultation with consumers, because the decisions of the regulated businesses will already somewhat reflect consumer interests. Similarly, as discussed in chapter 3, the energy and water regulators (for England and Wales) introduced processes whereby regulated businesses are required to consult with consumer groups prior to the submission of their business plans.

**Commercial Negotiations and Information Provision**

As noted above, negotiations between regulated entities and users in the first instance, can shift the information burden from regulators to businesses, and therefore arguably expedite regulatory processes.

There are numerous examples of where regulated businesses and other interested parties are encouraged to engage in commercial negotiations in the first instance. For example, in 2006, Australian governments affirmed that, in the first instance, terms and conditions for access to infrastructure services should be commercially agreed between the access seeker and infrastructure provider. Other examples include initiatives introduced in: rail and telecommunications in the UK; the federal energy sectors in Canada and the US; and surface transportation in the US.

In order for commercial negotiations to be effective in reducing the length of the regulatory process, there needs to be viable mechanisms that allow negotiation to occur in a more time-effective manner than traditional regulatory processes. One thing that may facilitate this is the role the negotiating businesses can play in the determination of what is commercial-in-confidence information and its dissemination. For instance, parties can be encouraged to establish their own ‘confidentiality regime’, which will avoid the need for regulatory determinations on these issues.

Formal procedures and guidelines can also expedite the process by guiding the dialogue between parties and providing an outline of what is considered acceptable. They can also force negotiating parties to release more information, which could

36 *Competition and Infrastructure Reform Agreement*, 10 February 2006, Clause 2.2.
enhance the negotiation process. In Australia, the ACCC’s standard practice is to give a general confidentiality direction at the beginning of an arbitration, and to encourage the parties to agree on a confidentiality regime; such as the exchange of a standard-form confidentiality undertaking and the identification of persons to have access to all confidential information. On the other hand, overly prescriptive procedures could stymie the negotiations, rendering the ADR mechanisms less useful.

In comparing timeliness with-and-without pre-lodgement negotiations and mediations, the duration of pre-lodgement processes needs to be included in overall timeframes for dispute settlement. Accordingly, improvements in timeliness only flow from such pre-lodgement hurdles where these processes are more streamlined than formal processes, and where disputes either do not proceed from such processes to formal settlement or, where the dispute does proceed, the formal process that follows is expedited sufficiently to outweigh the duration of the preliminary process. Expedition would occur particularly from the issues for resolution having been more precisely delineated by pre-lodgement mediation and negotiation.

Broadly, the issue of timeliness of decision-making is seen as critical to the regulatory process. Some countries manage to have timeframes of between two and four months, while most others manage timeframes of four to twelve months. In countries where the timeframe is particularly short, it is often from the use of pre-lodgement commercial negotiation practices, or other practices that simplify the decision-making process, and are more time-effective than traditional regulatory processes.

Key Points on Information

Regulators typically have a range of information-collection practices and powers that are deemed necessary to perform their duties, the scope, and strength, of which can vary across country and sector. Increasingly, regulators also obtain information through public consultation mechanisms. The use of information provided compulsorily by regulated entities, or voluntarily, through consultation mechanisms, raises issues, and often regulators must weigh the conflicting need to provide a transparent regulatory system with the need to protect confidential information. Disclosing too much can lead to a regulated entity becoming unwilling to provide information in order to ensure they are not adversely affected by revealing sensitive information. On the other hand, disclosing too little information decreases the ability for third parties to understand the rationale of the regulatory decision and can limit the ability of the regulator to apply a regulatory framework. In general, the trend across countries is for increasing transparency in regulatory processes and greater public access to documents used in these processes. This trend is more evident in some countries and infrastructure sectors than in others, which suggests achieving the right balance is partly dependent on context.

The following key points emerge from this chapter:

- For business-specific information that is not generally available, regulators typically have a range of statutory information-collection powers, although the scope of these powers, and the extent of regulatory discretion involved in their application, varies among the surveyed countries. The extent to which information is requested from, and provided by, regulated entities, also appears to be impacted by a number of contextual factors, including the general regulatory ‘environment’ or ‘culture’ in the particular jurisdiction. Obligations to provide information on either an annual or an ongoing basis exist in a number of countries,
and may reflect a surveillance responsibility of the regulator, or may be required on the basis of other particular regulatory arrangements. The ability to impose fines and other sanctions on businesses for non-compliance is part of the regulatory environment in most countries.

- The timely provision of information by regulated entities was identified as an issue in several countries, in particular because of the incentives that incumbents may have to delay determinations on access matters (to protect existing prices) or in relation to cost benchmarking. Some of the surveyed countries have developed initiatives to incentivise the timely provision of information.

- Disclosure of information collected and used in regulatory decisions is common across countries, and is aimed at increasing the transparency of the regulatory process. Transparency is sometimes codified into the legislation governing the regulators, but is more often a less formal commitment. However typically there are exemptions from information disclosure including for material deemed commercial in confidence (c-i-c).

- The role of the regulator in determining what constitutes c-i-c material varies widely, and is dependent on the formality or the informality of the definitions of such information. In addition, where ADR processes are used in relation to regulatory issues, the parties may establish their own confidentiality regime.

- In some jurisdictions, information which is designated c-i-c may nevertheless be published in prescribed circumstances. In particular, in a number of (common law) countries (Singapore, Ireland, the US, Canada, and the UK) a ‘public-interest’ type determination will defeat a claim for non-disclosure of c-i-c material. There is some variation across countries as to the meaning, and interpretation, of ‘the public interest’, and some regulators have developed specific processes in relation to making a ‘public interest’ determination.

- Information-collection activities and obligations raise storage and access issues, including: the security of storage of confidential information received by regulators; and the use of, and access to, computer models used in regulatory proceedings. Some jurisdictions have initiatives aimed at improving the security, accessibility, and useability of information collected.

- In many jurisdictions, regulators do not only collect information from regulated entities in performing regulatory tasks, but also are increasingly required to seek, and consider, information from other parties, and the public in general, under wider statutory consultation requirements (chapter 3). Information obtained through voluntary consultation mechanisms can raise similar issues to those discussed below in relation to information obtained compulsorily in terms of transparency, disclosure, storage and access.

- The information-collection process is a significant factor in the timeliness of regulatory decision-making. Therefore, the question of how to balance timeliness with other objectives (effectiveness, transparency and consultation) is a concern in many countries, including Australia. The survey demonstrates some initiatives that may expedite regulatory processes through shifting the information-collection and consultation burden from regulators to regulated businesses through: pre-lodgement processes; negotiation/arbitration mechanisms; or via stricter deadlines for information provision (including strict consultation period timeframes).
5. Appeals and Reviews of Decisions

The global trend of infrastructure liberalisation has been accompanied by increased use of independent regulatory authorities. While the independence of these agencies is seen to enhance certainty for regulated business, a process of appeal from the decisions of these agencies is generally regarded as important to ensure that the regulator exercises its powers lawfully and appropriately and ‘does not stray from its mandate’ (Smith, 1997). In this respect, the credibility of a regulatory system is linked to factors wider than just whether an independent regulatory authority is created. Broadly, the credibility of regulation is enhanced in jurisdictions where political and legal institutions are perceived to be able to control and oversee the exercise of discretion of a regulatory authority.

While questions about the accountability of independent regulatory authorities have featured in debates since the creation of the early regulatory agencies in the United States, the issue has taken on an increasing importance in some jurisdictions as the scope of the powers and discretion of regulatory authorities have expanded, and as rights of appeal and challenge of regulatory decisions are provided to a greater number of parties. However, as Spiller and Vogelsang (1994) have noted, the appropriate safeguards on the exercise of regulatory discretion can be highly context-specific, reflecting the underlying legal and political architecture of a jurisdiction.

Accordingly, a range of issues relating to the design and processes of appeal and review arrangements across the surveyed countries is considered in this chapter.

Design Features of the Appeal Mechanism

While rights to appeal regulatory decisions are frequently observed in the surveyed jurisdictions, the design of such arrangements varies significantly across a number of dimensions.

The first dimension relates to the nature of the review process, and in particular whether the process provides for review of the legality of a regulatory decision (sometimes called ‘judicial review’) or whether it permits for a re-consideration of the matter before the original decision maker on its ‘merits’ (sometimes called ‘substantive’ or ‘merits’ review’) or for both. It should be noted that, although merits review and judicial review are often perceived to be two very different processes, they arguably lie on a continuum, and the two types of review can be more similar or more distinct depending upon details of the relevant context. As Peter Cane (2010, p. 446) has noted more generally:

> ... to say that judicial review and merits review are categorically different is not to say that they are entirely dissimilar. For instance, both are concerned with enforcing the legal limits of decision-making powers …

Generally speaking, merits review provides the greater scope for reviewing the substantive content of regulatory decisions, and therefore widens the range of conduct over which a regulator is held accountable.

A second important dimension relates to whether any merits/substantive review occurs within the regulatory agency itself, or whether it is performed by an external body. Alternatively, and sometimes sequentially, it could be performed by both.

A number of other dimensions of appeal design are evident across the surveyed jurisdictions, including: who has standing to seek review of a regulatory decision;
who can participate in the review process once it is instigated?; how are appellants and other participants funded in relation to the appeals process?; how is the review process conducted?; and what outcomes or remedies are provided through the appeal mechanism?

The Nature of Review

Judicial Review of Regulatory Decisions

The ability to seek judicial review of administrative decisions, including regulatory decisions, is common across the surveyed jurisdictions, and a large number of the regulatory decisions are reviewable on this basis. This ability can be constitutionally prescribed (such as in South Africa) or can arise under national legislation. In some cases, the conduct of such review is influenced by international conventions (for example, in Europe, by the European Convention on Human Rights). However, judicial review is not necessarily available automatically. In many jurisdictions, a court may need to grant leave to appeal on the basis of particular criteria.

Although it is difficult precisely to compare the systems of judicial review of regulatory decisions applied across jurisdictions, in general, such review looks to whether the regulator has: acted within its powers; acted appropriately when exercising those powers; and not otherwise violated relevant laws. This can encompass consideration of matters such as: due process; reasonableness; fairness; and questions of misuse of power. These grounds are sometimes stated in terms of ‘illegality, irrationality or procedural impropriety’. In some jurisdictions, considerations of issues of proportionality, non-discrimination and natural justice are also relevant in processes of judicial review.

In general, judicial review does not involve the reviewing body repeating the regulator’s role in applying judgement in assessing the evidence. However, a question does arise as to how much deference the body conducting judicial review should give to the regulator in the exercise of its powers (that is, the standard of review). In many jurisdictions, courts approach the judicial review of administrative action with some deference, viewing the regulator as best able to determine relevant issues in light of its mandate and expertise. In this respect, courts may only interfere with a regulator’s decision in the case of ‘manifest’ abuses, errors or unreasonableness. Other contextual factors may also impact on a court’s standard of review. For example, the standard of ‘judicial review’ for Federal Energy Regulatory Commission decisions in the US appears to vary depending on whether the decision was subject to a ‘trial like procedure’. If so, the review body will only set aside the agency’s decision if it is found to be ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law’. In any other case, the court will review whether the agency’s decision is supported by ‘substantial evidence’ after reading the ‘whole record’.

A common (although not necessarily a distinguishing) characteristic of judicial review in the surveyed jurisdictions is that the reviewing body cannot modify the regulator’s decision, or substitute its own for that of the regulator. Remedial power is typically limited to annulling or setting aside a decision, in whole or in part, or remitting the matter for reconsideration by the relevant regulator with directions. The precise

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37 Two exceptions are: certain decisions in the rail subsector in Spain are binding on the rail businesses; and certain decisions of Sweden’s postal regulator are binding.
remedies available to courts will depend on their relevant statutes or common law powers. For example, they may be declaratory, or may prohibit certain conduct, or mandate the regulator do something

Substantive/Merits Review of Regulatory Decisions

In some of the surveyed jurisdictions, there is, in addition to the availability of judicial review, the possibility of substantive review of certain regulatory decisions. The notion of substantive review is not precise, but will generally involve the reviewing body looking to the ‘merits’ of a decision – its substantive correctness or preferability – not just its compliance with legal or procedural requirements. This may involve the reviewing body investigating a matter de novo, or repeating the regulator’s role in applying judgement in assessing the evidence that was before it. A body conducting merits review may also be empowered to vary the regulator’s decision or substitute its own decision for that of the regulator.

However, as is widely recognised, there is a potential tension between the possibility of substantive review of regulatory decisions and regulatory certainty and timeliness. For these reasons, where jurisdictions do provide for substantive review of regulatory decision, many only do so for a limited number of regulatory decisions. For example, the only decisions of the New Zealand Commerce Commission (CCNZ) subject to merits review in the energy sector are the periodic determinations of the ‘input methodologies’ for price decisions. In Ireland, merits-review appeals are limited to certain regulatory matters. However, these can be contrasted with the Netherlands where substantive review (through an Objections procedure, described below) is available for most ACM decisions.

In addition to limiting the type of decisions to which merits review will be available, substantive review is, in a number of jurisdictions, bounded in other respects. First, there may be limited grounds on which substantive review of a reviewable decision may be sought. In Canada, a right to internal review of a decision in the Federal energy sector, or re-hearing will only arise in specific circumstances: changed circumstances or new facts; facts not placed in evidence in the original proceedings that were not discoverable by reasonable diligence; or errors of law or jurisdiction. In the US, a petition for reconsideration of a FCC decision must rely on facts not previously presented to that regulator and will only be granted where the facts are essentially ‘new’, or were unknown to the petitioner at the time of the original decision (and could not have been known by reasonable diligence), or the FCC considers it in the public interest to consider the additional facts. Second, it may be in the regulator’s discretion whether to grant such a review. For example, while an application can be made to the FERC in the US for a re-hearing, it has discretion as to whether it acts on the request. Third, there may be limitations on the information that can be used in the review. For example, in New Zealand, the High Court’s merits-review process involves a rehearing of the information that was before the regulator when it made the decision. Fourth, there may be limitations in the remedies available to the body conducting the review. For example, in Ireland, after its merits review of issues, the Aviation Appeals Panel is unable to substitute its own decision, but remits back to the regulator. Similarly, although the High Court can conduct merits review of certain decisions in telecommunications, post, rail and airports, its remedial powers are limited to affirming or setting aside, accepting or rejecting the decision or remitting the matter back to the regulator.
In some cases, substantive review powers can be extensive. For example, in the Netherlands, the ACM conducts its internal review procedure ‘ex nunc’ (that is, ‘from now on’), and takes consideration of: changed policies; changed legal rules; and changed circumstances at the time of the review. In Ireland, the Energy Appeal Panels ‘stands in the shoes of the regulator with all its powers’ and, in investigating the matter, has all the powers of the High Court to compel the production of documents and the attendance of witnesses. In the UK, in relation to price-control decisions appealable (strictly referable) to the Competition and Markets Authority, it will conduct the price-control process afresh, with full investigatory powers. In relation to other regulatory decisions, the Competition Appeal Tribunal generally has the power to make any decision which the sectoral regulator could have made and can admit new evidence.

**The Review Body**

Across the surveyed jurisdictions, the review of regulatory decisions is conducted by a range of bodies and processes, including: internal review by a regulatory agency; review by external bodies or Ministers; or arrangements involving a combination, or sequence, of these processes.

In many jurisdictions, the review body is permanently established and may have a permanent staff and secretariat. However, in some cases, the review body is constituted on a more ‘as needed’ basis. For example, in Ireland, an independent appeals panel will be specifically constituted by the regulator to hear appeals against certain decisions in the energy and aviation sectors. In Singapore, an Appeal Panel can be established by the relevant minister to hear appeals against EMA decisions; while in Canada, in relation to public ports, the regulatory authority must set up an independent advisory panel to resolve complaints from users in relation to its tariff decisions.

**Internal Review Mechanisms**

In some jurisdictions, regulatory decisions can be subject to re-hearing or reconsideration by the regulatory agency that took the decision.

Best-known is the Objections Procedure in the Netherlands, which provides for most contested decisions of the ACM to be subject to a full substantive review by a separate team within that regulator. The ACM can also appoint an independent external advisory committee to conduct the procedure. The Swedish Transport Agency can reconsider certain decisions on application. Applications for internal review, reconsideration or rehearing can also be made in relation to certain regulatory decisions in Mexico, Ireland (energy and aviation), Canada (federal energy sector), the US (federal energy sector, telecommunications, rail and airports); South Korea (telecommunications) and New Zealand (telecommunications). Note, however, that these avenues are not necessarily available as of right, but may be in the discretion of the regulator or only arise in prescribed circumstances. For example, applications for reconsideration of a telecommunications determination in New Zealand require a change in circumstances since the determination; or that the determination was based on information false or misleading in a material particular. In Canada, applications can only be made on certain enumerated grounds (described earlier). In the US, in a number of areas, review or reconsideration by a regulatory authority is discretionary.

38 Application can only be made on certain enumerated grounds described earlier.
and must be ‘petitioned for’ on the basis of prescribed criteria. Other parties may make arguments against granting the petition for reconsideration.

In Alberta, Canada, the right to substantive or merits review of an energy decision depends on the procedure followed by the regulator in making the original decision. If the decision was made after a hearing, appeal cannot be made for merits review. However, if the decision was made without a hearing, application may be made for re-hearing and redetermination.

In some jurisdictions, exhaustion of any available internal review processes is a requirement before appeal can be made to an external body. This is the case in relation to applications for review of Federal Energy Regulatory Commission (FERC) decisions by the relevant court and in relation to the Netherlands objection procedure, which must usually (there are exceptions) be undertaken before appeal to an administrative court can be made.

Other Internal Review Arrangements

Before moving on from the discussion of internal review arrangements, it is worth noting a feature of the FERC’s decision-making process in the energy sector in the US. Although this process is not strictly a form of internal review or re-hearing, it creates the possibility for a FERC decision to be made after the conduct of two separate processes within the agency (that is, a decision is reached after ‘two sets of eyes’ have considered the matter). In brief, before a contested matter goes before the FERC Commissioners for their decision-making process, it may be referred for ‘administrative litigation’ conducted by an impartial Administrative Law Judge, located within the agency. The Administrative Law Judge will conduct a trial, collect evidence and make a recommendatory Initial Decision. The Commissioners will receive the recommendation then conduct their own decision-making process, including hearing any further evidence – that is, they can, if they wish, undertake a de novo review – before making a final decision. Appeal from this final decision is only by way of judicial review. Another distinctive US arrangement involving the potential for consideration of a matter by two separate ‘sets of eyes’ can be seen in relation to the regulation of airports. Certain decisions made at one level of the FAA will, after a prescribed period, become final decisions if they are not appealed to another level within the regulator. If appealed, the matter will be subjected to merits review, and the reviewer’s decision will become the final decision; with only judicial review then available.

Review by External Body

Across the surveyed jurisdictions, application for review of regulatory decisions may be made to a range of external bodies. These include: courts; specialist tribunals (which can be executive or judicial tribunals); government agencies; and individuals, such as ministers. Such external bodies may have powers of judicial or substantive review or both, and this frequently depends to a substantial degree on the constitutional arrangements of the jurisdiction.

Generally speaking, in jurisdictions where there is a strict separation of judicial and executive power, separate bodies must perform the judicial review and merits review of regulatory decisions. In these circumstances, the merits review by an executive

39 Countries that have a high level of separation of powers usually have different bodies responsible for judicial reviews (generally a court) and merits review (generally a tribunal or other administrative body). That is, a court can only consider the legality of a decision, while only an
body may be an intermediate step before appeal to a court for judicial review. However, in jurisdictions where there is not this strict separation, one body may be empowered to review both the merits and legality of a regulatory decision. For example: in New Zealand the High Court can rule on the merits of the Commerce Commission’s determination on input methodologies; in Germany, specialist regional and general administrative courts can conduct substantive ‘merits’ review of BNetzA decisions; in Ireland, the High Court hears appeals for merits review of certain decisions related to electronic communications, post, rail and airports; in the Netherlands the Court of Appeal reviews decisions on the merits; and, in the UK, the Competition Appeals Tribunal has powers of both judicial and merits review (these powers appear to be exercised separately depending on whether the Competition Appeals Tribunal’s involvement in relation to a particular regulatory decision comprises a ‘review’ or an ‘appeal’ under relevant provisions; ‘reviews’ are conducted on judicial review grounds; ‘appeals’ can involve merits review of decisions).

Generalist Court or Specialist Tribunal

Where appeal is available to an external body, an important design issue is whether such a body has a general or specialised practice (remit). The survey reveals that, where appeal is to a court, specialised practice is less common, although some jurisdictions have specialised branches of the judiciary. Examples include: the Cartel Senate in the German Higher Regional Court of Düsseldorf (which deals with general competition law and energy appeals); and the Netherlands specialised chamber of the Court of Appeal, known as the College of Appeals for Business. Where an executive body (or a non-court judicial body such as the Competition Appeals Tribunal) conducts a review, this body is generally assumed to have greater specialised expertise than a general court.

The composition of review bodies may, to some extent, blunt the sharpness of the distinction between ‘generalist’ and ‘specialist’ because members of the judiciary frequently sit on non-judicial bodies alongside the lay members, and courts may sit with lay members when conducting merit reviews of regulatory decisions. For example, Australia’s ACT and the UK’s CAT are composed of both judicial and non-judicial members. The High Court in New Zealand, when conducting merits reviews of CCNZ determinations, sits with lay members in addition to a judge.

Appeal from the decision of a regulator to specialist tribunals or to an independent executive body is evident in a number of jurisdictions. For example, the UK’s Competition Appeals Tribunal reviews certain decisions of regulators in telecommunications, electricity, gas, water and wastewater, railways and air traffic services. Although the Competition Appeals Tribunal is not a court, it is a judicial body within the UK’s legal system. It can conduct both merits review and judicial review of regulatory decisions. Certain other regulatory decisions (relating to modifications to the licences of regulated utilities and price-control reviews) are referable to an independent executive body, the Competition and Markets Authority.

The use of specialist tribunals to hear appeals from competition matters (as opposed to regulatory matters) is particularly common. Examples include: the Canadian Competition Tribunal; the Netherlands Trade and Industry Tribunal (which reviews administrative/executive body such as an administrative tribunal can consider the substantive merits of a decision.)
the regulators market analysis decisions); and Singapore’s Competition Appeal Board. In South Africa, a Water Tribunal hears appeals against decision made by a range of agencies/bodies.

Finally, in a few jurisdictions, appeal from certain regulatory decisions is to a minister or government. For example, in Ontario, Canada, certain decisions of the energy regulator can be appealed to the government for substantive review, although this right has been used sparingly. In Singapore, appeals in relation to certain decisions in telecommunications, post and energy can be made directly to the relevant Minister. Rights of appeal to relevant government ministers in relation to certain decisions can also be seen in Japan (telecommunications), Canada (telecommunications and rail), and Singapore (telecommunications post, energy and airports). In some cases, such ministers can compose a panel to determine the matter.

**Standard of Merits Review**

Even where review bodies have substantial remedial powers in relation to their merits review of a regulatory decision (that is, the ability to vary a decision or substitute their own), a separate question is the manner in which they exercise this power (that is, the standard applied in considering the correctness or preferability of a decision). Again, this raises the question of deference to the original decision-maker’s judgement and also raises questions as to the materiality threshold at which disruption of the earlier decision is justified. In New Zealand, while the High Court has power to amend or replace an input methodology determined by the Commerce Commission, it will only do so if the amended or substituted methodology is (or will be) ‘materially better’ in meeting the purposes of the relevant legislation. In the UK, where the Competition Appeals Tribunal has a full-merits jurisdiction in relation to some regulatory decisions, and is entitled to form its own view of the ‘best’ decision, it will only substitute its view for that of the decision-maker in appropriate circumstances.40 In this respect, the Tribunal has, in various judgements, accepted that there may be more than one approach a regulator could adopt in reaching a decision; and, while still carrying out a merits-assessment of the case, has suggested it would be slow to overturn a decision which is arrived at by an appropriate methodology, even if a dissatisfied party can suggest other reasonable ways of approaching the matter.41

The appropriate standard for merits review in the UK is currently a subject of government consultation. Specifically, the government is consulting on whether, when appeals are heard ‘on the merits’, review should shift to a judicial review standard or to defined grounds of appeal setting out more clearly the basis on which a regulator’s decision can be challenged. This follows concerns that merit appeals are often lengthy and costly, and that there is significant diversity in both how such appeals are handled across different regulated areas, and in the standards by which they are conducted.

**Standing and Participation in Appeal Processes**

The principal function of a standing rule is to limit access to the appeal body. The word ‘standing’ is used most accurately in the context of applications for review to

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41 See, for example, T-Mobile (UK) Ltd and others v Ofcom [2008] CAT 12, §82; Vodafone & others v Ofcom [2008] CAT 22 at §46-47.
bodies that are external to a regulator. However, this section also considers the criteria on which applications may be made, and granted, for internal review or reconsideration of a decision.

It is difficult to generalise about the standing rules that apply across the surveyed jurisdictions. In general, standing rules for judicial review reflect the general principles of the national court systems, and any national legislation governing judicial review of administrative decisions. In a number of jurisdictions, leave must be sought from the relevant court to apply for judicial review of a regulatory decision (and such leave must also be sought for any subsequent appeal to higher courts).

Any wider participation in judicial review processes is also typically governed by the rules and procedures of the relevant courts. In this respect, courts often exercise discretion as to which parties will be permitted to be intervenors in a matter.

Standing is typically available to those ‘adversely affected’ or ‘directly affected’ by a decision. Those who can establish a ‘sufficient interest’, or who can assist the decision-maker in its process, may also be permitted as intervenors. For example, in Ontario, Canada, a person must be ‘directly affected’ by an order. In the US, entitlement for judicial review arises for those who suffer legal wrong because of a regulator’s actions or are adversely affected or aggrieved by an agency’s action.

In relation to substantive reviews of regulatory decisions by bodies other than courts, standing is usually prescribed by the legislation or other rules establishing the ‘merits’ review regime. Such rights may be limited to those who participated in the original decision, or can be much broader. For example, in the UK, the ability to seek a reference to the Competition and Markets Authority in relation to a price-control decision of the energy regulator, applies not only to the affected network businesses, but also to any third parties that can satisfy particular criteria. The concerns of the third party seeking the reference must be legitimate and material, and meet a public interest test. In any case, whether it is a regulated business or a third party that seeks reference to the Competition and Markets Authority from Ofgem’s decision, the decision to refer (and the scope of the referral) is within the discretion of Ofgem.

Standing rules also reflect the specifics of a country’s regulatory system. Thus, in France, where airports are regulated through administrative/economic oversight contracts, any third party may appeal if it considers the airport is in breach of the contract. Further, under France’s legal system, a government commissioner may appeal decisions of the Competition Authority. However, the Minister for Economic Affairs can apply to the courts for cancellation or reversal of certain Competition Authority decisions.

Bespoke standing and participation rights may be prescribed under specific legislation. In the UK, for example, a consumer right of appeal to the Competition and Markets Authority from decisions by the energy regulator was introduced in 2010.42 In Ireland, any user affected by an electronic communications-related decision may appeal the decision on its merits (to the High Court). In the UK, the Competition Appeals Tribunal may give permission for anyone with ‘sufficient interest in the outcome’ of an appeal to intervene in the proceedings.

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42 This can be undertaken, through specialist consumer bodies (such as Consumer Futures) that have the third-party rights of appeal from the Ofgem’s final decision.
Access to internal-review mechanisms also appears to be variable across sectors and jurisdictions. In the Netherlands, access to the Objections Procedure appears to approximate a right, and the ACM must give interested parties the opportunity to be heard in the Objections Procedure. Interested parties are defined as parties directly affected by a decision or who can otherwise prove an interest in the decision, and in some cases, competitors and user groups are automatically defined to be Interested Parties. In many sectors in the US and Canada, internal review of a regulatory decision is discretionary, and when an applicant petitions the regulator to grant such reconsideration, other parties may file oppositions to the petition and, in this way, influence the regulator’s decision and the availability of the review.

**Conduct of Appeal and Review Processes**

The conduct of the appeal process raises a number of design issues including those related to the timing of the process and any information requirements and limits. There are various design issues in relation to the conduct and timeliness of regulatory review processes, including: the time within which appeals must be lodged; the time within which appeals must be completed; the number of steps available in an appeals process; and information requirements and limits.

**Commencement of Proceedings**

The timeframes to commence or initiate proceedings across the jurisdictions surveyed vary in the following way:

- **Timeframes for commencement of judicial review of regulatory decisions** range from as long as 180 days (South African telecommunications) to as short as 14 days (Japan telecommunications) with timeframes in many other cases falling between one to two months.\(^{43}\) In some cases, internal avenues of review must be exhausted before an application for judicial review can be made; and this can extend the overall timeframe in which judicial review can commence. For example, application for judicial review of certain Federal Energy Regulatory Commission (FERC) orders can only be made after a request for rehearing has been made to the FERC (accordingly, additional time will be involved in the FERC reaching a decision to deny or grant this rehearing application).

- **Timeframes for commencement of merits review of regulatory decisions** show a slightly narrower range, although again tend to fall within one to two months.\(^{44}\)

While extensions to timeframes for judicial or merits review are sometimes available, various jurisdictions seek to limit the use of these. In the UK, the CAT will only extend the timeframe where circumstances are ‘exceptional’. In Ireland, the High Court will only grant an extension with good and sufficient reason and where the applicant can show that the circumstances causing failure to comply in time were out of the applicant’s control.

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\(^{43}\) Examples include: 30 days (South Africa, water), 28 days (Australia), 20 working days (New Zealand), one month (France, energy), one month (Germany, energy), two months (Ireland, energy, rail), 60 days (US Federal energy). In Canada, there are timeframes which leave to appeal must be made (for example, 30 days telecommunications, 14 days Alberta energy), and further timeframes within which the appeal must be brought once leave is granted (for example, 60 days telecommunications, 30 days Alberta energy).

\(^{44}\) From three weeks/21 days (Australia), four weeks/28 days (Ireland telecommunications and post), six weeks (Netherlands), one month (Sweden rail), two months (UK appeal to the CAT), 30 days (US). Telecommunications,
Timeframes for Conduct of Appeal

For most jurisdictions, the survey does not indicate the time limits (if any) in which judicial review of an administrative decision must be conducted. There are however exceptions. For example, the Paris Court of Appeal must deliver a decision within four months of an appeal against a decision of the energy regulator.

The survey does, however, indicate that timeframes frequently apply to internal substantive reviews and to merits reviews by non-judicial external bodies. In Ireland, the Appeal Panel in energy must reach a decision in six months, while the Appeal Panel in Airports must do so in three months. In the Netherlands’ the Authority for Consumers and Markets must generally conduct its Objections Procedure within six weeks. Sweden’s substantive review process in rail must be completed in two months.

Where, however, judicial bodies conduct substantive review of regulatory decisions, the normal processes of those bodies appear to apply and time limits are not evident. For example, Germany’s administrative courts do not appear to be subject to time limits in undertaking substantive reviews of regulatory decisions, nor do Ireland’s or New Zealand’s High Court.

Stages of Appeal

In all of the jurisdictions surveyed, it is typical for there to be at least two ‘steps’ of appeal from a regulatory decision and, in relation to judicial review of a regulatory decision, appeal was available, with leave, up the court hierarchy. Some jurisdictions have sought to limit the number of steps available in an appeal process in relation to certain regulatory matters. For example, in Sweden, appeal against regulatory decisions in telecommunications can be made to a County Administrative Court in the first instance, and then to the courts of last instance (the Administrative Court of Appeals). The right of further appeal to the Supreme Administrative Court has been removed.

In some jurisdictions, exhaustion of any available internal review processes is a requirement before appeal can be made to an external body. This is the case in relation to applications for review of FERC decisions by the relevant court. Similarly, the Netherlands Objection Procedure must usually be undertaken before appeal to an external body can be made. It is difficult to estimate the impact of such requirements on the timeliness of regulatory outcomes based on the survey material. Such requirements may act to extend overall timeframes or, if a matter is resolved satisfactorily on reconsideration, may avoid further levels of appeal.

Information requirements and Limits

A further design issue relates to what evidence can be brought before the reviewing body, and how such evidence may be presented.

In relation to judicial review of a regulatory decision, the rules and processes of the judicial system in a country will impact on the conduct of such reviews. For example, in Germany, decisions of the BNetzA can be reviewed on the merits by regional and administrative courts. Being civil-law courts, these: have full investigative rights; can take evidence from the parties; and can call upon expert witnesses. Under this system, however, there appear to be limited discovery rights for the appellant, with BNetzA’s submission to the court typically limited to the extent of information the parties can access (although an appellate court can order disclosure of confidential
information). However, in some cases, standard judicial procedures may be subject to sector-specific arrangements. In the US, for example, judicial review of decisions in postal services is conducted based on the record before the postal services regulator (PRC) in making the order or decision. Whether a planned rate adjustment is in compliance with the CPI-minus-U price cap can be subject to subsequent substantive/merits review.

In relation to substantive or merits review, aspects of the conduct of the process, including information limits and presentational aspects, including the formality of the review process, will vary under the different substantive review regimes. In the US, the length and requirements of petitions for a regulator to reconsider a matter may be prescribed. For example, petitions for reconsideration of a decision by the FMC in relation to ports must be limited to 25 pages; and served in conformity with other specified requirements.

Finally, the particular nature of some regulatory processes may influence participation rights in any review or appeal processes. For example, in jurisdictions where commercial negotiation of access arrangements to infrastructure is encouraged before recourse to the regulator, appeals from regulatory arbitrations, or re-arbitrations, may be conducted privately and with only the relevant parties.

Remedies

Where a court conducts judicial review it typically can only affirm or set aside the decision or remit it back to the regulator with directions; and cannot modify or replace administrative decisions.

Specialist tribunals, conducting substantive or merits review, sometimes have wider remedial powers. For example, in the UK, in relation to relevant decisions, the CAT may: confirm or set aside all or part of the decision; remit the matter to the regulator; impose, revoke or vary the amount of any penalty; give such directions, or take such other steps as the regulator could have given or taken; or make any other decision which the regulator could have made. However, external specialist review bodies or panels do not necessarily have the ability to substitute their own decision for that of the regulator. For example, in Ireland, the Aviation Appeals Panel cannot substitute its own decision for that of the airport regulator, but remits the matter back to the regulator. In energy, the Energy Appeal Panel can, in the case of a refusal to grant a licence, either confirm the refusal or direct the regulator to grant it subject to any conditions it deems necessary. In the case of a modification or refusal to modify a licence, the panel’s remedial powers are limited to directing the regulator to overturn its decision.

Where appeal is to a minister or government body, the remedial results of such reviews are not considered in depth in the survey material. However, in Canada, where there is a right of appeal to the government for a form of ‘merits’ review of certain telecommunication decisions, the government may rescind or alter the regulator’s decision. In rail, certain decisions may be appealed to the Governor in Council who may ‘vary or rescind any decision, order, rule or regulation of the Agency’. In Singapore, any specialist Appeals Advisory Panel formed by the minister on appeals in relation to airports has only an advisory power/remit. By comparison, ‘re-hearings’ or ‘reconsiderations’ by an original decision-making body typically involve re-taking the decision.
Finally, the remedial outcomes of internal-review processes will depend on the specific arrangements around the mechanism. For example, review processes and panels may be empowered to retake a decision or only to provide a recommendation.

**Key Insights on Appeals and Reviews**

While the ability to appeal regulatory decisions is a feature of most of the jurisdictions surveyed, there are important differences in terms of: the nature of the appeal mechanisms; the standard applied; the forum in which appeals are heard; and who can participate. In many cases, this reflects the wider legal and political architectures of a jurisdiction.

Timeliness is an issue across all jurisdictions. For merits review, it appears that the Australian arrangements, which place certain time restrictions on the hearing of appeals by the Australian Competition Tribunal (ACT), are broadly consistent with the time restrictions that are applied in other jurisdictions on specialist appeals panels and tribunals.

There appears to be an important high-level link between the specific design of appeal arrangements – particularly the scope of any merits review – and the incentives for parties to appeal decisions. In situations where, as part of the appeal process, a regulatory decision will be completely re-opened, differing incentives on the party considering seeking review of a decision, may be created. For parties appealing a regulator’s decision, if the original decision is largely acceptable, appealing any contested points can, where an investigation is completely re-opened, potentially result in an outcome that is, overall, less preferable for the appellant than the original decision. In the UK, the potential for such ‘double jeopardy’ is sometimes cited as a reason why no appeals have been made of the price-control decisions of the Ofgem. This can be contrasted with the high level of appeals activity in the energy sector in Australia following the introduction of the Limited Merits Review, where the more limited scope of review by the ACT was seen to create incentives for businesses to ‘cherry-pick’ and appeal only specific aspects of price-control decisions, with an assurance that the rest of the regulatory decision would not be subject to review.

A number of jurisdictions rely on various forms of ‘internal’ review processes for disputed regulatory decisions. In order to address issues associated with perceived bias, various forms of institutional ‘checks and balances’ have been introduced to ensure that any internal appeal is conducted in an impartial manner. This includes: the use of separate hearing officers (such as Administrative Law Judges in the US); requirements that any appeal be heard by a separate division/chamber with a regulator; and requirements in relation to the development of a ‘record’ of evidence submitted and heard. In some jurisdictions, the need to exhaust any internal review process is necessary before appeal to an external body is available. Internal review of regulatory decisions is not currently observed in either Australia or the UK.

There appears to be a trend in some jurisdictions, such as New Zealand and Ireland, to limit merits-based appeals in certain infrastructure areas and types of regulatory decisions. Further, in the UK, a government review is currently considering whether there should be a movement away from the merits/substantive review of regulatory decisions towards narrower judicial-review type approaches. In part, this is seen to be a response to concerns that merit appeals are often lengthy and costly; and that different standards are applied across the regulated areas. On the other hand, in most
EU states, it is a requirement under the telecommunications directives that decisions of national regulatory agencies are subject to substantive review.
6. Insights for Australia

This review has identified a great diversity of objectives, institutions, and practices across the seventeen countries surveyed and between the seven infrastructure areas. As we have seen, regulation occurs in very specific contexts and, accordingly, this chapter focuses on potentially relevant insights from the design and practice of economic regulation of infrastructure in the countries surveyed, moderated according to contextual factors such as: legal traditions; political arrangements; geography; and demography. In this respect, a brief overview of the Australia context is necessary.

The Australian Context

During the 1980s a range of microeconomic reforms were introduced to reduce trade barriers and create a more flexible and trade-oriented economy. This, in turn, revealed the need to reform government-owned monopoly infrastructure to ensure that Australian businesses could compete effectively in global markets. This ultimately led to the implementation of the National Competition Policy (NCP), and the move to greater centralisation of regulation. The NCP reform agenda, which was agreed in April 1995, is underpinned by three intergovernmental agreements including the Competition Principles Agreement, which is intended to guide governments in the reform and regulation of economic infrastructure.

As a federation, legal powers may rest with: the Commonwealth government; state and territory governments; local governments; or be shared by them. For example, under the Commonwealth of Australia Constitution Act 1900, the responsibilities to regulate railways generally lie with the relevant state and territory government. The Constitution enables the states voluntarily to hand over responsibilities to the Commonwealth (referral of power), or the states can cooperatively enact identical legislation to the Commonwealth. Inter-government actions have, since 1992, been coordinated through the Council of Australian Governments (COAG). Establishing national gas and electricity markets relied primarily on referral of power.

The Hilmer Review45 had to deliberate on an institutional structure that would best fit Australian needs. Given the different requirements of competition law enforcement, consumer protection, economic regulation, and technical regulation, a number of models seemed possible. The Australian model involved the establishment of an independent statutory authority – the Australian Competition and Consumer Commission (ACCC) – with economy-wide responsibility for national economic regulation of main infrastructure areas, in addition to competition law and consumer protection. However, there are state variations to the overall scheme, and technical regulation is the responsibility of a range of separate bodies such as the Australian Communications and Media Authority (ACMA), and the Australian Energy Markets Commission (AEMC). Over time, the approach has been adjusted, particularly with the formation of the Australian Energy Regulator (AER). Moreover, there have been various changes to the appeal and review processes over time.

Following the order of the previous chapters, insights are considered in terms of: regulatory independence and discretion; objectives of regulation; aspects of institutional design; consumer engagement; engagement with other stakeholders; information-disclosure issues; timeliness; the decision-making process; and appeals.

45 Independent Committee of Inquiry (F Hilmer, chair), National Competition Policy, AGPS, Canberra, 1993.
1. Regulatory independence and discretion

There has been a strong trend towards independent regulation in many countries (such as the majority of EU member states, Australia, New Zealand and Canada) over the past twenty to twenty-five years, as outlined in chapter one. Asian and some European countries reveal greater ministerial involvement in regulation in relation to some services. Independence per se may not completely remove politicisation, which can also come into play through, for example, ministerial appointment of members of the agency’s main decision-making body.

The degree of discretion of such independent regulatory bodies was an issue discussed in chapter two, with a trade-off identified between a high level of prescription in legislation (which creates the risk that a regulator will be required to make a decision that is not tailored to the circumstances of an individual case) and a high degree of discretion (which can create uncertainty, and the risk of the misuse of that discretion). As discussed in that chapter, a country’s response to this trade-off can be closely linked to its legislative tradition, and also to the style of regulation used. This is most easily seen in pricing regulation, where some countries follow prescriptive formulae, and others simply require prices to be ‘fair and reasonable’. Further, the degree of clarity and avoidance of trade-offs in the regulatory remit, can be important (see insight two).

The Council of Australian Governments (COAG) process established independent regulatory bodies, and Australian regulators have relatively high degrees of political independence. Australian regulators also have a well-defined efficiency-based remit (see insight two) and are subject to appeal procedures (insight fifteen). The regulatory and public-policy functions are performed by separate bodies (the National Competition Council and the ACCC) in the case of the generic access regime (Part IIIA); while the ACCC is responsible for deciding which services should be ‘declared’ for regulation in telecommunications; and for administering the declaration. For rural water, the ACCC has an advisory role to the Minister for Water on the development of water-market rules and water-charge rules, and an advisory role to the Murray-Darling Basin Authority on water-trading rules.

*Independence per se is generally a positive feature of a regulatory regime and is potentially associated with more efficient and transparent decisions. Australian regulators have a high degree of political independence compared with Asian and some European countries. When assessing international frameworks, it is important to consider features such as the explicit level of independence of a regulator, and the extent to which appointments to the decision-making body are bipartisan. The potential for unchecked or undue regulatory discretion can arise where there are insufficient checks and balances on the independent regulator, or the regulator has an ambiguous charter.*

2. The various objectives of the economic regulators

Most countries surveyed assign a primary role to utility regulators to promote broad economic objectives (economic efficiency, mitigating monopoly power, competition and cost recovery). For example: mitigation of monopoly power as a regulatory objective is seen in the regimes of a number of countries that allow for asymmetric regulation of businesses considered to have significant market power (such as under the EU Access Directive); cost-recovery principles can be observed in pricing models that set price caps for cost recovery, rather than to encourage efficient-market pricing.
(such as the benchmarking approaches in Japan and Germany); while principles of competition are employed in some jurisdictions on the basis they support economic efficiency (for example, energy regulation in Canada). However, governments in some jurisdictions have given regulators a broader remit, including: attention to environmental concerns; universal service obligations (USOs); ‘bridging the digital divide’; alleviation of ‘fuel poverty’; and other social equity concerns.

The inclusion of non-economic goals in regulatory remits appears to be influenced by the social, political and environmental context of different countries and infrastructure areas, and how these influence the weighting of relative costs and benefits. For instance: attention to environmental concerns is most prevalent in the energy sector, and in countries that place a high value on environmental preservation; ‘bridging the digital divide’ in telecommunications tends to feature in regulatory remits in countries that view technology as a core aspect of their economic development, such as Japan, the US, and South Korea; while social-equity objectives appear in countries where there is significant inequality in provision of infrastructure, such as South Africa.

One question that arises in these cases is whether the infrastructure regulator is best placed to serve these broader objectives. In this respect, a maxim of economic policy of some pedigree\(^ {46}\) is that the number of instruments should be set equal to the number of targets, implying that broader targets should be addressed by instruments and agencies other than the infrastructure regulator.

As discussed in chapter two, setting broader objectives has also been seen to lead to potential conflicts between particular broader objectives and between such objectives and primary economic goals (efficiency foregone). Balancing competing objectives has also been seen to impact on time and resources through wider consultation requirements and adaptations to regulatory processes. While composed in the context of competition-policy implementation, the Organisation for Economic Cooperation and Development has been clear in its preference for both efficiency-based objectives and, where there is a conflict with non-economic objectives, clear rules for the balancing of objectives:\(^ {47}\)

> The inclusion of multiple objectives, however, increases the risks of conflicts and inconsistent application of competition policy. The interests of different stakeholders may severely constrain the independence of competition policy authorities, lead to political intervention and compromise and adversely affect one of the major benefits of the competitive process, namely economic efficiency. In most cases the conflicts between economic efficiency and other policy objectives either are insignificant or can be balanced. Nevertheless, the rank and weights attached to the multiple objectives of competition policy remain largely ambiguous and need to be defined. This is necessary to ensure both business certainty and public accountability.

In Australia, the NCP process was clear in its intention to improve economic efficiency, with a seminal emphasis in its regulatory objectives on the trilogy of economic efficiencies – productive, allocative and dynamic (Willett 2013). While economic efficiency is the primary focus of all Australian regulators, issues have arisen in relation to how other policy objectives sit within this overall focus. For example, while USOs in telecommunications and postal services are inherently in conflict with economic efficiency, a model has been followed in telecommunications to meet the USO efficiently. However, in water and wastewater the potential conflict

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\(^ {46}\) This maxim is associated with the inaugural Nobel Prize winner in economics, Jan Tinbergen (1952).

between efficiency-based regulation and environmental and social objectives is unclear – the Water Act 2007 assigns economic, social and environmental goals to the regulator without any guidance as how to trade them off.

*Regulators commonly are given economic objectives: improving economic efficiency; mitigating monopoly power and promoting competition. In some jurisdictions, a range of non-economic objectives are now included in regulatory remits, giving rise to questions including: What specific countervailing factors outweigh the compromised efficiency outcomes which result? and Would broader objectives be better served by instruments available to other agencies? In Australia, economic efficiency is the core objective in all infrastructure areas, and the promotion of competition is deemed desirable because it is consistent with the enhancement of efficiency. Broadening of regulatory objectives to include social and environmental objectives needs to be assessed in the light of the costs of specific compromises and the availability of other superior instruments and institutional arrangements.*

3. Division of regulatory functions as between national and sub-national regulators

The division of regulatory functions between different levels of government in the surveyed countries reflects constitutional and political aspects of those jurisdictions but also decisions of regulatory design having regard to: the extent of economies of scale and scope in the implementation of regulatory policy; inter-jurisdictional externalities in an industry; the degree of need to adjust to local conditions; and the value placed on experimentation.

Across jurisdictions, postal services are, in all cases, a national responsibility, and energy and telecommunications tend to be regulated predominantly by national governments. Externalities across state borders often give rise to a compelling case for greater centralisation of regulatory power. On the other hand, sub-national governments are more likely to be involved in the regulation of urban water and wastewater; airports; and ports. The governance of water and wastewater in some countries has been problematic because of the involvement of governments at different levels. Water and wastewater, airports, and ports also tend to be the three infrastructure areas where the degree of regulatory independence is less clear.

In five of the countries surveyed, responsibility for infrastructure regulation is shared between the different levels of government in a formal federation (Australia, Germany, Canada, Mexico, and the US). The assignment of regulatory functions to different levels of government appears to be heavily influenced by the relative level of power of state institutions. For instance, in the US, the states have considerably influenced regulation, and state regulatory bodies have a substantial role in economic regulation. Other countries – such as Japan and Spain – have substantial sub-national governments, although these are not formal federations.

More generally, the European Union (EU) may potentially be viewed as a large ‘federation’. To date, the EU’s processes of developing a consistent approach to the regulation of European and national markets has had mixed success in infrastructure areas; and there is evidence both of delays in implementation and resistance to change in some areas in some Member States. Despite the essentially political problems confronting the EU processes, the success in some areas – notably telecommunications – provides insights into the benefits of developing consistent regulatory approaches across previously disparate regimes.
In Australia, the states have traditionally played a part in institutional formation in infrastructure areas other than telecommunications and postal services. For instance, implementation of the NCP, mainly through the COAG, has required bipartisan cooperation between the three layers of Australian government. However, this process has not always been smooth, with the states generally reluctant to cede powers to the Commonwealth. At times there has been debate and disagreement about process and jurisdiction, and some delays in implementation of reform. In some Australian states, there has been political resistance to privatisation of infrastructure assets.

Part of the Australian competition reform process has been about the development of national rather than state markets and the attempt to develop national markets has called for national economic regulation in energy. The establishment of the Australian Energy Regulator (AER) was intended to prevent distortions in the energy market – clearly, a national energy market requires economic regulation to be undertaken on a national basis. As a consequence, regulatory powers moved from the states to the AER. For rail, while there is national regulation for interstate rail-track services, the states regulate intra-state services and safety.

Economic principles suggest that national governments are best suited to the regulation of infrastructure which is integrated and operates across jurisdictional boundaries as in: a national electricity market; telecommunications and postal communications; and an inter-state rail network. Sub-national governments are potentially better suited to the regulation of urban water and wastewater; urban transit and airports. Difficulties can arise in relation to the governance of a water basin that crosses jurisdictional boundaries. There are many examples of how other federations and countries with sub-national governments have addressed these assignment issues. Part of the Australian competition-reform process has been about the development of national markets; and this has been broadly consistent with international trends, particularly in the areas of energy and river-basin management.

4. Conglomeration of regulation at the sectoral level is widely observed

A regulatory model where there is responsibility at the sectoral level has potential advantages: it allows regulators to have a ‘big-picture’ focus that takes into account substitutability and complementarity relationships across subsectors that can be important in areas such as transport regulation, where coordination between, say, ports and rail, can increase competition and efficiency in both industries. Capture by regulated entities is also seen to be less of a concern under this model, on the basis that separate regulators at the industry or sub-sector level are at risk of identifying too closely with the industry they oversee, and, if they also have other roles (for example, research and information provision), they may become advocates for the industry. Generally speaking, disadvantages of the sectoral approach are difficult to identify.

There has been a strong trend towards greater institutional conglomeration of regulation at the sectoral level in most countries surveyed; perhaps reflecting a growing international belief that the benefits of this degree of conglomeration clearly exceed the costs. For instance: in energy, most countries have one body regulating electricity and gas; in communications, there is a strong trend towards regulating telecommunications and postal services; and some countries also combine regulation of different transport areas. In South Korea, there has been conglomeration of

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48 Jordana and Levi-Faur (2010) call this ‘agentification’, and provide empirical evidence that it has been strongest in smaller countries and in Europe.
ministries into ‘mega-ministries’ covering broad sectors. The degree of consolidation has been less in relation to transport regulation, where rail, airports and ports are often regulated by industry-specific bodies.

There has been a strong trend towards greater institutional conglomeration to the sectoral level in most countries surveyed; perhaps reflecting a growing international belief that the benefits of this degree of conglomeration clearly exceed the costs. In Australia, energy regulation has been consolidated in the AER, telecommunications regulation (except in relation to spectrum and USOs) is consolidated in the ACCC and the ACCC has a role in the regulation of rail, airports and ports.

5. Multi-sectoral regulation is also a feature of some countries, particularly at the sub-national level

A regulatory model where a single body is responsible for regulation across multiple sectors has certain potential advantages. It can ensure an integrated and consistent approach to regulation across infrastructure areas and limit the scope for capture by regulated entities even more. In addition, expertise can be pooled, and economies of scope made possible. On the other hand, there are potential disadvantages. The reputational effects of decisions in one area can flow into another area, tarnishing the reputation of the entire regulatory agency, with the risk that the agency loses credibility, or becomes overly cautious in regulatory practice to avoid losing credibility. Multi-sectoral conglomeration can also require regulators to have unreasonably and inefficiently broad levels and spread of knowledge. However, specialisation is still possible in large organisations, which can partly mitigate this problem. For instance, Germany’s BNetzA has authority over a number of infrastructure areas, but it is divided into a number of ruling chambers that are the final decision-making bodies for different industries and matters.

New Zealand, the Netherlands, Spain, and Germany, all have amalgamated their economic regulation of infrastructure into a single body responsible for all main infrastructure areas. In addition, many US states, including very large states such as California and Texas, have multi-sectoral regulatory agencies. Further, smaller economies such as Singapore have adopted a multi-agency approach to regulation. This suggests that the size of the economy is important, but not necessarily the dominant influence on the institutional structure used for economic regulation (and, as discussed in the next section, the enforcement of competition law).

In those jurisdictions where there are multiple regulators, various formal and informal mechanisms have been required to be adopted to try and achieve consistency in decision-making. The UK, for example, uses a range of organisational structures in seeking the achievement of consistency, including the use of the ‘Joint Regulators Group’ and the more recent establishment of the UK Regulators Network (UKRN). Alternatively, a degree of competition rather than coordination between regulators sometimes seems to be present in the US system, although there are bodies (such as the NARUC) which aim to increase consistency across regulatory agencies.

In setting up the regulatory system in Australia, it was considered that, in a relatively small economy, the analytical and specialist skills of staff were best pooled, in order to take advantage of economies of scope. The decision about the Australian institutional structure was partly driven by cost factors and perceptions of economies of scope. On this ground, the AER was set up as part of the ACCC to retain these advantages. However, the AER does have a separate legal identity with its own board.
of three members (one member is selected from ACCC commissioners). To date it has been possible to cover many of the diverse functions (including enforcing competition and consumer laws) in one organisation that employs fewer than 800 staff. Further, the answer to the requirement that both the staff and decision-makers have significant understanding of regulatory issues across a number of areas is seen in the internal organisational structure of the ACCC/AER. For instance, within the ACCC there are different working committees, each with its own focus and expertise; and the AER has a separate board, allowing for the necessary specialisation to make informed decisions in the sector it regulates.

The benefits of a multi-sectoral approach include: a broader focus than the sectoral approach; greater economies of scope; and lessened risk of regulatory capture. However, broader organisations may involve diseconomies and can also require decision-makers to have an overly broad perspective on regulation. This potential downside is mitigated in some jurisdictions, such as Australia (in the case of energy) and Germany, by having separate decision-making bodies or chambers operating in specific areas within a larger agency.

6. Combining regulatory and competition functions in a single organisation

There are various issues in deciding whether or not to combine infrastructure regulation and competition policy enforcement in a single body (see, for example, Shogren 2005). In principle, this ‘one-institutional model’ has a number of advantages: the further weakening of ‘capture’ opportunities; advancing a more pro-competitive approach to regulation; heightened economies of scope; and the achievement of greater consistency and lower costs (combination removes the need for bodies to coordinate regulation and competition policy enforcement across multiple bodies). The case for combination is strengthened further where the objectives of competition-law enforcement and economic regulation of infrastructure are closely aligned, particularly in relation to the promotion of competition and economic efficiency. However, in some countries, infrastructure regulators are directed to pursue broad economic efficiency objectives (‘total welfare’, encompassing both producer and consumer welfare), while competition bodies are sometimes directed to pursue consumer-only welfare goals. In this circumstance of divergent goals, the case for the one-institution model is weakened.

Four of the seventeen countries surveyed (Australia; New Zealand; the Netherlands, and Spain) have gone to a more-or-less ‘one-institution’ model, with the remaining thirteen countries having separate institutions to enforce general competition law (sometimes called ‘anti-trust’ or ‘fair trade’). Economic regulation in New Zealand is primarily the responsibility of the national competition authority – the CCNZ. In the Netherlands, the ACM enforces the Netherlands and EU competition law, and is responsible for the economic regulation of energy, telecommunications, postal services, rail and airports. In Spain the CNMC (National Commission on Markets and Competition) resulted from the amalgamation of seven industry-based regulators (in energy, telecommunications, postal services, audio-visual industries, railway and air transport, and gambling) with Spain’s competition authority.

In Australia, the rationale for the ‘one-institution approach’ in the NCP report was that there were ‘considerable advantages in administration’ across (access) regulation.

49 The pros and cons of total welfare and consumer welfare are discussed in section 2 of Huschelrath and Leheyda (2010).
and competition responsibilities; and that it could encourage a pro-competitive focus across the spectrum of regulation, consumer protection, merger and competition-law decisions. Given the relatively strong emphasis on economic efficiency, there is less concern about combination leading to conflicting goals. However, the structure has had to be modified, including with respect to the perceived need to focus decision-making by the formation of the AER. There are, however, some concerns about this combination. For example, Jose, King and Samuel (2013, p. 18) contend that it should be considered ‘whether the AER and the other regulatory functions of the ACCC should be separated into a specialised infrastructure regulator’. Subsequently, the current review of competition policy (the ‘Harper Review’) and the recently completed (Vertigan) review of telecommunications regulation have recommended that alternative institutional designs should be considered.

Of the thirteen countries that do not combine infrastructure regulation and competition functions, twelve have one dedicated national competition authority and the US is unique in having two federal competition bodies – the Federal Trade Commission’s (FTC) Bureau of Competition, and the Antitrust Division of the Department of Justice (DoJ).

Most of these countries have put procedures in place to deal with situations where enforcement and regulatory responsibilities overlap or are duplicated; including through guidelines, MOUs, consultation requirements, information exchanges, or concurrency regulations. In the US, concurrency issues are dealt with less formally through discussion and negotiation between relevant agencies and a process of ‘competition’ for cases.

Some considerations with respect to combining regulatory and competition functions are common to those of combining different infrastructure areas, including greater consistency and economies of scope (removing the need for coordination mechanisms). However, objectives may differ (‘total welfare’ versus ‘consumer welfare’) and there is a risk of creating an excessively large body, especially in large economies. While Australia was a forerunner of the ‘one-institution’ approach in the 1990s, and three other countries have since combined in similar ways, the most usual practice (in 13 of 17 countries) remains the institutional separation of competition regulation from infrastructure regulation; albeit with coordination mechanisms.

7. Adaptation to change

It is widely acknowledged that, to be effective, regulation needs to be able to adapt to factors such as: technological change; changing market trends; changing policy imperatives; and past mistakes. Without review and revision, a regulatory design that is appropriate at one point in time may become an impediment to competition and decrease efficiency at another. However, the continual review of regulation can create uncertainty and can be costly. Nancy Rose (2013, p. 34) identifies a fine balance here:

Regulatory rulemaking is intentionally cumbersome, in part to ensure some stability of the political bargain, enfranchise competing interests with a voice in the process,
and counteract capture by the regulated industry. But … that stolidity makes regulators far from agile in responding to changing conditions or challenges. The more dynamic is the industry, the greater the potential cost of these frictions.

It follows from these points that regulatory adaptation to change should reflect the speed at which the market actually changes. Mechanisms used by regulators to identify changes, and the need for regulatory development, can include ad hoc or ongoing research into market conditions, technologies, or practices within an infrastructure area, and wider policy reviews of the need for strategic regulatory change.

Continual research into market conditions is undertaken in some UK infrastructure areas, to ensure that regulation is up-to-date with market changes. For instance, the UK telecommunications regulator is required continually to review the main markets to ensure it is up-to-date with technological developments. By contrast, review and adaptation in relation to the complex American model appears to have occurred in a more piecemeal fashion with less central guidance.

South Korea, Mexico, and the UK have all implemented formal reviews of regulation on a broad level, or have mechanisms in place that ensure continual periodic reviews. South Korea enacts regulatory reform, develops regulatory policies, and evaluates regulatory reform via the KRRC. In Mexico, a specific body, the COFEMER, must review all regulatory proposals made by regulatory agencies, to assess the impact of the proposed regulation in terms of costs and benefits to society. These two continual processes are the most formal approaches to review in the countries surveyed, and they are proactive rather than reactive in the sense that they occur before implementation of a proposal; rather than as a response to appeals, or other issues. In the UK, a long-term plan in relation to investment in infrastructure (the National Infrastructure Plan) is published annually, the latest in 2014.51

The Australian approach to regulatory review flowed from the National Competition Policy (NCP; ‘Hilmer Report’) specification. Australia came to the economic regulation of infrastructure rather late because its infrastructure providers were almost exclusively state-owned, and corporatisation did not commence at the national level until the government business enterprise (GBE) reforms in the late 1980s necessitated the establishment of independent regulation. The NCP was built on the acceptance that Australia’s economic performance had to be improved and an essential part of that improvement had to come from key infrastructure areas such as energy, telecommunications and transport. Australia’s National Reform Agenda (the successor to the NCP) is intended to continue the reform process to ensure that regulation sufficiently adapts to changes. The Productivity Commission reviewed many areas of infrastructure regulation (such as, gas, telecommunications, airports, and harbour towage) over the years 2000 to 2003; and conducted an inquiry into the regulatory framework for electricity networks in 2013.

Following in this tradition, the (Harper) review of competition policy has focused on identifying productivity-boosting microeconomic reform that would result in transparent and open competition, and in increased incentives for innovation in

business. The review has considered the responsiveness, effectiveness and certainty of competition law in support of economic policy objectives in the context of, *inter alia*, changing global markets and technological change. In telecommunications, the 2014 Vertigan Review (referred to earlier) has considered institutional design issues particularly in relation to the dynamism of telecommunications, and the importance of promoting dynamic efficiency. For energy markets, an Expert Review Panel (Michael Vertigan, George Yarrow and Euan Morton) has been appointed by the COAG Energy Council to review existing market mechanisms and regulatory frameworks to ensure facilitation of adequate, efficient, and timely investment in, and operation of, generation and networks.

Changing market conditions and technologies can require institutional and policy reform to ensure that regulation adapts to such changes. However, most regulatory frameworks typically include safeguards against short-termism, especially in light of the requirements for making significant investments in long-lived assets in energy, telecommunications and other infrastructure areas. These safeguards can potentially inhibit change. The UK, Mexico, and South Korea have adopted mechanisms to facilitate regulatory review on a periodic basis.

8. A trend towards greater levels of consumer engagement can be observed in a number of jurisdictions

Individuals and households have tended to have a weaker voice in regulatory matters than suppliers of infrastructure services, or business customers. Enhancement of mechanisms for consumer engagement is now widely regarded as desirable in achieving more balanced regulatory decisions, and more transparent regulatory processes. Design issues that have arisen include: the time needed for adequate participation of consumers without causing unnecessary delay; a potentially low capacity of consumers to provide feedback on highly technical issues; selection biases that may arise from passive participation mechanisms and other consumer biases; choosing the ‘weight’ to be given to various consumer groups’ views; and accounting for the concerns of future consumers.

Most countries surveyed allow interested third parties to provide submissions to economic regulators, or participate in public forums in relation to regulatory decisions. However, the difficulty of getting the ‘average consumer’ to participate in such processes is often recognised, meaning participants will not necessarily be representative of the broad cross-section of consumer views. While such consult-and-respond mechanisms are necessary, they are often seen as inadequate to represent consumers’ interests, and need to be supplemented with complementary mechanisms.

More active processes to facilitate consumer engagement – such as working groups and consumer-representative bodies – have the potential at least partly to address the selection issues of more passive mechanisms. However, the survey suggests such groups can be costly to manage and that care needs to be taken to ensure that biases are not propagated via selecting only groups that share the same or similar ideas. Such groups can also be problematic if consumers have a low capacity to participate, such as through a relatively poor understanding of technical issues.

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The surveyed jurisdictions have taken different approaches to allocating the burden of responsibility for consultation with consumers. Mostly, consultation requirements apply to the regulator, although the situation is different in some sectors in the UK, where the regulated business must undertake consultation with consumers before commencing a formal regulatory process, and in the US, where, in some cases, consumers and regulated businesses negotiate directly as part of a rate-setting process, or enter into negotiated settlements. The relative ability to bear the costs of consultation may be an important factor in determining where consumer consultation obligations should lie.

The appropriate weight to be attributed to consumers’ views, and where the consumers’ views enter the decision-making process, are the most complex design issues. Educating consumers only after a decision has been taken gives them little influence. It also matters whether consumers believe their participation can impact on the process. Heavy engagement of narrowly defined groups can lead to poor perceptions of the process by those ignored, while amalgamation of groups can worsen outcomes for some consumers.

Examples of relatively active mechanisms of consumer engagement implemented in survey countries include: working groups that maintain a dialogue between key groups and provide recommendations to the regulator (the CRE in France); information and training sessions open to the broader community (run by the NERSA in South Africa to improve understanding of the regulatory framework for energy and increase the capacity of consumers to participate in regulatory processes); and the establishment of institutional advocacy bodies, (such as the Offices of Consumer Advocates in the US), where permanent technical staff must pursue consumer issues when participating in standard regulatory processes or negotiated settlements.

Negotiated agreements, where consumer groups are actively involved in the negotiation of prices and other conditions for utility services, are perceived to have worked successfully in jurisdictions such as the US and Canada, with consumers and utilities achieving outcomes that may not have been possible under standard/formal/traditional regulatory processes. Further, the approach has been seen as more expedient, less costly and less technically focused than other forms of engagement. That said, it appears that a strong consumer representative group, or an institutionalised consumer advocate, is required to ensure both expedience and that consumers have sufficient power in the negotiated-agreements approach. In the UK, forms of ‘constructive engagement’ are used by regulators in aviation, energy and water. For example, the Ofgem and the Ofwat adopted a particular form of ‘constructive engagement’, which places the burden on regulated businesses to consult with their users. It does this by ensuring the ‘primary outputs’ produced by the regulated business are directly connected to consumer and stakeholder views. Such mechanisms have the potential to: align consumer and producer incentives; minimise the need for direct consumer engagement by the regulator; build strong relationships between regulated businesses and consumers; and inform consumers about the regulatory process. However, if such mechanisms are not well designed, they can be burdensome for the regulator to manage and for the parties to participate in.

Procedures followed by the ACCC and the AER in relation to consumer engagement vary depending on legislative requirements. Informal consultation with consumers or others is restricted by administrative-law requirements for procedural fairness, which
generally requires the ACCC to give all affected parties an opportunity to respond to material, and to avoid the appearance of bias. Formal oral hearings are used less often than in some other jurisdictions; with emphasis being placed on written submissions. The AER in 2013 established a Consumer Reference Group and developed a Consumer Engagement Guideline. The objective is to align the provision of network services by energy network businesses with the long-term interests of consumers. Prior to this, engagement by businesses with their consumers was perceived to be inconsistent, and consumers were perceived to be uncertain as to whether their input was having any impact on service providers’ decision-making. A substantive issue with this approach will be the appropriate level of regulatory supervision of the regulated business’s consultation processes. Similarly to the model used by the Ofwat, the AER’s approach partly shifts the burden of engagement away from the regulator.

Encouraging greater consumer engagement is widely regarded as desirable in achieving more efficient, balanced and transparent regulatory decisions. Passive consult/respond mechanisms are increasingly being supplemented by more active forms of engagement. Three important dimensions of the issue of consumer engagement are: how should consumer groups be included in regulatory processes?; how diverse does consumer representation need to be?; and what weighting should be given to consumers’ opinions? While the Australian approach has historically been less active than some approaches observed internationally, the approach to consultation in energy establishes a Consumer Reference Group and places more of the consultation burden on regulated businesses.

9. The extent of consultation of interested parties

Processes for broader consultation desirably should be: unbiased; procedurally fair; accounting for future users; inexpensive to participate in; and designed to not slow-down the regulatory process excessively. The processes implemented by regulators to consult with interested parties – such as industry groups, non-government organisations, different levels of government, and, the regulated businesses – vary widely across infrastructure areas and countries surveyed. The variation across infrastructure areas tends to follow closely the general ‘intensity’ of regulation; with areas that have relatively intensive regulation, such as energy and telecommunications, tending to have relatively intensive consultation.

The type of regulation can directly influence the necessary level of consultation with interested parties before decisions can be reached. Countries that implement regulation that requires the regulator to collect a substantial amount of information (such as those in Germany and Japan that implement a pricing system based on benchmark costs) will naturally have to engage with stakeholders to a greater degree. The particular regulatory process used is also significant. For instance, the negotiation-and-arbitration model can require less information collection than where the regulator directly makes a decision about access prices.

High levels of co-ordination are required in cases such as the EU and North America where each jurisdiction has bodies which consult with various groups in order to coordinate regulation cross-jurisdictionally. Such consultation can involve the utility

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regulators of the countries or states involved, and some specialised interest groups. South Africa also implements such practices within its regions in regulating energy. Countries that have separate competition and regulatory bodies also often have to implement consultation practices to coordinate the work of these bodies, particularly where responsibilities are shared, or overlap (see insight six).

The mechanisms employed by regulators to consult with industry are generally similar to those used to engage with consumers. Most countries surveyed allow for submissions by any interested parties at specific points along the regulatory decision process. A common chronology is: a regulator declares some impending decision; submissions by interested parties (oral or written) are made; a draft decision is published; interested parties make further submissions on this draft; and the regulator makes a formal decision.

However, a well-recognised issue when engaging with industry groups is that selection issues can arise because industry groups frequently: have greater incentives to engage than individual consumers; have better capacity to participate (given their resources and technical knowledge); and may have a formal role in the process. These attributes can also mean there is a risk (or the perception of a risk) that industry groups can, relative to consumers, unduly influence regulatory outcomes.

In Australia, industry groups have a role in regulatory processes in all infrastructure areas. Telecommunications and energy have the most formal arrangements; with the role of some groups recognised in legislation. In energy, the ENA, the APIA and the EUA represent different interests; and user groups are entitled to intervene in ACT proceedings. In telecommunications, formally recognised bodies have played a role in forming recommendations (currently this role is partially played by the Communications Alliance Ltd.). The ACCC also has an Infrastructure Consultative Committee, with all seven infrastructure areas being represented.

The level of consultation with stakeholders is largely dependent on the ‘type/form’ and ‘intensity’ of regulation implemented, and stakeholder consultation in Australia is generally in line with international practice. The development of more complex consultation mechanisms is often driven by the need to coordinate between regulators, states or nations, and by the relative risk of one interest group potentially having an undue influence on the regulatory process.

10. Mechanisms to address information asymmetry

The powers of regulators to collect and disseminate information are important as they can directly influence: the credibility of the regulator; the willingness of firms to participate in regulatory processes; and the timeliness of those processes. Regulators that approach information collection collaboratively may be able to build relationships with the regulated businesses and obtain better access to the relevant information.

Regulators across the surveyed countries typically have a range of information-collection powers. However, the scope of these powers, the ability of regulators to enforce collection and to impose sanctions for non-cooperation are contextually specific, and often reflect the general legal and regulatory framework. As such, the information-collection powers vary across infrastructure area and country. The timely provision of information by regulated entities was identified as an issue in a number of the survey countries, in particular because of the incentives that incumbents may have to delay determinations on access matters. In some jurisdictions, regulators have attempted to address this issue by disadvantaging those who do not provide
information within relevant timeframes. Finally, annual or ongoing information-provision obligations exist in a number of countries, and may reflect the surveillance remit of a regulator, or may be required on the basis of particular regulatory arrangements, such as benchmarking or yardstick regulatory processes.

In Australia, information-provision obligations can be imposed by regulatory-information order (with specific items detailed) or in accordance with specific legislative provisions in relation to particular regulatory processes. Powers also vary by infrastructure area. For instance, in telecommunications, the ACCC has the power to summon a person to give evidence or produce documents; while in rail, the ACCC has no power to compel provision of information (although it will generally provide a framework of what information should be submitted). Information-related powers are similar to those in most countries, and appear to be less intrusive than in some countries surveyed. In particular: there is no scope for imposing fines on businesses who do not provide required information as there is in the UK, the Netherlands and Sweden; the ACCC/AER may prefer to gather information on a voluntary basis, without recourse to its statutory powers; \(^\text{55}\) and the ACCC can only compel provision of information it believes to be relevant.

The amount of information the ACCC and the AER collects from a regulated entity is influenced, in part, by the merits-review process, where the review is limited to the information originally submitted to the regulator (see insight fifteen). This is not the case in some countries, where the appellate entity is not restricted in undertaking a merits review to the material before the initial decision maker, but rather has ‘full investigative rights’. Likewise, the Australian arrangements appear to differ from those in countries which have established ‘internal’ review processes where a separate team within the regulatory agency undertakes a substantive review of the initial decision. In such circumstances, the review team can have broad powers, including the power to conduct public hearings (see insight sixteen below).

Processes and powers of information collection are generally tied to the country’s legal context, and can vary across infrastructure areas within a country. The approaches of the ACCC and the AER appear to be either similar or less intrusive, and narrower in scope, than those typically adopted in the countries surveyed. Approaches taken also appear to be influenced, in part, by the nature of the appellate review process which may encourage broad information collection in the first instance because of restrictions on considering additional information in any merits review.

11. Treatment of confidential information

General theory around asymmetric information suggests that the incentive structure is important in determining whether private information holders reveal their information truthfully. Given this, the treatment of confidential information by the regulator, and the process for determining what is considered confidential, are crucial factors in determining the degree of cooperation of regulated entities. This, however, creates a tension. On the one hand, a regulator may be concerned about ensuring a high level of transparency and procedural fairness, which is achieved by setting clear rules that all regulated businesses must follow, and making information relied on in decisions publicly available. On the other hand, businesses will have low incentives to reveal

accurate information to regulators if they believe this will put them at a competitive disadvantage and/or make them subject to more stringent regulation in the future. To alleviate this tension, regulators commonly develop mechanisms to deal with information that might be commercial-in-confidence (c-i-c), and to determine the circumstances when such information should be exempt from disclosure.

The processes for determining which information will be exempt from disclosure varies across countries, infrastructure areas and regulatory processes, and varying degrees of regulatory discretion and prescription/formality in such determinations can be observed. Mechanisms used in the surveyed countries include: statutory definition of c-i-c information, seen in parts of the US; statutory definition of c-i-c material, with application for material outside of this definition available (South Africa); identification of c-i-c material by the provider, and then confirmation of this status by the regulator (Singapore); determination of the c-i-c status of material on a case-by-case basis (BNetzA, Germany); and processes that involve negotiation between the regulated businesses and the regulator in relation to the status of material, with the regulator maintaining the final say.

Where the process is negotiated, and disagreements arise, there is sometimes a mechanism available to resolve the dispute. For instance, in the Netherlands, publication of such information is delayed, allowing parties to apply to the courts for an injunction against publication. In other countries, the applicant is allowed to resubmit information, excluding that information that it views as c-i-c but the regulator does not. The exemptions to disclosure, including exemptions for confidential commercial information, appear to be similar in scope in most countries examined. One practice which appears to provide additional protection for those affected by disclosure is that of the Irish energy regulator (the CER) to notify, not just the relevant party, but also any third parties who may be impacted by the decision, and provide them with an opportunity to respond.

In some cases, the regulator has the ability to disclose information considered as c-i-c if it believes disclosure is in the public interest. These countries include Ireland, the US, Canada, and the UK. The ability for regulators to make such a decision outlines the fact that they are aware of the trade-off between transparency and properly protecting private information in order to provide the right incentives.

In Australia, the ACCC/AER’s Information Policy states that it is subject to a number of general prohibitions on making an unauthorised disclosure of information, although in some circumstances it may or must disclose information. The ACCC/AER is required to treat confidential and private information respectfully and in accordance with the law and to: make efforts to consult with affected parties before disclosure of information, except in specific circumstances; protect information to the extent possible if the release of that information will have negative effects; and protect informants’ identities where appropriate. The ACCC follows procedures that: allow for the parties in arbitration to agree on a confidentiality regime; provide guidelines on the process of determination; and allow for parties to withdraw information from being considered.

In Australia, there are no formal c-i-c mechanisms, such as the statutory definitions seen in the US, or an ability to contest a confidentiality decision as in the Netherlands. Instead there are often pre-lodgement negotiations, with the ability for businesses to

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not submit information where agreement cannot be reached. Businesses must therefore choose between submitting such information and risk it being published, or withdrawing the information and risking an adverse decision. Such an approach is collaborative, and allows a high level of procedural fairness and a relatively high level of discretion by the regulated entity. The costs of implementing stronger tools would need to be considered. For instance, implementing a system where definitions of c-i-c are legislated, rather than negotiated between the regulator and the business, such as in the US, would reduce the flexibility inherent in the Australian pre-lodgement negotiation system. Allowing for the decision to be contested, such as in the Netherlands, could potentially reduce the timeliness of decision-making.

Finally, as part of requirements set out by the Australian Government’s ‘Protective Security Policy Framework’, agencies must implement a level of physical security measures that minimises or removes the risk of information and ICT equipment being made inoperable or inaccessible, or being accessed, used or removed without appropriate authorisation. This includes a requirement for the ACCC/AER to develop and implement a clear desk and clear screen policy.

A major issue for most regulators when dealing with potentially confidential information is addressing the trade-off between ensuring a transparent and efficient regulatory process and securing the ongoing co-operation of regulated businesses through accurate and timely disclosure of relevant information. Practices vary from strict definitions of what is considered c-i-c to processes that allow determination on a case-by-case basis. Australian practices accord with trends in North America and EU member states for transparent regulatory processes that incentivise revelation of private information.

12. The expedition of regulatory processes

Ensuring the decision-making process is both as-fully-as-possible informed by the relevant information, and timely in expedition is difficult to achieve. As a result, there is variation across the countries surveyed in both typical timeframes for decisions, and methods used to minimise these timeframes. Successful processes minimise the time taken to make a decision by: simplifying the decision being made where possible; ensuring that the informational burden is placed on those best able to bear it; providing incentives to submit information without delay; and by ensuring involvement of relevant parties, industry and consumer groups and other interested parties is efficient.

The review of international experience suggests that the time taken to conduct a regulatory process is also related to the type of matter (pricing, investigating breaches of conditions, non-price terms, etc.) under consideration and the industry or sector being regulated. As a general observation, it appears from the review that formal requirements that any sophisticated regulatory process be completed in less than four months can generally only be achieved by the curtailing of, or at least provision of a stricter framework for, consultation and transparency.

Formal timeframes for regulatory processes in most cases seem to range from between four to twelve months. Shorter timeframes than four months have been set for some regulatory determinations including: energy and rail access disputes in France; energy and telecommunications non-price access in Germany; energy access disputes in Ireland; telecommunications access, categorisation, and breaches of the code in energy in New Zealand; postal and airport regulation in Singapore; and telecommunications regulation in South Korea. Reviews of past decisions in some of these countries suggest that timeframes in other matters can be quite short; and that timeframes less than four months are achievable. However, decision-making times can vary greatly: in South Africa a review of decisions by the NERSA found the majority to be made within three to four months, but they can take up to eight months; and decisions made by the IDA can be made within one month, but can take up to eight months.

Some instances where shorter periods are adopted appear to be in areas where there is an effective pre-lodgement process (such as Germany) or the regulator is arbitrating after private negotiations have failed (such as the CRE in France). There are also initiatives in a number of jurisdictions which set a hurdle before the regulator becomes involved, including in relation to the ORR in the UK; the NEB in Canada; and the STB in the US. The hurdle typically includes the requirement of a party to consult the industry, or the exhaustion of alternative-dispute-resolution avenues, before the regulator will commence its process. Such short timeframes are achieved here mainly by putting the informational burden on businesses rather than regulators, in the sense that a lot of information will be implicitly revealed through negotiation. Given that the businesses already have the information they need to negotiate, there is a lower time cost involved in this preliminary process.

In order for commercial negotiations to be effective in reducing timeframes for required regulatory outcomes, there needs to be viable mechanisms that allow negotiation to occur in a more time-effective manner than traditional regulatory processes. One example is the role the negotiating businesses play in the determination of what is c-i-c information and its dissemination. For instance, parties can be encouraged to establish their own ‘confidentiality regime’. Such arrangements are permitted or encouraged in telecommunication disputes in Canada, and in ADR proceedings in the federal jurisdiction in the US. Formal procedures and guidelines can also expedite the process by guiding the dialogue between parties and providing an outline of what is considered acceptable. They can also force negotiating parties to release more information, which could enhance the negotiation process.

Reforms to the AER’s processes, implemented as part of Better Regulation, can be considered as providing a stricter framework for consultation that gives incentives for participants to provide information more quickly. Relatively simple decisions can also be made in a short timeframe. The ACCC will make decisions on price notifications of postal services within 21 days, with the option of extending this time but only with the consent of Australia Post, whereas arbitration of access disputes are generally determined over a six-month period, where appropriate information has been provided.59

There is some negotiation undertaken outside of the formal regulatory process in Australia. In the first instance, terms and conditions for access to infrastructure services should be commercially agreed between the access seeker and infrastructure provider.\textsuperscript{60} Also, under the Australian general and telecommunications-specific access regimes, if an access seeker and access provider are unable to agree upon the terms and conditions of access, either party may notify a dispute. The ACCC may terminate arbitration if it thinks that the notifier has not engaged in negotiations in good faith. In cases where the regulated entity unilaterally submits a proposal, such as an undertaking or gas access arrangement, some entities (such as the ARTC) have, of their own volition, undertaken extensive consultation prior to lodgement.

In terms of setting out regulation around c-i-c material, the ACCC’s standard practice is to give a general confidentiality direction at the beginning of an arbitration, and to encourage the parties to agree on a confidentiality regime; such as the exchange of a standard-form confidentiality undertaking and the identification of persons to have access to all confidential information. On the other hand, overly prescriptive procedures could stymie the negotiations, rendering the ADR mechanisms less useful.

The ACCC does not have a stringent timeframe for its decision-making relative to some of the countries considered. There are measures that could be adopted if reducing timeframes became a critical issue. For instance, greater use of ADR processes could decrease the time needed to make decisions. General treatment of information collection, however, is fairly well adapted to ensure the overall process is relatively short, particularly measures around treatment of voluntary information that are aimed at reducing appeals and legislation that allows the ACCC to set a cut-off for information submission, and make a decision without regard to any information not submitted in time.

There is variation across the countries surveyed in both typical timeframes for decisions, and methods used to minimise these timeframes. Some countries manage to have timeframes of between two and four months for some access disputes in specific industries, while most achieve timeframes of four to twelve months. A particularly short timeframe often results from: use of pre-lodgement commercial negotiation practices; incentives to submit information without delay; and ensuring involvement of industry and consumer groups and other interested parties is efficient by shifting some of the burden of engagement to regulated businesses.

13. Decision-making processes

The decision-making processes employed by regulatory agencies in the surveyed countries appear to be related to the more general institutional design and regulatory framework within which they operate. The determinative body of many regulators is a commission or a board. The number of commissioners or members comprising these determinative bodies can vary from as few as three (the CER in Ireland) to as many as ten (the CRTC in Canada). Regulators’ determinative bodies are subject to provisions governing majority votes, casting votes and quorums for decision making. For instance, the NERSA in South Africa forms committees based around specific work areas, and a decision is made based around the majority of votes cast by the members present at the committee meeting. In Mexico, all decisions by the CRE are

\textsuperscript{60}Competition and Infrastructure Reform Agreement, 10 February 2006, Clause 2.2.
by majority vote of the commissioners. In the communications sector, the KCC (South Korea) and the IDA (Singapore) both require a majority of members present to vote for any particular decision. The EMA in Singapore requires a quorum of at least one third of members to be present, and that quorum must have a simple majority vote for any decision. The Italian regulator’s Collegio makes all decisions by majority vote. For communications in Italy, a vote can take place as long as a majority or the commissioners are present, along with the president to ratify any decision. In Spain, decisions generally require a minimum number of votes, rather than a simple majority, from the board of commissioners. Some infrastructure areas in Mexico are constitutionally required to be operated by the state, and in these areas, decision-making rules are guided strictly by regulations and law.

In Germany, unusually, there are a number of determinative bodies within the regulator rather than a single determinative body. These ruling chambers are organised along industry lines (electricity, gas, telecommunications, postal services) and also according to specific activities within the industries (system charges, general regulation and access issues, wholesale charges, unconditioned local loop charges, etc.) allowing decision-makers within each Chamber to develop specialisation in the area they are regulating. The ACCC/AER model might be considered as a step towards this approach, allowing for both a high-level of consistency in regulation, but also for a high-level of sectoral specialisation by decision-makers. Such an approach can also decrease the need for decision-makers to have too broad an understanding of all issues, which can be a significant cost of the one-institution approach.

In most infrastructure areas in the majority of the countries surveyed, regulators make decisions ‘independently’ of government. The main exceptions to this are: Japan, where ministerial control remains common other than in respect of telecommunications disputes; South Korea, where there is strong ministerial control of regulation, except in telecommunications; France, where some of the ARCEP’s functions require ministerial approval; and Ireland, where ministerial consent is necessary for the ComReg to set uniform postal tariffs.

Decision-making processes of regulatory agencies are related to their general institutional design. The ultimate determinative body in many cases is the governing commission or board. Voting rules commonly require a majority vote of either the full board, or a quorum of the members present. There are cases where there are a number of determinative bodies within a regulatory agency; aimed at generating specialisation in decision-making. The decision-making process in Australia is similar to the practices followed internationally. Decisions are made by a majority of the ACCC or AER commissioners.

14. Transparency and publication of decisions

It is common practice for regulators across most of the surveyed jurisdictions to make their decisions, and reasons for decisions, publicly available. There is some variation in decision length which may reflect the detail of reasoning (for example, a decision report on energy matters can range from a standard fifteen pages in a CRE determination in France to hundreds of pages in the NEB determinations in Canada). It is also common practice for some regulators to issue draft decisions (or proposed decisions or preliminary views), with reasons, and invite submissions prior to making a final determination (the CER in Ireland, the Ofcom and the Ofgem in the UK). Publication of results is crucial for transparency, although there is the trade-off between too much information versus too little; where both can be opaque.
The decision-making process in Australia is similar to the practices followed internationally. For example, the stages of regulatory decision-making in relation to access arrangements for gas pipelines; setting the revenue and/or price paths for electricity networks; assessing undertakings, and making arbitration determinations, under the economy-wide and telecommunications-specific access regimes; and forming a view on price notifications by Australia Post and Sydney Airport are usually as follows: the regulated entity submits its proposed terms and conditions; the ACCC or the AER will commonly publish an issues paper or a discussion paper inviting written submissions within a specified time; the ACCC and the AER will typically publish a draft decision (including reasons for the draft decision) and invite written submissions on the draft decision within a specified time; and the ACCC or the AER will publish a final decision (including reasons for the decision).

In general, the process is conducted publicly, in that submissions, and the decision, are placed on the ACCC/AER’s websites (subject to any confidentiality requirements).

*Regulators generally make their decisions publicly available with reasons, although there is some variation in decision length and detail. Many regulators, including the ACCC/AER, issue draft decisions and invite further submissions prior to making a final determination. Final decisions are published with detailed reasons.*

### 15. Appeals

In general, an effective review and appeals process is a key to ensuring that: there is a high level of procedural fairness; regulators do not engage in arbitrary discretionary behaviour, including ‘short-termism’; and ‘the regulator does not stray from its mandate’ (Smith, 1997). On the other hand, where they are ineffective, review and appeals processes can delay the introduction of efficiency-enhancing decisions, such as the reduction of pricing in a monopoly situation. The length of the appeal process is important for other reasons – if it is ‘too long’, it may unnecessarily prolong uncertainty; whereas an excessively short process could lack credibility and may lead to ‘too many’ appeals.

Appeal processes vary in their scope to influence the initial decision made: some can repeal the initial decision and institute a replacement; others can order the initial decision-making body to change the initial decision based around defined criteria; while yet others can only refer the decision back to the initial decision-maker to be re-made or provide opinions on the decision.

Two general forms of regulatory appeal are evident across the surveyed jurisdictions: judicial review, focusing on the process and legality of the decision; and merits-based review focusing on broader issues where the review body puts itself in the position of the regulator.

In general the use of either appeal is determined by the model of government and the regulatory framework implemented within a country. Countries that have a high level of separation of powers usually have different bodies responsible for judicial reviews (generally a court) and merits review (generally a tribunal or other administrative body). Where separation of powers is less strict, practices vary more widely. In Germany, Ireland, and the Netherlands, courts can perform both merit and judicial-based reviews. The New Zealand High Court can undertake a merits review (based on achieving ‘materially preferable’ outcomes) of some determinations made by the CCNZ.
The strong separation of powers in Australia, and the commitment to judicial review through authorised courts and merits review by executive bodies, is considered a critical part of achieving procedural fairness, and therefore maintaining the credibility of the regulatory system. Merits review is available for authorisation decisions made by the ACCC/AER, although in some circumstances in the past the scope for the Australian Competition Tribunal to perform a merits review has been limited.\(^{61}\)

The introduction of the ‘limited merits review regime’ (LMR) under the national electricity and gas acts in 2008 had led to nearly all regulatory decisions being appealed in that sector. In 2011 the Standing Council on Energy and Resources (SCER) commenced a review of the LMR. After consultation and consideration by a panel (George Yarrow, Michael Egan and John Tamblyn),\(^{62}\) the regime was amended to include as a ground for review whether there is a ‘materially preferable’ decision. The main arguments in support of this amendment were that: it required the review body to look at the whole decision, and not just specific parts; and that it would reduce incentives for businesses to ‘cherry-pick’ parts of a decision they did not like. However, even with the definition of ‘materially preferable’, there is a wide scope for interpretation, as evidenced by the court proceedings in New Zealand, where the court recognised the difficulty in ruling on whether a decision was materially preferable.\(^{63}\)

The appeals process aims at a high level of procedural fairness and enhances the credibility of a regulatory regime. Generally speaking, the high level of separation of powers in Australia lends itself to achieving such outcomes. Examples of the two general forms of regulatory appeal (judicial review and merits review) can be seen across the surveyed jurisdictions, and in some cases a combination of approaches is adopted. In 2013, the ‘limited merits’ regime in the energy sector was amended to address the shortcomings of the previous LMR regime, particularly the excessive number of appeals generated.

16. Internal-to-the-regulator review

An internal-to-the-regulator review process can allow for affected parties to contest the regulator’s decision to the regulator as a precursor to a possible external review. Where such processes increase confidence in regulatory decision-making, this can minimise recourse to potentially more formal, and costly, external appeals. As such, internal review mechanisms may be particularly useful for stakeholders that lack the resources to undertake potentially longer and more formal external reviews.

However, to be effective it is essential that any internal review process is perceived to be impartial and this often involves the introduction of institutional arrangements and mechanisms which ensure that any internal review is conducted by a group separate from those who took the initial decision, who will review the contested decision with a ‘fresh pair of eyes’. In the US, this impartiality is achieved through reviews being conducted by impartial Administrative Law Judges, while in the Netherlands the internal reviews of decisions are typically managed by a separate division within the

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\(^{61}\) The Vertigan Report recommended the reintroduction of merits review for decisions in telecommunications that are of ‘enduring impact’ (Recommendation 18).


regulator. There is also a potential risk that low-cost internal mechanisms may incentivise businesses and other stakeholders to contest ‘too many’ decisions; there being little downside to seeking a ‘second roll of the dice’.

The Netherlands, Sweden, Canada and the US all implement various forms of internal review processes in some infrastructure areas. In Australia, ‘internal review’ (where merits review is undertaken by another officer within the same agency) is common in areas such as social security, migration and taxation. However, it is not commonly used for decisions in relation to the economic regulation of infrastructure.

The Netherlands, Sweden, Canada and the US all implement internal review processes in some infrastructure areas. However, although internal review processes are common in other areas of Australian administrative law, to date this approach has not been adopted in the area of economic regulation. The question of whether an internal review process would be appropriate for decisions of Australian economic regulators would require careful consideration of a number of factors, including: how to ensure impartiality of the review process; how such a mechanism might affect incentives for appeals; and the extent to which such a process would achieve significant time or cost benefits relative to existing arrangements for substantive review of regulatory decisions.

Final Reflection

Given the dynamic nature of the infrastructure industries, and the regulation that applies to those industries, there is always scope to draw insights from comparative research into how regulation is applied in other countries and settings. Each of the seventeen countries in the research sample has provided something worth considering in relation to Australia’s approach to regulatory design, processes and practices. The varied approaches observed across countries and infrastructure areas suggests both that there are often multiple viable ways of doing things, and that there is constant experimentation and adaptation of regulation to changing conditions, meaning that the regulatory framework is dynamic. A major finding of the BERI project in general is that, when looking to other countries for regulatory insights, the most suitable insights will come from countries with a contextual consonance, and that contextual factors can have a significant influence on: the institutional design of regulatory bodies; the objectives of regulatory bodies; the specific regulatory approaches adopted; the tools available to regulators; and the need for national or international coordination mechanisms.
References


