DOMESTIC TRANSMISSION CAPACITY SERVICE

An ACCC *Final Report* on the review of the declaration for the Domestic Transmission Capacity Service

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List of abbreviations

ACCC	Australian Competition and Consumer Commission
BROC	Binding Rules of Conduct
C&G	Corporate and Government
CAN	Customer Access Network
CBD	Central Business District
CCA	*Competition and Consumer Act 2010*
CIR	Committed Information Rate
CSP	Carriage Service Provider
DCS	Data Carriage Service
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
DTCS	Domestic Transmission Capacity Service
ESA	Exchange Serving Area
FAD	Final Access Determination
FSAM	Fibre Serving Area Module
Gbps	Gigabit per second
IP	Internet Protocol
LCS	Local Carriage Service
LSS	Line Sharing Service
LTIE	Long-Term Interests of End-users
Mbps	Megabit per second

MDF	Main Distribution Frame
MDU	Main Distribution Unit
MLL	Managed Lease Line
MTAS	Mobile Terminating Access Service
NBN Co	National Broadband Network Corporation Ltd
NBN POI	National Broadband Network Point of Interconnection
ODF	Optical Distribution Frame
PDH	Plesiochronous Digital Hierarchy
POI	Point of Interconnection
POP	Point of Presence
RBBP	Regional Backbone Blackspots Program
RKR	Record Keeping Rule
RPO	Regional Post Office
RSP	Retail Service Provider
SAO	Standard Access Obligation
SDH	Synchronous Digital Hierarchy
SIO	Services In Operation
SLA	Statistical Local Area level
SLC	Special Linkage Charge
TEBA	Telstra Equipment Building Access
TEF	Telstra Exchange Facilities
Telco Act	*Telecommunications Act 1997*

ULLS	Unconditioned Local Loop Service
WDM	Wavelength-Division Multiplexing
WLR	Wholesale Line Rental

Executive Summary

The Australian Competition and Consumer Commission (ACCC) has decided to extend the declaration of the Domestic Transmission Capacity Service (DTCS) for a further five years until 31 March 2019. It has also decided to vary the service description to improve its general clarity and interpretation and to more closely align it with the DTCS Final Access Determination (FAD) made in June 2012.

The DTCS is a high capacity transmission service that enables service providers to provide downstream wholesale and retail services to end users. The DTCS was deemed to be a declared service in 1997 because it was recognised to be an essential input for other services. However, the ACCC has progressively removed regulation in areas that have been found to be competitive. It has maintained regulation of the DTCS in areas where there has not been evidence of effective competition or where access to the DTCS is limited.

By applying a revised competition assessment methodology (illustrated on page 14), the ACCC has undertaken a comprehensive assessment of the state of competition on both specific capital-regional routes and routes in metropolitan and regional areas (this involved a reassessment of both regulated and de-regulated routes).

The ACCC has decided to vary and extend the declaration of the DTCS for five years

The ACCC has decided that it is in the long-term interests of end-users (LTIE) that the DTCS continues to be declared. In reaching this view, it has taken into account submissions received during the inquiry which in general supported the view that declaration of the DTCS should continue.

Transmission networks are generally capital intensive and require large sunk investments, which makes it economically inefficient to duplicate network infrastructure in some markets. Further, transmission networks underlie nearly all other telecommunications services and are an essential input for the supply of downstream retail and wholesale services. Because Telstra remains the dominant supplier of transmission services, particularly in regional areas, making sure that access seekers can achieve any-to-any connectivity is essential if they are to be able to provide downstream services in different locations.

It will be particularly important as the National Broadband Network (NBN) is rolled out that competitive transmission services are available to carry traffic between the NBN points of interconnection (NBN POIs) and the points of presence (POP) of retail service providers (RSPs). Where competition is less developed the ACCC considers that extending the declaration will enable access seekers to continue to access the declared service at regulated rates if required.

The ACCC considers that extending the declaration for five years will provide certainty to the industry and enable both access providers and access seekers to plan for future investment.

The ACCC has undertaken a comprehensive assessment of competition on transmission routes

As noted above, the ACCC has undertaken a comprehensive assessment of the state of competition in the DTCS market and related downstream markets in order to determine the scope of regulation for the DTCS. It has undertaken a comprehensive review of its

methodology for assessing competition in the DTCS market and applied a revised methodology to all DTCS routes, both on specific routes and in exchange serving areas (ESAs). The revised methodology provides a more comprehensive assessment of levels of effective competition on transmission routes.

In developing the revised methodology, the ACCC took account of submissions which suggested that the methodology it applied to determine the state of competition in previous DTCS inquiries did not assess effective competition. In previous decisions, the ACCC had considered that the presence of three or more providers (including Telstra) on a DTCS route was evidence of competition or contestability. Submitters argued that such an approach was mechanistic.

Since the last inquiry, the ACCC has had access to a wider range of data about the state of competition in transmission markets. This has enabled it to assess the level of competition in DTCS markets more effectively. The data that it has examined during this inquiry includes:

- time series data on optic fibre infrastructure collected under the Audit of Telecommunications Infrastructure Assets - Record Keeping Rules 2007 (the infrastructure RKR)
- information collected under the Telstra Customer Access Network Record Keeping and Reporting Rules (CAN RKR)
- more detailed pricing and service availability information (such as that collected under access agreements lodged with the ACCC), and
- pricing information collected by the ACCC during its inquiry into making the 2012 DTCS FAD.

Much of the data that has been examined during the inquiry is commercial-in-confidence. However, the ACCC has set out in this report, how the revised methodology for assessing competition has been applied.

The revised methodology to assess competition

The revised methodology takes the presence of three or more providers as a starting point to assess competition. That is, there must be a minimum of three fibre providers at, or within close proximity, to a Telstra exchange. Once this initial threshold is met, the ACCC has applied a number of additional quantitative and qualitative assessments. These include an assessment of:

- whether the three fibre providers are independent of each other
- the presence at, or close proximity of, competing fibre providers to a Telstra exchange
- whether the route is being serviced by at least three of the four largest transmission providers
- whether there is direct connectivity from that exchange to major transmission hubs in, or close to, the central business districts (CBD) of the major capital cities
- whether there is sufficient demand in that area to indicate likelihood of new investment and the potential for competition to develop
- the level of price competition in the area, and

- whether there is evidence of transmission services being supplied from the ESA.

Where these criteria were met, the ACCC considered that there was sufficient evidence of competition to be able to withdraw regulation in those ESAs or routes.

In some cases, an ESA may have either marginally failed to meet some aspect of the revised competition assessment or only just met the revised methodology. For example, a competing fibre provider may be slightly further away from a Telstra exchange but still be on a main transmission route. In these cases, the ACCC took into account additional relevant considerations to form a view as to whether the route was competitive. Additional considerations included matters such as the level of urban development in an adjacent area, the likely level of demand or fibre investment close to a particular route. Having considered these additional matters, the ACCC then formed a view as to whether the ESA or route should be deregulated or whether continued regulation is appropriate.

The ACCC considers that the revised competition methodology assesses actual levels of service availability on a DTCS route or the potential for existing or new providers to offer a competing service, thereby providing a more comprehensive assessment of the state of competition. It also takes into account levels of demand and the potential for infrastructure investment to occur.

The ACCC will remove regulation from some metropolitan and regional DTCS routes and re-declare some regional routes

The last time the ACCC reviewed the scope of regulation was in its assessment of *Telstra's domestic transmission capacity service exemption application*, November 2008 (2008 Telstra Exemption Decision). At that time, the ACCC's assessment of competition was limited to only those ESAs and routes applied for by Telstra in its exemption applications.[1] Further, the ACCC notes that there has been continued infrastructure investment by transmission providers such as Pipe Networks (now owned by TPG) and Nextgen Networks (through the Government's Regional Backbone Blackspots Program (RBBP)) since the last review of the DTCS declaration in 2009. These investments have improved competition in the DTCS market.

By assessing all routes and ESAs that are currently regulated and routes and ESAs that are deregulated, the ACCC has a more comprehensive picture of competition across the DTCS market. The ACCC notes that this is the first time the ACCC has undertaken an assessment of competition of this kind for the DTCS at *all* ESAs.

By applying the revised methodology, the ACCC has decided to remove from regulation those routes and ESAs where there is sufficient evidence of competition such that the ACCC considers that removing regulation is likely to promote both efficient investment in, and use of infrastructure. Where there was insufficient evidence of competition on routes that are currently excluded from regulation, the ACCC has decided to re-declare those routes.

The ACCC took into account submissions which raised specific concerns about those ESAs or routes identified in the Draft DTCS Declaration Decision to either be deregulated or re-regulated and re-assessed each of those ESAs and routes. Based on its current data, the

[1] Individual and Class exemptions are no longer available under the *Competition and Consumer Act 2010* (CCA).

ACCC is satisfied that only those ESAs or routes that meet the revised competition assessment are identified to be deregulated.

This declaration inquiry has found that:

- all of the current 88 metropolitan ESAs which are deregulated meet the ACCC's revised competition methodology and will remain excluded from the scope of regulation
- of the 23 capital-regional routes (which includes the Sydney-Campbelltown route which is now reclassified as a metropolitan route), three regional routes have failed to meet the revised methodology and the ACCC has decided to re-declare these routes, and
- an additional 112 metropolitan ESAs and eight regional routes satisfy the requirements of the new competition methodology and will be deregulated.

This means that there will be a total of 200 metropolitan ESAs and 27[2] regional routes that will be excluded from regulation.

The ACCC maintains regulation of tail-end DTCS services, including bundled tail-end services

The ACCC accepts the views of access seekers that there are few effective substitutes for the tail-end component of the DTCS service and has decided to maintain regulation of all tail-end services, including services which incorporate a bundled tail-end component.

The ACCC understands that it is common market practice to purchase the tail-end service as a bundled product, for example as a bundled inter-exchange and tail-end service. Where a bundled tail-end service is purchased, the entire end-to-end route will remain regulated (irrespective of whether the inter-exchange component is considered competitive and deregulated). The ACCC has amended the service description to make this clear. However, the ACCC considers it appropriate to recognise a stand-alone tail in the declaration, to allow access seekers the flexibility to seek independent pricing for the tail-end and inter-exchange components and to encourage investment.

Facilities Access issues

The ACCC has carefully considered submissions which have raised issues relating to facilities access services during this inquiry. Among other matters, those submissions have identified a number of barriers to entry for accessing facilities that enable interconnection with the DTCS. Some submitters have asked the ACCC to commence an inquiry to examine whether facilities access services should be declared, noting that these services are acquired to enable an access seeker to interconnect with the active declared service.

Concurrently with this inquiry, the ACCC is also arbitrating three disputes notified to it by access seekers in relation to facilities access services. These arbitrations will require the ACCC to examine the terms and conditions on which access is provided to those access seekers. However, given that arbitrations are private and their outcomes limited to the

[2] This is the summation of the currently deregulated 23 capital-regional routes, plus the 8 additional regional routes found to be competitive, minus the three regional routes which have been re-declared, minus the Sydney-Campbelltown route which is now reclassified as a metropolitan route.

arbitrating parties, the ACCC will be unable to address the broader issues raised by submitters in that process.

The ACCC has decided that it will examine issues relating to facilities access during the DTCS FAD inquiry. The ACCC is required to begin an access determination inquiry during the period beginning 18 months before the expiry date of the access determination and ending 6 months prior to the expiry of the access determination.[3] The current DTCS FAD expires on 31 December 2014. The FAD inquiry will be conducted contemporaneously with the arbitrations. While the ACCC acknowledges that any decision to specify terms and conditions in a FAD will apply prospectively and will cover those services that are supplied in connection with a declared service, the ACCC considers that this approach – together with the obligations under Telstra's Structural Separation Undertaking – are likely to provide a more timely and efficient response to the issues raised by submitters than commencing a separate declaration inquiry. If there are outstanding issues that are not addressed during the FAD inquiry or in the arbitrations, the ACCC will consider whether to commence a declaration inquiry at that time.

The ACCC has varied the DTCS service description

The ACCC has consulted widely on the drafting of the current service description and has decided that it will vary the service description to:

- remove out-dated references and to account for legislative changes,
- align the geographic route categories and boundaries with the DTCS FAD made in June 2012, to provide increased certainty and continuity in the regulation of the DTCS,
- expressly identify the relevant ESAs and routes found to be competitive,
- clarify that *all* tail-end services (including bundled tail-end services) remain regulated. That is, where a deregulated metropolitan, regional or inter-capital route incorporates a bundled tail-end component the route remains subject to regulation, and
- remove ambiguity in some general definitions and improve the general clarity of the service description.

The ACCC considers that the varied service description provides a more comprehensive and up-to-date reflection of the regulated service. The ACCC has also varied the service description to reflect the results of the revised competition assessment.

The ACCC has decided that a transitional period will apply before the new service description takes effect in 2015

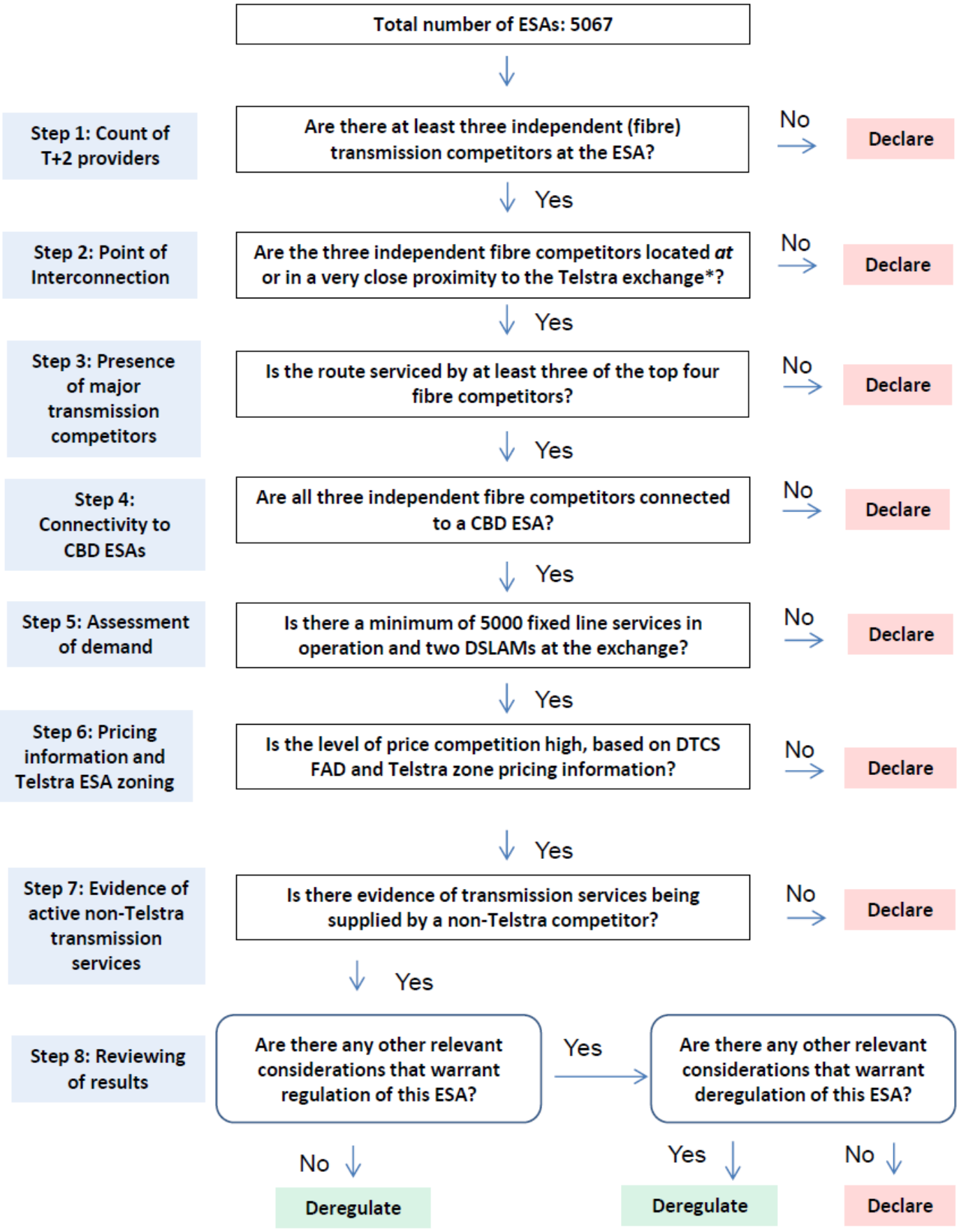
The ACCC has decided that a transitional period of 9 months apply before the changes to the scope of regulation take effect. To implement this transitional period, the existing DTCS declaration service description will remain in place until 31 December 2014 (that is, the current declaration is effectively extended for 9 months). From 1 January 2015, the new service description will apply which removes from regulation the additional 112 metropolitan ESAs and 8 regional routes found to be competitive. From this date, the three regional routes which failed to meet the revised competition assessment methodology will also be re-

[3] Subsection 152BCI(3) of the CCA.

declared. Other changes made to the service description to clarify or update references will also take effect from 1 January 2015.

The ACCC considers that this transition will allow stakeholders sufficient time to make any necessary adjustments to their commercial arrangements.

Revised competition assessment methodology



1 Introduction

1.1 Purpose

This report sets out the ACCC's final decision to vary and extend the DTCS declaration until 31 March 2019, pursuant to section 152ALA of the *Competition and Consumer Act 2010* (CCA).

The ACCC is required to conduct this review during the 18 month period preceding the expiry of the current DTCS declaration, which is set to expire on 31 March 2014. The purpose of the review is to determine whether the declaration should be remade, extended, revoked, varied, allowed to expire or extended and then allowed to expire.[4]

1.2 Legislative background

The ACCC may declare a service if it is satisfied that declaring the service will promote the LTIE. In order to determine whether the LTIE is satisfied, the ACCC must have regard to the extent to which maintaining, varying or revoking the existing declaration is likely to result in:

- the promotion of competition in markets for listed services
- any-to-any connectivity in relation to carriage services that involve communication between end-users, and
- 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.

These three criteria and the legislative background are discussed further in Appendix 4 to this Final Report.

1.3 Consultation

The ACCC commenced a review of the DTCS declaration on 11 July 2013 by publishing *An ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service* (the Discussion Paper) for comment by interested parties. The Discussion Paper and public submissions that were lodged are available from the ACCC's website at www.accc.gov.au.

On 13 December 2013, the ACCC released *An ACCC Draft Report on the review of the declaration for the Domestic Transmission Capacity Service* (the Draft Report). The Draft Report set out the ACCC's preliminary views having assessed whether declaring the DTCS would promote the LTIE and having considered the submissions made to the Discussion Paper. The Draft Report and public submissions to the Draft Report are available at www.accc.gov.au. Appendix 5 lists the submissions received to this inquiry.

The ACCC facilitated a stakeholder meeting on 4 February 2014 to provide DTCS providers and acquirers an opportunity to discuss any concerns relating to the Draft Report. The organisations below attended the stakeholder meeting:

[4] See subsection 152ALA(7) of the CCA.

- AAPT Limited (AAPT)
- Competitive Carriers Coalition (CCC)
- Herbert Geer (representing iiNet)
- Macquarie Telecom (Macquarie)
- National Broadband Network Corporation Limited (NBN Co)
- NextGen Group (Nextgen)
- SingTel Optus Pty Limited (Optus)
- Telstra Corporation Limited (Telstra), and
- Vodafone Hutchison Australia Limited (VHA).

The ACCC received several submissions from Regional Development Australia Committees[5] in response to the Draft Report. However, the main focus of the submissions relate to the pricing of the DTCS. The ACCC notes that issues of price will be more appropriately considered in the upcoming DTCS FAD inquiry in mid-2014.

1.4 Other related inquiries

The ACCC is also conducting a declaration review of the fixed line services (in the Fixed Services Review) and a declaration review of the mobile terminating access service (MTAS). The services covered by the Fixed Services Review are the unconditioned local loop service (ULLS), line sharing service (LSS), wholesale line rental (WLR), local carriage service (LCS) and the public switched telephone network originating access and terminating access service.

Where appropriate, the ACCC has adopted a consistent approach to the issues raised in the declaration reviews of the DTCS, the Fixed Services Review and MTAS.

1.5 The DTCS Final Access Determination

The ACCC will commence a public inquiry into making a new FAD for the DTCS in mid-2014. The CCA requires the ACCC to hold a public inquiry about a proposal to make an access determination for a declared service where the declaration is in force under section 152AL of the CCA and where an access determination has previously been made in relation to the declared service. The ACCC is required to begin an access determination inquiry during the period beginning 18 months before the expiry date of the access determination and ending 6 months prior to the expiry of the access determination. [6] The current DTCS FAD expires on 31 December 2014.

[5] Regional Development Australia Wheatbelt WA, Submission on the Draft Report, 4 February 2014; Regional Development Australia Townsville and North West Queensland, Submission on the Draft Report, 14 February 2014; Regional Development Australia Sunshine Coast Inc, Submission on the Draft Report, 14 February 2014; and Regional Development Australia Southern Inland, Submission on the Draft Report, 14 February 2014.
[6] See subsection 152BCI(3) of the CCA.

1.6 Structure of this Final Report

This Final Report is structured as follows:

- **Section 2** provides a background to the declared DTCS, how it has been regulated to date and the implications of the current DTCS FAD on the declaration review of the DTCS.
- **Section 3** sets out submissions and ACCC's final views on the state of competition in DTCS markets, including the results of the revised competition assessment methodology.
- **Section 4** sets out submission and the ACCC's final views on the variations to DTCS service description.
- **Section 5** sets out submissions and the ACCC's final views on the length of the declaration for the DTCS
- **Section 6** provides the ACCC's approach to assessing the LTIE
- **Sections 7-9** set out the ACCC's assessment against the LTIE
- **Section 10** provides the ACCC's final views on the DTCS declaration review.
- Appendix 1 sets out the current DTCS service description.
- Appendix 2 sets out the varied DTCS service description.
- Appendix 3 sets out the results of the revised competition assessment methodology.
- Appendix 4 discusses the legislative criteria for the LTIE.
- Appendix 5 lists the submissions received in this inquiry.

2 Background

The ACCC's approach to regulating the DTCS seeks to ensure that regulation remains appropriate to the current and future communications sector in Australia. This section examines the background to the regulation of the DTCS.

2.1 Transmission services

Transmission services underlie almost every telecommunications service. The term 'transmission' refers to high capacity data links that are used by carriers or carriage service providers (CSPs) to carry large volumes of communications traffic over long distances. Types of traffic which may be carried via transmission networks include voice, data or video communications.

Wholesale transmission services essentially allow access seekers to connect customers in places where they do not own their own transmission infrastructure. Transmission services therefore enable carriers and CSPs to connect their core networks with points of service delivery (such as exchanges or end customer premises) around Australia.

2.2 The declared DTCS

The DTCS is a high capacity transmission service differentiated from other transmission services on the basis that it:

- is a wholesale input into the provision of other services and not a resale service. That is, the DTCS service must be used in combination with an access seeker's infrastructure to provide other end-to-end services
- is a point-to-point service
- may be provided over a number of transmission mediums including copper, fibre and microwave
- is a high capacity service acquired at different data rates above 2 megabits per second (Mbps)
- is symmetric, that is it has the same data rate in both directions, and
- is an uncontended service - this means that the capacity of the service is dedicated to one access seeker only and not shared.

Only specific types of transmission services fall within the service description for the DTCS. Appendix 1 sets out the current service description of the DTCS.

The DTCS is an important input to enable service providers to supply downstream retail and wholesale services.

DTCS route categories

The ACCC uses broad geographic route categories to identify separate DTCS markets. Following the conclusion of the last DTCS declaration review in 2009 (2009 DTCS Declaration) the ACCC recognised the following types of transmission services:

- inter-capital transmission – transmission predominantly between call charge areas in different mainland capital cities (Melbourne, Sydney, Perth, Brisbane, Adelaide and Canberra, but not Darwin or Hobart)
- 'other' transmission (including capital–regional routes) – transmission between different call charge areas other than inter-capital transmission (as above)
- inter-exchange transmission – transmission within a single call charge area between a point of interconnection (POI) at an access provider's exchange where the POI and exchange are in the same call charge area, and
- tail-end transmission – transmission within a single ESA between a customer location and a POI on the access seeker's network, or if Telstra provides the tail-end service, between a customer location or a POI and the Telstra exchange.[7]

2.3 Why regulate the DTCS?

The DTCS is recognised to be an essential input for other services. The ACCC has considered the DTCS to be an enduring bottleneck in certain areas for the following reasons:

- Transmission networks are generally capital intensive and require large sunk investments. This makes it economically inefficient for competitors to duplicate existing transmission network infrastructure in certain geographic markets.
- Transmission networks underlie virtually every telecommunication service and are a critical input for the supply of all other downstream retail and wholesale telecommunications services, particularly on geographic routes which are considered to be natural monopolies or which are otherwise uncompetitive.
- Telstra remains the dominant supplier of transmission services across Australia, particularly in regional areas. Therefore, access to the DTCS on geographic routes, which are considered to be natural monopolies or which are otherwise uncompetitive, is critical to ensure that access seekers can achieve end-to-end connectivity to provide downstream services in different locations.
- Transmission services will also be necessary to support the delivery of NBN services. RSPs providing end-users with NBN voice and data services will require transmission services to carry traffic between the 121 (NBN POIs[8] and their POPs, usually located in a capital city location.

While the ACCC has removed regulation in areas that have been found to be competitive, it has maintained regulation of the DTCS where it is not satisfied that there is effective competition or where access to the DTCS is limited.

2.4 The history of declaring the DTCS

Declaration of the DTCS has previously been found to be in the LTIE because it:

- promotes competition in downstream markets and ensures that access seekers can gain access to those transmission routes that are not competitive

[7] ACCC, *Domestic Transmission Capacity Service – An ACCC final report reviewing the declaration of the domestic transmission capacity service*, March 2009 (2009 DTCS Declaration Decision), p. 3.
[8] An NBN POI is the inter-network location where end-user traffic is handed over from the NBN to the RSP.

- promotes any-to-any connectivity between networks, and
- encourages the economically efficient use of and investment in infrastructure (for example, by avoiding unnecessary duplication).

The DTCS was deemed a declared service in June 1997[9] and was extended or varied in 1998, 2001, 2004, 2009 and 2010 to remove or exclude specific routes found to be competitive and to include other technologies which are used to deliver the declared DTCS (such as the Ethernet interface).

Deregulated DTCS routes

As noted above, in previous inquiries, the ACCC has assessed the level of competition in transmission markets and removed from the DTCS declaration routes which have been found to be competitive. This included inter-capital transmission between Brisbane, Sydney, Canberra, Melbourne, Adelaide and Perth. In 2004, the ACCC also removed regulation on 14 capital-regional routes found to be competitive.

In 2008, in response to exemption applications from Telstra[10], the ACCC removed regulation on a further nine capital-regional routes, inter-exchange transmission in 72 metropolitan ESAs and inter-exchange transmission in 16 CBD ESAs (2008 Telstra Exemption Decision).[11] In March 2009, the ACCC varied the DTCS declaration to reflect the 2008 Telstra Exemption Decision.

Competition criteria used previously to assess competition

To assist its assessment of competition, the ACCC identified criteria that it applied to assess capital-regional (or regional) and metropolitan/CBD inter-exchange (or metropolitan) DTCS routes to determine whether those routes were sufficiently competitive and should be excluded from the declaration.

Capital-regional criteria

In the 2008 Telstra Exemption Decision, the ACCC defined the criteria for regional/capital-regional routes to be a fibre route to have:

- two or more fibre providers in addition to Telstra, within 1 kilometre of the regional town's regional post office (RPO), and
- a connection to an optical fibre network connecting the regional town to a capital city.[12]

Rationale for the capital-regional criteria

Entry into a transmission market is related to the ability of a carrier or CSP to connect with the Telstra customer access network (CAN) via a Telstra exchange. Determining how many fibre providers are located in close proximity to the exchange is considered to be a good

[9] ACCC, *Deeming of Telecommunications Services: A Statement Pursuant to Section 39 of the Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997* (Deeming Statement), June 1997, p. iv.
[10] Under the now repealed section 152AT of the CCA.
[11] ACCC, *Telstra's domestic transmission capacity services exemption applications*, Final decision (Telstra DTCS Exemption Decision), November 2008, p. 6.
[12] ACCC, Telstra DTCS Exemption Decision, November 2008, pp. 3-4.

indicator of the degree of contestability on a route. Because RPOs are generally located in the same location or in close proximity to a Telstra exchange (and are more easily identifiable), it was determined that the RPO would be nominated to measure the number of fibre providers within close proximity to the exchange.[13]

Nominating a distance of 1km from the RPO was considered reasonable because it was recognised that infrastructure owners were unlikely to enter the market if they were required to build additional fibre links (or 'spurs') greater than 1km from their existing network locations. Contestability was considered more likely when barriers to entry, in terms of the construction costs of a fibre link or spur line connecting a town with a passing fibre route, were lower.[14]

Inter-exchange criteria

In the 2008 Telstra Exemption Decision the ACCC defined the competition criteria for metropolitan/inter-exchange transmission routes to have:

- a point of interconnect at a Telstra exchange in an ESA by two or more fibre providers, in addition to Telstra, and
- a fibre network which connects that ESA with other ESAs and an ESA in a CBD.[15]

Rationale for the inter-exchange criteria

The presence of at least three fibre providers (including Telstra) on metropolitan transmission routes, each of which has a point of interconnection at a Telstra exchange, was considered necessary for a route to be competitive or contestable. This recognised high sunk cost of building fibre networks in metropolitan areas and obtaining access to Telstra's exchange buildings.[16]

In addition, it was considered that to be able to offer competitive metropolitan/inter exchange transmission services, the two additional networks should connect all the deregulated ESAs in a contiguous cluster to the CBD ESA.

2.5 The current DTCS Final Access Determination

In June 2012 the ACCC made a FAD for the DTCS which includes both price and non-price terms of access to the declared DTCS.[17] The DTCS FAD sets the price terms of access to the DTCS for different capacities, geographic route categories, distances and for services supplied on both a protected and unprotected basis.[18]

The price terms of the DTCS FAD were determined using a regression model, based on a domestic benchmark of DTCS prices collected from service providers during 2011. Competitive pricing information collected from industry was used to develop a benchmark of prices for uncompetitive/declared routes. However the aggregated pricing information

[13] ACCC, Telstra DTCS Exemption Decision, November 2008, p. 52.
[14] ACCC, Telstra DTCS Exemption Decision, November 2008, p. 51.
[15] ACCC, Telstra DTCS Exemption Decision, November 2008, p. 3.
[16] ACCC, Telstra DTCS Exemption Decision, November 2008, p. 78.
[17] ACCC, Final Access Determination (FAD) No. 1 of 2012 (DTCS), 21 June 2012.
[18] Transmission services can be provided on a 'protected' basis, whereby the network provider is able to provide continuity of service in the event of a service disruption.

collected from service providers during the DTCS FAD inquiry did not use the same classifications used in the DTCS service description. It also became evident during the DTCS FAD inquiry that the existing DTCS service description did not provide sufficient clarity on a number of aspects. For example, the DTCS service description:

- listed the 'exempt capital cities' or 'regional centres' that are excluded from regulation but did not define the geographic boundary of these areas. This created uncertainty as to where a deregulated DTCS route starts and finishes, and
- is intended to include 'protected' DTCS services however the service description did not expressly define 'protection.'

Therefore, in order to develop the price terms of the DTCS FAD the ACCC:

- defined the geographic boundaries of capital cities and regional centres listed in the DTCS service description
- revised the DTCS route categories to that previously identified in the 2009 DTCS Declaration and service description, and
- defined what is intended by a 'protected' DTCS service.

2.5.1 Geographic boundaries defined in the DTCS FAD

Capital city boundaries in the DTCS FAD

In the DTCS FAD, the ACCC defined the geographic boundaries of capital cities using a radial distance based approach. The ACCC applied a radial distance from the central point of a CBD ESA of each capital city based on the spread of continuous urban development from the CBD ESA. The ESAs which fell within the radial boundaries of each capital city were identified as 'metropolitan' and ESAs outside these boundaries were identified as 'regional.' For example, the DTCS FAD defined Melbourne as all ESAs within a 45km radius of the Kooyong ESA.[19]

Regional centre boundaries in the DTCS FAD

The DTCS FAD lists the ESAs which make up the geographic boundary of each deregulated regional centre listed in the DTCS service description.[20] The ACCC defined the regional centre boundaries by the central ESA in that regional centre. Where there was no obvious central ESA or the urban development of that regional centre covered more than one ESA, the ACCC used more than one ESA to define the regional centre. In defining regional centre boundaries the ACCC also had regard to the availability of competing fibre infrastructure in those regional centres and the extent to which access seekers may readily interconnect with a transmission service provider.[21]

Section 4.1.1 to this paper sets out submissions and the ACCC's final views on how the capital cities and regional centres listed in the DTCS service description will be defined in the service description.

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[19] ACCC, Explanatory Statement to the DTCS Final Access Determination (FAD), June 2012, pp. 17-18.
[20] This information is available in the 'DTCS Route Category Workbook' available on the ACCC website, at www.accc.gov.au.

[21] ACCC, Explanatory Statement to the DTCS FAD, June 2012, p. 20.

2.5.2 DTCS route categories identified in the DTCS FAD

As noted above, the price terms of the DTCS FAD were determined using a regression model based on a domestic benchmark of DTCS prices collected from service providers in 2011. In order to better identify competitive services to benchmark from the pricing dataset collected from service providers during the DTCS FAD inquiry the ACCC revised the DTCS route categories identified in the 2009 DTCS Declaration. The DTCS FAD reclassified the route categories as either metropolitan, regional, inter-capital, regional tail-end or metropolitan tail-end.

Section 4.1.2 to this paper sets out submissions and the ACCC's final views on whether the DTCS route categories identified in the DTCS FAD should be adopted in the DTCS service description.

2.5.3 Definition of 'protected DTCS services' in the DTCS FAD

Transmission services can be provided on a 'protected' basis, whereby the network provider is able to provide continuity of service in the event of a service disruption (for example, due to equipment failure or due to the cable being cut). Although not expressly stated or defined in the DTCS service description, the declared DTCS includes both protected and unprotected DTCS services.

The DTCS FAD includes price terms of access for protected services and defines protection as:

> geographic path diversity in the inter-exchange component of a transmissions service only; it does not extend to the tail-end component of transmission services.[22]

Section 4.1.5 to this paper sets out submissions and the ACCC's final views on whether the DTCS service description should be varied to include a definition for protection.

2.6 Access to facilities for the DTCS

Access to facilities such as ducts and the Telstra Equipment Building Access (TEBA) space are necessary for service providers to interconnect their equipment and access the DTCS and other declared services (such as the fixed line services). In order to determine whether remaking, extending, varying the existing DTCS declaration, allowing it to expire or extending the declaration and then allowing it to expire will be in the LTIE, the ACCC considers it necessary to ensure that facilities are readily accessible and provided on equivalent terms.

Section 3.5 to this paper sets out submissions and the ACCC's final views on whether there are any impediments for access to facilities including access to ducts and TEBA in relation to the DTCS or whether there are any other issues relating to facilities access. Access to facilities is also being considered in the context of the Fixed Services Review.

[22] ACCC, Explanatory Statement to the DTCS FAD, June 2012, p. 28.

3 State of competition in DTCS markets

This section examines the current state of competition in the DTCS markets and related downstream markets. It considers the relevant markets for the DTCS including an assessment of the substitutes and potential substitutes for the DTCS and the current market structure. In summary, the ACCC has:

- identified criteria to assess competition which have been incorporated into a revised competition assessment methodology
- assessed the state of competition on all DTCS routes, including currently deregulated routes, using the revised competition assessment methodology
- identified that an additional
  - 112 metropolitan ESAs, and
  - 8 regional routes

  satisfy the revised competition methodology and should be removed from the scope of regulation. Three regional routes (which are currently deregulated) fail to satisfy the revised competition assessment methodology and will be re-declared. A total of 75 NBN POIs are located in the deregulated ESAs
- decided that issues concerning access to facilities will be addressed during the DTCS FAD inquiry, and
- determined that issues concerning special linkage charges (SLCs) will be considered in the upcoming DTCS FAD inquiry.

3.1 Identifying relevant markets for the DTCS

The ACCC considers that defining markets relevant for transmission services will allow the ACCC to meaningfully analyse the effectiveness of competition and the likely effect of maintaining, varying or revoking the existing declaration. In the 2008 Telstra Exemption Decision the ACCC identified the geographic, functional, product and temporal dimensions of the market. It also noted that:

- it remained appropriate to employ the geographic markets used previously, namely: inter-capital transmission, capital-regional routes, inter-regional routes and local exchange and tail-end transmission in regional, metropolitan and CBD areas
- the functional dimension of the DTCS market refers to the activities involved in the supply chain. In the case of DTCS, there is a wholesale transmission market for the provision of DTCS services and which also includes access seekers that purchase transmission capacity for resale at the wholesale level.
- the product dimension of the market was generally limited to data transmission over optical fibre (but that copper and microwave were also widely used), and
- the temporal dimension of the market to be a period in the foreseeable future sufficient to ensure that the assessment of competition in the relevant market(s) better reflects actual competitive dynamics such as credible entry.[23]

[23] ACCC, Telstra DTCS Exemption Decision, November 2008, pp.40.

The ACCC also identified the relevant downstream markets as the range of wholesale and retail services that can be supplied using transmission services which are delivered (at least in part) over optical fibre transmission including the markets for data services such as Internet Protocol (IP) and business grade services, residential broadband and local, national and international call services. These downstream markets are important as the services all use the DTCS to transport aggregated data streams (for example, the internet data of a large number of subscribers or many voice calls simultaneously). Hence, competition in downstream markets depends on access to the DTCS (the upstream market). The ACCC also found that mobile services (including voice and data) were relevant downstream markets, as continuing growth in mobile data usage increases the use of transmission capacity.

Submitters generally agreed that the downstream markets identified by the ACCC in the 2009 Declaration Decision remained the relevant markets.[24] These markets were also identified in the Discussion Paper. Nextgen suggested that the ACCC take into account NBN POIs and local wholesale markets.[25] Optus submitted that the Corporate and Government (C&G) segment of the market should be identified as a separate market or a sub-market in each downstream market. It was argued that C&G end-users have particularly demanding requirements that need stringent service levels, such that potential alternative transmission technologies are less likely to be acceptable DTCS substitutes.[26]

Telstra contended that it was unnecessary to closely define the relevant markets because the industry understands that transmission is a necessary input to a range of downstream services.[27] Some submitters suggested that the ACCC define a national market for transmission services, in addition to defining individual routes for the geographic markets. VHA noted that over-segmentation of the geographic market definition ignores the market power Telstra derives through its vertical integration and economies of scale over its entire fibre transmission network.[28]

Draft Report

In the Draft Report, the ACCC's preliminary view was that the markets identified in 2009 remain the relevant markets for the DTCS. It considered that the C&G market is a distinct downstream market but not a separate upstream market because it uses the same transmission inputs as a number of other downstream services. The C&G market requires transmission services with similar characteristics to other business service markets (although at higher

[24] Telstra Corporation Limited, *Submission to the Commission's Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service*, 30 August 2013 (Telstra, Public Submission on the Discussion Paper), p.19. iiNet Limited, *ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service, Submission by Herbert Geer Lawyers on behalf of: iiNet Limited*, 30 August 2013 (iiNet, Submission on the Discussion Paper), p.3. Vodafone Hutchison Australia Limited, *Declaration of the Domestic Transmission Capacity Service, Response to the Australian Competition and Consumer Commission*, 30 August 2013 (VHA, Public Submission on the Discussion Paper), p.10. Macquarie Telecom Pty Ltd, *Domestic Transmission Capacity Service*, 2 September 2013 (Macquarie, Public Submission on the Discussion Paper), p.3. NBN Co Limited, *NBN Co Submission on ACCC Discussion Paper reviewing the Declaration for the Domestic Transmission Capacity Service*, August 2013 (NBN Co, Submission on the Discussion Paper), p.4. SingTel Optus Pty Limited, *Submission in response to the ACCC's Discussion Paper*, 30 August 2013 (Optus, Public Submission on the Discussion Paper), p.11.

[25] Nextgen, Submission on the Discussion Paper, p.3.

[26] iiNet, Submission on the Discussion Paper, p.3.

[27] Telstra, Public Submission on the Discussion Paper, p.19.

[28] VHA, Public Submission on the Discussion Paper, p.10.

capacities). The ACCC therefore considered it is not essential to define these markets separately.

The ACCC proposed to align the DTCS service description with the DTCS FAD. This required varying the service description to adopt the geographic descriptions of routes. Capital-regional and inter-regional markets would be described as regional routes and the CBD routes respectively, and inter-exchange routes would be described as metropolitan routes.

The ACCC considered submissions that it define a national market but found that, as access seekers continue to purchase the DTCS on a point to point route basis, defining a national market for the DTCS is not necessary for the purposes of declaration. While access seekers may require access on a national basis, the competition assessment is based on metropolitan and regional markets as the mainland inter-capital routes have been deregulated for over a decade. In line with the pricing structure determined in the DTCS FAD, the DTCS is commonly characterised on the basis of inter-capital, metropolitan and regional areas rather than a national market.

Submissions on the Draft Report

Optus submits that the DTCS declaration assumes that all related downstream markets face similar market conditions and customer requirements and that the Draft Report pays insufficient regard to the impact of wholesale transmission services on the C&G and mobile downstream markets.[29] Submissions were also made to the ACCC to reconsider defining a national market.

ACCC's views

The ACCC's view is that the markets identified in 2009 remain the relevant markets for the DTCS. The ACCC considers that the DTCS **product market** continues to be the market for data transmission services (of which there are a range of transmission services at varying capacities and distances). Data transmission services are used to aggregate data from other markets for transport to and/or from their required destination. In the case of the DTCS, this is limited by the service description to transmission that is above 2Mbps, uncontended and symmetric. While the service description is technology neutral the service is primarily (and increasingly) delivered over optic fibre. The ACCC does not consider that defining separate product markets according to types of customers served (for example, C&G customers) is likely to significantly contribute to the competition analysis for the purposes of declaration. The ACCC acknowledges that the tail-end component, whilst able to be purchased separately is often combined (bundled) with an inter-exchange component for use in an access seeker's network.

The ACCC notes Optus' submission that the DTCS declaration assumes that all related downstream markets face similar market conditions and customer requirements. However, the ACCC considers that transmission services are an input into a large variety of downstream markets (including the C&G sector) and that the transmission services used for the C&G market have similar characteristics to transmission services used in other residential and business service markets (albeit at higher capacities). While the ACCC acknowledges

[29] SingTel Optus Pty Limited, *Submission in response to the ACCC Draft Report on the review of the declaration inquiry for the Domestic Transmission Capacity Service*, February 2014 (Optus, Public Submission on the Draft Report), pp.3-4 and 8.

that a higher quality of transmission service is demanded in the C&G market, it considers that quality of service provisions can be best addressed through commercial negotiations, rather than through declaration of individual markets. The product dimensions of the market are discussed further in section 3.2 below.

The **geographic market** for the DTCS is a combination of particular geographic areas and particular route category types.

The ACCC considers that the main DTCS route types are clearly distinguishable and well recognised within the industry. For example, capital-regional routes are distinct from the other types of routes namely inter-capital, metro and regional inter-exchange and local tail ends. Access seekers are likely to purchase the DTCS based on a combination of routes. In particular, a point to point capital-regional route is not a demand substitute for another route (e.g. Sydney-Tamworth is not substitutable for Sydney-Dubbo) although they are likely to be on the same transmission ring. The ACCC notes that particular routes may be served by more than one geographically distinct transmission ring or point-to-point route.

The ACCC also considers that the appropriate geographic boundaries can be considered as either metropolitan or regional. As such, it remains appropriate to employ the route categories used previously in terms of identifying particular geographic markets, namely: inter-capital, capital-regional, inter-exchange and tail-end transmission but that the geographic scope is brought more in line with the geographic market boundaries set out in the DTCS FAD. That is, for pricing purposes the market was divided into just metropolitan and regional areas which incorporate route categories noted above rather than affixing each area type with a particular route category.

Similarly, the ACCC is not convinced that the DTCS market should be defined solely as a national market. The ACCC notes that the vast majority of DTCS services are metropolitan services (under 50km) or services with distinct regional characteristics (they involve distances greater than 50km and have at least one end point in a regional area). While many providers provide wholesale services on a national basis these are, in many instances, a bundle of the inter-capital and/or inter-exchange components with a tail-end component. As such the ACCC considers it unnecessary to explicitly define a separate national market as this is captured in the route categorisation (as defined in the service description) of each particular transmission service.

The DTCS is defined on a network element basis in order to allow for different access seeker network structures and transmission requirements. The ACCC considers that the geographic routes identified in the varied DTCS service description (metropolitan and regional) are sufficiently disaggregated (for example by route type and by geographic area) to enable access seekers to acquire the data transmission services they need in order to compete in separate downstream markets.

In this sense, the DTCS service description continues to reflect the main geographic markets in which the DTCS is sold (along inter-capital and inter-exchange route in metropolitan and regional areas). To align the service description with the DTCS FAD however, the ACCC has adopted the geographical descriptions that are set out in the FAD. This means that capital-regional and inter-exchange regional markets will be described as regional routes and the CBD and metropolitan inter-exchange routes are described as metropolitan routes. The geographic market for the DTCS is discussed further in section 3.3 below.

At the **functional level**, the ACCC remains of the view that the DTCS is a wholesale input for the provision of communications services. At the wholesale level, the DTCS is provided by firms such as Telstra, Optus, Pipe (TPG) and Nextgen to other service providers as inputs into the provision of a range of communications services. Some access providers are also access seekers. That is, they not only are a provider of DTCS services but they also acquire the DTCS service to extend their own networks. For example, an access seeker buys DTCS services from an access provider as an input into its supply of downstream fixed line services to its retail, business, wholesale and mobile customers. As noted above the relevant downstream markets are the markets for a range of communications services (both wholesale and retail) including data, fixed voice and mobiles. To this extent then the DTCS has some of the characteristics of a 'cluster market,'[30] for example, both in terms of a transmission service being made up of a bundle of different types of geographic services or network elements (such as a tail, an inter-exchange component and an inter-capital component) and its use as an input into downstream markets. The essential characteristic here is that the cost of the individual components of the service from different service providers could be higher than purchasing the bundled service as a whole.

The ACCC considers there is a separate wholesale market for DTCS transmission services and that these are used in a range of downstream markets (both other wholesale markets and retail markets). The functional market for the DTCS is discussed further in section 3.3 below.

The DTCS has changed over time through the use of new and emerging interface protocols (such as Ethernet) and capacity required has increased with the general increase in demand for data intensive services. The ACCC considers that the relevant **temporal market** is the period in the foreseeable future sufficient to ensure that the assessment of competition in the relevant market(s) best reflects both actual competitive dynamics present in the market or the potential threat of entry.

3.2 Substitutes and potential substitutes to the DTCS

The product dimensions of a market refer to the good and/or service supplied in that market and the potential substitutes for that service. In determining the relevant product dimensions of the market, the ACCC has had regard to factors that include but are not limited to:

- the physical and technical characteristics of the product and potential substitutes,
- costs of switching between the product and potential substitutes,
- costs of switching production to a substitute product, and
- the relative price levels and price movements of the product compared to potential substitutes.[31]

During the inquiry, submitters presented a range of views to the ACCC about the development of substitute products. These views were examined in the Draft Report.

Submissions on the Draft Report

In its submission to the Draft Report, Telstra notes that microwave technology offers

[30] A cluster market arises when the unbundling costs exist to extent that competition is based on a 'bundle' of goods or services rather than each individual good or service

[31] Merger Guidelines Draft 2008, p. 15.

symmetrical transmission speeds of up to 1 gigabit per second (Gbps) and a guaranteed network availability of 99.99 per cent in Sydney, Melbourne, Brisbane, Perth, Gold Coast, Newcastle and Adelaide.[32] It therefore submitted that this technology should be considered as a substitute.

VHA adds that interconnect links should also be identified as a separate category of the DTCS in the service description to ensure appropriate incentives are set in the FAD for the upgrade of critical transmission links. VHA notes that [cic] [cic] [33]

ACCC's views

The ACCC notes that the DTCS is agnostic in relation to the technology used to provide the service. The ACCC considers that while optical fibre remains the dominant technology for the provision of transmission services there are a number of technologies which may be used to provide the service in certain circumstances and markets. However, although the ACCC has had regard to the technologies and services cited in submissions, it remains of the view that none provide enough of a competitive constraint to the DTCS to be regarded as an effective substitute in any particular market. Briefly, the ACCC considers that:

- there are limitations of digital subscriber line (DSL) services over copper (including availability and weaker service-level agreements) and geographic limitations of the ULLS which mean that it is not an effective substitute for DTCS tail-end services in all circumstances
- in some circumstances wireless and satellite services do meet the requirements of the DTCS. In general however, systems using optical fibre can be expected to have greater capacity and reliability (and in comparison to satellite services, lower delay). The ACCC nevertheless agrees with Telstra that terrestrial wireless technology such as microwave technology can be used to provide DTCS services of up to 1Gbps in the markets where it is offered
- Wavelength-Division Multiplexing (WDM) is an optical fibre transmission technique that can be used to transmit Ethernet, Synchronous Digital Hierarchy (SDH) and Plesiochronous Digital Hierarchy (PDH) (even simultaneously) therefore any DTCS service which is supplied using Wavelength Division Multiplexing transmissions is already captured under the service description
- while dark fibre is capable of being used as an input to provide transmission services, it is nevertheless an unconditioned product which requires an access seeker's connecting equipment and management system in order to replicate the DTCS. As such, dark fibre is not a DTCS service nor is it a direct substitute, and
- VHA submissions on interconnect links refer to a Layer 3 service which is outside the scope of the DTCS.

The ACCC has no data on the performance of NBN Co's residential services in the market and NBN Co has yet to offer residential services on a wide scale. The ACCC also considers

[32] Telstra Corporation Limited, *Submission to the Commission's Draft Report on the review of the declaration for the Domestic Transmission Capacity Service*, 14 February 2014 (Telstra, Public Submission on the Draft Report), p.8.
[33] Vodafone Hutchison Australia Limited, *Declaration of the Domestic Transmission Capacity Service, Submission to the Australian Competition and Consumer Commission*, 14 February 2014 (VHA, Confidential Submission on the Draft Report), p.11.

that there is a risk that a service that does not have a committed information data rate (CIR) and also involves a contended component (such as the 100/40 service with TC-4) may not be able to reliably provide the same quality of service as the DTCS at peak congestion periods. As such, the ACCC does not consider that NBN Co's residential products are a full substitute for the DTCS even though they may be offered at very high data rates. The ACCC will however monitor the performance of such services as the NBN is rolled out.

In terms of NBN Co's Ethernet Enterprise Service, the ACCC remains of the view that while these services are likely to be a substitute for the DTCS in the future, the service is not yet available in the market, nor is it sufficiently defined to be considered as part of the future DTCS market within the next few years.

3.3 Market structure

Market structure is an important determinant of a competitive market. When examining the DTCS market structure, the ACCC has assessed whether the current number of participants in transmission services is likely to change via new market entry or existing players exiting the market. Competition is promoted when market structures are altered such that the exercise of market power becomes more difficult. This may be because barriers to entry have been lowered (permitting more efficient competitors to enter a market) and thereby constraining the pricing behaviour of the incumbents including where the ability of firms to raise rivals' costs is restricted.[34]

Submitters have identified a number of factors during the inquiry that impact on market structure. These were explored in detail in the Discussion Paper and are summarised below.

Barriers to entry and market power

The cost of transmission infrastructure, Telstra's monopoly in certain markets and use of market power were identified by submitters as significant barriers to entry into transmission markets. Access seekers identified the high sunk cost of building infrastructure as a barrier to entry into the transmission market.[35] The difficulty of building access fibre infrastructure in tail-end transmission markets and in metropolitan areas was specifically noted.[36] Optus cited the C&G market as an example of Telstra's dominance in building access fibre infrastructure.[37] VHA submitted that Telstra is able to exploit its market power and benefit from economies of scale because:

- it is the only provider of services in certain geographic markets
- other providers do not offer product equivalents and may not be able to offer equivalent speed over the entire route
- access seekers experience cost benefits (including service efficiencies and reduced transaction costs) from utilising one supplier as the provider of transmissions services and face difficulties when building a ubiquitous, networked solution based on multiple suppliers

[34] ACCC, *Fixed Services Review, A second position paper – Public version, April 2007*, p. 73.
[35] VHA, Public Submission on the Discussion Paper, p.8.
[36] Optus, Confidential Submission on the Discussion Paper, p.15.
[37] Optus, Public Submission on the Discussion Paper, p.14.

- Telstra prices its services in a way designed to secure national bundled deals.[38] Telstra prices [cic] [cic], thereby significantly limiting the ability of other infrastructure owners to provide a genuine competitive constraint,[39] and
- competitors wishing to offer national services are required to 'cobble together' a number of arrangements. Their costs and business plans are made unnecessarily complicated and are reflective of higher input prices which in turn must be passed through into their retail offers.[40]

Excess capacity

Access providers that have excess capacity can meet demand without the need for further investment. For this reason, some transmission providers cite excess capacity as a potential barrier to entry. [41] Existing operators on a DTCS route would be able to absorb any increase in demand before a competing provider could build additional infrastructure. [42] Telstra submitted excess capacity, where it exists, is available and utilised to meet growing demand and is likely to exert a downward pressure on prices for transmission services.[43]

NBN and market structure

Most submitters acknowledged that the likely effects of the NBN on the DTCS market structure would be:

- a high concentration of traffic on backhaul routes between NBN POIs and between NBN POIs and the transmission hub in the relevant capital city,[44] and
- the availability of effective substitutes for some declared services[45] such as tail-end services.[46]

However, submitters agreed that the rollout of the NBN is not likely to impact the DTCS in the short term. [47] NBN Co submitted that consideration of the effects of the NBN should occur where they can be confidently predicted. It noted that while it is providing some services with comparable features to the DTCS, the impact on the DTCS market at this stage is uncertain.[48] A number of submitters considered that there is a potential to remove regulation of the DTCS as a result of the NBN, but that it is too early to predict when that will occur. AAPT submitted that the removal of regulation of the DTCS on some routes should not occur because the rollout of the NBN is premature and also because Telstra continues to be the dominant provider in the metropolitan, regional and rural transmission markets in which the DTCS is still an enduring bottleneck.[49] iiNet submitted that it is

[38] VHA, Public Submission on the Discussion Paper, pp.7-8.
[39] AAPT, Confidential Submission on the Discussion Paper, pp.6-7.
[40] Competitive Carriers' Coalition Inc, *Submission on Domestic Transmission Capacity Service*, 30 August 2013 (CCC, Submission on the Discussion Paper), p.1.
[41] Nextgen, Submission on the Discussion Paper, p.4.
[42] iiNet, Submission on the Discussion Paper, p.10.
[43] Telstra, Public Submission on the Discussion Paper, p.25.
[44] NBN Co, Submission on the Discussion Paper, p.7. Telstra, Public Submission on Discussion Paper, pp. 3 and 21. iiNet, Submission on the Discussion Paper, p.5. Macquarie, Public Submission on the Discussion Paper, p.7. Nextgen, Submission on the Discussion Paper, p.2.
[45] NBN Co, Submission on the Discussion Paper, p.8.
[46] NBN Co, Submission on the Discussion Paper, pp.7-8, Telstra, Public Submission on Discussion Paper, p. 3.
[47] Nextgen, Submission on the Discussion Paper, p.2.
[48] NBN Co, Submission on the Discussion Paper, pp.7-8.
[49] AAPT, Public Submission on the Discussion Paper, pp.2 and 4.

premature to roll back regulation on the basis of anticipated builds by other fibre operators.[50] In relation to investment in transmission infrastructure it was submitted that:

- RSPs will only invest in locations closer to the NBN POIs when demand is sufficient and this is not likely to happen until there is a substantial rollout[51]
- investment in transmission network infrastructure is likely to be concentrated on connecting NBN POIs with capital city POPs[52]
- service providers may choose to locate a POP in regional locations in response to increased traffic[53]
- investment on current uncompetitive routes is likely to be reduced[54]
- there is no incentive to invest in transmission capacity in places other than between the NBN POIs,[55] and
- until the NBN rollout is complete, access seekers will be increasingly dependent on Telstra's existing transmission capacity.[56]

Submissions on the Draft Report

The Draft Report proposed to define tail-end routes as a stand-alone product. However, several submitters expressed concern that an unintended consequence of this change could be that where a regulated tail-end service was bundled with a deregulated service, the whole service would be deregulated. Optus and AAPT note that barriers to entry may increase if the tail-end component of a bundle is deregulated because of this change. Optus and AAPT also submit that their ability to purchase a standalone tail-end link from Telstra and a metropolitan link from a third party is limited by a number of factors including:

- TEBA rules – current access agreements do not allow access seekers to order a service from Telstra that directly cross-connects to a third party backhaul link for the purpose of connecting the access seeker's service
- the existence of an access seeker point of interconnection – it is not possible to purchase a tail-end from Telstra and an inter-exchange link from a third party where the access seeker does not have an established point of interconnection and where Telstra does provide an interconnect cable between two TEBA spaces
- high costs – charges associated with the purchase and installation of a point of interconnection in the TEBA space at the local exchange and the cost of the acquirer's cable. Optus also notes that Telstra imposes significant costs to connect an end-user whereas its new Managed Leased Line (MLL) includes a connection where required at no extra charge, and
- liability – the supplier is not liable for any faults, damage or acts affecting any service operating on the acquirer's cable.[57]

[50] iiNet, Submission on the Discussion Paper, p.5
[51] AAPT, Public Submission on the Discussion Paper, p.5. iiNet, Submission on the Discussion Paper, p.5.
[52] iiNet, Submission on the Discussion Paper, p.5. CCC, Submission on the Discussion Paper, p.2.
[53] AAPT, Public submission on the Discussion Paper, p.4.
[54] CCC, Submission on the Discussion Paper, p.2.
[55] Macquarie, Public submission on the Discussion Paper, p.7.
[56] Macquarie, Public submission on the Discussion Paper, p.7.

Telstra notes in response to these concerns that although its access agreements and TEBA rules contemplate access seekers purchasing a tail-end service that cross-connects to Telstra's backhaul link, access seekers can also apply to Telstra to access a third party's backhaul link in accordance with the *Telecommunications Act 1997* (Telco Act).

Macquarie, Nextgen and VHA note the recent consolidation of the telecommunications industry. In relation to the supply of the DTCS they cite TPG's purchase of Pipe Networks in 2009 and AAPT in 2013 (and therefore removal of two independent suppliers from the market). VHA submits that three of the four major suppliers of the DTCS (Telstra, Optus and TPG) are vertically integrated which could lead, in its view, to strategic behaviour in their supply of the DTCS because of incentives to favour their downstream business interests.[58] VHA further submits that another deterrent to entry on many transmission routes are the sunk costs of Telstra's DTCS infrastructure, combined with market perceptions that it has sufficient capacity to alter its pricing if faced with competition.[59]

ACCC's views

The ACCC maintains the view that high sunk costs in the transmission market continue to represent significant barriers to entry in many DTCS markets and that optic fibre is likely to remain the dominant technology across all transmission services.

The ACCC agrees with submitters that there is a risk that barriers to entry may increase if tail-end services are deregulated. It is the ACCC's intention that where any transmission service is sold with a regulated component (for example, a tail-end link bundled with an inter-exchange link), the bundled service will be regulated under the DTCS declaration (refer to section 4 for further detail on the DTCS declaration service description). The ACCC has amended the service description to make this clear.

In the Draft Report the ACCC agreed that the rollout of the NBN was in its early stages and had little impact on the structure of the DTCS market at this point in time. In response to this view the ACCC received two submissions which suggest that the DTCS market will be impacted by the NBN before the expiry of the DTCS declaration in five years:

- Telstra submits that the NBN will create strong incentives for carriers to build to the NBN POIs and a greater commercial incentive where they are located in regional centres. Telstra argues that the declaration should take into account the potential growth of the NBN as a competing transmission service.[60]
- Nextgen, while agreeing with the ACCC's assessment, cautions that the NBN warrants close attention as it is getting close, in its view, to being an actual impact on competition as opposed to being a potential impact. Nextgen asks that the ACCC

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[57] Optus, Public Submission on the Draft Report, pp.5 and 17-19. AAPT, *Domestic Transmission Capacity Service – An ACCC Draft Report on the review of the declaration for the Domestic Transmission Capacity Service*, 14 February 2014 (AAPT, Submission on the Draft Report), pp.1-2.
[58] VHA, Public Submission on the Draft Report, p.4
[59] Macquarie Telecom Pty Ltd, *Domestic Transmission Capacity Service – Declaration Inquiry*, 14 February 2014 (Macquarie, Submission on the Draft Report), p.1. Nextgen Group, *Submission on the draft report on the review of the declaration of the DTCS*, 17 February 2014 (Nextgen, Submission on the Draft Report), p.1.VHA, Public Submission on the Draft Report, p.4.
[60] Telstra, Public submission on the Draft Report, p.13.

provide further clarification on how it would address NBN related market developments going forward. [61]

The ACCC has noted these views and considers that while the impact of the NBN on the DTCS market is minimal at this stage, this may change before the ACCC commences another declaration review inquiry in four years' time. The ACCC may conduct an inquiry into the DTCS declaration or FAD at an earlier stage where there are developments affecting the DTCS market which warrant it. The ACCC notes that this approach is supported by most submitters, including NBN Co.

3.4 Assessing competition for the DTCS

The current DTCS service description excludes particular routes which the ACCC has found to be competitive. For example, the deemed service did not include transmission routes between major capital cities (inter-capital routes). In 2004, several capital-regional routes were found to be competitive and excluded and in 2009, further capital-regional routes and some inter-exchange transmission in several metropolitan and CBD areas were also excluded from the service description.

In each of these decisions, the ACCC considered that the presence of Telstra plus at least two other fibre providers on a particular route was evidence of competition or contestability such that that route could be removed from declaration. This is known as the T+2 approach.

During the 2008 Exemption Decision the ACCC also identified additional criteria that it applied to regional and metropolitan routes to test competition. These included:

(a) capital-regional criteria – a regional route which has:

  (i) two or more providers (in addition to Telstra) within 1 km of the regional town's RPO, and

  (ii) a connection to an optical fibre network connecting the regional town to a capital city.

(b) inter-exchange criteria – a metropolitan route which has:

  (i) a point of interconnect at a Telstra exchange in an ESA, and

  (ii) a fibre network which connects that ESA with other ESAs and an ESA in a CBD.

In its 2009 Declaration Decision, the ACCC found that effective competition did not exist in the tail-end market and that the relevant markets for many inter-exchange services (or metropolitan services, as identified by the DTCS FAD) exhibited limited contestability.[62]

[61] Nextgen, Submission on the Draft Report, p.4.
[62] ACCC, 2009 DTCS Declaration Decision, p. 20.

3.4.1 The Revised Competition Assessment Methodology

Having considered the submissions in response to the Discussion Paper, the ACCC developed a revised methodology for assessing competition in the DTCS market in order to determine levels of effective competition on particular transmission routes.

The revised methodology requires, as a starting point, that there be a minimum of three independent fibre providers, that is, T+2 fibre providers, at, or within a very close proximity, to a Telstra exchange. Once this initial threshold is met, the ACCC applied a number of additional quantitative and qualitative assessments to determine whether a route should be declared or deregulated.

The revised competition methodology allowed the ACCC to undertake a more comprehensive assessment of competition and where appropriate, determine whether continued declaration or deregulation is warranted, taking into account a number of additional factors discussed below.

T+2 as a starting point

As noted above, the ACCC considers that the presence of at least T+2 fibre providers should be the starting point of an assessment of competition. This means that there must be a minimum of at least two fibre providers (in addition to Telstra), in order for that ESA or route to be considered for deregulation. While this approach may not provide an assessment of *actual* competition on particular routes, it focuses on potential competition that may develop given the presence of alternative network infrastructure and when considered together with the additional qualitative and quantitative factors outlined below, should provide a more comprehensive assessment of competition in that ESA or route.

3.4.2 Additional quantitative and qualitative factors

Independence of fibre providers

In its Draft Report, the ACCC accepted the views of submitters that the fibre providers included in the competition methodology should be independent fibre providers. An independent fibre provider is an entity that is not related to or owned by another fibre provider. For example, with the acquisition of AAPT by TPG, these entities have been counted as the one entity under the new competition methodology.

A requirement for at least three independent fibre providers ensures that there is effective choice for access seekers in their purchase of transmission services.

Potential for interconnection and proximity to the point of interconnection

The ACCC accepted submissions that it is no longer appropriate or necessary to maintain geographical references to the RPO or to assess competition from RPOs.

Under the revised competition methodology, the point of interconnection from which competition will be assessed is the Telstra exchange site.[63] In order for a competitor to be

[63] In its Draft Report the ACCC noted that is has assessed competition from the "Telstra exchange site *or NBN built POI*". The ACCC notes that this was a typographical error. The revised competition assessment methodology has been applied at an ESA level and the ACCC has considered the availability of competitive

included in the fibre count under the new competition methodology, the fibre competitor must be located at or be within very close proximity to the Telstra exchange.

The ACCC considered submissions which asserted that the ACCC's competition assessment may have prematurely deregulated routes in the anticipation that those routes would become contested. In its Draft Report, the ACCC considered that limiting its assessment to those routes where fibre competitors are actually present or within very close proximity for interconnection at the exchange is necessary, because:

- the entry into a transmission market is related to the ability of a carrier to connect with the Telstra CAN via a Telstra exchange, and
- there are high sunk costs of building fibre networks (particularly in metropolitan areas) and obtaining access to Telstra's exchange buildings.

By taking account only of those fibre providers who are actually present at the exchange (or within a very close proximity), this will better ensure that transmission services are actively available from that exchange or are likely to become available.

Presence of major transmission providers

The ACCC accepts the views of access seekers that competition depends on the ability and willingness of the fibre providers to actually offer services on a particular route. The ACCC therefore proposed in the Draft Report not to include fibre providers such as utility companies and rail corporations (who provide transmission services over their own fibre networks) in its assessment of competition. Given their limited networks and that most are not interconnected with main telecommunications transmission hubs, such providers do not provide sufficient competitive constraint to Telstra.

The ACCC considers that routes serviced by the four major transmission infrastructure providers can be assumed to be a relatively good proxy for service availability. This is because the major transmission providers typically enjoy wider network coverage and offer a wider range and quality of transmission products. Smaller, regional based providers and utility companies such as Ergon and Queensland Rail (which have fibre which is limited to small, discrete geographical areas) have been excluded from the fibre count.

This assessment also addresses those access seeker concerns regarding the availability of commercial transmission services and the capacity for service providers to deliver services on the deregulated routes.

Connectivity to CBD ESAs

The ACCC examined whether each fibre competitor included in the fibre count on a particular route (irrespective of whether the route is metropolitan or regional) is connected to a capital city ESA. Connectivity to capital city ESAs is important as transmission traffic needs to be either handed over to the access seeker's POPs which are typically located in capital city locations or the traffic needs to be switched at a main transmission hub located in CBD ESAs.

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infrastructure from a Telstra exchange site only (it is not necessary to further consider competition to an NBN built POI in an ESA).

The revised competition methodology requires that each competing fibre provider at the exchange (irrespective of whether the exchange is in a metropolitan or regional ESA) has a fibre path connecting that ESA with a CBD ESA. This requirement will ensure that there are at least three different sources of supply to a CBD ESA. The ACCC considers that this assessment will address those access seeker concerns that alternative transmission providers actually have the capability to offer competing services to the incumbent, because there is competing infrastructure along the end-to-end route.

Assessment of demand

Using information collected under the CAN RKR, the ACCC compiled information on the ULLS band classification, number of the fixed line services in operation (SIOs) and number of Digital Subscriber Line Access Multiplexers (DSLAMs) at each ESA. The ACCC considers that fixed line SIOs and DSLAM numbers are a good proxy for assessing existing demand for transmission services. It also indicates where the potential for infrastructure investment is likely to emerge in order to meet demand. This is because competitors who have a ULL presence at an exchange will have an incentive to either invest in their own transmission infrastructure or acquire transmission services to carry that traffic back to a POP in the capital city.

The ACCC also observed that there is a degree of correlation between the number of DSLAMs and fixed line SIOs in an ESA; the greater the number of SIOs, the greater the number of DSLAMs in that ESA. ESAs with less than 5000 SIOs typically have two or less DSLAMs. The ACCC therefore observed potential demand levels and the potential for transmission infrastructure investment by examining those ESAs which have a minimum of 5000 SIOs and a minimum of two DSLAMs.

For these reasons, the ACCC formed the preliminary view in its Draft Report that regulation be maintained at those ESAs and routes which did not have a minimum of two DSLAMs and 5000 SIOs.

The ACCC also considered population density information for each ESA to identify high traffic areas. While population density information is not available at an ESA level, the ACCC examined the level of population density per square kilometre on a wider geographic basis, such as Statistical Local Area levels (SLAs), as recorded by the Australian Bureau of Statistics. SLAs are Local Government Areas or part thereof. Using a Geospatial analysis software called MapInfo, the ACCC overlayed population density information to ESA boundaries to gauge population density levels at ESAs. This also provided an indication of the potential level of demand for transmission services which was one of several factors considered during the assessment of competition.

Pricing information and Telstra zoning of ESAs

In its Draft Report, the ACCC also considered transmission pricing information that was available from a number of sources. The ACCC was able to assess price information collected during the DTCS FAD inquiry, price information contained in access agreements lodged with the ACCC, anecdotal price information received in response to the Discussion Paper and Telstra's price zone classification structure to gauge the level of price competition. The ACCC stated in the Draft Report that it was appropriate to have regard to the Telstra zone pricing structure for DTCS services in examining whether an ESA is subject to effective competition. Telstra prices DTCS services on a zone based approach in categories including

CBD, Zone 1, Zone 2 and Zone 3. Zones further away from the CBD typically reflect lower levels of demand and higher prices.

While Telstra's zone classifications were used to gauge potential price competition at an ESA, a Zone 3 classification of an ESA alone did not preclude the ACCC from removing regulation. Rather, where an ESA has demonstrated actual or likely low levels of demand (e.g. as suggested by low DSLAM numbers, SIOs and low population density) *and* is classified as a Telstra Zone 3, the Draft Report proposed to maintain regulation of that ESA. Conversely, where an ESA is classified as a Zone 3, but other factors indicate higher levels of demand, consideration was given to deregulating that ESA.

Availability of transmission services

If the routes and ESAs satisfied the criteria outlined above, the ACCC then assessed whether there were active transmission services available on that route or ESA. Using granular pricing data gathered from the DTCS FAD inquiry and from access agreements lodged with the ACCC, the ACCC examined whether transmission services are being supplied in an ESA. Where there was evidence of alternative services to Telstra being supplied in an ESA, the ACCC formed the preliminary view that the route or ESA was competitive and could be excluded from regulation.

Other relevant considerations

Having applied the revised methodology outlined above, the ACCC then reviewed the results of the competition assessment on a case-by-case basis to examine whether there were ESAs which could be removed from regulation even though they may not have met the revised methodology. Similarly, even where an ESA or route satisfied the criteria in the revised competition assessment methodology and the ACCC considered that there were other relevant considerations which warranted continued regulation, the ACCC decided to maintain regulation on that route or ESA. The ACCC considered matters such as the level of urban development, the geographic terrain or the existence of a major route connecting that town to a capital city destination. To make its assessment the ACCC examined additional data such as satellite information available through its MapInfo software.

For example, although the ESA of Mudgeeraba in QLD meets most of the criteria in the revised competition assessment methodology, it only has one alternative fibre provider to Telstra within a very close proximity to the exchange. However, the ACCC notes that there are a total of five fibre competitors within a 150m radius of the exchange. Further, Mudgeeraba is on a major fibre corridor to Brisbane. For these reasons, the ACCC considers that removing Mudgeeraba from the scope of regulation will not be detrimental to competition.

The ACCC has reviewed those ESAs which are currently deregulated but fail to meet the new competition methodology, in order to assess whether there are additional considerations which warrant the continued deregulation of those ESAs.

An illustration of the new competition methodology can be found on page 14 of this Final Report.

Submissions and the ACCC's views

Telstra contends that the revised competition assessment methodology is unnecessary and overly restrictive in light of the increased competition in the market.[64] However, the majority of submissions to the Draft Report support the ACCC's revised competition assessment methodology and a number of submissions identified areas in which the ACCC should make further refinements.[65] These are discussed below.

Independence of fibre providers

VHA notes that with the acquisition of AAPT by TPG, the ACCC should treat AAPT and TPG as one entity in applying the T+2 criterion.[66] The ACCC confirms that it counted AAPT and TPG as one entity.

Telstra argues that the criterion requiring three independent fibre providers is an unnecessary requirement because market evidence suggests that the initial entry of a competitive provider on a route previously served only by Telstra results in price-based competition.[67]

The ACCC maintains that it is appropriate to only include fibre providers in its T+2 count that are independent entities, as this ensures that access seekers have effective choice in their purchase of transmission services. Further, the ACCC notes that both NBN Co and VHA have submitted in their submissions that they have observed lower pricing on routes with multiple service providers.[68]

Potential for interconnection and proximity to the point of interconnection

Optus raises concern that while Infrastructure RKR data may provide a map level view of Optus' fibre infrastructure and its proximity to a Telstra exchange, this information does not allow the ACCC to identify whether Optus is in fact connected to an exchange.[69] Optus further argues that the Infrastructure RKR data does not allow the ACCC to draw an accurate picture of an infrastructure owner's effective capability to provide transmission services at a given location, particularly if an exchange is limited by Telstra's ability to provide space, power and approval for cable infrastructure.[70]

Similarly, VHA and iiNet also submit that the geographic proximity of fibre providers to Telstra's exchanges is not sufficient in assessing levels of competition.[71] VHA proposes that the ACCC include a further step in the competition methodology to test whether access seekers have the ability to connect to Telstra's exchange, for example by testing for the availability of TEBA services.[72]

NBN Co submits that where the T+2 count includes fibre providers within very close proximity to a Telstra exchange, but not actually connected to that exchange, the revised

[64] Telstra, Public Submission on the Draft Report, p.9.
[65] VHA, Public Submission on the Draft Report, p. 5.
[66] VHA, Public Submission on the Draft Report, p.7.
[67] Telstra, Public Submission on the Draft Report, pp.9-10.
[68] VHA, Public Submission on the Draft Report, p.4. NBN Co, Submission on the Discussion Paper, p.10.
[69] Optus, Public Submission on the Draft Report, p.9.
[70] Optus, Public Submission on the Draft Report, p. 9.
[71] iiNet Limited, *ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service, Submission by Herbert Geer Lawyers on behalf of: iiNet Limited*, 30 August 2013 (Submission on the Draft Report) p.4. VHA, Public Submission on the Draft Report, p.6.
[72] VHA, Public Submission on the Draft Report, p.6.

competition methodology should consider the costs involved in connecting to the exchange. [73] NBN Co notes that this assessment would allow the ACCC to consider whether the costs involved in connecting to an exchange create a significant barrier to entry to supplying transmission services.

iiNet considers that the ACCC's assessment of competition should be route focused and that the ACCC should assess competition for the DTCS on a route-by-route basis, rather than from an ESA level.[74]

Nextgen and Telstra seek clarification on how the ACCC determined whether a fibre competitor is located within a "very close proximity" to a Telstra exchange.[75]

Telstra contends that it would be arbitrary to apply a 150m radius around Telstra exchanges to identify competitors located within a close proximity to a Telstra exchange.[76] Telstra cites as example that the Rockhampton ESA has been re-declared because it fails to capture another fibre provider who is located within a 190m radius of the Telstra exchange.

The ACCC has considered these submissions carefully. While the ACCC acknowledges that the capability to provide transmission services depends on access to Telstra exchanges and TEBA space, the ACCC does not consider it appropriate to incorporate such a test in to the revised competition methodology. The ACCC continues to monitor queuing for access to TEBA through the Access to Telstra Exchange Facilities Record Keeping and Reporting Rules (2011) (TEF RKR). Further, the ACCC notes that this information (as collected via the TEF RKR) is dynamic and is subject to change on a monthly basis. Therefore, even if this information could be incorporated to the revised competition assessment methodology, it would not be a reliable indicator of the state of the market. The ACCC will shortly undertake a review of the TEF RKR (which expires on 14 July 2014). It will consider whether there is sufficient transparency of access seekers' ability to obtain access to TEBA in Telstra exchanges in that review.

As noted above, Optus submits that the data relied upon by the ACCC, including information obtained through the Infrastructure RKR data alone does not allow the ACCC to determine whether a competitor is connected to a Telstra exchange. However the ACCC notes that satellite imaging available through MapInfo allows the ACCC to take a street view of where fibre is located and any buildings it traverses. By overlaying Telstra exchange location information on top of competitor fibre infrastructure data, the MapInfo software enables the ACCC to visually examine whether there is any fibre near or entering a Telstra exchange building. The ACCC considers that where fibre infrastructure enters an exchange building, the capacity for interconnection by the fibre provider to the exchange is relatively small and barriers to accessing the Telstra CAN are low.

The ACCC gauged the capability of competitors to connect to an exchange by considering their proximity to the Telstra exchange. To ensure that the location of a Telstra exchange in MapInfo accurately reflected the correct physical address, the ACCC examined the competitor fibre infrastructure on MapInfo from within a 50m and 150m radius of the Telstra

[73] NBN Co, Submission on the Draft Report, p.2.
[74] iiNet, Submission on the Draft Report, p.5.
[75] Nextgen, Submission on the Draft Report, p.2. Telstra, Public Submission on the Discussion Paper, p.11.
[76] Telstra, Submission on the Draft Report, p.4.

exchange. This allowed the ACCC to ensure that it took into account all competitor fibre infrastructure close to a Telstra exchange.

The ACCC maintains that it is appropriate to assess competition for the DTCS on an ESA basis, not a route-by-route basis as submitted by iiNet. A route-by-route assessment would not only be impractical, but it would not result in an effective outcome because although DTCS is regulated as a point-to-point service, transmission traffic follows a logical path, not an actual physical path. Transmission traffic can be carried via a multitude of routes between the 5067 ESAs. Further, the ACCC notes that transmission networks are commonly constructed on a ring or mesh network architecture. Therefore, there are numerous ways in which transmission traffic can be routed. So for example, a route from Sydney to Albury may not necessarily follow a direct fibre path from Sydney to Albury. The transmission traffic may instead travel from Sydney to Melbourne, then Albury. Therefore, the ACCC maintains that is appropriate to assess competition at an ESA specific level.

The revised competition assessment methodology considers the availability of competitor infrastructure within a very close proximity to the Telstra exchange. Optus, Nextgen and Telstra have sought clarification on what constitutes 'very close proximity' in the competition assessment. The ACCC confirms it has examined the availability of competitive fibre infrastructure from within a 150m radius of a Telstra exchange. A radial boundary of 150m ensures that all available competitor infrastructure near a Telstra exchange is adequately captured in the competition assessment.

The ACCC re-examined the Rockhampton ESA in light of Telstra's comments. The ACCC acknowledges that there is another competitor with fibre infrastructure within a 190m radius of the Rockhampton exchange, however the ACCC does not consider this competitor to be amongst one of the top four transmission providers in the market nor does it have a direct connection to a capital city. The availability of commercial transmission services is also limited as this provider does not generally provide transmission services on a commercial basis. Further, the ACCC also notes there are only two fibre providers connecting Rockhampton back to Brisbane. For these reasons, the ACCC is not satisfied that the Rockhampton ESA is competitive at this point in time and remains of the view that Rockhampton should be re-declared.

Presence of major transmission providers

Telstra submits that regional fibre providers should be included in the T+2 count as they provide a competitive restraint on Telstra in its provision of the DTCS.[77] Telstra does not agree that only the top four transmission providers provide a competitive constraint on Telstra.[78]

The ACCC maintains its view that regional providers such as utility and rail corporations should not be considered as part of the competition assessment as they have limited networks, limited wholesale interconnect facilities and provide limited wholesale transmission services. While Telstra has provided several examples of services being offered by such corporations, access seekers have submitted that such corporations do not provide sufficient transmission connectivity or have the capacity to offer the range of transmission services to suit their business needs. While Optus agrees with the ACCC's exclusion of smaller and regional

[77] Telstra, Public Submission on the Draft Report, p. 8.
[78] Telstra, Public Submission on the Draft Report, p. 11.

transmission infrastructure owners from the competition assessment, it seeks clarification on which transmission providers have been included in T+2 fibre count.[79]

The ACCC confirms that Telstra, Optus, Nextgen and TPG Telecom (which includes Pipe and AAPT) have been included in the count of T+2 providers. The ACCC considers that these competitors have the network reach and service offering to provide a constraint on Telstra and have the capacity to ensure continued commercial availability of services once a route or ESA is deregulated.

Connectivity to CBD ESAs

Telstra seeks clarification on how this criterion has been applied and whether 'direct connectivity' includes connections from an exchange back to the CBD even if it runs through other exchanges on the way.[80]

The ACCC confirms that it has applied this criterion by visually examining fibre maps to determine whether at least three of the fibre providers included in the T+2 count have a fibre path connecting that exchange with an exchange in a CBD ESA, irrespective of whether that route traverses through other exchanges. This requirement will ensure that there are at least three different sources of supply to capital city transmission hubs.

Assessment of demand

The ACCC maintains that 5000 SIOs and a minimum of 2 DSLAMS represent an appropriate *proxy* for assessing demand for the DTCS. iiNet submits that because the ACCC has previously found that 14,000 SIOs are required to support ULLS/LSS based competition in an ESA, it would be appropriate to maintain a figure of 14,000 SIOs in the revised competition assessment methodology.[81] However, the previous ACCC assessment was in the context of Telstra's exemption applications[82] (which are no longer available) in relation to the LCS and the WLR in 2008/2009 and the competition assessment sought to encourage ULLS-based entry. At the time, based on the information then available to the ACCC, the ACCC considered that ULLS-based entry and effective competition in fixed voice services was likely to occur in those ESAs that have 14,000 SIOs or have 4 or more ULLS based competitors within the ESA.[83] However, the demand assessments used in the current inquiry seek to gauge where potential transmission infrastructure investment is likely to occur, in order to meet demand. Given that competitors who have a ULL presence will have an incentive to invest in their own transmission infrastructure or acquire transmission services to carry traffic back to a capital city POP, the ACCC considers that 5000 SIOs and 2 DSLAMs is a good proxy for assessing existing demand for transmission services.

This assessment was made in the context of whether the exemptions were in the LTIE. The competition assessment used in the current review is in relation to a declaration inquiry of the DTCS to determine the appropriate extent of regulation.

[79] Optus, Public Submission on the Draft Report, p. 8.
[80] Telstra, Public Submission on the Draft Report, p.11
[81] iiNet, Submission on the Draft Report, p.5.
[82] The previous sections 152AS and 152AT have now been repealed from the CCA, and exemption processes are no longer available.
[83] ACCC, *Telstra's local carriage services and wholesale line rental exemption applications, Draft Decision and Proposed Class Exemption*, April 2008, p.6.

Pricing information and Telstra zoning of ESAs

VHA comments that referencing Telstra's zone classification [cic] [cic].[84] VHA argues that there is a potential for Telstra to reclassify zones to avoid regulation in the future.[85] iiNet considers that the ACCC has only removed regulation where that ESA is classified by Telstra as a Zone 1 or Zone 2 area and the ESA satisfies the revised competition assessment methodology.[86]

While the revised competition assessment methodology takes account of Telstra's ESA zone classifications, this is only *one* of a number of considerations in the revised competition assessment. The ACCC is of the view that variations to the zone classification are unlikely to significantly influence the final results of the revised competition assessment methodology. However, the ACCC will continue to monitor Telstra zone classifications of ESAs as part of its ongoing industry monitoring processes.

Further, the ACCC confirms that while it was guided by Telstra's zone classification of ESAs in its assessment of competition, the ACCC did not limit its assessment of competition to only the Zone 1 and Zone 2 ESAs. While the ACCC acknowledges that ESAs classified as Zone 3 may be priced comparatively higher than the Zone 1 and Zone 2 areas, the ACCC considers that a Zone 3 classification of an ESA alone does not warrant continued regulation.

Availability of transmission services

Optus seeks further information regarding how the ACCC has taken into account the 'availability of commercial transmission services' and the capacity of these providers to deliver services on deregulated routes.[87] Further, Optus submits that the ACCC make available a list of exchanges outlining the service providers which the ACCC assumes are capable of providing wholesale DTCS services over their own infrastructure.

The ACCC analysed access agreements lodged with the ACCC to determine where commercial transmission services are available.[88] In order to determine whether a major transmission provider has the capability to offer commercial transmission services, the ACCC took into account the proximity of that competitor to the Telstra exchange. Where competitive infrastructure is located close to a Telstra exchange, the ACCC considers that the removal of regulation may encourage competitors to make efficient investment to that exchange, in order to respond to changes in demand.

The ACCC considers that it would not be appropriate to identify which service providers are capable of providing transmission services in an ESA as such information is confidential and would disclose the locations of competitor infrastructure. The ACCC notes that it has previously made available a summary of the number of providers in an ESA (based on the Infrastructure RKR data collected by the ACCC).[89]

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[84] VHA, Confidential Submission on the Draft Report, p.6.
[85] VHA, Public Submission on the Draft Report, p.6.
[86] VHA, Public Submission on the Draft Report, p.12. iiNet Submission on the Draft Report, p.5.
[87] Optus, Public Submission on the Draft Report, p. 8.
[88] See sections 152BEA and s152BEB of the CCA.
[89] http://www.accc.gov.au/regulated-infrastructure/communications/monitoring-reporting/audit-of-the-infrastructure-record-keeping-rules/infrastructure-rkr

NBN Co submits that in determining the availability of transmission services, the ACCC should consider the costs involved in connecting to a Telstra exchange and whether these costs may act as a significant barrier to entry.[90]

While the ACCC agrees that access to, and connection with, a Telstra exchange is necessary to ensure that services can be made available, the ACCC notes that it currently does not have information about the costs of accessing a Telstra exchange. The ACCC notes that it will monitor developments in this area, including any complaints from access seekers about the costs of accessing and connecting to Telstra exchanges.

Other relevant considerations

Optus submits that there is a lack of transparency in the way the ACCC applied the 'other relevant considerations' in the revised competition assessment methodology and argues that this criterion undermines the rationale to undertake a competition assessment in the first place.[91] VHA argues that this limb of the competition assessment needs to have regard to both considerations which warrant declaration of the ESA and considerations which warrant exemption.[92]

This criterion allowed the ACCC to consider information such as the level of urban development (using satellite imaging), the level of fibre investment in adjacent areas or whether an NBN POI is situated on this route before it made its final decision whether deregulation of an ESA or route was warranted.

The ACCC considers this criterion is a necessary inclusion in the competition assessment. In applying the revised competition methodology, the ACCC found that a number of ESAs only marginally failed to meet to the competition assessment, such as Mudgeeraba (in QLD). By taking account of additional considerations, such as the level of urban development in adjacent areas and the level of fibre investment along this route to Brisbane, the ACCC was able to have a more comprehensive picture of the state of competition. It was persuaded by those additional considerations that it would not be necessary to maintain regulation along this route nor would it be detrimental to competition to remove regulation.

Similarly, the ACCC formed the view that although a particular ESA satisfied the requirements of the revised competition assessment methodology, there were other relevant considerations that warranted declaration of the ESA. For example, the metropolitan ESA of Karingal in Victoria satisfies almost all of the criteria in the revised competition methodology. However, the ACCC's assessment of this ESA indicates that there is relatively low population density and little urban development in Karingal and adjacent ESAs, which may indicate low levels of demand and likelihood for new investment may be low. For these reasons, the ACCC determined that it would be appropriate to maintain regulation at Karingal.

The ACCC has previously acknowledged submissions that the ACCC's application of the previous T+2 approach was mechanistic and failed to take account of actual levels of competition. While most submitters supported the revised competition methodology, the

[90] NBN Co Limited, *NBN Co Submission on ACCC Draft Report on the review of the declaration for the Domestic Transmission Capacity Service*, 17 February 2014 (NBN Co, Submission on the Draft Report) p.2.
[91] Optus, Public Submission on the Draft Report, p. 9.
[92] VHA, Public Submission on the Draft Report, p.7.

ACCC considers that consideration of other relevant factors will be necessary to be able to recognise, reconsider and reassess the state of competition on an ESA-by-ESA basis where appropriate.

The ACCC notes that the last step of the revised competition methodology enabled the ACCC to review the results of the competition assessment to determine whether those ESAs that only marginally met any of the competition criteria should be deregulated. The ACCC then reviewed those ESAs on a case-by-case basis and where appropriate applied its regulatory discretion to consider any additional relevant considerations before regulation was removed or maintained.. For example, an ESA may meet all the criteria for deregulation except for one where it just fails to meet the required measure (such as having 4,999 SIOs in the ESA rather than the required minimum of 5,000). In instances such as this, the ACCC has reviewed all the competition criteria and may still propose to deregulate that ESA or route even if it marginally fails one or more of the competition criteria. Likewise, the proximity of fibre to the exchange criteria may be relaxed where there are compelling reasons to do so. For example, an exchange may not have fibre competitors within close proximity as defined in an initial assessment, but due to topology or other factors may have a number of fibre providers within a relatively close distance. This criterion allows the ACCC to apply a 'safety check' to ensure that the results of the competition assessment are sound or whether there are particular considerations not envisaged in the methodology that would impact on competition in that ESA or route.

Leased capacity

NBN Co supports in principle the inclusion of leased capacity when considering the level of competition on a route or in an ESA and seeks clarification as to whether the revised competition methodology takes account of leased capacity.[93]

The ACCC's revised competition assessment methodology is solely based on infrastructure based competition and only considers owned infrastructure as eligible inputs to the assessment. The ACCC confirms that it currently does have some, but not sufficient, information on leased capacity to be able to use this information in the revised competition assessment methodology.

3.4.3 Assessment of competition on currently deregulated and regulated DTCS routes

Following receipt of submissions to the Discussion Paper, the ACCC applied the revised competition assessment methodology on all DTCS routes that are currently deregulated and regulated. In its Draft Report, the ACCC identified three routes that did not meet the competition assessment methodology and considered that they should be re-declared and an additional 112 metropolitan routes and 8 regional routes that met the new methodology and should be deregulated.

Submissions on the Draft Report

In its response to the Draft Report, Telstra argues that the 2013 Infrastructure RKR data indicates that there are 1826 ESAs which have three or more fibre providers, which indicates a much higher level of competition in the market than is reflected in the Draft Report.[94]

[93] NBN Co, Submission on the Draft Report, p. 3.
[94] Telstra, Public Submission on the Draft Report, p.12.

Macquarie, while supportive of the revised competition assessment methodology proposed in the Draft Report, raises concern that the ACCC's assessment has resulted in a lower number of regulated metropolitan routes than under the previous declaration.[95] Specifically, Macquarie lists five currently deregulated metropolitan routes where two of the largest non-Telstra wholesale service providers are unable to offer services to Macquarie using their own infrastructure. Macquarie argues that a service provider that offers a service through a re-billing of Telstra's infrastructure should not be counted in the T+2 competition assessment and submits that transmission services on these routes should be regulated.[96]
VHA submits that in applying the methodology, the ACCC deregulated the Golden Grove ESA whereas in its view, that ESA would not satisfy the revised criteria.[97]

ACCC's views

As noted above, the ACCC only considered fibre providers that owned infrastructure assets in a given ESA as part of its assessment. Leased services were not considered. In each of the five ESAs referred to by Macquarie, the ACCC notes that there are alternative infrastructure providers (to Telstra) present in these ESAs. These alternative providers own fibre assets within close proximity to the Telstra exchange.

Given the ubiquitous nature of Telstra's network it can be expected that competing providers make use of parts of Telstra's network (e.g. Telstra's tail-end and inter-exchange services), in conjunction with their own network to provide an end-to-end service to customers. Therefore, while resale based competition may be considered a weaker form of competition than infrastructure based competition, the ACCC is not convinced that reselling leased capacity as such is indicative of a lack of competition.

The ACCC also re-examined the Golden Grove ESA and was satisfied that it has more than 5000 SIOs, more than 2 DSLAMs and demonstrates sufficient levels of demand and contestability to be removed from regulation.

Currently deregulated DTCS routes

The majority of currently deregulated ESAs and routes meet the requirements of the revised competition methodology. The ACCC considers that these ESAs and routes remain effectively competitive and should remain excluded from the scope of regulation.

Currently declared DTCS routes

The ACCC's revised competition assessment methodology has identified that an additional 112 metropolitan ESAs satisfy the requirements of the revised competition methodology and should be removed from the scope of DTCS regulation. These ESAs are listed in Table 1 in Appendix 2.

The ACCC has identified that an additional 8 regional routes satisfy the revised competition methodology and are considered sufficiently competitive to warrant removing regulation. These routes and the relevant ESAs are listed in Table 2 in Appendix 2.

[95] Macquarie, Submission on the Draft Report, p. 4.
[96] Macquarie, Submission on the Draft Report, p. 5.
[97] VHA, Public Submission on the Draft Report, p.12.

Re-declaration of previously deregulated DTCS routes

In applying the revised competition methodology, the ACCC has identified a total of three routes which are currently deregulated and fail to meet the revised competition methodology. The ACCC maintains that the regional routes from Maryborough, Bundaberg and Rockhampton fail to meet the revised competition assessment methodology and will therefore be re-declared.

The ACCC's application of the revised competition methodology to Maryborough, Bundaberg and Rockhampton is set out below:

- Count of fibre providers: the ESAs of Maryborough, Bundaberg and Rockhampton each have minimum of three or more fibre providers in the ESA.
- Independence of fibre providers: the T+2 fibre providers at Maryborough, Bundaberg and Rockhampton are independent fibre providers and are not related or owned by the same parent company.
- Potential for interconnection: the T+2 fibre providers at Maryborough, Bundaberg and Rockhampton are all either at or within a very close proximity to the Telstra exchange.
- Presence of major fibre providers: while Bundaberg has three of the top four transmission providers at the exchange, Maryborough and Rockhampton only have two of the top four transmission providers at the exchange. The ACCC is not satisfied that the alternative service providers at Maryborough and Rockhampton can offer an appropriate transmission service with commercial and interconnection arrangements to a capital city destination sufficient to provide an acceptable competitive alternative to existing transmission services.
- Connectivity to CBD ESAs: only two of the top four transmission providers provide connectivity from Maryborough, Bundaberg and Rockhampton back to a deregulated capital city ESA in Queensland. The ACCC considers that this may limit the effective supply of transmission services from these regional ESAs to Brisbane.
- Assessment of demand: while Maryborough, Bundaberg and Rockhampton have a low population density per square kilometre, the ESAs have a minimum of two of more DSLAMs and have more than 5000 fixed SIOs in operation.
- Pricing information and Telstra zoning of ESAs: the confidential information currently available to the ACCC indicates that there may be limited contestability on these regional routes.
- Availability of transmission services: confidential information available to the ACCC indicates that there may be limited availability of transmission services at Maryborough, Bundaberg and Rockhampton.
- Other relevant considerations: in a confidential submission to the ACCC, one access seeker submitted that there is only one alternative supplier on the Brisbane-Bundaberg and Brisbane-Maryborough route and that there is limited competition on these routes.

The ACCC has therefore decided to re-declare these routes as it is not satisfied that the relevant requisites of the revised competition methodology have been met.

Appendix 3 sets out the results of the competition assessment.

3.4.4 Tail-end services

Tail-end DTCS is a type of declared transmission service. In its Draft Report, the ACCC proposed to maintain declaration of all tail-end route DTCS services on the basis that these services have not been found to be competitive.

Submissions on the Draft Report

In its submission to the Draft Report, Telstra states that in four of the five Sydney CBD ESAs, there are 11 providers each competing for demand and in the fifth there are 10 providers. Telstra submits that this demonstrates the intensity of competition in CBD ESAs and that the 16 CBD ESAs identified by Telstra should be deregulated.[98]

Nextgen considers that the continued regulation of tails, in tandem with clarification of the tail-end service in the service description, should result in access seekers having greater ability to assemble transmission services – potentially from multiple providers.[99]
AAPT, Macquarie, Optus and iiNet submit that due to ambiguities in the service description, the declaration may inadvertently exclude inter-exchange services (reclassified as metropolitan or regional in the service description) which incorporate a bundled tail service.[100] Macquarie further submits that the ACCC should unbundle tail-end services.[101]

Optus, Macquarie, AAPT, iiNet and VHA all contend that tail-end services are never provided on a stand-alone basis. Submitters also argue that Telstra is the only effective supplier of the tail-end service. Macquarie proposes that tail-end services should be unbundled in order to improve access to competitive transmission services. Alternatively, Macquarie submits that the ACCC remove any ambiguities in the service description by clarifying that any transmission service that contains a tail-end remains regulated.[102]

ACCC's views

The ACCC agrees with submitter views that there are no effective substitutes for tail-end services. For the reasons outlined in Section 3.2 of this paper and the 2008 Telstra Exemption Decision, the ACCC does not consider that tail-end transmission provided using ULLS or microwave technology is a close substitute for the provision of the DTCS. The 2008 Telstra Exemption Decision noted the limitations of ULLS being a close substitute for tail-end DTCS, including:

- supply constraints, including customer access modules being located outside the exchange, or exchange capping occurring
- deterioration of transmission signal strength due to distance limitation and the presence of Large Pair Gain System equipment
- concerns over the disparity between the quality of service and other contractual non-price terms, and

[98] Telstra, Public Submission on the Draft Report, p. 11.
[99] Nextgen, Submission on the Draft Report, p.2.
[100] AAPT, Submission on the Draft Report, p. 2. Macquarie, Submission on the Draft Report, p. 6. Optus, Public Submission on the Draft Report, p. 16. iiNet, Submission on the Draft Report, p. 6.
[101] Macquarie, Submission on the Draft Report, p.5.
[102] Macquarie, Submission on the Draft Report, p. 6.

- observed increasing demand for tail-end DTCS despite its higher cost than ULLS services.[103]

The ACCC has considered Telstra's submission that CBD ESAs should be deregulated. However, as outlined above, the ACCC does not consider that there is sufficient competitive restraint provided by competitors in CBD ESAs in the provision of tail-end services. The ACCC considers that barriers to entry of deploying ubiquitous fibre infrastructure for tail-end transmission remain high. The ACCC's view is tail-end services should continue to be declared.

The ACCC acknowledges the concerns raised about ambiguities in the service description that may cause confusion about how regulated tail-end services are treated when bundled with a deregulated route. The ACCC has also considered Macquarie's submission to unbundle tail-end services. Section 4.3 to this paper outlines the ACCC's views on these matters.

3.4.5 Impact of the NBN on the level of competition for the DTCS

RSPs providing end-users with NBN Access Services will require transmission services to carry traffic from an NBN POI [104] to their POP usually located in a capital city location. The number and location of the NBN POIs define the boundaries of NBN Co's network and determines the extent to which backhaul is required by each RSP.

The ACCC considers it likely that competition in DTCS markets will be impacted by the NBN during the next declaration period. In the Discussion Paper the ACCC sought views on whether there was already increased demand for transmission services at or near NBN POIs and the nature of any DTCS investments made at NBN POIs. It also considered the level of competition on backhaul routes from NBN POIs.

3.4.6 Competition on backhaul routes from NBN POIs

Under the current DTCS declaration, 51 of the 121 NBN POIs are located in deregulated ESAs. The ACCC considered the issue of competition on backhaul routes in its Discussion Paper.

Submissions on the Draft Report

In its submission to the Draft Report, NBN Co expresses support for the revised competition assessment methodology and noted that the revised approach reflects a number of considerations proposed by NBN Co.[105] NBN Co submits that the revised competition assessment methodology provides a more comprehensive view of the level of actual competition on a given transmission route. iiNet submits that the assessment of competition for NBN POIs should be based on whether a fibre provider is actually connected to the NBN POI rather than being close to it.

[103] ACCC, Telstra DTCS Exemption Decision, November 2008, p. 36.
[104] An NBN POI is the inter-network location where end-user traffic is handed over from the NBN to the RSP.
[105] NBN Co, Submission on the Discussion Paper, p.1.

ACCC's views

The ACCC has assessed competition from the Telstra exchange located in each ESA when applying its revised competition assessment methodology. It is the ACCC's view that a total of 75 NBN POIs will be located in the deregulated ESAs.

While the ACCC considers that the roll-out of the NBN is still in its early stages, the ACCC expects that competition for backhaul is likely to concentrate at or near the NBN POIs. Given the importance of accessing competitive backhaul for the supply of NBN services, the ACCC will continue to monitor the state of competition on backhaul routes from NBN POIs during the period of declaration.

3.5 Access to facilities for the DTCS

The ACCC notes that competition is promoted in markets for the DTCS where access to the relevant facilities is enabled in a timely and cost effective manner. The ACCC also notes that access to facilities for the DTCS will be important in accessing NBN services as access seekers may need to interconnect their existing transmission infrastructure from the TEBA space to the NBN Co allocated exchange space in order to access the NBN Access Service.

Submissions have raised a number of issues relating to facilities during this inquiry, including barriers to entry for accessing facilities providing interconnection with the DTCS. Those issues include:

- High access to duct charges.[106] AAPT submitted that [cic] [cic][107]
- restrictive or cumbersome access terms imposed by Telstra.[108] AAPT noted that [cic] [cic][109]
- unnecessary delay in getting access. iiNet noted that it often takes an access seeker up to 90 days to access and install equipment in a Telstra exchange due to Telstra's requirements relating to queuing and the design and construction process,[110] and
- practical limitations of the negotiation/arbitration model under Schedule 1 of the Telco Act.

iiNet submitted that resolution of access disputes under Schedule 1 of the Telco Act can take considerable time which causes commercial difficulties. iiNet also noted that there is no mechanism under the Telco Act by which the ACCC can set price and non-price terms and conditions of access that could operate as fall back provisions in the event that carriers cannot agree on access terms.[111]

AAPT argued that given that Telstra will own and operate the passive infrastructure which AAPT will be reliant upon for access to facilities at the bulk of the NBN POI locations, there are a myriad of ways in which Telstra will be able to take advantage of its position to the detriment of access seekers and the LTIE. AAPT argued facilities access should be declared

[106] AAPT, Public Submission on the Discussion Paper, p.11, iiNet, Submission on the Discussion Paper, p.9
[107] AAPT, Confidential Submission on the Discussion Paper, p.11.
[108] AAPT, Public Submission on the Discussion Paper, p.13, iiNet Submission on the Discussion Paper, p.8.
[109] AAPT, Confidential Submission on the Discussion Paper, p.13.
[110] iiNet, Submission on the Discussion Paper, p.8.
[111] iiNet, Submission on the Discussion Paper, p.8.

given Telstra's dominant market power in relation to facilities and the essential role facilities access has in the provision of transmission.[112]

Telstra argued that there is no need for any further regulation because:

- facilities access to the DTCS is already regulated via the Telco Act, Facilities Access Code,[113] Telstra's Structural Separation Undertaking and 'Access to Telstra Exchange Facilities RKR' and therefore any additional regulation runs the risk of either being inconsistent or duplicative[114]
- the existing regime works well. In the past decade there have only been [cic] [cic] duct access disputes and [cic] [cic],[115] and
- in its view, the ACCC does not have the power to declare access to facilities, that are subject to Part 3 or Part 5 of Schedule 1 to the Telco Act, under Part XIC.[116]

In general, submissions on the Draft Report consider:

- it is necessary to set access terms and conditions for facilities access services which relate to the DTCS. AAPT urges the ACCC to actively seek submissions during the relevant FAD inquiry on the services which should be regulated and the terms and conditions for access[117]
- there is scope for the ACCC to streamline measures relating to facilities access. Streamlining of the measures which currently exist would help reduce ambiguity and enable a clearer and more timely resolution of future facilities access issues[118]
- the ACCC does not need any further submissions to make a decision on whether to commence an inquiry into the declaration of facilities access services and should do so as soon as possible[119], and
- the failure of the ACCC to commence an inquiry may further delay the appropriate regulation of such services to the detriment of access seekers and their customers[120].

ACCC's views

The ACCC acknowledges that access to facilities is an area of general concern for access seekers. The ACCC also considers that more issues may emerge as RSPs seek connection to NBN POIs, the vast majority of which are located in Telstra exchanges. The ACCC confirms that all of the ESAs (except South Brisbane) which have been identified as meeting the Revised Competition Assessment Criteria and which are proposed to be deregulated have established TEBA areas in the Telstra exchange building.

[112] AAPT, Public Submission on the Discussion Paper, pp.10-11.
[113] ACCC, *A Code of Access to Telecommunications Transmission Towers, Sites of Towers and Underground Facilities, 1999.*
[114] Telstra, Public Submission on the Discussion Paper, pp. 16 and 24.
[115] Telstra, Confidential Submission on the Discussion Paper, p.16.
[116] Telstra, Public Submission on the Discussion Paper, p. 18.
[117] AAPT, Submission on the Draft Report, p.3.
[118] Nextgen, Submission on the Draft Report, p.4.
[119] Macquarie, Submission on the Draft Report, p.6.
[120] Macquarie, Submission on the Draft Report, p.6.

The ACCC has carefully considered the submissions from access seekers that raise concerns about the effectiveness of the current facilities access regulatory framework. It has also noted submissions which have asked the ACCC to commence an inquiry to decide whether a facilities access service should be declared. The ACCC agrees that there are further issues to be examined to make sure that facilities access services are being provided effectively to facilitate interconnection.

Concurrently with this inquiry, the ACCC is also arbitrating three disputes notified to it by access seekers in relation to facilities access services. These arbitrations will require the ACCC to examine the terms and conditions on which access is provided to those access seekers. However, given that arbitrations are private and their outcomes limited to the arbitrating parties, the ACCC will be unable to address the broader facilities access issues that have been identified during this inquiry.

The ACCC will consider whether access to certain facilities is required for the purpose of interconnecting with the declared service in the upcoming FAD inquiries for both the DTCS and fixed line services. This would include consideration of the relevant terms and conditions for access (both price and non-price terms) that would apply to facilities access services that are required for the purpose of enabling the access seeker to interconnect with the active declared service (i.e. the DTCS or fixed line services).

The ACCC considers it may also declare a facilities access service under Part XIC of the CCA, where it is satisfied that declaration meets the criteria in section 152AL, including that it would be in the LTIE. This would allow the ACCC to directly set terms and conditions of access to facilities in the relevant access determination (which would apply where there is no commercial agreement). The ACCC notes that interconnection within an exchange is necessary for the promotion of competition, to prevent inefficient provision of infrastructure and to allow access seekers to connect with competitive transmission providers.

In addition, the ACCC notes that under the SSU, Telstra is required to publish a Reference Price for TEBA. Where the ACCC prices a facilities access service (for example, TEBA in a FAD) in relation to interconnection with a declared service, Telstra is required to publish a new Rate Card which includes the new Reference Price equal to the price specified by the ACCC[121].

The ACCC will consider the need for setting access terms and conditions for facilities access in relation to DTCS services (such as those that are ancillary to the declared DTCS) in conjunction with other fixed line services currently under review. As noted above, the ACCC will examine these issues during the respective FAD inquiries for the DTCS and fixed services, which will be undertaken contemporaneously with the arbitrations. The ACCC does not consider that it is necessary for facilities access issues that relate to the DTCS to be dealt with directly in the DTCS declaration inquiry in order for them to be considered during the FAD inquiry.

However, the service description for the DTCS expressly points out that the DTCS is a service between various types of transmission points including transmission points located in an exchange. As such, access seekers can acquire the declared service including interconnection. Any specific problems involving interconnection can be dealt with in the

[121] Paragraph 2 of Schedule 8 of the SSU

non-price terms and conditions for access to the declared service or through the arrangements for access to supplementary facilities as enabled through Part 3 of Schedule 1 to the Telco Act.

Declaration inquiry for facilities access services

As noted above, while the ACCC is of the view that it may declare a facilities access service under Part XIC of the CCA, it has decided that will not commence a separate declaration inquiry in relation to facilities access services at this point in time. Rather, the ACCC considers that it would be more timely and efficient to consider issues relating to access to facilities through the FAD process (where access is provided in connection with a declared service). This will allow the ACCC to provide a more timely regulatory response to the facilities access issues raised by stakeholders. Where access is dealt with by other provisions of the Telco Act (including arbitrations) or is not in connection with a declared service, the ACCC will consider the issues both individually and in the context of the industry as a whole. If there are outstanding issues that are not addressed during the FAD inquiry or in the arbitrations, the ACCC will consider whether to commence a declaration inquiry at that time.

3.6 Special Linkage Charges

SLCs are additional charges levied by Telstra where it is requested to extend its network boundary point so that a wholesale customer is able to deliver services to its customer premise. Several submitters have raised transparency and consistency issues as to how costs are calculated and apportioned for Telstra's SLC.[122]

The Draft Report

The Draft Report noted access seeker concerns relating to SLCs and considered that SLCs are primarily a pricing matter and would be best addressed in the upcoming DTCS FAD inquiry which will commence in mid-2014. The ACCC took the preliminary view that is it not necessary to specify SLCs within the DTCS service description in order to consider the issue in the DTCS FAD inquiry.

Submissions on the Draft Report

VHA and Macquarie argue the DTCS service description should expressly specify that SLCs are captured by the scope of the declaration.[123]AAPT notes in its submission to the Draft Report that it continues to be concerned about transparency and equivalence issues relating to Telstra's SLC pricing constructs. AAPT supports the ACCC's acknowledgment that regulatory intervention regarding SLCs may be required and AAPT submits that this may be best dealt with the upcoming FAD inquiry.[124]

Telstra clarifies in its submission to the Draft Report that SLCs are cost based charges directly proportionate to the cost of extending the network to accommodate the needs of the customer.[125] It notes that SLCs are applied when the delivery of a service requires capital expenditure to extend the Telstra network beyond what is funded as part of a standard

[122] CCC, Submission on the Discussion Paper, p.2. Macquarie, Confidential Submission on the Discussion Paper, p.11. VHA, Public Submission on the Discussion Paper, p.14. Optus, Public Submission on the Draft Report, p.26.
[123] VHA, Public Submission on the Draft Report, p.10. Macquarie, Submission on the Draft Report, p.6.
[124] AAPT, Submission on the Draft Report, p.3.
[125] Telstra, Public Submission on the Draft Report, p.6.

installation. Telstra further notes that SLCs will likely depend on the specific extension requested and is therefore better understood as related to the supply of the service and not a description of the service itself. Telstra notes that it is simplifying SLCs by introducing better quote tools for wholesale customers that also improve price certainty.[126]

In a meeting with the ACCC, Telstra also stated that its retail business units have an analogous process. For example, enterprise customers are charged for network or infrastructure extensions required in order for Telstra to provide relevant telecommunications services (this is typically referred to as a capital contribution rather than a SLC).

ACCC's views

The ACCC considers that SLCs are related to the supply of a DTCS service and notes that the SLC is similar to a connection charge (which is priced in the DTCS FAD). However, unlike a connection charge, the SLC is not readily quantifiable at the time of purchasing a DTCS service.

The ACCC notes access seeker concerns about the lack of transparency and processes associated with the provisioning of SLCs. The ACCC considers that the issue of SLCs warrants further consideration in the context of the upcoming DTCS FAD. As part of the consideration of this issue the ACCC may also consider whether the use of other regulatory tools would also be appropriate in addressing the concerns raised by access seekers.
The ACCC welcomes Telstra's initiative to simplify and introduce better pricing tools to assist access seekers in understanding the SLC better.

3.7 Conclusion on the state of competition

The ACCC considers that generally, barriers to entry into the DTCS market remain high with significant sunk costs incurred and the risk of uneconomic returns. However, the ACCC notes that contestability is increasingly evident in some transmission markets.

In terms of the impact of the NBN, the ACCC agrees with submitters that it is too early to determine the impact of the NBN but that it is likely to have an impact on the structure of DTCS markets and levels of DTCS competition in the future. The ACCC proposes to continue to monitor the effects of the NBN on DTCS markets as it is rolled out.

There are currently 88 metropolitan ESAs and 23[127] regional routes which are excluded from regulation. The ACCC's final view on the state of competition for the DTCS is that an additional 112 metropolitan ESAs and 8 regional routes are competitive and should be excluded from regulation. In addition, three regional routes should be re-declared. In total, 200 metropolitan ESAs and 27 regional routes[128] will be deregulated (these ESAs are listed at Appendix 2).

[126] Telstra, Public Submission on the Draft Report, p.6.
[127] The Sydney-Campbelltown route is currently classified as a regional route and is included in the count of 23 deregulated regional routes. However, through the findings of this inquiry, the ACCC has decided to reclassify the Campbelltown ESA as a metropolitan ESA (to align with the DTCS Final Access Determination made in June 2012).
[128] This is the summation of the currently deregulated 23 capital-regional routes, plus the 8 additional regional routes found to be competitive, minus the three regional routes which will be re-declared, minus the Sydney-Campbelltown route which is now reclassified as a metropolitan route.

In terms of the remaining transmission markets, the ACCC does not consider that there are conditions conducive to effective competition to warrant their removal from the scope of the declaration.

The ACCC notes that the declared DTCS is largely characterised by significant barriers to entry, limited supply or demand side substitutability and a dominant incumbent. The ACCC considers it is essential that access seekers are able to gain access to the DTCS at a reasonable price to ensure continued innovation and vigorous competition in downstream markets. This access must be balanced against providing the correct incentives for efficient investment in the market to ensure the long-term interests of end-users are also addressed.

4 The DTCS service description

The ACCC has consulted on the DTCS service description during this inquiry to seek views on whether it should be updated to clarify its general understanding and interpretations and to account for other legislative changes that have occurred since the last review of the declaration. The current DTCS service description is set out at Appendix 1.

The ACCC has decided to vary the current DTCS service description to:

- clarify its interpretation, by
  - aligning the service description with the DTCS FAD made in June 2012 where appropriate
  - removing ambiguity in some general definitions and improve the general clarity of the service description and
  - accounting for legislative changes made by the CCA, and
- reflect the results of the competition assessment methodology by
  - excluding from regulation an additional 112 metropolitan ESAs
  - excluding from regulation an additional 8 regional routes
  - re-declaring 3 regional routes, and
  - clarifying that the service description maintains regulation of all tail-end services, including metropolitan and regional services which have a bundled tail-end component.

The varied DTCS service description is set out at Appendix 2.

4.1 Clarifying the DTCS service description

The ACCC considers that it would be in the LTIE to align the DTCS service description where appropriate with some of the definitions made in the 2012 DTCS FAD. The DTCS FAD categorised ESAs and routes between ESAs for pricing purposes and was guided by the way DTCS services are sold in transmission markets. As a consequence, the DTCS FAD developed an improved approach to the way geographic boundaries are set and how the route categories are defined.

4.1.1 Defining geographic boundaries in the DTCS service description

The ACCC has previously removed routes from the DTCS service description which have been found to be competitive, including routes between transmission points located in:

- an ‘exempt capital city’ (inter-capital routes). An exempt capital city is defined in the current service description as Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney, and
- specified ‘regional centres’ to Sydney, Melbourne, Brisbane and Adelaide (Capital-regional routes).

The current service description however does not specify the geographic boundaries of the listed 'exempt' capital cities or 'regional centres' and the ACCC considers this creates uncertainty as to where a deregulated DTCS route starts and finishes.

The DTCS FAD defines the geographic boundaries of capital cities and regional centres listed in the service description by listing the ESAs which make up each capital city and regional centre. The ACCC notes however that the ESAs listed in the FAD are for pricing purposes only and have not been subject to a competition assessment. That is, the FAD identifies how a service between any two ESAs will be categorised so that it can be priced accordingly. For example, under the DTCS FAD, the ESA of Mascot is identified as metropolitan and the ESA of Bega is identified as regional. Therefore the existing FAD would classify and price a route between Mascot and Bega as a regional DTCS route.

Submissions on the Draft Report

In submissions to the Draft Report, VHA submits that the proposed service description in the Draft Report is unclear in relation to the scope of regulation for inter-capital routes.[129] Although the current service description only excludes regulation between the 'exempt' capital cities, the proposed service description excludes regulation between the boundaries of all capital cities, not just those ESAs which are intended to be deregulated. To improve clarity, VHA proposed the service description be amended to:

- include a revised definition of inter-capital routes to clarify that routes between all capital city boundaries (including Hobart and Darwin) are considered inter-capital routes
- provide that, unless specifically exempted, all inter-capital routes are declared
- insert a definition of 'deregulated capital city,' and
- exempt routes between deregulated capital city boundaries.

VHA proposes the following definition of 'inter-capital route' and 'deregulated capital city':

> **inter-capital route** means a transmission service from a transmission point within one capital city boundary to a transmission point within another capital city boundary. Capital City boundaries are listed in Table 3.
>
> **deregulated capital city** means Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney

For clarity, NBN Co proposes that the definition of inter-capital route be drafted as follows:

> "a transmission point in a deregulated ESA within one capital city boundary to a transmission point in a deregulated ESA within another capital city boundary."

[129] VHA, Public Submission on the Draft Report. p.11.

ACCC's views

The ACCC has decided to align the definition of geographic boundaries in the service description with the DTCS FAD. The ACCC also agrees with VHA and NBN Co that the proposed service description in the Draft Report could be clearer in relation to the scope of regulation for inter-capital routes.

The ACCC agrees with NBN Co's proposed changes to the definition of 'inter-capital route'. While the ACCC does not consider it necessary to insert a definition for 'deregulated capital city' (as suggested by VHA), the ACCC has clarified in the definition that only routes between Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney are deregulated. The varied service description adopts the following definition for inter-capital routes:

> **inter-capital route** means a route from a transmission point within one capital city boundary to a transmission point within another capital city boundary in Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney. Capital city boundaries are listed in Table 3.

In aligning the service description with the FAD, the ACCC confirms that although all routes *between* the capital cities boundaries are classified as inter-capital routes (for pricing purposes in an FAD), the service description only excludes regulation on inter-capital routes between the deregulated ESAs in each of the capital city boundaries for Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney. For example:

> *Route 1:* A route between City South (in Sydney) to Exhibition (in Melbourne) would be classified as an inter-capital route, because both ESAs fall into the Sydney and Melbourne capital city boundaries respectively. This route would not be subject to regulation because both City South and Exhibition are identified in the service description as a deregulated ESA.
>
> *Route 2:* A transmission route between City South and Bentleigh (in Melbourne), although classified as inter-capital (because both ESAs fall into the Sydney and Melbourne capital city boundaries), the route would remain regulated. This is because although the City South ESA is excluded from the scope of regulation, Bentleigh remains regulated.

For completeness, the ACCC has listed in the varied service description (Appendix 2) the ESAs which make up the boundary of each capital city (see Table 3), along with the list of metropolitan ESAs (Table 1) and regional ESAs/routes (Table 2) which are excluded from regulation.

As previously noted in the Discussion Paper, the ACCC considers that the geographic boundaries identified in the DTCS FAD reflect the way the DTCS is marketed and sold. The ACCC considers that the DTCS FAD and declaration should define geographic boundaries, whether for the purpose of pricing or defining the scope of regulation, in a similar manner where appropriate, in order to provide certainty and continuity.

The ACCC also agrees with NBN Co that it should consider other geographic units as the NBN is rolled out but considers at this stage ESAs are still the most relevant geographic unit.

4.1.2 Aligning the DTCS service description with the route categories identified in the DTCS FAD

As discussed in Section 2.5 to this paper, the DTCS service description and DTCS FAD identify different geographic route categories. The DTCS service description identifies particular inter-capital, capital-regional and inter-exchange (metropolitan and CBD areas) routes in order to exclude them from regulation while the DTCS FAD seeks to align route categories more closely to the way they are sold in the market in order to price them. The geographic classifications used in the DTCS FAD are as follows:

- *inter-capital routes* - routes from an ESA within the boundary of a capital city to an ESA within the boundary of another capital city
- *regional routes* - routes where either or both the beginning (A-end) and end of a route (B-end) are outside the boundary of a capital city
- *metropolitan route* - routes where both the A-end and B-end are within the boundary of a capital city
- *tail-end services*:
  - a regional tail-end route - a route wholly within a single ESA outside the boundary of a capital city, and
  - a metropolitan tail-end route - a route wholly within a single ESA inside the boundary of a capital city.[130]

In response to the Discussion Paper, most submitters supported the adoption of the revised geographic route categories used in the DTCS FAD in the DTCS service description.[131]

ACCC's views

The ACCC notes that submitters are in general agreement that the ACCC should adopt the route categories which are set out in the DTCS FAD and the definitions associated with each route category. The ACCC has decided to vary the service description to:

- replace references to 'inter-exchange transmission' with metropolitan routes, and
- replace reference to 'capital-regional routes' with regional routes.

The ACCC considers that aligning the route categories between the DTCS FAD and service description where appropriate, will provide certainty and continuity with the ACCC's pricing structure of the DTCS as this may assist parties during commercial negotiations for access to the DTCS.

As noted in Table 1 of Appendix 2, only one ESA has been deregulated in the Australian Capital Territory –the ESA of Civic in Canberra, therefore, there are no deregulated metropolitan routes in Canberra (as noted above, this is because a metropolitan route is a route between ESAs within the same capital city boundary). The Draft Report proposed the following drafting for clause (e) of the service description:

[130] ACCC, Explanatory Statement to the DTCS FAD, June 2012, p. 16.
[131] Macquarie, Public Submission on the Discussion Paper, p.5. NBN Co, Submission on the Discussion Paper, p.6. Nextgen, Submission on the Discussion paper, p.2. Telstra, Public Submission on the Discussion Paper, p.20. VHA, Public Submission on the Discussion Paper, p.11.

(e) transmission points:

1. in any of the deregulated metropolitan ESAs in Sydney
2. in any of the deregulated metropolitan ESAs in Brisbane
3. in any of the deregulated metropolitan ESAs in Melbourne
4. in any of the deregulated metropolitan ESAs in Perth
5. in any of the deregulated metropolitan ESAs in Adelaide
6. in any of the deregulated metropolitan ESAs in Canberra

Refer to Table 1 for the ESAs which are deregulated in each capital city

Given that there is only one deregulated metropolitan ESA in Canberra, the ACCC has decided to remove sub-clause (e)(6) in the proposed service description to the Draft Report.

4.1.3 Backhaul routes from NBN POIs

Transmission traffic is required to carry NBN traffic from the NBN POIs back to the relevant capacity city destinations. The ACCC anticipates that as the roll-out of the NBN continues, most transmission traffic will concentrate around the NBN POIs.

Submissions on the Draft Report

NBN Co notes that the revised competition assessment methodology aligns with the competition criteria originally proposed by NBN Co (in its submission to the Discussion Paper) in respect of deregulating NBN POI backhaul routes. NBN Co considers that its views in relation to the need for an NBN POI backhaul route have been substantially addressed by the move to the revised competition assessment methodology, which applies to all transmission routes, including those with NBN POIs.[132]

ACCC's views

The ACCC maintains the view that at this point in time, it is not necessary to specifically identify NBN POI backhaul routes to the service description. The ACCC notes that the DTCS declaration applies to all regulated routes, including backhaul routes from NBN POIs to capital city destinations.

4.1.4 Sydney – Campbelltown route

The deregulated Sydney-Campbelltown route is currently identified as a competitive 'capital-regional' route in the DTCS service description. However, the DTCS FAD identifies Campbelltown as a metropolitan area because the Campbelltown ESA falls within the Sydney capital city boundary. For pricing purposes, the ACCC determined that Campbelltown is more akin to the characteristics of a metropolitan route rather than as a capital-regional route.[133]

ACCC's views

The ACCC is of the final view that the Sydney-Campbelltown route be reclassified in the DTCS service description as a metropolitan route because the findings of the DTCS FAD inquiry showed that Campbelltown is more akin to the characteristics of a metropolitan route rather than a regional route. The ACCC notes that no submissions on the Draft Report were

[132] NBN Co, Submission on the Draft Report, p.1.
[133] ACCC, Explanatory Statement to the DTCS FAD, June 2012, p. 18.

received on this issue. The ACCC remains of view the Sydney-Campbelltown route satisfies the competition assessment under the new revised competition assessment methodology and it should continue to remain excluded from the scope of regulation. The ACCC considers that Campbelltown is part of Sydney having regard to the geographic boundaries which are set out in the DTCS FAD and submitters to this inquiry broadly supported the adoption of the geographic boundaries set out in the FAD.

4.1.5 Defining 'Protection' in the service description

Although the declared DTCS includes both protected and unprotected DTCS services, the DTCS service declaration does not define the features of a protected DTCS service. Consideration has been given to whether it is necessary to include a definition for protection in the DTCS service description and if so, whether this should align with the definition provided in the DTCS FAD.

The DTCS FAD defines 'protection' as:

> geographic path diversity in the inter-exchange component of a transmissions service only; it does not extend to the tail-end component of transmission services.[134]

Submissions on this issue were divided in the Discussion Paper. Some submitters suggested that further clarity would be provided by defining protection, and others (Telstra and NBN Co) submitting that a definition was unnecessary.

ACCC's views

The ACCC is of the view that it is not necessary to define protection in the service description. The declaration extends to both protected and unprotected services and protection is well defined for pricing purposes in the DTCS FAD. The ACCC notes that in their submissions on the Draft Report, NBN Co and Telstra supports the ACCC's view.[135]

4.1.6 Relevance of 'contention' and 'symmetry'

In September 2010 the ACCC varied the DTCS service description to insert the terms 'symmetry' and 'uncontended'. These terms clarify that declared DTCS services are provided on a symmetric and permanent basis to a particular access seeker and are not shared with other access seekers.[136] The declared DTCS is intended to capture high capacity backhaul services in which the supply and quality of service is controlled by the access seeker (not the service provider).[137]

In response to the Discussion Paper, most submitters supported the retention of the words 'uncontended' and 'symmetric' in the DTCS service description and the ACCC adopted this

[134] ACCC, Explanatory Statement to the DTCS FAD, June 2012, p. 28.
[135] NBN Co, Submission on the Draft Report, p.4, Telstra, Public Submission on the Draft Report, p.6.
[136] ACCC, *An ACCC Final Report on reviewing the declaration of the domestic transmission capacity service*, September 2010 (DTCS Declaration Variation), p. 16.
[137] ACCC, DTCS Declaration Variation, September 2010, p. 19.

approach in the Draft Report. There were no substantive submissions on this issue in the following the Draft Report.

ACCC's views

The ACCC maintains the view that it will retain the words 'uncontended' and 'symmetric' in the DTCS service description.

The ACCC also does not consider it necessary to use the word 'dedicated' instead of 'uncontended' as proposed by both Optus and Macquarie in their submissions on the basis that the DTCS declaration already defines uncontended as 'dedicated and not shared'.

4.1.7 Transmission point

Under the DTCS service description access providers are not required to provide transmission capacity between transmission points which do not connect, or intersect with, their networks.[138] The current DTCS service description provides the following definitions for a transmission point:

> a **transmission point** is any of the following
>
> (a) a point of interconnection
> (b) a customer transmission point
> (c) an access seeker network location
>
> a **point of interconnection** is a physical point of interconnection in Australia between a network operated by a carrier or carriage service provider and another network operated by a service provider
>
> 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)[139]
>
> 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

ACCC's views

The ACCC notes that submitters with the exception of Nextgen, either agree to retain current definitions or do not make any substantive submissions. The ACCC considers that Nextgen's suggestion to define 'customer transmission point' provides further clarity and should be adopted into the service description. The ACCC notes that a 'customer transmission point' or 'access seeker network location' includes transmission point locations at mobile base stations.

Other definitions of transmission points will be retained.

[138] ACCC, *Competition in data markets*, November 1998, p. xiii.
[139] DTCS service description.

4.1.8 Out-dated terminology

The ACCC notes that a number of legislative changes have occurred since the last review of the DTCS declaration and that the service description should be updated to reflect these changes. The legislative changes include:

- the repeal of ordinary class exemptions (sections 152AS) and ordinary individual exemptions (section 152AT) from the CCA, and
- the replacement of the *Trade Practices Act 1974* with the CCA.

ACCC's views

The ACCC has decided to update the service description to account for legislative and other organisational/name changes that have occurred since the last declaration review. In doing so the ACCC has:

- replaced the *Trade Practices Act 1974* with *Competition and Consumer Act 2010*
- replaced the word 'exempt' with 'deregulated'.

4.1.9 Reference to 'Exchange Service Areas' in the DTCS service description

The existing DTCS service description (and DTCS FAD) uses ESAs to identify the geographic boundaries of telecommunication services and networks[140] while the NBN will be rolled out in regions called Fibre Serving Area Modules (FSAMs). Consideration has been given to whether the DTCS service description should continue to use ESAs to identify the geographic boundary of telecommunications networks.

Submissions on the Draft Report

In its submission to the Draft Report, VHA proposes to update the reference of exchange as follows (amendments are in italics and strikethrough):

> exchange ~~service~~ *servicing* area or ESA has the meaning given to that phrase by the *Communications Alliance Ltd* ~~Australian Communications Industry Forum Limited~~ definition in ACIF C559:~~2006~~*2012,* Part 1ULLS Performance Requirements Industry Code

ACCC's views

The ACCC considers that while the NBN will increasingly have an impact on the structure of the geographic market for the DTCS, this has not yet occurred. The ACCC agrees with submitters that references to ESAs should be retained in the service description until the NBN is sufficiently rolled out to affect DTCS geographic markets.

The ACCC acknowledges that the definition of ESA, as currently noted in the service description, is out-dated. The current service description defines an ESA as follows:

[140] The DTCS service description uses ESAs to identify the boundaries of deregulated inter-exchange transmission services. The DTCS FAD uses ESAs to identify the boundaries of capital cities and the boundaries of the deregulated regional centres.

> **Exchange service area** or **ESA** has the meaning given to that phrase by the Australian Communications Industry Forum Limited definition in ACIF C559:2012, Part 1

The ACCC has decided to adopt the Communications Alliance definition of an ESA, as defined in the code C559:2012 Part 1 ULLS Performance Requirements, but has decided to use the actual wording of that definition in the service description. The varied service description defines an ESA as follows:

> **Exchange serving area** or **ESA** means the area served from a traditional local exchange building

4.1.10 Telstra's Managed Leased Line service

Telstra offers the MLL service under its suite of transmission products called the 'Data Advantage Service'. The MLL offers the basic DTCS as the building block service and allows the acquirer to purchase additional managed features, such as proactive service monitoring and other service level features. Access seekers have sought clarification about whether the Telstra MLL service falls within the remit of the declared DTCS.
A number of submitters raised issues regarding the MLL during the inquiry. Some submitters were concerned that there may be some uncertainty about whether the service description would cover these services.[141]

[cic] [cic].[142] Optus proposed that a definition of 'managed services' be added to the DTCS service description. Optus argued that the definition should clarify that the inclusion of managed services to provide fault identification/rectification does not exclude the service from regulation.[143]

Draft Report

The ACCC clarified in the Draft Report that the Telstra MLL product meets the requirements of the DTCS service description and is covered by the declaration.

Submissions on the Draft Report

Optus observes [cic] [cic].[144]

To clarify, Telstra notes that its MLL service:[145]

- is one of the four current means of acquiring the declared DTCS service from Telstra
- incorporates point to point, symmetric, uncontended data services which come within the declared DTCS but that the service incorporates additional service quality features and the price for these types of services when supplied under the MLL are averaged rather than based on radial distances

[141] Macquarie, Public Submission on the Discussion Paper, p.2.
[142] Optus, Confidential Submission on the Discussion Paper, p.8.
[143] Optus, Public Submission on the Discussion Paper, p.4.
[144] Optus, Confidential Submission on the Draft Report, p.14
[145] Telstra Public Submission on the Draft Report, pp. 7 and 16.

- was a product developed in response to customer demands and now has [cic] [cic][146] more services on the MLL than on its Data Carriage Service (DCS), and
- does demonstrate that the DTCS service description is operating effectively to capture the key features that the ACCC is seeking to regulate and that it applies flexibly to new services or new pricing constructs that come within its terms.

ACCC's views

The ACCC maintains that the DTCS is a wholesale transmission service in which the supply and quality of service is controlled by the access seeker and although an input into other services, it is not, of itself, a managed service. The ACCC considers that the service description adequately balances the need to define the DTCS so that it extends to wholesale transmission services without capturing services of a lesser quality (such as asymmetric services) or services in which the access provider retains control over the quality of service (such as contended services).

In terms of fault identification and rectification, the ACCC notes that the Standard Access Obligations (SAO) require access providers to provide 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 when supplying an active declared service such as the DTCS (section 152AR(3)(c) of the CCA). As such, the ACCC does not consider these to be characteristics of a managed service.

The ACCC maintains its view that the service features of the MLL product meets the requirements of the DTCS service description and is covered by the DTCS declaration.

The ACCC will consider issues of pricing in the upcoming DTCS FAD inquiry.

4.2 Varying the service description to reflect the results of the competition assessment

The current service description lists routes which have been found to be competitive and removed from the scope of declaration (see Section 3). Following the results of the competition assessment in this declaration inquiry, the service description will be varied to exclude those additional routes and ESAs found to be competitive, as well as to re-declare the 3 regional routes which failed to meet the competition assessment.

Draft Report

The Draft Report proposed to vary the current service description to reflect the results of the competition assessment from this inquiry and exclude regulation on a further 112 metropolitan routes, 8 regional routes and re-declare regional routes to Rockhampton, Maryborough and Bundaberg.

Submissions on the Draft Report

In response to the Draft Report, Optus and iiNet submits that instead of varying the service description to identify the deregulated routes, the ACCC should use the DTCS FAD to

[146] Telstra Confidential Submission on the Draft Report, p.7.

exclude routes found to be competitive.[147] Optus argues that by listing the deregulated routes in the service description, this risks locking in the current assessment of competition for the term of the DTCS declaration. Both iiNet and Optus argue that by listing the routes found to be competitive in an FAD, the ACCC would have the power to vary this list via a Binding Rule of Conduct (BROC) should market conditions change and it becomes necessary to re-declare routes.[148]

ACCC's views

The ACCC has considered the submissions regarding whether the deregulation of routes should be included in the FAD, rather than the service description. The scope of regulation can be addressed either during the declaration or as a result of information received during the FAD. The ACCC also notes that the scope of regulation can be varied in either process if evidence emerged that there had been a change to competition in the market that would require a re-assessment of particular ESAs or routes. Although the process for varying the scope of regulation differs, both processes require that the ACCC undertake a public inquiry to gauge industry views.

Having considered this issue, the ACCC remains of the view that setting the scope of regulation in the declaration will provide greater certainty to industry. As discussed below, the ACCC is proposing that a transitional period be nominated before the declaration takes effect. This will assist both industry and the ACCC to assess whether any further refinement of the regulatory scope is necessary before the deregulation of ESAs and routes commences. Should pricing information suggest that competition is not sufficiently developed on any deregulated ESA or route, the ACCC can adjust the scope of regulation either in the FAD or before the new service description commences.

The ACCC is satisfied that the revised competition assessment methodology is more stringent than processes followed to assess competition in previous inquiries. In applying this methodology to all routes and ESAs (including those currently deregulated), the ACCC has found that there has been some new investment in infrastructure and competition has improved in certain metropolitan and regional areas. The ACCC considers it to be appropriate that this is reflected in the scope of regulation as set out in the varied service description.

The ACCC proposes to continue to monitor competition in the DTCS market throughout the duration of the declaration. If competition changes during that period, the ACCC will make changes to the scope of regulation by varying the DTCS declaration.

4.3 Tail-end services

Tail-end services are the 'last mile' of a transmission link connecting the customer premise with a transmission point of interconnect, such as a Telstra exchange. During the course of this declaration inquiry, the ACCC consulted with parties about whether the ACCC should maintain regulation of the tail-end service.

Draft Report

In the Draft Report, the ACCC agreed with submitter views that there are no effective substitutes for tail-end services and considered that barriers to entry of deploying fibre

[147] Optus, Public Submission on the Draft Report, p.6. iiNet, Submission on the Draft Report, p.7.
[148] iiNet, Submission on the Draft Report, p.7. Optus, Public Submission on the Draft Report, p.6.

infrastructure for tail-end transmission remain high. The ACCC proposed to continue to declare tail-end services. The ACCC also took account of stakeholder submissions and proposed to vary the description of the inter-capital, regional and metropolitan routes in the service description to note that these routes may include a bundled tail-end component (to align with the FAD). The ACCC also defined the tail-end service, where that the tail-end service is only purchased as a standalone product (also in line with the FAD).

Submissions on the Discussion Paper and Draft Report

Tail services are sold as a bundled product

Many submitters consider that the regulation of tail-end services (whether bundled or unbundled) should remain regulated as they continue to exhibit bottleneck characteristics.[149] Submitters have made the following observations:[150]

- the tail-end service is not supplied as a standalone product and is almost always sold as a bundled product (incorporating for example an inter-exchange and tail-end component), and
- access seekers cannot purchase a tail-end from Telstra and an inter-exchange link from a third party where the access seeker does not already have an established point of interconnect in the relevant exchange.

Optus further clarifies that the tail-end is typically sold a bundled product e.g. via the legacy Telstra x163 transmission service.[151] Optus questions why, in the absence of a market product, there is a regulated stand-alone product.

Nextgen contends that although the revised service description to the Draft Report recognises the potential for tail-end services to be sold stand-alone product, current market practices tend to see tail-end services bundled with other components.[152] Where this is the case, Nextgen notes that it may be difficult for the forthcoming DTCS FAD to reflect the intent of the revised service description.

Contractual restrictions

Macquarie, Optus and AAPT all argue that Telstra's TEBA rules may limit their ability to purchase an inter-exchange link from one provider and to separately purchase the tail-end link from Telstra.[153]

Clarify that bundled services remain regulated

In their submission to the Discussion Paper, NBN Co and VHA submitted that the ACCC should consider amending the DTCS service description to explicitly bundle tail-end services with regional or metropolitan routes as this is how the product is often bought.[154]

[149] iiNet, Submission on the Draft Report p.11. Macquarie, Submission on the Draft Report p.6.
[150] AAPT, Submission on the Draft Report, p.2. Macquarie, Submission on the Draft Report, p.5. Optus, Public Submission on the Draft Report, p. 5.
[151] Optus, Public Submission on the Draft Report, p.24.
[152] Nextgen, Submission on the Draft Report, p.3.
[153] Macquarie, Submission on the Draft Report, p.5. AAPT, Submission on the Draft Report, p.2. Optus, Public Submission on the Draft Report, p.5.
[154] NBN Co, Submission on the Discussion Paper, p.7. VHA, Public Submission on the Discussion Paper, p.11.

The CCC agrees with the ACCC's Draft Report to revise the service description for tail-end services to make clear that tail-end services are subject to regulation.[155]

Other submissions on the Draft Report argue that the proposed service description has not been clearly drafted to reflect that both bundled (that is, a tail plus an inter-exchange link) and standalone tail-end services remain regulated.[156] VHA considers that the ACCC's proposed service description in the Draft Report may inadvertently exclude from regulation bundled transmission routes which incorporate a tail-end component.[157]

In order to ensure that bundled tail-end services remain regulated, NBN Co proposes that clauses (d) and (e) of the service description insert the words "located at an exchange" after the words "transmission point" and "transmission points" respectively. [158]

Optus suggests that the definitions for inter-capital, metropolitan, regional and tail-end routes be amended as follows:[159]

> **inter-capital route** means a route from an ESA within the boundary of the capital city to an ESA within the boundary of another capital city. Capital city boundaries are listed in Table 3. ~~An inter-capital route may include a tail-end where it is included as part of a bundle with the inter-capital route.~~
>
> **metropolitan route** means a route where both the beginning and end of the route are within a capital city boundary. Capital city boundaries are listed in Table 3. ~~A metropolitan route may include a tail-end where it is included as part of a bundle with the metropolitan route.~~
>
> **regional route** means a route where either or both the beginning and end of the route are outside a capital city boundary. Capital city boundaries are listed in Table 3. ~~A metropolitan route may include a tail-end where it is included as part of a bundle with the regional route.~~

Optus submits that the amendments ensure that deregulation only applies to routes that are competitive, as assessed through the ACCC's analysis of reviewing routes on a POI to POI and ESA to ESA basis.[160]

Unbundle tail-end services

Macquarie argues that the tail-end service should be unbundled. [161] Macquarie considers that if Telstra were to provide the tail-end service on a stand-alone basis, access seekers would have the opportunity to utilise non-Telstra inter-exchange infrastructure in combination with

[155] Competitive Carriers' Coalition Inc, *Submission to Draft Decision on Domestic Transmission Capacity Service Declaration Review*, 14 February 2014 (CCC, Submission on the Draft Report), p.1.
[156] AAPT, Submission on the Draft Report, p.2. iiNet, Submission on the Draft Report, pp.2 and 6. Macquarie, Submission on the Draft Report, p.6. Optus, Public Submission on the Draft Report, p.19. VHA, Public Submission on the Draft Report, p.9.
[157] VHA, Public Submission on the Draft Report, p.9.
[158] NBN Co, Submission on the Draft Report, p.4.
[159] Optus, Submission on the Draft Report, pp.22-23.
[160] Optus, Public Submission on the Draft Report, p.23
[161] Macquarie, Submission on the Draft Report, p.5.

a Telstra tail-end service. Macquarie argues that this would remedy the limitations imposed by Telstra's TEBA rules.

Identifying a separate route category for bundled tail-end services

In its submission on the Discussion Paper, Optus submitted that the DTCS declaration should be separated into the Domestic Transmission Terminating Service and the Domestic Transmission Trunking Service.[162] Optus submitted that a separate 'trunk' and 'terminating' service will allow the declaration to better relate to the downstream markets and, as a result, provide specific remedies that will better promote competition in the related markets.

Optus submitted that the fundamental problem with the proposed service description in the Draft Report is that is does not reflect transmission services currently being sold to, or used by, access seekers.[163] Optus considers that there are two main types of wholesale transmission services currently available in the market and the service description should be amended to reflect these services. The two distinct services are:[164]

- a POI to POI (the former DTCS trunking service proposed by Optus) service that provides dedicated transmission capacity between access seekers' POIs in different locations, and
- a POI to End-User (the former DTCS Terminating service proposed by Optus) service that provides dedicated transmission capacity connections between an access seeker's POI and end-user premise. An end-user premise can be either an access seeker network location or a customer transmission point.

To ensure that bundled inter-exchanges services remain regulated, Optus suggests the inclusion of a new transmission route category to the DTCS service description called the 'access network link'.[165]

AAPT supports Optus' proposed amendments to include the access network link concept in the DTCS service description on the basis that this will clarify that both end-to-end access network links and tail-end services are regulated services under the DTCS declaration.[166]

Optus submits that currently there is one commercial construct which provides connections between an end-user premise and an access seeker's POI and that this commercial product is currently covered by two regulated products (the tail-end and inter-exchange services). [167] Optus notes that the DTCS Declaration provides two regulated products for one market product which has one set of characteristics.[168]

Provision of the tail-end service

Optus also submitted that the definition for tail-end services should make clear that it includes the provision of a connection between the end-user's premise and the Main Distribution Frame (MDF) located within a Main Distribution Unit (MDU).[169]

[162] Optus, Public Submission on the Discussion Paper, pp. 19 and 21.
[163] Optus, Public Submission on the Draft Report, p. 4
[164] Optus, Public Submission on the Draft Report, p. 4.
[165] Optus, Public Submission on the Draft Report, pp.22-24.
[166] AAPT, Submission on the Draft Report, p. 2.
[167] Optus, Public Submission on the Draft Report, p. 16.
[168] Optus, Public Submission on the Draft Report, p. 16.
[169] Optus, Public Submission on the Discussion Paper, p.18.

ACCC's views

Tail services are sold as a bundled product

The ACCC acknowledges submissions that the tail-end is not sold as a standalone service, rather it is typically sold as bundled product, e.g. via the Telstra x163 transmission service. However, the ACCC considers it appropriate to include a definition that would cover a stand-alone tail-end service and a tail-end service that is bundled with a connecting service, such as the inter-exchange component. This should give access seekers the flexibility to separately purchase the tail-end service, should they choose to, but also ensures that a bundled tail-end service is regulated. The ACCC has therefore decided to define the tail-end in the service description as follows:

> **tail-end route** means a route where both the transmission points for the beginning and end of the route are within the same ESA

This definition aligns with the tail-end definition provided in the DTCS FAD, which provides that a tail-end service is contained wholly within the boundary of an ESA.[170] A stand-alone tail is currently priced in the DTCS FAD.

Contractual restrictions

While the ACCC notes that there are contractual and commercial reasons which limit the purchase of standalone tail-end services, the ACCC notes that the service description as varied (at Appendix 2) recognises a stand-alone tail as a regulated service.

The ACCC further clarifies that while the DTCS FAD provides a price for standalone tail-end services, it recognises that the price of inter-capital, regional and metropolitan routes already incorporate the price of a tail component (where the tail is bundled with an inter-exchange service). The prices provided by the DTCS FAD are generally end-to-end prices for declared inter-capital, regional and metropolitan services with a bundled tail-end element. Where access seekers wish to purchase a standalone tail-end service (metropolitan or regional), the DTCS FAD also provides a method for deriving this price.[171] This provides access seekers the option of acquiring that component of the link that is competitive (e.g. metropolitan or regional route) separately to the component incorporating the tail-end DTCS.

Clarify that bundled services remain regulated

The ACCC acknowledges submitter concerns that the proposed service description in the Draft Report could be clearer as to whether services that include a bundled tail-end service (e.g. a bundled inter-exchange and tail-end service) remain regulated.

The ACCC confirms that all tail-end services, including tail-end services that are bundled with an inter-exchange component are considered regulated and remain within the scope of the declaration. The ACCC confirms that where a bundled product contains a deregulated route and a regulated tail-end, the services remains regulated.

[170] ACCC, Explanatory Statement to the DTCS FAD, June 2012, p.16 and p.30.
[171] ACCC, Explanatory Statement to the DTCS Final Access Determination (FAD), June 2012, p.6.

To clarify this, the ACCC has varied the service description to insert the words 'located at an exchange' (as suggested in NBN Co's proposed drafting) after the words "transmission point" and "transmission points" in clauses (c), (d) and (e) as follows:[172]

> (c) in the case of inter-capital routes, a transmission point located at an exchange in a deregulated ESA within one capital city boundary to a transmission point located at an exchange in a deregulated ESA within another capital city boundary
>
> (d) in the case of regional routes, a transmission point located at an exchange in a deregulated regional ESA to a transmission point located at an exchange in a deregulated ESA in Sydney, Melbourne, Brisbane or Adelaide…
>
> (e) in the case of metropolitan routes, transmission points located at an exchange between…

The ACCC considers that the amendments noted above provide sufficient clarification to reflect the ACCC's intention to regulate all tail-end services, including bundled tail-end services. Where a declared service is requested, the acquirer will most likely seek to obtain a service with the least distance (as the regulated price will be lower).

The ACCC recognises the market practice of bundling a tail-end service with other routes and notes that the prices provided by the DTCS FAD are end-to-end prices for declared inter-capital, regional and metropolitan services with a bundled tail-end element.[173] However, the ACCC considers that Optus' submission is correct that the proposed service description in the Draft Report may inadvertently deregulate those routes which have a bundled tail-end. The ACCC has therefore varied the service description to provide the following definitions of inter-capital route, regional route and metropolitan route as follows:

> **inter-capital route** means a route from a transmission point within one capital city boundary to a transmission point within another capital city boundary in Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney. Capital city boundaries are listed in Table 3.
>
> **metropolitan route** means a route where both the transmission points for the beginning and end of the route are within the same capital city boundary. Capital city boundaries are listed in Table 3.
>
> **regional route** means a route where either one or both of the transmission points for the beginning and end of the route are outside a capital city boundary. Capital city boundaries are listed in Table 3.

Unbundle tail-end services

The ACCC notes Macquarie's submission that tail-end services should be unbundled. The ACCC maintains that the intent of the current DTCS declaration and FAD is to promote unbundling of the tail-end service to promote competition in this segment of the market. The ACCC considers that the variations to the service description are intended to:

[172] NBN Co, Submission on the Draft Report, p.4.
[173] ACCC, DTCS FAD, June 2012, p.6.

- recognise that the deregulations *only* apply to the inter-exchange component of a deregulated metropolitan, regional or inter-capital route (i.e. if the route includes a bundled tail-end component, then the route is subject to regulation), and
- explicitly recognise stand-alone tails, should access seekers wish to purchase them independently of a metropolitan, regional or inter-capital route.

The ACCC considers that the variations to the service description will encourage DTCS suppliers to unbundle and price the tail-end route separately to the inter-exchange component.

Identifying a separate route category for bundled tail-end services

The ACCC does not consider it necessary to recognise an 'Access Network link' as a separate route category in the service description as proposed by Optus (and supported by AAPT). The ACCC considers that the access network link is already captured under the declaration as a 'metropolitan' or 'regional route'. Further, the FAD provides an end-to-end price for metropolitan, regional and inter-capital routes with a bundled tail-end component. The ACCC's approach is to describe the regulated service by identifying each of the actual network links and elements which make up the service. The ACCC considers that it would not be appropriate to describe the service from any specific access seeker's perspective. While ACCC acknowledges that Optus is a large acquirer of the DTCS, ACCC notes that the DTCS service description should capture the declared service that is acquired (and provided) by industry generally. As noted above, it is ACCC's view that the current service description captures Access Network links (as described by Optus and AAPT), although this term is not included in the declaration.

The ACCC notes that current DTCS route categories are based on the different markets in which the DTCS is sold and as such, reflects local market conditions, including different transmission network structures and Australia's geography and topography.
Pricing of tail-end services will be separately addressed during the FAD inquiry.

Provision of the tail-end service

The ACCC has considered the submission made by Optus that the tail-end definition should include 'a connection between the end-user's premise and the MDF located within the MDU'. The ACCC however notes that the DTCS service description is agnostic as to the technology and equipment used to provide the DTCS. The ACCC also notes that all tail-end services which use the copper network require access to an MDF in order to connect to an access seeker's network and that the proposed definition of tail-end services does not preclude this from occurring.

The ACCC regulates tail-end transmission services where they are sold as stand-alone services provided wholly within an ESA between a customer location and a POI on the access seeker's network (either as a wholesale customer POP-to-POP service or POP-to-end-user service) irrespective of whether they use an MDF or optical distribution frame (ODF).

4.4 Other issues raised about the DTCS Service Description

In submissions to the Draft Report, submitters raised additional issues and suggestions to the DTCS Service Description for ACCC's consideration.

4.4.1 Defining 'Interconnect links' in the DTCS Service Description

Submissions on the Draft Report

VHA considers that interconnect links should be expressly acknowledged as a separate type of DTCS in the service description as this would permit the ACCC to ensure appropriate incentives are set for these critical interconnect links as part of the FAD.[174]

ACCC's views

The ACCC considers interconnect links as a type of infrastructure over which transmission services can be provided and it is not a DTCS service itself. Therefore the ACCC has decided not to include interconnect links in the service description as proposed by VHA.

4.4.2 References to 'network interfaces' in the DTCS service description

Submissions on the Draft Report

VHA proposes that the service description be amended to remove references to network interfaces and considers the current definition of 'network interfaces' in the proposed service description is not sufficiently technology neutral as it refers to specific protocols.[175]

ACCC's views

The ACCC notes VHA's submission and has varied the definition of 'network interface' in the service description to express that the declared DTCS is not limited to the protocols listed in the service description. Although the declared DTCS includes SDH and Ethernet network interfaces, it is not limited to these network interfaces. The varied service description provides the following definition for network interface (variations are in italics):

> **network interfaces** include, *but are not limited to,* Ethernet, Plesiochronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH) network interfaces used to provide a transmission rate of 2.048 Megabits per second or above which an access provider provides to itself or others

4.4.3 References to exchange in the DTCS service description

Submissions on the Draft Report

NBN Co proposes the definition of 'exchange' should be amended to include a reference to a Telstra exchange. NBN Co notes that the amendment makes clear that the deregulated routes are based on consideration of competition at Telstra exchanges.[176]

ACCC's views

The ACCC does not consider it appropriate to vary the definition of exchange in the service description, as suggested by NBN Co. The ACCC notes that the DTCS declaration applies to all carriers and carriages service providers, not just Telstra.

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[174] VHA, Public Submission on the Draft Report, p.11.
[175] VHA, Public Submission on the Draft Report, p.9.
[176] NBN Co, Submission on the Draft Report, p.4

4.4.4 Describing the deregulated regional routes

Submissions on the Draft Report

Optus considers that the proposed service description in the Draft Report may have unintentionally expanded the scope of deregulations for regional routes.[177] It notes that the ACCC's proposed variation currently drops the geographic nuance that exists in the current service description; i.e. that the deregulation only applies where the deregulated regional ESA and the capital city that it relates to, are both located within the same state.

ACCC's views

The ACCC does not consider that Optus' proposed amendment for the definition of regional routes is appropriate. The proposed amendment by Optus seeks to define a deregulated regional route as occurring where the regional ESA and the capital city ESA are located in the same state. However, the ACCC considers that there may be instances where the deregulated regional ESA may be geographically closer to a capital city that is not within the same state. For example, Lismore in NSW is geographically closer to Brisbane than Sydney and competitive infrastructure is located on that route. Therefore, the ACCC does not consider it necessary to narrow the definition of a deregulated regional route as proposed by Optus.

[177] Optus, Public Submission on the Draft Report, p.22.

5 Length of DTCS declaration

The *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010* (CACS Act) amended section 152ALA(2) of the CCA to allow the ACCC to specify an expiry date for a declaration that is more than five years after the declaration is made. However in specifying an expiry date the ACCC must have regard to the principle that a declaration should expire between a three and five year period, unless there are circumstances that warrant the expiry date occurring in a shorter or longer period.[178] This amendment is intended to enable the ACCC to provide longer-term regulatory certainty, where appropriate, in order to promote competition and investment.[179]

ACCC's views

The ACCC is of the view that the DTCS declaration should be maintained for five years, noting that if specific issues arise, particularly relating to the NBN, an inquiry can be commenced to amend or vary the declaration.

The ACCC maintains its view that a transitional period of 9 months will apply to the newly deregulated metropolitan ESAs and regional routes and the re-declared regional routes. During the 9 month transitional period the drafting in the current declaration will apply. The ACCC clarifies that the rationale for a transitional period of 9 months is to coincide with the expiry of the DTCS FAD on 31 December 2014. The ACCC considers that a 9 month transitional period is appropriate and allows sufficient time for access seekers to make any necessary alterations to their current business plans and negotiates alternative supply arrangements. The transitional period will also allow fibre infrastructure owners to have sufficient time to expand the capacity of existing fibre networks or invest in other infrastructure that is required to supply transmission services.

During the transitional period of 9 months, any ESA or route that is currently declared, remains regulated until 31 December 2014 and any route/ESA that is deregulated remains deregulated until 31 December 2014. The existing section 152AR SAOs continue to apply during this period. That is, carriers and CSPs must continue to supply the DTCS in the currently declared areas. The prices (and non-price terms) set out in the DTCS FAD apply to the currently regulated routes and ESAs (including routes which have a changed regulatory status) during the 9 month transitional period. After this time, when a route/area is removed from regulation, the carriers and CSPs are free to commercially negotiate access outside the terms of the FAD.

The final DTCS declaration deregulates an additional 112 metropolitan ESAs and 8 regional routes and re-declares 3 regional routes which are currently excluded from regulation. Therefore, until 31 December 2014:

- The identified 112 metropolitan ESAs and 8 regional routes *remain* regulated and remain subject to the s.152AR SAOs. Carriers and CSPs are required to comply with the existing FAD and supply the declared service on the price (and non-price) terms set out in the existing FAD.
- The three identified regional routes (Maryborough, Bundaberg and Rockhampton) will remain deregulated. That is, carriers and CSPs do not have to provide access on

[178] See subsection 152ALA(2) of the CCA.
[179] Explanatory Memorandum to the CACS Act, p.167.

the terms of the FAD until 31 December 2014. Until this time, should parties requires access to the DTCS in these areas, they must negotiate access on commercial terms.

After 1 January 2015:

- The 112 metropolitan ESAs and 8 regional routes will be removed from the scope of the DTCS declaration and carriers/CSPs do not need to comply with the FAD for these ESAs/routes. Parties will need to commercially negotiate access to the DTCS in these areas.
- the 3 regional routes will become regulated and carriers will need to comply with the terms of the FAD.

Implementation of the 9 month transitional period

The transition period will be implemented by keeping in place the current DTCS service description until the end of the transition period (31 December 2014). The varied DTCS service description will take effect from 1 January 2015. This should be the same date on which the new FAD commences so the declaration and FAD will be aligned.

6 The ACCC's assessment against the LTIE

In deciding to declare a service, the ACCC must be satisfied that declaring a service will promote the LTIE of end-users of telecommunications services.[180] In deciding whether declaration is likely to promote the LTIE, the ACCC must have regard to the extent to which declaration is likely to result in the achievement of the following three objectives:

- promoting competition in markets for telecommunications services
- achieving any-to-any connectivity, and
- encouraging economically efficient use of, and investment in, infrastructure by which the service is supplied or capable of being supplied.

Promoting competition in markets for telecommunications services

When conducting a declaration inquiry, the ACCC is required under subsection 152AB(2) of the CCA to consider whether declaration of a service is likely to promote competition in relevant markets. In assessing whether declaration will promote competition in markets for telecommunications services, the ACCC considers that it is useful to consider the likely state of competition in the future, both with declaration and without declaration.

The ACCC notes that Part XIC of the CCA does not require the ACCC to precisely define the scope of the relevant markets in a declaration inquiry. The ACCC's approach to market definition in the context of this declaration inquiry is discussed in Section 3.1 of this Report.

Once the relevant markets have been defined, the next step is to assess the state of competition in relevant markets. In assessing the state of competition, the ACCC considers dynamic factors such as the potential for sustainable competition to emerge and the extent to which the threat of entry (or expansion by existing suppliers) constrains pricing and output decisions. The state of competition in relevant markets is discussed in Section 3.4 of this Report.

To determine whether the LTIE will be better promoted with declaration or without declaration, the ACCC is required to consider the effects of regulated access to particular services in each relevant market as well as make an overall assessment of the benefits expected to flow to end-users from declaration.

Achieving any-to-any connectivity

The objective of any-to-any connectivity is achieved when each end-user is able to communicate with other end-users, whether or not they are connected to the same telecommunications network.[181] The ACCC notes that the relevance of any-to-any connectivity in achieving the LTIE is only relevant in the declaration context with respect to certain services. The Explanatory Memorandum the Trade Practices Amendment (Telecommunications) Bill 1996 stated that the objective of any-to-any connectivity will only be relevant when considering whether a particular service promotes the LTIE of a carriage service that involves communications between end-users.[182] When considering other types of services (such as carriage services which are inputs to an end-to-end service) this criterion

[180] Section 152AB of the CCA.
[181] Subsection 152AB(8) of the CCA.
[182] Explanatory Memorandum, Trade Practices Amendment (Telecommunications) Bill, 1996, pp. 40-41.

will have little relevance and will therefore be given little, if any, weight. The achievement of any-to-any connectivity is particularly relevant when considering services that require interconnection between different networks.

Efficient use of, and investment in, infrastructure

In determining the extent to which declaration is likely to encourage the economically efficient use of, and investment in, infrastructure, subsections 152AB(6) and (7) of the CCA provide that regard must be had (but is not limited) to the technical feasibility of providing and charging for the services, the legitimate commercial interests of the supplier(s) of the services, and the incentives for investment in infrastructure. These are discussed further below.

Economic efficiency has three components:

- Productive efficiency refers to the efficient use of resources within each firm to produce goods and services using the least cost combination of inputs.
- Allocative efficiency is the efficient allocation of resources across the economy to produce goods and services that are most valued by consumers.
- Dynamic efficiency refers to efficiencies flowing from innovation leading to the development of new services or improvements in production techniques. It also refers to the efficient deployment of resources between present and future uses so that the welfare of society is maximised over time.

Facilitating access plays an important role in ensuring that existing infrastructure is used efficiently where it is inefficient to duplicate the existing networks or network elements. This is likely to be where infrastructure has natural monopoly characteristics and is a bottleneck for the supply of downstream services. The ACCC considers an access regime must not discourage investment in networks or network elements where such investment is efficient.

Technical feasibility

In assessing the technical feasibility of supplying and charging for a service, the ACCC considers:[183]

- the technology that is in use, available or likely to become available
- whether the costs that would be involved are reasonable or likely to become reasonable, and
- the effects or likely effects of supplying and charging for the service on the operation or performance of telecommunications networks.

The ACCC assesses the technical feasibility of supplying the relevant service by examining the access provider's ability to provide the service and considering experiences in other jurisdictions.

The legitimate commercial interests of the infrastructure operator

An infrastructure operator's legitimate commercial interests relate to its obligations to the owners of the firm, including the need to recover the costs of providing services and to earn a

[183] Subsection 152AB(6) of the CCA.

normal commercial return on the investment in infrastructure. Allowing for a normal commercial return on investment provides an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service.

Sub-section 152AB(6)(b) of the CCA also requires the ACCC to have regard to whether providing access may affect the infrastructure operator's ability to exploit economies of scale and 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 where it is less costly for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce the relevant products. The ACCC assesses the effects on an infrastructure operator's ability to exploit both economies of scale and scope on a case-by-case basis.

Incentives for efficient investment

Infrastructure operators should have the incentive to invest efficiently in the infrastructure by which the services are supplied (or are capable or likely to become capable, of being supplied). In assessing incentives for investment, regard must be had (but is not limited) to the risks involved in making the investment.[184]

Access regulation may promote efficient investment in infrastructure by avoiding the need for access seekers to duplicate existing infrastructure where duplication would be inefficient. It reduces the barriers to entry for competing providers of services to end-users and promotes efficient investments by these service providers in related equipment that is required to provide services to end-users.

[184] Subsections 152AB(7A) and (7B) of the CCA.

7 Will declaration promote competition?

When conducting a declaration inquiry, the ACCC is required under subsection 152AB(2) of the CCA to consider whether declaration of a service is likely to promote competition in relevant markets. In assessing whether declaration will promote competition in markets for telecommunications services, the ACCC considers that it is useful to consider the likely state of competition in the future both with declaration and without declaration.

Submissions on the Draft Report

Optus considers that the DTCS declaration will not promote competition if it assumes that all related downstream markets for wholesale transmission services (such as C&G and mobile markets) face similar market conditions and customer requirements.[185] Optus submits that the declaration should apply to two separate services, POI to POI and POI to end-user, and this will better remedy the wholesale network bottleneck that impacts competition in related downstream markets.[186]

Impact of revised methodology on promoting competition criteria

Telstra considers that supply competition for the DTCS has been increasing and is demonstrated by the additional 112 ESAs the ACCC has found to be competitive even when applying a more stringent competition assessment.[187] However, Telstra considers that the full extent of the increased levels of competition may not be fully reflected in the Draft Report, because the latest Infrastructure RKR data shows that there are in fact 1826 ESAs with three or more fibre providers.[188]

Macquarie states that the revised methodology actually results in less routes being subject to regulation and that it is particularly concerned with ineffective competition on various metropolitan routes.[189] Macquarie submits that the ACCC should revisit its assessment of competition on all routes proposed for deregulation to ensure that competition is genuine infrastructure based competition.[190]

AAPT submits that the proposed variations to the scope and nature of the DTCS declaration will still fail to constrain the anti-competitive pricing behaviour of Telstra as the incumbent and only ubiquitous transmission provider.[191]

iiNet states that the revised competition criteria are focused on identifying "competitive ESAs" rather than "competitive transmission routes", which may result in routes being de-regulated that are potentially competitive, but that have not become competitive.[192] iiNet proposes that the competition test should be route focused so that only currently competitive routes are de-regulated.[193]

[185] Optus, Public Submission on the Draft Report, p.3.
[186] Optus, Public Submission on the Draft Report, p.4.
[187] Telstra, Public Submission on the Draft Report, p.3.
[188] Telstra, Public Submission on the Draft Report, p.5.
[189] Macquarie, Submission on Draft Report, p.4.
[190] Macquarie, Submission on Draft Report, p.4.
[191] AAPT, Submission on the Draft Report, p.1.
[192] iiNet, Submission on the Draft Report, p.5.
[193] iiNet, Submission on the Draft Report, p.5.

The CCC states that it is unclear how deregulation of the routes creates any positive market conditions to stimulate further investment or promote greater competition.[194] The CCC submits that the focus on identifying routes that are competitive is unwarranted and does not address the fundamental problem of the inequity between access prices and Telstra's cost of self-supply.[195]

NBN Co submits that the revised methodology could additionally consider the quantum of costs involved with connecting to the Telstra exchange, as there are likely to be significant upfront costs involved with connecting to a Telstra exchange, even where the infrastructure is adjacent to the Telstra exchange.[196]

Relevance of tail-end services to promoting competition

Macquarie states that while the tail-end is explicitly regulated, it is not practically available for use by access seekers to provide non-Telstra based inter-exchange services utilising a stand-alone Telstra tail-end. Macquarie submits that this undermines the development of competitive inter-exchange infrastructure and that unbundling the tail-end would provide genuine opportunities for promoting competition on inter-exchange infrastructure.[197]

AAPT states that while the revised methodology may address the competition issues related to inter-exchange routes, it does little to address the competitive barriers faced by access seekers in routes between a POI and a customer transmission point or an access seeker network location.[198] In this regard, AAPT supports Optus' proposed service description revision and states that this will promote competition.[199]

Nextgen states that the continued regulation of, and improved description of, tail-end services will improve access seekers ability to assemble transmission services that meet their particular requirements. Nextgen submits that enabling choice regarding tail-ends is important for enhancing competitive dynamics in the market for DTCS and that amendment to the service description are required.[200]

ACCC's views

Impact of revised methodology on promoting competition

The ACCC considers that, in the context of assessing whether a route or ESA should be excluded from the DTCS declaration, it should consider whether excluding it would promote competition. In determining the extent to which excluding a route/ESA from the declaration is likely to promote competition, the ACCC must have regard to the extent to which it will remove obstacles to end-users gaining access to carriage services or to services provided by means of carriage services (subsection 152AB(4)). In doing so, the ACCC considers that comparing the likely state of competition in the future, both with or without declaration, is useful.

[194] CCC, Submission on the Draft Report, p.2.
[195] CCC, Submission on the Draft Report, p.3.
[196] NBN Co, Submission on the Draft Report, p.2.
[197] Macquarie, Submission on Draft Report, p.5.
[198] AAPT, Submission on the Draft Report, p.1.
[199] AAPT, Submission on the Draft Report, p.2.
[200] Nextgen, Submission on the Draft Report, p.2.

The ACCC considers that where there is the presence of competition, or the appropriate conditions for competition, removing regulation will not be detrimental to the objective of promoting competition. The removal of regulation will likely promote facilities based competition as it would send correct signals to the market that regulation will be removed where facilities based competition is occurring or likely to occur.

Currently, access seekers may acquire DTCS transmission services from transmission providers or transmission acquirers:

- selling conditioned or managed transmission services (for example, Telstra, Optus, Nextgen, AAPT and Pipe Networks)
- re-selling DTCS transmission services supplied by Telstra or another operator (for example Telstra's MLL service), or
- re-selling DTCS transmission services supplied by an operator using a regulated product (for example, Telstra's DCS).

As set out in the section 3.4, the ACCC considers that there is already effective competition in the provision of transmission services on most inter-capital routes, a number of regional routes and transmission between a large number of metropolitan ESAs. In other areas, there are transmission providers with existing optical fibre networks that are located within very close proximity to, but may not be connected, to an exchange. While they may not be currently providing transmission services they would need to make additional investments to enter the market. This investment would either be through:

- the building of a link to connect the access seeker's network with the access provider's network, and/or
- the upgrade of existing capacity to offer wholesale services.

The ACCC recognises that the additional investment required to begin providing competitive transmission services in such situations is not insubstantial. However, the proposed deregulation considers that the proposed routes/ESAs demonstrate sufficient demand is likely to exist and as such appropriate incentive exists for such investments to be made.

The ACCC considers that this additional investment is more likely to be encouraged if regulation is removed. This is on the basis that effective competitive market forces are more likely in an unregulated environment to encourage access seekers to seek transmission services from alternative providers and for those providers to make the necessary efficient investments in order to meet that demand.

The impact on access seekers would depend on:

- whether access seekers acquiring a service on a currently declared route could acquire a similar service from another access provider
- the likelihood of transmission providers that have existing infrastructure to undertake additional investment needed to provide services, and
- whether there would be stronger competitive pressure on existing transmission providers as new entrants to acquire the necessary scale to provide additional competitive services.

It is difficult to predict the possibility of entry into the DTCS transmission market in a particular route/ESA as a consequence of deregulation. However, the ACCC considers that the presence of transmission infrastructure (but not yet providing transmission services) in those routes/ESAs that meet the ACCC's competition assessment is a strong indication that transmission services are capable of being provided using that existing infrastructure without prohibitive sunk costs. Where the ACCC considers that, based on the available information, a particular DTCS transmission route/ESA is not able to attract additional investment in DTCS services, the ACCC has not regarded that route/ESA to be competitive.

The ACCC considers that the removal of regulation on routes/ ESAs where there is evidence of competition and/or the presence of a major input into providing transmission services (that is, existing infrastructure) would increase the incentives for new transmission providers (generally those other than Telstra) to provide services directly or efficiently upgrade their networks in order to do so.

On this basis the ACCC considers that removing regulation on those routes/ESAs that meet the competition assessment outlined in this review would also remove regulatory obstacles and create incentives for alternative transmission providers to enter that deregulated route/ESA. The ACCC considers that retaining regulation on routes that do not meet the competition criteria and removing regulation where competitive conditions are appropriate will promote competition in the relevant markets.

Relevance of tail-end services to promoting competition

The ACCC notes the submissions regarding the issue of tail-end regulation and has addressed this via amendments to the service description to ensure it is clear that routes that have a bundled tail-end component remain regulated. The varied service description also provides a definition for standalone tail-end services.

The ACCC also understands, through the dataset collected from industry during the DTCS FAD inquiry, standalone tail-end services are sold. The ACCC considers that the variations to the service description, in conjunction with the FAD (which prices both standalone and bundled tail services) will encourage more efficient use of tail-end infrastructure and encourage new entrant competition in the supply of tail-end services.

8 Will declaration achieve any-to-any connectivity?

Any-to-any connectivity is achieved only if each end-user is able to communicate with other end-users supplied with the same service or a similar service, whether or not the end-users are connected to the same telecommunication network. In determining whether to remake, vary or extend the current declaration, the ACCC must make an assessment as to whether this is likely to achieve any-to-any connectivity in relation to carriage services that involve communication between end-users.

Submissions on the Draft Report

Optus considers that the bundling of tail-ends with inter-exchange products impacts on any-to-any connectivity where an access seeker may not be physically present at an exchange.[201]

VHA states that HD mobile voice requires IP interconnect links between networks. VHA states that if the upgrade path of transmission services is deliberately limited to non-IP service this can hinder innovation, such as the supply of HD mobile voice. VHA submits that such issues warrant special consideration within the DTCS declaration.[202]

ACCC's views

The ACCC considers that regulation of DTCS routes which lack competition will ensure continued any-to-any connectivity between services. The ACCC also considers that deregulation of competitive routes as set out in this Final Report will not impede the achievement of any-to-any connectivity between end-users.

While Optus indicates that a physical presence in an exchange is required to promote any-to-any connectivity, the ACCC notes that any-to-any connectivity is achieved regardless of whether end-users are connected to the same network.

VHA considers that access to interconnect links are necessary to ensure any-to-any connectivity for HD voice services.[203] However the ACCC considers that any-to-any connectivity, as described under subsection 152AB(8) of the CCA, will not be impacted as mobile devices are still currently able to transmit non-HD voice services. Additionally, if misuse of market power is alleged, such a matter should not be addressed within a declaration inquiry and may be more appropriately considered under the regime in Part XIB of the CCA, if appropriate.

The ACCC notes that the proposed competition criteria for both regional and metropolitan routes takes account of a competitor's proximity to the Telstra CAN and access to a capital city so that competitors are able to link their network traffic with a major central site or main transmission hub (typically located in a capital city).

The ACCC also notes that the proposed changes to the DTCS service description to align with the DTCS FAD, where appropriate, will promote clarity and consistency between the way the DTCS is defined and priced. In doing so, it will also encourage greater interconnection between networks and promote the objective of any-to-any connectivity.

[201] Optus, Public Submission on the Draft Report, p.8.
[202] VHA, Public Submission on the Draft Report, p.4.
[203] VHA, Public Submission on the Draft Report, p.4.

Finally, the ACCC notes that in order to achieve the objective of any-to-any connectivity in relation to the DTCS, access seekers need to be able to access network facilities such as ducts and TEBA. Without access to facilities (which are predominately Telstra owned) carriers may be limited in their ability to interconnect their network and equipment with other carrier networks and equipment to provide telecommunications services on a wide scale basis.

Although the ACCC does not consider that the issues raised in submissions will impede any-to-any connectivity, it is committed to continue to monitor facilities access issues with a view of conducting a separate inquiry if necessary.

9 Will declaration encourage the efficient use of and investment in infrastructure?

In assessing whether to remake, vary or extend the current declaration the ACCC must consider whether it is likely to encourage the economically efficient use of, and economically efficient investment in:

- infrastructure by which listed services are supplied, and
- any other infrastructure by which listed services are, or are likely to become, capable of being supplied.[204]

In considering this objective, the ACCC must have regard to the following matters:

- the technical feasibility of supplying and charging for the eligible service
- the legitimate commercial interests of the access provider
- incentives for investment in new infrastructure to supply eligible services, and
- incentives for investment in new infrastructure which could be used to supply the eligible service and the risks involved in making the investment.

The key issue is whether deregulating would create an environment whereby the participants have increased incentives to undertake efficient use of, and efficient investment in, infrastructure.

Submissions on the Draft Report

Macquarie submits that there is little commercial or policy imperative to duplicate Telstra's transmission network in light of the transition to the NBN.[205]

Similarly the CCC submits that investment on current uncompetitive routes is likely to be reduced and that the argument that routes should be regarded as 'potentially' competitive and deregulated in the hope that this will encourage alternative suppliers to enter the market, is weakened.[206]

Telstra submits that the level of investment by existing players and new entrants has grown, leading to increased competition. Telstra submits that:

- Pipe Networks/TPG has more than doubled its length of installed cable between 2009 and 2013 to 3,800 kilometres, and a utilisation rate of 26 per cent. Pipe Networks/TPG also reported in 2013 to have invested $66.9 million and connected a total of more than 1,500 buildings and over 100 data centres
- Vocus has had a 178 per cent increase in its fibre network since December 2011 and an utilisation rate of 5.6 per cent
- Amcom reports additional fibre network investment of $11.3 million in 2013
- VicTrack has rolled out a number of fibre transmission networks including:

[204] Subsection 152AB(2)(e) of the CCA.
[205] Macquarie, Public Submission on Discussion Paper, p.1.
[206] CCC, Submission on Discussion Paper, p.2.

  - the 1,221.5 kilometre 10Mbps wide area network connecting all metropolitan Melbourne train stations with a scalable service to 1Gbps in 2011-12, and
  - 196 kilometres between Geelong and Warrnambool by mid-2013 as part of the Victorian Fibre Strategy, and
- the Commonwealth Government has invested $250 million in the RBBP.

As noted in Section 4.3, Optus considers that the DTCS declaration should recognise the presence of two different DTCS service types, a POI to POI service and a POI to end-user service, which would reflect downstream markets. Without such a distinction, Optus submits that this would distort the build-buy decision by favouring access seekers that buy access to transmission rather than build transmission links and that this would not promote efficient investment in transmission infrastructure.[207]

VHA states that some ambiguity in the service description and the lack of transparency of SLCs creates uncertainty for access seekers in their planning and investment processes.[208] VHA submits that from an economy-wide perspective, these issues increase the risk of inefficient investments occurring, or reduced investment, which is detrimental to downstream markets.[209]

ACCC's views

The ACCC seeks to ensure that the DTCS declaration encourages the efficient use of, or investment in, infrastructure used to supply DTCS transmission services.

The ACCC considers that incentives for efficient investment in existing and new infrastructure are predominantly driven by demand for transmission services and the potential return on investment from providing those services. An infrastructure based supplier of transmission services will typically consider the demand characteristics of a potential customer area and weigh this consideration against the cost of further augmenting its network or investing in new infrastructure to supply that area. There is evidence that the demand for the carriage of data is increasing with a corresponding increase in demand for transmission services.

Given the ubiquitous nature of Telstra's network the ACCC considers that operators with existing optical fibre networks would be encouraged to invest in deregulated routes/ESAs where demand is sufficient to encourage entry. This investment is likely to be in the form of either:

- the establishment of a presence in the exchange to offer a wide variety of transmission services (both the DTCS and other services)
- augmentation of existing infrastructure to reach new markets, or
- the upgrade of existing infrastructure to provide the capacity necessary to provide wholesale services.

The ACCC considers that the presence of optical fibre infrastructure is an indication that the sunk costs necessary for the provision of DTCS transmission services is not prohibitive.

[207] Optus, Public Submission on the Draft Report, p.4.
[208] VHA, Public Submission on the Draft Report, p.2, p.10.
[209] VHA, Public Submission on the Draft Report, p.10.

Further, the removal of regulation is likely to provide the incentive for other access providers to invest in infrastructure to capture part of the market and for access seekers to seek out alternative suppliers. The ACCC is cognisant of the risks of undertaking new investment but that this risk is minimised or reduced where fibre providers are already located within very close proximity to an exchange.

The ACCC considers that there has been some investment in transmission infrastructure since the last declaration review of the DTCS in 2008-2009. This has mainly been due to the government's investment in backhaul under the RBBP. In addition, existing transmission providers continue to augment their networks by investing in links to service new ESAs and some regional centres. The ACCC is also aware of proposed new investments in some regional areas of Australia. However, the ACCC recognises that, at times, large sunk investments are required to install additional transmission infrastructure and/or create capacity. In this sense, the level of demand has been a key factor in the assessment of competition.

It is likely that some areas of Australia will continue to remain underserved by alternative DTCS services and will continue to be supplied only by Telstra. Maintaining regulation in these areas, where investment in new transmission services is unlikely to occur due to the high costs of providing services will enable access to DTCS services on regulated terms and at regulated prices. Areas which do not meet the competition assessment thresholds and where Telstra faces little competitive constraint in negotiating terms and conditions of access will remain regulated and DTCS will be available to access seekers at regulated prices. This will also encourage the efficient use of existing infrastructure (that is, Telstra's network) in areas where competition for DTCS service is low or non-existent.

In terms of the NBN, the ACCC notes that while it has the potential to change the market dynamics in a way which will promote further investment, this has yet to occur. The ACCC considers that the NBN is likely to increase the volume of traffic that will be carried on transmission networks and that this may increase the ability for prospective entrants to achieve the economies of scale that would make entry economically viable. The ACCC also considers that NBN POIs may form an important location from which DTCS investment and competition is likely to emerge. This is because the DTCS will be necessary to support the delivery of NBN services, particularly by providing backhaul from the NBN POIs to RSP POPs. Where there is new market entry, the ACCC anticipates that this may be concentrated at or near NBN POIs.

The ACCC notes that in the future, transmission services are likely to be concentrated in a smaller number of locations particularly as the rollout of the NBN aggregates demand at the 121 NBN POIs. However, this is also likely to encourage additional investment in infrastructure as the transmission providers ensure they have infrastructure and capacity to provide wholesale DTCS services at the NBN POIs.

As noted in Section 3.6, the issue of SLCs is important and the ACCC recognises that improving transparency and consistency for access seekers will likely encourage the efficient use of and investment in infrastructure. Accordingly, the ACCC will be closely monitoring Telstra's implementation of its improved transparency and certainty measures noted above and will consult further with access seekers as this occurs.

The ACCC does not consider that a delineation of services, as proposed by Optus, will encourage the efficient use of and investment in infrastructure any more than is already likely to occur. The ACCC considers that build/buy investment decisions would be based on a wide variety of considerations, and a distinction between two declared services (as Optus proposes) is unlikely to contribute substantially to these investment decisions.

10 The ACCC's final views

The ACCC's finding is that the DTCS is a vital input into a range of downstream services and its importance in ensuring competitive and vigorous competition in downstream markets is likely to increase as demand for such services continues to increase. DTCS over optical fibre is still the preferred transmission medium despite numerous alternate technologies that are sometimes utilised for a similar function.

The ACCC considers that varying the declaration with an expiry in 5 years will ensure that declaration is retained where competition is not effective. As noted earlier the ACCC considers that varying the declaration will promote competition by ensuring that access seekers continue to be provided with the DTCS where competition would otherwise be ineffective. Further, the transitional period (of 9 months) provides access seekers on routes that are to be deregulated a sufficient period to enter into alternative arrangements for continued provision of the service.

The ACCC is aware that the DTCS is a multi-dimensional and dynamic service. During the course of the 5 year declaration, changes in market structure and the substitutability of alternative technologies may affect the state of competition in one or more products or geographic markets. To ensure that declaration keeps pace with the rollout of the NBN, and continues to underpin the promotion of the LTIE, the ACCC will vary the scope of the DTCS through a further declaration inquiry should it be appropriate to do so having regard to the state of competition in the market.

Appendix 1: Current DTCS 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 symmetric network interfaces on a permanent uncontended basis by means of guided and/or unguided electromagnetic energy, except communications between:

(a) one customer transmission point directly to another customer transmission point

(b) one access seeker network location directly to another access seeker network location.

Inter-capital routes

(c) a transmission point in an exempt capital city and a transmission point in another exempt capital city. Exempt capital cities include: Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney

Capital-regional routes

(d) a transmission point in Sydney and a transmission point in any of the following regional centres: Albury, Lismore, Newcastle, Grafton, Wollongong, Taree, Dubbo, Campbelltown, Gosford, Coffs Harbour and Goulburn

(e) a transmission point in Melbourne and a transmission point in any of the following regional centres: Ballarat, Bendigo, Geelong and Shepparton

(f) a transmission point in Brisbane and a transmission point in any of the following regional centres: Toowoomba, Gold Coast, Townsville, Rockhampton, Bundaberg and Maryborough

(g) a transmission point in Adelaide and a transmission point in Murray Bridge and, Port Augusta

Inter-exchange transmission (metropolitan areas)

(h) inter-exchange transmission for the following metropolitan ESAs:

(1) in Sydney between transmission points located at an exchange in any of the following ESAs: Ashfield, Balgowlah, Bankstown, Blacktown, Burwood, Campsie, Carramar, Castle Hill, Chatswood, Coogee, Cremorne, East, Eastwood, Edgecliff, Epping, Glebe, Granville, Harbord, Homebush, Hornsby, Hurstville, Kensington, Kingsgrove, Kogarah, Lakemba, Lane Cove, Lidcombe, Liverpool, Mascot, Mosman, Newtown, North Parramatta, North Ryde, North Sydney, Parramatta, Pendle Hill, Pennant Hills, Petersham, Randwick, Redfern, Revesby, Rockdale Rydalmere, Ryde, Seven Hills, Silverwater, St Leonards, Undercliffe, Waverley

(2) in Brisbane between transmission points located at an Exchange in any of the following ESAs: Paddington, South Brisbane, Toowong, Valley, Woolloongabba

(3) in Melbourne between transmission points located at an Exchange in any of the following ESAs: Ascot, Brunswick, Caulfield, Coburg, Elsternwick, Footscray, Heidelberg, Malvern, Moreland, North Melbourne, Port Melbourne, Preston, Richmond, South Melbourne, St Kilda, Toorak

(4) in Perth between transmission points located at an Exchange in any of the following ESAs: South Perth and Subiaco

Inter-exchange transmission (CBD areas)

(i) inter-exchange transmission for the following CBD ESAs:

(1) in Sydney between transmission points located at an Exchange in any of the following ESAs: City South, Dalley, Haymarket, Kent, Pitt and exempted Sydney Metropolitan ESAs as set out in item (h)(1) of this service description

(2) in Brisbane between transmission points located at an Exchange in any of the following ESAs: Charlotte, Edison, Spring Hill and exempted Brisbane Metropolitan ESAs as set out in item (h)(2) of this service description

(3) in Adelaide between transmission points located at an Exchange in any of the following ESAs: Flinders and Waymouth.

(4) in Melbourne between transmission points located at an Exchange in any of the following ESAs: Batman, Exhibition, Lonsdale and exempted Melbourne Metropolitan ESAs as set out in item (h)(3) of this service description

(5) in Perth between transmission points located at an Exchange in any of the following ESAs: Bulwer, Pier, Wellington and exempted Perth Metropolitan ESAs as set out in item (h)(4) of this service description

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 given in that Act.

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

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)

network interfaces include Ethernet, Plesiochronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH) network interfaces used to provide a transmission rate of 2.048 Megabits per second or above which an access provider provides to itself or others

exchange means a telecommunications exchange and includes the land, buildings and facilities (within the meaning of section 7 of the *Telecommunications Act 1997* (Cth)) that comprise or form part of the exchange

exchange service area or **ESA** has the meaning given to that phrase by the Australian Communications Industry Forum Limited definition in ACIF C559:2006, Part 1

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

uncontended means dedicated and not shared

Appendix 2: Varied DTCS 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 symmetric network interfaces on a permanent uncontended basis by means of guided and/or unguided electromagnetic energy, including services provided on or over:

- inter-capital routes
- regional routes
- metropolitan routes, and
- tail-end routes

except communications between:

(a) one customer transmission point directly to another customer transmission point

(b) one access seeker network location directly to another access seeker network location

(c) in the case of inter-capital routes, a transmission point located at an exchange in a deregulated ESA within one capital city boundary to a transmission point located at an exchange in a deregulated ESA within another capital city boundary

Note: Refer to Table 1 for the exchange serving areas (ESAs) which are deregulated in each capital city and Table 3 for the boundaries of each capital city.

(d) in the case of regional routes, a transmission point located at an exchange in a deregulated regional ESA to a transmission point located at an exchange in a deregulated ESA in Sydney, Melbourne, Brisbane or Adelaide

Note: Refer to Table 1 for the ESAs which are deregulated in Sydney, Melbourne, Brisbane and Adelaide. Refer to Table 2 for the list of deregulated regional ESAs.

or

(e) in the case of metropolitan routes, transmission points located at an exchange between:

(1) any of the deregulated metropolitan ESAs in Sydney

(2) any of the deregulated metropolitan ESAs in Brisbane

(3) any of the deregulated metropolitan ESAs in Melbourne

(4) any of the deregulated metropolitan ESAs in Perth, or

(5) any of the deregulated metropolitan ESAs in Adelaide.

Note: Refer to Table 1 for the ESAs which are deregulated in each capital city.

The exceptions in paragraphs (c), (d) and (e) do not apply to any service that is comprised of an inter-capital, regional or metropolitan route that is bundled with or incorporates a tail-end route.

Definitions

Where words or phrases used in this Annexure are defined in the *Competition and Consumer Act 2010* or the *Telecommunications Act 1997*, they have the meaning given in those Acts

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

a **customer transmission point** is a point at which a service provider delivers a service to its own customers (either wholesale or retail). For the avoidance of doubt, a customer in this context may be another service provider

exchange means a telecommunications exchange and includes the land, buildings and facilities (within the meaning of section 7 of the *Telecommunications Act 1997* (Cth)) that comprise or form part of the exchange

exchange serving area or **ESA** means the area served from a traditional local exchange building

inter-capital route means a route from a transmission point within one capital city boundary to a transmission point within another capital city boundary in Adelaide, Brisbane, Canberra, Melbourne, Perth or Sydney. Capital city boundaries are listed in Table 3

metropolitan route means a route where both the transmission points for the beginning and end of the route are within the same capital city boundary. Capital city boundaries are listed in Table 3

network interfaces include, but are not limited to, Ethernet, Plesiochronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH) network interfaces used to provide a transmission rate of 2.048 Megabits per second or above which an access provider provides to itself or others

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

regional route means a route where either one or both of the transmission points for the beginning and end of the route are outside a capital city boundary. Capital city boundaries are listed in Table 3.

tail-end route means a route where both the transmission points for the beginning and end of the route are within the same ESA

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

a) a point of interconnection

b) a customer transmission point

c) an access seeker network location

uncontended means dedicated and not shared

Table 1: Deregulated ESAs in each capital city

Deregulated Metropolitan Areas	**ESA names**
Sydney	Ashfield, Balgowlah, Balmain, Bankstown, Baulkham Hills, Blacktown, Bondi, Botany, Burwood, Campbelltown, Campsie, Carlingford, Carramar, Castle Hill, Chatswood, City South, Coogee, Concord, Cremorne, Cronulla, Dalley, Dee Why, Drummoyne, East, Eastwood, Edensor Park, Edgecliff, Engadine, Epping, Erskine Park, Frenchs Forest, Glebe, Granville, Guildford, Harbord, Haymarket, Homebush, Hornsby, Hunters Hill, Hurstville, Ingleburn, Kensington, Kent, Killara, Kingsgrove, Kogarah, Lakemba, Lane Cove, Lidcombe, Liverpool, Manly, Maroubra, Mascot, Miller, Minto, Miranda, Mosman, Newtown, North Parramatta, Penrith, North Ryde, North Sydney, Parramatta, Peakhurst, Pendle Hill, Pennant Hills, Petersham, Pitt, Pymble, Randwick, Redfern, Revesby, Rockdale, Rose Bay, Rydalmere, Ryde, Seven Hills, Silverwater, Sutherland, St Leonards, St Marys, Undercliffe, Wahroonga, Waverley, Wetherill Park, Willoughby
Brisbane	Acacia Ridge, Albion, Alexandra Hills, Bulimba, Browns Plains, Charlotte, Chermside, Chapel Hill, Capalaba, Coorparoo, Edison, Eight Mile Plains, Everton Park, Goodna, Inala, Lutwyche, Mitchelton, Mount Gravatt, Nundah, New Farm, Paddington, Petrie, Salisbury, Slacks Creek, South Brisbane, Spring Hill, Sunnybank, Tingalpa, Toowong, Valley, Woolloongabba, Wynnum, Yeronga, Zillmere
Melbourne	Ascot, Batman, Berwick, Blackburn, Brooklyn, Brunswick, Bundoora, Burwood, Camberwell, Canterbury, Carlton, Caulfield, Cheltenham, Coburg, Collingwood, Croydon, Dandenong, Deepdene, East Kew, Elsternwick, Epping, Exhibition, Flemington, Footscray, Glen Iris, Hawthorn, Heidelberg, Highett, Kooyong, Lonsdale, Malvern, Mitcham, Moreland, North Balwyn, Northcote, North Essendon, North Melbourne, Oakleigh, Port Melbourne, Preston, Richmond, Ringwood, South Melbourne, St Kilda, Sunshine, South Yarra, Tally Ho, Thomastown, Thornbury, Toorak, Tullamarine, Wheelers Hill, Windsor, Wantirna
Perth	Bateman, Bulwer, Cannington, Cottesloe, Doubleview, Hilton, Maylands, Pier, South Perth, Subiaco, Victoria Park, Wellington
Adelaide	Brighton, Croydon, Gepps Cross, Flinders, Golden Grove, Norwood, Salisbury, Stirling, St Peters, Unley, Waymouth, West Adelaide, St Marys
Canberra	Civic

Table 2: Deregulated Regional ESAs

State	Deregulated Regional Areas/Routes	ESAs included
New South Wales	Albury	Albury, Lavington
	Bathurst	Bathurst
	Lismore	Lismore
	Newcastle	Mayfield, Hamilton, Wolfe, New Lambton, Charlestown
	Grafton	Grafton
	Wollongong	Wollongong, Unanderra, Corrimal, Dapto
	Taree	Taree
	Dubbo	Dubbo
	Gosford	Gosford
	Coffs Harbour	Coffs Harbour
	Goulburn	Goulburn
	Orange	Orange
	Wagga Wagga	Wagga Wagga
Victoria	Ballarat	Ballarat
	Bendigo	Bendigo
	Geelong	Geelong, North Geelong
	Shepparton	Shepparton
Queensland	Ipswich	Ipswich
	Toowoomba	Toowoomba
	Gold Coast	Southport, Nerang, Merrimac, Arundel, Bundall, Surfers Paradise, Robina, Mudgeeraba, Oxenford
	Moreton Bay	Rothwell, Narangba
	Logan	Beenleigh, Loganholme
	Sunshine Coast	Caloundra, Mooloolaba, Maroochydore
	Townsville	Townsville
South Australia	Murray Bridge	Murray Bridge
	Port Augusta	Port Augusta
	Smithfield	Smithfield

Table 3: Capital City Boundaries

Adelaide	A 25 km radius from the Waymouth ESA including the ESAs of: Balhannah, Blackwood, Brighton, Brooklyn Park, Chain of Ponds, Clarendon, Coromandel Valley, Croydon, Edwardstown, Elizabeth, Flinders, Gepps Cross, Glenelg, Glenunga, Golden Grove, Greenwith, Hahndorf, Hampstead, Henley Beach, Inglewood, Lenswood, Lonsdale, Modbury, Montacute, Morphett Vale East, Mylor, North Adelaide, Norwood, Osborne, Paradise, Port Adelaide, Prospect, Reynella, Salisbury, Scott Creek, Semaphore, St Marys, St Peters, Stirling, Summertown, Unley, Waterloo Corner, Waymouth, West Adelaide, Woodville
Brisbane	A 25 km radius from the Edison ESA including the ESAs of: Acacia Ridge, Albany Creek, Albion, Alexandra Hills, Ascot, Ashgrove, Aspley, Bald Hills, Brisbane Airport, Brookfield, Browns Plains, Bulimba, Camp Hill, Capalaba, Cashmere, Chapel Hill, Charlotte, Chermside, Closeburn, Coorparoo, Darra, Edison, Eight Mile Plains, Everton Park, Ferny Hills, Goodna, Highvale, Inala, Jamboree Heights, Kallangur, Karalee, Lutwyche, Lytton, Mitchelton, Moggill, Mount Crosby, Mount Gravatt, Mount Nebo, New Farm, Newmarket, Nudgee, Nundah, Paddington, Petrie, Pinkenba, Redcliffe, Salisbury, Samford, Sandgate, Sherwood, Slacks Creek, South Brisbane, Spring Hill, Strathpine, Sunnybank, The Gap, Thornlands, Tingalpa, Toowong, Valley, Wacol, Warner, Wellington Point, Woolloongabba, Wynnum, Yeronga, Zillmere
Canberra	A 15 km radius from the Barton ESA including the ESAs of: Barton, Belconnen, Civic, Crace, Deakin, Fyshwick, Jerrabomberra, Kambah, Manuka, Mawson, Melba, Monash, Queanbeyan, Scullin, Tralee, Tuggeranong, Weston Creek
Darwin	A 10 km radius from the Nightcliff ESA including the ESAs of: Berrimah, Casuarina, Darwin, Nightcliff
Hobart	A 6 km radius from the Bathurst ESA including the ESAs of: Bathurst, Davey, Glenorchy, New Town, Sandy Bay
Melbourne	A 45 km radius from the Kooyong ESA including the ESAs of: Altona, Arthurs Creek, Ascot, Balaclava, Batman, Baxter, Bayswater, Bayswater North, Beaconsfield Upper, Beaumaris, Belgrave, Bentleigh, Berwick, Berwick South, Blackburn, Boronia, Box Hill, Brighton, Broadmeadows, Brooklyn, Brunswick, Bulla, Bulleen, Bundoora, Camberwell, Campbellfield, Canterbury, Carlton, Carrum Downs, Caulfield, Chelsea, Cheltenham, Clayton, Clyde, Coburg, Cockatoo, Coldstream, Collingwood, Craigieburn, Cranbourne, Cranbourne North, Croydon, Dandenong, Dandenong North, Dandenong South, Deepdene, Deer Park, Derrimut, Devon Meadows, Diamond Creek, Diggers Rest, Dixons Creek, Doncaster,

	Doncaster East, East Kew, Eden Park, Elsternwick, Eltham, Elwood, Emerald, Endeavour Hills, Epping, Exhibition, Fawkner, Ferntree Gully, Ferny Creek, Flemington, Footscray, Frankston, Gardenvale, Glen Iris, Glenroy, Greensborough, Greenvale, Gruyere, Hallam, Hartwell, Hawthorn, Heatherton, Heidelberg, Highett, Hurstbridge, Ivanhoe, Jordanville, Kalkallo, Kangaroo Ground, Karingal, Keilor, Kew, Keysborough, Kings Park, Kooyong, Laverton, Laverton South, Lilydale, Lonsdale, Lyndhurst, Lysterfield, Maidstone, Malvern, Melton, Mernda, Mitcham, Monbulk, Montrose, Mooroolbark, Mordialloc, Moreland, Mornington, Mount Cottrell, Mount Eliza, Mount Evelyn, Narre Warren, Narre Warren North, Newport, North Balwyn, North Essendon, North Melbourne, Northcote, Oakleigh, Officer, Olinda, Ormond, Pakenham Upper, Panton Hill, Pearcedale, Point Cook, Port Melbourne, Preston, Research, Reservoir, Richmond, Ringwood, Rockbank, Rowville, Sandringham, Scoresby, Seaford, Seaford North, Silvan, Somerton, Somerville, South Melbourne, South Morang, South Oakleigh, South Yarra, Springvale, St Albans, St Andrews, St Kilda, Sunbury, Sunshine, Sydenham, Tally Ho, Tarneit, Templestowe, Thomastown, Thornbury, Toorak, Tullamarine, Wandin, Wantirna, Warrandyte, Warranwood, Werribee, Werribee South, West Essendon, Wheelers Hill, Whittlesea, Williamstown, Windsor, Wollert, Wonga Park, Woori Yallock, Yarra Glen, Yarrambat, Yellingbo
Perth	A 30 km radius from the Wellington ESA including the ESAs of: Applecross, Armadale, Ascot, Attadale, Balcatta, Ballajura, Bassendean, Bateman, Beechboro, Bulwer, Burns, Canning Vale, Cannington, Carmel, City Beach, Cottesloe, Currambine, Darlington, Doubleview, Ellenbrook, Forrestdale, Forrestfield, Fremantle, Girrawheen, Glen Forrest, Gosnells, Greenmount, Hamersley, Herne Hill, Hilton, Jandakot, Jandakot South, Joondalup, Kalamunda, Kelmscott, Kewdale, Kingsley, Landsdale, Lesmurdie, Maddington, Maida Vale, Manning, Maylands, Midland, Morley, Mount Hawthorn, Mullaloo, Munster, Nedlands, Ocean Reef, Palmyra, Parkerville, Pickering Brook, Pier, Pinjar, Riverton, Roleystone, Scarborough, South Coogee, South Perth, Spearwood, Subiaco, Tuart Hill, Victoria Park, Wanneroo, Wellington, Wembley
Sydney	A 50 km radius from the City South ESA including the ESAs of: Ashfield, Austral, Avalon Beach, Avoca Beach, Balgowlah, Balmain, Bankstown, Baulkham Hills, Berkshire Park, Berowra, Berrilee, Blacktown, Blakehurst, Bondi, Botany, Bringelly, Brooklyn, Campbelltown, Campbelltown South, Campsie, Canoelands, Carlingford, Carramar, Castle Hill, Cattai, Chatswood, City South, Como, Concord, Coogee, Cranebrook, Cremorne, Cronulla, Dalley, Dee Why, Drummoyne, Dural, East, Eastwood, Ebenezer, Edensor Park, Edgecliff, Elderslie,

	Engadine, Epping, Erskine Park, Fiddletown, Five Dock, Frenchs Forest, Galston, Glebe, Glenorie, Granville, Guildford, Gunderman, Harbord, Haymarket, Helensburgh, Holsworthy, Homebush, Hornsby, Horsley Park, Hunters Hill, Hurstville, Ingleburn, Kariong, Kellyville, Kemps Creek, Kensington, Kent, Kenthurst, Kenthurst North, Killara, Kincumber, Kingsgrove, Kogarah, Kurnell, Lakemba, Lane Cove, Leppington, Lidcombe, Lindfield, Liverpool, Llandilo, Luddenham, Manly, Maraylya, Maroota South, Maroubra, Mascot, Matraville, Menai, Miller, Minto, Miranda, Mona Vale, Mooney Mooney, Mosman, Mount Kuring-gai, Mount White, Narellan, Narrabeen, Newtown, North Parramatta, North Ryde, North Sydney, Northbridge, Orchard Hills, Palm Beach, Parramatta, Patonga Beach, Peakhurst, Pendle Hill, Pennant Hills, Penrith, Petersham, Pitt, Pitt Town, Pymble, Quakers Hill, Ramsgate, Randwick, Redfern, Revesby, Riverstone, Rockdale, Rooty Hill, Rose Bay, Rouse Hill, Rydalmere, Ryde, Saratoga, Sefton, Seven Hills, Shalvey, Silverwater, South Strathfield, Spencer, St Helens Park, St Leonards, St Marys, Sutherland, Sylvania, Terrey Hills, Undercliffe, Vaucluse, Wagstaff Point, Wahroonga, Waverley, Wetherill Park, Wilberforce, Willoughby, Windsor, Woy Woy

Appendix 3: Results of the competition assessment

Currently deregulated ESAs - maintain deregulation

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Active or potential service provision	FINAL Decision
ASHFIELD	Deregulated	NSW	Metro		6	7	8	Yes	Yes	✓	**Maintain deregulation**
BALGOWLAH	Deregulated	NSW	Metro		3	3	3	Yes	Yes	✓	**Maintain deregulation**
BANKSTOWN	Deregulated	NSW	Metro		3	4	4	Yes	Yes	✓	**Maintain deregulation**
BLACKTOWN	Deregulated	NSW	Metro	Yes	4	4	5	Yes	Yes	✓	**Maintain deregulation**
BURWOOD	Deregulated	NSW	Metro		5	7	8	Yes	Yes	✓	**Maintain deregulation**
CAMPBELLTOWN	Deregulated	NSW	Metro	Yes	4	5	6	Yes	Yes	✓	**Maintain deregulation**
CAMPSIE	Deregulated	NSW	Metro	Yes	3	3	4	Yes	Yes	✓	**Maintain deregulation**
CARRAMAR	Deregulated	NSW	Metro	Yes	3	3	4	Yes	Yes	✓	**Maintain deregulation**
CASTLE HILL	Deregulated	NSW	Metro	Yes	4	4	4	Yes	Yes	✓	**Maintain deregulation**
CHATSWOOD	Deregulated	NSW	Metro	Yes	6	7	8	Yes	Yes	✓	**Maintain deregulation**
CITY SOUTH	Deregulated	NSW	Metro	Yes	5	8	8	Yes	Yes	✓	**Maintain deregulation**
COOGEE	Deregulated	NSW	Metro		3	3	4	Yes	Yes	✓	**Maintain deregulation**
CREMORNE	Deregulated	NSW	Metro		4	4	4	Yes	Yes	✓	**Maintain deregulation**
DALLEY	Deregulated	NSW	Metro	Yes	6	7	8	Yes	Yes	✓	**Maintain deregulation**
EAST	Deregulated	NSW	Metro		5	5	8	Yes	Yes	✓	**Maintain deregulation**
EASTWOOD	Deregulated	NSW	Metro		4	5	5	Yes	Yes	✓	**Maintain deregulation**
EDGECLIFF	Deregulated	NSW	Metro	Yes	4	4	4	Yes	Yes	✓	**Maintain deregulation**
EPPING	Deregulated	NSW	Metro		5	5	5	Yes	Yes	✓	**Maintain deregulation**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Active or potential service provision	FINAL Decision
GLEBE	Deregulated	NSW	Metro	Yes	4	4	7	Yes	Yes	✓	**Maintain deregulation**
GRANVILLE	Deregulated	NSW	Metro		4	4	6	Yes	Yes	✓	**Maintain deregulation**
HARBORD	Deregulated	NSW	Metro		3	3	3	Yes	Yes	✓	**Maintain deregulation**
HAYMARKET	Deregulated	NSW	Metro		5	8	8	Yes	Yes	✓	**Maintain deregulation**
HOMEBUSH	Deregulated	NSW	Metro		4	4	7	Yes	Yes	✓	**Maintain deregulation**
HORNSBY	Deregulated	NSW	Metro	Yes*	4	6	7	Yes	Yes	✓	**Maintain deregulation**
HURSTVILLE	Deregulated	NSW	Metro		3	4	4	Yes	Yes	✓	**Maintain deregulation**
KENSINGTON	Deregulated	NSW	Metro	Yes	4	5	5	Yes	Yes	✓	**Maintain deregulation**
KENT	Deregulated	NSW	Metro		7	8	8	Yes	Yes	✓	**Maintain deregulation**
KINGSGROVE	Deregulated	NSW	Metro		3	3	5	Yes	Yes	✓	**Maintain deregulation**
KOGARAH	Deregulated	NSW	Metro		3	4	5	Yes	Yes	✓	**Maintain deregulation**
LAKEMBA	Deregulated	NSW	Metro	Yes	3	6	6	Yes	Yes	✓	**Maintain deregulation**
LANE COVE	Deregulated	NSW	Metro		4	4	4	Yes	Yes	✓	**Maintain deregulation**
LIDCOMBE	Deregulated	NSW	Metro	Yes	5	6	6	Yes	Yes	✓	**Maintain deregulation**
LIVERPOOL	Deregulated	NSW	Metro	Yes	4	4	6	Yes	Yes	✓	**Maintain deregulation**
MASCOT	Deregulated	NSW	Metro		6	6	9	Yes	Yes	✓	**Maintain deregulation**
MOSMAN	Deregulated	NSW	Metro	Yes	3	3	3	Yes	Yes	✓	**Maintain deregulation**
NEWTOWN	Deregulated	NSW	Metro	Yes	4	5	7	Yes	Yes	✓	**Maintain deregulation**
NORTH PARRAMATTA	Deregulated	NSW	Metro		4	4	6	Yes	Yes	✓	**Maintain deregulation**
NORTH RYDE	Deregulated	NSW	Metro		4	4	4	Yes	Yes	✓	**Maintain deregulation**
NORTH SYDNEY	Deregulated	NSW	Metro		7	7	8	Yes	Yes	✓	**Maintain deregulation**
PARRAMATTA	Deregulated	NSW	Metro	Yes	5	6	7	Yes	Yes	✓	**Maintain deregulation**
PENDLE HILL	Deregulated	NSW	Metro	Yes	4	4	5	Yes	Yes	✓	**Maintain deregulation**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Active or potential service provision	FINAL Decision
PENNANT HILLS	Deregulated	NSW	Metro		5	5	5	Yes	Yes	✓	**Maintain deregulation**
PETERSHAM	Deregulated	NSW	Metro		5	6	7	Yes	Yes	✓	**Maintain deregulation**
PITT	Deregulated	NSW	Metro		7	7	8	Yes	Yes	✓	**Maintain deregulation**
RANDWICK	Deregulated	NSW	Metro		3	3	4	Yes	Yes	✓	**Maintain deregulation**
REDFERN	Deregulated	NSW	Metro		6	7	8	Yes	Yes	✓	**Maintain deregulation**
REVESBY	Deregulated	NSW	Metro		4	4	7	Yes	Yes	✓	**Maintain deregulation**
ROCKDALE	Deregulated	NSW	Metro	Yes	4	5	5	Yes	Yes	✓	**Maintain deregulation**
RYDALMERE	Deregulated	NSW	Metro		4	4	5	Yes	Yes	✓	**Maintain deregulation**
RYDE	Deregulated	NSW	Metro	Yes	3	3	3	Yes	Yes	✓	**Maintain deregulation**
SEVEN HILLS	Deregulated	NSW	Metro		3	3	3	Yes	Yes	✓	**Maintain deregulation**
SILVERWATER	Deregulated	NSW	Metro		5	6	7	Yes	Yes	✓	**Maintain deregulation**
ST LEONARDS	Deregulated	NSW	Metro	Yes	5	5	7	Yes	Yes	✓	**Maintain deregulation**
UNDERCLIFFE	Deregulated	NSW	Metro		3	3	4	Yes	Yes	✓	**Maintain deregulation**
WAVERLEY	Deregulated	NSW	Metro		3	3	6	Yes	Yes	✓	**Maintain deregulation**
ALBURY	Deregulated	NSW	Regional	Yes	4	5	5	Yes	Yes	✓	**Maintain deregulation**
DUBBO	Deregulated	NSW	Regional	Yes	3	5	5	Yes	Yes	✓	**Maintain deregulation**
DAPTO	Deregulated	NSW	Regional		3	4	4	No	Yes	✓	**Maintain deregulation**
UNANDERRA	Deregulated	NSW	Regional		4	4	4	No	Yes	✓	**Maintain deregulation**
GRAFTON	Deregulated	NSW	Regional	Yes	4	4	5	No	Yes	✓	**Maintain deregulation**
CHARLESTOWN	Deregulated	NSW	Regional		3	3	3	Yes	Yes	✓	**Maintain deregulation**
LISMORE	Deregulated	NSW	Regional		4	4	4	No	Yes	✓	**Maintain deregulation**
HAMILTON	Deregulated	NSW	Regional	Yes	5	5	6	Yes	Yes	✓	**Maintain deregulation**
MAYFIELD	Deregulated	NSW	Regional	Yes	5	5	7	Yes	Yes	✓	**Maintain deregulation**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Active or potential service provision	FINAL Decision
NEW LAMBTON	Deregulated	NSW	Regional		5	5	5	Yes	Yes	✓	**Maintain deregulation**
CORRIMAL	Deregulated	NSW	Regional		3	3	4	No	Yes	✓	**Maintain deregulation**
WOLFE	Deregulated	NSW	Regional		4	4	6	Yes	Yes	✓	**Maintain deregulation**
TAREE	Deregulated	NSW	Regional		4	4	5	No	Yes	✓	**Maintain deregulation**
LAVINGTON	Deregulated	NSW	Regional		3	3	3	No	Yes	✓	**Maintain deregulation**
GOSFORD	Deregulated	NSW	Regional	Yes	4	5	6	Yes	Yes	✓	**Maintain deregulation**
WOLLONGONG	Deregulated	NSW	Regional	Yes	3	5	7	Yes	Yes	✓	**Maintain deregulation**
COFFS HARBOUR	Deregulated	NSW	Regional	Yes	5	5	5	Yes	Yes	✓	**Maintain deregulation**
GOULBURN	Deregulated	NSW	Regional		4	4	5	Yes	Yes	✓	**Maintain deregulation**
CHARLOTTE	Deregulated	QLD	Metro		5	6	7	Yes	Yes	✓	**Maintain deregulation**
EDISON	Deregulated	QLD	Metro		6	6	7	Yes	Yes	✓	**Maintain deregulation**
PADDINGTON	Deregulated	QLD	Metro		4	4	6	Yes	Yes	✓	**Maintain deregulation**
SOUTH BRISBANE	Deregulated	QLD	Metro		7	7	7	No	Yes	✓	**Maintain deregulation**
SPRING HILL	Deregulated	QLD	Metro		6	6	7	Yes	Yes	✓	**Maintain deregulation**
TOOWONG	Deregulated	QLD	Metro		4	4	5	Yes	Yes	✓	**Maintain deregulation**
VALLEY	Deregulated	QLD	Metro		6	6	6	Yes	Yes	✓	**Maintain deregulation**
WOOLLOONGABBA	Deregulated	QLD	Metro	Yes	6	6	7	Yes	Yes	✓	**Maintain deregulation**
TOWNSVILLE	Deregulated	QLD	Regional	Yes	4	4	4	No	Yes	✓	**Maintain deregulation**
MERRIMAC	Deregulated	QLD	Regional	Yes	4	4	4	Yes	Yes	✓	**Maintain deregulation**
ARUNDEL	Deregulated	QLD	Regional		4	4	4	Yes	Yes	✓	**Maintain deregulation**
MUDGEERABA	Deregulated	QLD	Regional		1	5	5	Yes	Yes	✓	**Maintain deregulation**
BUNDALL	Deregulated	QLD	Regional		3	4	4	No	No	✓	**Maintain deregulation**
NERANG	Deregulated	QLD	Regional	Yes	4	4	5	Yes	Yes	✓	**Maintain deregulation**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Active or potential service provision	FINAL Decision
ROBINA	Deregulated	QLD	Regional		4	4	4	Yes	Yes	✓	**Maintain deregulation**
TOOWOOMBA	Deregulated	QLD	Regional	Yes	4	5	7	Yes	Yes	✓	**Maintain deregulation**
SOUTHPORT	Deregulated	QLD	Regional	Yes	4	4	5	Yes	Yes	✓	**Maintain deregulation**
SURFERS PARADISE	Deregulated	QLD	Regional		4	4	4	Yes	Yes	✓	**Maintain deregulation**
FLINDERS	Deregulated	SA	Metro		6	8	8	Yes	Yes	✓	**Maintain deregulation**
WAYMOUTH	Deregulated	SA	Metro		5	8	8	Yes	Yes	✓	**Maintain deregulation**
MURRAY BRIDGE	Deregulated	SA	Regional		4	5	5	No	Yes	✓	**Maintain deregulation**
PORT AUGUSTA	Deregulated	SA	Regional	Yes	4	4	5	No	Yes	✓	**Maintain deregulation**
ASCOT	Deregulated	VIC	Metro		3	3	3	Yes	Yes	✓	**Maintain deregulation**
BATMAN	Deregulated	VIC	Metro		6	7	8	Yes	Yes	✓	**Maintain deregulation**
BRUNSWICK	Deregulated	VIC	Metro		5	5	5	Yes	Yes	✓	**Maintain deregulation**
CAULFIELD	Deregulated	VIC	Metro	Yes	3	5	6	Yes	Yes	✓	**Maintain deregulation**
COBURG	Deregulated	VIC	Metro		5	5	5	Yes	Yes	✓	**Maintain deregulation**
ELSTERNWICK	Deregulated	VIC	Metro		3	3	4	Yes	Yes	✓	**Maintain deregulation**
EXHIBITION	Deregulated	VIC	Metro	Yes	6	7	7	Yes	Yes	✓	**Maintain deregulation**
FOOTSCRAY	Deregulated	VIC	Metro	Yes	5	5	5	Yes	Yes	✓	**Maintain deregulation**
HEIDELBERG	Deregulated	VIC	Metro		3	3	4	Yes	Yes	✓	**Maintain deregulation**
LONSDALE	Deregulated	VIC	Metro		5	7	7	Yes	Yes	✓	**Maintain deregulation**
MALVERN	Deregulated	VIC	Metro		3	4	4	Yes	Yes	✓	**Maintain deregulation**
MORELAND	Deregulated	VIC	Metro		4	4	5	Yes	Yes	✓	**Maintain deregulation**
NORTH MELBOURNE	Deregulated	VIC	Metro		7	7	7	Yes	Yes	✓	**Maintain deregulation**
PORT MELBOURNE	Deregulated	VIC	Metro	Yes*	4	5	6	Yes	Yes	✓	**Maintain deregulation**
PRESTON	Deregulated	VIC	Metro		3	3	3	Yes	Yes	✓	**Maintain deregulation**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Active or potential service provision	FINAL Decision
RICHMOND	Deregulated	VIC	Metro		4	4	5	Yes	Yes	✓	**Maintain deregulation**
SOUTH MELBOURNE	Deregulated	VIC	Metro		6	7	7	Yes	Yes	✓	**Maintain deregulation**
ST KILDA	Deregulated	VIC	Metro	Yes	4	5	6	Yes	Yes	✓	**Maintain deregulation**
TOORAK	Deregulated	VIC	Metro		4	4	5	Yes	Yes	✓	**Maintain deregulation**
GEELONG	Deregulated	VIC	Regional	Yes	5	5	5	Yes	Yes	✓	**Maintain deregulation**
BALLARAT	Deregulated	VIC	Regional	Yes	4	4	4	Yes	Yes	✓	**Maintain deregulation**
NORTH GEELONG	Deregulated	VIC	Regional		3	3	3	Yes	Yes	✓	**Maintain deregulation**
SHEPPARTON	Deregulated	VIC	Regional	Yes	4	4	5	No	Yes	✓	**Maintain deregulation**
BENDIGO	Deregulated	VIC	Regional	Yes	5	5	5	Yes	Yes	✓	**Maintain deregulation**
BULWER	Deregulated	WA	Metro		4	5	7	Yes	Yes	✓	**Maintain deregulation**
PIER	Deregulated	WA	Metro		7	7	8	Yes	Yes	✓	**Maintain deregulation**
SOUTH PERTH	Deregulated	WA	Metro		3	3	4	Yes	Yes	✓	**Maintain deregulation**
SUBIACO	Deregulated	WA	Metro	Yes	3	4	6	Yes	Yes	✓	**Maintain deregulation**
WELLINGTON	Deregulated	WA	Metro		4	7	8	Yes	Yes	✓	**Maintain deregulation**

NOTE: For some capital-regional routes the regional centre contains multiple ESAs. For example, the Melbourne to Geelong capital-regional route includes the Geelong and North Geelong ESAs.

* indicates an NBN Co built POI

Currently declared ESAs – remove regulation

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
CIVIC	Declared	ACT	Metro	Yes	5	5	5	Yes	Yes	✓	**Deregulate**
BALMAIN	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BAULKHAM HILLS	Declared	NSW	Metro		4	4	4	No	Yes	✓	**Deregulate**
BONDI	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BOTANY	Declared	NSW	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
CARLINGFORD	Declared	NSW	Metro		4	4	4	Yes	Yes	✓	**Deregulate**
CONCORD	Declared	NSW	Metro		3	3	4	No	Yes	✓	**Deregulate**
CRONULLA	Declared	NSW	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
DEE WHY	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
DRUMMOYNE	Declared	NSW	Metro		3	3	3	No	Yes	✓	**Deregulate**
EDENSOR PARK	Declared	NSW	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
ENGADINE	Declared	NSW	Metro		3	4	6	Yes	Yes	✓	**Deregulate**
ERSKINE PARK	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
FRENCHS FOREST	Declared	NSW	Metro	Yes	4	4	4	Yes	Yes	✓	**Deregulate**
GUILDFORD	Declared	NSW	Metro		3	3	4	No	Yes	✓	**Deregulate**
HUNTERS HILL	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
INGLEBURN	Declared	NSW	Metro		4	6	6	Yes	Yes	✓	**Deregulate**
KILLARA	Declared	NSW	Metro		4	4	6	No	Yes	✓	**Deregulate**
MANLY	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
MAROUBRA	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
MILLER	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
MINTO	Declared	NSW	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
MIRANDA	Declared	NSW	Metro	Yes	3	4	5	Yes	Yes	✓	**Deregulate**
PEAKHURST	Declared	NSW	Metro	Yes	2	4	5	Yes	Yes	✓	**Deregulate**
PENRITH	Declared	NSW	Metro	Yes	4	4	5	Yes	Yes	✓	**Deregulate**
PYMBLE	Declared	NSW	Metro		2	3	6	Yes	Yes	✓	**Deregulate**
ROSE BAY	Declared	NSW	Metro		3	3	3	No	Yes	✓	**Deregulate**
ST MARYS	Declared	NSW	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
SUTHERLAND	Declared	NSW	Metro		4	4	5	Yes	Yes	✓	**Deregulate**
WAHROONGA	Declared	NSW	Metro		4	4	6	Yes	Yes	✓	**Deregulate**
WETHERILL PARK	Declared	NSW	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
WILLOUGHBY	Declared	NSW	Metro		3	3	4	No	Yes	✓	**Deregulate**
BATHURST	Declared	NSW	Regional		4	4	4	Yes	Yes	✓	**Deregulate**
ORANGE	Declared	NSW	Regional		4	4	6	Yes	Yes	✓	**Deregulate**
WAGGA WAGGA	Declared	NSW	Regional	Yes	4	4	4	Yes	Yes	✓	**Deregulate**
ACACIA RIDGE	Declared	QLD	Metro	Yes*	3	3	3	Yes	Yes	✓	**Deregulate**
ALBION	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
ALEXANDRA HILLS	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BROWNS PLAINS	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BULIMBA	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
CAPALABA	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
CHAPEL HILL	Declared	QLD	Metro		4	4	5	Yes	Yes	✓	**Deregulate**
CHERMSIDE	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
COORPAROO	Declared	QLD	Metro		4	4	5	Yes	Yes	✓	**Deregulate**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
EIGHT MILE PLAINS	Declared	QLD	Metro	Yes	4	5	5	Yes	Yes	✓	**Deregulate**
EVERTON PARK	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
GOODNA	Declared	QLD	Metro	Yes	3	3	4	No	Yes	✓	**Deregulate**
INALA	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
LUTWYCHE	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
MITCHELTON	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
MOUNT GRAVATT	Declared	QLD	Metro		5	5	5	Yes	Yes	✓	**Deregulate**
NEW FARM	Declared	QLD	Metro		3	3	5	Yes	Yes	✓	**Deregulate**
NUNDAH	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
PETRIE	Declared	QLD	Metro	Yes	3	3	3	Yes	Yes	✓	**Deregulate**
SALISBURY	Declared	QLD	Metro		5	5	5	Yes	Yes	✓	**Deregulate**
SLACKS CREEK	Declared	QLD	Metro	Yes	5	5	5	Yes	Yes	✓	**Deregulate**
SUNNYBANK	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
TINGALPA	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
WYNNUM	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
YERONGA	Declared	QLD	Metro		4	4	4	Yes	Yes	✓	**Deregulate**
ZILLMERE	Declared	QLD	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BEENLEIGH	Declared	QLD	Regional		4	4	4	Yes	Yes	✓	**Deregulate**
LOGANHOLME	Declared	QLD	Regional		4	4	4	Yes	Yes	✓	**Deregulate**
OXENFORD	Declared	QLD	Regional		4	4	5	No	Yes	✓	**Deregulate**
IPSWICH	Declared	QLD	Regional	Yes	5	5	5	Yes	Yes	✓	**Deregulate**
NARANGBA	Declared	QLD	Regional		3	3	3	Yes	Yes	✓	**Deregulate**
ROTHWELL	Declared	QLD	Regional		3	3	3	Yes	Yes	✓	**Deregulate**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
CALOUNDRA	Declared	QLD	Regional		3	3	3	Yes	Yes	✓	**Deregulate**
MAROOCHYDORE	Declared	QLD	Regional		4	4	4	Yes	Yes	✓	**Deregulate**
MOOLOOLABA	Declared	QLD	Regional		3	3	3	Yes	Yes	✓	**Deregulate**
ST MARYS	Declared	SA	Metro	Yes	4	4	4	Yes	Yes	✓	**Deregulate**
BRIGHTON	Declared	SA	Metro		2	3	3	Yes	Yes	✓	**Deregulate**
CROYDON	Declared	SA	Metro		3	4	6	Yes	Yes	✓	**Deregulate**
GEPPS CROSS	Declared	SA	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
GOLDEN GROVE	Declared	SA	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
NORWOOD	Declared	SA	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
SALISBURY	Declared	SA	Metro	Yes*	3	3	4	Yes	Yes	✓	**Deregulate**
ST PETERS	Declared	SA	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
STIRLING	Declared	SA	Metro	Yes	2	3	3	Yes	Yes	✓	**Deregulate**
UNLEY	Declared	SA	Metro		3	3	5	Yes	Yes	✓	**Deregulate**
WEST ADELAIDE	Declared	SA	Metro		4	5	6	Yes	Yes	✓	**Deregulate**
SMITHFIELD	Declared	SA	Regional		3	3	4	Yes	Yes	✓	**Deregulate**
BERWICK	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BLACKBURN	Declared	VIC	Metro	Yes*	4	4	4	Yes	Yes	✓	**Deregulate**
BROOKLYN	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
BUNDOORA	Declared	VIC	Metro		3	3	3	No	Yes	✓	**Deregulate**
BURWOOD	Declared	VIC	Metro		3	4	4	Yes	Yes	✓	**Deregulate**
CAMBERWELL	Declared	VIC	Metro		5	5	5	Yes	Yes	✓	**Deregulate**
CANTERBURY	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
CARLTON	Declared	VIC	Metro		7	7	7	Yes	Yes	✓	**Deregulate**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
CHELTENHAM	Declared	VIC	Metro	Yes	3	3	3	Yes	Yes	✓	**Deregulate**
COLLINGWOOD	Declared	VIC	Metro		5	6	7	Yes	Yes	✓	**Deregulate**
CROYDON	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
DANDENONG	Declared	VIC	Metro	Yes	4	4	4	Yes	Yes	✓	**Deregulate**
DEEPDENE	Declared	VIC	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
EAST KEW	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
EPPING	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
FLEMINGTON	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
GLEN IRIS	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
HAWTHORN	Declared	VIC	Metro	Yes	5	5	6	Yes	Yes	✓	**Deregulate**
HIGHETT	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
KOOYONG	Declared	VIC	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
MITCHAM	Declared	VIC	Metro		4	4	4	Yes	Yes	✓	**Deregulate**
NORTH BALWYN	Declared	VIC	Metro	Yes	4	4	4	Yes	Yes	✓	**Deregulate**
NORTH ESSENDON	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
NORTHCOTE	Declared	VIC	Metro		3	4	4	Yes	Yes	✓	**Deregulate**
OAKLEIGH	Declared	VIC	Metro		3	3	5	Yes	Yes	✓	**Deregulate**
RINGWOOD	Declared	VIC	Metro	Yes	3	3	3	Yes	Yes	✓	**Deregulate**
SOUTH YARRA	Declared	VIC	Metro		5	6	8	Yes	Yes	✓	**Deregulate**
SUNSHINE	Declared	VIC	Metro		5	5	5	Yes	Yes	✓	**Deregulate**
TALLY HO	Declared	VIC	Metro		3	3	4	Yes	Yes	✓	**Deregulate**
THOMASTOWN	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
THORNBURY	Declared	VIC	Metro	Yes	3	3	3	Yes	Yes	✓	**Deregulate**

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
TULLAMARINE	Declared	VIC	Metro	Yes	3	3	4	Yes	Yes	✓	**Deregulate**
WANTIRNA	Declared	VIC	Metro		3	3	3	Yes	Yes	✓	**Deregulate**
WHEELERS HILL	Declared	VIC	Metro	Yes	3	3	4	Yes	Yes	✓	**Deregulate**
WINDSOR	Declared	VIC	Metro		6	6	7	Yes	Yes	✓	**Deregulate**
BATEMAN	Declared	WA	Metro		2	3	5	Yes	Yes	✓	**Deregulate**
CANNINGTON	Declared	WA	Metro	Yes**	3	3	4	Yes	Yes	✓	**Deregulate**
COTTESLOE	Declared	WA	Metro		3	3	5	Yes	Yes	✓	**Deregulate**
DOUBLEVIEW	Declared	WA	Metro	Yes	3	3	4	Yes	Yes	✓	**Deregulate**
HILTON	Declared	WA	Metro	Yes	3	3	3	Yes	Yes	✓	**Deregulate**
MAYLANDS	Declared	WA	Metro		3	4	6	Yes	Yes	✓	**Deregulate**
VICTORIA PARK	Declared	WA	Metro		4	4	5	Yes	Yes	✓	**Deregulate**

NOTE: For some capital-regional routes the regional centre contains multiple ESAs. For example, the Melbourne to Geelong capital-regional route includes the Geelong and North Geelong ESAs.

* indicates an NBN Co built POI

** The ESA of Cannington contains 2 NBN POIs. One is located at the Telstra telephone exchange 'Cannington', and the other is housed in the new NBN Co built facility 'Bentley'.

Currently deregulated ESAs - re-declaration

ESA	Current status	STATE	Route category - based on 2012 FAD	NBN POI location	No. of fibre providers within 50m of exchange	No. of fibre providers within 150m of exchange	No. of fibre providers within 1km of exchange	More than 2 DSLAM providers?	More than 5000 SIOs at ESA?	Evidence of active or potential service provision	FINAL Decision
BUNDABERG	Deregulated	QLD	Regional	Yes	4	5	5	No	Yes	na	**Re-declare**
MARYBOROUGH	Deregulated	QLD	Regional		3	5	6	No	Yes	na	**Re-declare**
ROCKHAMPTON	Deregulated	QLD	Regional	Yes	3	5	6	No	Yes	na	**Re-declare**

NOTE: For some capital-regional routes the regional centre contains multiple ESAs. For example, the Melbourne to Geelong capital-regional route includes the Geelong and North Geelong ESAs.

Appendix 4: 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, and
- 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. [210]

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-

[210] Explanatory Memorandum, Trade Practices Amendment (Telecommunications) Act 1997 (Cth).

> 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. [211]

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 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 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

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

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, and

- 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.

Paragraph 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 5: List of submissions received

Submissions received in response to the Draft Report:

AAPT Limited, *Domestic Transmission Capacity Service – An ACCC Draft Report on the review of the declaration for the Domestic Transmission Capacity Service Submission by AAPT Limited (14 February 2014) to Australian Competition and Consumer Commission (ACCC)*, 14 February 2014.

Broadband Today Alliance (Broadband Alliance Inc.), *Re: Domestic Transmission Capacity Service Pricing*, 12 February 2014.

Competitive Carriers' Coalition Inc, *Submission to Draft Decision on Domestic Transmission Capacity Service Declaration Review,* 14 February 2014.

Herbert Geer Lawyers on behalf of: iiNet Limited, *ACCC Draft Report on the review of the declaration for the Domestic Transmission Capacity Service*, 14 February 2014.

Macquarie Telecom Pty Ltd, *Domestic Transmission Capacity Service - Declaration Inquiry*, 14 February 2014.

NBN Co Limited, *NBN Co Submission on ACCC Draft Report on the review of the declaration for the Domestic Transmission Capacity Service*, 17 February 2014.

Nextgen Group Holdings Pty Ltd, *RE: Draft report on the review of the declaration for the DTCS*, 17 February 2014.

Regional Development Australia Sunshine Coast Inc., *Re: Domestic Transmission Capacity Service Pricing*, 4 February 2014.

Regional Development Australia Wheatbelt WA Inc., *Re: Domestic Transmission Capacity Service Pricing*, 4 February 2014.

Regional Development Australia Townsville and North West QLD, *Re: Domestic Transmission Capacity Service – An ACCC Draft Report*, 14 February 2014.

Regional Development Australia Southern Inland, *Declaration of Domestic Transmission Capacity Services*, 14 February 2014.

Singtel Optus Pty Limited, *Submission in response to ACCC Draft Report on the review of the declaration inquiry for the Domestic Transmission Capacity Service,* Confidential and Public versions, 14 February 2014.

Telstra Corporation Limited, *Submission to the Commission's Draft Report on the review of the declaration for the Domestic Transmission Capacity Service,* Confidential and Public versions, 14 February 2014.

Vodafone Hutchison Australia Pty Ltd, *Declaration Of The Domestic Transmission Capacity Service Submission to the Australian Competition and Consumer Commission*, Confidential and Public versions, 14 February 2014.

Submissions received in response to the Discussion Paper:

AAPT Limited, *Submission by AAPT Limited (September 2013) to Australian Competition and Consumer Commission, Domestic Transmission Capacity Service, "An ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service"(July 2013)* (public and confidential version).

Competitive Carriers' Coalition Inc, *Submission on Domestic Transmission Capacity Service*, 30 August 2013.

iiNet Limited, *ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service*, *Submission by Herbert Geer Lawyers on behalf of: iiNet Limited*, 30 August 2013.

Macquarie Telecom Pty Ltd, *Domestic Transmission Capacity Service*, 2 September 2013 (public and confidential version).

NBN Co Limited, *NBN Co Submission on ACCC Discussion Paper reviewing the Declaration for the Domestic Transmission Capacity Service*, August 2013.

Nextgen Group, *Discussion paper reviewing the declaration for the DTCS*, 13 September 2013.

SingTel Optus Pty Limited, *Defining the terminating segment of DTCS*, 3 October 2013 (confidential version).

SingTel Optus Pty Limited, *Submission in response to the ACCC's Discussion Paper*, 30 August 2013 (public and confidential version).

Telstra Corporation Limited, *Submission to the Commission's Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service*, 30 August 2013 (public and confidential version).

Telstra Corporation Limited, *Review of the Declaration for the Domestic Transmission Capacity Service (DTCS), Telstra meeting with ACCC*, 8 October 2013 (Confidential).

Vodafone Hutchison Australia Limited, *Declaration of the Domestic Transmission Capacity Service, Response to the Australian Competition and Consumer Commission*, 30 August 2013 (public and confidential version).

Wimmera Development Association Inc, *Domestic Transmission Capacity Service, ACCC Review*, 17 September 2013.