



DOMESTIC TRANSMISSION CAPACITY SERVICE

***An ACCC Discussion Paper reviewing the declaration for the
domestic transmission capacity service***

November 2008

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1 Introduction

1.1 Background

The Australian Competition and Consumer Commission (Commission) is to conduct a review of the declared domestic transmission capacity service (DTCS). The purpose of the review is to determine whether the declaration should be remade, extended, revoked, varied or allowed to expire.

The Commission is required to conduct this review pursuant to section 152ALA of the *Trade Practices Act 1974 (Act)*. The review is to be conducted pursuant to Part 25 of the *Telecommunications Act 1997*.

1.2 Purpose

The purpose of this Discussion Paper is to:

- identify the issues which, in the Commission's opinion, are relevant to the review of the existing declaration (which currently applies to specified transmission services)
- set out background material about, and discussion of, those issues which the Commission seeks comment on from industry participants, other stakeholders (including end-users) and the public more generally.

Section Two outlines the timetable and inquiry process for the declaration review.

Section Three outlines the declared service and the legislative background for the declaration review.

Section Four provides a description of transmission services.

Section Five outlines the relevance of the Commission's Final DTCS Exemption Decision.

Section Six sets out the matters that the Commission would like submissions to address.

Section Seven outlines the factors the Commission must have regard to when developing pricing principles for declared services.

Appendix 1 contains the current transmission capacity service description.

Appendix 2 details the legislative background.

Appendix 3 collates the questions submissions should address.

2 Timetable and Inquiry Process

2.1 Timetable for the Inquiry

Under the Telecommunications Act, the Commission must provide a reasonable opportunity for any member of the public to make a written submission to a public inquiry. Accordingly, the Commission requests written submissions by no later than 5.00pm on Tuesday 23 December 2008.

After consideration of the submissions from interested parties, the Commission will publish a draft report setting out its preliminary findings. The Commission will then provide an opportunity for comment to be made on the draft report before making its final decision.

Further information about the Commission's approach to declaration inquiries is outlined in its publication *Telecommunications services – Declaration provisions – a guide to the declaration Provisions of Part XIC of the Trade Practices Act*, July 1999.

2.2 Making submissions

The Commission encourages industry participants, other stakeholders and the public more generally to consider the matters set out in Section 6 of this Discussion Paper, and to make submissions to the Commission to assist it in determining whether to remake, extend, revoke, vary or allow the existing declaration for the DTCS to expire.

To foster an informed and consultative process, all submissions will be considered as public submissions and will be posted on the Commission's website. If interested parties wish to submit commercial-in-confidence material to the Commission they should submit both a public and a commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or 'c-i-c'.

Please forward submissions **by email** to the Contact Officer:

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3 Legislative background

3.1 The access regime

Part XIC of the Act establishes a regime for regulated access to carriage services and services which facilitate the supply of carriage services. Access obligations in relation to a particular service are established following the declaration of that service by the Commission. Once a service is declared, access seekers must be provided with that service and specified ancillary services, on request, by any access provider supplying, or proposing to supply, those services to any person (including to themselves). The access regime thus enables access seekers to supply carriage or content services to their customers without the (potentially anti-competitive) restriction of key services by access providers.

The terms and conditions of supply can be agreed through commercial negotiations. If the access provider or access seekers cannot agree on the terms and conditions of supply, either party can seek Commission arbitration of disputes over access terms and conditions of declared services. Where a relevant access undertaking (accepted by the Commission) exists, an arbitration determination made by the Commission on access to the declared service must not be inconsistent with that undertaking.

3.2 The declared service

The DTCS was deemed a declared service under Part XIC of the Act on 30 June 1997. The declared service did not include transmission capacity on major inter-capital routes (specifically defined as routes between the cities of Brisbane, Sydney, Canberra, Melbourne, Adelaide and Perth).

On 4 November 1998, the Commission varied the declared DTCS following a public inquiry process.¹ The variations involved, *inter alia*, the inclusion of the major inter-capital routes with the exception of those between Melbourne, Canberra and Sydney.

The Commission also established a monitoring program to assess aspects of market structure and market conduct on all the inter-capital routes. The monitoring program began in March 1999 and involved periodically collecting data (on a voluntary basis) from both Telstra and Optus. In May 2001, following a public inquiry, the Commission decided to vary the declaration to remove the remaining defined inter-capital routes (i.e. Brisbane, Adelaide and Perth) on the basis that increasing/impending entry was stimulating competition on these routes. The monitoring program was extended to monitor whether competition developed as expected on these inter-capital routes by including the new carriers providing transmission services.

In its 2004 review of the DTCS declaration (2004 Declaration Review), the

¹ ACCC, *Competition in data markets – Inquiry Report*, Chapter 4, November 1998.

Commission decided that the DTCS declaration should be allowed to expire and be replaced with a new declaration.²

The 2004 Declaration Review left out of the scope of the declaration:

- inter-capital routes between Brisbane, Sydney, Canberra, Melbourne, Adelaide and Perth, and
- 14 nominated capital-regional routes (Table 1 in section 4.3 lists these routes).

However, the Commission decided to continue to include CBD inter-exchange and CBD tail-end transmission within the DTCS declaration.

The Commission took the view that there was sufficient competition on all inter-capital routes, including the east-west routes, such that they should remain outside the scope of declaration and the associated monitoring program should be discontinued. This decision was based on evidence of at least three infrastructure competitors and at least two carriers/carriage service providers ('CSPs') that had secured long-term contractual arrangements with surplus capacity to resell transmission capacity services on the exempted routes.³

For capital-regional routes, the Commission's decision was based on evidence of at least three optical fibre suppliers either serving the regional centres or in very close proximity (within 1 km or less from the GPO of a regional centre for a given capital-regional route). The Commission took the view that the presence of at least three suppliers serves as evidence of sufficient competition and/or contestability to warrant removal of that route from declaration.⁴ In coming to this conclusion, the Commission had regard to the competitive environment that might be faced by an owner of a network which had the potential to supply capital-regional routes.

In making the decision to maintain declaration of CBD inter-exchange and CBD tail-end transmission, the Commission considered that there was not effective competition and/or sufficient contestability in the markets for inter-exchange and tail-end transmission services. The Commission noted that economies of scope exist between the two services and therefore CBD tail-end transmission may be particularly affected if CBD inter-exchange transmission was exempt from declaration in those nominated areas.⁵

3.3 Declaration review

Section 152ALA of the Act requires the Commission to review each declaration within the year preceding its expiry date.

² ACCC, *Transmission Capacity Service – Review of the declaration for the domestic transmission capacity service – Final Report*, April 2004.

³ *ibid.*, p.4.

⁴ *ibid.*, p.27.

⁵ *ibid.*, p.5.

The purpose of the review, as set out in section 152ALA(7) of the Act, is to determine whether or not the declaration should be remade, extended, revoked, varied or allowed to expire. An extension to an expiry date, or the expiry date for a new declaration, may not be for a period exceeding five years.

The purpose of holding a public inquiry is to assist the Commission to determine whether it is satisfied that maintaining, varying or revoking the existing declaration would promote the long-term interests of end-users (LTIE) of carriage services and services provided by means of carriage services. In this regard, the Commission must:

- hold a public inquiry in accordance with Part 25 of the Telecommunications Act on whether to remake, extend, revoke, vary or allow the existing service declaration to expire
- prepare and publish a report setting out the Commission's findings as a result of that public inquiry, and
- be satisfied that remaking, extending, revoking, varying or allowing the service declaration to expire will promote the LTIE of carriage services or of services provided by means of carriage services.

The Commission's power to remake, extend, revoke or vary a declaration is set out in sections 152AL, 152ALA and 152AO of the Act.

3.4 The Commission's approach to the LTIE test

In determining whether remaking, extending, revoking, varying or allowing the existing service declaration to expire will promote the LTIE, regard must be had to the three primary objectives identified by section 152AB:

- promoting competition in markets for listed services
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users, and
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied and any other infrastructure by which telecommunications services are, or are likely to become, capable of being supplied.⁶

Section 152AB also provides further guidance in interpreting these objectives. The three objectives and the legislative background in general are discussed further in Appendix 2.

⁶ See section 152AB of the Act.

4 Transmission Services

4.1 Generic service description

The DTCS is a generic service that can be used for the carriage of voice, data or other communications using wideband or broadband carriage (the minimum bandwidth in the current declaration is 2 Mbps). Carriers/CSPs can use transmission capacity to set up their own networks for aggregated voice or data channels, or for integrated data traffic (such as voice, video and data).

There are a number of types of transmission capacity services, including:

- inter-capital transmission
- ‘other’ transmission (e.g. capital-regional routes)
- inter-exchange local transmission
- tail-end transmission.

4.2 Declared transmission service

The declared transmission capacity service currently includes tail-end transmission, inter-exchange local transmission and ‘other’ transmission.

Tail-end transmission refers to transmission between a point at a customer location and some point on the access seeker’s network (that is, a point of interconnection). For example, in the case of a customer whose premises are located near an access provider’s local exchange where there is a transmission point of interconnection, the transmission of traffic from that customer’s premises to the access provider’s local exchange, and hence to the transmission point of interconnection, would constitute tail-end transmission.

Inter-exchange local transmission refers to transmission between points of interconnection located at or virtually co-located with an access provider’s local exchange, both of which are within a single call charge area. In functional terms, these transmission links, together with switching and network management functions, constitute the inter-exchange network, which carries traffic within a call charge area, but where the transmission points are not linked to the same local exchange.

‘Other’ transmission refers to transmission between points located in different call charge areas, except for inter-capital transmission between the exempt capital cities: Melbourne, Sydney, Canberra, Brisbane, Adelaide and Perth. For example, it includes transmission between Adelaide-Darwin, Perth-Darwin and Melbourne-Hobart, as well as transmission along capital-regional routes (eg Sydney-Albury) and regional-regional (eg Geelong-Ballarat).

The current service description for the DTCS declaration can be found at Appendix 1.

4.3 Non-declared transmission services

As noted above, the non-declared transmission capacity service currently includes inter-capital transmission, or transmission between transmission points of interconnection which are located in exempt capital cities. In the 2004 Declaration Review Final Report ('2004 Final Report') the Commission decided that 14 nominated capital-regional routes should be excluded from the declaration.⁷

The capital-regional routes that were excluded from the current declaration are listed below in Table 1.

Table 1

New South Wales	Victoria	Queensland	South Australia
Sydney – Albury	Melbourne – Ballarat	Brisbane – Toowoomba	Adelaide – Murray Bridge
Sydney – Lismore	Melbourne – Bendigo	Brisbane – Gold-Coast	
Sydney – Newcastle	Melbourne – Geelong		
Sydney – Grafton	Melbourne – Shepparton		
Sydney – Wollongong			
Sydney – Taree			
Sydney - Dubbo			

The 2004 Final Report also recommended that routes which have at least three optical fibre suppliers either serving these regional centres or in very close proximity (within 1 km or less from the GPO of a regional centre for a given capital-regional route)⁸ be removed from the declaration, as the presence of three optical fibre suppliers within 1 km or less from the GPO of a regional centre for a given capital-regional route was evidence of sufficient competition/contestability on the relevant route. This was the basis for exempting from declaration the routes set out in Table 1.

⁷ ACCC, *Transmission Capacity Service – Review of the declaration for the domestic transmission capacity service – Final Report*, April 2004, p.48 & 49.

⁸ ACCC, *Transmission Capacity Service – Review of the declaration for the domestic transmission capacity service – Final Report*, April 2004, p.27.

5 The Commission's final exemption decision

On 24 August 2007, Telstra lodged an application under section 152AT of the Act for an individual exemption from the standard access obligations (SAOs) in relation to the supply of the DTCS on 20 capital-regional routes.

On 21 December 2007, Telstra lodged four additional applications for individual exemption from the SAOs in relation to the supply of the DTCS in terms of:

- inter-exchange transmission in 17 capital city areas for all declared bandwidths
- tail-end transmission in 17 capital city areas for all declared bandwidths
- inter-exchange transmission in 115 metropolitan areas or regional centres for all bandwidths, and
- tail-end transmission in 128 metropolitan areas for bandwidths up to 2 Mbps.

On 25 November 2008, the Commission released its final decision on Telstra's transmission exemption applications: *Telstra's domestic transmission capacity service exemption applications – Final decision*, November 2008 (Final Exemption Decision). In the Final Exemption Decision, the Commission concluded that where there is effective competition or contestability in a transmission market, granting an exemption from the DTCS in that market would not be detrimental to the objective of promotion of competition.⁹ However, where no evidence exists, it is likely that a bottleneck remains and that a declared DTCS should remain available to access seekers. Routes are considered competitive or contestable according to the '1 km criterion' established in the 2004 Declaration Review.¹⁰

In the Final Exemption Decision, the Commission decided to:

- exempt capital-regional transmission on 9 of 20 capital regional routes
- exempt inter-exchange transmission in 16 of 17 capital city areas
- exempt inter-exchange transmission for 72 of 115 metropolitan areas
- refuse Telstra's exemption application for tail-end transmission in metropolitan and capital city areas, and
- issue a determination for a class exemption of the same scope.

⁹ ACCC, *Telstra's domestic transmission capacity service exemption applications – Final Decision*, November 2008, p.4.

¹⁰ ACCC, *Transmission Capacity Service – Review of the declaration for the domestic transmission capacity service – Final Report*, April 2004, p.27.

In the Final Exemption Decision the Commission decided that a transition phase of 12 months should apply to allow access seekers time to adjust their business plans and make alternative arrangements.

The Commission decided that a 12 month transition period will provide an opportunity for:

- users of the DTCS in areas which are proposed to be exempted to make any necessary alterations to their current business plans and negotiate supply arrangements with Telstra or a third party on a commercial basis
- owners of fibre infrastructure to have sufficient time to expand the capacity of existing fibre networks or invest in other infrastructure that is required to supply capital-regional or inter-exchange services.¹¹

In the Final Exemption Decision the Commission decided that the exemptions should be granted for a limited period and should expire on 21 December 2012 or on the expiry or revocation of the DTCS declaration, whichever occurs first. The Commission's view is that this period of time is sufficient to promote regulatory certainty.¹²

The Commission notes that the current expiry date of the DTCS declaration is 31 March 2009 – before the commencement of the exemption orders. Accordingly, if the DTCS declaration was allowed to expire, the exemption orders would become redundant. If however, the DTCS declaration's expiry date was extended pursuant to section 152ALA(4), the exemption orders will apply in respect of that service.

For full details of the Commission's Final Exemption Decision visit the Commission's website at www.accc.gov.au.

¹¹ ACCC, *Telstra's domestic transmission capacity service exemption application s– Final Decision*, November 2008, p.103 & 104.

¹² ACCC, *Telstra's domestic transmission capacity service exemption applications – Final Decision*, November 2008, p.104.

6 Main matters submissions should address

In reviewing the existing declaration for the DTCS, the Commission must decide whether to remake, extend, revoke or vary the existing declaration or allow it to expire. The Commission must have regard to the legislative criteria outlined in section 152AB of the Act (discussed in Section 3). Where possible, submissions should address the legislative criteria to assist the Commission.

Outlined below are more specific issues that the Commission considers may be pertinent to a review of the existing service declaration, in order to assist it to determine what outcome is in the LTIE.

6.1 Market definition

Identifying markets relevant to transmission services will allow the Commission to meaningfully analyse the effectiveness of competition and the likely effect of remaking, extending, revoking or varying the existing declaration or allowing it to expire. The markets identified may be for declared transmission, non-declared transmission, or any relevant downstream markets.

The Act directs the Commission's attention to the markets in which competition may be promoted. In most cases, this is likely to be the markets for downstream services rather than the market in which the eligible service is supplied (where these markets are separate). That said, the Act does not prohibit the Commission from considering the market in which the service is supplied where this will assist in examining the impact of remaking, extending, revoking or varying the existing declaration or allowing its expiration, on competition in the relevant markets.

The process of market definition involves determining the market boundaries of transmission or any downstream markets, which can be described in product, geographic and functional terms. Further discussion of these elements can be found in the *Draft Merger Guidelines, 2008* (2008 Draft Merger Guidelines).¹³

Questions to assist those preparing submissions:

- The Commission's view in the Final Exemption Decision is that the relevant downstream market is the range of retail services (that can be provided using transmission services) delivered over optical fibre. This includes the national long distance, international call, data and IP-related markets. Are these the relevant downstream markets for which transmission constitutes an input?
- What is the extent to which downstream services are concentrated on certain transmission routes?

¹³ ACCC, *Merger Guidelines* (Draft), 2008.

6.2 Geographic market

In relation to determining the market boundaries on a geographic basis, the Commission has, in past inquiries, noted that geographic markets included inter-capital transmission, capital-regional routes, inter-regional routes and local exchange and tail-end transmission in regional, metropolitan and CBD areas. When considering inter-capital transmission, the Commission has viewed each inter-capital transmission route as a distinct geographical market with differing characteristics.

In the 2004 Final Report, the Commission considered that broad geographical categories for transmission capacity services are useful in identifying particular transmission markets. It also considered that it is feasible to break these into particular routes where clear distinctions are apparent based on traffic volumes and the loci of competing providers.

Questions to assist those preparing submissions:

- What are the relevant markets affected by the declaration review?

6.3 Technologies used to provide transmission services

In the 2004 Final Report, the Commission considered that optical fibre remained the dominant technology for the provision of all transmission services. In light of information received during the 2004 Declaration Review, the Commission did not consider microwave services as a viable substitute on capital-regional routes given that it could not be utilised effectively across the entire range of downstream demands. Further, the Commission considered that alternative tail-end transmission technologies such as ULLS, HFC, LMDS and MMDS could not match optical fibre in terms of capacity or customer acceptance for the full range of transmission requirements.

Questions to assist those preparing submissions:

- Are competing fibre-optic owners and providers able to replicate DTCS services inter-exchange and tail-end transmission services?
- Have the alternative technologies to fibre-optical cable become more or less viable in the provision of transmission capacity since the previous inquiry? Are they likely to increase or decrease in importance in the foreseeable future?
- What are the substitutes for DTCS?

6.4 Market Structure

Market structure is an important determinant of a competitive market. The Commission is particularly concerned to examine whether the market structure has changed in respect of both declared and non-declared transmission since the original service declaration, and the subsequent variations. Both current and future indications of market structure are important. The Commission is interested, therefore, not only in the current number of participants in transmission markets, but in whether this number is likely to change via new market entry or existing players exiting the market.

In the 2004 Final Report, the Commission took the view that the presence of non-vertically integrated providers and access seekers suggested that there were not overwhelming efficiencies from vertical integration, and thus, that there appeared to be a separate wholesale market for transmission services. In terms of the vertical elements of the transmission capacity service, the Commission came to the view that in CBD areas there did not appear to be a discrete inter-exchange local transmission service. Such a service is most commonly purchased from a supplier of a transmission tail-end service, in conjunction with that service.

With respect to capital-regional transmission services, the Commission considered that where a route had at least three optical fibre competitors present or in very close proximity (within 1 km or less from the GPO of a regional centre for a given capital-regional route), there was likely to be sufficient competition/contestability on the relevant route to warrant removal of that route from declaration.¹⁴ However, this structural threshold was not necessarily appropriate in reviewing other service declarations.

Questions to assist those preparing submissions:

- Should DTCS with respect to inter-exchange and tail-end transmission services be considered as enduring bottlenecks?

6.5 Market entry

In its 2004 Final Report, the Commission considered concentration levels to be an indicator of the level of competition for provision of inter-exchange and tail-end transmission services.

The potential for fibre owners, fibre providers and owners with access to fibre infrastructure in a particular CBD, metropolitan or regional Exchange Service Area (“ESA”) to provide inter-exchange and tail-end transmission services is important in determining whether removal of these services from the declaration would promote the LTIE.

¹⁴ ACCC, *Transmission Capacity Service – Review of the declaration for the domestic transmission capacity service – Final Report*, April 2004, p.27.

Issues that the Commission identified in the 2004 Final Report which were relevant to its decision not to exempt inter-exchange transmission services were:

- the economies of scope in access seekers purchasing the services together
- the number of end-customers likely to be supplied by a new entrant to the market
- the degree of difficulty for new entrants to the market to connect to Telstra's exchanges
- the impact on the development of competition in downstream markets if tail-end transmission services were not exempted from the DTCS declaration but inter-exchange transmission services were.

Issues that the Commission identified in the 2004 Final Report which were relevant to its decision not to exempt tail-end transmission services were:

- Telstra's dominance in the market
- the ability of access to Telstra's network to act as a stepping stone for encouraging infrastructure based competition
- the lack of viable alternative declared services.

Questions to assist those preparing submissions:

- Is competition in downstream markets currently effective?
- What infrastructure do alternative wholesale providers use to supply inter-exchange or tail-end transmission services?
- Are there any investments planned by alternative providers to enable the provision of inter-exchange or tail-end transmission services?
- Would all new DTCS infrastructure have the capacity to provide competitive constraints on existing infrastructure in relation to the provision of inter-exchange or tail-end transmission services?
- Do barriers to entry exist in transmission markets? If so, what are they? Are there barriers to expanding in any inter-capital market? If so, what are they?
- Are markets still dominated by Telstra? If so, which ones?

6.6 Excess capacity

The 2004 Final Report commented on the presence of excess capacity along a particular route as being a potential barrier for alternative providers to enter the market. At that time, the Commission noted that it was not aware of incumbent firms using excess capacity to deter new entrants from establishing rival networks on particular routes. The 2004 Final Report also noted that transmission networks are generally constructed to accommodate traffic requirements that are far in excess of current demand for the purposes of offering redundancy and to cater for future bandwidth needs rather than for deterring competitive entry.

Questions to assist those preparing submissions:

- Can excess capacity still be viewed as a benign factor in determining the level of competition in the market?

6.7 Price movements

In the 2004 Final Report, the Commission formed the view that prices for inter-capital and capital-regional transmission had fallen since the previous declaration in 2001. However, submissions suggested that the extent of the price falls had been greater on inter-capital routes than on non-inter-capital routes.

The Commission considered that evidence of prices for non-inter-capital transmission services not falling (in percentage terms) commensurably with prices for inter-capital transmission services reflected the lesser extent of infrastructure competition in many of these markets. However, the Commission noted that many capital-regional routes had a number of infrastructure competitors.

Questions to assist those preparing submissions:

- Have prices continued to fall since the previous inquiry?
- Have some markets exhibited greater price falls than others? Why?

6.8 Profit margins

In the 2004 Final Report the Commission was unable to come to a definitive view of how closely transmission prices reflected costs. However it considered that prices were likely to be closer to costs where there were several competitors operating in a particular transmission market.

Questions to assist those preparing submissions:

- Do wholesale prices for inter-capital transmission reflect underlying costs? If not, on which inter-capital routes is this the case?
- Do wholesale prices for non-inter-capital transmission reflect underlying costs? If not, on which routes is this the case?

6.9 Impact on efficient use of and investment in infrastructure

As discussed in Appendix 2, in assessing whether remaking, extending, revoking or varying the existing declaration or allowing it to expire will promote the LTIE, the Commission is required to consider whether it is likely to encourage the economically efficient use of, and the economically efficient investment in:

- infrastructure by which listed services are supplied
- any other infrastructure by which listed services are, or are likely to become, capable of being supplied.

There is a strong relationship between the relevant factors when considering the promotion of competition and the relevant factors when considering the economically efficient use of and investment in infrastructure. As noted above, the Commission considers that the effect of declaration on the incentives for investment is likely to be a significant factor in deciding whether to remake, extend, revoke or vary the existing declaration or allow it to expire.

Economically efficient use of infrastructure

As noted in Appendix 2, the Commission considers that efficiency has three major components – allocative, productive and dynamic. In general, each of these forms of efficiency is enhanced when prices of given services reflect the underlying costs of providing these services.

The question of whether declaration promotes the economically efficient use of infrastructure is closely related to the price charged for a service. The comparison of the level of costs to prices, and the impact declaration will have on the difference between the two, are key considerations in determining whether declaration leads to a more efficient use of infrastructure.

Economically efficient investment in infrastructure

Efficient investment in infrastructure makes an important contribution to the promotion of the LTIE. It can lead to more efficient methods of production, foster increased competition in lower prices, and enhance the level of diversity in the goods and services available to end-users. The Commission is particularly concerned to ensure declaration does not prevent efficient investment or encourage inefficient investment. Creating the right incentive for

service providers to make an efficient build/buy choice is closely related to the price of the service.

In the present case, it is necessary to consider three different types of infrastructure investment:

- infrastructure by which the DTCS are currently supplied
- alternative infrastructure by which the DTCS may be supplied
- alternative infrastructure by which other related services may be supplied.

The Commission considers that the economically efficient investment in alternative infrastructure may be affected by the declaration of the DTCS (and conversely by the expiration of the declaration).

The ongoing declaration of the DTCS may provide a substitute for, and impediment to, efficient investment in alternative infrastructure. If the declared service provides an easy means of entry into the market with minimal risk and investment, access seekers may choose to postpone or cancel investment in new infrastructure with which they could provide the service. Declaration might diminish the incentives for the deployment and activation of alternative infrastructure and stifle the development of facilities-based competition.

Accordingly, allowing the declaration to expire where facilities-based competition is economically feasible, would likely lead to efficient investment by current access seekers and more sustainable and innovative forms of competition. As noted previously, the Commission is of the view that facilities-based competition is generally more desirable for the promotion of the LTIE.

Questions to assist those preparing submissions:

- Has declaration of the DTCS discouraged investment in alternative infrastructure by access seekers?
- Would revoking the declaration be likely to encourage efficient investment in alternative infrastructure by removing the scope for reliance on the declared DTCS for inter-exchange and tail-end transmission services?

6.10 Exemptions to the DTCS

The Commission's Final Exemption Decision is that a phase in period of 12 months should be applied to the granted exemptions to allow access seekers time to adjust their business plans and make alternative arrangements.

The Commission notes that the current expiry date of the DTCS declaration is 31 March 2009 – before the commencement of the exemption orders. Accordingly, if the DTCS declaration was allowed to expire, the exemption orders would become redundant. If however, the DTCS declaration’s expiry date was extended pursuant to section 152ALA(4), the exemption orders will apply in respect of that service.

Questions to assist those preparing submissions:

- Keeping in mind that the Commission has issued a Final Exemption decision (as outlined in Section 5), should the existing declaration be remade, extended, revoked, varied or allowed to expire?

7 Developing Pricing Principles for Declared Services

7.1 Legislative Requirement

Under section 152AQA of the Act, the Commission must, by writing, determine principles relating to the price of access to a declared service. The determination may also contain price-related terms and conditions relating to access to the declared service. In terms of timing, the Commission must make such a determination at the same time as, or as soon as practicable after:

- the Commission declares a service to be a declared service
- if the Commission varies a declared service – that variation.

Before making such a determination, the Commission must publish a draft of the determination and invite people to make submissions to the Commission on the draft determination. Subsequently, after considering the submissions received, the Commission must publish the determination in such a manner as it considers appropriate.

If the Commission is required to arbitrate an access dispute under Division 8 in relation to the declared service, the Commission must have regard to the determination.

7.2 Criteria for developing pricing principles

The Commission's role in assessing price terms and conditions generally revolves around assessing undertakings and arbitrating access disputes. In the context of assessing undertakings, the Act requires the ACCC to consider whether the terms and conditions of access are reasonable.¹⁵ In determining whether terms and conditions are reasonable, regard must be had to the following matters:

- Whether the terms and conditions promote the LTIE of carriage services or of services supplied by means of carriage services, which requires consideration of:
 - the objective of promoting competition in markets for telecommunications services
 - the objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users
 - the objective of encouraging the economically efficient use of, and the economically efficient investment in: (i) the infrastructure by which telecommunications services are supplied; and (ii) any other infrastructure by which listed services are, or are likely to become, capable of being supplied.¹⁶

¹⁵ The Commission must also ensure that the terms and conditions in an undertaking are consistent with any Ministerial pricing determination in place. See section 152CI of the Act.

¹⁶ Section 152AB(2) of the Act.

- 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.¹⁷

This does not, by implication, limit the matters to which regard may be had.¹⁸

The ACCC must have regard to similar matters in making a final determination in access disputes.

The Commission has generally employed the pricing methodology based on TSLRIC to determine an access price. In September 2004, the Commission released its *Pricing Principles for Declared Transmission Capacity Services*, again recommending that a TSLRIC approach be adopted when determining an appropriate access price for the transmission capacity service.

Questions to assist those preparing submissions:

- What are considered to be the appropriate pricing principles for the transmission capacity service?

¹⁷ Section 152AH(1) of the Act.

¹⁸ Section 152AH(2) of the Act.

Appendix 1. Current transmission capacity service description

The domestic transmission capacity service is a service for the carriage of certain communications from one transmission point to another transmission point via network interfaces at a designated rate on a permanent basis by means of guided and/or unguided electromagnetic energy, except communications between:

- a) one customer transmission point and another customer transmission point
- b) a transmission point in an exempt capital city and a transmission point in another exempt capital city
- c) a transmission point in Sydney and a transmission point in any of the following regional centres: Albury, Lismore, Newcastle, Grafton, Wollongong, Taree and Dubbo
- d) a transmission point in Melbourne and a transmission point in any of the following regional centres: Ballarat, Bendigo, Geelong and Shepparton
- e) a transmission point in Brisbane and a transmission point in any of the following regional centres: Toowoomba and Gold Coast
- f) a transmission point in Adelaide and a transmission point in Murray Bridge
- g) one access seeker network location and another access seeker network location.

Definitions

Where words or phrases used in this Annexure are defined in the *Trade Practices Act 1974* or the *Telecommunications Act 1997*, they have the meaning as given in the relevant Act.

In this appendix:

an **access seeker network location** is a point in a network operated by a service provider that is not a point of interconnection or a customer transmission point

an **exempt capital city** means Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney

a **customer transmission point** is a point located at customer equipment at a service provider's customer's premises in Australia (for the avoidance of doubt, a customer in this context may be another service provider)

a **designated rate** is a transmission rate of 2.048 Megabits per second, 4.096 Megabits per second, 6.144 Megabits per second, 8.192 Megabits per second, 34 to 35 Megabits per second, 140/155 Megabits per second (or higher orders)

a **point of interconnection** is a physical point of interconnection in Australia between a network operated by a carrier or a carriage service provider and another network operated by a service provider

a **transmission point** is any of the following:

- a) a point of interconnection
- b) a customer transmission point
- c) an access seeker network location.

Appendix 2. Legislative background

Part XIC of the Act sets out a telecommunications access regime. This section of the discussion paper outlines the provisions of the access regime that are relevant to the declaration review.

A.1 Declaration and the SAOs

The Commission may determine that particular carriage services and related services are declared services under section 152AL of the Act. A carrier or carriage service provider that provides a declared service to itself or other persons is known as an access provider. Once a service is declared, access providers are subject to a number of SAOs pursuant to section 152AR of the Act. Terms of access can be governed by the terms of an undertaking or, in the absence of an accepted undertaking, by Commission determination in an access dispute.

In summary, the SAOs require that an access provider, if requested by a service provider, must:

- supply the declared service
- take all reasonable steps to ensure that the technical and operational quality of the service supplied to the service provider is equivalent to that which the access provider is supplying to itself
- take all reasonable steps to ensure that the fault detection, handling and rectification which the service provider receives in relation to the declared service is of equivalent technical and operational quality and timing as that provided by the access provider to itself
- permit interconnection of its facilities with the facilities of the service provider
- take all reasonable steps to ensure that the technical and operational quality and timing of the interconnection is equivalent to that which the access provider provides to itself
- take all reasonable steps to ensure that the service provider receives interconnection fault detection, handling and rectification of a technical and operational quality and timing that is equivalent to that which the access provider provides to itself
- if a standard is in force under section 384 of the Telecommunications Act, take all reasonable steps to ensure that the interconnection complies with the standard
- if requested by the service provider, provide billing information in connection with matters associated with, or incidental to, the supply of the declared service

- if an access provider supplies an active declared service by means of conditional-access customer equipment, the access provider must, if requested to do so by a service provider, supply any service that is necessary to enable the service provider to supply carriage services and/or content services by means of the declared service and using the equipment.

The Commission must only declare a service if, following a public inquiry, it considers that declaration would promote the LTIE.

A.2 Long-term interests of end-users

Section 152AB of the Act states that, in determining whether declaration promotes the LTIE, regard must be had to the extent to which declaration is likely to result in the achievement of the following objectives only:

- promoting competition in markets for listed services
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users
- encouraging the economically efficient use of, and the economically efficient investment in: (i) the infrastructure by which listed services are supplied; and (ii) any other infrastructure by which listed services are, or are likely to become, capable of being supplied.

These objectives are interrelated. In many cases, the LTIE may be promoted through the achievement of two or all three of these matters simultaneously. In other cases, the achievement of one of these matters may involve some trade-off in terms of another of the matters, and the Commission will need to weigh up the different effects to determine whether remaking, extending, revoking or varying the existing declaration, or allowing it to expire promotes the LTIE. In this regard, the Commission will interpret long-term to mean a balancing of the flow of costs and benefits to end-users over time in relation to the criteria. Thus, it may be in the LTIE to receive a benefit for even a short period of time if its effect is not outweighed by any longer term cost.

The following discussion provides an overview of what the Commission must consider in assessing each of these objectives.

Promotion of competition

Subsections 152AB(4) and (5) of the Act provide that, in interpreting this objective, regard must be had to, but is not limited to, the extent to which the arrangements will remove obstacles to end-users gaining access to listed services. The explanatory memorandum to Part XIC of the Act states that:

...it is intended that particular regard be had to the extent to which the...[declaration]... would

enable end-users to gain access to an increased range or choice of services.¹⁹

The concept of competition is of fundamental importance to the Act and has been discussed many times in connection with the operation of Parts IIIA, IV, XIB and XIC of the Act.

In general terms, competition is the process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. The Trade Practices Tribunal (now the Australian Competition Tribunal) stated that:

In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers. Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate.²⁰

Competition can provide benefits to end-users including lower prices, better quality and a better range of services over time. Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms to constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market for a significant period of time.

The establishment of a right for third parties to negotiate access to certain services on reasonable terms and conditions can operate to constrain the use of market power that could be derived from the control of these services. Accordingly, an access regime such as Part IIIA or Part XIC addresses the structure of a market, to limit or reduce the sources of market power and consequent anti-competitive conduct, rather than directly regulating conduct which may flow from its use, which is the role of Part IV and Part XIB of the Act. Nonetheless, in any given challenge to competition, both Parts XIB (or IV) and XIC may be necessary to address anti-competitive behaviour.

To assist in determining the impact on markets of remaking, extending, revoking or varying the existing declaration or allowing its expiration, the Commission will first need to identify the relevant market(s) and then to assess the likely effect on competition in each market.

Section 4E of the Act provides that the term 'market' includes a market for the goods or services under consideration as well as any other goods or services that are substitutable for, or otherwise competitive with, those goods or services. The Commission's approach to market definition is discussed in its 2008 Draft Merger Guidelines, is canvassed in its information paper, *Anti-competitive conduct in telecommunications markets*, August 1999 and is also explored in the Commission's second *Fixed Services Review position paper*, April 2007.

The second step is to assess the likely effect of the proposal on competition in each relevant market. As noted above, subsection 152AB(4) requires that regard must be had to the

¹⁹ Trade Practices Amendment (Telecommunications) Act 1997 (Cth) explanatory memorandum.

²⁰ *Re Queensland Co-operative Milling Association Ltd; Re Defiance Holdings Ltd*, (1976) ATPR 40-012, 17,245.

extent to which a particular thing will remove obstacles to end-users gaining access to listed services.

The Commission considers that denial to service providers of access to necessary upstream services on reasonable terms is a significant obstacle to end users gaining access to services. In this regard, declaration can remove such obstacles by facilitating entry by service providers, thereby providing end-users with additional services from which to choose. For example, access to a mobile termination service may enable more service providers to provide fixed to mobile calls to end-users. This gives end-users more choice of service providers.

Where existing market conditions already provide for the competitive supply of services, the access regime should not impose regulated access. This recognises the costs of providing access, such as administration and compliance, as well as potential disincentives to investment. Regulation will only be desirable where it leads to benefits in terms of lower prices, better services or improved service quality for end-users that outweigh any costs of regulation.

In the context of considering whether remaking, extending, revoking or varying the declaration or allowing its expiration will promote competition, it is appropriate to examine the impact of the existing declaration on each relevant market, the likely effect of altered access obligations (due to the removal of the declaration) on the relevant market, and compare the likely competitive environment in that market before and after the proposed remaking, extension, revocation, variation, or expiration of the declaration. In examining the market structure, the Commission considers that competition is promoted when market structures are altered such that the exercise of market power becomes more difficult; for example, because barriers to entry have been lowered (permitting more efficient competitors to enter a market and thereby constraining the pricing behaviour of the incumbents) or because the ability of firms to raise rivals' costs is restricted.

Any-to-any connectivity

Subsection 152AB(8) of the Act provides that the objective of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, or a similar service, with other end-users whether or not they are connected to the same network. The reference to 'similar' services in the Act enables this objective to apply to services with analogous but not identical functional characteristics, such as fixed and mobile voice telephony services or Internet services which may have differing characteristics.

The any-to-any connectivity requirement is particularly relevant when considering services that involve communications between end-users. When considering other types of services (such as carriage services that are inputs to an end-to-end service or distribution services such as the carriage of pay television), the Commission generally considers that this matter will be given less weight compared to the other two matters.

Efficient use of, and investment in, infrastructure

Subsections 152AB(6) and (7A) of the Act provide that, in interpreting this objective, regard must be had to, but is not limited to, the following:

- whether it is, or is likely to become, technically feasible for the services to be supplied and charged for, having regard to:
 - the technology that is in use, available or likely to become available
 - whether the costs that would be involved in supplying, and charging for, the services are reasonable, or likely to become reasonable
 - the effects, or likely effects, that supplying, and charging for, the services would have on the operation or performance of telecommunications networks
- the legitimate commercial interests of the supplier or suppliers of the services, including the ability of the supplier or suppliers to exploit economies of scale and scope
- the incentives for investment in:
 - the infrastructure by which the services are supplied, and
 - any other infrastructure by which the services are, or are likely to become, capable of being supplied.

In considering incentives for investment in infrastructure, the Commission must have regard to the risks involved in making the investment.

Economic efficiency has three components.

- Productive efficiency refers to the efficient use of resources within each firm such that all goods and services are produced using the least cost combination of inputs.
- Allocative efficiency refers to the efficient allocation of resources across the economy such that the goods and services that are produced in the economy are the ones most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs.
- Dynamic efficiency refers to the efficient deployment of resources between present and future uses such that the welfare of society is maximised over time. Dynamic efficiency incorporates efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques.

The Commission will need to ensure that the access regime does not discourage investment in networks or network elements where such investment is efficient. The access regime also

plays an important role in ensuring that existing infrastructure is used efficiently where it is inefficient to duplicate investment in existing networks or network elements.

The technical feasibility of supplying and charging for particular services

This incorporates a number of elements, including the technology that is in use or available, the costs of supplying, and charging for, the services and the effects on the operation of telecommunications networks.

In many cases, the technical feasibility of supplying and charging for particular services given the current state of technology may be clear, particularly where (as in the present case) the service is already declared and there is a history of providing access. The question may be more difficult where there is no prior access, or where conditions have changed. Experience in other jurisdictions, taking account of relevant differences in technology or network configuration, will be helpful. Generally the Commission will look to an access provider to demonstrate that supply is not technically feasible.

The legitimate commercial interests of the supplier, including the ability of the supplier to exploit economies of scale and scope

A supplier's legitimate commercial interests encompass its obligations to the owners of the firm, including the need to recover the cost of providing services and to earn a normal commercial return on the investment in infrastructure. The Commission considers that allowing for a normal commercial return on investment will provide an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service.

A significant issue relates to whether or not capacity should be made available to an access seeker. Where there is spare capacity within the network, not assigned to current or planned services, allocative efficiency would be promoted by obliging the owner to release capacity for competitors.

Section 152AB(6)(b) of the Act also requires the Commission to have regard to whether the access arrangement may affect the owner's ability to realise economies of scale or scope. Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise from a production process in which it is less costly in total for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce each of the products.

Potential effects from access on economies of scope are likely to be greater than on economies of scale. A limit in the capacity available to the owner may constrain the number of services that the owner is able to provide using the infrastructure and thus prevent the realisation of economies of scope associated with the production of multiple services. In contrast, economies of scale may simply result from the use of the capacity of the network and be able to be realised regardless of whether that capacity is being used by the owner or by other carriers or carriage service providers. Nonetheless, the Commission will assess the effects on the supplier's ability to exploit both economies of scale and scope on a case-by-case basis.

The impact on incentives for investment in infrastructure

Firms should have the incentive to invest efficiently in infrastructure. Various aspects of efficiency have been discussed already. It is also important to note that while access regulation may have the potential to diminish incentives for some businesses to invest in infrastructure, it may also ensure that investment is efficient and reduce the barriers to entry for other (competing) businesses or the barriers to expansion by competing businesses.

There is also a need to consider the effects of any expected disincentive to investment from anticipated increases in competition to determine the overall effect on the LTIE. The Commission is careful to ensure that services are not declared where there is a risk that incentives to invest may be dampened, such that there is little subsequent benefit to end users from the access arrangements.

Appendix 3. Questions submissions should address

This appendix gathers together for reference the questions contained in chapter 6 of this paper.

6.1 Market definition

- The Commission's view in the Final Exemption Decision is that the relevant downstream market is the range of retail services (that can be provided using transmission services) delivered over optical fibre. This includes the national long distance, international call, data and IP-related markets. Are these the relevant downstream markets for which transmission constitutes an input?
- What is the extent to which downstream services are concentrated on certain transmission routes?

6.2 Geographic market

- What are the relevant markets affected by the declaration review?

6.3 Technologies used to provide transmission services

- Are competing fibre-optic owners and providers able to replicate DTCS inter-exchange and tail-end transmission services?
- Have the alternative technologies to fibre-optical cable become more or less viable in the provision of transmission capacity since the previous inquiry? Are they likely to increase or decrease in importance in the foreseeable future?
- What are the substitutes for DTCS?

6.4 Market structure

- Should DTCS with respect to inter-exchange and tail-end transmission services be considered as enduring bottlenecks?

6.5 Market entry

- Is competition in downstream markets currently effective?
- What infrastructure do alternative wholesale providers use to supply inter-exchange or tail-end transmission services?
- Are there any investments planned by alternative providers to enable the provision of inter-exchange or tail-end transmission services?
- Would all new DTCS infrastructure have the capacity to provide competitive constraints on existing infrastructure in relation to the provision of inter-exchange or tail-end transmission services?
- Do barriers to entry exist in transmission markets? If so, what are they? Are there barriers to expanding in any inter-capital market? If so, what are they?
- Are markets still dominated by Telstra? If so, which ones?

6.6 Excess capacity

- Can excess capacity still be viewed as a benign factor in determining the level of competition in the market?

6.7 Price movements

- Have prices continued to fall since the previous inquiry?
- Have some markets exhibited greater price falls than others? Why?

6.8 Profit margins

- Do wholesale prices for inter-capital transmission reflect underlying costs? If not, on which inter-capital routes is this the case?
- Do wholesale prices for non-inter-capital transmission reflect underlying costs? If not, on which routes is this the case?

6.9 Impact on efficient use of and investment in infrastructure

- Has declaration of the DTCS discouraged investment in alternative infrastructure by access seekers?
- Would revoking the declaration be likely to encourage efficient investment in alternative infrastructure by removing the scope for reliance on the declared DTCS for inter-exchange and tail-end transmission services?

6.10 Exemptions to the DTCS

- Keeping in mind that the Commission has issued a Final Exemption Decision (as outlined in Section 5), should the existing declaration be remade, extended, revoked, varied or allowed to expire?

7.2 Criteria for developing pricing principles

- What are considered to be the appropriate pricing principles for the transmission capacity service?