
PANEL SESSION 1

Invited paper 2

Access pricing in telecommunications

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2.1 Introduction

Recent amendments to the *Trade Practices Act 1974* (the Act) have changed the environment within which access to services in the telecommunications industry are determined. One change has been to afford two important functions to the Australian Competition and Consumer Commission. The Commission will have a role in determining:

- the services to which access to third parties must be provided; and
- the terms and conditions upon which access is to be provided.

It must be stressed that the legislation envisages a regime of industry self regulation and commercial determination. A primary mechanism through which services can be 'declared' as access services is through the recommendation of the Telecommunications Access Forum (TAF). Recommendations by the TAF are to be by industry consensus. In addition, it is envisaged that the primary mechanism through which the terms and conditions of access are to be determined is through commercial negotiation.

The Commission does however have important functions in both the declaration of access services and in the determination of terms and conditions of access. During the transition to the new regime the Commission has been required to deem certain services (contained in existing access agreements) to be declared.¹ In the long term the Commission can also declare services after holding a public inquiry.

In regard to the terms and conditions of access, the Commission's role can be described as one of a 'safety net'. One of its main functions is to arbitrate disputes if the terms and conditions of access cannot be determined through commercial negotiation or alternative dispute resolution processes.

The aim of this paper is to outline the Commission's approach to its role in access pricing. This involves an outline of the Commission's on-going responsibilities in this area and a brief discussion of its approach to these responsibilities. It also involves a discussion of a recent determination by the Commission specifying interconnection prices for a certain class of service providers for a six month transitional period. The discussion draws heavily on two Commission publications — *Access pricing principles telecommunications: a draft guide* (28 February 1997) (the draft guide) and *Determination under section 41 of the Telecommunications (Transitional Provisions and Consequential and Amendments) Act 1997* (25 June 1997). The Commission is

¹ For more details see ACCC, *Deeming of Telecommunications Services*, 30 June 1997.

currently refining its approach to access pricing as detailed in the draft guide and will release a revised document during the month of July.

2.2 The Commission's responsibilities in access pricing

Under the recent amendments to the Act, the Commission has both an on-going role and a transitional role in access pricing.

On-going role

Under Part XIC of the Act, the Commission has a role in determining a price for a declared service, or a method for ascertaining a price when undertaking the following tasks:

- approving (or otherwise) the TAF access code which may include the model terms and conditions for access to declared telecommunications services;
- approving (or otherwise) undertakings submitted by access providers which may include the terms and conditions of access to declared telecommunications services; and
- arbitrating disputes between parties concerning the terms and conditions of access to declared telecommunications services.

Transitional role

The legislation also required the Commission to determine transitional terms and conditions upon which a certain class of service providers connect to Telstra's network. In this determination the Commission reduced usage charges service providers using Telstra's National Access service must pay for originating and terminating calls. These terms and conditions, determined under section 41 the *Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997*, will continue for a six month period until 31 December 1997.²

2.3 Legislative criteria

The Commission in meeting its on-going and transitional access pricing responsibilities must ensure that access prices are *reasonable*. In determining

² Or for a longer period as determined by the Commission.

whether terms and conditions are reasonable, Part XIC specifies that regard must be had to the following matters:

- whether the terms and conditions promote the long term interests of end-users of carriage services or of services supplied by means of carriage services;
- the legitimate business interests of the carrier or carriage service provider concerned, and the carrier's or provider's investment in facilities used to supply the declared service concerned;
- the interests of persons who have rights to use the declared service concerned;
- the direct costs of providing access to the declared service concerned;
- the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility;
- the economically efficient operation of a carriage service, a telecommunications network or a facility; and
- the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else.

This does not, by implication, limit the matters to which regard may be had.

The long term interests of end-users are promoted by achieving the following objectives:

- promoting competition in markets for telecommunications services;
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- achieving the economically efficient use of, and the economically efficient investment in, telecommunications infrastructure.

The criteria above are interdependent. In some cases promoting one criterion will promote another. In other cases, the criteria are conflicting. For example, telecommunications is an industry where the delivery of many services is characterised by large economies of scale and scope. Therefore, a central dilemma which must be confronted is that an access price that promotes the economically efficient use of infrastructure in the short term may, in some cases, not promote efficient investment in infrastructure in the long term and may not be consistent with the legitimate business interests of the access provider. In particular, an access price based on the direct incremental cost of providing access may not always allow an efficient access provider to recover all its costs.

In addition to promoting the economically efficient use of, and investment in, infrastructure, the access regime established by Part XIC attempts to open up to competition markets which are potentially competitive but where the scope for competition depends on the services of bottleneck facilities.³ The access price should allow more efficient sources of supply to displace less efficient sources within these potentially competitive markets. However, the access price should also allow vertically-integrated firms to exploit economies of scale and scope to deliver services to end-users at least cost.

Further, access prices and the processes of competition which Part XIC harnesses should encourage suppliers to produce the kinds of services most highly valued by end-users, improve customer choice and product quality, and supply services in the least-cost way.

2.4 Commission's draft approach to access pricing

The Commission's approach to access pricing, as detailed in the draft guide can be divided into four parts:

- identifying declared services to which the Access Pricing Principles (APP) should apply;
- broad pricing principles;
- pricing rules or guides which will assist the Commission in assessing undertakings and in arbitrations; and
- methodology the Commission will apply when required to determine an access price.

Declared services to which the access pricing principles should apply

The range of declared services can be broad, including services required to achieve any-to-any connectivity. As a result it may not be appropriate to apply the APP (in particular cost-based pricing) to all declared services.

In the draft guide the Commission specified pricing principles that it will apply to services that:

³ A bottleneck facility is used to provide services that are essential for firms to supply in downstream markets. A bottleneck facility is usually very costly or impossible to duplicate. As such, there is scope for the owner of a bottleneck facility to reap abnormally high profits through restricting the supply of services from the infrastructure and reducing competition in dependent markets.

- are essential for competition in dependent markets;
- have a high degree of bottleneck power; and
- are not highly contestable.⁴

One example, is the Customer Access Network (CAN) which has a high degree of bottleneck power and is considered to be an essential service for competition.

The largest potential gains from regulatory intervention in access pricing are likely to come from cost-based pricing of the above services. Narrowing the range of services also reduces the risk of the loss that may be caused by inappropriate regulation.

Broad pricing principles

An access price consistent with the reasonableness criteria is difficult to determine *ex ante*. In the draft guide the Commission has indicated its approach to access pricing is designed to constrain access providers to price consistent with that would prevail if they faced effective competition. This yields four broad pricing principles.

Access prices should be cost based

Price of an access service should equal the minimum costs an efficient firm would incur in the long run in providing the service. The relevant costs are the economic costs of providing the service.⁵ These are the on-going (or forward looking) costs of providing the service, including a normal commercial return on efficient investment.

Access prices should not discriminate in a way which reduces efficient competition

An access provider should not be able to price discriminate to reduce efficient competition in downstream markets. This does not mean an access service need be uniformly priced to all customers. Rather, the Commission envisages that in the usual case undertakings will comprise the same menu of offerings for a

⁴ A service that is not highly contestable is one where there are few or no alternative potential sources of supply that could economically displace the current supplier.

⁵ If there are short-run capacity constraints prices could rise to ensure that services go to the highest-valued users. However, access prices should not provide incentives for access providers to artificially constrain capacity to earn congestion rents.

service to all customers on a non discriminatory basis.⁶ Such a principle is necessary to ensure the access price allows more efficient sources of supply in dependent markets to displace less efficient.

Different prices for a service can occur where there are demonstrated differences in the economic costs of supplying the service to different customers. For example, a firm offering cost-related discounts for bulk volume purchases would be consistent with non discriminatory pricing if the same offer was available to all.⁷ Alternatively, an access seeker may commercially negotiate for itself a better access price.

Access prices should not be inflated to reduce competition in dependent markets

A firm facing effective competition will not be able to inflate the access price with the aim of reducing competition in dependent markets.

Access prices should not be predatory

If the forces of competition (or threat of competition) work effectively, a supplier will not be able to successfully predatory price. A predatory price is a price below the incremental cost of production with the aim of reducing competition or discouraging entry into the market (with the objective of pricing above cost once the competition has been removed).

Pricing Guides

In reality it is difficult, time consuming and costly to determine whether a price is cost based, discriminates or is inflated to reduce efficient competition, or is predatory. The Commission has developed price guides that involve comparisons between access prices and observable (or potentially observable) prices and are designed to provide parties with some assistance in developing undertakings. If a price in an undertaking is inconsistent with the guides, it will signal to the Commission that it may be inconsistent with the pricing principles and the legislative criteria under Part XIC, and will need to be examined

⁶ For example, an access provider could offer access seekers a menu of multi-part pricing schemes for a service. Alternatively, different price/quality offerings could be made. For example, lower prices could be offered for a lower quality service. This would allow different customers to adopt different pricing plans in accordance with their own requirements.

⁷ Cost differences arising from supplying customers in different locations or with different credit worthiness may also, among other things, potentially provide grounds for charging different customers different prices.

carefully. These guides may also be used by the Commission in arbitrations to assist in narrowing the range of acceptable price outcomes.

1. Access prices available to competitors must not be greater than the access provider's best price to its own vertically-integrated operations (unless cost justification is provided).
2. Any part of a service, if declared, should be priced at less than the price of the whole service (unless cost justification is provided).
3. An access price for a service must not be greater than the sum of the access prices for the parts of the service (unless cost justification is provided).
4. Any increase in an access price must be based on recognisable changes in the cost of providing the service.
5. Access prices should be based on the functionality of the service — all access prices giving the same functionality should be priced the same.
6. An access price should not be greater than the retail price of the service.
7. Access prices for unbundled elements of a service must be priced the same across all bundled services.

Methodology for determining a price

When arbitrating disputes on access prices, and where necessary when approving undertakings, the Commission must be satisfied that the access price is based on the cost of providing the service. Determining a cost-based price involves identifying which costs to include and establishing and verifying the size of these costs.

There are many variants of cost-based pricing depending upon the costs that are included, how they are allocated and how they are measured (particularly common costs and capital costs).⁸ The Commission's view is that for the types of services mentioned above, the access price should be based on the total service long run incremental cost (TSLRIC) of providing the service.

TSLRIC is the incremental or additional costs the firm incurs in the long term in producing the service, assuming all of its other production activities remain unchanged. It is the cost the firm would avoid in the long term if it ceased to provide the service. As such, TSLRIC represents the costs the firm necessarily

⁸ These variants include directly attributable incremental costs (DAIC), fully distributed costs (FDC), short-run incremental costs (SRIC), long-run incremental costs (LRIC), etc.

incurs in producing the service and captures the value of society's resources used in its production.

TSLRIC consists of the operating and maintenance costs the firm incurs in providing the service, as well as a normal commercial return on capital. TSLRIC also includes common costs that are causally related to the access service.

TSLRIC is based on forward-looking costs. These are the on-going costs of providing the service in the future using the most efficient means possible and generally available. In practice this often means basing costs on the best-in-use technology and production practices and valuing inputs using current prices.⁹

Measuring TSLRIC is a difficult and time consuming exercise. Decisions about how to measure and allocate costs can potentially have as large an effect on the access price as the choice of pricing methodology. Details concerning the measurement of costs are included in the draft guide.

2.5 Transitional interconnection price

As indicated above, the Commission was also required under the legislation to make a determination of the terms and conditions a certain class of service providers connect to Telstra's network. These are transitional provisions covering the six month period until 31 December 1997.¹⁰ It is envisaged that this will provide service providers sufficient time to make their own commercial arrangements with Telstra and other carriers.

⁹ In most cases, using forward looking rather than historic costs will result in the more efficient use of, and investment in, infrastructure. Historic costs guarantee a normal commercial return to the access provider independent of the quality of its investment decisions. Cost valuation based on the best-in-use technology (rather than historical costs) provides stronger incentives for appropriate investment decisions through rewarding/penalising the access provider for good/poor investment decisions. Using historic costs also increases the scope for access providers to shift costs from competitive segments of the market to less competitive segments. This can deter entry and inhibit competition in dependent telecommunications markets. Finally, efficient 'build or buy' decisions will be based on whether a firm can provide the service at a lower cost using the best-in-use technology. As historic costs may not represent costs using the best-in-use technology, access prices based on these costs may result in inefficient build or buy decisions.

¹⁰ Section 41 of the *Telecommunications (Transitional Provisions and Consequential and Amendments) Act 1997*.

The major part of the Commission's determination under section 41 was to review the terms and conditions of Telstra's National Access service. National Access is a national access and egress service for service providers who provide call management services to third parties. It allows service providers with their own switching equipment to connect to Telstra's network and provide end-to-end services over that network.

In the limited time available, the Commission was not able to undertake a full information gathering and verification process that could be expected in an arbitration. As a result, the Commission adopted a pragmatic approach which it considered appropriate given the transitional nature of the determination. The approach involved benchmarking the terms and conditions of National Access to the current Telstra–Optus Access Agreement. Specifically, the Commission benchmarked the terms and conditions of the services provided by Telstra to Optus that use bottleneck elements (CAN, local switching, junction network, trunk switching) to the same interconnection services provided under National Access. Under the Commission's draft pricing principles, these services should be cost-based.

The Commission considered this approach appropriate because:

- interconnection services are sufficiently similar;
- structure of charges are sufficiently similar with up-front charges and usage charges;
- evidence suggests that the terms and conditions in the Telstra–Optus Agreement are more consistent with the reasonableness criteria that National Access;
- evidence suggests that the Telstra–Optus Agreement includes favourable interconnection charges and conditions from the pre-existing duopoly arrangements (Part 8 of the *Telecommunication Act* 1991); and
- evidence suggests that the National Access tariff includes an amount to recover the costs of Universal Service Obligations (USOs) (service providers using National Access are likely to become carriers on or soon after 1 July 1997 and be required to contribute separately to the USO fund).

The major changes in the determination were to the originating (access) and terminating (egress) services of the National Access tariff.

Capital city

Pre-existing usage rate
(cents per minute)

Usage rate specified in
Commission's determination
(cents per minute)

Access/Egress (8.00am – 10.00pm)	4.24	2.84
Access/Egress (10.00pm – 8.00am)	2.18	1.34

Non-capital city

	<i>Pre-existing usage rate (cents per minute)</i>	<i>Usage rate specified in Commission's determination (cents per minute)</i>
Access/Egress (8.00am – 10.00pm)	7.48	5.01
Access/Egress (10.00pm – 8.00am)	4.99	3.07

Non-code access (pre-selection)

Per call non-code access charge (per month) were changed to:

- 3 cents per call attempt for 0 to 850,000 calls per month; and
- 0 cents per call attempt thereafter.

from:

- 3 cents per call attempt for 0 to 850,000 calls per month;
- 2 cents per call attempt for 850,000 to 2,500,000 per month;
- 1 cents per call attempt for 2,500,000 to 5,000,000 per month;
- 0.5 cents per call attempt for 5,000,000 to 8,500,000 per month;
- 0.2 cents per call attempt for 8,500,000 to 25,000,000 per month; and
- 0.1 cents per call attempt thereafter.