Australian Competition and Consumer Commission

Submission to the Productivity Commission Review of the National Access Regime

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A. Economic regulation in the United States, Europe and New Zealand – an overview

B. Report by National Economic Research Associates on the declaration criteria and overseas regulatory arrangements

EXECUTIVE SUMMARY

In 1991 The Council of Australian Governments (COAG) resolved to examine a national approach to competition policy as an extension of the national micro-economic reform agenda. The first step in this process was the establishment in the following year of the National Competition Policy Review by a committee chaired by Professor Fred Hilmer.

On completion of the Hilmer Committee's report in August 1993 Commonwealth, state and territory governments began extensive negotiations, involving public consultations, on the implementation of its recommendations. This process culminated in June 1995 in the *Competition Policy Reform Act 1995*, which when coupled with two inter-governmental agreements (the Competition Principles Agreement and the Competition Code Agreement), resulted in substantial legal and policy changes including the creation of a national access regime, embodied in Part IIIA of the *Trade Practices Act 1974* ("Trade Practices Act").

After five years of operation the access regime is being reviewed by the Productivity Commission. This submission explains the Australian Competition and Consumer Commission's ("Commission's") experience in administering the arrangements and presents its views on the regime and ways of improving it.

The submission is structured as follows. Part A provides an overview of the access regime and how the regime has operated since its introduction in 1995. The access provisions are summarised in section 2. Section 3 explains how the provisions have been applied in the gas, electricity, aviation, rail and postal sectors. Part A also provides a brief history of regulation of essential facilities before the access regime was introduced, the limitations of those arrangements and the rationale for the subsequent access arrangements.

Part B of the submission reviews the experience with the access regime to date and the lessons learned. It first considers the threshold question of whether access regulation is required. The benefits of a generic regime vis a vis industry specific regulation are considered in section 5. Coverage of the access regime is considered in section 6 in the context of the declaration criteria. Part B suggests a number of ways of improving operation of the regime. Sections 7 and 8 suggest changes to the framework for setting terms and conditions of access. Section 10 sets out proposals for streamlining administrative processes.

The current access arrangements

The national access regime establishes a legal regime to facilitate access to the services of certain facilities of national significance. The approach adopted is based on commercial negotiation of access terms and conditions between parties in the first instance, supported by the option of arbitration of disputes by an independent body if the negotiations fail. These statutory access arrangements are triggered when services

are declared. Services are declared by the relevant Minister on recommendation of the National Competition Council ("NCC"). Declaration is by reference to a number of economically based criteria, which limit coverage of the access regime to situations where:

- access would promote competition; and
- it would be uneconomical for anyone to develop another facility; and
- the facility in question is of national significance.

As an alternative to the declaration process the national access regime allows service providers to develop access undertakings specifying terms and conditions of access. These undertakings are assessed by the Commission against criteria which balance the interests of the service provider, potential access seekers and the public. Once an undertaking has been accepted the services covered cannot be declared. Undertakings have the advantage that they give the service provider certainty about access arrangements before a third party seeks access. They can also avoid the possibility of time consuming and expensive disputes.

Similarly, effective regimes offer an alternative to the declaration process. This provision recognises that governments may have established their own access regimes. The Commonwealth makes the decision about whether such regimes are "effective" based on recommendations from the NCC. As with access undertakings, once a regime is deemed effective the relevant services cannot be declared.

These access arrangements have been used as the legislative vehicle for economic regulation of gas and electricity transmission, airport services and railway track. Indeed, in some cases the access regime has been a catalyst for development of sector specific arrangements.

Each of the access options - declaration, access undertakings and effective regimes - have been applied in developing the sector specific arrangements. Access undertakings (together with an industry access code) have been used in delivering access to electricity transmission. The arrangements have been instrumental to the development of a national electricity market. Effective regimes have been used to establish an access regime for gas transmission. In the rail sector applications for declaration have resulted in negotiated track access outcomes. Section 3 provides a detailed explanation of the application of the access provisions to each of these sectors.

Why regulate?

The access regime is one part of a package of pro-competitive reforms adopted by the Council of Australian Governments in April 1995. The reforms limit the scope for governments to restrict competition, encourage structural reform of state-owned enterprises and create an environment for improved access by firms to essential facilities.

In introducing these reforms governments recognised that while tariff reductions had opened the traded goods sector to competition the provision of services by public utilities and a number of other sectors of the economy remained sheltered from

international and domestic competition. Similarly there was a growing understanding of the needs of exporting and import competing businesses. If Australia is to compete effectively in the international economy it needs an efficient non traded sector to reduce input prices to business.

Access is an important element in the competition reform program. Without access the other measures will not always be sufficient to ensure benefits in terms of competition and efficiency. The access regime recognises that under certain circumstances owners of infrastructure facilities may have substantial market power and be in a position to distort competition in that market and related markets. Where they are vertically integrated into competitive upstream or downstream markets, service providers may have incentives to restrict competitor access to the facilities' services in those markets or to offer terms and conditions of access which discriminate against them. Even when services are vertically separated the service providers may be in a position to use market power to charge unnecessarily high prices at the expense of consumers and economic efficiency.

The law has recognised the problem for some time. In the US courts have developed an "essential facilities doctrine" covering facilities which are uneconomic for a competitor to duplicate. In Australia Governments have established a number of industry and facility specific access regimes, for example, in the *Telecommunications Act 1991* and the *Petroleum Pipelines Act 1969 (WA).*

The access regime established by the *Competition Policy Reform Act 1995,* however, goes beyond these. It is unique in terms of its comprehensive coverage through an access specific legislative base.

The economic theory underpinning economic regulation and the access regime is well documented and widely accepted. It shows that under a range of circumstances effective competition will not be sustainable.

Economies of scale and scope

Economies of scale arise when unit production costs fall as the scale of a firm's output increases. Economies of scope arise when the cost of a service declines as the number of services produced by the firm increases. These economies can be a barrier to entry in as much as that new entrant may face higher production costs than the incumbent.

In the extreme case it is more efficient to have all of the output in a market produced by a single firm than multiple firms. This situation is described as a natural monopoly technology. In practice, significant market power issues may also arise where economies of scale and scope create barriers to entry and limit the number of firms that can viably operate in a market. This is recognised in the access regime where the declaration test is not limited to the natural monopoly scenario. Instead the test is "that it would be uneconomical for anyone to *develop another facility* to provide the service" (emphasis added).

Lumpy and sunk investment

Lumpy and sunk investments may create barriers to entry and limit the scope for competitive conditions in a market. An investment is 'sunk' when its cannot be readily be converted to another use. This means that a firm will incur substantial costs in exiting an industry which in turn increases the risks of entry. When an investment is also lumpy[1] entry may give rise to substantial excess capacity relative to current demand. The combination can deter entry and be a source of market power[2].

"Essential" or "bottleneck" facilities

Where a service is a necessary input into the production of another service, and an alternative source of supply is not available then the service is described as a "bottleneck" or "essential" facility. As explained in the Hilmer Report:

> ....Where the owner of the "essential facility" is vertically-integrated with potentially competitive activities in upstream or downstream markets – as is commonly the case with traditional public monopolies such as telecommunications, electricity and rail – the potential to charge monopoly prices may be combined with an incentive to inhibit competitors' access to the facility. For example, a business that owned an electricity transmission grid and was also participating in the electricity generation market could restrict access to the grid to prevent or limit competition in the generation market. Even the prospect of such behaviour may be sufficient to deter entry to, or limit vigorous competition in, markets that are dependent on access to an essential facility.[3]

Network externalities

Network externalities occur on the demand side. They arise when the value of a service to a customer is positively related to the number of users of the service. As an example, a telephone service is more valuable to a user if more people can be called using the service. Network externalities can be relevant to infrastructure services such as telecommunications, post[4] and even rail services[5].

The national access regime combined with the other competition reforms provides a means of addressing the loss of economic efficiency that can arise from such outcomes. By contrast the arrangements in place before the competition reforms were introduced were inadequate for the purpose. The limitations of those arrangements and in particular of section 46 of the Trade Practices Act are discussed in section 1 of the submission.

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1 Investments are lumpy when capacity can only economically be added in large increments.

2 See for example, Baumol, W., Panzar, J. and Willig, R. (1982) *Contestable Markets and The Theory of Industry Structure*, Harcourt Brace Javanovich, pp. 290-292.

3 Independent Committee of Inquiry into a National Competition Policy 1993, *National Competition Policy* (F. G. Hilmer, Chairman), AGPS, Canberra, p. 241.

4 As with the telephone service example, a postal service has more value to a customer the more people that can be contacted using the service.

5 An increase in passenger transport usage may result in increase service frequency.

The reforms have now been in place for over five years. The developments over the period are beginning to provide the information needed to make an assessment about their impact. In general, the results have been positive. Benefits can be measured by falling access prices, with substantial reductions in the electricity and transport sectors. However the benefits go beyond price. Greater choice and quality of service, while more difficult to quantify, are additional benefits driven by the reform process. Further, what can now be observed is transparent and accountable regulation by independent regulators. Section 4 provides details on the benefits of reform to date.

The experience in economic regulation overseas lends support to the approach adopted in Australia. The benefits of access regulation have been widely recognised overseas. Most OECD countries have implemented or are implementing economic regulatory provisions covering the type of facilities captured by the Australian national access regime. Generic access arrangements operate in the U.S. and Europe. At the same time industry specific provisions have been established in the U.S. and have been or are being developed by member states of the European Union.

The one example of a more 'light handed' approach is in New Zealand. However, the New Zealand Government is moving to re-regulate, with new regulatory arrangements in the electricity and telecommunications sectors. The move to re-regulate has been driven by the disappointing outcomes experienced under the current approach.

Regulation in New Zealand, North America and Europe is discussed in section 4.4 with details provided in attachments A and B to this submission.

A generic access regime or industry specific provisions?

At present the post and telecommunications regimes are stand alone statutory regimes while the electricity and gas regimes have been developed within the Part IIIA framework. The Commission considers this flexibility to be desirable.

Industry based regimes have the advantage that they can be tailored to the particular needs of the industry. For instance, a particular technological requirement in the telecommunications industry is the need for any-to any connectivity which is specifically catered for in Part XIC but is not a consideration directly relevant to Part IIIA.

At the same time the generic provisions of Part IIIA have a number of advantages.

One is that Part IIIA can act as a catalyst for the development of industry specific regimes. Where declaration under a generic regime is possible industry may consider it preferable to develop an access regime tailored to their needs rather than risk declaration and bilateral arbitrations. The Commission believes that this was a factor in the development by industry of an effective regime in the gas industry.

Another advantage is flexibility. It is impossible to predict what changes in technology the future will hold or the effect these changes will have on industry. A generic access regime is adaptable and may capture new or emerging technologies more effectively

than would stand alone legislation. Similarly a generic regime provides flexibility for deregulation as technological and other conditions change over time[6]. A non-legislative response is potentially faster and more flexible. It may also provide a better mechanism for responding to issues as they arise. A generic regime provides a framework for addressing concerns within the economic boundaries reflected in the legislation. By contrast legislative responses are not constrained in this way.

A final advantage of a generic regime is that it can operate as a benchmark. Part IIIA and the Competition Principles Agreement offer consistent criteria against which the standard and quality of the access regime must be measured. This helps to ensure the integrity of the access provisions.

For these reasons the Commission supports the retention of both industry specific and generic access regimes.

In addition the Commission considers that revocation of Part IIIA would be symbolic, sending signals that the Government is not committed to competition reforms. Revocation of Part IIIA also has the potential to unravel reforms already achieved in the electricity and gas sectors, including establishment of the national electricity market.

Proposed changes to the national access regime

The submission considers a range of possible changes to the national access regime. Two are proposed, namely changes to streamline administrative processes and changes to promote development of access undertakings.

Declaration criteria

The Commission supports the approach of having economically based criteria to determine the coverage of the access regime. As discussed above the economic theory that underpins the declaration criteria is well developed and widely understood. Adopting a generic regime using economic criteria allows the relevant market participants to identify market failure and make the case for declaration within the boundaries established by the regime.

The experience to date suggests that the outcomes of the declaration process are consistent with the economic theory.

The Commission sought advice from National Economic Research Associates (NERA) in relation to the declaration criteria. NERA have assessed the declaration criteria and declaration outcomes against economic theory. NERA also compared the outcomes with regulatory regimes adopted overseas. NERA's conclusions suggest that the criteria are consistent with both theory and the overseas experience. NERA's report is at attachment B.

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6 This is likely to be the case in telecommunications. See Australian Competition and Consumer Commission (2000), *Submission to the Productivity Commission Review of Telecommunications Specific Competition Regulation* for further discussion.

One of the concerns that the Commission has about changing the criteria at this stage is that a number of the issues are only now being clarified. It is only through the development of a body of precedent that the application of the criteria can be fully understood. Given the lack of evidence to suggest that services are being inappropriately declared and the limited experience in application of the provisions it is premature to change the criteria at this time. The Commission suggests that the provisions be subject to ongoing monitoring and review so that if problems do emerge appropriate responses can be implemented.

Terms and conditions of access

The negotiate-arbitrate model forms the basis for the access regime. The submission considers the merits of this approach, concluding that it has a number of fundamental limitations, including:

- the high propensity to seek arbitration rather than negotiate outcomes;
- time consuming and costly processes; and
- the potential for the negotiate-arbitrate model to give rent sharing outcomes.

The negotiate-arbitrate model was originally described as a 'light handed' model with arbitration only as a last resort. The experience since then suggests this is not the case.

The limitations of the negotiate-arbitrate model are most apparent where services are vertically separated. The model seems to have been designed to cater for circumstances where the service provider is vertically integrated and the provider may have incentives to deny access to protect its business interests in downstream markets either through price or non-price means. The original approach made sense in that at the time the arrangements were developed most of the essential services being considered were still vertically integrated. Since then reforms in the electricity, gas and rail sectors have structurally separated upstream from downstream services.

When a service provider is vertically separated it will usually have little incentive to deny access. While the service provider may exploit its market power by setting high prices it is unlikely to manipulate other terms and conditions to limit access. Nevertheless the negotiate-arbitrate provisions allow an access seeker to seek arbitration over non-price terms and conditions. This could result in unnecessarily intrusive arbitration over detailed operational matters.

Price specification, for example tariff setting or price caps, seems to have a number of advantages over the negotiate-arbitrate model, especially where the service provider is vertically separated. Some of the pricing options are discussed in the submission along with the advantages and disadvantages of each of them.

The Commission proposes changes to the undertaking provisions to help address the limitations of the negotiate-arbitrate model. The changes would promote the development of access undertakings as an alternative to arbitration. The proposal involves two changes.

First, consistent with provisions proposed for access to postal services, service providers should be able to submit an undertaking before or after a service is declared.

Second, in limited circumstances after a service has been declared the Commission should have the power to compel an access provider to submit an access undertaking in relation to a declared service. In the event that the access provider failed to comply with a direction to submit such an undertaking, or if the Commission rejected the undertaking submitted, the Commission should have the power, after conducting a public consultation process, to impose an access undertaking on the access provider. This is similar to the approach adopted in the *National Third Party Access Code for Natural Gas Pipeline Systems* which already contains a compulsory undertaking power.

This approach would both encourage service providers to deal with issues of general concern to industry on a multilateral basis and give the Commission the power to deal with such issues in an open and consultative manner.

Such an amendment would not extend the scope for regulation. It would only operate where a service had been declared. In these circumstances the Commission can already determine terms and conditions of access through the arbitration of an access dispute. The changes would merely facilitate the efficient and transparent consideration of issues of general concern to industry. The Commission considers such an approach preferable to conducting a series of bilateral arbitrations.

An alternative to this approach would be to change the access regime to incorporate explicit pricing powers. The Commission considers that this is not warranted for three reasons.

First, the national access regime has proved to be a catalyst for the development of industry specify regimes and provides a statutory platform for such regimes. Both the electricity and gas codes (introduced using Part IIIA) effectively address the limitations of the negotiate-arbitrate model by include pricing arrangements tailored to the specific circumstances of the industries.

Second, where the national access regime has not achieved substantial outcomes, most obviously in relation to rail, more fundamental issues are at play than the access regime. In this case satisfactory rail access arrangements have not been developed because of a lack of co-operation from some states.

Thirdly, the changes proposed to the access undertaking provisions should make undertakings a more workable option than now and increase the likelihood of the development of access undertakings as an alternative to the negotiate-arbitrate model.

The submission suggests further monitoring of the arrangements or a future review to re-assess the effectiveness of the Part IIIA framework in light of further experience.

Streamlining administrative processes

The submission considers possible procedural changes at each step in the current access regime, namely the declaration and arbitration processes. The submission proposes changes to the arbitration processes.

In relation to the declaration process procedural changes could address the length of time required to have services declared. One way of doing this would be to move away from criteria based declaration decisions to listing services covered by the regime. While this may be desirable in providing certainty from the outset and reducing delays, the Commission consider that it has disadvantages on other grounds and does not propose this approach for the submission. The main disadvantage of a list is the move away from decisions based on economical principles. The current approach is also likely to be more flexible in dealing with technological and other relevant changes over time. These issues are discussed in the sections 5 and 10 of the submission.

In relation to arbitration processes, the Commission's experience so far in arbitrating telecommunications matters under Part XIC suggests that arbitration can be a slow process and costly to the parties. The process is generally unavoidably resource intensive and time consuming process due to the complex nature of the issues and the need to conduct the hearing fairly. Merits review by the Australian Competition Tribunal in addition to appeals to the Federal Court on questions of law, further delay the resolution of the dispute.

The submission suggests limiting the scope for review to matters of law. This approach is consistent with guidelines issued by the Administrative Review Council. Furthermore it is unusual for an arbitration to be subject to a complete re-hearing. For example, awards by the Australian Industrial Relations Commission are not subject to merits review.

Summary of proposals

Table 1 provides a summary of the main provisions in the access regime and the Commission's position on each of them.

Table 1: Summary of Commission positions

Part IIIA provision	Commission proposal	Reason for proposal
Declaration provisions	No changes at this stage, but continued monitoring and review.	▪ The Commission considers that the declaration decisions made to date do not suggest that services have been inappropriately declared. This position is supported by advice from NERA. ▪ While there has been some uncertainty about the operation of the declaration provisions it is only through the development of a body of precedent that these and other issues have started to be clarified. Given this it is too early to conclude that the provisions require significant amendment.
Negotiation-arbitration as a means of setting terms and conditions of access	Process changes (see below), otherwise no changes at this stage subject to further review.	It would be premature to change the access regime at this time. While more explicit pricing powers could address limitations of the negotiate-arbitrate model, these issues are already being addressed through industry specific regimes.
Access undertakings	Change the provisions: ▪ to allow service providers to lodge an undertaking before or after declaration; ▪ to allow, in limited circumstances, the Commission to require lodgement of an undertaking; and ▪ to provide for the Commission to impose an undertaking if the service provider fails to submit an undertaking or have an undertaking accepted.	The changes would encourage access providers to deal with issues of general concern to industry on a multilateral basis rather than through individual bilateral arbitrations. The undertaking process also allows the Commission to deal with such issues in an open and consultative manner.
Effective regimes	No changes suggested, but support the retention and rigorous application of clause 6(4)(p) of the Competition Principles Agreement where proposed effective regimes cover inter-state services.	Clause 6(4)(p) addresses the need for national consistency. Its continuation and rigorous application is necessary to ensure consistency between state based regimes. This is becoming increasingly important as national markets develop.
Administrative processes	Streamline the arbitration process by limiting review of Commission determinations to matters of law.	The changes would reduce time delays and costs to the various parties. The approach is consistent with guidelines issued by the Administrative Review Council.

PART A

REGULATING ACCESS TO ESSENTIAL FACILITIES

The access provisions in Part IIIA of the Trade Practices Act have operated since June 1995. This part of the submission summarises the provisions and their application in the gas, electricity, aviation and rail industries. It also provides a brief history of regulation in this area and the rationale behind Clause 6 of the Competition Principles Agreement and Part IIIA.

1. THE RATIONALE FOR THE NATIONAL ACCESS REGIME

1.1 Introduction

On 11 April 1995 the Commonwealth and state and territory governments agreed to implement a national competition policy. The parameters of the national competition policy are set out in the Competition Principles Agreement signed by the governments on that date. Clause 6 of the agreement requires the Commonwealth to establish a national regime to facilitate third party access to services provided by means of significant infrastructure facilities.

The Commonwealth amended the *Trade Practices Act 1974* ("Trade Practices Act") in June 1995 to implement several of the initiatives in the Competition Principles Agreement. A new part, Part IIIA, was enacted to facilitate third party access to significant infrastructure facilities.

This section commences by outlining the economic problems arising from significant infrastructure facilities with natural monopoly characteristics. It then provides a brief history of the regulation of such facilities and discusses the rationale for the national access regime.

1.2 Economic efficiency and essential facilities

A number of facilities are characterised by economies of scale and scope relative to the size of the market to the extent that supply by a limited number of firms, or in the extreme case a single firm, is technically the most efficient way of supplying the market.

Some of these facilities supply services that are essential inputs for the provision of goods or services in related markets. These facilities can be characterised as "essential facilities". An example is a major gas pipeline that provides a service (the transmission of gas between, say, a gas field and an urban centre) which would be essential to businesses seeking to compete in the upstream market (gas extraction and manufacture) and in the downstream market (such as supplying gas to users).

Under some circumstances facility owners may have market power and use it in ways which are detrimental to competition. They may be in a position to charge high prices for the services provided by a facility. Maximising profits by restricting output and increasing prices in this way results in a misallocation of society's resources.

Where facility owners also participate in upstream or downstream markets they may deny access to the service to inhibit the entry of new firms into those markets. Similarly, the owners may set a price for access which disadvantages potential entrants. Either strategy may damage competition in the related market.

1.3 History of regulation of essential facilities

The national access regime is a relatively recent policy response to the essential facilities problem. However it was not launched in a regulatory vacuum. The commonly cited examples of essential facilities are electricity transmission grids, telecommunication networks, rail tracks, major pipelines, ports and airports.[7] In Australia these facilities have always been subject to some intervention through public ownership, price regulation and the laws governing anti-competitive conduct.

Public ownership and price scrutiny

It is a distinguishing characteristic of Australia's economic history that government played such a significant role in infrastructure development. Many essential facilities were either developed by publicly owned enterprises or developed by private concerns and later incorporated into public enterprises when the private facility failed.

Infrastructure facilities were often managed within a government department and investment and pricing decisions were frequently made on the basis of a complex mix of economic, social and political considerations. Often this mix of considerations kept prices too low or too high while costs went unchecked. Investment decisions were often skewed with little reference made to future capacity requirements.

The opening up of the Australian economy to international trade and investment highlighted the limitations of this type of government management of infrastructure facilities and pointed to the need for economic reform in the non traded goods sector.

Governments moved to separate management of infrastructure facilities from the political process through commercialisation, corporatisation and privatisation. Australian postal reform, for example followed this "orthodox" path. Postal services were taken from the control of a government department and a separate Act defined the responsibility of the Board of Directors, the accountability requirements on Australia Post and its commercial objectives.

While the Commonwealth has not suggested that Australia Post should be privatised, for many other utilities corporatisation has been a necessary step in the reform process before privatisation. Many government business entities have now been given clear direction and scope to operate on commercial terms.

With this increased understanding of the importance of utility pricing to business performance there has been a growing recognition of the importance of some price oversight for monopoly infrastructure facilities.

The Commonwealth has recognised the importance of pricing scrutiny for some time. Telecom and Australia Post were declared for the purposes of the PS Act in 1983. Shortly afterwards the Commonwealth established Austel to regulate Telecom. Now

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7 Hilmer Report, p. 240.

telecommunication services are subject to industry specific legislation including a price cap for certain retail services while reserved services of Australia Post remain declared for the purposes of the PS Act.

In contrast, state owned government utilities in Australia have been outside Commonwealth Government oversight and until recent times outside independent scrutiny of their pricing decisions. In this way the Australian experience has been quite different from the American experience, which has a long tradition of independent scrutiny of utilities. More recently independent regulatory bodies have been put in place in the states and although their roles differ scrutiny of utility prices has become much more pervasive.

However, since the High Court cases of *Strickland v Rocla Concrete Pipes Ltd*[8] and *Tasmania v The Commonwealth*[9], it has been accepted that the Commonwealth has wide powers to pass laws that regulate the economic activity and conduct of corporations. To the extent that the owner of a facility within the meaning of Part IIIA is a trading or financial corporation, this would allow the Commonwealth to regulate access to those facilities including terms and conditions of access.

Competition law

The problems associated with essential facilities stem from the ability of the owners of such facilities to behave in anti-competitive ways. The laws enacted by parliaments to control anti-competitive conduct have the potential to affect operators of essential facilities.[10] The following discussion outlines the development of competition law and describes how the current regime might apply to essential facilities. The shortcomings of competition law in dealing with these issues are also discussed.

Development of competition law

The common law has long contained principles to encourage free dealings. Courts have held unreasonably restrictive agreements to be unenforceable. The common law has also witnessed the development of certain rights of action for persons whose economic interests are injured by others.[11] However the common law has historically been of limited utility as a means of promoting competition.[12] For example one problem was that a person who was not a party to a restrictive agreement originally had no standing

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8 (1971) 124 CLR 468.

9 (1983) 158 CLR 1.

10 A significant limitation in the Trade Practices Act's scope to regulate natural monopolies has been that until recently its application to state owned enterprises was limited. As noted earlier in this submission many natural monopoly facilities have been owned by governments. This difficulty has been ameliorated since the Hilmer Report with the extension of the TP Act to state owned enterprises and the restructuring and privatisation of many such enterprises.

11 For example the economic torts of conspiracy, intimidation, interference with contractual relations and intentional infliction of loss by unlawful means.

12 Heydon, J.D. (1989), *Trade Practices Law,* vol.1, The Law Book Company, Sydney, NSW, para. 1.40 – 1.60.

to bring an action to declare it unlawful.[13] This would have severely limited the scope of the doctrine to assist a third party seeking access to an infrastructure facility.

The limitations of the common law led governments to legislate to promote competition. The Commonwealth Parliament enacted the *Australian Industries Preservation Act* in 1906. Its terms strongly reflected those of the U.S. *Sherman Act.*

U.S. courts have developed what has become known as the essential facilities doctrine from the general prohibitions of the Sherman Act. This doctrine, and its relationship with industry specific access regimes is examined in more detail in attachment A.

Australian courts did not follow in the path of their US counterparts. Two early cases brought under the *Australian Industries Preservation Act* severely limited its application. In *Huddart Parker and Co Pty Ltd v Moorhead*[14] the High Court held that the Act went beyond the corporations power in the Commonwealth Constitution. In *Attorney General (Clth) v Adelaide Steamship Co Ltd*[15] the Privy Council held that the Act was unconstitutional even in relation to interstate trade.[16]

The *Australian Industries Preservation Act* fell into disuse and was eventually replaced by the *Trade Practices Act 1965*. The 1965 Act established the Commissioner of Trade Practices and the Trade Practices Tribunal. It provided for the registration of collusive practices on a secret register maintained by the Commissioner. It rendered various practices 'examinable' including discriminatory dealing, third line forcing, collective refusal to deal and monopolisation. The Commissioner could take such cases to the Tribunal and seek to have them set aside as being contrary to the public interest.[17]

Section 46 of the Trade Practices Act and essential facilities

The *Trade Practices Act 1965* was considered too weak and its administration unduly cautious.[18] The *Trade Practices Act 1974* addressed these concerns. It prohibited a wide range of conduct detrimental to competition. The Act also introduced penalties for breaches of the competition rules and provided a private right of action.

One form of conduct prohibited by the 1974 Act is misuse of market power. Section 46 of the Act provides as follows:

> (1) A corporation that has a substantial degree of power in a market shall not take advantage of that power for the purpose of:
>
> (a) eliminating or substantially damaging a competitor of the corporation or of a body corporate that is related to the corporation in that or any other market;

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13 Heydon para. 1.40 – 1.60.

14 (1909) 8 CLR 330.

15 (1913) 18 CLR 13.

16 Heydon p. 536.

17 Heydon p. 536.

18 Heydon p. 536.

(b) preventing the entry of a person into that or any other market; or
(c) deterring or preventing a person from engaging in competitive conduct in that or any other market.

Three conditions must be satisfied to establish a breach of section 46. First, the firm must have substantial market power. Second, the owner must have taken advantage of its market power by engaging in the conduct in question. Finally, the owner must have done so for one of the three anti-competitive purposes.

It is sometimes suggested that section 46 is a suitable mechanism for addressing the problems arising from essential facilities. If the facility has natural monopoly characteristics it is likely to imbue its owner with a substantial degree of market power.[19] It may be possible to characterise a refusal to provide access as a use of that power. A refusal to provide access to an essential facility might be motivated by one of the three anti-competitive purposes.

In a number of cases section 46 has been successfully used by parties seeking access to a product or service provided by another party. The most significant of these is *Queensland Wire Industries Pty Ltd v Broken Hill Proprietary Co Ltd.*[20] In that case BHP was the sole manufacturer of a product necessary for constructing rural fences. BHP sold the product exclusively to its own fencing business. The High Court found that BHP had a substantial degree of market power and, by refusing supply to a rival fencing business, it had used that power for a proscribed purpose.

In *Queensland Wire* the plaintiff cited US authorities to support a general rule that a monopolist who controls an essential facility is not free to refuse to deal but rather is under a duty to give access. The Full Federal Court rejected the application of the essential facility doctrine in the most emphatic terms. The Full Court noted that the doctrine does not fall readily from the words of section 46 but rather had developed "as a gloss on the succinct terms of the Sherman Act."[21] The Full Court appears also to have had reservations as to the efficacy of the doctrine, noting its ill-defined boundaries and the practical difficulties which arise when courts are asked to force parties into a commercial relationship.[22]

Although Australian courts have rejected the idea that section 46 entails an essential facilities doctrine it has been used with varying degrees of success by parties seeking access to goods provided by another party.[23]

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19 Hilmer, p. 243.

20 (1989) 167 CLR 177.

21 (1987) 17 FCR 211 at 221.

22 (1987) 17 FCR 211 at 221.

23 Some cases in which access was obtained are: *Queensland Wire Industries Pty Ltd v Broken Hill Proprietary Co Ltd* (1989)167 CLR 177; *ASX Operations Pty Ltd v Pont Data Australia Pty Ltd (No 1)* (1990) 27 FCR 460; *Melway Publishing Pty Ltd v Robert Hicks Pty Ltd* (1999) ATPR 41-693. But cf *Dowling v Dalgety Australia Ltd* (1992) 34 FCR 109; *Plume v Federal Airports Corporation* (1997) ATPR 41-589.

Section 46 seeks to facilitate effective competition by ensuring firms do not use their market power to hinder the competitive process. But the requirement that the conduct is motivated by a proscribed purpose requires proof of the state of mind of an officer of the firm and limits the usefulness of section 46 in relation to the provision of access to essential facilities. For example, section 46 does not proscribe a monopolist charging high or inefficient prices where this is done without the requisite purpose.

A court is required to look at the relevant market, assess the extent to which there would have been competition in the market but for the conduct and determine whether the lessening, preventing or hindering[24] of competition is substantial. In the absence of a 'smoking gun', it is difficult to prove purpose as a firm can obscure its intent.

The Commission notes that subsection 46(7) permits purpose to be inferred from the conduct of the corporation or any other person or from other relevant circumstances (although it is unclear whether purpose is to be ascertained subjectively or objectively).[25] In *Queensland Wire* the High Court inferred a proscribed purpose from the evidence that BHP had not offered any business justification for its refusal to supply Y-bar to Queensland Wire and that this refusal was inconsistent with its normal selling policy in relation to its other products.[26] However, as Deane J also noted, even without s 46(7), it was apparent from BHP's internal documents and its dealings with QWI that its purpose had been to prevent QWI from competing in the market for star pickets.[27]

In the Commission's experience it is particularly difficult for a court to infer intent where a firm's conduct substantially lessens competition but the firm has not engaged in a positive act to 'injure' its competitors. Consequently, section 46 will, in some cases, fail to capture monopolistic conduct. The text book example is of a public enterprise that does not have a profit-maximising motive and consequently prices below costs with the unintended effect of destroying or deterring new entrants.

In addition to the fact that it may be difficult for a Court to infer intent on the part of an access provider, the Commission considers that in the context of access regulation

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24 See *Trade Practices Act 1974* (Cwlth), s 4G.

25 In *General Newspapers Pty Ltd v Telstra Corporation* (1993) ATPR 41-274, the Full Federal Court considered that the ultimate test is objective (at 41,697). Cf *ASX Operations Pty Ltd v Pont Data Australia Pty Ltd* (1991) 27 FCR 460, 474; *Eastern Express Pty Limited v General Newspapers Pty Limited* (1992) ATPR 41-167, 40,303. See Stewart, I. 1998, 'The Economics and Law of Section 46 of the Trade Practices Act', *Australian Business Law Review*, vol. 26, no. 2, p. 111, 126; Shafron, P.J. 1998, 'QWI v BHP: A Flash in the Section 46 Pan?' *Australian Law Journal*, vol. 72, no.1, p. 53, 55; Griggs, L. 1997, 'Misuse of Market Power' *The Law Institute Journal*, vol. 71, no. 10, p. 51, 54.

26 *Queensland Wire Industries Pty Ltd v The Broken Hill Pty Co Ltd* (1989) ATPR 40-925, 50,011 & 50,014. See Nagarajan, V. 1993-94, 'The Regulation of Competition by Section 46 of the Trade Practices Act 1974', *Competition and Consumer Law Journal*, vol. 1, p. 127, 131; Hanks, F. and Williams, P.L. 1990, 'Implications of the Decision of the High Court in *Queensland Wire*', *Melbourne University Law Review*, vol. 17, no. 3, p. 437, 446.

27 At 50,022.

intent to harm competition is not an appropriate inquiry. Part IIIA seeks to provide access to facilities for the purposes of ensuring economically efficient and competitive markets. Whether or not access is made available under Part IIIA should depend upon economic policy and principle not the commission, by the access provider, of an offence. Promoting an environment in which competition can flourish should not depend upon a finding that the access provider has engaged in conduct that damages a competitor, prevents entry of a competitor into a market or prevents a person engaging in competitive conduct. The mere control of a facility with monopoly characteristics may so distort the market as to inhibit effective competition.

The Commission has previously argued that the limitations of section 46 are of concern where the Government's objective is to introduce effective competition into markets traditionally supplied by vertically-integrated public monopolies.[28] In particular, it has been argued that:

(i) there is doubt as to whether section 46 could be used to ensure access to facilities with monopoly characteristics; without a significant development in the case law, it would be risky to assume that section 46 would be sufficiently flexible;

(ii) the fact that vertical integration can lead to efficiencies is likely to lead to the need to balance conflicting economic evidence about trade-offs between competition and efficiency. It was argued that the courts were not necessarily best placed to make such judgments;

(iii) relief under section 46 (penalties, injunctions and court orders) does not lend itself easily to setting generally applicable access prices; and

(iv) particularly new entrants, who may not be well resourced, would be at a disadvantage if access decisions were made through the judicial system which is costly. It was also noted that in industries undergoing substantial restructuring or where markets presently do not exist, administrative solutions offer increased flexibility.

1.4 - Rationale for the national access regime

The shortcomings of the competitive conduct rules in dealing with the problems arising from essential facilities have lead governments to develop mechanisms specifically to facilitate third party access to the services provided by such facilities.

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28 Trade Practices Commission (1993), *Submission to the National Competition Policy Review*, xix, 26-27.

The difficulties of using section 46 to provide access to essential facilities are well catalogued. The Hilmer Report listed the following:[29]

- difficulty in establishing that a facility owners refusal to provide access, or access on reasonable terms, is due to a proscribed purpose;
- the reluctance and ability of courts to decide appropriate terms and conditions of access; and
- the costly and time consuming nature of litigation.

Experience in New Zealand since the Hilmer Report has tended to underscore the inadequacy of an approach based on the misuse of market power provisions. New Zealand has not introduced a statutory right of access to essential facilities but rather has chosen to rely on its misuse of market power provision.[30]

A passage of litigation arose from the efforts of Clear Communications Ltd, a new entrant in local telephony, to obtain access on reasonable terms to the telephone network owned by the former state monopoly, NZ Telecom. The passage of the case through the New Zealand High Court and Court of Appeal to the Privy Council took several years and undoubtably involved significant legal costs[31] even though the only thing at issue was the terms of access (ie the courts did not have to determine whether access should be provided in the first place). Its costly and time consuming nature is likely to discourage access seekers from using misuse of market power provisions to gain access to infrastructure.

The case also illustrates the reluctance of courts to determine terms and conditions of access. The Privy Council allowed Telecom to set a price for access which would allow it to recoup its production costs and also compensate it for foregone profits from final product sales due to the additional competition from access seekers. The outcome is often criticised for failing to address the issue of monopoly pricing of the upstream input: if Telecom's price for its final product entails a monopoly price for the input then fully compensating Telecom for the loss of these final sales is said to be the same as enshrining its monopoly pricing of the input.[32]

In light of the shortcomings of the general competition laws, the Hilmer Report concluded that a legislated right of access was necessary to address the problems arising from essential facilities. The Report states:

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29 See for example Hilmer, p. 243.

30 *Commerce Act 1986* (NZ), section 36. Section 36 arguably has a higher market power threshold than its Australian counterpart. It requires that the impugned firm be in a position to dominate the market. However this distinction does not appear material to the comments which follow.

31 According to the *Australian Financial Review* costs for each party were in the vicinity of $8million – see Pengilley, W. 1995, 'The Privy Council Speaks on Essential Facilities Access in New Zealand: What are the Australiasian Lessons?', *Competition and Consumer Law Journal*, vol. 3, pp. 26, 42.

32 See for example Hay, G.A. 1995, 'Reflections on Clear' 3, *Competition and Consumer Law Journal*, vol. 3, p. 231, 232 – 236.

> There are some industries where there is a strong public interest in ensuring that effective competition can take place, without the need to establish any anti-competitive intent on the part of the owner for the purposes of the general conduct rules. [...] Where such a clear public interest exists, but not otherwise, the Committee supports the establishment of a legislated right of access, coupled with other provisions to ensure that efficient competitive activity can occur with minimal uncertainty and delay arising from concern over access issues.[33]

The Hilmer report emphasised the need to limit the circumstances in which firms would be required to provide access so as to ensure appropriate incentives existed to encourage investment. It proposed a national, general access regime, rather than industry or state based regimes. It also considered that a considered a single framework would promote a consistent approach to access issues across the economy.

The framework ultimately enacted in Part IIIA largely reflects that proposed in the Hilmer Report. The nature of the national access regime is discussed in the next part of this submission.

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33 Hilmer, p. 248.

2. OPERATION OF PART IIIA

2.1 Introduction

Part IIIA establishes a legal regime to facilitate access to the services of certain facilities of national significance. The approach adopted is based on commercial negotiation of access terms and conditions between the parties in the first instance, supported by the option of arbitration of disputes by an independent body if the negotiations fail.

Part IIIA provides three alternate mechanisms for achieving access, declaration (and any subsequent negotiations and arbitrations), undertakings and establishment of effective regimes. Figure one summarises the three mechanisms. This section briefly reviews each of them.

2.2 Declaration

The legislative regime can require service providers to grant access to their service once a service has been declared. Services can be declared by the relevant Minister on the NCC's recommendation or by the Australian Competition Tribunal on appeal.

Any person can apply to the NCC for a recommendation to the Minister that a service should be 'declared'. In making a recommendation the NCC must be satisfied that a service satisfies all of the criteria set out in section 44G of the Trade Practices Act. The criteria are:

(a) that access (or increased access) to the service would promote competition in at least one market (whether or not in Australia), other than the market for the service;

(b) that it would be uneconomical for anyone to develop another facility to provide the service;

(c) that the facility is of national significance, having regard to:

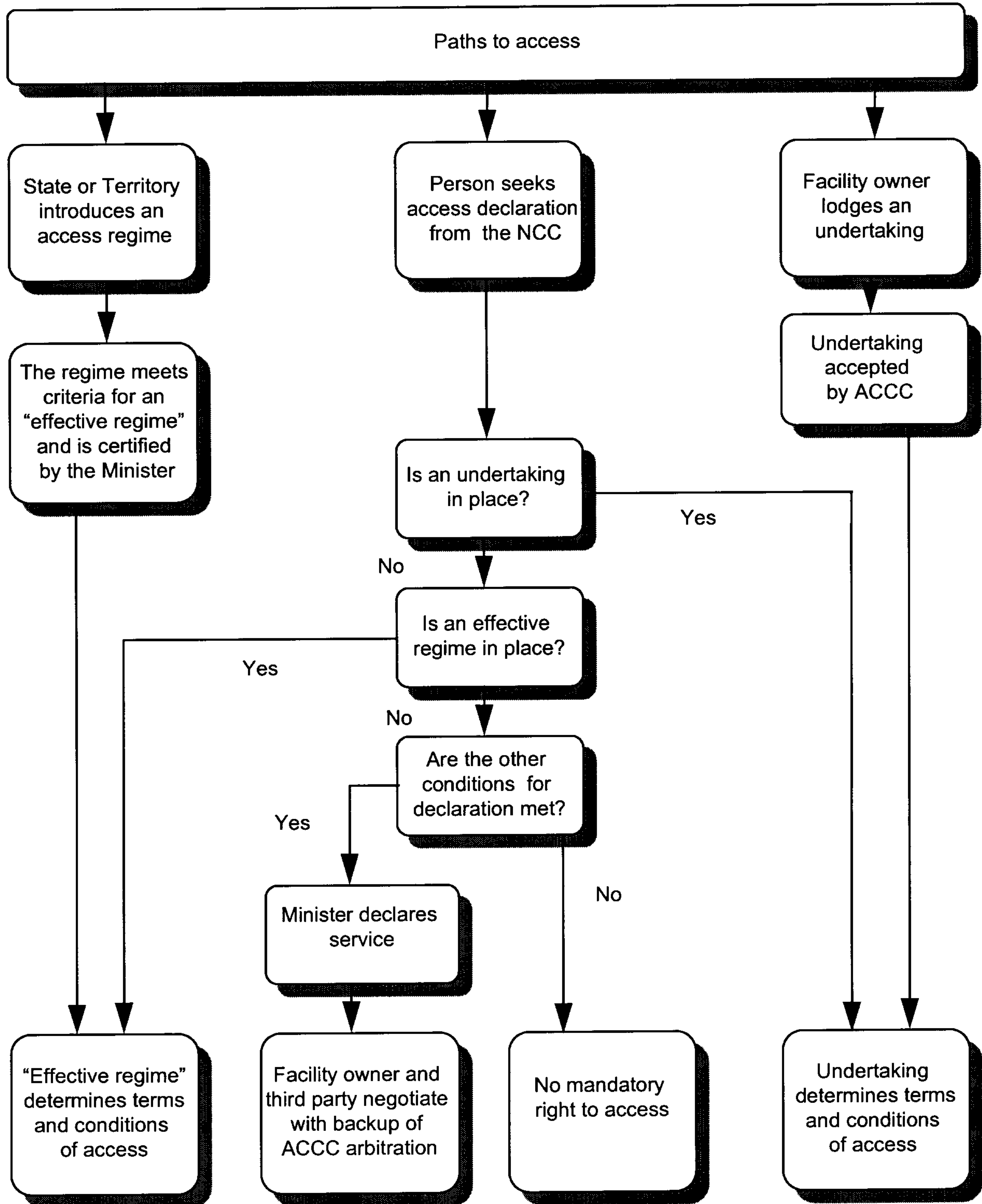
- (i) the size of the facility; or
- (ii) the importance of the facility to constitutional trade or commerce; or
- (iii) the importance of the facility to the national economy;

(d) that access to the service can be provided without undue risk to human health or safety;

(e) that access to the service is not already the subject of an effective access regime; and

(f) that access (or increased access) to the service would not be contrary to the public interest.

Figure 1: Three paths to access



Acknowledgments: Industry Commission, Phillips Fox solicitors

The Minister must respond to a recommendation by the NCC either by declaring the service or deciding not to declare it. The Minister must give reasons for his or her decision. In reaching a decision the Minister must have regard to the same criteria as the NCC.

Ministerial declarations are reviewable by the Australian Competition Tribunal.

Only services provided by means of a facility can be declared. Part IIIA lists examples, including:

- the use of an infrastructure facility, such as a road or railway line;
- handling or transporting things, such as goods or people; and
- a communications service or similar service.

This definition specifically excludes production processes (for example, manufacturing plants and processes), intellectual property (for example, copyrights and patents), or the supply of goods, except to the extent any of these is an integral but subsidiary part of the service in question.

To date the NCC has received ten applications for a recommendation to declare services. The NCC has made recommendations on five of these. A summary of the applications, the services covered, the NCC's decision, the minister's decision and appeals to the Australian Competition Tribunal is provided in Table 2.

The NCC has made three recommendations for declaration of rail services provided by state government businesses, two in New South Wales, one in Western Australia. None of the recommendations have been adopted by the state Ministers. In each case the Ministers' decisions have been appealed to the Australian Competition Tribunal. Following appeal the parties have reached negotiated outcomes and the appeals have been withdrawn.

The other two recommendations made by the NCC to declare services related to airports which fall within the Commonwealth's jurisdiction. In both cases the Minister accepted the NCC's recommendations. The declarations covered services provided by the Federal Airports Corporation at Sydney (Kingsford Smith) Airport, the other services provided by Australia Pacific Airports Corporation at Melbourne Airport. The Federal Airports Corporation appealed the Minister's decision to the Australian Competition Tribunal. In March 2000 the Tribunal upheld the decision to declare the services. The decision provides useful guidance on the application of the declaration criteria in practice. The decision is discussed further in section 3.4.

Table 2: Summary of applications for declaration dealt with by the Council

Application	Service	Council recommendation	Minister's decision	Outcome
Australian Union of Students (April 1996)	Payroll deduction service provided by DEETYA	Not to declare (June 1996)	Not to declare (August 1996)	AUS applied to the Tribunal for review of the Minister's decision. The Tribunal determined not to declare (July 1997).
Futuris Corporation (August 1996)	WA gas distribution service			Application withdrawn (November 1996)
Australian Cargo Terminal Operators (November 1996)	Qantas ramp and cargo terminal services at Melbourne and Sydney international airports (2 applications)			Application withdrawn.
Australian Cargo Terminal Operators (November 1996)	Particular airport services at Sydney International Airport (3 applications)	To declare (May 1997)	To declare (July 1997)	The airport operator (the Federal Airports Corporation) applied to the Tribunal for review of the Minister's decision. The Tribunal determined to declare the services for a period of five years from 1 March 2000 (March 2000).
Australian Cargo Terminal Operators (November 1996)	Particular airport services at Melbourne International airport (3 applications)	To declare (May 1997)	To declare for a period of 12 months (July 1997)	Services declared from August 1997 until 9 June 1998. Thereafter subject to access provisions of the *Airports Act 1996* .
Carpenteria Transport (December 1996)	Qld rail services, including above rail services	Not to declare (June 1997)	Not to declare (August 1997)	Carpenteria applied to Tribunal for review of Minister's decision. The application for review was subsequently withdrawn (August 1997).

...table 2 continued

Application	Service	Council recommendation	Minister's decision	Outcome
Standardised Container Transport (February 1997)	New South Wales rail track services (Sydney to Broken Hill)	To declare (June 1997)	Deemed to be not declared due to expiry of 60 day time limit (August 1997)	SCT applied to Tribunal for review of Minister's decision. Application for review was subsequently withdrawn following successful access negotiations.
New South Wales Minerals Council (April 1997)	New South Wales rail track services in Hunter Valley	To declare (September 1997)	Deemed not to declare due to lapse of time (November 1997)	NSW Minerals Council applied to Tribunal for review of Minister's decision. Application for review was withdrawn following the certification as 'effective' of the NSW Rail Access Regime.
Standardised Container Transport (July 1997)	(1) WA rail track services; (2) arriving/ departing services; (3) marshalling/shunting service; (4) marshalling/ shunting access; (5) fuelling service (5 applications)	To declare (1) rail service; not to declare other services (November 1997)	Not to declare any of the 5 services (January 1998)	SCT applied to the Tribunal for a review of the Minister's decision. Application for review was subsequently withdrawn following successful access negotiations.
Robe River (August 1998)	Hamersley rail track services			Federal Court decision that the service is not within Part IIIA (June 1999). The decision was appealed. Application for declaration withdrawn by Robe prior to Full Federal Court hearing. Appeal stayed.

Source: National Competition Council

2.3 Arbitration

Declaration establishes a right to negotiate terms and conditions of access in the first instance, with recourse to arbitration by the Commission if the negotiations fail.

If the parties successfully negotiate an agreement and enter into a contract they may apply to register that contract with the Commission. Registration has the advantage that it provides a statutory mechanism for enforcing the contract. In making a decision on whether or not to register a contract the Commission must take into account the interests of all those with rights to use the services and the public interest. Commission decisions not to register a contract may be appealed to the Australian Competition Tribunal. To date the Commission has not received any applications to register a contract.

If negotiations fail, either party to the negotiations can notify the Commission that an access dispute exists. In notifying a dispute the relevant party initiates an arbitration process in which the Commission may determine whether access should be provided and if so the terms and conditions of access.

Once it has received a notification the Commission must arbitrate the matter unless, amongst other things, it considers that the notification was vexatious, trivial or that the party who notified the dispute had not engaged in negotiations in good faith.

In arbitrating a dispute the Commission must take into account:

- the legitimate business interests of the provider, and the providers investment in the facility;
- the public interest, including the public interest in having competition in markets (whether or not in Australia);
- the interests of all persons who have rights to use the service;
- the direct costs of providing access to the service;
- the value to the provider of extensions whose cost is borne by someone else;
- the operational and technical requirements necessary for the sage and reliable operation of the facility; and
- the economically efficient operation of the facility.

In addition Part IIIA includes statutory restrictions on the Commission making determinations. Amongst other things these restrictions protect certain pre-existing contractual rights and the interests of existing users. Subject to any extensions required to a facility, these restrictions have the effect of limiting access rights to spare capacity of the relevant facility. Such spare capacity may include unused capacity held by the owner, capacity contracted to but unused by another party and capacity technically and

economically feasible of being developed by the owner. The restrictions also protect the provider from bearing the costs of extending or maintaining extensions to a facility.

Commission determinations are appealable to the Australian Competition Tribunal. Determinations can be enforced by the Federal Court on application by any of the parties to the dispute.

To date no parties have notified the Commission of an access dispute under Part IIIA.

2.4 Access undertakings and industry codes

As an alternative to the declaration process, Part IIIA allows service providers to give access undertakings to the Commission specifying the terms on which access will be made available to third parties. The Commission is required by section 44ZZA of the Act to decide whether or not to approve undertakings after conducting a public consultation process. Once the undertaking has been accepted the service in question cannot be declared. Conversely, if the service is already declared, the Commission cannot accept the undertaking.

As stated in the Second Reading Speech an undertaking has the advantage that it "...provides a means by which the owner or operator of a facility can obtain certainty about access arrangements, before a third party seeks access"[34]. It can also avoid the possibility of time consuming and expensive disputes about whether a service should be declared and the terms and conditions on which access should be granted.

Undertakings are enforceable by the Commission in the Federal Court.

Once an undertaking has been lodged with the Commission service providers may withdraw or vary undertakings with the Commission's consent.

An undertaking can be lodged by a service provider to cover its own facility. Section 44ZZAA of the Trade Practices Act also allows industry bodies to prepare and lodge an access code to the Commission on behalf of their constituents. Such codes are assessed by the Commission in the same way as undertakings. Access codes have the advantage that they allow for streamlined processing of undertakings subsequently submitted by individual service providers. These undertakings can be assessed by the Commission without the need for a public consultation process if the undertaking is consistent with the industry code.

Undertakings can be enforced by the Federal Court on application by the Commission.

To date the Commission has received 3 undertakings, one covering a gas pipeline from Longford to Sydney, and two covering services at Melbourne and Perth Airports. The Commission has also received an access code covering electricity transmission. The code forms the basis of electricity undertakings which are discussed further in section 3.

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[34] Commonwealth, *Parliamentary Debates (Competition Policy Reform Bill 1995, Second Reading Speech)*, House of Representatives, 30 June 1995 (Mr Gear, Assistant Treasurer).

2.5 Effective regimes

The national access regime is intended to operate concurrently with other Commonwealth, state and territory legislated access regimes. If an alternative regime is recognised as effective, services covered by that regime cannot be declared under Part IIIA.

The Commonwealth Minister makes the decision about whether a regime is effective based on a recommendation of the National Competition Council (NCC) and in accordance with the relevant criteria in clause 6 of the *Competition Principles Agreement*.

To date the NCC has received 14 applications for certification. Seven relate to gas pipelines, four to rail track services, one to services of electricity distribution networks in the Northern Territory and one to a Victorian commercial shipping channels. As of October 2000 seven of the regimes had been certified as effective, six were under consideration and one application had been withdrawn. Details are summarised in table 3.

Table 3: Summary of certification applications dealt with by the Council

Application	Service	Council recommendation	Minister's decision	Outcome
New South Wales Gas Distribution Networks Regime (October 1996)	Access to services of relevant gas pipelines	To certify (May 1997)	To certify (August 1997)	Certified; only intended as interim regime
Victorian commercial shipping channels (December 1996)	Access to commercial shipping channels leading into Melbourne Port	To certify (May 1997)	To certify (August 1997)	Certified
New South Wales Rail (June 1997)	Access to rail track services	To certify (April 1999)	To certify (November 1999)	Certified
South Australian Gas Access Regime (June 1998)	Access to services of relevant gas pipelines	To certify (September 1998)	To certify (December 1998)	Certified
Queensland Rail (June 1998)	Access to rail track services			Application withdrawn (February 1999)
Queensland Gas Access Regime (September 1998)	Access to services of relevant gas pipelines	Under consideration by Council	N.A.	N.A.
New South Wales Gas Access Regime (October 1998)	Access to services of relevant gas pipelines	Sent to Minister, but not publicly available (March 1999)	Postponed	Certification of Regime postponed pending resolution of cross-vesting issues

....table 3 continued

Application	Service	Council recommendation	Minister's decision	Outcome
Australian Capital Territory Gas Access Regime (January 1999)	Access to services of relevant gas pipelines	To certify (July 2000)	To certify	Certified
Western Australian Gas Access Regime (March 1999)	Access to services of relevant gas pipelines	To certify (February 2000)	To certify (May 2000)	Certified
Western Australian Rail (February 1999)	Access to rail track services			Withdrawn October 2000
Northern Territory/ South Australian Rail (March 1999)	Access to rail track services	To certify (February 2000)	To certify (March 2000)	Certified
Victorian Gas Access Regime (July 1999)	Access to services of covered pipelines	Sent to Minister, but not publicly available (April 2000)	Under consideration by Minister	N.A.
Northern Territory Electricity Access Regime (December 1999)	Access to services of electricity distribution networks	Under consideration by Council	N.A.	N.A.

Source: National Competition Council

2.6 Comparison with the Telecommunications access regime

On 1 July 1997 telecommunications specific competition provisions took effect. The provisions include a telecommunications specific access regime. The access provisions are set out in part XIC of the Trade Practices Act.

Part IIIA is intended to provide an 'umbrella' whereby access regimes would be available in relation to services in any sector of the economy where the declaration criteria are satisfied. In contrast, Part XIC applies specifically to the telecommunications industry.

The Government's philosophy in preparing Part XIC was to follow an approach based on Part IIIA of the Trade Practices Act as far as practicable but to introduce additional refinements due to the particular features of the telecommunications industry.[35] The major differences between Part IIIA and Part XIC can be summarised as shown in Table 4 below. In particular, the Government introduced:

- different criteria for the declaration of services and determining terms and conditions of access under Part XIC; and
- standard access obligations which become operative once a service is declared under Part XIC.[36]

The relationship between Part IIIA and Part XIC is addressed in section 152CK of the Trade Practices Act. If a service is declared under both Parts, the arbitration must be conducted under Part XIC; if a service is declared under Part XIC, an access undertaking cannot be submitted under Part IIIA; and if an undertaking has been accepted under Part IIIA, it ceases to operate if the service is declared under Part XIC.

Part XIC sets out the object of the regime (the long-term interests of end-users) which then forms the test to be applied in determining which services should be subject to access regulation and the terms and conditions of access. By contrast Part IIIA has no object separate to the general object of the Trade Practices Act.

In declaration decisions under Part XIC, the Commission is required to have regard to certain criteria (promotion of competition, any-to-any connectivity and efficiency). In contrast, Part IIIA requires each criterion to be satisfied before a service can be declared.

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35 Commonwealth, *Parliamentary Debates (Trade Practices Amendment (Telecommunications) Bill 1996 Second Reading Speech)*, Senate, 25 February 1997, 895 (Senator Campbell, Parliamentary Secretary to the Treasurer).

36 In 1999, amendments were also made to the arbitration provisions in Part XIC which have not been made to Part IIIA. No arbitration has been notified under Part IIIA.

Table 4: Comparison of Part IIIA and Part XIC access provisions

	Part IIIA	**Part XIC**
Declaration	▪ State or Commonwealth Minister declares the service on NCC recommendation ▪ NCC and Minister must be satisfied that certain criteria are met ▪ Australian Competition Tribunal can review decision	▪ ACCC declares service on recommendation of TAF or after conducting a public inquiry ▪ ACCC must be satisfied the declaration is in the LTIE and must have regard to certain criteria ▪ a provider of a declared service is subject to standard access obligations
Undertaking	▪ ACCC cannot accept undertaking if service is declared and service cannot be declared if ACCC accepts undertaking ▪ undertaking can be based on an industry access code accepted by the ACCC	▪ undertaking can only be provided in relation to a declared service ▪ undertaking can be based on a TAF or ACCC telecommunications access code ▪ Australian Competition Tribunal can review decision
Arbitration	▪ if parties are unable to agree terms of access to a declared service, the ACCC may arbitrate ▪ no arbitration has yet been notified under Part IIIA	▪ if parties are unable to agree terms of access to a declared service, the ACCC may arbitrate ▪ process has been refined in light of experience to date (eg negotiation directions – including prior to the notification of a dispute, interim determinations and back-dating final determinations)
Rights of access	▪ depends on the access seeker's ability to negotiate an access agreement or arbitrated terms and conditions	▪ legislative obligation to supply a declared service on request (refer s152AR). However, in practice access still requires the finalisation of terms and conditions
Other processes	▪ Commonwealth Minister may, on NCC recommendation, decide that a State access regime is an effective access regime ▪ state access regimes may confer functions and powers on the ACCC	

In addition, Part XIC requires the Commission to consider the extent to which access will encourage the economically efficient use of, and investment in, infrastructure[37] and thus the incentives for investment in infrastructure.[38] Part IIIA includes an 'uneconomic to develop another facility' and 'public interest' test but does not expressly contain an efficiency test. As noted in the Hilmer Report, efficiency is a fundamental objective of competition policy because of the role it plays in enhancing community welfare.[39] An access regime will impact on maintenance, improvement and expansion decisions and may lead to inefficient investment that harms the long-term interests of end-users (see the Commission's *Declaration Guide*[40] and *Pricing Principles*[41]).

Declaration under Part IIIA requires consideration of federal-state co-regulation issues, particularly whether the service is subject to an effective access regime. Part XIC has no similar obligation as telecommunications is a Commonwealth responsibility. This is also reflected in the fact that Part XIC provides for the Commission to determine both whether to declare a service and the terms and conditions of access; there being no role, as in Part IIIA, for involvement of ministers, state or federal, in the declaration process.

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37 Paragraph 152AB(2)(e).

38 Paragraph 152AB(6)(c).

39 Hilmer, p. 3.

40 Australian Competition and Consumer Commission (1999), *Telecommunications Services: Declaration Provisions*, AGPS, Canberra, p. 63.

41 Australian Competition and Consumer Commission (1997), *Access Pricing Principles: Telecommunications – A Guide*, AGPS, Canberra, pp. 7-8.

3. APPLICATION IN PRACTICE

3.1 Introduction

Part IIIA has been instrumental in the economic regulation of gas and electricity transmission, airport services and railway track. This section summarises the regulatory framework that applies to each of these sectors and the way in which Part IIIA has been used to establish them. Section 3.6 also briefly examines the access regime applying to certain postal services under separate Commonwealth legislation.

3.2 Gas transmission

Historically Australia's natural gas industry developed as a number of separate, state-based markets with legislative and regulatory barriers restricting trade between states. The supply chains in each market were highly integrated, with monopolies operating at the production, distribution and retailing stages.

Exploration and production was carried out by a small number of companies under long-term leases granted by state and territory governments. In most jurisdictions a single transmission pipeline connected a single basin to the major population centre and regional markets. Producers sold gas to public and private distribution monopolies under long-term, restrictive sales contracts, often underpinned by state or territory legislation.

While these arrangements have underpinned the industry's development from the mid-1960s, they have also left consumers exposed to uncompetitive markets and high prices.

In 1994 the Council of Australian Governments (COAG) decided to address the problems of gas industry fragmentation and monopoly power by developing nationally integrated and competitive markets. This involved a series of complementary reforms.

The first was to remove all legislative and regulatory barriers to free and fair trade in gas.

The second reform was to separate transmission and distribution from the publicly-owned utilities, and to require ring-fencing arrangements in the privately-owned retail utilities. The public utility businesses have been corporatised and in many cases privatised. Retail franchise arrangements have also been reformed to allow the phased introduction of competition.

The third reform was to establish the National Third Party Access Code for Natural Gas Pipelines Systems (The National Gas Code). The code sets out a consistent procedure for the Commission and state and territory regulators to assess proposed arrangements under which pipeline operators sell transmission and distribution services to gas producers, retailers and users.

Other reforms included establishing independent state and territory agencies to regulate gas distribution access and pricing, and reviewing existing long-term exploration leases and supply contracts, at their expiry, to reduce barriers to new entrants.

Access arrangements

The National Gas Code establishes pipeline access arrangements. The owner or operator of a pipeline covered by the code must lodge an access arrangement with the relevant regulator, detailing proposed terms and conditions for access to its services.

Coverage by the code[42] is determined by the relevant Minister, following a recommendation by the NCC, which assesses the characteristics of a pipeline against criteria in the code. The criteria apply to transmission and distribution pipelines and are similar to the declaration criteria in Part IIIA[43]. In the first instance a number of pipelines were covered in the inter-governmental agreement that established the Gas Code. A Service Provider can apply to the NCC to have coverage revoked. In such circumstances, the NCC considers whether the coverage criteria are met by the pipeline in question. If not, the NCC will recommend to the relevant Minister that coverage be revoked. As at October 2000 the NCC had recommended that coverage be revoked for 17 pipelines. A number of others are still under consideration.

Access arrangements for gas transmission are assessed by the Commission, while access arrangements for gas distribution are assessed by state regulators. The code sets out the principles to be applied by the regulators in assessing an access arrangement. It also provides for binding arbitration of disputes between service providers and access seekers.

The code states that access arrangements must specify the range of services offered, the terms and conditions for their use and service policy statements on matters including capacity management and pipeline expansions and extensions.

The Commission and state/territory regulators may only approve an access arrangement if it satisfies the principles set out in the code. In assessing the access arrangements the regulator must have regard to the following criteria:

- the service provider's legitimate business interests and investment in the pipeline;

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42 Here coverage means that the provisions of code apply to a particular pipeline.

43 The NCC must be satisfied that all of the following criteria are satisfied:

- that access (or increased access) to Services provided by means of the Pipeline would promote competition in at least one market (whether or not in Australia), other than the market for the Services provided by means of the Pipeline;
- that it would be uneconomic for anyone to develop another Pipeline to provide the Services provided by means of the Pipeline;
- that access (or increased access) to the Services provided by means of the Pipeline can be provided without undue risk to human health or safety; and
- that access (or increased access) to the Services provided by means of the Pipeline would not be contrary to the public interest.

- the cost of providing access, but not losses from increased competition;
- economic value of additional investment;
- interests of all users;
- firm and binding contractual obligations of the service provider or other persons already using the pipeline;
- operational and technical requirements necessary for safe and reliable operation of the pipeline;
- economically efficient operation of the pipeline; and
- public benefit from having competitive markets.

The regulator must either approve the proposed access arrangement or not approve it. If the regulator does not approve the proposed arrangements, it must identify areas needing change. If the service provider has already been given an opportunity to address the stated concerns, the regulator must develop and approve its own access arrangement. The service provider has a right of appeal in such circumstances.

The Commission and state/territory regulators have powers to arbitrate disputes over issues such as spare or developable pipeline capacity, terms of access, trading policies and interconnection. Disputes must be arbitrated within the terms of the relevant access arrangement.

The legislative base for the code is through state-based legislation and Part IIIA. The state based access regimes are assessed by the NCC to determine whether they are 'effective regimes' or not. All of the states except for Tasmania (which does not have gas transmission or distribution pipelines) have applied to have their legislative regimes certified as effective. As at October 2000 the South Australian, Western Australian and ACT regimes had been certified, the remainder were under consideration by the NCC or Minister.

Reference tariffs

In proposing terms and conditions of an access arrangement, pipeline service providers must specify one or more reference tariffs. These serve as benchmark prices for services likely to be sought by a significant part of the market. Reference tariffs are established by determining the charges needed to meet each pipeline operator's proposed total revenue requirement.

The Commission and state/territory regulators must assess the pipeline owner's proposed total revenue requirements and reference tariffs against the code's pricing principles. This involves assessing submissions from the pipeline owner and the public on issues including asset values, capital costs, depreciation rates and operating and maintenance costs.

Reference tariffs accepted by the Commission and state/territory regulators must also include incentive regulation mechanisms, to ensure that pipeline operators continue to

improve their service and that the benefits of efficiency gains are shared with customers.

Commission role

The Commission is the designated regulator for gas transmission pipelines in all states and territories (except WA) and for transmission and distribution pipelines in the Northern Territory and is responsible for:

- assessing proposed pipeline access arrangements and subsequent amendments;
- monitoring and enforcing reference tariffs, ring-fencing, incentive regulation and other access arrangement provisions;
- arbitrating access disputes between pipeline service providers and access seekers;
- overseeing competitive tendering processes for new transmission pipelines; and
- assessing applications from industry for authorisation of anti-competitive gas supply arrangements.

Assessment of proposed access arrangements is a public process. The Commission publishes the service provider's proposed arrangement, notifies all interested parties and calls for public submissions. It may publish an issues paper and must publish a draft decision and allow further submissions before its final decision.

The Commission has received 19 applications for approval of access arrangements. The applications and their status are summarised in table 5. The list includes three applications relating to pipelines whose coverage was subsequently revoked[44]. It also includes four extensions pending the outcome of revocation applications. Of the remaining 12 applications, access arrangements for two have been approved[45], a draft submission has been released on another[46] while the remainder are being assessed.

A primary consideration for the Commission in considering access arrangements is the rate of return proposed. The rate adopted in its decisions on the GPU GasNet transmission pipelines in Victoria was for a 13.2% return on equity in post tax nominal terms. The Commission's draft determination on the Moomba to Adelaide pipeline system was similar. By contrast, in its Central West pipeline decision the Commission adopted a higher post tax nominal return on equity of 15.4%. The higher rate

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44 Revocation means the pipeline is no longer covered by the Gas Code, and that access arrangements are not required.

45 The access arrangements approved cover gas transmission in Victoria (the GPU GasNet pipeline system and, a gas transmission pipeline from Marsden to Dubbo (Central West Pipeline)). Statements of reasons for the decisions are available on the Commission's web site at accc.gov.au.

46 The Commission released a draft decision on the Moomba to Adelaide Pipeline System on 16 August 2000.

recognises that operators of new 'greenfield' facilities can face higher risks than operators of established projects.

To date there have been no appeals and no requests for arbitration.

Table 5: Gas transmission pipeline access arrangements submitted to the Commission for approval

PIPELINE	OPERATOR	STATUS
Wallumbilla to Brisbane	AGL Pipelines Ltd	Received 6/11/0o, currently being assessed.
Kincora to Wallumbilla	Oil Co of Aust Ltd	Extension granted on 16/08/00 as pipeline seeks revocation from Code.
Ballera to Wallumbilla	Epic Energy Pty Ltd	Received 17.8.00, currently being assessed.
Dawson Valley to PG&E Qld Gas Pipeline	Oil Co of Australia	Extension granted on 16/08/00 as pipeline seeks revocation from Code.
Wallumbilla to Rockhampton System	Duke Energy International	Received 17.8.00, currently being assessed.
Moura Mine to Duke Qld Gas Pipeline	BHP Mitsui Coal P/L	Extension granted on 30/08/00 as pipeline seeks revocation from Code.
Ballera to Mt Isa	AGL Pipelines Ltd	Received 3/11/00, currently being assessed.
Moomba to Sydney Pipeline System	East Australian Pipeline Ltd	Received 5.5.99, currently under assessment.
Marsden to Dubbo (AKA Central West Pipeline)	AGL Pipelines (NSW) Pty Ltd	Final Approval 20.10.00.
Eastern Gas Pipeline	Duke Energy	The Minister decided to cover the EGP on 16/10/00, which meant that an access arrangement was due in 90 days, but Duke have appealed the decision, which stays the date pending resolution of the appeal.
GPU GasNet	Vencorp	Final Approval 16.12.98. Application for approval of revision to access arrangements to incorporate Interconnect assets received 26.8.99.
Moomba to Adelaide Pipeline System	Epic Energy Pty Ltd	Draft Decision 16.8.00, currently being assessed.
Riverland Pipeline System	Epic EnergyPty Ltd (pipeline owned by Envestra Ltd)	Received 22.11.99, currently being assessed.
South East Pipeline	Epic Energy Pty Ltd	Coverage revoked effective 20.4.00.
Mildura Pipeline	Epic Energy Pty Ltd (p/line owned by Envestra Ltd)	Received 22.11.99, currently being assessed.
Palm Valley to Alice Springs	Envestra Ltd	Coverage revoked.
Amadeus Basin to Darwin Pipeline	NT Gas Pty Ltd	Received 25.6.99, currently being assessed.
City Gate to Berrimah	Envestra Ltd	Extension granted 23.02.2000, AA due 12.2.2001. Pipeline seeking revocation of coverage from Code.
Alice Springs Gas Reticulation System	NT Gas Pty Ltd	Coverage revoked.

3.3 Electricity Transmission

Before 1990 each Australian state and territory owned its own electricity supply industry, either through a single authority or a combination of authorities that were responsible for the generation, transmission and distribution of electricity. Decisions about investment in plant and price setting were made by governments through these authorities.

Since the early 1990s the industry has undergone dramatic restructuring. The process began in 1990–91 when a series of Premiers' Conferences approved plans to develop a single wholesale electricity market in eastern and southern Australia.

The National Electricity Market commenced on 13 December 1998. It allows electricity to be traded between generators and customers in NSW, Victoria, South Australia and the ACT. The different State and Territory grids are physically connected through high voltage transmission wires known as 'interconnects'.

The Premiers' Conferences established a series of principles that are now reflected, to varying degrees, in the National Electricity Code that governs the operation of the market. They are:

- **open and non-discriminatory access** for all generators and retailers to the interconnected electricity transmission and distribution grids;
- **free trade** in wholesale electricity for private generating companies, public utilities and private and public wholesale customers;
- **coordinated dispatch** of generation and demand management with coordinated planning of interconnected transmission systems; and
- **competitive sourcing** of generation capacity.

The Premiers' Conferences also agreed to industry restructuring and the progressive introduction of competition in retail supply to all customers.

Part IIIA provides the legislative platform for the National Electricity Code. Each transmission and distribution business owner or operator will submit to the Commission an individual access undertaking. To streamline the assessment process the National Electricity Code Administrator (NECA) has submitted an access code on behalf of the service providers pursuant to section 44ZZAA of the Trade Practices Act[47].

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47 Approval of a code allows for a streamlined assessment of undertakings which mirror the code. See section 2.4 for a discussion of undertakings and industry codes.

Industry restructuring

The structural changes needed to establish a competitive national market were introduced by state and territory governments throughout the 1990s. The most fundamental change involved separating the vertically-integrated electricity utilities into separate generation, transmission, distribution and retailing businesses.

The generation assets in NSW, Victoria, Queensland and South Australia were further divided into a number of separate, competing businesses. In Victoria the distribution and retail assets of the former SECV were split into five separate companies. In NSW and Queensland the former local or regional distribution and retail businesses have been amalgamated into a smaller number of competitive corporations.

Western Australia, while not part of the NEM, is developing a state-based competitive market in electricity and has introduced third party access to its transmission and distribution networks. Tasmania has also reformed its industry creating separate generation, transmission and distribution and retail businesses out of the formerly integrated Hydro Electric Commission. The Northern Territory is considering reform.

While the states and territories are at different stages of implementing the reforms, and there are regional differences in industry structure, major changes have been made in nearly all jurisdictions. In some cases this has included privatisation. In others, greater commercialisation has been achieved within public ownership.

Retail competition

The states and territories license retailers to purchase electricity from generators through the wholesale market and sell to business and domestic consumers. Many generators also hold retail licences that allow them to sell direct to large customers. Subject to licensing requirements, there are no barriers to interstate trade.

Retail competition is being phased in progressively. In most states and territories, larger customers are already able to choose their supplier. It is expected that all customers in the National Electricity Market will be able to choose their supplier by 2003. As an interim measure, maximum retail prices covering customers who cannot choose their supplier are set by state and territory regulators.

The National Electricity Code

The national electricity market is governed by a code of conduct that has three separate but related elements:

- an access code — rules governing the ways in which participants gain access to and connect with transmission grids and distribution networks, including the principles for regulating access prices;
- market rules — rules governing how generators and customers trade through the common pool, and how the physical system is controlled; and

- administrative arrangements — rules governing how disputes are settled, how the code is enforced and changed, and establishing transitional arrangements for each participating jurisdiction.

Each transmission and distribution business owner or operator must submit to the Commission an individual access undertaking consistent with the code. The Commission is required to assess the undertakings against the relevant criteria in sections 44ZZA of the Trade Practices Act which address the interests of the network service providers and access seekers[48]. As mentioned above, to streamline the assessment process the National Electricity Code Administrator (NECA) has submitted an access code on behalf of the service providers pursuant to section 44ZZAA of the Trade Practices Act[49]. The assessment criteria in section 44ZZAA are the same as section 44ZZA.

The access elements of the National Electricity Code govern the physical transport of electricity through the networks of transmission and distribution wires. There are detailed rules for network connection and disconnection, network extensions and interconnection, system security (the ability to meet demand) and metering. Other rules deal with network pricing methods, dispute resolution and code enforcement.

Revenue capping

The National Electricity Code requires the Commission to set a revenue cap for transmission services using prescribed pricing principles. Similarly the states or territories are required to set a revenue cap using pricing principles set out in the code. The code also requires regulators to use "CPI-X or some incentive based variant" to encourage network service providers to improve productivity. The primary determinant of X is the productivity improvements the business owner is expected to achieve each year. The advantage of this approach is that it constrains prices and at the same time provides incentives for the operator to improve efficiency.

The pricing principles in the code require the Commission to first value the network's assets and then determine a return on the asset, based on the cost of securing capital from debt and equity markets. The final revenue caps are derived by factoring in efficient depreciation rates and operating and maintenance costs. The Commission must determine the values for each of these cost components, after receiving public evidence and conducting its own research.

Details of the Commission's approach in regulating transmission revenues are set in its draft decision *Statement of regulatory intent for the regulation of transmission revenues*[50].

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48 See section 2.4 for details.

49 Approval of a code allows for a streamlined assessment of undertakings which mirror the code. See section 2.4 for a discussion of undertakings and industry codes.

50 Australian Competition and Consumer Commission 1999, *Statement of regulatory intent for the regulation of transmission renenues.*

Commission functions

The Commission's functions in relation to the National Electricity Code are to accept the code as an industry code under Part IIIA of the Trade Practices Act, accept undertakings which mirror the code, authorise the market rules under Part VII of the Trade Practices Act, and regulate network pricing for the transmission businesses. The Commission is progressively assuming responsibility for regulating the transmission services from the states and territories. It became the regulator of these services in NSW and the ACT in July 1999, and by December 2002 will regulate all transmission services in the National Electricity Market. Other ongoing functions include assessing applications for changes to the code, authorisation of anti-competitive conduct and accepting access undertakings from individual network owners.

To date the Commission has received and accepted the access code lodged by NECA. In addition 23 transmission or distribution service providers have lodged access undertakings consistent with the code. These have either been accepted or are being assessed by the Commission.

3.4 Airport services

Leased Airports

In 1997 and 1998 the Commonwealth Government privatised 17 of the 22 airports it owned and operated through the Federal Airports Corporation. The Government established a comprehensive system of economic regulation for the privatised airports. The main measures were a price cap on aeronautical services administered under the Prices Surveillance Act and an access regime to complement Part IIIA of the Trade Practices Act.

The airport specific access measures are set out in section 192 of the *Airports Act 1996*. These provide for airport services at most of the leased airports[51] to be declared for purposes of Part IIIA. Declaration triggers the same rights to negotiation and arbitration as services declared through Part IIIA. As with Part IIIA, services subject to an access undertaking approved by the Commission cannot be declared.

As with the telecommunications access regime, one of the reasons for the sector specific declaration mechanism is that airports are a Commonwealth responsibility. Unlike some of the other sectors covered by Part IIIA, consideration of Commonwealth-state co-regulation issues are not required.

Section 192 requires the relevant Commonwealth Minister to determine that airport services are declared unless the services are the subject of an access undertaking. The Minister's determination must be made as soon as practicable after the end of a

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[51] The declaration provisions in section 192 of the *Airports Act 1996* (Cwlth) apply to leased 'core regulated' airports. These comprise Alice Springs, Adelaide, Brisbane, Canberra, Coolangatta, Darwin, Hobart, Launceston, Melbourne, Perth and Townswille airports.

designated period. The designated period is twelve months after an airport has been privatised[52]. The designated period was intended to give the new private airport operators the opportunity to develop access undertakings. As in Part IIIA, undertakings cannot be lodged once a service is declared.

Since no undertakings have been accepted and the designated period has expired the Minister has now determined that 'airport services' at all of the leased airports are declared.

The services declared are not listed. Instead declaration is by reference to specified criteria. The criteria are that the service:

(i) is necessary for the purposes of operating and/or maintaining civil aviation services at the airport; and

(ii) is provided by means of significant facilities at the airport, being facilities that cannot be economically duplicated.

The Commission can determine whether a particular service satisfies the criteria and therefore is, or is not, an 'airport service'.

The second of these criteria is similar to one of the matters that the NCC and Minister must consider in assessing declaration requests under Part IIIA, namely "that it would be uneconomical for anyone to develop another facility to provide a service". In practice the section 192 test may be narrower than the Part IIIA test by referring to 'duplicate' rather than 'develop another facility'.

In October 1998 the Commission released a draft guide to section 192[53] to provide guidance on which airport services are likely to be declared. In relation to criterion (i) the draft guide stated that:

> In assessing specific airport services against criteria (i), the ACCC has distinguished between services that are necessary for purposes of operation and/or maintenance of civil aviation services and services that are not necessary for civil aviation services. On this basis, services such as those provided by retail outlets do not meet the requirements of criterion (i). Although such services are convenient for airport users, they are not necessary for operating and/or maintaining civil aviation services.

In relation to the second criterion, the Commission's starting point was to consider whether the airport as a whole could be economically duplicated. Two factors were considered relevant. One was economies of scale in provision of airport services. The other was the significance of entry and exit costs. The Commission's analysis of these two factors indicates that it is unlikely that large airports could be economically duplicated.

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52 Section 192 provides for the period to be extended to 24 months for some airports.

53 Australian Competition and Consumer Commission (1998), *Section 192 of the Airports Act – Declaration of Airport Services, Draft Guide.*

This raises a number of further issues about whether individual services provided at such airports could be duplicated, in particular:

1. Could the service be provided at an off-airport location? For example, the NCC concluded that it would be economic to locate cargo terminal facilities off-airport[54].

2. Could the service be provided at another airport? For example, heavy maintenance services are only provided at a limited number of airports indicating that they do not need to be provided at all airports.

Taking these matters into consideration the draft guide listed the services considered likely to be declared under section 192 of the Airports Act. They are:

- airside facilities (runways, taxiways, aprons, etc.);
- certain passenger processing areas (check-in, holding lounges, immigration and customs service, etc.);
- land for providing refuelling services;
- sites for storing ground service and freight handling equipment;
- sites for light/emergency maintenance; and
- landside vehicle facilities.

In addition, the draft guide stated that whether domestic passenger processing areas (terminals), certain refuelling facilities such as pipelines and ground service and freight handling equipment facilities satisfy the criteria of airport services in subsection 192(5), should be addressed on a case by case basis.

To date the Commission has received one request for a determination on whether or not a service is declared under section 192, from Delta Car Rentals. The Commission determined the service of "provision of landside roads and associated vehicle facilities for dropping off and picking up passengers" at Melbourne Airport is declared[55]. Neither Delta Car Rentals nor Melbourne Airport have sought Commission arbitration of the terms and conditions of access to the service.

Undertakings

Melbourne and Perth Airports lodged access undertaking in 1997. Both undertakings covered a range of services, some covered by the price cap, some outside the cap. Both committed to providing access at prices consistent with the price cap for capped services, and for non-capped services at prices determined by the airport operator or

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[54] National Competition Council (1996), *Australian Cargo Terminal Operators Pty Ltd Application for Determination of Airport Services – Issues Paper,* pp. 34 – 35.

[55] Australian Competition and Consumer Commission (1999), *Delta Car Rentals Request for Determination – Statement of Reasons.*

negotiated between the parties. The undertakings established mechanisms for dispute resolution in the event of disputes over terms and conditions of access.

The undertakings were not accepted. The main reasons for this were that:

- The Commission did not consider that the undertakings provided sufficient clarity for them to be enforceable.
- The Commission considered that the undertakings would not provide sufficient financial information to access seekers to allow for meaningful negotiation.
- In relation to Melbourne Airport's undertaking the Commission was concerned that the pricing proposals for services outside the price cap would not be effective in constraining prices.
- In relation to Perth Airport's undertaking the Commission was concerned at the scope for delays in the dispute resolution process and the potential that the arbitrator would not have sufficient skills.

In reaching its conclusions the Commission sought and received submissions from interested parties. Details about the undertakings and the reasons for the Commission's decisions are set out in draft determinations released by the Commission in May 1998[56].

Sydney Airport

Sydney (Kingsford Smith) Airport is subject to a number of the economic regulatory measures that apply to the privatised airports. The main ones are prices surveillance and Part IIIA.

While Sydney Airport is not subject to a price cap it is subject to surveillance under the Prices Surveillance Act. The services subject to prices surveillance are the same as the services subject to the price cap at privatised airports. Sydney Airport must notify the Commission of any price increases in the services subject to surveillance. In assessing pricing proposals the Commission must give special consideration to matters set out in a Ministerial Direction[57] and have regard to criteria set out in section 17 of the Prices Surveillance Act. These criteria focus on market power and the need to maintain investment and employment.

The declaration provisions in section 192 do not apply to Sydney Airport or the other airports that are still government owned. However, the Part IIIA access regime does apply. In November 1996 Australian Cargo Terminal Operators applied to the NCC for declaration of certain freight and ramp handling services at Sydney and Melbourne

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56 Australian Competition and Consumer Commission (1998), *Draft Determination – Melbourne Airport Access Undertaking* and Australian Competition and Consumer Commission 1998, *Draft Determination – Perth Airport Access Undertaking*

57 The Minister can direct the Commission to give special consideration to specified matters under section 20 of the *Prices Surveillance Act 1983* (Cwlth). Direction 18 requires the Commission to give special consideration to new investment proposals (including the cost of the proposals and user support for the proposals) and quality of service information.

Airports. The Commonwealth Minister declared a number of services on the NCC's recommendation. One of the service providers at the time, the Federal Airports Corporation, appealed the Minister's decision to the Australian Competition Tribunal. The Tribunal upheld the Minister's decision.

Interaction with Prices Surveillance Act

The airports access regime overlaps with the price cap that applies at 'core regulated' privatised airports.

The price cap operates under the declaration provisions of the Prices Surveillance Act. It applies to 'aeronautical services' which are defined to cover "aircraft movement facilities and activities" and "passenger processing facilities and activities".

The coverage of services declared under section 192 is somewhat broader than the price cap. For example, check in facilities and some refuelling and maintenance facilities are likely to be covered by section 192 but are not covered by the price cap. However, most of the services declared under section 192 are also covered by the price cap.

Similarly Part IIIA may overlap with the prices surveillance measures at Sydney Airport.

The question of how section 192 and Part IIIA might interact with the price cap was a relevant consideration for the Commission in its assessment of the airport access undertakings lodged by Melbourne and Perth Airports. In both cases the undertakings proposed to set prices for price capped services at a level consistent with the price cap. In its draft decisions on the undertakings[58] the Commission did not object to this approach.

3.5 Railway track

Most railway track services are provided by state government businesses. Up to now, operators wishing to provide services on the interstate network[59] have had to negotiate access with multiple access providers which has added to the time and cost of operating rail services.

In 1997 the Commonwealth and state governments signed an Inter Governmental Agreement designed to achieve a coordinated approach to rail reform. The main element of the agreement was to establish as single national track authority, the Australian Rail Track Corporation (ARTC), with the objective of promoting use of Australia's national rail network by providing a single point of access for interstate rail users.

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58 Australian Competition and Consumer Commission (1998), *Draft Determination – Melbourne Airport Access Undertaking* and Australian Competition and Consumer Commission 1998, *Draft Determination – Perth Airport Access Undertaking.*

59 The interstate network currently consists of standard gauge tracks linking all capital cities, with a link from Sydney to Adelaide via Broken Hill.

ARTC owns the interstate railway line in South Australia (including the track to Kalgoorlie in Western Australia and Alice Springs in the Northern Territory). It also has lease agreements with the Victorian Government which gives it control over interstate track in that state. For the other parts of the network in New South Wales, Queensland and Western Australia, ARTC has been negotiating wholesale access agreements with the respective states.

The original position was that the wholesale access agreements would enable ARTC to manage the entire interstate network and establish a single access regime for it. ARTC's objective pursuant to the Inter Governmental Agreement was to lodge an undertaking setting out the access arrangements with the Commission.

In practice there have been delays in completing negotiations on the wholesale access agreements. It now also appears that there are doubts as to whether ARTC can lodge an undertaking with the ACCC. The reason for this is that the wholesale access agreements would be unlikely to give ARTC a significant degree of control over the operation or working of the facilities meaning that ARTC would not be deemed to be a provider under section 44G of the Trade Practices Act. At best, it would appear that ARTC could submit an undertaking as a joint venture partner with the three track owners from Western Australia, New South Wales and Queensland.

In the meantime the NCC has recommended declaration of a number of railway track services. The relevant state ministers have not acted on the recommendations. Details are provided in section 2.2.

At the same time some states are establishing their own access regimes. An access regime established by the New South Wales Government has been certified as effective by the NCC. In Western Australia, the state government has submitted a regime covering access to intrastate rail services to the NCC for certification. The NCC has issued draft recommendations on the Western Australian regime recommending certification pending resolution of some issues. In Queensland, Queensland Rail has submitted an undertaking covering access to intrastate tracks to the Queensland Competition Authority for assessment under the Queensland Competition Act[60].

Each of these regimes has been developed independently and each adopts a different approach. Establishment of these regimes does not address one of the main objectives of reform, namely promoting use of Australia's national rail network by providing a single point of access for interstate rail users.

Given concerns about the lack of cooperation from some states the Commonwealth Government has called for new initiatives to further the reform process. It has stated that:

1. The government remains committed to the development of an effective national access regime. ARTC is expected to submit an access undertaking to the ACCC as soon as possible after finalising the necessary arrangements with the relevant states.

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60 The interstate track in QLD consists of a standard gauge link from Brisbane to the NSW border. QLD's intrastate network is narrow gauge.

2. If ARTC is not capable of establishing effective access arrangements by mid 2001, the review planned for 2002 and required under the Inter Governmental Agreement will develop a new institutional framework. This may include a national regulatory regime based on Commonwealth legislation if necessary.

3.6 Postal services

Under section 51(v) of the Constitution the Commonwealth Parliament has power to make laws with respect to postal, telegraphic, telephonic and other like services. The Commonwealth has used this power to provide a legislated monopoly over certain 'reserved services' to Australia Post and its predecessors. Generally speaking the principal services reserved to Australia Post are: the collection and delivery of all letters weighing no more than 250 grams, letters carried for a fee of less than $1.80 and all inward bound international letters.

Australia Post as a GBE already provides access to its network pursuant to the terms of the *Australian Postal Corporation Act 1989.* Since 1975 it has offered discounted access to bulk mail customers/mail houses who pre-sort mail and in 1995 it introduced limited discounts to customers who interconnect (ie deliver) bulk mail to designated mail centres. The Commission has a dispute resolution role under these interconnect arrangements (section 32A of the Postal Co-operation Act) but this role has never been performed.

In response to the NCC's review of the *Australian Postal Corporation Act 1998*[61] the Government has introduced the *Postal Services Legislation Amendment Bill 2000.* In addition to restructuring Australia Post, it proposes to insert a new Part XID into the Trade Practices Act dealing specifically with access to postal services. The Government identified the need for an access regime because of the continuing legislative monopoly, and Australia Post's significant market power in the postal services market and a number of related markets. Application of Part IIIA was not considered the preferred option because of advice from the NCC that the service might not be declared. The Explanatory Memorandum to the Bill explains that the Government seeks to generate further competition in the postal services market, and to have this competition flow through to the range of services offered to consumers, and the pricing of those services.

The proposed access regime combines a number of aspects of both Part IIIA and Part XIC of the Trade Practices Act but includes a number of differences:

- the Commission would have the power to declare a postal service for the purposes of access;
- the declaration criteria would be closer to those used in Part XIC (in that they would use the concept of long term interests of consumers of postal services). It is noted that the NCC concluded that postal services would be unlikely to intrinsically meet the tests for declaration required under Part IIIA;

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[61] National Competition Council 1998, *Review of the Australian Postal Corporation Act.*

- the legislation would require the Minister to determine that each bulk service and each service related to a post-office box is declared. This is similar to provisions of the *Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997* which provided for the Commission to deem certain telecommunications services to be declared under Part XIC without undertaking a full declaration inquiry as required by Part XIC;

- undertakings would have precedence over declaration/arbitration. An undertaking could be accepted before or after declaration. If an undertaking is accepted any declaration relating to that service would lapse;

- if parties are unable to agree on the terms and conditions of access to a declared service the Commission would have power to arbitrate; and

- an application can be made to the Australian Competition Tribunal to review an arbitration determination.

The regime is not restricted to access to Australia Post's network.

PART B

IMPROVING REGULATION OF ACCESS TO ESSENTIAL FACILITIES

The national access regime has been in place for five years now. This part of the submission reviews the experience to date, and the lessons learned. First it considers whether there is a continued need for access regulation. Then it considers the various elements of the national access regime with suggestions for changes to improve their effectiveness.

4. THE CONTINUING NEED FOR ACCESS REGULATION

4.1 Introduction

The access provisions in the Competition Principles Agreement and Part IIIA have operated since 1995. This part of the submission considers the merits of access regulation. Section 4.2 considers the economic theory behind such regulation.

The developments over the past five years are beginning to provide the information needed to make an assessment about the impact on the Australian economy of the national access regime and accompanying competition reforms. Section 4.3 provides an overview of results to date.

The need for economic regulation has been widely recognised overseas. In the U.S. utilities have been regulated for over 100 years. More recently the European Union has introduced measures covering access to major infrastructure facilities in a number of sectors. These are now being implemented by the member states. In New Zealand the Government is moving to re-regulate. Section 4.4 provides an overview of the approaches being adopted. Further details are in attachments B and C.

One of the most common criticisms of regulation is its impact on investment. Section 4.5 considers the issue in light of recent experience.

4.2 Why regulate access to essential facilities?

The national access regime was introduced along with a number of other measures designed to promote competition in Australian markets and establish a focused and nationally consistent approach to economic regulation. In introducing the measures governments recognised that while tariff reductions had opened the traded goods sector to competition the provision of services by public utilities and a number of other sectors of the economy remained sheltered from international and domestic competition. Similarly there was a growing understanding of the needs of exporting and import competing businesses. If Australia was to compete in the international economy it needed an efficient non traded sector to reduce input costs to business.

The measures introduced by the Competition Principles Agreement and supporting legislation encouraged structural reform of utilities. The period since then has seen significant structural reform across a range of industries accompanied by considerable privatisation activity.

In the electricity industry, for example, distribution, transmission and generation have been separated in most states. The reforms have promoted competition. In a number of states electricity generation companies compete directly. Following establishment of the national electricity market inter-state competition is also emerging. Similarly, structural separation in the gas industry will result in inter-basin competition between gas producers.

These reforms largely followed recommendations in the Hilmer Report. The essential argument of the report was that increased competition is the driver of increased efficiency. Reforms should therefore be pro-competitive. However, where reform is unable to increase the level of competition in the economy other measures might be needed to cap the potential market power of service providers. It is under these circumstances that access regulation might be used.

The economic theory underpinning the economic regulation and the access regime is well documented and widely accepted. It shows that under a range of circumstances effective competition will not be sustainable.

Economies of scale and scope

Economies of scale arise when unit production costs fall as the scale of a firm's output increases. Economies of scope arise when the cost of a service declines as the number of services produced by the firm increases. These economies can be a barrier to entry in as much as that new entrant may face higher production costs than the incumbent. In the extreme case it is more efficient to have all of the output in a market produced by a single firm than multiple firms. This situation is described as a natural monopoly technology[62].

In practice significant market power issues may also arise where the economies of scale and scope create barriers to entry and limit the number of firms that can viably operate in a market. This is recognised in the access regime where the declaration test is not limited to the natural monopoly scenario. Instead the test is "that it would be uneconomical for anyone to *develop another facility* to provide the service" (emphasis added).

The national access regime largely followed recommendations in the Hilmer Report. While the Report's preference was for full separation of the "essential facilities" parts of businesses from potentially competitive parts, it recognised that this might not always be the case and that additional measures would be required in those circumstances anyway. Even where "essential facilities" are separated from the potentially competitive elements, there is still an access pricing issue:

> Where the owner of the "essential facility" is not competing in upstream or downstream markets, the owner of the facility will usually have little incentive to deny access, for maximising competition in vertically related markets maximises its own profits. Like other monopolists,

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62 See for example King, S. 2000, *Access – what where and how?*, Submission to the Productivity Commission review of the national access regime, p. 6. King states that "A natural monopoly technology exists if, at all relevant levels of output, it is more efficient (in terms of lower production costs) to have the output supplied by a single firm than by more than one producer. In such circumstances, it is economically undesirable for there to be competitive supply in the sense that *given a level of output*, the costs of having two or more firms produce that output is higher than if only a single firm produced that output. The existence of a natural monopoly technology is an empirical question, although such technologies are most likely to arise where production involves fixed costs that are large when compared with marginal costs."

however, the owner of the facility is able to use its monopoly position to charge higher prices and derive monopoly profits at the expense of consumers and economic efficiency.[63]

Lumpy and sunk investment

Lumpy and sunk investments may create barriers to entry and limit the scope for competitive conditions in a market. An investment is 'sunk' when its cannot be readily be converted to another use. This means that a firm will incur substantial costs in exiting an industry which in turn increases the risks of entry. When an investment is also lumpy[64] entry may give rise to substantial excess capacity relative to current demand. The combination can deter entry and be a source of market power[65].

"Essential" or "bottleneck" facilities

Where a service is a necessary input into the production of another service, and an alternative source of supply is not available then the service is described as a "bottleneck" or "essential" facility. As explained in the Hilmer Report:

> ....Where the owner of the "essential facility" is vertically-integrated with potentially competitive activities in upstream or downstream markets – as is commonly the case with traditional public monopolies such as telecommunications, electricity and rail – the potential to charge monopoly prices may be combined with an incentive to inhibit competitors' access to the facility. For example, a business that owned an electricity transmission grid and was also participating in the electricity generation market could restrict access to the grid to prevent or limit competition in the generation market. Even the prospect of such behaviour may be sufficient to deter entry to, or limit vigorous competition in, markets that are dependent on access to an essential facility.[66]

The existence of such facilities means that it may not always be desirable to have competition. However, the absence of competition may result in high prices and/or integrated businesses inhibiting access to "essential facilities".

Network externalities

Network externalities arise when the value of a service to a customer is positively related to the number of users of the service. As an example, a telephone service is more valuable to a user if more people can be called using the service. Network externalities can be relevant to a number of infrastructure services, for example, telecommunications, post[67] and even rail services[68].

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63 Hilmer, pp. 240 – 241.

64 Investments are lumpy when capacity can only economically be added in large increments.

65 See for example, Baumol, W., Panzar, J. and Willig, R. (1982), *Contestable Markets and The Theory of Industry Structure*, Harcourt Brace Javanovich, pp. 290-292.

66 Independent Committee of Inquiry into a National Competition Policy (1993), *National Competition Policy* (F. G. Hilmer, Chairman), AGPS, Canberra, p. 241.

67 As with the telephone service example, a postal service has more value to a customer the more people that can be contacted using the service.

68 An increase in passenger transport usage may result in increase service frequency.

Network externalities give rise to economies of scale on the demand side, with increased willingness to pay for the service as the number of users increases. They can act as a deterrent to entry in a similar way to economies of scale and scope[69].

Failure to address such market power issues can have significant implications. Higher prices can affect economic growth by affecting business input costs and the ability of businesses to compete in Australia and overseas. Ultimately artificially inflated prices will result in allocative inefficiency. An important condition for allocative efficiency is that the prices for services reflect the opportunity cost of resources used in their production. If input costs are artificially inflated because of a misuse of market power then this condition will not be satisfied.

The national access regime combined with the other competition reforms provides a means of addressing the loss of economic efficiency that can arise from such outcomes.

At the time the national access regime was introduced it was recognised that existing legislative measures did not adequately address the essential facilities or access pricing problems. The limitations of section 46 of the Trade Practices Act in addressing these issues are discussed in section 1. The limitations of prices surveillance are discussed in section 7 of this submission and in the Commission's submission to the Productivity Commission's review of the Prices Surveillance Act. The national access regime was an integral part of the competition reforms designed to address these limitations.

The economic rationale for the reforms remains unchanged. Similarly since the reforms were introduced technology and demand conditions have not changed sufficiently to alter the monopoly characteristics in the sectors most affected by the national access regime, namely gas and electricity transmission and rail track and airport services. This suggests that the case for regulation of access to essential facilities is fundamentally unchanged.

The experience since then suggests that the reforms are having a significant positive impact, lending support to the approach adopted.

4.3 Benefits of reform – the Australian experience

The Competition Principles Agreement and Part IIIA have been in place for over five years. The developments over the period are beginning to provide the information needed to make an assessment about their impact.

In general, the results from the implementation of the reforms have been positive. Benefits can be measured by falling access prices, however they go beyond this measure. Greater choice and quality of service, while more difficult to quantify, are

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[69] For a summary of network externalities and entry deterrence see Gilbert, R.J. (1989), 'Mobility Barriers and the value of incumbency', in Schmalensee, R. and Willig, R. eds. *Handbook of Industrial Organsation*, North Holland, pp.498-499.

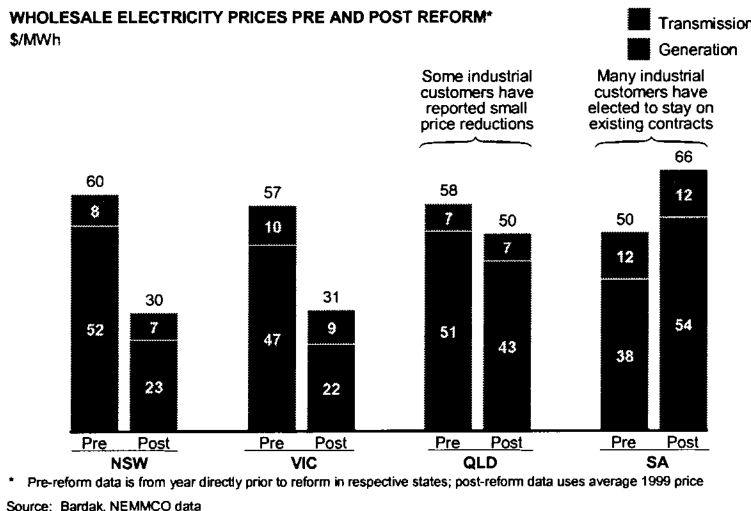
additional benefits driven by the reform process. Further, what can now be observed is transparent and accountable regulation by independent regulators.

This section considers some of the reform outcomes in the electricity, gas and aviation sectors and implications for investment. The experience in the Telecommunications sector is addressed separately in the Commission's submission to the Productivity Commission's review of telecommunications specific competition regulation[70].

Electricity

It is clear that electricity prices have declined dramatically since electricity reform was started. As can be seen in Chart 1, generally the states that have implemented reform have experienced large price reductions. Both NSW and Victoria have experienced price reductions of around 50% at the wholesale level, while Queensland, despite achieving smaller gains, has benefited. As yet South Australia has not experienced a reduction in price as a result of their reforms. In more recent times there has been some upward movement in wholesale electricity prices, reflecting the gradual take up of excess capacity and in some instances, more commercially orientated bidding strategies by generators.

Chart 1



* Pre-reform data is from year directly prior to reform in respective states; post-reform data uses average 1999 price

Source: Bardak, NEMMCO data

As can be seen in Chart 2 Australia has improved its electricity prices relative to the rest of the world. Its average electricity price has decreased in absolute terms, and this has happened despite an increase in average electricity prices worldwide. Australia's electricity prices remain low compared to other industrialised nations, but some other nations are experiencing faster decline in electricity prices than have been seen in Australia.

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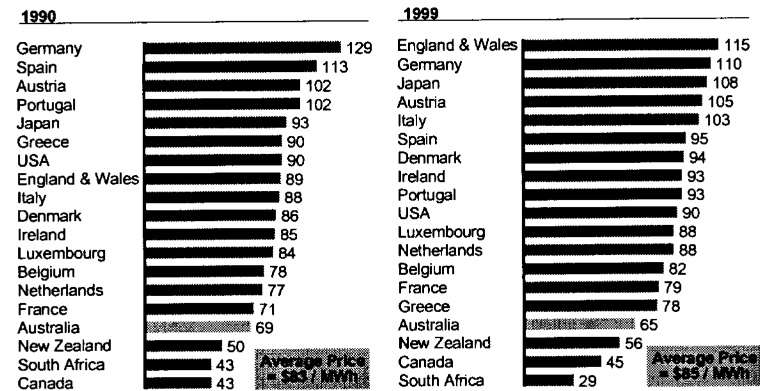
70 Australian Competition and Consumer Commission (2000), *Submission to the Productivity Commission Review of Telecommunications Specific Competition Regulation.*

Chart 2



Gas

The reform process in gas has not progressed as far as in the electricity sector. As can be seen in Chart 3 gas prices have increased or remained about the same in the period from 1994 to 1999, with the exception of Western Australia. It has been suggested that the reason for the fall in price in Western Australia is because WA has a number of gas fields owned by different Joint Ventures competing to supply the market. The WA government's disaggregation of the single dominant supply contract with the North West Shelf Joint Venture was also significant. Other jurisdictions have not had the benefit of similar upstream competition.

However, Chart 4 clearly shows that Australian gas prices remain low internationally, and are still well below average prices. It is important to note that internationally the price of gas is declining (and in some countries, declining rapidly).

Chart 3

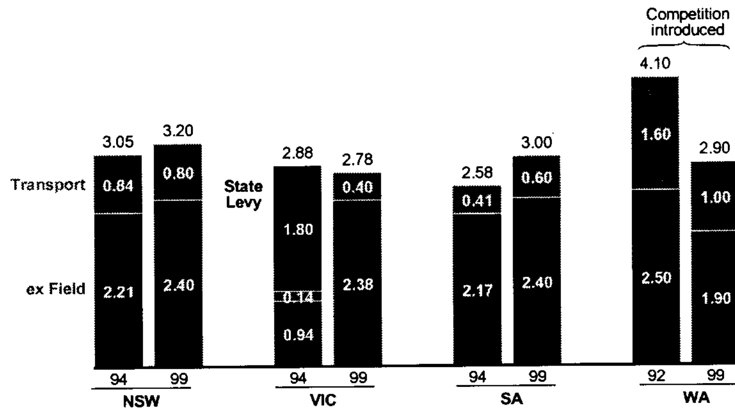
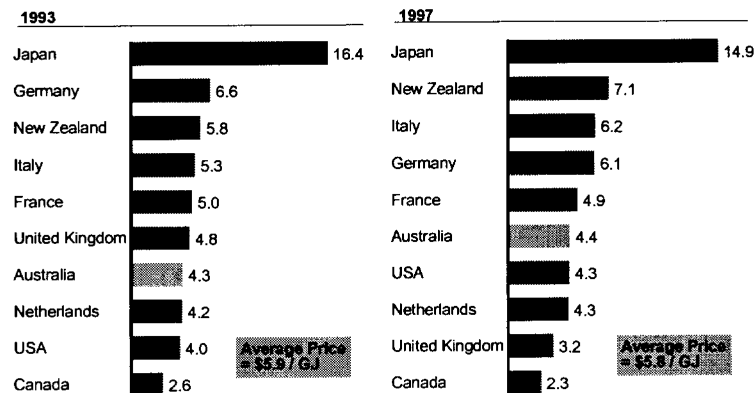


Chart 4



Airports

The CPI – X price cap imposed on regulated airports is providing significant benefits for users. The price cap is delivering reductions in landing charges in real terms at all of the regulated leased airports. The reductions will be as high as 22 per cent over the 5 years of the price cap. At the same time quality of service monitoring undertaken by

the Commission indicates that the new private airport operators are achieving high scores for their service standards[71].

The regulatory framework also provides incentives for new investment. To date the Commission has approved over $200 million in new investment at the leased airport as a price cap "pass through". The pricing for services provided by such new investment are in addition to the price cap. The new investments approved include new common user passenger facilities to service Impulse and Virgin airlines at Sydney and Melbourne Airports and a new common user facility at Adelaide airport to service all domestic and international passengers.

4.4 Economic regulation overseas

The benefits of access regulation have been widely recognised overseas. Most OECD countries have implemented or are implementing economic regulatory arrangements covering the type of facilities captured by the Australian national access regime.

The one example of a more 'light handed' approach to regulation is in New Zealand. However, the New Zealand Government is now moving to re-regulate, with new regulatory arrangements in the electricity and telecommunications sectors.

In October 2000 the NZ Government announced a package of reforms to regulation of the electricity market and industry in response to the Caygill Review[72]. The reforms involve the establishment of a new independent Electricity Governance Board with responsibility for developing rules for the industry including the areas of transmission and distribution access and pricing. The Government has developed transmission cost recovery principles. The transmission service provider, Transpower, is to develop a pricing methodology consistent with the Government's pricing principles. In turn these will be assessed by the Electricity Governance Board. Should Transpower and the Electricity Governance Board not agree on a pricing methodology the Government has stated that it will empower the Commerce Commission to determine prices. Further details are in attachment A.

In relation to telecommunications the New Zealand Government commissioned an inquiry to examine regulatory arrangements in the sector[73]. The inquiry concluded that "the [existing regulatory regime of relying on the Courts, arbitration, or industry self-regulation to resolve access disputes (e.g. terms and conditions of interconnection, number allocation and portability)] is not best suited to achieving the Government's objective [that the regulatory environment delivers cost-effective, timely and innovative

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71 See Australian Competition and Consumer Commission's Regulatory Reports on Brisbane, Melbourne and Perth airports for 1997-98 and 1998-99.

72 Inquiry into the Electricity Industry, Final Report to the Minister of Energy, June 2000. The report is available on the web site www.electricityinquiry.govt.nz.

73 Final Report of the Ministerial Inquiry into Telecommunications, October 2000. The report is available on the web site www.teleinquiry.govt.nz.

telecommunications services]." The inquiry considered that "light-handed industry specific regulation ... is required."[74]

In the U.S. the essential facilities doctrine has developed from the application of anti-trust law. The Sherman Act prohibits restraint of trade and the attempt by parties to monopolise a market. Over time a body of case law has developed into the "essential facilities" doctrine. In broad terms the doctrine requires service providers to provide access to facilities under the following circumstances:

- the facility is essential;
- the essential facility is controlled by a monopolist;
- competitor's are not able practically or reasonably to duplicate the essential facility;
- use of the essential facility by a competitor has been denied; and
- it is technically and otherwise feasibility to provide access to the facility.

The test of whether a facility is essential is that denial of access causes 'more than inconvenience or even economic loss; ... an alternative to the facility is not feasible'[75]. The essential facilities doctrine has covered electricity transmission, railroad, telecommunications and natural gas facilities.

In a similar way the general principles of European competition law have been developed and applied to impose certain obligations on the owners and operators of

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[74] In particular, the Inquiry considered that:

- the existing regulatory regime:
  - has resulted, and is likely to continue to result, in significant delays and associated costs
  - is not able to provide consistent and clearly articulated guidelines in respect of access issues;
- there is considerable scope for Telecom and, in some cases, other network operators, to:
  - refrain from passing cost reductions on to consumers
  - charge inefficient non-cost-based access prices
  - inhibit or delay competition, without necessarily breaching the Commerce Act;
- in the near to medium term, a range of new issues are likely to emerge that have the potential to hamper effective competition in electronic communications markets (e.g. the ability of a new entrant's customers to roam onto other mobile networks and access to certain types of high-value content for delivery through electronic communications devices); and
- while industry self-regulation has the potential to resolve a number of competition and user issues, it is unlikely to do so effectively in some cases, particularly in the absence of an effective regulatory backstop.

The Inquiry's view is that it is vital that efficient competition and efficient investment in the electronic communications sector are encouraged, barriers to entry are minimised, and any access disputes are resolved quickly and efficiently. These outcomes are essential so that New Zealand does not get left behind in the race to capitalise on the opportunities that electronic communications and the information economy have to offer

[75] See Australian Competition and Consumer Commission's Regulatory Reports on Brisbane, Melbourne and Perth airports for 1997-98 and 1998-99.

infrastructure facilities to provide access to competitors. European competition law has been interpreted as prohibiting the owner of significant facilities from using its property rights with the purpose of suppressing competition and denying access to its facility, at least where capacity is available and a reasonable price is being offered. Liability under European competition law is similar in a number of respects to the U.S. essential facilities doctrine.

Industry specific regulatory provisions in the U.S. apply at the state and federal levels. The federal government, for example, regulates telecommunications services and electricity and natural gas transmission. In Europe access regimes have been developed in most network sectors aimed at market restructuring and liberalisation. Specific regimes cover telecommunications, gas, electricity and post.

Details on regulatory arrangements overseas are set out in attachments A and B. Attachment A provides an overview of developments in the U.S. and Europe, covering both general competition law and industry specific arrangements. The focus of the discussion is on institutional and legal arrangements.

Attachment B presents the findings of a report by NERA (National Economic Research Associates) on how the regulatory arrangements outlined in attachment A work in practice, including details on the approaches adopted to setting terms and conditions of access.

4.5 New investment

Substantial investment projects in regulated electricity, gas and transport sectors suggest that competition reform and regulation are providing a strong base for new investment.

Recently there has been some criticism from industry about the impact of regulation, particularly from the gas and electricity transmission sectors. One of the main concerns appears to be that the rates of returns established by regulatory decisions are too low to encourage new investment in energy infrastructure. However, it is the Commission's view that regulatory decisions provide gas and electricity transmission businesses with the opportunity to earn returns that are comparable to returns achieved elsewhere on the Australian share market and by regulated gas and electricity transmission businesses overseas.

The Commission has made a number of decisions on regulated energy businesses, starting with the Victorian gas transmission system in 1998 through to the recently released final approval of the Central West Pipeline access arrangement. The returns on equity provided in these decisions range from 12.7% to 15.4%.

To put these figures into perspective, the average return on equity from investing in the Australian share market over the past ten years was 11.3%[76], and the average return on

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[76] ASX Fact book 1999.

Australian superannuation funds over the last three years was 10.4%[77]. The returns provided to Australian transmission owners are also higher than those available to comparable regulated energy businesses overseas. Recent regulatory decisions in the United States, the United Kingdom and Canada have provided post-tax nominal returns to equity of between 9% and 12%[78].

In light of these figures, it would appear that investment in gas and electricity transmission in Australia is yielding very favourable returns. Together with the substantial new investments being undertaken or planned for Australia, including more than $8 billion[79] worth of new gas pipeline investments, the returns achieved lend support to the Commission's view that current regulated returns provide a solid base for future investment in electricity and gas transmission.

Further to this, the regulatory regimes do not cap returns on equity. Instead they are incentive based. Prices are based on expected usage and costs. If a business is able to outperform its forecasts or reduce operating and maintenance costs, it can exceed the return anticipated by the regulator.

The regulatory regimes can also address the specific risks inherent in some greenfield developments. The Commission's decision on the Central West Pipeline access arrangement provides a good example of the regulatory framework's ability to accommodate and encourage such investment. In that decision the Commission determined that the appropriate return on equity for the pipeline was 15.4 per cent. The decision also include an extended regulatory period of ten years (where any upside is retained by the service provider), and provision for the owners to capitalise early revenue losses so that they can be recovered once demand grows. Further, if the demand outcome is worse than originally forecast, the access arrangement allows the service provider to seek a review of the tariffs in an attempt to restore the forecast regulatory return.

It should also be noted that the National Gas Code includes special provisions for tendering new pipeline systems. This aspect of the Code is well suited to new greenfields projects where demand and returns are uncertain and difficult to assess in the standard framework applied to established pipelines. In such circumstances the returns available to the developer are determined by the tender process and are not subject to regulatory review except as provided for within the known terms of the tender.

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77 William M Mercer, 2000, 'Survey – Three year average return on pooled superannuation funds', reported in *Business Review Weekly* 16 June 2000, p. 88.

78 While these figures provide a good benchmark for comparison, the differences in regulatory frameworks under which they were determined should also be considered.

79 Beasley, A. 2000, Investing in Pipelines: Economic and Environmental Opportunities for Victoria, paper presented at the 3rd Annual Victorian Gas Industry Summit, 17 February 2000.

5. A GENERIC REGIME OR INDUSTRY SPECIFIC PROVISIONS?

5.1 Introduction

At present there exist three routes to access under the Trade Practices Act. First, generic regimes, under which at least access in the rail sector is managed. Secondly, industry specific regimes that come within the framework of Part IIIA such as in the gas, electricity sectors. Thirdly, stand-alone statutory schemes such as apply in the telecommunication industry and as is proposed for the postal services industry. Airports regulation is a combination of the third and first of these[80].

The Commission supports the retention of both industry specific and generic access regimes for the reasons set out in sections 5.2 and 5.3 respectively. In short, industry specific regimes can be developed to suit the particular needs of an industry. However, the Commission believes generic access provisions should also be retained. The Commission considers that the generic provisions of Part IIIA have acted as a catalyst for the development of industry specific regimes. The generic access provisions also have the advantage that they operate as a benchmark for industry specific regimes and their application is flexible.

5.2 The case for industry based regimes

The Commission considers that it is appropriate that industries are able to develop their own access regime that is tailored to the particular needs of the industry. For instance, a particular technological requirement in the telecommunications industry is the need for any-to any connectivity; this consideration is specifically catered for in Part XIC but is not a consideration directly relevant to Part IIIA. In addition, there may be specific market development or other factors that need to be taken into account in an access regime that make it desirable to develop industry specific regimes.

At present the post and telecommunications regimes are stand alone statutory regimes while the electricity and gas regimes have been developed within the Part IIIA framework. The Commission considers this flexibility to be desirable.

Even though the gas access regime has been developed to be consistent with Part IIIA it addresses the specific needs of the industry. It establishes a more multi-lateral process than would operate under the generic provisions of Part IIIA. It also requires access arrangements to meet criteria that are more specific to the needs of the industry than the criteria that would apply either to an undertaking or an arbitration determination under the generic provisions of Part IIIA.

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80 Section 192 of the *Airports Act 1996* establishes a stand alone declaration process, though once declared the services are subject to the Part IIIA provisions in the normal way. See section 3.4 for details.

As with gas, the access regime for the electricity industry has been developed by industry to be consistent with Part IIIA but has been tailored to meet the specific requirements of the electricity industry. The revenue cap mechanism established by the access regime includes more specific pricing constraints than would apply under the criteria that would apply in relation to either to an undertaking or an arbitration determination under the generic provisions of Part IIIA.

The electricity and gas regimes need to be viewed in the context in which they were developed. Each industry had a history of strong state government involvement; including both ownership of network facilities and operation of state owned businesses. They were also historically state based markets with little inter-state trade and areas where the Commonwealth government had limited legislative power. In these circumstances a reform agenda was agreed at the heads of government level and governments, with a direct stake in businesses, participated in the development of the access regimes.

On the other hand, telecommunications, airports and post expressly fall within the Commonwealth government's legislative power and are areas in which the Commonwealth has owned and operated network facilities and businesses.

In relation to telecommunications Part XIC of the Trade Practices Act establishes a telecommunications specific access regime. Section 2.6 of this submission compares Part XIC with the generic access provisions contained in Part IIIA.

Unlike the gas and electricity regimes, Part XIC was not developed by industry to meet the special needs arising from reform of the telecommunications industry. It was imposed by Government upon that industry[81]. However, the Government considered that total reliance on the general provisions in Parts IIIA of the *Trade Practices Act* would not achieve its objectives as:[82]

- telecommunications is a complex, horizontally and vertically integrated industry;
- the industry is developing from a monopoly structure to greater competition, with relatively small entrants compared to the incumbent;
- the Government's objective of not imposing undue administrative burdens on industry participants[83] may require effective enforcement backstops to provide a strong disincentive for the dominant incumbent to use its market power to stifle competition;

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81 At the time the access regimes were developed the gas and electricity sectors were comprised of a number of network owners. In contrast, in the telecommunications sector, Telstra's network was, and remains predominant.

82 See for example the Explanatory Memorandum to the *Trade Practices Amendment (Telecommunications) Bill 1996* p. 6.

83 *Telecommunications Act 1997* (Cwlth) s. 4.

- anti-competitive cross-subsidies by the incumbent from non-competitive markets to markets in which competition exists or is emerging is a particular threat to the establishment of a competitive environment; and
- there is considerable scope for the incumbent to engage in anti-competitive conduct because competitors in downstream markets depend on access to networks or facilities controlled by the incumbent. The access regime is intended to facilitate 'any-to-any connectivity' and the Government's commitment to promote the diversity of carriage and content services available to end-users.

5.3 The case for a generic regime

To date the flexibility offered by the co-existence of Part IIIA with stand-alone legislative access regimes has enabled access regimes suited to the particular needs of each industry to be developed at appropriate levels and by appropriate parties. Although the Commission considers that industry specific regimes may operate more appropriately for given industries than a generic regime, it considers that the existence of a regime of general application remains important for several reasons.

First, the existence of the generic regime may act as a catalyst to the development of such industry specific regimes. Where declaration under a generic regime is possible, industry may consider it preferable to develop an access regime tailored to their needs than risk declaration and bi-lateral arbitrations. The Commission believes that this was a factor in the development by industry of an effective regime in the gas industry.

Secondly, it is impossible to predict what changes in technology the future will hold or the effect these changes will have on industry. It is quite feasible that convergence will give rise to the need for access to infrastructure that is not currently possible under existing regimes. A generic access regime is adaptable and may capture new or emerging technologies more effectively than would stand alone legislation. Similarly a generic regime provides flexibility for deregulation as technological and other conditions change over time[84]. A non-legislative response is potentially faster and more flexible and better able to meet the needs of that particular industry.

Thirdly, the generic regime is a benchmark. Whether industry develops its specific access regime via the undertaking/industry code route (as per electricity) or an alternative effective access regime (as per gas) Part IIIA and the Competition Principles Agreement offer consistent criteria against which the standard and quality of the access regime must be measured. This ensures the integrity of the access provisions in the policy framework identified in the Hilmer Report by ensuring the quality and consistency of access provisions. This helps prevent distortion of investment signals. Just as the Commission supports a single economy-wide regulator in section 11.3

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[84] This is likely to be the case in telecommunications. See Australian Competition and Consumer Commission 2000, *Submission to the Productivity Commission Review of Telecommunications Specific Competition Regulation* for further discussion.

below, the Commission supports the retention of Part IIIA as a benchmark that ensures consistency as a way of avoiding inefficient investment outcomes.

Finally, the development of industry specific regimes, whether legislative or within the framework of Part IIIA, is costly and time consuming. Smaller industries may not warrant, or have the resources to develop, an industry specific regime.

6. DECLARATION

6.1 Introduction

The Commission supports the retention, within Part IIIA, of declaration criteria of generic application. The Commission does not believe that these criteria have led to the inappropriate declaration of services. The Commission would not favour access obligations applying to an administratively determined list of services.

The process of declaration has been criticised for being too slow. However, the Commission believes that because declaration decisions are complex and have significant consequences for industry participants and, more generally, competition in Australia, it is important to take the time to make good declaration decisions.

6.2 Declaration criteria

Criteria that must be satisfied before a service can be declared

The declaration criteria in section 44G, the matters of which the NCC must be satisfied before it can recommend declaration, are set out in full in section 2.2 of the paper. The relevant Minister must also be satisfied of all of the same matters before declaring a service under section 44H. Importantly, the criteria include:

(a) access (or increased access) would promote competition in another market;

(b) it would be uneconomical to develop another facility to provide the service;

(c) the facility is of national significance.

Before briefly considering how these criteria have been applied in practice, it is useful to consider how these provisions compare with the tests for application of access suggested by the Hilmer Report. It is also useful to consider how the declaration criteria compare with the rationale and theoretical criteria for access regulation and the criteria that apply in other countries to determine the scope of access regulation. The Commission has obtained a Report from National Economic Research Associates (NERA) that examines these issues. Their report is at attachment B.

The Hilmer Report suggested that the Minister should only be able to declare access if the owner agrees or the Minister is satisfied that:

(a) access to the facility is essential to permit effective competition in a downstream or upstream activity[85];

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[85] For the Committee, an essential facility was one that exhibits natural monopoly characteristics and hence could not be duplicated economically. Hilmer p. 239.

(b) such a declaration is in the public interest having regard to:

   (i) the significance of the industry to the national economy, and
   (ii) the expected impact of effective competition in that industry on national competitiveness; and

(c) the legitimate interests of the owner of the facility will be protected by the imposition of an access fees and other terms and conditions that are fair and reasonable.[86]

The core issues identified in the Hilmer Report are consistent with those enacted under Part IIIA; namely:

(a) the service is provided by a facility that has monopoly characteristics[87];

(b) access to the service will promote competition;

(c) competition will be promoted in another market; and

(d) there is an element of national significance in providing access.

Much has been written about how these criteria should be interpreted. The NCC has published (in draft) a guide to its interpretation of these criteria[88]. Various NCC statements of reasons relating to the applications for declaration have also discussed these issues. A significant number of academic articles have also commented on the criteria and how they should be interpreted. Most importantly, there are a number of decisions by the Australian Competition Tribunal which are beginning to assist in the interpretation of the various criteria. In particular the Sydney Airport[89] and Austudy[90] cases. There are also a number of cases of the Federal Court that have interpreted issues including the definition of a service[91].

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86 Hilmer, p. 261.

87 As noted in the Australian Competition and Consumer Commission 1995, *Access Regime*, AGPS, Canberra, the relevant criterion [s44G(2)(b) and s44H(4)(b)] in Part IIIA extends beyond the natural monopoly case to natural duopolies or oligopolies, that is, where there are already two (or more) facilities but it would be uneconomic to develop another one. However, the Hilmer Report, on which the policy was based , the relevant COAG communiques and the Second Reading Speech placed particular emphasis on the natural monopoly facility case.

88 Australian Competition and Consumer Commission 1996, *National Access Regime – A Draft Guide to Part IIIA of the Trade Practices Act.*

89 *Sydney International Airport* [2000] AcompT 1 (1 March 2000).

90 *Re Application for Review of the Decision by the Commonwealth Treasurer published on 14 August 1996 not to declare the 'Austudy Payroll Deduction Service' under Part IIIA of the Trade Practices Act 1974 by the Australian Union of Students* [1997] AcompT 1 (28 July 1997)

91 *Rail Access Corp v New South Wales Mineral Council Ltd* (1998) 158 ALR 323 and *Hamersley Iron Pty Ltd v National Competition Council* (1999) 164 ALR 203.

The Commission notes that the only services that have been declared are cargo handling services using ramp and cargo terminal facilities at Sydney International Airport and, on an interim basis (prior to application of s192 of the *Airports Act 1996*), airport services at Melbourne International Airport[92].

The Commission does not seek to comment upon particular aspects of the interpretation of the declaration criteria. It is in fact only relatively recently that authoritative decisions have emerged to assist in the interpretation of the criteria. However, the NERA report includes an examination of the interpretation of the declaration criteria by the NCC and the ACT at section 8.3.2.

The Commission considers that it is too early to argue that the declaration criteria should be amended to overcome perceived shortcomings. The Commission agrees with the conclusion in section 8.4 of the NERA report that "[t]o date there have been no applications of Part IIIA that have been inconsistent with the application of access regimes internationally as a result of the declaration criteria."

The Commission does however note that there has been an apparently significant divergence of views between the NCC and relevant (state) Ministers on whether the declaration criteria are satisfied. Section 6.3 provides further comments on this issue.

Definition of service

A further limit on what can be declared is the requirement that only a *service* can be declared and the section 44B definition of *service*.

Service is defined to mean:

> "a service provided by means of a facility and includes:
>
> (a) the use of an infrastructure facility such as a road or railway line;
> (b) handling or transporting things such as goods or people;
> (c) a communications service or similar service;
>
> but does not include:
>
> (d) the supply of goods; or
> (e) the use of intellectual property; or
> (f) the use of a production process;
>
> except to the extent that it is an integral but subsidiary part of the service".

A number of issues from the above definition have been considered judicially. For instance in the Hamersley Iron case[93] the Federal court considered whether a railway

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92 In addition, it is noted that rail services provided by state owned businesses in NSW and WA have been recommended for declaration by the NCC but not declared by the relevant state Minister.

93 (1999) 164 ALR 203. The Commission considers this case is limited by its facts. Kenny J considered the railway in question was part of the production process on the basis that output from a

was a production process. In the Rail Access case[94] the Federal court discussed the distinction between owning a facility and supplying a service provided by means of that facility. This distinction was also discussed in the Sydney Airport case. The Austudy case also relevantly included a brief discussion about whether computers or databases may be facilities to which access may be available.

Again, the Commission notes that the various decisions relating to declaration have not given rise to significant problems and considers that it is too early to be suggesting changes to the definition of service.

6.3 Declaration process

By providing a generic definition of *service* and by establishing generic criteria of which the NCC must be satisfied before recommending declaration of a service, Part IIIA has established an access regime of general application. As noted in 5.3 above, the Commission supports the continuation of generic declaration criteria. The Commission does not consider perceptions of delay should be remedied by the imposition of arbitrary time limits. Very often, the conduct of a public process is held up by matters outside the control of the decision maker, especially where the decision maker relies upon information from industry participants. Some in industry have suggested that access should apply to an administratively or legislatively determined list of services, rather than services which satisfy generic declaration criteria. The Commission would not support such an approach. This issue is discussed further in section 10.2 below.

It appears that delays in the declaration process are perceived to be a concern. The Commission considers that a careful decision that is justified according to the legislative criteria is preferable to a speedy but ill-considered decision. The fact that no state ministers have accepted NCC recommendations also raises an issue for consideration. These issues are discussed in further detail in section 10.3 below.

6.4 Improving the effectiveness of the provisions

As noted above, the Commission believes that declaration decisions have significant consequences and that care must be taken to have a statutory framework that facilitates good decisions. Most importantly, the Commission does not consider that the statutory framework has operated in a manner that has seen services inappropriately declared. If anything, it could be argued that the involvement of state Ministers has seen the provisions operate very conservatively. Any proposal for change should be seen against this background.

As with any significant new legislation, there have been uncertainties about the operation of Part IIIA. For instance:

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number of mines was mixed by coordinating delivery to port of that out to meet certain a contractually defined quality of product.

94 (1998) 158 ALR 323.

(a) how to define the markets in which competition is to be promoted;

(b) what measure should be used to determine whether declaration would "promote competition";

(c) what is required for a facility to be "of national significance"; and

(d) from whose perspective should one judge whether it would be uneconomic for anyone to develop another facility to provide the service in question?

It is only by making decisions and through the development of a body of precedent that these and other issues have started to be clarified. Other issues are yet to be resolved. This will always be the case.

The Commission's view is that it is too early to conclude that the declaration provisions of Part IIIA require significant amendment. In deed, the fact that services have not been inappropriately declared would indicate that such amendments are unnecessary. The Commission supports on-going monitoring of the situation, or a periodic review, to ensure that if problems do emerge appropriate responses can be implemented.

7. TERMS AND CONDITIONS OF ACCESS

7.1 Introduction

Declaration establishes a right for access seekers to negotiate terms and conditions of access in the first instance, and if the negotiations are not successful to seek arbitration of disputes by the Commission. The experience to date in application of the negotiate-arbitrate model is reviewed in section 7.2. Section 7.3 considers alternatives to the negotiate-arbitrate model and section 7.4 ways in which these alternatives could be implemented. Suggestions for improving the effectiveness of the current provisions are considered in section 7.5.

7.2 The negotiate-arbitrate model

The negotiate-arbitrate model was originally described as a 'light handed' safety net relying on negotiated outcomes in the first instance with arbitration seen as a last resort in the event that negotiations failed. The Commission's experience in implementing the provisions has primarily been in the telecommunications area. So far all of the arbitrations conducted by the Commission have been telecommunications related[95]. While these have been conducted under XIC of the Trade Practices Act the lessons learned are relevant to Part IIIA.

The telecommunications experience suggests that there are three fundamental problems with the negotiate-arbitrate model.

First, there seem to be limited incentives for access providers and access seekers to conclude effective agreements concerning the terms and conditions of access where there is a market power imbalance between the access provider and the access seeker and where information asymmetries may be expected. Anecdotal evidence suggests that a 'take it or leave it' approach is common when the access seeker has no countervailing market power. Where the access seeker has limited access to information from the service provider the access seeker may seek arbitration in an attempt to identify the parameters likely to be used by the regulator.[96] The net outcome has been a high propensity to seek arbitrated outcomes rather than engage in meaningful negotiations.

Second, the negotiate-arbitrate model requires arbitrations to be resolved bilaterally and in private. However, any particular input service is likely to be largely homogeneous and undifferentiated in both cost and quality, so that a similar price should be

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95 Over 30 disputes have been notified to the Commission under Part XIC of the *Trade Practices Act 1974* (Cwlth), and a number have been finalised. By contrast no disputes have been notified under Part IIIA

96 While the ACCC has powers which could be used to reduce information asymmetries without recourse to arbitration, those processes, too, are time-consuming and do not necessarily eliminate such incentives.

appropriate for all access seekers except where quantity discounts or other special circumstances exist. Multilateral, public processes would seem likely to provide faster, more effective and more transparent price determinations than the current arrangement.

Finally, arbitrations are time-consuming to conduct and so impose costs and delays on participants, at an inevitable cost to the efficiency of the market and the certainty with which new entrants can establish their own operations. Appeals can further delay the process.

These problems mean that the model originally intended as a 'light handed' safety net is in fact a slow and costly device which is ill-suited to the current conditions in the Australian telecommunications market and whose very existence appears to reduce the incentives for commercial negotiation.

Economic theory suggests that there may be other problems with the negotiate-arbitrate model:

- Negotiations may result in rent sharing rather than efficient pricing outcomes. King and Maddock[97] argue that access seekers and service providers have incentives to negotiate access prices that maintain monopoly profits and share the profits between them. They set out a number of conditions where such outcomes may be possible.

- The potential for *ex post* arbitrated outcomes may reduce incentives for higher risk greenfield investments. King[98] argues that in arbitrating prices the regulator may cap profits if a project is successful. In such cases, the downside risks and potential losses on a project would be unchanged, but profitability in the event of project success would be lower. For some projects this could affect *ex anti* profit expectations to a point were a project is viable without arbitration, but not viable with it.

- The costs of arbitration may be prohibitive for some access seekers. This is particularly relevant in two circumstances. The first is where there are a large number of possible users operating in diverse downstream markets, whose use of the facility is incidental. A large port with significant casual trade could be an example where price setting could significantly reduce costs by saving on the costs and delays associated with negotiation. The second is where the access seeker is a small business. For these access seekers the costs of arbitration may be prohibitive[99].

In addition, when applied to vertically separated businesses, the negotiate-arbitrate model may prove to be unnecessarily intrusive.

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97 King, S. & Maddock, R. 1996, *Unlocking the Infrastructure, The reform of public utilities in Australia*, Allen and Unwin, Sydney.

98 See King, S. 2000, Access – what where and how?, Submission to the Productivity Commission review of the national access regime, pp. 12-15.

99 This is potentially an issue at airports where some of the access seekers operate relatively small businesses. See for example Australian Competition and Consumer Commission 1999, *Delta Car Rentals Request for Determination – Statement of Reasons.*

Most of the telecommunications arbitrations deal with vertically integrated service providers. They may have incentives to deny access to protect their business interests in downstream markets. This could be done in a number of ways including through price and non-price terms and conditions of access.

By contrast many of the service providers covered, or likely to be covered by Part IIIA, do not compete in upstream or downstream markets[100]. When vertically separated in this way service providers will usually have little incentive to deny access, though this is not always the case. In some cases vertical separation does not mean separation of ownership[101], and in other cases the nature of contracts between the service provider and users may create incentives to impede access to third parties.

Where a vertically separated service provider does not have incentives to deny access it may exploit its market power by setting high prices but is unlikely to manipulate other terms and conditions to limit access. Nevertheless the negotiate-arbitrate provisions allow an access seeker to seek arbitration over non-price terms and conditions. This could result in unnecessary arbitration over detailed operational matters.

7.3 Alternatives to the negotiate-arbitrate model

The alternatives to the negotiate-arbitrate model revolve around providing greater guidance on pricing. They could supplement negotiations or replace them. This section considers three possible alternatives and their merits.

Tariff setting

Tariff setting could take the form of specifying or listing prices. The most common way of setting tariffs is to use the cost of service to determine the allowable revenue to the service provider. This allows the service provider to set prices that cover the costs of providing the service. It would include a return on capital, return of capital (depreciation) and operating , maintenance and administration costs. The approach involves determining a rate of return allowed on capital which means that the service provider's assets need to be valued to form a 'rate base' and a rate of return specified to apply to this base.

This approach is similar to the rate of return approach that has been used extensively in the United States for more than a century.

The advantage of tariff setting is that it provides clarity and certainty for all of the parties about pricing outcomes. It can also reduce the delays and costs associated with

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100 For example, electricity transmission, airport services and railway track are typically proved as vertically separated businesses. This is also the case for some gas transmission pipelines.

101 For example, even though electricity generation is vertically separated from distribution in New South Wales, the state government owns both. Similarly rail track and above line freight operations are vertically separated (into the Rail Access Corporation and Rail Freight Corporation) but both are owned by the New South Wales government.

the negotiate-arbitrate model and the possibility of negotiated rent sharing outcomes raised by King and Maddock[102].

The main disadvantage of tariff setting is the incentives for efficiency when a cost of service approach is used. Prices set on this basis may provide weak signals for the service provider to minimise production costs. They may also provide incentives for the service provider to increase the rate base (and returns) by choosing an inefficient mix of capital and labour inputs (the Averch-Johnson effect).

To a large extent the lack of incentives for efficiency can be addressed by setting tariffs on the basis of efficient rather than actual costs. For example prices could be based on the forward looking costs that an efficient firm would incur in providing the service. This approach has been adopted by the Commission in administering the Telecommunications access regime[103]. They can also be addressed through the use of price caps.

A further possible disadvantage of tariff setting is that it may be heavy handed compared to the negotiate-arbitrate model. The reason for this is that all access prices are regulated from the outset while arbitration is only triggered on an as needs basis.

Incentive regulation - price caps

Price caps set the maximum price that a service provider can charge for a specified period. They allow the service provider to retain profits achieved by increasing volume or reducing costs.

Price caps can be set on the basis of a cost of service approach or by using pre-existing prices as a starting point. In either case prices can be adjusted over time to reflect future cost changes. Typically price caps are set by applying CPI-X adjustments (or RPI-X in the United Kingdom) to a starting point, with CPI a proxy for changes to input prices, and 'X' an estimate of future productivity gains.

In Australia price caps have been applied in economic regulation of airports, gas, electricity and telecommunications. In the United Kingdom they have been used in regulating these sectors as well as water and rail.

As with the tariff setting model price caps have the advantage that they provide clarity and certainty for all of the parties about pricing outcomes.

Price caps have the added advantage that they provide incentives to the service provider to reduce production costs. Where existing prices are used as a starting point price caps may also have the advantage of simplicity.

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102 King, S. & Maddock, R. 1996, *Unlocking the Infrastructure, The reform of public utilities in Australia*, Allen and Unwin, Sydney.

103 See Australian Competition and Consumer Commission 1997, *Access Pricing Principles Telecommunicaitons – a draft guide.*

Price caps can also address the possible incentive impact of arbitration on greenfield investments raised by King[104]. They can be designed to accommodate and encourage higher risk greenfield developments. As an example the decision on the Central West Pipeline addressed incentives in a number of ways[105]. The Commission used conservative volume projections in determining the cap, allowing the service provider to retain any upside over a 10 year period. The decision also included a provision for the owners to capitalise early revenue losses so that they can be recovered once demand grows and allowed for a review of tariffs if demand outcomes are worse than originally forecast. This approach is more readily achieved by setting price caps *ex-ante* than through arbitration processes.

The possible disadvantages of a price cap are two-fold.

The first is that they do not address quality of service. This concern arises because price caps provides strong incentives for the service provider to cut costs. One way that this can be achieved is through quality of service reductions.

The second disadvantage of price caps, and for that matter any form of tariff setting, is that they do not address non-price terms and conditions of access. This should not normally be a matter for concern where a service provider is vertically separated. Where the service provider does not compete with access seekers in upstream or downstream markets it should have every incentive to provide access and no obvious incentives to discriminate in an inefficient way between access seekers.

By contrast, where the service provider also competes in upstream or downstream markets it may have incentives to prevent access through non-price terms and conditions. Currently most of the service providers regulated using the Part IIIA regulatory framework are vertically separated. Furthermore, in a number of cases legislation prevents vertical integration in future[106].

Where non-price terms and conditions are a matter of concern they can be addressed by separately specifying non-price conditions of access or through supplementary negotiation-arbitration processes.

Pricing Principles

Pricing principles could take the form of:

- Guidance on the economic principles for setting prices. An example is the Commission's guidelines on telecommunications access pricing principles[107]. The

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[104] See King, S. 2000, Access – what where and how?, Submission to the Productivity Commission review of the national access regime, pp. 12-15.

[105] See section 4.5 for more details.

[106] See for example Parts 2 and 3 of the *Airports Act 1996* (Cwlth).

[107] Australian Competition and Consumer Commission 1997, *Access Pricing Principles Telecommunications – a draft guide,*

guidelines adopt total service long-run incremental cost (TSLRIC) as the basis for setting access prices.

- Maximum and minimum prices. These could be stated explicitly or by reference to the principles that they would set on. As an example, the New South Wales rail access regime states that prices must be between the incremental cost of providing a service and the stand alone cost of providing the service[108].

Setting pricing principles has the advantage that it provides additional guidance to parties in negotiations and may improve the probability of successful outcomes. As stated in the Hilmer Report: "Once principles are in place the parties have a greater degree of certainty over their respective rights and obligations"[109].

Nevertheless the experience to date has been mixed. In relation to telecommunications the access pricing guidelines developed by the Commission provide a detailed outline of pricing principles. Even with this guidance many parties have elected to seek Commission arbitration over pricing matters. So far over 30 disputes have been notified.

Similarly a number of rail matters have gone to arbitration by the Independent Pricing and Regulatory Tribunal in New South Wales, even though the rail access regime includes pricing principles.

Both examples suggest that setting general pricing principles do not effectively address the limitations of the negotiate-arbitrate model discussed in section 7.2. The experience to date suggests that these problems are better addressed by more specific pricing guidance.

One of the options discussed at the time the national access regime was being formulated was the possibility that pricing principles could be set at the time services are declared. The Commission has reservations about this approach. Establishing pricing principles can involve complex and detailed issues both in terms of the economic principles and the regulators understanding of the industry. In order to adequately understand these issues the regulator must draw on a range of inputs, including from the service provider and access seekers. From a procedural point of view consultation with interested parties is also important, both in terms of fairness and transparency. Such consultation can only be conducted once a declaration has been made and the parties know which services are covered.

7.4 Implementation of alternatives

The current access regime goes some way to accommodating alternatives to the negotiate-arbitrate model.

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108 Independent Pricing and Regulatory Tribunal of NSW 1999, *Aspects of the NSW Rail ACCC Regime – Final Report,* Review report 99-4.

109 Ibid, p. 255.

Both the gas and electricity access arrangements include CPI-X price caps, with starting point prices and the X values determined on the basis of efficient costs. In both cases the arrangements have been introduced using Part IIIA, using effective regimes in the case of gas, and the access code and undertakings provisions in the case of electricity (see section 3 for details).

These outcomes were achieved through co-operative inter-governmental agreements. This will not always be the case. The experience with airport undertakings and rail access, for example, has been less successful. In such cases alternatives mechanisms for implementing pricing arrangements may be useful.

Modify access undertaking provisions

One such alternative is to modify the access undertakings provisions so that:

- service providers could provide an undertaking before or after declaration;
- the Commission could, in limited circumstances, require the service provider to submit an access undertaking; and
- in a similar way to that envisaged under the Gas Code, the Commission could modify or redraft the undertaking if the undertaking did not meet the requirements for an undertaking set out in Part IIIA.

This option is discussed in section 8 below.

Sector specific legislation

A second alternative to the negotiate-arbitrate model is to implement sector specific legislation. This is the case for telecommunications. Part XIC of the Trade Practices Act establishes a separate telecommunications access regime designed to meet the specific requirements of that industry. Similarly the *Airports Act 1996* establishes airport specific declaration arrangements and the *Postal Services Legislation Amendment Bill 2000* if enacted will establish an access regime for postal services.

In the United States and United Kingdom economic regulatory measures have typically been established through sector specific legislation.

An advantage of sector specific legislative provision is that it can be tailored to address the specific needs of each sector. The potential disadvantages are a loss of consistency in economic regulatory principles across sectors and a lack of flexibility to address changing technological and competitive conditions. The merits of sector specific legislation are discussed in section 5 of this submission.

Link the access regime to a modified Prices Surveillance Act

A third option for implementing pricing arrangements could be to link the national access regime to a modified Prices Surveillance Act. For example, declaration under Part IIIA could trigger prices surveillance. The merits of this approach would depend on the outcome of the Productivity Commission's review of the Prices Surveillance

Act. The Commission has two main concerns with using the current provisions of the Prices Surveillance Act for purposes of economic regulation:

1. Compliance with the Act is voluntary. While declared companies are required to notify the Commission of a price rise there is no obligation to comply with decisions made by the Commission. Recent experience suggests that reliance on the Prices Surveillance Act would result in compliance problems[110].

2. There is no mechanism for achieving price reductions. The Act only requires notifications for price increases. This could be relevant for implementation of CPI-X price caps or where an assessment of a companies prices suggests that prices should be reduced.

The Commission considers that it would only be worth considering linking the national access regime to the Prices Surveillance Act if the Act were modified to addresses current limitations. It also considers that linking the two should only be considered where service providers are vertically separated unless additional provisions are made available to address non-price terms and conditions of access.

More generally though the Commission would see the Prices Surveillance Act as a supplement to the access regime, either as a means of addressing market power issues where the access regime does not apply or as a supplementary measure to the access regime.

The access regime was originally intended to address market power in the provision of services that are essential inputs for the provision of goods or services in related markets. In some cases it may be desirable to address market power issues in the supply of services that do not fall into this category, for example in retail markets. This could be addressed by the Prices Surveillance Act. One of the circumstances where such surveillance might be useful is where further competitive reform of a legislative monopoly is undesirable or unlikely, in which case some form of prices oversight may be needed to avoid excessive pricing.

The Prices Surveillance Act could also operate in a complementary way to competition reform and the access regime under certain circumstances. Even if an access regime and vertical restructuring does provide a solution to monopoly power in the longer term, in the short to medium term price oversight could be an important adjunct to reform. As an example, structural reforms may take time to be implemented. Even then it may take time for new entrants to establish themselves as effective competitors. Prices surveillance or monitoring could apply during the transition to competition.

These issues are also discussed in the Commission's submission to the Productivity Commission's review of the Prices Surveillance Act and will be addressed more fully in a supplementary submission to that review.

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110 In 1998 Waratah Towage increased charges for services by 15 per cent in Port Jackson even though the Commission had objected to the increase.

7.5 Improving the effectiveness of the provisions

The risks associated with regulation are well documented. Regulation has the potential to distort investment and consumption decisions. Regulated prices that are too low or too high can stifle innovation or reduce firm's incentives to increase efficiency. At the same time the need for regulation is also well documented (see discussion in section 4).

The Hilmer Report aimed to address these concerns with a 'light handed' safety net relying on negotiated outcomes in the first instance with a recourse to arbitration by the Commission. In this way regulatory intervention was seen as a last resort, only available in the event that negotiations failed.

In practice the Commission's experience is that there are a number of fundamental problems with the negotiate-arbitrate model including:

- a high propensity to seek arbitration rather than negotiate outcomes;
- time consuming and costly processes; and
- the potential for the negotiate-arbitrate model to give rent sharing outcomes and deter greenfield investment.

Regulation using tariff setting can address the second and third of these problems. It also has the advantage that it provides clarity and certainty for all of the parties about pricing outcomes. One limitation of this approach is that tariff setting may not provide incentives for improved efficiency. Another is that vertically integrated service providers may have incentives to prevent access through non-price terms and conditions in which case additional regulatory measures may be necessary.

Incentive regulation in the form of price caps can combine the clarity and certainty advantages of tariff setting and at the same time provide incentives for the service provider to reduce production costs. As such, and given that most of the service regulated by the Commission using Part IIIA are vertically separated, there is a strong case for using price caps in regulating terms and conditions of access.

On balance, though, the Commission considers that it would be premature to change the access regime to incorporate more explicit pricing powers at this time. The reason for this is that the national access regime has proved to be a catalyst for the development of industry specific regimes. Both the gas and electricity codes have been introduced using Part IIIA. Both of the regimes include incentive based pricing arrangements tailored to the specific circumstances of each industry.

Furthermore the Commission considers that even if services are vertically separated a mechanism to address non-price terms and conditions may be necessary. As discussed in section 7.2 above, vertical separation does not necessarily mean separation of

ownership. Similarly, and as highlighted by King and Maddock[111], there is scope for service providers and users to develop contracts which restrict access to third parties.

One area where the national access regime has not achieved substantial outcomes is in the provision of rail services. However, it is not clear that changing the provisions in the national access regime for setting terms and conditions would effectively address these problems. More fundamental issues are at play, namely the lack of co-operation from some state governments.

The Commission's suggests retaining the current general framework for setting terms and conditions with two changes.

The first proposed change is to access undertakings. This would increase the likelihood of access undertaking being developed as an alternative to the negotiate-arbitrate process. The proposed approach to undertakings is discussed in section 8 below. The second change would be to remove the full merits review of arbitration decisions. Of course, judicial review on questions of law would be retained. This proposal is discussed more fully in section 10.4 below.

Access arrangements are still being developed and implemented using the Part IIIA framework so have not yet been fully tested. Further monitoring of the arrangements or a future review could re-assess the effectiveness of the Part IIIA framework in light of further experience.

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111 King, S. & Maddock, R. 1996, *Unlocking the Infrastructure, The reform of public utilities in Australia*, Allen and Unwin, Sydney.

8. ACCESS UNDERTAKINGS

8.1 Introduction

For services that are not declared, service providers are able to give access undertakings to the Commission specifying the terms on which access to the service will be made available to third parties. Assessment of an undertaking requires the Commission to conduct a public consultation process and to have regard to a number of matters listed in subsection 44ZZA(3) including the legitimate interests of the service provider, the interests of potential access seekers and the public interest.

In Part IIIA, undertakings were intended to allow service providers to determine the terms of third party access with certainty (prior to declaration). Unlike undertakings in Part XIC, which prevent arbitrations of access disputes once a service is declared, undertakings under Part IIIA prevent declaration. Thus the certainty that they seek to facilitate is available only before a service is declared.

In contrast to both the telecommunications regime and Part IIIA, the access regime proposed for postal services will allow the Commission to accept an undertaking before or after a service was declared. This is consistent with the policy intention of allowing a service provider to remove business uncertainty arising because of the possibility of declaration and the possibility of an access price being set by arbitration. There seems to be little reason for the provision of undertakings to be limited as it currently is in Part IIIA. The Commission would support amendments to allow undertakings to be given before or after declaration.

8.2 Experience to date

To date the Commission has received undertakings as follows:

- from transmission and distribution network service providers under the National Electricity Law that adopt the industry code approved by the Commission under s44ZZAA, the National Electricity Code;
- from Duke Energy in relation to the Longford to Sydney gas pipeline; and
- from Melbourne and Perth airports in 1997 prior to the application of section 192 of the *Airports Act 1996* to these airports.

Only those undertakings in the electricity industry that have been consistent with the National Electricity Code have been accepted.

In September 1999, the Commission published a booklet entitled *Access Undertakings*[112]. This publication seeks to provide guidance to industry about how the Commission will interpret the statutory requirements of Part IIIA and perform its role under that Part.

Undertakings can specify precise terms and conditions (such as price, service standards and pricing methodology) in advance. The undertaking can provide some room for negotiation about terms and conditions but it must be sufficiently certain to be enforceable in the Federal Court[113]. For instance there must be constrained limits within which negotiation will occur; for instance, a timeframe for negotiations, a range of prices or a mechanism to set a minimum or maximum price and what, if any, services are negotiable in relation to type, quality and price. The undertaking would also need to provide for resolution of any disputes if negotiation was unsuccessful.

The Commission also takes the view that the undertaking must provide details of how the access price is set. The Commission considers that this is necessary in relation to the Commission's consideration of the criteria for acceptance of an undertaking in s44ZZA(3). The Commission has indicated that to meet the legislative criteria prices specified in undertakings should usually be reflective of costs, and should not discriminate in a way which reduces efficient competition. The Commission refused to accept Duke Energy's application for an undertaking for the Longford to Sydney gas pipeline on the basis that it was not supported by information sufficient for the Commission to make an assessment of these matters.

The access undertakings lodged by Melbourne and Perth Airports are referred to in more detail in section 3.4.

The Commission has also received four sets of undertakings under Part XIC.[114] The experience of the Commission in the telecommunications area also highlights problems with the operation of existing undertaking mechanisms. The incentives for submitting realistic undertakings are limited in relation to Part XIC.

On the one hand, if there are no undertakings are in place to provide 'reference tariffs' against which to conduct negotiations, arbitration is more likely to be necessary. Because arbitration is proving to be costly and time-consuming, the access provider's incentives to avoid arbitration are weak. And on the other hand, because undertakings are optional and are themselves time-consuming to assess, access providers may have an incentive to submit unreasonable undertakings.

In relation to Part IIIA, while undertakings remove the threat of declaration, it is questionable how effective an incentive this is in the context of the limited number of

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112 This publication replaced the publication, Australian Competition and Consumer Commission 1996, *Access undertakings: a draft guide to access undertakings under Part IIIA of the Trade Practices Act.*

113 Refer section 44ZZJ.

114 Although there were more than four separate undertakings, each set of undertakings related to the supply of complementary originating and terminating services.

declarations and the fact that to date no arbitrations under Part IIIA have imposed terms and conditions of access on service providers.

8.3 Improving the effectiveness of the access undertaking provisions

The Commission suggests two possible amendments to the undertaking provisions.

First, consistent with provisions proposed for access to postal services, service providers should be able to submit an undertaking before or after a service is declared. If an undertaking is accepted prior to declaration, any declaration would not operate to the extent the undertaking applied to the service. If a service was already declared, the terms and conditions of access would be determined in accordance with the terms of the undertaking and the Commission would not arbitrate under Part IIIA in relation to matters covered by the undertaking.

Secondly, in limited circumstances after a service has been declared the Commission should have the power to compel an access provider to submit an access undertaking in relation to a declared service. In the event that the access provider failed to comply with a direction to submit such an undertaking, or if the Commission rejected the undertaking submitted the Commission should have the power, after conducting a public consultation process, to impose an access undertaking on the access provider.

This approach would both encourage access providers to deal with issues of general concern to industry on a multilateral basis and give the Commission the power to also deal with such issues in an open and consultative manner. The Commission considers such an approach would offer advantages over current arrangements. In the telecommunications context, the Commission has had difficulty conducting a number of bilateral private arbitrations raising the same issues and relating to the same declared service.

Such an amendment would not extend the scope for regulation. It would only operate where a service had been declared. In these circumstances the Commission can determine terms and conditions of access through the arbitration of an access dispute. For the Commission to have the power to compel the provision of an access undertaking would merely facilitate the efficient and transparent consideration of issues of general concern to industry. The Commission considers such an approach preferable to conducting a series of bilateral arbitrations.

The *National Third Party Access Code for Natural Gas Pipeline Systems* already contains a compulsory undertaking power.

9. EFFECTIVE REGIMES

9.1 Introduction

Before the national access regime was introduced some access regimes had already been established by the Commonwealth and state governments. These covered infrastructure such as gas pipelines and grain handling facilities. The Competition Principles Agreement recognised that these regimes, and new regimes established by governments, had the potential to adequately address the access objectives of a national access regime.

At the same time there is potential for conflict of interest. Often state governments own the facilities being regulated. The national access regime addresses this by providing a mechanism for certification of effective regimes by an independent body (the NCC) following an assessment of the access regime against specified criteria. Clause 6(4) of the Competition Principles Agreement sets out the criteria which establish a number of principles for what constitutes an effective regime. The principles include the following:

- the access regime should establish rights to negotiate access in the first instance and provide for arbitration by an independent body if the negotiations are not successful;
- the dispute resolution body should take into account the "owner's legitimate business interests and investment in the facility" and the "benefit to the public from having competitive markets" as well as a number of other matters; and
- consistency of regimes where more than one state or territory access regime applies to the same service.

So far a number of applications for certification have been submitted to the NCC. The applications and their outcomes are summarised in section 2.5.

The Commission strongly supports the process of independent review of access regimes to determine whether they are effective. Given the potential for conflict of interest between governments in their role as regulator and service provider the process is necessary to ensure that the objectives of the national access regime are not frustrated.

Based on the experience with effective regimes so far the Commission has some concerns about the scope for inconsistency between different regimes.

9.2 National consistency

The effective regime provisions may give rise to separate state based access regimes. This does not raise complications if the facilities covered are for intra-state usage only, such as the Victorian commercial shipping channels. However where facilities cater for inter-state usage it creates the potential for inconsistency between state based regimes.

The need for consistency between state based access regimes is becoming increasingly important as national markets develop. This is particularly relevant in the gas industry where new interstate gas pipelines are being developed, and in rail where interstate freight traffic is recording strong growth.

In relation to gas transmission and distribution, the states and territories have introduced mirror legislation which includes the National Gas Code[115]. In turn the legislation in each state and territory is being submitted to the NCC for certification as an effective access regime. The advantage of this approach is that the same provisions are being introduced in different states, with the same principles for setting prices and other terms and conditions of access as well as the same provisions for arbitration of disputes.

By contrast consistency is not being achieved in the provision of railway track services. In 1997 the Commonwealth and state governments signed an Inter Governmental Agreement designed to achieve a coordinated approach to rail reform. The aim of the agreement was to establish as single national track authority, the Australian Rail Track Corporation (ARTC), as a single point of access for interstate rail users. In practice this has not been achieved.

The New South Wales and Western Australian Governments have introduced their own access regimes. In Queensland, Queensland Rail has submitted an undertaking covering access to intrastate tracks to the Queensland Competition Authority for assessment under the Queensland Competition Act[116]. Each of these regimes has been developed independently and each adopts a different approach to access. This means that:

- different operating systems apply across the network with non uniform technical, safety and operating standards;
- access terms and conditions vary from state to state; and
- operators wishing to provide services on the interstate network[117] have to negotiate access with multiple access providers.

This lack of consistency and lack of a single access point adds to the time and cost of operating rail services and in doing so inhibits the development of private sector long haul rail services.

The New South Wales and Western Australian Governments have sought certification of their rail access regimes as effective. Neither has a satisfactory interface with the proposed national track access regime being developed by ARTC. The risk is that the effective regimes could result in outcomes which do not deliver national consistency.

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115 Details on gas access arrangements are provided in section 3.2.

116 The interstate track in QLD consists of a standard gauge link from Brisbane to the NSW border. QLD's intrastate network is narrow gauge.

117 The interstate network currently consists of standard gauge tracks linking all capital cities, with a link from Sydney to Adelaide via Broken Hill.

Clause 6(4)(p) of the Competition Principles Agreement addresses the issue. It states that:

> Where more than one State or Territory access regime applies to a service, those regimes should be consistent and, by means of vested jurisdiction or other co-operative legislative scheme, provide for a single process for persons to seek access to the service, a single body to resolve disputes about any aspect of access and a single forum for enforcement of access arrangements.

The clause has been instrumental in the NCC's assessment of the rail access regimes submitted by the states. While the NCC certified the New South Wales regime it set a time limit on its operation. In December 2000 certification expires and the regime will be subject to further review. In relation to the Western Australian regime the NCC advised that the regime did not satisfy clause 6(4)(p). The Western Australian Government subsequently withdrew its application for certification.

9.3 Improving the effectiveness of the provisions

The Commission makes no suggestions for changes to the current arrangements. It supports both the flexibility provided by allowing other access regimes to be developed to suit particular circumstances where appropriate and the process of independent review of access regimes to determine whether they are effective. Given the potential for conflict of interest between governments in their role as regulator and service provider the process is necessary to ensure that the objectives of the national access regime are not frustrated.

The Commission also considers that the continued operation of clause 6(4)(p) of the Competition Principles Agreement is necessary to ensuring national consistency of state based access regimes and to promoting the development of interstate markets. The Commission supports rigorous application of the clause where proposed effective regimes cover inter-state services.

10. ADMINISTRATIVE PROCESSES – POSSIBLE IMPROVEMENTS?

10.1 Introduction

As industry and regulators gain experience of the operation of Part IIIA possible improvements to the regime may become clear. This section focuses only on improvements of an administrative nature, not on possible policy changes. The Commission is aware that the declaration process has been criticised as slow and that there have been suggestions to streamline the process by moving to an administratively determined list of services rather than generic declaration criteria. The Commission can see little utility in such a change, this issue is discussed in more detail in section 10.2 below. The Commission also sees possible dangers in making hasty decisions about declaration. Further comments on this issue are at section 10.3 below. One procedural improvement the Commission would support is to streamline the process for review of arbitration determinations. This is discussed in further detail in section 10.4 below.

10.2 A list of services or a generic declaration criteria

An access regime based on generic declaration criteria is consistent with that suggested by the Hilmer Report. As noted in section 6.2 above, there are only minor differences between the declaration criteria suggested by Hilmer and those enacted in Part IIIA. It is to be contrasted with a series of industry specific regimes such as the telecommunications access regime in Part XIC of the *Trade Practices Act 1974* and the proposed postal access regime. It is also to be contrasted with the application of a general regime to services specified or notified by the executive government. Ministerial determination under s192 of the *Airports Act 1996* is one example of this in the access context.

The Commission would not support any move to a generic access regime applying to an administratively determined list of services. The Commission's experience is that such a process could lead to making decisions on the application of access to services based on reasons other than sound and consistent economic principles. For instance, a service that is politically sensitive may be inappropriately 'declared' on the grounds that regulation of the service may 'take the political heat out of the issue' or pass the buck to someone else. Part IIIA currently minimises the risk of this happening by requiring that statutory, and economically based, criteria are satisfied before declaration and by involving an independent third party in the process; the NCC has expertise in the areas of competition policy and economics.

10.3 Streamlining the declaration process

As noted above, the Commission does not consider that services have been declared inappropriately under Part IIIA. There has been some criticism that the declaration process is too time consuming[118].

The declaration of cargo handling services at Sydney International Airport illustrates the delay that may be experienced in the declaration process. With this delay comes uncertainty and regulatory costs for the participants. The application for declaration was lodged in November 1996. The NCC recommended declaration in May 1997. The Minister declared the services in July 1997 and the Australian Competition Tribunal determined that the services should be declared in March 2000; almost 2½ years after the application was lodged.

The Commission believes that declaration decisions have significant consequences and that care must be taken to make good decisions. There may be some trade-off between making speedy decisions and making comprehensive and transparent decisions. However, with the benefit of its experience declaring services under Part XIC, the Commission believes there would be dangers associated with requiring that declaration decisions be made within a certain timeframe.

For similar reasons, the Commission would not support time limits being imposed upon the assessments of undertakings, the certification of state based access regimes or the determination of access disputes.

The Commission understands that the power to declare rests with state Ministers upon recommendation of the NCC having regard to the same statutory criteria in recognition of the potential application of Part IIIA to a number of industries, including the rail and energy industries, that have previously seen heavy involvement from state governments both in ownership of assets and operation of government businesses. One reason all governments have wanted to have an involvement in the declaration process is the privatisation or potential privatisation of some state owned facilities or business likely to be affected by declaration.

The Commission notes that one of the potential disadvantages of Ministerial involvement, declaration decisions being made on the basis of inappropriate political considerations, is tempered by the fact that the decision of the Minister to declare or not to declare is reviewable by the Australian Competition Tribunal. Although the Minister could make submissions to the Tribunal, the Tribunal is required to make its own decision having regard to the matters set out in s44H.

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[118] Evans, L. 2000, 'Access under the Trade Practices Act', *Competition and Consumer Law* Journal, vol. 8, pp. 45, 59.

10.4 Streamlining the process of arbitrating access disputes

Changes to the arbitration review process could streamline the arbitration process and reduce time delays and costs to the various parties. Guidelines issued by the Administrative Review Council indicate that a decision that affects the interests of a person should generally be subject to external merits review but that this may not be appropriate where the decision involves an extensive inquiry process (as it would be difficult, having regard to the time and cost involved, to justify repeating the review).[119]

It is unusual for an arbitration to be subject to a complete re-hearing.[120] The Commission has found that an arbitration under Part XIC is an unavoidably resource intensive and time consuming process due to the complex nature of the issues and the need to conduct the hearing fairly. This is particularly the case where the Commission conducts a public consultation process to determine the appropriate pricing principles in relation to a declared service that is the subject of a particular bilateral arbitration. Merits review by the Australian Competition Tribunal in addition to appeals to the Federal Court on questions of law,[121] further delays the resolution of the dispute and reduces the potential advantage of the negotiate-arbitrate model. An incumbent is more likely to reach an agreement with the access seeker where there is an early and certain outcome.

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119 Administrative Review Council 1999, What Decisions Should be Subject to Merits Review?

120 For example, awards by the Australian Industrial Relations Commission are not subject to merits review.

121 Trade Practices Act 1974 (Cwlth), s. 152DQ.

11. ADMINISTRATION – COMPETITION AGENCY AS REGULATOR

11.1 Introduction

A recent paper by the OECD Committee on Competition Law and Policy provides a comprehensive account of the institutional options available for administration of economic regulation as well as an assessment of their potential strengths and weaknesses.[122] Taking into account the requirements of technical and economic regulation and competition law (antitrust enforcement), the paper identifies three practical alternatives:

1) combine technical and economic regulation in a sector specific regulator and leave competition law enforcement entirely in the hands of the competition agency;

2) organise technical regulation as a stand alone function and include economic regulation within the competition agency; and

3) combine technical and economic regulation in a sector specific regulator and give it all or some competition law enforcement functions.[123]

Of these three broad models Australia has in effect embarked upon the second alternative – institutional integration with antitrust enforcement (competition law), and general rather than sector specific regulation combined in a single national body[124]. Particular state variations to this overall schema do occur as individual states conduct some technical regulation and share in some of the economic regulation of particular utilities[125]. Nevertheless, the pervasive institutional structure in Australia is that of a national body which administers both antitrust enforcement and economic regulation.

Overseas the institutional arrangements vary from country to country. The first of the models identified by the OECD most closely reflects circumstances in the U.S.[126],

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122 Organisation for Economic Cooperation and Development Committee on Competition Law and Policy 1999, *Relationship Between Regulators and Competition Authorities*, Roundtable in June 1998, published in 1999.

123 Ibid, p. 33

124 At the Commonwealth level, administration of economic regulatory measures is carried out by the Commission in conjunction with the enforcement and consumer protection provisions of the *Trade Practices Act 1974* (Cwlth).

125 Economic regulation is shared between the Commonwealth and the states and territories. Most states and territories have established regulatory agencies to administer the regulatory measures. Sometimes these agencies are sector specific, for example, the Office for the Gas Access Regulator in Western Australia. In other cases the agencies cover a range of sectors such as Independent Pricing and Regulatory Tribunal (IPART) in New South Wales, the Office of the Regulator General (ORG) in Victoria and the Queensland Competition Authority in Queensland.

126 The Federal Communications Commission, the Federal Energy Regulation Commission and The Federal Aviation Agency, for example, combine technical and economic regulation without anti-trust responsibilities.

though some of the state regulatory agencies are general rather than sector specific. The third of the models applies in the U.K. where some of the sector specific regulators also have competition law enforcement functions[127]. Institutional arrangements are being developed as part of a move towards deregulation in Japan and a number of European Community countries. Typically the starting point in these countries is regulation through the relevant government departments[128].

This section outlines some of the practical advantages that have emerged from Australia's adoption of one national regulatory body compared to other approaches. First, it considers the case for combining administration of economic regulation and competition law in the one organisation, and second, the case for having a single economic regulator rather than sector specific ones.

11.2 Competition agency as regulator

In recommending that the Commission administer the national access regime, the Hilmer Committee[129] and others recognised the differing requirement of competition law enforcement and economic regulation. Competition law enforcement is chiefly *ex post* (merger reviews excepted) whereas regulation is primarily *ex ante* and continuous.[130] Instead of being involved in monitoring firms on a continuous basis, competition offices usually begin to acquire information only when they receive a complaint or otherwise believe that competition law has been broken. Information requirements are likely to be different with the regulators needing a quantity and detail of accountancy information that is not required in competition law enforcement. The different approaches and areas of expertise would suggest that anti trust enforcement and economic regulation are in effect different cultures.

Nevertheless, there are a number of arguments in support of institutional integration.

Competition culture

At the time the national access regime was established, the foremost argument for combining competition law administration and economic regulation in a single body was the importance of a competition culture and outlook pervading regulatory decision making. It was felt that in separate regulatory organisations the competition focus could be lost, distorted or relegated to a quite secondary position[131]. As pointed out by

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127 For example the energy regulator, OFGEM, has responsibility for authorising various activities under the Competition Act.

128 See for example Organisation for Economic Cooperation and Development Committee on Competition Law and Policy 1999, *Relationship Between Regulators and Competition Authorities*, Roundtable in June 1998, published in 1999, pp. 169 – 174.

129 Hilmer, pp. 325 – 328.

130 Organisation for Economic Cooperation and Development Committee on Competition Law and Policy 1999, *Relationship Between Regulators and Competition Authorities*, Roundtable in June 1998, published in 1999, pp. 24 – 29.

131 See for example Hilmer.

the OECD this is most relevant where priority is given to easing back on regulation as competition develops:

> Whenever the principle task is arguably to manage the evolution to ever greater competition, general competition agencies should enjoy certain advantages over sector-specific regulators. In particular, competition agencies should be more:
>
> 1. attuned to pursuing static and dynamic economic efficiency which are the principal reasons for introducing competition;
> 2. convinced that competition truly will produce significant benefits, and motivated to demonstrate this in as many sectors as possible;
> 3. familiar with what constitutes a competitive market and what threatens it;
> 4. likely to rely on structural remedies which would probably prove to be a better instrument for developing competition than dependence on a set of behavioural prescriptions;
> 5. willing to wind down both access and economic regulations as and when competition become sufficiently strong (the fraction of resources devoted to such regulation of a specific sector should never be as high in a general competition agency as it would be in a sector-specific regulator. [132]

Based on the Australian experience to date there is evidence to support the arguments put by the OECD. In telecommunications, a number of services were deemed to be declared in July 1997 and additional services were subsequently declared following public inquiries. However, as competition has developed in the market, the focus of the Commission has shifted from the regulation of services to examination of the continuing need for regulation. No new services have been declared for over 12 months, and the two inquiries currently in progress relate to the limitation, rather than the extension, of existing regulation. Both these inquiries were initiated by the Commission.

Administrative synergies

Combining economic regulatory and competition law functions provides certain administrative synergies. The OECD identified a number of these arguing:

> Synergies exist between competition protection and economic regulation and also between both of those functions and access regulation. They arise largely because the same staff expertise can be applied to a number of related problems, and because combining several policy instruments in the same agency increases the chances that they will always be used in tandem rather than sometimes at cross purposes.[133]

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[132] Organisation for Economic Cooperation and Development Committee on Competition Law and Policy 1999, *Relationship Between Regulators and Competition Authorities*, Roundtable in June 1998, published in 1999, p. 9.

[133] Ibid.

These synergies have advantages in terms of consistency of approach and the quality of analysis. As the Hilmer Report identified, such synergies can also result in administrative cost savings[134].

An example of such synergies is the authorisation process under sections 88 and 89 of the Trade Practices Act. The Act provides for the Commission to "authorise" (thereby granting immunity from the Trade Practices Act) certain regulatory arrangements by subjecting anti-competitive issues to a public benefit test.

The Commission authorised the market and administrative rules within the Electricity Code. Creation of the national spot market as a price-setting mechanism required authorisation (with conditions) before it could commence operation. In collaboration with the National Electricity Code Administrator (NECA), the Commission has monitored market behaviour and conditions, and has incorporated this experience into its role of review, when requested to authorise changes to market rules and design.

Similarly the Commission has sought to integrate its industry-specific knowledge with its expertise in competition issues in the reform of the Victorian gas industry. The Commission approved three access arrangements for the state's transmission pipelines under the Victorian Access Code for Natural Gas Pipeline Systems (which preceded but largely mirrored the national Code). The terms and conditions of the access arrangements included market rules governing the operation of a newly created spot market for gas. Concurrently with its assessment of the access arrangements, the Commission authorised the market rules.

Accountability

Combining competition law and economic regulatory functions may also have advantages in terms of accountability, both in terms of public scrutiny and through review processes.

In general an industry-specific regulator is less likely to be scrutinised by the general public or firms in other industries because the regulator's decisions have limited precedent value.

In relation to review processes, at the time the national access regime was being established a process for reviewing Commission decisions was already in place. The Trade Practices Act established the Australian Competition Tribunal as a review body for competition law matters. Part IIIA extended the Tribunal's review role to cover declaration and arbitration decisions. In relation to arbitrations, a Tribunal review of a Commission determination is a re-arbitration of the access dispute.

As with other Commonwealth agencies making decisions pursuant to a Commonwealth Act, the Commission's decisions are subject to the provisions of the *Administrative Decisions (Judicial Review) Act 1977*. This provides rights of appeal on matters related to the Commission's administrative processes, the reasonableness of its decisions and whether it has jurisdiction to make decisions.

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134 Hilmer, pp. 327, 329.

In carrying out its regulatory functions the Commission has adopted rigorous and transparent processes in reaching decisions on economic regulatory matters. Typically the Commission conducts a public consultation process where it invites submissions, releases a draft decision and invites further submissions in response to the draft. In a number of cases the Commission has conducted public discussion forums. Where necessary the Commission draws on independent external expertise.

11.3 A single regulator or sector specific regulators?

Combining administration of competition law and economic regulation necessarily requires a single regulatory body. Separation of the two functions raises the possibility of sector specific regulators. This section considers the main arguments for and against the two models.

Expertise

The primary case for sector specific regulators arises where technical and economic regulatory functions are combined. Under these circumstances there may be advantages in terms of the regulator's capacity to understand the unique technical and other relevant conditions specific to each industry, though the Commission considers that this has not been an impediment to date[135].

At the same time the establishment of industry specific regulators could fragment the expertise in areas common to regulation of services in different industries, in particular in relation to pricing.

Furthermore the Commission's dual regulatory and competition law role can enhance its knowledge and understanding of industries. As an example the Commission has had an active role in restructuring of the gas industry in Victoria. The Commission assessed the sale of a number of Victorian gas assets (including each of the three Victorian retail/distribution businesses and the gas transmission network owner, Transmission Pipelines of Australia) to ensure that they did not raise market power issues. The knowledge gained from this helped the Commission to understand structural and competitive changes in the industry.

Convergence

In the international economy convergence is a reality. Convergence between infrastructure services is occurring at three levels:

- At a technical level, network facilities are converging. For instance, electricity distributor businesses are entering the telecommunications business, an example is ACTEW in the ACT.

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135 Technical regulators, external experts and its public consultation processes have been used to supplement the knowledge already built up within the Commission.

- At a market level, the services provided by infrastructure may be substitutable. Particularly transport services and to a lesser extent gas and electricity.
- At a corporate level, there is vertical and horizontal integration particularly in service provision where joint ventures allow things such as combined bills and single payment schemes.

In such cases having a single regulator has the advantage that service providers operating in different regulated sectors only need to deal with the one agency. This can have advantages for the industry in terms of cost, convenience and consistency of decision making. It also avoids the allocation problems that may arise if firms exploit different industry rules.[136]

Regulatory capture

A single economy wide regulator may be less prone to "regulatory capture" than sector specific regulators. The broader responsibilities of an economy-wide regulator helps to reduce the risk that a regulatory regime will either be captured politically or by an industry[137] or become entangled in an antagonistic relationship with industry chiefs.[138] The scope for reducing the risks of regulatory capture by relying on a single regulatory body was recognised in the Hilmer Report[139].

On the other hand, it has also been argued that a centralist regulator has the capacity to be captured by a 'perceived view' which it imposes across the board without any appreciation of individual needs.[140] Having a diversity of regulators allows comparisons to be made of regulatory practice and outcomes. It also reduces the possibility of a regulatory mistake flowing across a wide section of the economy. However, the Commission considers international benchmarking is a sufficient protection against these perceived disadvantages.

Consistency

A single regulatory is more likely to deliver consistency in application of pricing principles and other regulatory matters across sectors. This has advantages in terms of the regulators ability to address issues common across sectors. While all infrastructure industries have unique features, many of the regulatory issues raised (particularly for

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136 Smith, W. 1997, 'Utility Regulators – Roles and Responsibilities' in International Forum for Utility Regulation, *The Private Sector in Infrastructure: Strategy, Regulation and Risk,* The World Bank Group, p. 26.

137 Although capture may still occur at a higher level when policy is formulated and legislation is passed as would be a particular risk if a list approach was adopted to declaration.

138 Dnes, A. 1996, 'Testing for Regulatory Capture – Regulating Telecoms in the UK' in International Forum for Utility Regulation, *Public Policy for the Private Sector: Infrastructure,* The World Bank Group, p. 70 and Veljanovski, C. 1993, *The Future of Industry Regulation in the UK: A Report of an Independent Inquiry,* p. 26.

139 Hilmer p. 328.

140 Pengilley, W. 1994, 'Hilmer and 'Essential Facilities'' *University of New South Wales Law Journal,* vol. 17, no. 1, p. 44.

economic regulation) are similar. In access pricing, for example, the rules will often be industry-specific but some broad principles will often apply.[141]

As all industries compete for investment capital, inconsistent approaches to issues such as the valuation of capital and tariff setting may lead to inefficient investment patterns. As a consistent approach is more likely to be achieved by an economy-wide regulator, industry-specific regulators increase the risk of economic distortions.

Efficiency of the Regulator

An economy-wide regulator benefits, particularly in smaller economies, from the ability to use common resources such as professional and administrative staff and facilities.

11.4 Improving the effectiveness of the provisions

The Commission considers that the advantages of combining administration of competition law and economic regulation in a single regulator outweigh the disadvantages. It also considers that the Australian experience in combining the two administrative functions has proved effective. In light of this the Commission makes no suggestions for changes to the current arrangements.

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[141] King, S. 1997, 'Pricing for Infrastructure Access', *Competition and Consumer Law Journal*, vol. 4, pp. 203, 218 – 219. See also Waters et al 1995, *Model or Mirage? The Access Regime under the Competitive Policy Reform Bill and Competitive Infrastructure Development* (Paper presented at the Developing Australia's Telecommunications Infrastructure Conference, Sydney, 6&7 April 1995) p. 4.

ATTACHMENT A

Economic regulation in the United States, Europe and New Zealand – an overview

This attachment provides a summary of economic regulation in the United States and Europe, focusing on institutional and legal arrangements. It considers the essential facilities doctrine and industry specific regulatory regimes in the U.S. and competition law and industry specific access regimes in Europe. Information is also provided on the new regulatory arrangements being established in New Zealand in the electricity sector.

United States

The U.S. Essential Facilities Doctrine

The U.S. essential facilities doctrine has developed from the application of anti-trust law. The relevant antitrust law is Section 1 and 2 of the Sherman Act. Section 1 prohibits restraint of trade perpetrated by two or more parties while Section 2 prohibits the attempt by parties to monopolise a market.

It is generally agreed that the origin of the essential facilities doctrine is the Supreme Court's decision in the *United States v. Terminal Railroad Association of St Louis*[142]. The case arose from the joint acquisition by six railroad companies of a railroad terminal that provided the sole means of access to St Louis and beyond. The fact that the Terminal Railroad Company was providing access to competing railroads on discriminatory terms in order to gain a competitive advantage was determined by the Supreme Court to violate the provisions of Section 1 of the Sherman Act. The remedy in this case was a court order for the owners of the terminal to provide access to the terminal on just and reasonable terms.

From this and other essential facility cases a streamlined test has been developed[143]. First is the question of whether the facility is essential. If this is satisfied, then the court must determine whether the monopolist is liable under section 2 of the Sherman Act for denying competitors access to that facility. From case law the elements necessary to establish liability are:

- control of the essential facility by a monopolist;
- a competitor's inability practically or reasonably to duplicate the essential facility;
- the denial of the use of the essential facility to a competitor; and
- the feasibility of providing the facility.

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142. Edger Jr, F. 1992, 'The Essential Facilities Doctrine and Public Utilities: Another Layer of Regulation', *Idaho Law Review*, vol. 29, no. 2, p. 295.

143 ibid, p.302.

Essentiality requires the plaintiff to show that they are "practically or reasonably" unable to duplicate the transmission line or the facility concerned[144]. They must show denial causes "more than inconvenience or even economic loss; he must show that an alternative to the facility is not feasible"[145].

The courts usually presume that electricity transmission facilities, because of their natural monopoly characteristics, are essential facilities. However in some cases the defendants have been able to illustrate through cost based rules that the facility is not essential on the basis that there are feasible alternative options for obtaining power (for example, building an alternative facility). The test has been whether the costs of building a facility that bypasses the transmission line is less than the costs of wheeling power across the power line. Another rule compares the costs of building a bypass facility plus the cost (price) of the alternative wholesale power source with the bundled (transmission and wholesale) rate offered by the incumbent.

A facility owner is not necessarily obligated to provide access if it can show legitimate business reasons for not suppling access or supplying access on the terms and conditions of which the plaintiff found unreasonable. For example, access may be denied because the access seeker did not satisfy the conditions (technical or economic) which were set out by the incumbent. Also in the US electricity transmission cases the courts have found that integrated utility companies have no duty to supply access to municipally owned distribution companies if the effect of the arrangements is to shift costs from one subset of the utility's customers to another[146].

When dealing with cases under the essential facilities doctrine the courts are often required to consider what are the fair and reasonable terms of access. However, courts do not hold the specialist knowledge for determining access prices and for this reason have usually delegated this responsibility to a regulatory body such as the Federal Energy Regulatory Commission (FERC).

The essential facilities doctrine coexists with industry specific access regulation. The court's willingness to apply antitrust principles to regulated industries was first illustrated in the *Otter Tail Power Co. v. United States* case. The Supreme Court found that Otter Tail, an electricity distributor, violated section 2 of the Sherman Act by attempting to prevent communities from providing retail distribution service themselves[147] even though it was subject to price and access regulations overseen by an industry specific regulator. A number of other cases have arisen in relation to regulated electricity, telecommunications, railroad and natural gas facilities.

Industry Specific Access Regulations

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[144] ibid.

[145] ibid

[146] ibid

[147] ibid, p. 298.

Federal and state governments have established sector specific regulatory arrangements covering amongst other things gas, electricity and telecommunications services. This section briefly considers some the regulatory arrangements at the Federal level.

Natural Gas Transportation

The regulation of interstate pipeline companies is undertaken by the Federal Energy Regulatory Commission (FERC), while local distribution companies (LDC's) are regulated by state or local governments. Prior to industry reforms interstate natural gas pipelines acted as both merchants and transporters of natural gas: they bought from gas producers, transported and then sold to LDC's. The issuing of Order No. 436 in 1985 by FERC established rules for pipelines to offer open access transportation service independent of pipelines' sales service.

In 1992 FERC found that the pipelines' provision of a bundled gas and transportation service had anti-competitive effects that limited the benefits of open access service and wellhead decontrol (the removal of price regulation of producer prices). In response the Commission issued Order No. 636 which required pipelines to separate their sales of natural gas from their transportation service and to provide comparable transportation service to all whether they purchase gas form the pipeline or another gas seller[148]. These reforms were supplemented by state regulators who saw the need to open local distribution systems by allowing large industrial customers to purchase their own gas and transport that gas both on the interstate pipeline and on the LDC's facilities.

The FERC has adopted further initiatives in order to increase competition for pipeline capacity and thus reduce prices. These include rules allowing holders of firm pipeline capacity to sell or release their capacity to other shippers and the requirement for pipelines to permit shippers to use flexible receipt and delivery points. Order No. 637 issued by FERC this year further refined the regulatory rules concerning gas transportation, particularly in relation to short-term transportation options. Included in the order is a short term waiver of the price ceiling for short term released capacity. In relation to the regulation to long term transportation capacity, FERC acknowledges that the growing competitive market will force it to re-examine its regulatory framework[149].

FERC also has the responsibility for setting rates for interstate gas transmission companies. In establishing the rate of return of capital FERC is under a legal obligation to set a rate that will allow it to continue to attract capital and to maintain its financial integrity. This obligation comes from two landmark Supreme Court decisions. In Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679, 693 (1923), the Court said:

> The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

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148 Order No. 637 Final Rule, Federal Energy Regulatory Commission, Issued 9 February 2000, p.5.

149 ibid, p.2.

Electricity Transmission

The Public Utility Holding Company Act (PUHCA) and the Federal Power Act (FPA) of 1935 established a regulatory regime for electric utilities in the United States where regulatory powers were separated between state and Federal governments. As with the other network industries, the American constitution requires federal governance of interstate commerce while intrastate commerce is state domain. The Federal Energy Regulatory Commission (FERC) undertakes this federal regulatory responsibility.

The division of regulatory power in the electricity industry is complicated by the nature of electricity flows over the electricity transmission network. The physical nature of electricity flows ensures FERC has responsibility for all transactions on the transmission grid, including the price of power generated for sale on the grid, the price of transmission services, and the regulation of transmission access[150].

The enactment of the Energy Policy Act of 1992 saw the removal of several regulatory barriers to entry in the electricity generation market. Specifically the Act provided for the creation of new entities, called 'exempt wholesale generators' (EWG), which could generate and sell electricity at wholesale without been regulated as utilities under the PUHCA Act[151]. The Energy Policy Act, however, did not include provisions relating to the EWG access to the transmission facilities usually operated by vertically integrated competitors. As a result FERC issued Orders 888 and 889 in 1996.

Under Order 888, the Open Access Rule, transmission network owners are required to offer network services under comparable terms and conditions that they would provide themselves[152]. Order 889, the Open Access Same-time Information System rule, requires utilities to separate the wholesale power and transmission service functions on an accounting level.

While Orders 888 and 889 aim to limit the distortionary price setting activity at the transmission level, the same issue at the distribution/local level can only be addressed by state governments. The vertical separation of generation and grid units of utilities has been one policy used in the New England states and California to remove incentives and opportunities for utilities to discriminate against competitors[153]. However vertical separation of utilities may not be required for competitive purposes when utilities delegate the operation of their transmission networks to an independent system operator (ISO).

Telecommunications

The Communications Act of 1934, which has been amended over the years, established the Federal Communications Authority to create policies governing the interstate and

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150 International Energy Agency 1998, Energy Policy of IEA Countries-The United States 1998 Review, Ch. 6: Electricity, www.iea.org/pubs/free/usa.html

151 Congressional Research Service Issue Brief for Congress, Electricity: The Road Towards Restructuring, July 17, 2000, www.cnie.org/nle/eng-7.html

152 ibid.

153 ibid.

international communications by television, radio, wire, satellite and cable. In 1996 the Telecommunications Act of 1996 was signed into law and represented the most extensive and significant change in the Communications Law since the Communications Act of 1934[154].

The major initiatives of the Telecommunications Act are[155]:

i. Opening up of competition among local telephone companies, long distance providers, and cable companies with each other; and

ii. Re-confirming the US commitment to universal service.

The opening up of competition initiative is most pronounced in the Local Exchange Market, where local exchange carriers' previous general duty to deal has been significantly extended. The Act now requires local telephone companies[156]:

- to interconnect their network facilities with the networks of competing telecommunications carriers at any technically feasible point and on just, reasonable, and non-discriminatory terms;
- to unbundle their services into their constituent network elements and make those elements available to competing telecommunications carriers on just, reasonable and non-discriminatory terms; and
- to provide for resale of any of their retail services to other telecommunications carriers at a reasonable discount to consumers.

The Local Exchange Carriers interconnection, unbundling and resale obligations to competitors are to be made by negotiated agreements with the other parties. If they can not agree on price and conditions then the state regulatory commissions may arbitrate the dispute[157].

The Federal Communications Commission (FCC) determines the regulations and rules required by these provisions, including the guidelines concerning the pricing of interconnection and unbundled network elements. To ensure the state regulatory commissions adopt a consistent approach to pricing that achieves the competition objectives of the Act the FCC has established national pricing principles. The pricing methodology that the FCC believes best achieves the goals of the Act is Total Element Long Run Incremental Cost (TESLRIC) which is based on forward looking economic costs.

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154 www.fcc.gov

155 Joseph Guttuso, The United States Telecommunications Act of 1996, National Telecommunications and Information Administration, 1998, www.globalcomms.co.uk/inter98/editorial/24.html.

156 ibid.

157 ibid.

Europe

The general principles of European competition law have been developed and applied to impose certain obligations on the owners and operators of infrastructure facilities to provide access to competitors. The duty to deal/provide access has been developed and applied on a case-by-case basis by both European and Member State institutions.

In addition, the imperative to develop a single market has led to the development of specific regimes governing third party access for most of the network industries. These regimes have, to varying degrees, resulted in the creation of regulatory institutions at the Member State level, and the development of either negotiate/arbitrate or regulatory models of access regimes.

Application of general competition law

The duty to provide access to essential facilities is been based primarily on Articles 82 and 86 of the EC Treaty.

Article 82 prohibits any abuse by an undertaking having a dominant position within the common market or a substantial part of it. A finding of market dominance is a prerequisite for the triggering of this provision.

Article 86 is directed at the introduction of competition into markets in which governments have granted monopoly or special rights conferring competitive advantages[158]. Competition is seen as essential for improving the efficiency of these monopoly industries. In referring to monopoly industries the European Commission has focussed on the network industries of transport, energy, telecommunications and post. The general principle underlying Article 86 is that 'while the right of exclusive ownership may persist as regards to the infrastructure, monopolists must grant access to third parties wishing to compete with them as regards the services offered on their networks'[159].

In addition to its powers under the provisions relating to the free movement of goods and services, the European Commission has various means to enforce the opening up of monopoly markets through the provisions of Article 86,

- The European Commission checks that Member States, when they grant special or exclusive rights to firms, comply with the Community competition rules, including Art 82. If necessary, the European Commission can institute enforcement proceedings before the European Court of Justice.

- The European Commission can adopt or initiate directives aimed at liberalisation of particular sectors. A directive is a form of Community legislation that sets a common objective to be attained by all Member States, which each Member State is required to implement in its own legislation and enforce. In some cases this legislation is enacted by the European Council and Parliament, acting on their

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158 European Commission, 2000, *Competition Policy in Europe and the Citizen*, p. 26.

159 ibid.

powers under Article 96 of the Treaty to introduce measures necessary to effect the single market. European Union legislation has been a significant stimulus to the opening up of the telecommunications, transport, postal, gas and electricity markets.

- Finally, the European Commission ensures that Community competition rules are properly complied with by firms that have been granted special or exclusive rights. However the application of competition rules must not obstruct the performance of their statutory obligations.

Article 82 prohibits three forms of conduct relevant to access: refusal to supply, charging of excessive prices, and discriminatory pricing. These may be linked, as for example an excessive price may amount to a constructive refusal, and a refusal to supply is in itself an extreme form of discrimination. The European Commission and the Court have interpreted Article 82 as prohibiting inefficiency and inertia on the part of a monopolist. Article 82(b) explicitly condemns the limitation of production markets or technical development to the prejudice of customers. In its *British Telecom* decision in 1982 the European Commission condemned British Telecom's behaviour because, inter alia, it impeded the use of new technology. As to inertia, the Court has suggested that a statutory monopoly that reserves the provision of a service to a particular firm could contravene Article 82 where that firm was unable to satisfy fully the demand itself. In the *Port of Genoa* case in 1990 the Court struck down a statute granting the port an exclusive right to organise and carry out various port operations.

Article 82 in conjunction with Article 86(1) has been relied on to condemn national legislation that confers exclusive or monopoly rights on undertakings, and the legislation leads them to abuse their dominant position. For example, in *Corbeau* (1991) the Court suggested that the exclusive rights conferred on the Belgian postal authorities could be contrary to Article 86 in conjunction with Article 82 if this led to a situation where competitors who could satisfy the emerging demand for certain types of value-added postal services were kept out of the market. The Court has condemned as contrary to these articles exclusive rights granted to undertakings which allow them to demand payment for services which have not been requested, to charge disproportionate prices, to refuse access to modern technology which involves an increase in cost to users, and to grant reductions to some customers while offsetting those reductions by increasing the price to others.

Article 81 (prohibition of anti-competitive agreements) has also been extensively applied in the context of access to infrastructure. However, these cases have not so much concerned issues of refusal or potential refusal to supply, but whether agreements under consideration would foreclose the possibility of competition from third parties. In these cases the European Commission is placed in a more reactive role.

Since about the early 1990s the European Commission has in a number of cases relied on the "essential facilities" doctrine in coming to its decisions. Broadly, Article 86 has been interpreted as prohibiting the owner of significant facilities from using its property rights with the purpose of suppressing competition and denying access to its facility, at least where capacity is available and a reasonable price is being offered. Liability under the essential facilities doctrine focuses on the following issues:

- Control of an essential facility;
- A competitor's inability practically nor reasonably to duplicate the facility;
- A denial of use by the owner/operator; and
- The feasibility of providing capacity/access.

The exact scope of the essential facilities doctrine in the European Union and the precise duties which can be imposed on the operator still remain to be clarified. Further, the doctrine only addresses the initial question of whether access should be granted at all. It is relatively powerless to deal with the crucial questions of whether sufficient capacity is available, and, if so, the terms and conditions (including price) pursuant to which access is to be provided.

European Union case law and European Commission practice dealing with excessive or discriminatory prices for infrastructure access is limited. It is generally agreed that the European Commission in the main has been reluctant to become involved in what it has traditionally perceived as regulatory rather than competition matters. There is little evidence that Member State courts are taking a more aggressive line. As a consequence, there is little guidance in the general competition case law as to what levels or structures of prices are to regarded as excessive or discriminatory, and little indication of what sort of cost calculation methodologies should be used.

The limitations of the essential facilities doctrine have been a contributing factor to the European Commission's development of industry specific regimes.

Industry-specific access regimes

As mentioned, regimes have been established in most network sectors aimed at market restructuring and liberalisation. In some of these – telecommunications, gas, electricity and post in particular – specific rules have been laid down as to the provision of access to major natural monopoly infrastructure. This section provides an overview of access arrangements that apply to the electricity and gas sectors.

Electricity

After nearly a decade of negotiations, Directive 96/92/EC "concerning common rules for the internal market in electricity" was enacted by the European Parliament and Council on 19 December 1996. Member States were required to implement its terms by 19 February 1999. Most States have to date adopted legislation in response to the Directive.

The Directive builds on two earlier Community directives aimed at introducing greater competitiveness into the European electricity supply industry. Directive 90/547/EEC (29 October 1990) on the transit of electricity through transmission grids essentially obliged the State-owned transmission companies to allow each other to transit electricity over their systems on non-discriminatory terms. Directive 90/377/EEC (29 June 1990) on transparency of gas and electricity prices charged to industrial end-users sought to introduce a degree of transparency into the prices charged by electricity businesses to commercial customers.

The Directive was finalised at a time when European Union competition law was being increasingly applied and enforced in the energy sectors. The European Commission was prosecuting a number of cases against Member States for contravention of the Treaty provisions on free trade (especially in relation to State-owned import and export monopolies)[160]. Several other cases involving restrictions on cross-border trade in electricity were the subject of litigation before the European Court of Justice and national courts. A similar directive (since come into force)[161] seeking to open up the gas sector to greater competition was also the subject of much interest. Gas and electricity utilities had recently been subjected to European Union rules mandating competitive procurement practices[162]. Finally, a number of Member States had already introduced major electricity reforms or were in the process of doing so.

The Directive addresses a number of fundamental aspects of a competitive electricity market, including: opening up of production sector to new entrants; introducing system operators; accounting unbundling; phased contestability; third party access; and public service obligations.

The Directive sets out three alternative models of access to systems that Member States can adopt:

- "negotiated access": a system allowing producers, suppliers and eligible customers "to negotiate access to the system". To facilitate the negotiations, system operators must publish annually an indicative range of prices for use of the system.
- "regulated access": a system whereby eligible customers have "a right of access, on the basis of published tariffs for the use of the transmission and distribution systems".
- "single buyer procedure": a system whereby the state designates an entity "to be the single buyer within the territory covered by the system operator", such as existed until recently in France. If the single buyer is obliged to purchase electricity from producers, it must do so on certain terms.

In each case, access may be denied where there is lack of capacity. However, the operator (or single buyer) must give reasons for any denial of access.

Each Member State must set up an independent competent authority to "settle disputes relating to contracts and negotiations in question". No further guidelines are laid down as to the grounds upon which access must be granted or the powers of the dispute settlement authorities. These are matters for the regulators in individual member states to develop.

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160 Cases C-157/94 (*Commission v Netherlands*), C-158/94 (*Commission v Italy*), C-159/94 (*Commission v France*), and C-160/94 (*Commission v Spain*) decided on 23 October 1997.

161 Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas.

162 Directive 93/38/EEC (14 June 1993) concerning the placing of tenders in the water, energy, transport and telecommunications sectors.

Gas

Directive 98/30/EC "concerning common rules for the internal market in natural gas" was enacted by the European Parliament and Council on 22 June 1998. Member States were required to implement its terms by September 2000. The Gas Directive applies only to transportation, storage and supply activities; it does not apply to the production sector (except for upstream pipeline networks); special rules apply to the upstream gas sector under other instruments, such as the rules on public procurement procedures.

The European Union Gas Directive deals with the following issues:

- transmission, distribution, storage and LNG undertakings must operate reliably, securely and efficiently, not discriminate amongst users, and provide adequate information to others;
- confidentiality of information;
- regulation of distribution franchises;
- unbundling and transparency of accounts;
- liberalisation of supply markets (phased contestability); and
- access to the system.

As to access, Member States may choose between either "negotiated" or "regulated" access. In either event the procedures shall operate in accordance with objective, transparent and non-discriminatory procedures.

Negotiated access requires transmission and distribution businesses to negotiate in good faith with eligible customers to conclude supply contracts on the basis of voluntary agreements.

Regulated access requires the Member State to implement procedures giving eligible customers a right of access to transmission and distribution facilities "on the basis of published tariffs and/or other terms and conditions for use of that system". This does not necessarily require the establishment of an independent regulator to establish or approve the published tariffs.

Access may be denied on the basis of lack of capacity or where access would prevent them from performing their legitimate public service obligations, or on the basis of difficulties under certain existing take-or-pay contracts.

Member States are required to establish an independent authority to settle disputes.

As will be apparent, the directive does not prescribe particular pricing methodologies or approaches. Nor does it deal in great detail with variations between member States on these issues and other aspects of access and market liberalisation. As a result, much work is currently being carried out, under the direction and supervision of the European Commission, to develop harmonised rules and procedures for access pricing. As yet, these efforts have not led to the introduction of detailed or binding pricing rules.

New Zealand

The New Zealand Government is moving to re-regulate electricity transmission and distribution. In October 2000 the Government announced a package of reforms to regulation of the electricity market and industry, in response to the Caygill Review.

A key reform is that an independent Electricity Governance Board (EGB) will replace the existing market institutions. The EGB will be responsible for developing rules for the industry, including the areas of transmission and distribution access and pricing. In addition the Government has set out its policy expectations as to how transmission and distribution services should be priced and provided.

The Government's objectives for the provision of transmission services are that:

- the services are provided in a manner consistent with the Government's energy policy objective - to ensure that electricity is delivered in an efficient, fair, reliable and environmentally sustainable manner to all classes of consumer;
- the services should be provided at the standards of quality and security required by grid users through a process of agreement with those users, or the EGB on behalf of users;
- the efficiency of transmission services should be continuously improved so as to produce the services users want at least cost; and
- the services are priced in a manner that:
    - is transparent;
    - fully reflects their costs including risk;
    - facilitates nationally efficient supply, delivery and use of electricity;
    - promotes efficient use of Transpower's resources; and
    - promotes nationally efficient use of transmission services by grid users and so facilitates efficient resource use.

The Government has also spelt out principles on cost recovery, asset replacement and contestable transmission services. Points of interest with regard to cost recovery are:

- the emphasis on incentives to identify least cost transmission investment options, including energy efficiency and demand management options;
- a requirement that pricing for new entrants should provide clear locational signals;
- the sunk costs of the transmission grid should be allocated in a way that minimises distortions to decisions about the use of and new investment in the grid; and

- the pricing structure should include a variable element based on peak demand in order to provide an incentive to minimise network constraints.

Transpower is to develop a transmission pricing methodology consistent with the Government's policy criteria, with the EGB required to ensure that this consistency is achieved. Should Transpower and the EGB not agree on a methodology, the Government intends to empower the Commerce Commission to determine the methodology.

Transpower is also required to produce annually a rolling five-year Statement of Investment Opportunities in relation to forecasts of medium term system adequacy. The Statement will assist grid users to identify opportunities for generation (including distributed generation) and demand-side management (including energy efficiency and load management), and to determine whether these are more appropriate than further investment in the grid by Transpower.

The EGB will determine service standards of common quality through the agreement process and will oversight the processes governing asset replacement and investments, as well as the identification of contestable transmission services.

The Commerce Commission is presently developing its policy on how it will undertake its transmission price control role, if it is so required. An issues paper was released in November 2000 with the intent of finalising the Commission's position in early 2001. The Commission will also re-assess the basis for transmission and distribution asset valuation, including a review of whether ODV is the best valuation methodology.

In the area of distribution services, the EGB is also to develop:

- model approaches to distribution pricing;

- a model use of system and connection agreement for access to distribution lines (including terms and conditions for distributed generation);

- a standard contract for distribution consumers; and monitoring arrangements for the development of retail contestability.

ATTACHMENT B

Report by National Economic Research Associates on the declaration criteria and overseas regulatory arrangements

PART IIIA OF THE TRADE PRACTICES ACT

A Report for the Australian Competition And Consumer Commission

Prepared by NERA

November 2000
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EXECUTIVE SUMMARY

Purpose and Overview

The Productivity Commission has begun a review of the national access regime. The objective of this report is to provide the Australian Competition and Consumer Commission with background material to draw on when preparing its submission for this review. In particular, this report considers:

- the regulatory approach to access in the gas, electricity, rail, airport and postal industries in North America, Europe and New Zealand compared to in Australia; and
- the declaration criteria of Part IIIA in light of economic principles and international experience, drawing out aspects of the declaration criteria that may be key for the Productivity Commission's review.

The broad conclusions of the report are that:

- the application of the national access regime to specific industries in Australia has been consistent with industry specific regulation used elsewhere;
- the declaration criteria have been interpreted in such a way that they are unlikely to rule out the application of Part IIIA to facilities that, on the basis of theory and international practice, should be subject to access regulation; and
- to date the interpretation of the declaration criteria has been consistent with the application of access regimes internationally, and it may, therefore, be prudent to hold back from amending the criteria until it is clear that changes will improve outcomes.

The Objective of Access Regulation

In many industries the delivery of final services to the consumer requires the provision of a number of connected services. For example, the provision of gas to the consumer requires extraction, transportation, distribution, metering and billing services. In many such industries, particularly utilities, at some stage of the production process an essential facility (one that is necessary in the supply chain) exists with a cost structure that results in an industry configuration which is not fully competitive. That is, the efficient number of providers may not be sufficient to lead to competitive pressures in the market for the services of this "bottleneck" facility.

Within many utility production chains, some activities which use the bottleneck infrastructure as an input are potentially competitive. For example, electricity and gas retailing can be competitive components of the respective industries, even if the cost

structure of transmission and transportation services implies these components will not be competitive.

The rationale for regulating access to bottleneck facility services is two-fold. First, to limit a supplier's ability to extend its market power into other (related) markets that could otherwise be more competitive. Second, to reduce the facility owner's ability to charge access prices that exceed the economic cost of providing services.

Industry Specific Regulation

Compared to the majority of other countries considered in this report (the United States, Canada, the European Union, the United Kingdom and New Zealand[1]), Australia's regulatory framework is based to a greater extent on general access requirements rather than industry specific access regulation. That said, the application of Part IIIA to particular industries, namely electricity, gas, rail, postal and airport industries, in Australia is broadly consistent with industry specific regulation used in the countries considered.

In particular:

- *electricity* – transmission and distribution services are generally regulated within the industry. Tariffs usually require the regulator's approval. The regulator usually caps allowed revenue at a level just sufficient to cover costs. Prices have traditionally been based on a mix of postage stamp and cost based methodologies, with an increasing reliance on cost based methodologies, which may provide better allocation signals. The use of CPI-X incentive mechanisms is common.
- *gas* – access to gas pipeline services is typically regulated. Tariffs are generally either negotiated (with arbitration by the regulator) or submitted to the regulator for approval. Most regulators impose a revenue cap and there is increasing use of CPI-X incentive mechanisms between tariff reviews.
- *rail* – access to track facilities is typically regulated, with reliance on a mixture of negotiation and tariff approval requirements. Where negotiation is the preferred system, prices are generally required to remain within a specified band based on the Baumol-Willig rule.[2]
- *airports* – access is typically regulated for aircraft movement services and, in some cases, ground handling services. The degree of price regulation varies, depending on the ownership structure of airports. In practice, most airports base prices for aircraft

1 It is worth noting that New Zealand's "light-handed" regime is, in many ways, inconsistent with the access regimes used internationally. Therefore, in this study, Australia's access regime is more aligned with that used in the other countries considered.

2 Prices must be no lower than the marginal or avoidable cost and no higher than the standalone cost.

movement services on a total revenue requirement, taking into account revenue earned in other activities.

- *postal* – postal services are generally legislated monopolies, in order to enable cross-subsidisation to support a universal service. However, most countries provide some upstream access to the monopoly network for pre-sorted mail.

Access Declaration Criteria

Any "person" wishing to gain access to the services of a particular facility they consider essential can apply to the National Competition Council to recommend to the relevant Minister that the services be "declared". Once services have been declared, the facility owner must negotiate to provide reasonable terms and conditions for access to these services. Under the Trade Practices Act, *all* the following criteria must be satisfied in order for the NCC to recommend declaration:

i. that access, or increased access, to the service would promote competition in at least one market, whether or not in Australia, other than the market for the service;

ii. that it would be uneconomical to develop another facility to provide the service;

iii. that the facility is of national significance, having regard to:

  - the size of the facility;
  - the importance of the facility to constitutional trade or commerce; or
  - the importance of the facility to the national economy;

iv. that access to the service can be provided without undue risk to human health or safety;

v. that access to the service is not already the subject of an effective access regime; and

vi. that access or increased access to the service would not be contrary to the public interest.

These criteria address reasonably proficiently the theoretical requirements of an access framework and the access issues raised internationally.

Theory

Theoretical consideration of the general objectives of access regulation yield four general requirements for granting access to facility services:

- *the existence of related markets* – without linkages, access to the facility is not required for other businesses to compete and, therefore, access regulation is unnecessary;

- *the potential for competition in at least one of these related markets* – if some degree of competition is not possible, access will not improve the efficiency of the market.
- *the existence of an essential facility that is necessary for the provision of competitive services* – if the service is not essential for participation in the related market (that is, if it can be by-passed), access arrangements are not necessary.
- *cost characteristics* in the provision of the essential services that make it *uneconomical for potential entrants to develop an alternate facility*, resulting in insufficient competition in the market for those services – without this condition, a third party could potentially invest in developing an alternative facility from which to efficiently provide services, access would, therefore, be unnecessary and may be counter-productive.

The essential facilities doctrine

In most countries considered in this study, industry specific regulation is supported by an *essential facilities doctrine*, which provides for general application of access requirements. This tends to be based on, and developed through, case law and is a specific aspect of more general antitrust legislation.

Partly as a result of the case law nature, the essential facilities doctrine has not been applied uniformly either within or across countries. However, in general, the following criteria have been required before granting third party access to essential services:

- it must *not be efficient* for the access seeking party's to replicate the facility;
- the denial of access must virtually *eliminate competition* in a related market; and
- it must be *feasible* for the facility owner to provide access to the services.

Furthermore, general concern has been expressed regarding a perceived risk of applying the essential facility doctrine too broadly, and thereby reducing investment. The concerns raised have included that:

- access inhibits firms from undertaking risky and costly investment in the absence of countervailing first-mover advantages; and
- if access is allowed too easily, there would be no incentive for a competitor to develop alternate facilities, therefore firms may abstain from investment in an attempt to free-ride on the facilities of their competitors.

Comparability of the declaration criteria

Comparing the declaration criteria with the theoretical discussion and the application of the general *essential facilities doctrine* in other countries, the following can be noted:

- the requirement for *national significance* is not necessarily consistent with theoretical underpinnings or the application of access regimes in other countries; and
- in practice the effectiveness of the criteria will depend critically on the *interpretation* of such key phrases as "promote competition", "uneconomical", "national significance" and "public interest".

Concluding remarks

The discussion on the theoretical rationale, and practical implementation, of access regimes indicates that there are few significant distinctions between the application of the access regime in Australia and access regimes implemented elsewhere. Nevertheless, the discussion may suggest the following potential questions regarding the wording of the criteria:

- should the scope of application of the access criteria be more tightly defined?
- does the wording of the declaration criteria most clearly reflect the intention behind the legislation and, if not, could this lead to inappropriate application of the access regime in the future?
- would it be prudent to adjust the criteria wording to better reflect this intent and the application to date?

Over the five years since their inception, however, the declaration criteria have not lead to applications of Part IIIA that are significantly different from the application of access regimes internationally. Furthermore, given the relatively short time for the interpretation of the existing criteria to have been refined, amending the declaration criteria could introduce additional problems or complications. It may, therefore, be prudent to refrain from amending the criteria until it is clear that any change will lead to improved outcomes.

1 INTRODUCTION AND BACKGROUND

1.1 Rationale for Access Regulation

For many utility and transportation industries, the delivery of final services requires the provision of a number of connected services. In many such industries, at some stage of the production process an essential facility (one that is necessary in the supply chain) exists with a cost structure that results in an industry configuration which is not fully competitive. That is, the efficient number of providers may not be sufficient to lead to competitive pressures in the market for the services of this "bottleneck" facility.

However, some activities which use the bottleneck facility as an input are potentially competitive. For example, electricity and gas retailing can be competitive components of those industries, even if transmission and transportation are not. Similarly the provision of internet access can be competitive, even if the provision of the network infrastructure has natural monopoly characteristics.

If the owner of a bottleneck facility in an industry with potentially competitive production stages is not vertically integrated, it will have little incentive not to provide access to these facilities but may charge higher prices and derive monopoly profits at the expense of consumers and economic efficiency. Where the owner of such a facility is vertically integrated there may be an additional incentive to limit competitors' access to the facility and therefore limit competition.

The rationale for regulating access to bottleneck infrastructure services is to limit a supplier's ability to extend its market power into related markets that could otherwise be more competitive, or to charge access prices that exceed the economic cost of providing those services. As an example, the objective of regulating access to gas pipelines is to encourage competition in the gas production and retail gas market.

1.2 The Review of Access Regulation in Australia

In Australia, since 1995, access to essential facilities has been regulated under Part IIIA of the Trade Practices Act. Part IIIA establishes a legislative framework to facilitate third party access to the *services of certain essential facilities of national significance* in an effort to encourage competition in related markets.

This legislation was implemented under the National Competition Policy (NCP) which was adopted by the commonwealth, state and territory governments. As part of the NCP, the governments agreed to review the national access arrangements after five years of operation.

This review is being undertaken by the Productivity Commission, which is considering:

- Clause 6 of the Competition Principles Agreement, which requires the commonwealth to establish a national access regime, explains when that regime will apply, and details the principles with which an effective state or territory access regime must comply; and
- Part IIIA of the Trade Practices Act 1974, which discharges the commonwealth's obligation under Clause 6.

The terms of reference for the inquiry direct the Productivity Commission to clarify the objectives of Clause 6 and Part IIIA, analyse their benefits and costs, and:[3]

- to consider alternative ways of achieving underlying objectives;
- to examine measures to engender greater certainty, transparency and accountability in Part IIIA decision making, and to increase flexibility and reduce complexity and costs for participants; and
- to examine the roles of various regulatory bodies.

1.3 Purpose of this Report

In undertaking this review, the Productivity Commission has called for submissions from interested parties. This report is intended to provide background material to be drawn on by the Australian Competition and Consumer Commission (ACCC) when preparing its submission for the Productivity Commission's review.

The purpose of this report is twofold:

- to describe the approach to regulation of gas, electricity, rail, airport and postal services in North America, Europe and New Zealand and compare these approaches with Australian regulation; and
- to review Part IIIA's declaration criteria and its outcomes in light of economic principles and international experience, drawing out any possible recommendations for improvements to the criteria.

1.4 Structure of this Report

Parts 2 through 7 compare the regulation of access within selected industries internationally. Specifically, Part 2 provides an *overview* and Parts 3 through 7 consider regulation in the *electricity, gas, rail, postal and airport* industries respectively.

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3 Productivity Commission (2000).

Part 8 considers the *type* of service that should be regulated on the basis of economic theory and international experience. It then considers the outcomes of declaration applications in light of these findings. Part 8 concludes by outlining some aspects of the declaration criteria that may be potential areas of focus in the Productivity Commission's review.

2 REGULATION OF ESSENTIAL FACILITIES - OVERVIEW

The following five parts of this report consider the regulation of various utility and transportation industries internationally and compare this regulation with the approach used in Australia.

The main theme to emerge from this study is that, for the most part, the approach to access regulation in Australia is consistent with that used internationally. This is particularly evident in the regulation of electricity, gas and postal services. For example:

- *Electricity* – transmission and distribution services are generally regulated within the industry. Tariffs usually require the regulator's approval. The regulator usually caps allowed revenue at a level just sufficient to cover costs. Prices have traditionally been based on a mix of postage stamp and cost based methodologies, with an increasing reliance on cost based methodologies, which may provide better allocation signals. The use of CPI-X incentive mechanisms is common.

- *Gas* – access to gas pipeline services is typically regulated. Tariffs are generally either negotiated (with arbitration by the regulator) or submitted to the regulator for approval. Most regulators impose a revenue cap and there is increasing use of CPI-X incentive mechanisms between tariff reviews.

- *Rail* – access to track facilities is typically regulated, with reliance on a mixture of negotiation and requirements for tariff approval. Where negotiation is the preferred system, prices must generally remain within a specified band based on the Baumol-Willig rule, which specifies that prices must be no lower than the marginal or avoidable cost and no higher than the standalone cost.

- *Airports* – access is typically regulated for aircraft movement services and, in some cases, ground handling services. The degree of price regulation varies, depending on the ownership structure of airports. In practice, most airports base prices for aircraft movement services on a total revenue requirement, taking into account revenue earned in other activities.

- *Postal* – postal services are generally legislated monopolies, in order to enable cross-subsidisation to support a universal service. However, most countries provide some upstream access to the monopoly network for pre-sorted mail.

3 ELECTRICITY

3.1 Overview and Comparison with Australia

In most countries, access to the use of electricity transmission and distribution facilities is regulated, with an emphasis on non-discriminatory access being provided to any potential third-party users. In most cases, utility companies are required to seek regulators' approval for proposed tariff arrangements.

The "allowed" revenue for companies tends to be capped at a level that will allow them to earn a reasonable rate of return on their investment. The basis for determining the value of the investment ranges from historic cost, as used in the US, to the use of optimised deprival value (ODV), as used in New Zealand.

A mixture of incremental/marginal cost based pricing and postage stamp pricing tends to be used, with a move towards greater use of cost based pricing as markets develop and computer modelling advances. Most regulators allow additional charges to reflect capacity constraints in order to improve pricing signals. Most regulators also use some type of inflation less productivity growth mechanism to adjust prices between reviews.

Access regulation for the electricity industry within Australia (as provided for under the National Electricity Market Access Code) is largely consistent with the type of regulation used internationally. In particular, access to both transmission and distribution services is regulated and the central features of the arrangements under the Code are:

- the regulator undertakes periodic reviews of network costs and sales forecasts to determine a revenue cap, which is based on efficient costs and assets;
- based on the revenue cap, the service provider is responsible for allocating costs amongst different services and thereby deriving a range of access prices; and
- a CPI-X (or similar) incentive mechanism is applied to the revenue cap between the five-yearly reviews.

As highlighted by the following country studies, Australia's electricity sector regulation is broadly consistent with that used in most of the countries considered.

3.2 United States of America

The US electricity industry is fragmented into companies with varying degrees of vertical integration. Access to transmission and distribution services is regulated within states by state authorities. Access to interstate transmission services is regulated by the Federal Energy Regulatory Commission (FERC).

3.2.1 Interstate transmission

In 1996, FERC issued three inter-related rules (Order 888) designed to remove impediments to competition in the wholesale bulk power marketplace and to bring more efficient, lower cost power to the nation's electricity consumers. These rules require all public interstate transmission providers to file non-discriminatory and open access transmission tariffs that contain minimum terms and conditions of service.

In 1999, FERC issued Order No. 2000, requiring the development of Regional Transmission Organizations (RTOs). The purpose of this was to address the operational and reliability issues confronting the industry, and to eliminate any residual discrimination in transmission services that may occur when the operation of the transmission system remains in the control of a vertically integrated utility. FERC's goals with respect to RTOs include the removal of remaining opportunities for discriminatory transmission practices, the improvement of market performance, and the facilitation of lighter handed regulation.

The traditional transmission pricing policy allowed service providers to recover the cost of the transmission grid on a postage stamp basis, where this cost comprises a fair rate of return on the depreciated original cost of facilities, plus operation and maintenance expenses and taxes. Transmission firms have also been permitted to charge a contribution to fixed costs (with the proviso that pricing must reflect the characteristics of the service provided) and the incremental expansion cost where there are capacity constraints.

More recently, FERC has moved away from requiring a postage stamp approach to allowing more flexible pricing systems. The rationale for the shift included the ongoing changes in the competitive environment and advances in computer modelling, which make more complex pricing systems practical to implement.

FERC now requires transmission prices to be in line with the following pricing principles (recognising that some of the principles require tradeoffs):

- *the traditional revenue requirement* - prices must be cost based, in that transmission owners are allowed to meet but not exceed their revenue requirements;
- *comparability* - access must be offered to third parties on the same or comparable terms as the transmission provider charges itself for the use of the system;
- *economic efficiency* - prices should foster efficient investment, use of the existing facilities, etc;
- *fairness* - prices should be fair and equitable; and
- *practical and easy to administer.*

Although FERC does not currently apply an incentive based pricing adjustment, such as CPI-X, it has called for performance based regulation (PBR) as part of Order No. 2000.

Box 1: Rate Cases

In the US and Canada, *rate cases* are the usual regulatory process for determining regulated revenues and tariffs for electricity and gas utilities – whenever a company wishes to change its rates it must file a rate case. The process is carried out in court as a trial-type hearing in front of an administrative law judge, or a hearing examiner. At the end of the process, the regulatory body (eg, FERC), issues an opinion which *must be based entirely on the information provided during the hearing*. The regulator's opinion usually ends the rate case unless one of the parties to the hearing believes that due process was not followed and chooses to appeal. Each state typically has a limitation on the length of time a rate case may take, although this limit varies from state to state.

There are two stages to a rate case. The first is to ascertain a rate level, which forms the allowed revenue requirement. From the rate level, the rate structure is developed, which is the final set of tariffs which the utility may charge its customers. The revenue requirement is expressed as the following formula:[4,5] $R=O+(V-D)r$

Where:
- R is the total revenue requirement
- O is the operating cost
- V is the gross value of tangible and intangible property
- D is the accrued depreciation or the tangible and reproducible property
- r is the allowed rate of return.

In the case of the US, FERC is not obliged to include all operating costs into the revenue requirement, but must consider whether the costs are 'fair and reasonable'. The rate base includes all used and useful tangible property, and an allowance for working capital. Traditionally, rate cases have been set using historic costs (ie, operating costs, revenue etc.). There has been a move towards a forward-looking basis but the majority of states still use historic costs, some use a mix of historic and forward-looking and a few (such as New York) use fully forecast costs. The rate base is multiplied by the allowed rate of return to obtain the rate level.

Once a revenue requirement has been established, a tariff model can be developed. Tariffs are typically unbundled, and calculated for each of the services provided by the company. The actual design of the tariffs will vary depending on efficiency initiatives etc.

Once tariffs have been determined in a rate case, they will apply until costs move out of line with the existing tariff structure and the company asks for a new rate case. Some tariff structure's will have an RPI-X element to the price cap which should defer the need for an early revisit to the rate case. The length of time that the tariffs stand varies across the board. Many factors, such as inflation come into play. Some states have annual reviews but in general, tariffs last varying lengths of time. Nevertheless, the start of a new price control period (and so a new rate case) requires a basic re-examination of the values of the parameters that constitute permissible revenues including the asset base.[6]

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4 Phillips, C (1993).

5 An allowance for taxes is also included, but this is a perfunctory calculation rather than a debated issue.

6 Makholm, J (1999).

3.2.2 Intrastate transmission and distribution

Regulatory jurisdictions in the US are moving away from traditional cost of service regulation toward PBR. California, Maine, Massachusetts, New York, Rhode Island, Illinois, and Oregon, among other states, have each implemented some sort of incentive based regulation for electric utilities. Furthermore, the length of PBR plans approved by state regulatory agencies is increasing over time, suggesting that regulators are becoming more comfortable with PBR. For example, in Massachusetts and Rhode Island, a 20-year PR plan was approved for a number of companies in early 2000 (with the proviso that prices can be reviewed if realised costs differ significantly from those expected).

The following discussion regarding California and Massachusetts provide examples of state-based regulation.

3.2.3 California

Full retail competition has been in place in California since 31 March 1998.[7] Access to transmission and distribution services are regulated within the state.

Transmission prices are divided into two separate charges:

- *access fees* – designed to recover the fixed costs of the existing transmission system. This includes the return on and of investment in existing assets as well as on-going operation and maintenance costs. Electricity purchasers are responsible for paying these charges; and
- *usage charges* – designed to recover the costs of congestion.

Distribution charges are set using a bottom-up approach. They include the costs of distribution wires, metering, meter reading, billing and customer services. If customers elect to receive revenue cycle services (RCS = billing, meter-ownership, meter reading, and metering service) from an alternative retail supplier, they get a credit for this in their fixed distribution charge. Credits for RCS are differentiated by customer class, and are based on an avoided cost "top-down" approach.

3.2.4 Massachusetts

From 1 March 1998, electricity customers in Massachusetts have been allowed to choose a competitive retail supplier. Network services in Massachusetts are provided by distribution companies.

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[7] The state has three major investor-owned utilities (IOUs): Pacific Gas & Electric, Southern California Edison and San Diego Gas and Electric. These three utilities serve over 75 per cent of the annual load in the state. In addition, there are government-owned municipal utilities, rural co-operatives and irrigation districts.

The Independent System Operator (ISO), called "ISO New England", offers open access to transmission facilities to all the participants of the New England Power Pool. The ISO fixes and collects a charge for the use of these facilities. The rate is derived by calculating the actual costs for building and maintaining transmission facilities.

3.3 Canada

Access issues within Canada's electricity industry are regulated at the state level.[8] Regulation in Ontario and Alberta provide two examples of the implementation of access regulation.

3.3.1 Ontario – distribution prices

The electricity industry is in the process of restructuring in preparation for the introduction of competition in the retail market. Access, and access pricing, are regulated for both electricity transmission and distribution. The price of both transmission and distribution services are regulated by the Ontario Energy Board (OEB). The OEB's role is to ensure marketplace fairness, network reliability and consumer protection. The following discussion outlines how distribution prices are set.[9]

Distribution networks are often municipal electric utilities owned by local governments (Toronto Hydro, for example). In rural Ontario, however, most distribution networks are owned by the Ontario Hydro Services Company (which also owns the transmission network). Like transmission, the distribution network must be open to all suppliers on an equitable basis.

The framework for regulating distribution prices is based on the use of a price cap performance based regulation mechanism to adjust prices over time. Distribution utilities are required to file unbundled rates, along with the utility's election for its productivity factor and earnings cap, with the OEB. In January 2000, the OEB issued a decision on PBR for electricity distribution utilities approving a price cap plan with a productivity factor of 1.5 per cent.

Unbundling the transmission/distribution costs from the commodity costs is one of the main issues in establishing the base prices. The starting premise is that existing rate to consumers appropriately recovers costs from each of the consumer classes. Allocating the cost of power to each class then yields an initial revenue requirement.

class distribution revenue requirement = class revenue – allocated power cost

8 With the exception of cross-border exports of electricity to the United States, which are regulated by the National Energy Board.

9 Ontario Energy Board (1999).

Several adjustments are then made to adjust for a market based rate of return and for any prudent and material transition costs associated with industry restructuring.

3.3.2 Alberta – transmission pricing

Alberta Power, TransAlta Utilities, Edmonton Power and Enmax Corporation own the transmission system within Alberta, but they act merely as transmission facility owners. With the introduction of a competitive market, control of these assets was transferred to the transmission administrator.

The transmission administrator manages all regulatory and financial requirements related to buying and selling transmission services, including developing transmission tariffs and schedules.

The transmission administrator is responsible for providing access to the provincial transmission system. Access is available on a non-discriminatory basis to all transmission system users who pay a common state-wide postage stamp transmission rate to the administrator. Generators are charged a location-based tariff. The administrator, in turn, pays the transmission revenue requirements of the transmission facility owners.

The administrator sets access rates to recover the costs of operating the transmission system. These are then subject to approval by the Alberta Energy and Utilities Board, the body responsible for regulating transmission tariffs.

3.4 European Union

The European Commission has issued a Directive regarding access to electricity facilities throughout the European Community.[10] This directive provides a framework for Community member states to open up part of their electricity markets to competition and addresses a number of issues, including open, non-discriminatory and transparent rules of access to electricity networks.

Under the Electricity (96/92/EC) Directive:

- either "negotiated" or "regulated" access arrangements for electricity distribution and transmission systems are allowed;
- access must be granted to eligible customers and access arrangements must not discriminate between system users, particularly in favour of subsidiaries or shareholders of the system operator. Prices must be based on objective, transparent and non-discriminatory criteria;

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[10] European Commission (1997).

- with negotiated access, parties are obliged to negotiate access in good faith, on the basis of voluntary commercial agreements. An indicative/average range of prices must be published. Under regulated access, eligible customers are given a right to access on published tariff terms; and
- during the transitional period, EU countries can apply for derogations from the terms of the directives, where agreements signed before the implementation of the directives would be undermined.

Network operators can refuse access if they have insufficient capacity, or if granting access would prevent them fulfilling their public service obligations (which must be clearly defined, transparent, non-discriminatory, and verifiable).

Since 1998, the European Commission has sponsored a forum of electricity regulators from the Member States, known as the Council of European Electricity Regulators (CEER). The CEER has been charged with promoting cross-border trade (within the EU). To date, the CEER has suggested that the proportion of transmission charges levied on generation should be harmonised (at around 25%), to remove biases between power stations in different Member States. The CEER has also considered auctions of cross-border transmission capacity, and a proposal for compensation payments between TSOs for the costs of congestion caused by long-distance ("transit") power flows from one state to another across an intervening state.

3.5 England and Wales

Access to transmission and distribution networks within England and Wales are regulated by the Office of Gas and Electricity Markets (OFGEM).

3.5.1 Transmission

The National Grid Company (NGC) is the owner and sole operator of all high voltage lines (275kV and 400kV). It has no generation, distribution or retail interests.

For transmission use of system (TUOS) charges, *investment cost related pricing* (ICRP) was introduced in 1993/94. ICRP was developed to achieve a number of objectives, including revenue recovery, locational signalling for generation and demand, simplicity, transparency, and equity. The main steps in the methodology are:

- a model simulates the peak-time flow of power from generation to demand, over the national grid assuming that generation capacity is scaled (pro rata) to match the level of demand;
- the model simulates power flow from each point of injection (generation) to every point of withdrawal (load) using the minimum distance route;

- NGC then identifies the associated change to net flows (positive or negative) compared with the peak-time flow;
- NGC assigns a simple investment cost per MW-km to these changes in net flows to determine the (positive or negative) *incremental cost* of injections at each point of connection – the incremental cost of withdrawals is the negative of the cost for injections; and
- nodes with similar costs are grouped into zones and charges are based on an average of the costs in each zone.

Charges based on the calculation of incremental costs would only recover around 25 per cent of NGC's allowed revenues, so each zonal charge is scaled up by a flat rate to ensure that total charges meet the revenue requirement. Around two thirds of the revenue is recovered from suppliers (ie, retailers) and one third from generation. Generators pay use of system charges based on their registered capacity (in kW).

Transmission access tariffs are adjusted on an RPI-X basis with a regulatory review every three to four years.

3.5.2 Distribution

In addition to paying for access to the transmission system, retailers must also pay an access tariff for use of the distribution networks. In England and Wales there are 12 regional electricity companies, which provide distribution services within franchise areas. These companies set access tariffs to retailers using a bottom-up approach which is then scaled to meet the companies' revenue requirements.

The distribution companies use a model of their system to allocate network costs between different customer categories. Costs are attributed to facilities on the basis of replacement costs, scaled as appropriate to ensure that total charges match the distribution business's allowed revenue. Customer-related costs, such as metering and billing, are accounted for separately.

Distribution access tariffs are subject to an RPI-X control in the form of a tariff basket, with a regulatory review every four to five years.

3.6 New Zealand

New Zealand (NZ) takes a "light-handed" approach to utility regulation. Its stated aim is to open up to competition the components of former statutory monopolies which are potentially contestable, and to subject the non-contestable components to a disclosure regime, supported by the threat of price regulation. This has resulted in very limited regulation of the electricity industry.

However, because of concerns that recent reforms have not yielded the expected benefits, the industry was the subject of a Ministerial inquiry during 2000. The government released a policy statement following the inquiry's report, proposing potential increases in regulation.

3.6.1 The current regulatory approach

Transpower, a state owned enterprise, owns and operates the national transmission grid. NZ introduced direct access as part of its industry restructuring in 1994. Transpower is subject to generic legislation, including the Commerce Act and the Resource Management Act but is not subject to specific regulation.

As a state owned enterprise, Transpower is required by its statement of corporate intent to price in accordance with the government's economic policy for electricity transmission (issued under section 26 of the Commerce Act). This statement emphasises economic efficiency and requires that fixed costs are allocated in a way that minimises distortions to grid users' investment decisions.

The underlying philosophy in NZ transmission tariff setting is that the recovery of sunk costs should not distort the pricing signals for future network usage and investment. Transpower's asset costs are therefore recovered through:

- a connection charge based on the optimised deprival value (ODV) of connection assets;
- an interconnection charge based on the ODV of the core interconnected grid, charged to offtake customers - this is calculated by dividing the interconnection revenue requirement by the sum of the estimated customer point of supply capacities; and
- a high voltage direct current (HVDC) charge based on the ODV of the HVDC inter-island link, charged to South Island generators.

Specific tariff rates are not published by Transpower, however the company is required to publish the methodology by which charges are calculated and information relating to the revenue requirement.

Distribution charges are not currently regulated, although distribution companies are required to disclose their rates of return.

3.6.2 The electricity industry inquiry

In February 2000, the Minister of Energy announced a Ministerial inquiry to examine the electricity industry. The purpose of the inquiry was to evaluate whether the current regulatory regime meets the government's objectives. In particular, there was concern that the past changes to the industry had not delivered sufficient benefits to consumers.

The final report of the inquiry was released in June and the government released its policy statement in October. In its statement, the government said that it favours industry solutions where possible and wishes to see further evolution of self-regulatory arrangements, but is prepared to use regulatory solutions where necessary.

The main policy changes proposed include:

- *the Electricity Governance Board.* The Board will be established to replace existing bodies[11] and govern the industry. The Board's constitution will be established by the industry, which will also appoint Board members (the majority of whom must be independent, along with the chair) in consultation with the Minister of Energy. Legislation will ensure that the Government can direct the Board if necessary.

  Among other roles, the Board will be required to approve Transpower's pricing methodology. The Commerce Commission is able to set the pricing methodology if the two parties cannot agree. The Board will also be required to establish rules governing the terms and conditions of access to distribution services and to formulate non-binding "model" pricing methodologies for distribution prices that are consistent with these rules;

- *potential price regulation for line businesses.* New legislation will be implemented to provide the Commerce Commission with the power to put Transpower and individual distribution companies under price control if they breach thresholds or criteria determined by the Commission. The Commission will be able to use price control techniques such as CPI-X;

- *asset valuation review.* The Commerce Commission will be required to undertake a re-calibration of asset values for electricity line and determine its preferred asset valuation methodology;

- *information disclosure.* Responsibility for information disclosure on electricity transmission and distribution will be transferred to the Commerce Commission;

- *electricity trusts.* Legislation will be introduced to bring the rules governing electricity trusts' information disclosure and reporting requirements in line with other market participants.

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[11] The Board will replace three existing institutions: the New Zealand Electricity Market, the Metering and Reconciliation Information Agreement and the Multilateral Agreement on Common Quality Standards.

4 GAS

4.1 Overview and Comparison with Australia

Access regulation within the gas industry in Australia is similar to that used internationally. In general, access is regulated to the pipeline services and, sometimes, to the storage facility services.

The US and Canada each have systems of national level regulation for interstate/interprovince pipelines and state/province level regulation for local infrastructure. Both countries rely on a formal process of rate hearings for determining regulated revenue requirements and allow the businesses to set tariffs within these boundaries. Canada, however, has a first objective of negotiated settlement where possible, turning to rate cases where negotiation fails. The US relies on rate cases from the outset.

Great Britain has only one monopoly transporter of gas, Transco, which is regulated via an RPI-X control on allowed revenue. Transco operates on an 'open access' policy.

Consistent with other industries in NZ, there is no formal regulation of the gas industry, other than a general competition oversight via the Commerce Act. Whilst the restrictions of the Commerce Act are similar to those implied by the Trade Practices Act (TPA) in Australia, the NZ industry is less regulated.

The institutional arrangements for the regulation of the gas sector in Australia are most similar to the arrangements in North America. Gas pipelines in Australia can be regulated at either the state/territory level if the relevant access regime is 'certified effective', or, at the national level, if a pipeline owner has a voluntary access undertaking accepted under part IIIA of the TPA, or if a service is 'declared' as an essential facility under the TPA.

For example, in Australia all declared pipelines are required to draw up an Access Arrangement in accordance with the Gas Code.[12] The Gas Code establishes a national access regime for natural gas pipeline systems in Australia and applies to both transmission and distribution pipelines.[13] Pipelines which have been declared, and as such are subject to the provisions of the Gas Code, are termed "covered" pipelines.

The Gas Code requires service providers (ie, pipeline operators) of a pipeline which has been declared to submit an access arrangement to the relevant regulator for approval. An access arrangement is a statement of the policies and the basic terms and conditions which apply to third party access to a covered pipeline. The Gas Code sets out the minimum

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12 Annex D of The Council of Australian Governments 'Natural Gas Pipelines Access Agreement' is the 'National Third Party Access Code for Natural Gas Pipeline Systems' (the Gas Code).

13 Council of Australian Governments (COAG) (November 1997) .

requirements for an access arrangement, including the basis on which reference tariffs for certain reference services are to be calculated. The service provider and users are free to agree to terms and conditions which differ from the access arrangement.[14] In contrast, a voluntary access undertaking is less onerous on the pipeline operator. At present, no pipelines in Australia have voluntary access undertakings.

4.2 USA

FERC regulates interstate transmission pipelines. Interstate pipelines face a degree of competition owing to the 'grid' of pipelines developed in the US which allows shippers some element of choice in transport route. Interstate pipeline owners are required to offer 'open access' to their pipeline network.

Public Utility Commissions regulate state distribution companies' distribution and (to a limited extent) storage activities. Most storage is owned and controlled by interstate pipeline companies or gas producers, and is now generally unregulated. Distributors purchase pipeline transport services and gas separately.

Rates are set on the basis of regulated permissible revenue. The utility constructs its permissible revenue such that all expenses are covered and an adequate return on equity is earned. Return on equity is defined in nominal pre-tax terms.

Most economic regulation within the US gas industry has traditionally been based on the 'cost-of-service' model. More recently there has been a move toward PBR of gas transmission and distribution prices. The general trend is now shifting from cost-of-service to PBR, for example, California, Massachusetts, and Illinois have all implemented some kind of PBR plans for gas utilities.

4.3 Canada

The National Energy Board (NEB) is the regulator for inter-provincial and international pipelines. Each province also has their own local energy regulator which regulates infrastructure contained within the borders of each province.[15]

The NEB regulates transmission pipelines. Province regulators, such as the Alberta Energy and Utilities Board and the Ontario Energy Board regulate rates for both pipelines and storage infrastructure which lie entirely within the borders of their province. Regulators' authorisation is also required for any proposed construction of pipelines and related facilities within their jurisdiction before such development may be undertaken.

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14 With the exception of the Gas Code's requirements relating to queuing policies, which define the priority that prospective users have to negotiate for specific capacity.

15 NEB website, www.neb.gc.ca. Primary information source on this site was National Energy Board (August 2000).

The NEB requires that pipeline companies operate according to the principle of *open access.* This means that all parties must have access to transportation on a non-discriminatory basis. In practice, tolls for services provided under similar circumstances and conditions with respect to all traffic of the same description, carried over the same route, must be the same for all customers. The NEB conducts compliance audits as part of its monitoring responsibility.

The NEB determines revenue requirements for the pipeline owner/operator. The revenue requirement covers the cost of providing services, including operating and maintenance expenses, depreciation, taxes and return on rate base. The rate base is the amount of investment on which a return is authorised to be earned and the rate of return on this base is set by the NEB. The pipeline owner must then set the tariff rates. For example, in the case of the Maritimes and Northeast Pipeline (MNP) decision, August 2000, MNP were directed to set tolls in accordance with NEB's decision. MNP were then required to submit their proposed tolls for approval with the NEB.

The NEB holds public hearings when deciding on major toll applications. For smaller businesses the NEB encourages the relevant businesses to negotiate their own terms and conditions. If this negotiation breaks down then the NEB will accept a complaint from any of the parties and intervene. All negotiated settlements must be submitted to the NEB for approval.

The NEB has started to introduce incentive regulation to inter-provincial pipelines. In June 1996, the NEB approved an "incentive cost envelope" as a part of the calculation of pipeline tolls for TransCanada PipeLines Limited (TCPL). Similarly, in April 1997, following the precedent it set by approving TCPL's plan, the NEB approved a transmission PBR plan for Trans Quebec & Maritimes Pipeline, Inc. (TQM). An incentive cost envelope was created as a partial determinant of TQM's net revenue requirement, for the purpose of calculating transportation tolls.

Each province has its own regulatory system and legislation, and as such the details of their approach to each of these issues tends to vary. The following discussions provide examples of provincial regulation.

4.3.1 Alberta

In Alberta, the most recent decision of the Alberta Energy and Utilities Board (AEUB) broke from a tradition of postage stamp rates for transporting gas and moved to receipt point specific rates. Receipt point specific rates are based on distance and pipeline diameter and are intended to be more cost reflective.

Parties are encouraged to agree on a negotiated settlement. Where agreement is reached, the pipeline company proposes negotiated tariffs to the AEUB for approval. The tariffs should be developed in accordance with the rate design criteria and principles set down by the AEUB. Where the parties fail to agree then the matter will be referred to the AEUB for a

public hearing. The AEUB will then determine the appropriate revenue requirement. Over the past few years most tariffs have been agreed by negotiated settlement.

4.3.2 Ontario

In Ontario, the Ontario Energy Board (OEB) is beginning to approve PBR plans for gas utilities. Consumers' Gas Company, Ltd (also known as Enbridge Consumers Gas) filed a PBR plan that was approved by the OEB on April 22, 1999. It is a partial PBR plan; in that only operating and maintenance expenses are regulated by PBR. The OEB pushed for a full PBR plan, but accepted this plan as a step in the transition process to full PBR. Capital remains under traditional cost-of-service regulation.

4.3.3 British Columbia

British Columbia is also beginning to implement PBR. In 1994, a partial operating and maintenance PBR plan was approved for British Columbia Gas. This plan became comprehensive in 1998, for the years 1998-2002. This plan has been approved on a trial basis and is under relatively close scrutiny.

4.4 Great Britain

OFGEM is the regulator for the gas industry in Great Britain. Lattice (previously Transco, but recently renamed following a de-merger from BG Group plc) is the transmission and distribution business in Great Britain. It also has some storage facilities. BG Storage, which is part of BG Group also owns storage facilities.

OFGEM regulates both the transmission and distribution network and requires Transco to offer *open access* to their pipeline network. Storage is largely a competitive business with no detailed regulation of charges but OFGEM does oversee auctions for storage injections and withdrawal capacity, and storage space.

The Utilities Act 2000 and the Gas Act 1986 (as amended in 1995) allows OFGEM to set guaranteed and overall performance standards for Transco. OFGEM can issue enforcement orders under the Gas Act to address poor performance by Transco and set financial penalties for overall poor standards. Customers also have the right to compensation where Transco fails to meet guaranteed standards.

Currently Transco is regulated with a single price control which covers almost all of its main gas transportation activities. The current price control is an RPI-X form of price control. OFGEM is currently considering introducing separate price controls for Transco's various functions including system operation and ownership of gas transportation assets. It is consulting the industry on the best means for separating metering and meter reading from Transco, thereby creating new competitive businesses. It is also considering further levels of disaggregation such as splitting transport into national transmission and local distribution

zones. OFGEM is also currently looking at what forms of performance incentives could be included in the price control to incentivise Transco's service performance. Service standards and overall performance targets are taken into consideration when setting the price control for Transco.

Access to the main storage facilities (salt cavities and offshore depleted gas fields) is secured by auctioning capacity rights. Storage owners have the right to set reserve prices when auctioning capacity. OFGEM believes that the reserve price should be set at avoidable cost (however, this is not the methodology currently used).

4.5 European Union

The Gas Market Directive, 98/30/EC, adopted in June 1998 is concerned with the operation of the *internal gas market*. The gas market Directive should have been transposed into all member states legislation by 10 August 2000. At present only 6 Member States out of 15 have actually passed and implemented the necessary primary legislation (Belgium, Italy, Spain, the Netherlands, Ireland and the UK). Of the remaining nine, three have applied for or been granted a derogation from the Gas Directive for a period (Greece, Portugal and Finland). The rest have legislation at various stages of preparation (Austria, France, Germany, Denmark, Sweden and Luxembourg).

Regulated services: The directive establishes common rules on the storage, transmission, supply and distribution of natural gas. It defines very broad rules on the organisation and functioning of the natural gas sector including market access.

General approach to setting terms and conditions of service and the basis for setting prices:

- Access to the system may be organised in member states in one of two ways:
- negotiated access on the basis of publication of the main commercial conditions for use of the system; and
- regulated access on the basis of tariffs and/or other published clauses and obligations for use of the system.

Access to the system may be refused on the grounds of:

- lack of capacity;
- public service obligations; and
- economic and financial difficulties with take-or-pay contracts (but only for a short period and subject to approval by the EU Commission).

4.6 New Zealand

Consistent with the rest of the utility sector in NZ, the gas industry has no formal regulator (although the Commerce Commission does have staff that deal with energy issues).

Principles for access to NZ's transmission and distribution network are guided by the *voluntary* "New Zealand Gas Pipeline Access Code". This access code defines a standard of behaviour and disclosure in respect of access to gas transport systems. The code is not a legally binding document. Access to the transmission and distribution system are on the basis of common carriage contracts between the pipeline owner/operator and any third party wishing access to the network.

Under the Gas (Information Disclosure) Regulations 1997, pipeline owners have public information disclosure requirements. These requirements are currently being tightened up with the introduction of mandatory avoidable cost allocation methodology and a mandatory optimised deprival valuation (ODV) methodology These changes are intended to prevent pipeline owners concealing monopoly profits and to enhance comparisons between pipelines. Other changes include disclosure of asset management planning information for gas networks, and improvements in the reliability performance information.

Retailers and producers are not regulated in any manner (except according to the sections of the Commerce Act that would deal with anticompetitive practices).

Pricing for all sectors of the gas industry is on the basis of private commercial contracts with no obligation on businesses to post prices. However, the information disclosure requirements for pipeline owners are also being increased in this area. Pipeline owners are obliged to disclose the methodology used to set charges for gas distribution and transmission services, the current revisions are intended to improve the level of detail disclosed.

Other changes to the information disclosure requirements reflect increasing competition in the gas industry in New Zealand with an end to price disclosure for NGC's wholesale contracts. Likewise, pipeline owners no longer have to disclose financial statements covering their contestable gas wholesaling and retailing businesses.

Whilst the need for greater regulatory oversight is being discussed in gas, there are no formal moves to bring this into effect other than the tightening up of the information disclosure requirements. Failure to comply with the information disclosure requirements can lead to prosecution and penalties under the Gas Act 1992.

5 RAIL

5.1 Overview and Comparison with Australia

The regulation of access pricing to rail facilities varies across the countries considered. For example, access is not explicitly encouraged in NZ, whereas non-discriminatory access is a requirement in the US and the UK.

For all services in the US and for freight services in the UK, regulators rely on a negotiation/arbitration process with the requirement that prices be at least as high as some measure of marginal or avoidable cost but no higher than the standalone cost.

Allowing prices to be negotiated within a price band allows the rail owner to price discriminate between various users. This is particularly appropriate in the rail industry where different users are likely to attach significantly different values to the use of the infrastructure. The ability to charge different prices is important because a very high proportion of rail infrastructure costs are fixed, at least in the short to medium term. Differential pricing allows infrastructure providers to seek contributions to fixed costs from high value users while still accepting onto the network lower value users who can't afford to pay much more than marginal cost.

In addition to the negotiation bands for freight services, the UK Rail Regulator sets the prices for franchised passenger operators at five yearly reviews and sets a revenue limit that allows Railtrack to just cover its costs. This limits Railtrack's ability to extract monopoly profits.

The regulation of access to rail facilities in Australia is consistent with these approaches. Access to rail services is regulated on a state or territory basis, with access regimes requiring certification by the NCC under the process laid out under the Competition Principles Agreement. Rail access regimes established to date are consistent with the negotiation/ arbitration principle, with floor and ceiling limits set consistent with those applied in the US. In addition, regimes approved by the NCC have included an upper limit on total revenue that will just allow the rail owner to recover all of its costs.

For example, *the New South Wales rail access regime* uses a negotiation and arbitration process with a requirement for prices to be at least as high as the direct or incremental provision costs and no higher than the stand-alone cost *for any combination of line sections within that network*. Further, total revenue must not exceed the stand alone economic costs of the entire New South Wales rail network.

5.2 United States

The railways in the US are vertically integrated and separated horizontally by function and geography. The rail industry is characterised by profitable privately owned freight railways,

an unprofitable publicly owned intercity passenger service, and locally financed commuter networks.

Access to rail infrastructure is arranged through the use of shared infrastructure and contractual arrangements. There are a number of contractual arrangements which provide rail companies with limited access to facilities owned by other railways. These arrangements, however, do not introduce competition into all segments of the market and there is growing concern about bottleneck facilities.[16]

The Surface Transportation Board supervises access and antitrust issues. The law requires that any access arrangements be non-discriminatory. Where contracts have not been upheld or the conditions (including price) are perceived to be discriminatory they can be appealed to the Surface Transportation Board.

The Board allows full pricing freedom to railroads, subject to:

- a floor of directly variable cost; and
- a ceiling of stand-alone cost.

5.3 Canada

The railways in Canada are vertically integrated and separated horizontally by function. Canadian railways are characterised by profitable freight operations, unprofitable intercity passenger railways and locally funded commuter rail services. Canadian railways are dominated by a long-standing duopoly between Canadian National and Canadian Pacific, which are primarily freight railways. In addition there are approximately 23 other (mainly small) rail operators. In 1997, VIA Rail was created to manage passenger rail services previously provided by Canadian National and Canadian Pacific. VIA is owned, operated and directly subsidised by the Canadian government.

Economic regulation is carried out by the Canadian Transportation Agency (CTA). In the absence of a negotiated agreement, a railway company can apply to the Agency for "running rights" to use or operate its trains over infrastructure owned by another federal railway company.

The CTA can also fix the amount to be paid for access if a fee cannot be agreed between the parties. To date, the CTA has received only four such applications for running rights. One of these applications was withdrawn (as the parties reached agreement) and the other three were rejected - in two cases because they did not meet the requirements of the Act. In the third case, in which VIA Rail sought use of part of a Canadian Pacific maintenance facility,

[16] Jahanshahi (1998).

the Agency decided instead that Canadian Pacific should continue providing maintenance services to VIA Rail.

5.4 Europe

Since 1990, the EC has adopted a series of directives designed to liberalise rail services. The first directive (directive 91/440/EEC) specified that access to track services should be provided on a non-discriminatory basis for two types of international services: those provided by international groupings of train operators; and combined transport (ie multimodal) freight services. However, there is no general right of access for services not falling into either of these categories. Furthermore, the directive excludes urban and regional services. Although directive 91/440/EEC is limited in scope, it requires at least an accounting separation between infrastructure provision and train operation.

In addition, the EC has two other directives of relevance to structural reform and access. Directive 95/18/EC describes conditions on the licensing of railway undertakings and establishes the need for a separate access unit. Directive 95/19/EC relates to the allocation of infrastructure and the charging of access fees. A revision to these directives is currently being considered by the European Commission and Parliament.

Some member states have decided to go beyond the Directives and have established separate bodies for infrastructure management and transport operations, either within a single undertaking or in a separate undertaking. Some states have also established wider access rights than those in the Directive and have introduced competitive tendering and contracting. Despite this, there has been limited opening of the market and the incumbent rail operator remains dominant in most member states.

In all EC member states except the UK, rail infrastructure providers are public sector bodies and access charges are generally set by agreement between the infrastructure provider and the relevant government department. The form of access charging adopted by different member states is heavily influenced by the financial constraints placed on infrastructure providers. In the Scandinavian countries, where governments have appeared willing to fund the majority of rail infrastructure costs, access charges have generally been set at, or close to, short run marginal cost. In other countries (including France, Germany and Austria) governments have required a higher degree of cost recovery and this has resulted in charges significantly above short run marginal cost, with only a limited degree of variation between different market segments. The unique system of charging adopted in the UK is described below.

5.5 Great Britain

The Rail Regulator is the independent agency responsible for supervising access to tracks and enforcing domestic competition policy. It was established to protect the public interest by carrying out economic regulation of the rail industry.

Access to rail infrastructure is provided through agreements between the private sector infrastructure provider (Railtrack) and private sector train operators. All track access contracts must be approved by the Rail Regulator, who can also determine the terms and conditions of access if Railtrack and the relevant train operator cannot reach agreement. The fact that all access contracts must be approved by the Rail Regulator allows it to specify in advance certain terms and conditions that must be included in contracts, such as the level and structure of access charges to be included in contracts for franchised passenger services.

The access charges are set to recover a revenue requirement, which allows Railtrack to meet all of its costs, including a rate of return on the asset base. This is adjusted between reviews on the basis of inflation less a productivity growth measure.

The present structure of access charges for franchised passenger services comprises low variable charges (covering track wear and tear and electricity charges for traction) and a fixed charge. The average split of charges in the original Track Access Agreements was 91% fixed and 9% variable. The 2000 review of pricing has recommended a higher proportion of variable charges, given more recent evidence which suggests the original charges were actually lower than short run marginal costs. It has also recommended that access prices include a capacity charge to recover congestion costs and also a volume incentive to give Railtrack an incentive to attract more traffic onto its network. To reduce the risk that these new charges will create disincentives for train operators, the Rail Regulator has decided that half of the capacity charge and the entire volume incentive should be recovered through Railtrack's overall level of charges (by being added to the regulatory asset base), rather than higher charges for specific operators.

Freight access charges are individually negotiated with each operator. The regulator requires that prices:

- be at least as high as the avoidable cost of providing access;
- be less than the standalone cost;
- not be such that they risk significantly distorting competition between freight operators or users; and
- reflect the value of access to users.

The Rail Regulator is currently reviewing the charging framework for freight services, and has indicated that his current view is that the charging framework should become more deterministic and less reliant on negotiations between Railtrack and train operators.

5.6 New Zealand

The railways in NZ are horizontally and vertically integrated. They are characterised by private monopoly operations of rail services and public ownership of the right of way. In

July 1993, New Zealand Rail was sold to a NZ-US consortium which now operates as Tranz Rail. Tranz Rail has entered into a long term lease with the NZ government for use of the track.

The control of access is defined in the lease between Tranz Rail and the NZ government. When freight and passenger traffic fall below critical levels, the NZ government may allow access to other operators. Thus access to tracks by other operators is not encouraged if minimum volumes are met by Tranz Rail. This reflects the belief of the NZ government that competition from road and shipping is enough to ensure efficiency.

There is no specific rail regulator in NZ. Disputes between potential entrants and Tranz Rail are subject to arbitration by the competition authority. In addition, the NZ Commerce Commission has the power to investigate the abuse of market power.

6 AIRPORTS

6.1 Overview

Airports provide a range of services, including:

- *aircraft movement services* – take off and landing facilities, aircraft parking, visual navigation, etc;
- *terminal services* – passenger lounges, etc;
- *ground handling services* – services required for aircraft cleaning, loading, catering, etc; and
- *property* – including retail leases, buildings, office space, etc.

Some of these services are potentially competitive, while others have natural monopoly characteristics. In particular, airports generally have a geographical monopoly for aircraft movement services and, in the countries considered, are required to provide non-discriminatory access to these services. In most situations where access is capacity constrained, slot allocation mechanisms are used to regulate access. In addition, bilateral and multi-lateral agreements establish access requirements for foreign airlines. For example, Article 15 of the 1944 Chicago Convention on International Civil aviation provides for non-discriminatory pricing in that a state must not impose higher charges for aircraft of another state.

That said, the degree of price regulation for these services varies between countries. At one end of the spectrum, NZ's light-handed approach results in airports being able to charge prices as they see fit (although this must be in consultation with airlines and this policy is currently under review). In contrast, price caps are applied to major UK airports.

The other aspect of airport services to which access is most often regulated is ground handling services. This is particularly evident in the EU Directives.

Within this context, the regulation of airport services in Australia is consistent with that used in other countries, in particular the requirement that access to aircraft movement services be provided on a non-discriminatory basis and the declaration of (some) ground handling services at Sydney and Melbourne Airports. In addition, the method of setting prices using the "single-till" approach (discussed below) is consistent with price setting in the UK and the US (although the appropriateness of the single till approach in the UK is currently subject to a review – see Section 6.5).

6.2 The United States

In the US, airports are mostly owned and operated by public sector agencies, such as the New York Port Authority, which set airport charges to recover residual airport costs after taking account of revenues from commercial and other activities. This is commonly referred to as the *single till* approach.

Airports are expected to provide access to landing and take-off services to airlines on a non-discriminatory basis. Where access availability is limited, access is regulated through a *slot* system. In particular, access to landing and take-off rights at congested airports (JF Kennedy (New York City), La Guardia (New York City), O'Hare (Chicago), and National (Washington))is regulated under the High Density Traffic Airports Rule (HDR) 1968. Under the HDR, carriers wishing to land or take off during restricted periods must obtain the *privilege* to do so, referred to as a *slot*.

Present regulations allow slot holders to sell, trade or lease their domestic slots and permit slots to be held by any party meeting certain Federal Aviation Authority (FAA) qualifications. The FAA rules provide for lotteries to distribute the slots that have been recalled for non-use, voluntarily transferred back to it, or are otherwise not currently allocated when a sufficient number of slots become available. Both incumbent and new entrant carriers may enter these lotteries. Within the lottery 25 per cent of the slots (but no fewer than two) are set aside for new entrant carriers.

One criticism of this slot system is that it may be difficult for new entrants to obtain a sufficient package of slots to be competitive in the market. This could stem from either the high transaction costs of searching and purchasing suitable available slots or from anti-competitive practices by incumbents. There is some concern that the new entrant's problem may be exacerbated when the proposed service is one in direct competition with an existing incumbent with market power.

6.3 Canada

There are some 726 airports in Canada certified by Transport Canada for operation. Some are privately owned but the vast majority are owned by municipalities, provincial and territorial governments, or the by federal government, some of whose airports are now operated by local airport authorities.

Airports are required to provide non-discriminatory access to their services and, where access is constrained (currently only at Lester B. Pearson International Airport), access is regulated under a slot system. Slot allocation decisions are made by an impartial slot co-ordinator. Slot swaps are encouraged but there is no monetary or non-monetary market for existing slots in Canada.

In Canada, airport charges are no longer set by a regulator, except to the extent that each entity establishing charges is required to adhere to Canada's international obligations and airport charges must be competitive and non-discriminatory. Local accountability and status as not-for-profit entities are expected to provide an appropriate framework for pricing and consultation with users without regulatory oversight. However, appeals respecting the process of consultation on user charges can be raised with the Canadian Transportation Agency.

6.4 European Union

European Union legislation covers slot allocation and ground handling. Furthermore, there is currently a draft directive regarding airport charges, although these are not currently regulated.

In the European Community, regulation 95/93 defines a procedure for airport slot allocation.[17]

Regarding access to provide ground handling services, directive 96/67 is intended to liberalise access to both land-side and airside handling at EU airports with more than 1 million annual passengers.

On the airside, directive 96/97 states that from the 1/1/99 airports with more than three million passengers a year, cannot limit the number of third-party handlers without the permission of the relevant member state's authority (in some cases this may be the national Civil Aviation Authority, in others this role may be subsumed within the Ministry of Transport). From the 1/1/2001 this rule is extended to include airports with between two and three million annual passengers. Also on the airside, from the 1/1/1998 airports with more than one million annual passengers cannot limit the number of self-handlers without the permission of the relevant national authority. Exemptions to these rules (ie, an airport only having one handler) can only be provided by the European Commission.

6.5 United Kingdom

In the UK, airports must provide access to their services on a non-discriminatory basis. Similar to the US and Canada and under the EU directives, where access is constrained it is regulated through a slot allocation system. In the UK, the Airport Co-ordination Limited (ACL) acts as the slot co-ordinator and is jointly funded by the British Airports Authority and airlines. ACL serves 13 UK airports and Dublin airport.

The European Council regulation 95/93 (discussed above), requires 50 per cent of the available slots to be allocated to "new entrants". This has the effect of spreading slots very

[17] OECD (1998).

thinly amongst a large number of airlines and makes it difficult for an airline to enter at a high daily frequency level, although it is possible to enhance frequency over time. Slot swapping allows for mutually advantageous trades and has been an important mechanism in allowing airlines to obtain slots at the times appropriate to operate to their chosen destinations or to provide a regularly timed high frequency service.

Although in the past airlines have been unable to sell slots, in 1999 the UK High Court ruled[18] that slots could be freely exchanged and that an accompanying money payment did not convert the exchange into a sale. Although the impact of this decision has not yet become clear, it may lead the way towards monetary trading arrangements.

Under the Airports Act 1986, the Civil Aviation Authority (CAA) regulates airport charges at Heathrow, Gatwick, Stansted and Manchester Airports. Price caps for these airports have traditionally been expressed as the maximum revenue yield per passenger from airport charges, and the airport operator is able to re-balance charges within the price cap.

The CAA has recently begun the third quinquennial review of airport charges. The review is expected to be more wide-ranging than in the past, including a fundamental review of the "single till" basis for regulation. In December 2001 the CAA will publish a final report and recommendations to the UK Competition Commission, who will report back to the CAA in mid-2002. In October 2002 the CAA will announce a final decision on price caps that will take effect in April 2003.

Airport charges at other airports are not directly regulated. Instead, the CAA is able, under Section 41 of the Airports Act and the Airports (Northern Ireland) Order 1994, to investigate the conduct of smaller airports. If it finds that the airport operator is unreasonably discriminating between users, unfairly exploiting its bargaining position or engaging in predatory pricing, it can impose conditions to remedy the situation. Alternatively, provisions can be made under Section 2 of the 1998 Competition Act.

6.6 New Zealand

Much of NZ's airport infrastructure was developed and originally operated by government owned entities. Over the past fifteen years, however, the transport sector has been systematically deregulated and legislative barriers to competition have been removed. NZ's three major international airports and a number of provincial airports have been restructured as limited liability companies. In 1998, Auckland and Wellington International Airports and a number of provincial airports were sold.

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18 This was in a case brought by the Guernsey Transport board and relating to the alleged sale of slots at Heathrow by Air UK to British Airways.

In line with NZ's "light-handed" approach to regulation, access to services is addressed under the Commerce Act rather than through industry specific regulation. In particular, section 36 of the Commerce Act has generally been interpreted by the Courts as requiring network owners to provide access where it is technically and commercially feasible to do so. This Act prevents companies from using any dominant market positions for the purpose of:

- restricting the entry of any person into that or any other market;
- preventing or deterring any person from engaging in competitive conduct in that or in any other markets; or
- eliminating any person from that or any market.

In addition to the general competition requirements, under the Airport Authorities Act 1966 airports are expected to operate as *commercial undertakings* and *after consultation with airlines may charge and set fees, charges and dues as they from time to time think fit.* Airports are obliged to avoid reliance on monopoly positions to formulate and levy charges or for the purposes of making or implementing pricing decisions.

The requirement to *consult* with airlines has been the basis for most legal cases regarding airport pricing.[19] The Appeal Court decision in *Wellington International Airport Ltd v Air New Zealand* (1993), demonstrated that consultation places a considerable responsibility on airport companies and requires more than an airport just informing the parties being consulted. The court described consultation in the following way:[20]

> "If the party having the power to make a decision after consultation holds meetings with the parties it is required to consult, provides those parties with relevant information and with such further information as they request, enters the meetings with an open mind, takes due notice of what is said and waits until they have had their say before making a decision, then the decision is properly described as having been made after consultation."

If airlines do not consider airports have properly consulted prior to implementing price increases, they can serve legal proceedings under Section 4(2) of the Airport Authorities Act to have the court declare the prices to be invalid. If this is the outcome, airports must reimburse airlines for any price differential paid. It is reasonably typical in the industry for airlines to take this course of action after the announcement of price increases.

For example, in October 2000 Air New Zealand served legal proceedings on Auckland International Airport over the company's increased landing fees. The Airport announced three annual increases totalling 19.4 per cent with the first, of 8.5 per cent, taking effect from

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19 Airlines have also challenged airports' asset valuation methodologies.

20 Huse, D (1996).

September 2000. The proceedings have been filed on the basis that Auckland International Airport failed to properly consult and seek to have the price increases declared invalid. Also on the basis of the Airport's alleged failure to properly consult, Air New Zealand is additionally seeking partial refund of landing charges it has been paying under protest since November 1999.

Because of concerns that the existing framework may not be satisfactorily protecting airlines from airports' use of monopoly power, the Minister of Commerce has requested the Commerce Commission to review whether the prices of airfield activities should be controlled for any of the three major airports. Section 53 of the Commerce Act provides for price controls to be introduced over goods and services if the Minister is satisfied that:

- "[g]oods or services to which the recommendation relates are or will be supplied or acquired in a market in which competition is limited or is likely to be lessened; and
- [i]t is necessary or desirable for the prices of those goods or services to be controlled in accordance with this Act in the interests of users, or consumers, or, as the case may be, of suppliers."

The Minister has also requested the Commerce Commission to address how any such price controls should be imposed. The Commission is expected to report to the Minister of Commerce and Enterprise by August 2002.

7 POSTAL SERVICES

7.1 Overview and comparison with Australia

With the exception of NZ, postal services in all of the countries considered have a legislated monopoly for standard letter-service. Profits from such "reserved areas" are used to subsidise the losses incurred by fulfilling universal service obligations (USOs).[21] The reserved service in Australia is similar in design to the other countries with a restriction of 250 grams and a limit of up to four times the standard letter rate. The postal companies generally establish their own tariffs with some form of government or regulatory oversight for reserved service tariffs.

Owing to the reserved service there are few third party access issues intra-country. However, many countries now allow some form of upstream access to the monopoly network for pre-sorted mail. For example, there are detailed arrangements for this "work sharing" in the US, with discounted tariffs based on the cost savings to the US Postal Service for such upstream injections of mail. In Australia, mail from overseas may be carried by competing operators and lodged with Australia Post for final delivery in Australia. In addition, an interconnection service is allowed, whereby letters lodged in bulk at specified mail centres receive a discount including a component reflecting the average transport costs avoided by Australia Post.

For the transport and delivery of international mail, pricing and service standards are set via international agreement through the Universal Postal Union (UPU)[22] and the Asian Pacific Postal Union. Under the UPU each country retains revenue on dispatched mail and delivers mail on a reciprocal basis. For countries with an imbalance between dispatched and delivered mail with any other particular country, then the dispatching country may have to pay terminal dues to the delivering country. There are various systems based on weight and number of letters which determine what the terminal dues are.

7.2 United States

The US Postal Service is an independent establishment of the executive branch of the government of the US. The US Postal Service is obliged to break-even over time. The Postal Rates Commission is responsible for evaluating proposals for changes in rates of postage and mail classifications, and for making recommendations to the Postal Service's Governors regarding rates and classifications. Rate changes are based on detailed hearings and evaluations of postal costs. The US is a member of the UPU.

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[21] There is a detailed discussion of such USOs and their burdens in NERA's 1998 report to the European Commission.

[22] See section 7.7 for a more detailed explanation of the UPU.

Access to the postal network can be considered in terms of access by carriers to delivery receptacles and partial private carriage between points of origin and destination. The mailbox rule restricts access by private competitors to mail delivery receptacles. Partial private carriage rules permit private carriage of letters that enter the mail stream at some point between their origin and destination. Examples of permissible activities include the pickup and carriage of letters that are delivered to post offices for mailing and the bulk shipment of individually addressed letters ultimately carried by the US Postal Service.

The US Postal Service has the monopoly right (reserved service) to carry letters. There are exceptions to this monopoly for urgent letters and outbound international letters.

The US Postal Service determines the scope of the postal services. The Governors of the Postal Service (largely appointed by the President) establish the domestic postage rate. International rates are established by the US Postal Service directly, without following the procedures required for domestic rates. Where users of the postal system have upstream access to the system they can secure discounts to normal tariffs. An example of this is destination entry discounts which reward mailers who are able to pre-sort and deposit bulk mail at US Postal Service processing or delivery units that are closer to the intended recipient. These discounts are cost-based.

7.3 Canada

Canada Post is the incumbent letter-service postal company in Canada. Canada Post is solely owned by the Canadian government. Canada Post is operated on a commercial basis and has an obligation to make a profit. The Canadian Government is also Canada Post's regulator. Canada is a member of the UPU.[23]

The Canada Post Corporation Act, the Canada Business Corporations Act and the Financial Administration Act, establish the principles for governance of the corporation and the reserved service area. The Competition Act also applies to the postal sector.

Canada Post has a monopoly right (reserved service) for the collection, transmission and delivery of letters of up to 500 grams to an addressee in Canada. Canada Post also has an obligation to provide Canadians with a universal letter service at affordable, uniform rates.

There is an exception to this monopoly for urgent delivery of letters by other delivery companies provided that the fee is at least three times the regular rate of postage for letters up to 50 grams.

Canada Post determines the scope of postal services and prepares a five-year corporate plan. For the basic, domestic letter rate on which Canada Post has a monopoly, price increases are

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23 OECD (1999) pp159-168, and http://www.upu.int

limited to CPI increases plus recovery of extraordinary expenditure increases which are beyond the control of Canada Post.

7.4 European Union

The primary regulation relating to postal services in the EU is the European Commission directive 97/67/EC, otherwise known as the "postal directive", which was published in January 1998, and the subsequent the Postal Notice 98/C 39/02.[24] A proposal for amending directive 97/67/EC was published in May 2000.[25] The European Commission has also published a number of studies on the impact of different forms of postal liberalisation, including one on the liberalisation of upstream access.[26]

The *Postal Directive* allows members to maintain monopoly rights (reserved service) for letter service up to 350 grams but only to the extent necessary to maintain universal service. Exceptions to this monopoly are granted for delivery at five times or more of 1st class tariff. The draft proposal proposes that these limits be reduced to 50 grams and two and a half times the basic standard tariff for ordinary domestic correspondence, incoming cross-border mail, and direct mail by January 1st 2003. In practice, progress in implementing the directive varies between member states.

The *Postal Notice* defines the application of competition rules to the sector, while accommodating monopoly rights in the reserved area of the core letter service. The Notice, among other issues, stipulates non-discriminatory access to the postal network.

Each member state is responsible for setting its own tariffs. Member states of the EU are part of the UPU. The EU largely uses the "CEPT" system (refer Section 7.7) for calculating terminal dues. There are also a number of bilateral agreements between various administrations, eg, the Dutch and the Swedish.

7.5 United Kingdom

The Post Office is a statutory corporation created by an Act of Parliament. Royal Mail, which is responsible for letters, is a subsidiary of the Post Office, as are Parcelforce (parcels) and Post Office Counters (retail post offices, mostly operated by franchisees). The Post Office has traditionally been the only company offering postal services in the reserved area, which in the UK covers letters weighing less than 350 grams and costing less than £1.

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24 This section is based on a speech by Herbert Ungerer, Postal Services, Liberalisation, and EC Competition Law, Brussels, 11/6/99. http://europa.eu.int/comm./competition/speeches/text/sp1999_018_en.html

25 Commission of the European Communities (May 2000) .

26 CTcon Brussels and Vallendar (August 1998) .

Until 2000, the Post Office was regulated by the Department of Trade and Industry and the Post Office Users' National Council, which was an independent supervisory authority. The government is the sole shareholder of the Post Office, and the Post Office has a profit making target.

A new Postal Services Act was passed in 2000. This Act set up a new postal regulatory body, Postcomm, headed by a regulatory commission.[27] In addition, the Post Office Users' National Council is being replaced by the new Consumer Council for Postal Services.

In regard to Postcomm's obligations, the 2000 Act indicates that "The Commission shall exercise its functions in the manner which it considers is best calculated to ensure the provision of a universal postal service" (clause 3.1). Such a "universal service is provided if ... at least one delivery... is made every working day... and... at least one collection ... is made every working day" (clause 4.1). The universal service obligation also covers registered mail, but not recorded or special delivery. However the Commission has a duty to promote competition. "Subject to section 3, the Commission shall exercise its functions in the manner which it considers is best calculated to further the interests of users of postal services, wherever appropriate by promoting effective competition between postal operators" (clause 5.1).

Postcomm has the power to issue licences to postal operators to provide different types of services, including universal services within specified geographical areas.[28] No other EU Member State allows licensing within the reserved area, though Sweden has abolished the reserved area altogether.

Postcomm became an entirely independent non-Ministerial Government department on 6th November 2000. They have already issued draft licence frameworks for discussion, and have issued a consultation document on the promotion of effective competition between postal operators

As well as the possibility that they might licence competitors to operate within the reserved area, Postcomm has identified a number of other mechanisms for introducing competition, including:

- reductions in the price and weight thresholds;
- liberalisation by class of mail, such as direct mail or bulk mail; and

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[27] This is a different situation to that in the other UK regulated sectors, since these each have a single regulator, rather than a regulatory commission.

[28] The Post Office itself will require such a licence from March 26th 2001.

- requiring the Post Office to deliver mail which has been sorted and transported by other operators, and on terms that are fair and non-discriminatory, ie, providing upstream access to the Post Office's delivery network.

Postcomm's other responsibilities include setting and enforcing Post Office service standards, controlling Post Office prices (likely to be via an RPI – X mechanism), ensuring fair competition between the Post Office and other postal operators, and helping maintain a network of rural and inner city post offices.

Since Postcomm has only just become an independent body, no decisions as to how the liberalised market will operate have yet been taken.

7.6 New Zealand

In contrast to the other countries considered, NZ's postal services are open to full competition. There are no licensing requirements on any postal operator in NZ, but there is a requirement to register with the Minister of Commerce. The Postal Services Act 1998, governs the registration and activities of postal operators. More generally, the Commerce Act 1986, governs competition policy in all sectors including postal services.[29]

NZ Post (the incumbent) has a requirement to disclose information related to pricing, discounting, access agreements and service quality on a regular basis. There is no equivalent obligation on New Zealand Post's competitors.

New Zealand Post has the right to be designated exclusively as NZ's postal operator for the UPU, however, the flow of international mail is open to full competition. There is no regulation of NZ's postal services per se other than those outlined above.

The Deed of Understanding between New Zealand Post and the Crown sets out the company's social obligations, including delivery standards and the provision of access to other postal operators on a non-discriminatory basis to equivalent customers.

New Zealand Post's standard letter price is subject to a transitional price cap since liberalisation of the market in 1998. New Zealand Post is free to set all other prices as it sees fit. There are no price restrictions on independent postal operators.

7.7 Universal Postal Union

The Universal Postal Union (UPU) is an international agreement between universal service providers. The UPU is a specialised agency of the United Nations which regulates the global network of postal services for cross-border mail. The principles of the UPU include

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29 All information on New Zealand's postal service is drawn from the OECD (1999) pp247-252.

guaranteed freedom of transit within the member countries, standardisation of the charges to be collected for letter-post items and the abolition of the sharing of charges between the country of origin and the country of destination. Instead, each administration retains the entire amount of the charges which it collects, subject to remuneration, at established rates, of intermediate administrations ensuring the transit of such items.

Nevertheless, the UPU allows destination administrations to demand lump-sum remuneration ("terminal dues") from dispatching destinations as compensation for the amount of mail received in excess of the mail dispatched. There are three different basis for calculating this remuneration amount:

- the UPU system, which is based on a fixed rate per kilogram;
- the European Conference of Postal and Telecommunications Administrators (CEPT) system, which is based on a rate per item and a rate per kilogram; and
- the Agreement for Remuneration of Mandatory Deliveries of Cross Border Mails (REIMS) system, which is based on a link to domestic tariffs on an Europe-wide basis.

8 WHAT TYPE OF SERVICES SHOULD BE COVERED BY ACCESS REGIMES

The purpose of this section is to assess whether the Trade Practices Act's declaration criteria are likely to capture the appropriate mix of services for the application of access regimes. This section, therefore, first considers the theoretical underpinnings of access regulation and how it is applied in other countries. In light of this, it then considers the wording and application of the declaration criteria in Part IIIA.

8.1 Rationale and Theoretical Criteria for Access Regulation

8.1.1 Rationale

In many industries the delivery of final services to the consumer requires the provision of a number of connected services. For example, the provision of gas to households requires extraction, transportation, distribution, metering and billing services. In many such industries, particularly utilities, at some stage of the production process an essential facility (one that is necessary in the supply chain) exists with a cost structure that results in an industry configuration which is not fully competitive. That is, the efficient number of providers may not be sufficient to lead to competitive pressures in the market for these services. The cost characteristics of such facilities, which are often associated with networks and referred to as "bottleneck" facilities, include:

- *high start-up costs* – the initial cost of investing in the infrastructure needed to provide these types of services is generally very large;
- *significant sunk costs* – once the investment is made, a significant proportion of the cost cannot be recovered if the provision of services stops;
- *high fixed costs* – a high proportion of the costs of providing the services must be incurred regardless of the volume of services being provided;
- *low avoidable costs* – the costs that would no longer be incurred if services are incrementally reduced are often a relatively small proportion of total costs;
- *significant common costs* – a significant proportion of costs may relate either to the provision of more than one service or of a single service to more than one customer; and
- *high stand alone costs* – the cost of serving a single customer (or providing a service) if there were no other customers (or services) is often high.

For example, once an electricity distribution company has invested in the lines and other infrastructure to provide a suburb with power, it is more efficient for all houses within the suburb to use this infrastructure rather than for another company to replicate the system and share the market. Different companies may be able to supply different suburbs or

towns efficiently, but it is not efficient for more than one company to invest in infrastructure to cover the same geographic market. Similarly, a geographical market may be able to support two gas pipelines, but may not be sufficient to support a third. Under these circumstances, it could be expected that competitive pressures may not be sufficient to protect consumers from suppliers wishing to charge prices that exceed economic cost.

In addition, the *common costs* within network industries can lead to *economies of scope* in that it can be cheaper for the incumbent company to provide complementary services than it would be for a new company to establish itself in the market. For example, once a telecommunications provider has invested in the ground cables and other necessary infrastructure, it is cheaper to provide internet services using these assets than it would be to invest in a new network for the purpose. This potentially allows firms which occupy a dominant market position in one sector of the industry to affect more than one upstream or downstream market.

Within many utility production chains, some activities which use as an input the services of a bottleneck facility may potentially be competitive. For example, electricity and gas retailing can be competitive components of the respective industries, even if the markets for transmission and transportation services are not competitive. Similarly the provision of internet access can be competitive, even if the provision of the network infrastructure has natural monopoly characteristics.

The rationale for regulating access to network infrastructure services is to limit a supplier's ability to extend its market power into other (related) markets that could be otherwise be more competitive. For example the objective of regulating access to gas pipelines is to encourage competition in the retail gas market. There are two main types of regulation to achieve access to essential facilities:

- *regulation of market structure* – which includes merger controls, the removal of entry barriers, restrictions on the line of business or the break up of an integrated incumbent; and
- *regulation of conduct* – which considers the behaviour of the firm in providing access to infrastructure services to other users, which may be potential competitors, including the terms and conditions of access.

Vertical separation of the non-competitive components of the industry and participants in upstream or downstream markets is often preferable to regulation of access terms and conditions within a vertically integrated firm. This is because vertical separation limits the scope of the regulator's involvement to the component directly responsible for inadequate competition, reducing the costs of regulation and increasing the likelihood of appropriately setting prices. Such structural separation is a key feature of current industry reform and privatisation initiatives in many public sector network industries. In some cases, however, vertical separation may involve costs which exceed the potential benefits to competition, particularly where private investors are already in place. In these cases regulated provision

of third party access might be appropriate. Further, even with vertical separation or guaranteed access, there may still be an incentive to charge excessive or unjustifiable prices, which may require regulation of access pricing.

8.1.2 Theoretical criteria for access regime coverage

There are four broad criteria that arise from the theoretical discussion on access regulation[30]:

- the existence of related markets;
- the potential for competition in at least one of these related markets;
- the existence of an essential facility that is necessary for the provision of competitive services – in that firms wishing to compete in some related market(s) cannot compete without access to these services (they cannot be bypassed); and
- cost characteristics in the provision of the essential services that make it uneconomical for potential entrants to develop an alternate facility, resulting in insufficient competition in the market for those services.

Markets are said to be *vertically related* when the production or supply of final goods or services involves different activities from "upstream" to "downstream" that are linked to each other in a clear sequence. Without vertical linkages, access to the facility is not required for other businesses to compete and, therefore, access regulation is unnecessary.

The *potential for competition* in related markets implies that the monopolist network provider could reduce the competitiveness of other markets if left unregulated. If some degree of competition is not possible in related markets, access will not improve the efficiency of the market. For example, if two related markets were both characterised as natural monopolies, they would be forced to trade to remain viable and access regulation would be ineffective in introducing competitive elements into either market.

An *essential facility* is one to which access is *necessary* if a company is to participate in a particular industry or market. An essential facility can be referred to as a *bottleneck* in the sense that all provision of services in at least one related market must go through this facility. If the service is not essential for participation in the related market (that is, if it can be by-passed), access arrangements are not necessary.

The *cost characteristics of the service being provided* make it inefficient for the party seeking access to replicate the facility. Without this condition, the third party could potentially invest in developing an alternate facility from which to provide services. If the provision of

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[30] See Valletti and Estache (1999), Armstrong, Doyle and Vickers (1996), Armstrong and Vickers (1995) and Laffont and Tirole (1994).

services from an essential facility does not exhibit this characteristic, regulating access may decrease competition in the long-run by reducing the incentive for efficient investment.

8.2 Criteria for Access – International Practice

Most of the countries considered within this study largely rely on industry specific legislation and regulation to address access to facilities which most clearly fall within the criteria outlined above (that is, services exhibiting characteristics that limit competition and occupying critical points within vertically related markets, of which at least one related market could be competitive). Such facilities typically fall within the following industries:

- telecommunications;
- gas and electricity;
- transportation; and
- water services.

This industry specific regulation is often supported by an *essential facilities doctrine*, which provides for more general access arrangements. Unlike the industry specific legislation, the essential facilities doctrine is generally based on, and developed through, case law and is a specific aspect of more general antitrust legislation. Partly as a result of the case law nature, the essential facilities doctrine has not been applied uniformly either within or across countries.

The following Section briefly outlines the application of the essential facilities doctrine within the US, Canada, the EU and the UK.

8.2.1 The US

In the US, the essential facilities doctrine, sometimes called the *bottleneck monopoly theory*, has been developed in case law through specific application of the theory and policy underlying Section 2, and to a more limited extent Section 1, of the Sherman Act.[31]

The essential facilities doctrine can be applied when:

> "a monopolist or near-monopolist controlling what is deemed an essential facility denies an actual or potential competitor access to that facility, where the facility cannot reasonably be duplicated and where there is no valid technical or business justification for denying access."[32]

[31] The Sherman Act 1890, along with the Clayton Act 1914, forms the United States general anti-trust law.

[32] Kezsbom, A. and A. Goldman (1996) .

In such cases, firms can be required to provide access to their facilities at a fair price, there is no requirement for free access. Essential facilities cases usually involve vertically integrated firms. In most cases, the essential facility has been something requiring a substantial investment, usually something large and tangible. However, there also have been cases involving intangible assets such as intellectual property.

The leading US essential facilities case is *MCI Communications Corp. v. AT&T* (1983), which challenged AT&T's use of local telephone networks to thwart competition in the long distance telephone service market[33]. This case created four elements necessary to establish liability under the essential facilities doctrine:

- control of the essential facility by a monopolist;
- a competitor's inability practically or reasonably to duplicate the essential facility;
- the denial of use of the facility to a competitor; and
- the feasibility of providing the facility.

8.2.2 Canada

In Canada, the Competition Act addresses the concept of general access to a scarce or essential facility in two sections: refusal to supply and abuse of dominance.

According to the OECD (1996), the important point that is stressed in applying the essential facilities concept in Canada is whether control over a facility is being used by a dominant firm (or group of firms) to create or maintain market power in other relevant markets by substantially preventing or lessening competition or preventing someone from carrying on business.

8.2.3 The European Union

Among other things, the European Community Treaty 1957 established the competition policies operating within the European Community. Article 86 of this treaty (now renumbered Article 82) deals with the abuse of a dominant position within the common market and the essential facilities doctrine is generally interpreted within this article.

The Commission first used the term "essential facility" in two related decisions involving access to the port of Holyhead in North Wales.[34] In the *B&I v. Sealink* (1992) case, the Commission described an essential facility as "a facility or infrastructure without access to which competitors cannot provide services to their customers". In the *Sea Containers v. Stena Sealink* (1993) case, arising from Sea Containers' desire to operate a fast ferry service from the

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[33] OECD (1996).

[34] OECD (1996).

same port, the Commission ruled that a company infringes Article 86 if it has a dominant position in the provision of an essential facility, uses that facility itself, and refuses other companies access without objective justification or grants access only on terms less favourable than those which it gives to its own services.

The Commission has stressed that a dominant owner of a facility must provide access on a non-discriminatory basis.

8.2.4 The UK

In the UK, the Competition Act outlaws any agreements, business practices and conduct which have a damaging effect on competition in the UK, specifically:[35] "the abuse by one or more undertakings of a dominant position in a market which may affect trade within the United Kingdom" (referred to as the Chapter II prohibition). Although this does not provide a specific statutory framework for access arrangements, refusal to supply, for which the *doctrine of essential facilities* is relevant, could constitute an abuse of a dominant position. If a facility is considered to be essential the owner is expected to provide competitors with access at economically efficient prices. Unless a lack of access can be justified objectively, the interpretation is that the facility owner would be likely to be acting anti-competitively.

8.2.5 General themes

Although the application of the essential facilities doctrine has not been consistent, some general themes can be drawn out. In particular, the following three aspects have generally been required before granting third party access to essential services:

- it must *not be efficient* for the access seeking party to replicate the facility;
- the denial of access must virtually *eliminate competition* in a vertically related market; and
- it must be *feasible* for the facility owner to provide access to the services.

General concern has been expressed regarding a perceived risk of applying the essential facility doctrine too broadly, and thereby reducing investment. For example, in the US, according to Soma, Forkner and Jumps (1998), antitrust law rarely mandates access to a monopolist's facility on the basis that:

- liberal access encourages firms to abstain from significant investment initiatives in an attempt to free ride on the investment of their competitors;

35 The UK has not historically had a blanket presumption of access under its general competition laws. However, with the introduction of the Competition Act 1998, UK competition law has been brought in line with European Union law.

- access inhibits firms from undertaking risky and costly investment in the absence of countervailing first-mover advantages; and
- mandated access does not have pro-competitive effects unless the terms and conditions of access are reasonable.

Similar sentiments were expressed by Advocate General of the European Court of Justice in regard to *Oscar Bronner GmbH & Co. KG v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and Others* (1997):[36]

- "the rights to choose one's trading partners and freely to dispose of one's property are generally recognised principles...and incursions on these rights require careful justification"; and
- "in the long term, it is generally pro-competitive and in the interests of consumers to allow a company to retain for its own use facilities which it has developed...Thus, the mere fact that by retaining a facility for its own use a dominant undertaking retains an advantage over a competitor cannot justify requiring access to such facility";
- "if access...[is] allowed too easily, there would be no incentive for a competitor to develop competing facilities"; and
- "the incentive for a dominant undertaking to invest in efficient facilities would be weakened if its competitors were entitled, upon request, to share the benefits of such investment".

8.3 Review of Declaration Outcomes

For the National Competition Council (NCC) to recommend declaration, the infrastructure service must occupy a particularly strategic position in an industry such that access to the service is necessary to enable a third party to compete effectively in an upstream or downstream market. The Act requires that *all* the following criteria be satisfied:

i. that access, or increased access, to the service would promote competition in at least one market, whether or not in Australia, other than the market for the service;

ii. that it would be uneconomical to develop another facility to provide the service;

iii. that the facility is of national significance, having regard to:

   - the size of the facility;
   - the importance of the facility to constitutional trade or commerce; or

36 The European Legal Developments Bulletin (1999).

- the importance of the facility to the national economy;

iv. that access to the service can be provided without undue risk to human health or safety;

v. that access to the service is not already the subject of an effective access regime; and

vi. that access or increased access to the service would not be contrary to the public interest.

8.3.1 Comparison with theoretical criteria and international practice

Matching the declaration criteria specified in Part IIIA with the theoretical criteria outlined in Section 8.1.2, it can be noted that the first declaration criteria encompasses all of the first three theoretical criteria. That is, the existence of vertically related markets; the potential for competition; and, the existence of an essential or bottleneck facility that is necessary for the provision of competitive services. The second declaration criteria, that it would be uneconomical to develop another facility to provide the service, addresses the fourth theoretical criteria outlined.

The other two declaration criteria which are of most interest are that the declaration must be of national significance and in the public interest. The main function of these criteria appears to be a to avoid inappropriate, unnecessary or trivial applications. The remaining criteria are common sense requirements.

Comparing the declaration criteria with the theoretical discussion and the application of the general *essential facilities doctrine* in other countries, the following can be noted.

First, the requirement for the facility to be of *national significance* is not necessarily consistent with either the theory of access regulation or the application of the essential facilities doctrine in other countries. The practical implications of this requirement will depend on its interpretation, which is discussed in further detail below (Section 8.3.2.3).

Second, the declaration criteria have no specific exclusion to the provision of access on the grounds that it would be commercially or practically infeasible. However, this issue is picked up in the arbitration process following declaration, where the ACCC must take into account (among other things):[37]

- the legitimate business interests of the provider, and the provider's investment in the facility;
- the interests of all persons who have rights to use the service;
- the direct costs of providing access to the service;

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37 Section 44X of the Trade Practices Act.

- the operational and technical requirements necessary for the safe and reliable operation of the facility; and
- the economically efficient operation of the facility.

Third, in practice the effectiveness of the criteria will depend critically on the interpretation of such key phrases as "promote competition", "uneconomical", "national significance" and "public interest". The following section considers the practical implementation of the access declaration criteria to date.

8.3.2 Interpretation and application of Part IIIA Criteria

The following discussion outlines the interpretation of the access criteria used by the NCC and the ACT on the basis of a number of declaration application determinations.

8.3.2.1 Promote Competition

This criteria has been applied such that creating the conditions or environment for improving competition are considered sufficient to "promote competition". This interpretation should allow, for example, access to a gas pipeline to be declared in a previously non-competitive gas sector. This is important, as access arrangements can only create the conditions for competition in related markets; new entrants or competitive behaviour in the related market are required for competition to be directly promoted.

For example, the March 2000 declaration of services at Sydney International Airport[38] illustrates this interpretation. The ACT considered carefully the interpretation of promoting competition and stated that this condition would be satisfied if the declaration created the conditions or environment for improving competition as opposed to the stricter interpretation that declaration would need to improve competition directly. The ACT stated that the removal of barriers to entry to competing firms was sufficient to meet the requirement that declaration would promote competition.

This interpretation should capture services for which increased access will improve competition in a related market. A more rigorous requirement of directly promoting competition may fail to capture sufficient facilities, as access to the network would not in itself promote competition in the related markets. However, this interpretation could potentially lead to more extensive application of access regimes than in other countries, where the requirement tends to be more tightly defined along the lines of competition not being possible without access to the essential facility.

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[38] See Australian Competition Tribunal (March 2000) .

Other factors which may be interpreted as promoting competition include a reduction in prices, particularly of an input into a related market.[39]

8.3.2.2 Uneconomic to develop an alternate facility

In applying this criteria, the scope of the service and the assets required to provide the service, tend to have been interpreted broadly. This is likely to allow a greater number of investments to qualify as "uneconomic" than more narrow interpretations would. Furthermore, social inefficiency has been taken into consideration rather than the more narrow definition of private inefficiency. It might be expected that for some services, investment in by-passing a facility which a user cannot gain access to would still be viable for the access seeker even if the by-pass was socially inefficient, raising the average costs of production.

For example, in its interpretation of *uneconomical for anyone to replicate the asset*, in the context of the Sydney Airport case,[40] the ACT noted that a key issue is the minimum bundle of assets that would need to be replicated to provide essentially the same service. In this case, the Tribunal decided that the relevant facility included much of the remaining airport infrastructure and not just that mentioned in the service definition. The Tribunal also interpreted *uneconomical* in terms of the associated costs and benefits to society as a whole, rather than just the applicant.

In another example, the NCC's recent decision on the Eastern Gas Pipeline (EGP)[41] considered the proposition of whether it was uneconomic to develop another pipeline to provide the services of the EGP. This decision had to be taken within the context of part of the EGP already being a duplicate of an existing pipeline. Nevertheless, the NCC decided that this duplication constituted uneconomic development, and as such did *not* refute the proposition that it was uneconomic to duplicate.

The NCC's "draft guide"[42] to the TPA indicates that the "uneconomic" criteria is intended to focus mainly on natural monopoly infrastructure. Nevertheless, where legislated monopolies make a facility uneconomic to duplicate, say, due to environmental or planning regulations, then a facility *may* still pass this criteria.

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39 See National Competition Council (November 1997).

40 Australian Competition Tribunal (March 2000).

41 National Competition Council (June 2000).

42 National Competition Council (August 1996).

8.3.2.3 National Significance

The NCC, in its draft guide,[43] has referred to the determination criteria requiring national significance as a *test of materiality*, as it places less important facilities outside the scope of the National access regime.

In its 1997, decision on access to services at both Sydney and Melbourne International Airports[44] the NCC decided that the freight handling facilities were of national significance. Their decision depended on the choice of a narrow or broad application of this criteria, and in this instance the NCC applied a broad criteria which considered the freight handling facilities within the context of their location at Sydney and Melbourne International Airports. The justification for this was that freight travelled most cost-effectively in passenger aircraft and thus had to locate where passengers preferred to fly. Thus the national significance of the airports themselves determined the significance of the facilities.

An example of this criteria being used to reject an application is Austudy Payroll Deduction Service[45]. In this case the computer database that coverage was being applied failed the national significance criteria as it was neither significant in physical size, nor in relation to the national economy or commercial trade.

8.3.2.4 Risk to Human Health or Safety

In the ACT's reasons for decision on the declaration of services at Sydney Airport, the ACT noted that it considered safety matters could be satisfactorily addressed within the process of negotiating (and arbitrating) appropriate access terms and conditions. This issue has been treated in a similar manner in other decisions.

8.3.2.5 Not Already an Effective Access Regime

This criteria is open only to direct application and determines whether an application would even proceed from the outset. Consequently, it is not a relevant matter of interpretation and application.

8.3.2.6 Contrary to the Public Interest

This criteria has been written in the negative, and as such, an application must only be found neutral to be met. In other words no public benefit needs to be shown, it must only be demonstrated that it would not be against the public interest in order to pass this criteria.

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43 National Competition Council (August 1996).

44 National Competition Council (May 1997).

45 National Competition Council (June 1996) .

The NCC draft guide states that each case must be assessed individually as "public benefit" has not been defined in the TPA. Whilst economic efficiency, in terms of technical, allocative and dynamic efficiency is likely to be the primary consideration it is not a necessary condition. Indeed, the NCC "does not consider public interest and economic efficiency to be synonymous".[46] Other public interest considerations include: ecologically sustainable development, social welfare and equity, and, economic and regional development.

The Austudy application, as referred to in section 8.3.2.3, was also rejected on grounds that it was contrary to the public interest. The NCC decided that if declared the database would be used in a manner which would result in misleading information; that students otherwise entitled to funding might lose their funding for an unrelated reason; the total amount of funding available to students would be reduced; and that all Austudy students would be obliged to pay for a service which they did not necessarily use. In this case a fairly direct interpretation of contrary to the public interest was applied.

8.4 Considerations for the Review of the Declaration Criteria

The above discussion on the theoretical rationale, and practical implementation, of access regimes indicates that there are few significant distinctions between the application of the access regime in Australia and access regimes implemented elsewhere. Nevertheless, the discussion may suggest the following potential questions regarding the wording of the criteria:

- should the scope of application of the access criteria be more tightly defined?
- does the wording of the declaration criteria most clearly reflect the intention behind the legislation and, if not, could this lead to inappropriate application of the access regime in the future?
- would it be prudent to adjust the criteria wording to better reflect this intent and the application to date?

Over the five years since their inception, however, the declaration criteria have not lead to applications of Part IIIA that are significantly different from the application of access regimes internationally. Furthermore, given the relatively short time for the interpretation of the existing criteria to have been refined, amending the declaration criteria could introduce additional problems or complications. It may, therefore, be prudent to hold back from amending the criteria until it is clear that any change will lead to improved outcomes.

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[46] National Competition Council (August 1996) p29.

9 REFERENCES

Armstrong, M and Vickers, J (1995) *The Access Pricing Problem* (carried out under the ESRC's Contracts and Competition initiative)

Armstrong, M, Doyle C, and Vickers, J (1995) "The Access Pricing Problem" *Journal of Industrial Economics*, Volo 44, No 2, June pages 131-150

Australian Competition and Consumer Commission (1997) *Applications for Authorisation National Electricity Code*

Australian Competition and Consumer Commission (1998) *Draft Guide: Section 192 of the Airports Act – Declaration of Airport Services*

Australian Competition and Consumer Commission (2000) *Aviation*

Australian Competition and Consumer Commission (2000) *Website* www.accc.gov.au/airport/fs-air.htm

Australian Competition Tribunal (2000) *Sydney International Airport, Application for review of the declaration by the Commonwealth Treasurer published on 30 June 1997 of certain freight handling services provided by the federal airports corporation at Sydney international airport*

Beshers, E (2000) *Efficient Access Pricing for Rail Bottlenecks* www.fra.dot.gov/doc/pdf/policy/part2.pdf

Brooks, M and Button, K (1995) "Separating Transport from Track Operations: A Typology of International Experiences" *International Journal of Transport Economics*, Volo 22, No 3, pages 235-260

Centre for the Study of Regulated Industries (1997) *Utility Regulation 1997* Lewington, I Ed, London: Privatisation International Ltd

Commission of the European Communities (2000) *Proposal for a European Parliament and Council Directive amending Directive 97/67/EC with regard to the further opening to competition of Community postal services* Brussels, COM(2000) 319 final

Council of Australian Governments (COAG) (1997) *Natural Gas Pipelines Access Agreement: Annex D – National Third Party Access Code for Natural Gas Pipeline Systems*

CTcon, Brussels and Vallendar (1998) *Studies on the Impact of Liberalisation in the Postal Sector: On the Liberalisation of Clearance, Sorting and Transport* Report for the European Commission, DG XIII

Davey, A (1993) *Essential Facilities Discussion Paper* NERA

European Commission (1997) *Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity* Official Journal No. L 027, page 0020, europa.eu.int/en/comm/dg17/gazel_en.htm

Federal Energy Regulatory Commission (1999) *Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public utilities Under the Federal Power Act; Policy Statement, October 26,1994* Docket No. RM93-19-000,18CFR 2,59 FR 55031

Federal Energy Regulatory Commission (1999) *Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public utilities Under the Federal Power Act* Docket No. RM93-19-001

Huse, D (1996) *Economic and Environmental Regulation of New Zealand Airports* presented at the Aviation Law Association of Australia and New Zealand Inc's 15th Annual Conference

Independent Committee of Inquiry (1993) *National Competition Policy* Canberra: Australian Government Publishing Service

Jahanshahi, M (1998) "The US Railroad Industry and Open Access" *Transport Policy 5*, pages 73-81

Kaplanidis, A and Lampert, T (1999) "Judgement of the European Court of Justice on the "Essential Facilities Doctrine" - Bronner ./. Mediaprint (Case C-7/97)" *The European Legal Developments* Bulletin, Volo 9, No 1, www.bakerinfo.com/Publications/Documents/848_tx.htm

Kezsbom, A and Goldman, A (1996) 'No Shortcut to Antitrust Analysis: The Twisted Journey of the "Essential Facilities Doctrine"', Reprinted from Columbia Business Law Review, 1(1), www.ffhsj.com/firmpage/ cmemos/0112041.htm.

Laffont, J, and Tirole, J (1994) "Access Pricing and Competition"

Laffont, J, Rey, P and Tirole, J (1998) "Network Competition: I. Overview and non-discriminatory pricing; II Price discrimination" *Rand Journal of Economics*, Volo 29, No 1, pages 1-56

Lang, J (1994) "Defining Legitimate Competition: Companies Duties to Supply Competitors and Access to Essential Facilities" *Fordham International Law Journal*, Volo 8, pages 437-524

Makholm, J (1999) *Benchmarking, Rate Cases and Regulatory Commitment* Presentation to the ACCC Incentive Regulation and Overseas Developments Conference, Australia

Ministerial Inquiry into the Electricity Industry (2000) *Final Report* www.electricityinquiry.govt.nz

Nash, C and Toner, J (1998) *Railways, Structure, Regulation and Competition Policy* DAFFE/CLP(98)1, OECD Competition Policy Roundtables, No. 15, www.oecd.org/daf/clp/Roundtables/railw01.htm

National Business Review Online (2000) www.nbr.co.nz

National Competition Council (2000) *AustralAsia Railway Access Regime: Final Recommendation*

National Competition Council (2000) *Application for Coverage of Eastern Gas Pipeline (Longford to Sydney) Final Recommendation*

National Competition Council (1999) *WA Rail Access Regime: Draft Recommendation*

National Competition Council (1997) *Specialised Container Transport Applications for Declaration of Services Provided by Westrail: Recommendation.*

National Competition Council (1997) *Applications for Declaration of Certain Airport Services At Sydney and Melbourne International Airports: Reasons for Decisions*

National Competition Council (1996) *The National Access Regime; A Draft Guide to Part IIIA of the Trade Practices Act*

National Competition Council (1996) *Austudy Payroll Deduction Service Statement of Reasons for NCC recommendation under Section 44F of the Trade Practices Act 1974*

National Energy Board (2000) *Reasons for Decisions: Maritimes and Northeast Pipeline Management RHI-1-2000*

New Zealand Commerce Commission (2000) *website* www.comcom.govt.nz

New Zealand Herald Online (2000) www.nzherald.co.nz

NERA (1998) *Costing and financing of universal service obligations in the postal sector in the European Union Final Report for EC DG XIII*

OECD (1999) *Promoting competition in postal services*

OECD (1998) *Competition Policy and International Airport Services* DAFFE/CLP(98)3 Competition Policy Roundtables, No. 16, www.oecd.org/daf/clp/Roundtables/airpor17.htm

OECD (1996) *The Essential Facilities Concept*, OCDE/GD(96)113, Competition Policy Roundtables, No 5., www.oecd.org/daf/clp/roundtables/ess_

Ontario Energy Board (1999) *Proposed Electric Distribution Rate Handbook* www.oeb.gov.on.ca/english/home.htm

Ontario Power Generation, *website* www.ontariopowergeneration.com/newgen/regenv.asp

Pengilley, W (1998) "Access to essential facilities: A unique antitrust experiment in Australia" *The Antitrust Bulletin*, Summer, pages 519-545

Phillips, C (1993) *The Regulation of Public Utilities*, Public Utilities Reports, Inc. Arlington, Virginia

Productivity Commission (2000) *The National Access Regime: Issues Paper*

Soma, J, Forkner, D and Jumps, B (1998) The Essential Facilities Doctrine in the Deregulated Telecommunications Industry, Berkeley Technology Law Journal, 13(2), www.law.berkeley.edu/journals/btlj/articles/13_2/Soma/ html/text.html

Ungerer, H, (1999) Postal Services, Liberalisation, and EC Competition Law, Brussels, europa.eu.int/comm./competition/speeches/text/sp1999_018_en.html

United States Department of Transportation (2000) *website* www.nw.faa.gov/airports/anm620.htm#Compliance

Universal Postal Union, Homepage, www.upu.int

Valletti, T and Estache, A (1999) *The Theory of Access Pricing: An Overview for Infrastructure Regulators* Centre for Economic Policy Research: Discussion Paper No. 2133

10 ACRONYMS

ACCC	Australian Competition and Consumer Commission
ACL	Airport Co-ordination Limited
ACT	Australian Competition Tribunal
AEUB	Alberta Energy and Utilities Board
BAA	British Aviation Authority
CAA	Civil Aviation Authority
CEER	Council of European Electricity Regulators
CEPT	European Conference of Postal and Telecommunications Administrations
CNSE	National Commission of the Electricity Sector
CPI	Consumer Price Index
CPUC	Californian Public Utilities Commission
CTA	Canadian Transportation Agency
EU	European Union
FERC	Federal Energy Regulatory Commission
HDR	High Density Traffic Airports Rule
ICRP	Investment Cost-Related Pricing
ISO	Independent System Operator
IOU	Investor-owned Utility
kW	kilowatt
kWh	kilowatt hour
kV	kilovolt

MW	megawatt
MWh	megawatt hour
NCC	National Competition Council
NCP	National Competition Policy
NEB	National Energy Board
NEC	National Electricity Code
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NEPOOL	New England Power Pool
NETA	New Electricity Trading Arrangements
NGC	National Grid Company
NSW	New South Wales
ODV	Optimised Deprival Value
OEB	Ontario Energy Board
OFGEM	Office of Gas and Electricity Market
ORC	Optimised Replacement Cost
PBR	Performance based regulation
RPI-X	Retail Price Index –productivity growth factor (X)
RTO	Regional transmission organisations
SO	System Operator
TA	Transmission Administrator
TCPL	Trans Canada Pipelines Ltd
TFO	Transmission Facilities Owners

TQM	Trans Quebec and Maritimes Pipeline
TSO	Transmission System Operator
TSS	Transmission Service Scheme
TUOS	Transmission Use of System
UK	United Kingdom
UPU	Universal Postal Union
US	United States
USO	Universal service Obligations