Forum

The following speech was presented by Dr John Tamblyn, the Commission's Adviser on Micro-economic Reform, at a conference in Sydney on 21–22 February 1996.

Pricing criteria for determining access

A major new responsibility of the Commission involves the administrative and regulatory arrangements governing access to facilities, such as public utility infrastructure. A new Part IIIA has been introduced into the Trade Practices Act as part of the competition policy reforms adopted by COAG in April 1995 and given effect by the *Competition Policy Reform Act 1995*. This new Part of the Trade Practices Act introduces a general access regime which establishes rights of access to the services of certain 'essential facilities' for competitors operating in markets upstream or downstream from such facilities.

Following the North American usage, 'essential facilities' are normally understood to be services with natural monopoly characteristics, access to which is required by participants in upstream or downstream markets to be able to compete effectively in those markets. Access problems can be of particular concern where public utility monopolies are vertically integrated into competitive markets and are able to limit competition in these markets by restricting access to the essential facility services.

This article comments on some important regulatory and access pricing issues that will have to be addressed by the Commission in administering Part IIIA. It also comments on the relationship between the Commission's prices oversight and access responsibilities and the interaction between the Commission and State regulators in relation to access regulation.

The competition objectives of the Part IIIA access provisions

The Part IIIA access regime represents a departure from the traditional economic and legal principles regarding private property rights. It is based on the notion that competition, efficiency and community welfare may be increased in certain circumstances by overriding the exclusive right of monopoly facility owners to determine the terms and conditions on which they will supply their services.

There are often potential efficiency gains from monopoly (or near monopoly) supply of many essential infrastructure services due to the economies of scale and scope they involve. While competitive supply of such services by two or more facilities would be inefficient, monopoly supply of essential facility services also confers a high degree of market power which can be exploited in the form of monopoly pricing or operating inefficiencies. Monopoly pricing itself creates inefficiencies and distorts resource allocation by raising costs and distorting demand and investment patterns in downstream and end use markets.

Direct price (and sometimes service quality) regulation is the usual policy response to monopoly pricing with a view to imposing an approximation of the

'efficient' or 'competitive' price (and service quality) for the monopoly service. However, where the monopoly service is an input into other competitive markets and the monopolist is also vertically integrated into (or has long-term contractual interests in) those markets, regulation may also be necessary to prevent the monopolist from distorting competition. For example, regulations may be needed to prevent the intermediate service monopolist from discriminating against its competitors in upstream or downstream markets in the prices and other terms and conditions of supply of the facility services.

The Part IIIA access regime seeks to overcome these adverse consequences of monopoly power by giving competitors in upstream or downstream markets rights of access to essential facility services on 'non-discriminatory' terms and conditions.

Part IIIA establishes two alternative means by which third parties may obtain access to the services of essential facilities. The first is by having a particular service *declared* as that of an essential facility, such that disputes over the terms and conditions of access not resolved through commercial negotiations can be subjected to compulsory arbitration by the Commission. The second enables the owner of an essential facility to enter into an access *undertaking* with the Commission setting out the terms and conditions on which third parties will be provided with access to the services of the facility.

Declaration of an essential facility

Under the declaration procedure, a third party may request the National Competition Council (NCC) to recommend declaration of the services of the facility to the Minister who, in deciding whether to declare, must be satisfied on certain matters, including that:

- access would promote competition in at least one other market;
- it would be uneconomic to develop another facility;
- the facility is of national significance;
- access would not be contrary to the public interest; and
- the service is not already subject to an 'effective' access regime.

Part IIIA also provides for the Minister to decide (on the recommendation of the NCC) that a State-based access regime is effective in terms of the Competition Principles Agreement access principles and therefore cannot be subject to the declaration procedure under Part IIIA.

In arbitrating disputes regarding access to declared services, the Commission must have regard to the rights of the operator and third party access seekers and to the wider public interest, including in having competitive markets.

The rationale for this approach is that the availability of compulsory arbitration gives third party access seekers considerable leverage in their negotiations with monopoly facility operators which should contribute to negotiated pricing outcomes closer to 'efficient' access prices. If the matter does go to arbitration the dispute is then determined by the Commission having regard to the implications for the private stakeholders and for the wider public interest criteria in the Act — this should also achieve a closer approximation to any 'efficient' access price.

Access undertaking

A facility owner who believes there is a high chance of the services being declared can avoid the declaration process by giving the Commission an access undertaking. In accepting an access undertaking, the Commission must have regard to:

- the business interests of the service provider;
- the public interest, including in having competitive markets;
- the interests of third parties who might want access to the service;
- whether the service is already subject to an access regime; and

- any other matter the Commission thinks relevant.

The access undertakings provisions of Part IIIA give the Commission considerable discretion regarding the nature of the facilities for which it will accept undertakings and regarding the scope of the undertakings and the detail of the arrangements for pricing and other terms and conditions of access to be included. At the same time, the undertakings approach has certain advantages over the declaration procedure for the facility owner, including the ability to take the initiative in proposing terms and conditions of access and avoidance of the time, cost and uncertainty of the declaration process.

One of the benefits of the discretion available to the Commission in relation to undertakings is that it provides sufficient flexibility to develop tailored industry-specific access regimes within the general access framework of Part IIIA. For example, the access undertakings procedures will be used, or are being considered, to develop competitive access regimes for electricity transmission and distribution networks, gas transmission and distribution pipelines and possibly for the interconnected national railway network.

Interaction between the ACCC's prices oversight and access responsibilities

The COAG competition policy reform package contained inter-related measures which, in addition to s. 46 of the Trade Practices Act, can be used to regulate the market conduct of natural monopoly infrastructure facilities and businesses with a high degree of market power. These measures involve:

- structural reform of vertically integrated public utilities to separate potentially competitive activities from the natural monopoly activities;

- regulation of access to essential facilities to prevent the use of the market power derived from those facilities to distort competition in upstream or downstream markets; and

- prices oversight of public monopolies and dominant firms in markets where competition is weak or absent.

While responsibility for the structural reform of public monopolies is in the hands of the Federal Government and the relevant State Governments, the Competition Policy Reform Act gives the Commission responsibility for both prices oversight (through the provisions of the Prices Surveillance Act) and for access regulation (through the provisions of Part IIIA of the Trade Practices Act). The Competition Principles Agreement also provides for the regulation of access to, and prices oversight of, public monopolies by State and Territory regulators.

It is possible that prices oversight regulation (prices surveillance and monitoring) could be applied to natural monopoly/essential facility markets in circumstances where the Part IIIA access arrangements may also be applicable. Consideration will therefore have to be given to which of the two regulatory measures offers the most efficient form of intervention in particular circumstances and to whether in some cases the two regulatory measures would be complements such that both should apply.

Prices oversight is likely to be the more appropriate regulatory tool where monopoly pricing by dominant firms in final goods and services markets is the main concern and vertical links with upstream markets are not strong. However, where natural monopoly or near natural monopoly conditions apply in the supply of intermediate services which are necessary for competition in related upstream or downstream markets, Part IIIA declaration or undertakings may be available in industries where prices oversight declaration applies or could apply.

Prices oversight regulation already plays a role in monitoring or controlling the prices of some essential facility operators which could be candidates for declaration or access undertakings under Part IIIA. Several such industries are declared for surveillance under the Prices Surveillance Act or are subject to prices

monitoring arrangements. These include interconnection discounts offered by Australia Post, aeronautical charges of airports and haulage charges on the Moomba-Sydney gas pipeline.

There are likely to be circumstances, however, in which *both* access regulation and prices oversight regulation will not be appropriate and a choice will need to be made between the two.

For example, if there is already an effective prices surveillance or prices monitoring regime in place, the need for additional regulatory action under Part IIIA may be reduced or eliminated. That is, where prices oversight has been shown to be effective in facilitating access to a facility's services on reasonable, non-discriminatory commercial terms, there would be nothing further to gain from declaring the facility or accepting an access undertaking under Part IIIA.

In other cases, however, even though an enterprise may be covered by prices monitoring or surveillance, it may be offering access on terms which third parties consider unacceptable due to limitations in price oversight powers or their application. This may arise, for example, because under the provisions of the Prices Surveillance Act the Commission cannot recommend, or require, prices to be reduced in a notification context and does not have the power to regulate prices directly in the case of price monitoring. In such cases, the use of access undertakings may represent a more effective approach to achieving efficient access prices where the relevant Part IIIA criteria can be satisfied. Where the application of Part IIIA (either by way of declaration or undertakings) can be shown to achieve efficient access prices and to promote competition in related markets, there would be no point to declaring the facility for prices oversight regulation.

Some commentators have questioned whether the Part IIIA access regime alone will be capable of overcoming the monopoly pricing/allocative efficiency problem which is inherent in the supply of essential facility services. They point out, for example, that smaller access seekers may be unwilling or unable to take a dispute to arbitration because they may have informational disadvantages, legitimate fears about retaliation by the facility operator or simply be unable to withstand the cost and delay involved. According to this view, access disputes would be rare but that would not necessarily indicate that the access regime had eliminated monopoly pricing and other forms of exploitation of monopoly power.

A variation on this view maintains that access disputes would be rare because the threat of arbitration would give the essential facility operator an incentive to bribe downstream facility users to accept the monopoly price in return for a share of the resulting monopoly rent. These commentators argue that an absence of dispute arbitration would simply indicate that monopoly rents were being maintained by such side deals between the facility operator and downstream users.

The solution suggested to address these perceived shortcomings is direct access price regulation of all of the services supplied by the facility, not just those that give rise to disputes. These potential shortcomings will need to be kept under review in the application of Part IIIA. Direct price regulation offers a solution if they prove to be of substance.

Interaction between the ACCC and the State regulators

The COAG Competition Principles Agreement recognises that the States and Territories may establish their own access regulation and prices oversight regimes to apply to the terms and conditions of access and to the prices of monopoly or near monopoly business enterprises operating within their respective jurisdictions.

The NCC is able to recommend, and the Minister may approve, registration of a particular State/Territory access regime as 'effective' in terms of the Competition Principles Agreement access principles and it is then protected from declaration under Part IIIA of the Trade Practices Act. State-owned public monopolies may also be declared by the

Minister for prices oversight by the Commission subject to the protections and conditions set out in the Competition Principles Agreement.

State and Territory governments have the option to voluntarily refer price oversight responsibilities to the Commission. Alternatively, the Commission may carry out such responsibilities in relation to facilities that have been declared for such national oversight by the Minister, after having regard to the relevant conditions of the Competition Principles Agreement.

Similarly, the Competition Principles Agreement allows for the establishment of State-based access regimes which are 'effective' in that they accord with its access principles and do not result in inconsistencies with other State-based regimes or have undesirable effects beyond the State boundaries.

As utilities markets become more national in character, and utility enterprises and infrastructure facilities operate across State/Territory boundaries (such as in the gas, electricity and railway industries), the co-existence of Commonwealth and State regulation in relation to essential facility access and pricing will be an important issue for both policy-makers and regulators. The consistency of multiple regulators and their effects on competition and economic efficiency will also be a central issue for the NCC in its assessment of the effectiveness of State-based access regimes.

For example, a number of States have introduced regimes to regulate pipeline access within their jurisdictions, including arbitration of access disputes and access pricing principles and requirements, and others are considering introducing such regimes. A Commonwealth access regime applies to the Moomba-Sydney pipeline and the Part IIIA access regime also applies to gas transmission and reticulation pipelines which satisfy the relevant criteria and are not already subject to 'effective' access regimes in terms of the Competition Principles Agreement access criteria.

The COAG Gas Reform Task Force is considering options for the regulation of access to gas pipelines in an interconnected multi-State gas market. One option for implementing the agreed COAG gas reforms would be to submit the access arrangements to the Commission in the form of a Part IIIA access undertaking. Consideration is also being given to the option of effectiveness accreditation of intermeshing State-based access regimes. At the same time, State-based regulators such as the NSW Independent Pricing and Regulatory Tribunal and the Victorian Office of the Regulator General are, or will be, responsible for the regulation of the pricing of gas distribution pipeline services and for the pricing of gas supplies to tariff customers within their jurisdictions.

The COAG electricity reform process provides an alternative model for developing efficient nationally focused regulatory arrangements for public utility sectors which are undergoing major structural and regulatory reforms.

The COAG/National Grid Management Council national electricity market code of conduct establishes institutional arrangements and market rules for a national wholesale market for electricity and for providing non-discriminatory access to transmission and distribution wires. Participating governments have agreed on a single national approach to the regulation of access to wires, including access prices regulation. State-based regulators will have a role in regulating access to distribution wires and the pricing of energy to tariff market customers, and the ACCC will be responsible for regulation of access to transmission wires after a transitional period. This regulation will be conducted on the basis of agreed, consistent principles and methodologies.

The possibility (indeed likelihood) of having a multitude of regulators involved in both access regulation and prices oversight applying to the same facilities, or to interconnected facilities, as well as to markets upstream or downstream from such facilities, highlights the importance of maintaining consistency of approach and coordination of regulatory activities between Commonwealth and State/Territory regulators. This will be essential to ensure that a fragmented regulatory framework does not distort competition between participants in multi-State or national network industries or distort the market price signals available for investment, production and consumption decisions.

The Competition Principles Agreement signed by the Commonwealth and the Territories and the provisions of Part IIIA dealing with 'effective' access regimes provide a framework for addressing the potential for regulatory overlap and inconsistency between Commonwealth and State regulations and regulators. Under those arrangements there is a presumption that multiple regulators may co-exist provided:

- their access and prices oversight regimes adopt the principles and conditions set out in the Competition Principles Agreement;
- they operate on a consistent basis and provide for a single process and dispute forum where interstate transactions are involved; and
- there are no adverse effects from the facility operating in, or having influences beyond, the State or Territory involved.

Even so, in some cases there is likely to be scope for inefficiencies, increased transactions and regulatory costs and obstacles to interstate competition and trade arising from the fragmentation of access and price regulation among Australian jurisdictions.

Duplication or inconsistency of regulation between Commonwealth and State regulators may be of particular concern where one level of government is regulating the upstream essential facility market and another is regulating the downstream distribution and end user market levels. Effective regulation at one level may eliminate the need for regulation at the other, and the continuation of regulation at both levels could simply add unnecessarily to transactions and regulatory costs. The federal and State policy and regulatory agencies will therefore need to cooperate in eliminating unnecessary regulation of this kind.

Pricing criteria for access undertakings

The sections of Part IIIA which set out the criteria and procedures for the Commission's access arbitration and undertakings functions do not include specific requirements, principles or criteria which the Commission must apply in relation to the pricing aspects of access undertakings or disputes. Rather, the sections give the Commission considerable discretion in the approach it can take to access pricing issues, subject only to the general guidance provided in the sections regarding the matters it must take into account in performing its arbitration and access undertakings functions.

Pricing objectives

The general access arbitration and undertakings criteria set out in the Act essentially require the Commission to have regard to and to balance three sets of interest in determining disputes and accepting undertakings:

- the business interests of the service provider;
- the interests of persons seeking access to the service; and
- the public interest in having competition in markets.

With that in mind, it would be reasonable to identify two basic objectives for access pricing which are generally consistent with reconciling those different interests:

- ensuring that essential facility services are priced efficiently; implying that access prices reflect the least cost supply, encourage optimal use of existing assets and provide incentives for efficient investment decisions; and
- ensuring that essential facility services are priced such that potential users are not denied access to the services at reasonable, non-discriminatory prices, so that competition in related markets is not impeded.

Both objectives would require the elimination of monopoly pricing which is normally a concern in any infrastructure industry with natural monopoly characteristics. They would also require the elimination of price discrimination engaged in for the purpose of impeding competition or damaging competitors in related markets.

These general pricing objectives focus on the competition, economic efficiency and efficient resource allocation implications of access pricing which can in themselves provide

important public benefits in the form of improvements in productivity, economic growth, export and import replacement performance and ultimately in community living standards.

However, the access criteria in the Act, and particularly the obligation to consider 'the public interest, including in having competition in markets', may also be interpreted as requiring consideration of both the economic efficiency implications and any relevant non-economic or social consequences that may be reasonably regarded as contributing to the national interest.

In a recent publication, the Industry Commission has argued for economic efficiency as the prime test because there is less risk of imposing unnecessary (regulatory and other) costs on the parties and on the economy as a whole. The Industry Commission argues that, both in relation to the declaration criteria under which the NCC recommends access be provided and the undertakings criteria under which the Commission will permit access undertakings, the public interest criteria should be interpreted primarily in terms of economic efficiency.

According to this view a primary focus on maximising the benefits of competition will improve economic growth and community welfare directly. This would enable other non-economic objectives to be addressed by more direct means from the taxation and other benefits of higher economic growth rather than being pursued indirectly through utility prices. This approach is consistent with the view that competition policy (including access regulation) should primarily satisfy efficiency goals rather than social or other goals.

An alternative view is that the language adopted in the Act itself suggests that the Parliament intended the 'public interest' to include objectives other than those which flow from competitive markets and economic growth. According to this view, the words 'public interest, *including* in having competition ...' were used deliberately to direct the Commission's attention to other aspects of the public interest.

A further difficult issue is the question of cross-subsidies and community service obligations which may be imposed on facility operators for income distribution or other social policy reasons. Examples may include a universal telephone service obligation imposed on telecommunications operators, or requirements to cross-subsidise utility service prices in favour of certain user groups at the expense of others, for example in favour of country users, householders or disadvantaged members of the community.

On the one hand, such pricing policies might represent an enforced departure from the cost-based pricing which would emerge from unrestricted competition and to that extent would involve a departure from the pricing objective of economic efficiency. As noted above, the Industry Commission maintains that income distribution objectives should be pursued directly and transparently through social welfare policies which are funded from government budgets rather than being achieved indirectly through cross-subsidised utility prices which distort market signals.

On the other hand, the Competition Principles Agreement which forms part of the COAG competition policy reform recognises that participating governments may impose community service obligations on their business enterprises in the context of those reforms.

For example, the Competition Principles Agreement indicates that the prime objective of a prices oversight regime for public monopolies:

> ... should be one of efficient resource allocation but with regard to explicitly identified and defined community service obligations imposed on a business enterprise by the (owning) Government.

The Competition Principles Agreement also provides (at clause 1(3)) guidance on the matters to be taken into account in weighing the benefits and costs of a particular policy or course of action. While this guidance includes reference to 'the competitiveness of Australian business' and to 'the efficient allocation of resources', it also refers to 'policies relating to ecologically sustainable development' and to 'social welfare and equity considerations, including community service obligations'. While the Competition Principles Agreement also notes that the guidance set out in clause 1(3) is not intended to affect the interpretation of 'public benefit' for purposes of authorisations under the Trade Practices Act.

Thus, the interpretation of the 'public interest' criterion in Part IIIA in the context of access pricing and access arrangements generally will require careful consideration by the Commission. The economic efficiency benefits of efficient cost-based pricing in competitive markets will clearly need to be given primacy as this objective is obviously central to the overall purpose of the COAG competition policy reforms and of the Part IIIA access arrangements specifically. However, consideration will also need to be given in appropriate cases to other public interest issues (such as environmental issues and community service obligations) in interpreting the arbitration and undertakings criteria of Part IIIA of the Trade Practices Act.

Possible pricing approaches and methodologies

The pricing of access to facilities of a kind likely to be subject to the access provisions of Part IIIA will be influenced importantly by the structural, technological and cost characteristics of the facilities involved as well as by the demand characteristics of the relevant markets. In particular, the 'essential facilities' involved are likely to:

- have natural monopoly characteristics;
- provide capital intensive infrastructure network services; and
- provide services necessary for competition in markets upstream and/or downstream from the facility.

Among other things, natural monopoly infrastructure facilities normally exhibit economies of scale (and scope) such that pricing at incremental or short-run marginal cost will not recover the full cost of providing the service, including (usually high) fixed and common costs involved. Pricing methodologies will therefore have to reflect options for recovering the full costs of service provision in decreasing cost industries, assuming public provision of the service at a loss is not contemplated.

In practice a range of pricing approaches applicable to access situations is available and it will require case-by-case judgments by the Commission as to which approach is best suited to meeting the efficiency/competition objective. These pricing approaches include:

- pricing at short-run marginal cost (with budget supplementation?);
- pricing on the basis of long-run incremental cost;
- Ramsey pricing (involving premia above marginal cost related to the inverse of price elasticities of demand);
- non-linear pricing such as two-part tariffs (involving a lump sum capacity charge and a separate usage charge);
- congestion pricing such as peak load or peak period pricing;
- pricing on the basis of the efficient component pricing (Baumol-Willig) rule; and
- pricing rules which provide incentives for efficient performance and pricing and information revelation.

Apart from the question of the appropriate price and cost allocation criteria and methodologies, access pricing involves difficult conceptual and empirical issues including the definition and measurement of costs, the valuation of relevant assets, determination of the cost of capital, estimation of demand elasticities and the implications of information asymmetries.

Conclusion

It is not the purpose of this article to assess the available access pricing methodologies and their conceptual and operational benefits and disadvantages in any detail. The Commission is currently examining those issues internally, in consultation with other regulators, as part of its work program on the interpretation and implementation of its new Part IIIA responsibilities.

The Commission does have in mind, however, circulating issues and discussion papers in the coming months on both access pricing and general access issues as contributions to the public discussion and to benefit from the comments and views of facility operators, access seekers and the wider community.