Draft final access determination for the domestic transmission capacity service (DTCS)

Explanatory Statement

December 2011

Contents

List of abbreviations and acronyms

ACCC	Australian Competition and Consumer Commission
CBD	central business district
CCAs	Call Charge Areas
CACS Act	*Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010*
CSP	Carriage Service Provider
DTCS	domestic transmission capacity service (as defined in the current service description)
ESA	exchange service area
FAD	final access determination
IAD	interim access determination
LTIE	Long Term Interests of End-users
Model Terms	*Model Non-Price Terms & Conditions Determination 2008*
NBN	National Broadband Network
PDH	Plesiochronous Digital Hierarchy
POI	Point of Interconnection
RAF	regulatory accounting framework
SAOs	standard access obligations
SDH	Synchronous Digital Hierarchy
TSLRIC+	total service long-run incremental cost

1 Introduction

This Explanatory Statement and the attached draft final access determination (FAD) are part of the Australian Competition and Consumer Commission's (ACCC) public inquiry into the making of an access determination for the declared domestic transmission capacity service (DTCS).

The report reflects the outcomes of consultation on the DTCS FAD Discussion Paper released in June 2011, the draft regression model released in July 2011 and the DTCS FAD public forum in August 2011.The report discusses the key issues raised in the consultations and explains the price and non-price terms contained in the draft DTCS FAD.

The ACCC invites submissions on the draft DTCS FAD. After considering submissions on the draft DTCS FAD, the ACCC proposes to publish a Final Report and make an FAD for the DTCS in early 2012.

1.1 Background

The *Competition and Consumer Act 2010* (the Act) requires the ACCC to hold a public inquiry into a proposal to make an FAD for all declared services in operation on 1 January 2011.[1] It is a carrier licence condition and a service provider rule to comply with an FAD.[2] Failure to comply may lead to a fine of up to $10 million for each contravention[3] and private action may also be taken in the Federal Court.[4]

An FAD may specify terms and conditions of access to declared services. If so, it must include terms and conditions relating to price or a method of ascertaining price. Non-price terms and conditions may be included but are not compulsory. Access seekers can rely on the FAD if they are unable to agree terms of access with an access provider. If the parties agree terms and conditions of access, their access agreement will prevail over the FAD to the extent of any inconsistency.[5]

The DTCS was deemed a declared service in June 1997.[6] The declaration was varied in November 1998, May 2001, April 2004, April 2009 and September 2010. The current DTCS declaration is due to expire on 31 March 2014. The current DTCS declaration is at Appendix I.

The ACCC made an interim access determination (IAD) for the DTCS in April 2011 which was set to expire on 31 December 2011. On 9 November 2011 the ACCC made a declaration pursuant to subsection 152BCF(10) of the Act to extend the expiry date of the IAD to the day immediately before the DTCS FAD comes into force. The ACCC must commence a public inquiry into a DTCS FAD at least six months before

1 Subsection 152BCI(2) of the Act.
2 Sections 152BCO and 152BCP of the Act.
3 Section 570 of the *Telecommunications Act 1997*.
4 Section 152BCQ of the Act.
5 Section 152BCC of the Act.
6 ACCC, *Deeming of Telecommunications Services: a statement pursuant to section 39 of the Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997,* June 1997.

the IAD expires.[7] Once an FAD is made, the IAD will be automatically revoked[8] and no access disputes can be notified to the ACCC in relation to that service.

When making an FAD, the ACCC must take account of a range of criteria. These criteria are specified in subsection 152BCA(1) of the Act and are:

(a) whether the determination will promote the LTIE of carriage services or services supplied by means of carriage services

(b) the legitimate business interests of a carrier or CSP who supplies, or is capable of supplying, the declared service, and the carrier's or provider's investment in facilities used to supply the declared service

(c) the interests of all persons who have rights to use the declared service

(d) the direct costs of providing access to the declared service

(e) the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

(f) the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility

(g) the economically efficient operation of a carriage service, a telecommunications network or a facility.

The ACCC may also take into account any other matters that it thinks are relevant when making an FAD.[9] Information about these requirements and how the ACCC will apply them is in Appendix II.

The ACCC proposes to include price and non-price terms in the DTCS FAD. The ACCC decided on a domestic benchmarking approach to pricing the DTCS in November 2010 following industry consultation and sought pricing information from transmission service providers in December 2010. This information was used in determining the price terms in the DTCS IAD. The non-price terms in the DTCS IAD were based on provisions in the ACCC's *Model Non-Price Terms and Conditions Determination 2008* (2008 Model Terms).

1.2 Consultation process

The ACCC commenced a public inquiry into an FAD for the DTCS on 15 June 2011 and must complete the inquiry by December 2011.[10] A discussion paper was released in June and the ACCC released a draft regression model for pricing in July. In August 2011, the ACCC hosted a public forum (encompassing Sydney, Melbourne and

7 Subsection 152BCI(3) of the Act.
8 Subsection 152BCF(9A) of the Act.
9 Subsection 152BCA(3) of the Act.
10 Under section 152BCK of the Act, the ACCC must commence a public inquiry into making an FAD for the declared DTCS and must make an FAD within six months of commencing the inquiry. This may be extended by six month periods if the ACCC explains the reasons for the extension. The ACCC commenced the DTCS FAD inquiry in June 2011.

Canberra) as part of the inquiry process. The ACCC has also held bi-lateral meetings with stakeholders during the inquiry process.

The organisations below have provided submissions, participated in the public forum and/or met with ACCC staff during the course of the public inquiry:

AAPT
Aurora Energy
Basslink Telecom
Competitive Carriers Coalition
Frontier Economics
Department of Broadband, Communications and the Digital Economy
Department of Premier and Cabinet (Tasmania)
Department of Business and Innovation (Victoria)
Herbert Geer
Macquarie Telecom
NBN Co
NextGen
Optus
Primus Telecom
Telstra
TransACT
VHA.

This explanatory statement and the draft DTCS FAD form part of the public inquiry. The ACCC invites submissions on the draft DTCS FAD and proposes to make a final DTCS FAD after considering submissions on the draft DTCS FAD.

All submissions will be considered public and posted on the ACCC website. If stakeholders wish to submit commercial-in-confidence material they should also submit a public version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or '[c-i-c]'.

The ACCC and Australian Energy Regulator (AER) approach to the collection, use and disclosure of information is set out in the document "*ACCC-AER information policy: the collection, use and disclosure of information"*. A copy is available on the ACCC website.

The ACCC prefers to receive submissions in electronic form, either in PDF or Microsoft Word format which allows the submission text to be searched.

Submissions about the draft DTCS FAD will be accepted until **5:00 pm on Friday, 27 January 2012**. Any submissions received after this time may not be considered.

Please send submissions to accessdeterminations@accc.gov.au and copy to:

Josh Davies Communications Group Australian Competition and Consumer Commission Email: joshua.davies@accc.gov.au	**Grahame O'Leary** Communications Group Australian Competition and Consumer Commission Email: grahame.oleary@accc.gov.au

1.3 DTCS declaration exemptions

The ACCC last considered exemptions from the DTCS declaration in 2008 when it assessed Telstra's applications for exemption. The ACCC subsequently made four exemption determinations which were incorporated into the DTCS service description in 2009.[11]

Telstra supports a review of the scope of the DTCS declaration in this FAD inquiry on the basis that the current declaration does not reflect the true level of competition in transmission markets. Telstra notes that the level of competition in transmission markets has increased considerably since 2008 and that waiting another two years for the declaration inquiry is not in the LTIE and will only serve to reduce incentives for investment and create uncertainty. Telstra suggests that the competition criteria previously used by the ACCC when assessing Telstra's exemption applications should also be reviewed.[12]

The ACCC considers the DTCS FAD inquiry is intended to consider the form and content of an access determination for the declared DTCS as it is expressed in the current DTCS declaration. The ACCC does not consider the DTCS FAD inquiry is the appropriate avenue to examine the scope of the current DTCS declaration. The ACCC considers any review of the scope of the current DTCS declaration should be considered in the context of a specific declaration inquiry. A declaration inquiry will consider whether to vary, extend, revoke or allow the declaration to expire.

The next DTCS declaration inquiry is due before the current DTCS declaration expires on 31 March 2014.

The ACCC notes that the 2009 DTCS Declaration exempts specified areas to limit the operation of the standard access obligations of section 152AR of the Act to declared areas. These exempt areas include the ACCC exemptions decisions listed below. As

[11] On the 25 November 2008, the ACCC made the following exemptions to the DTCS declaration: Class Exemption Determination No. 4 of 2008, Individual Exemption Determination No.7 of 2008 (capital-regional routes), Individual Exemption Determination No.8 of 2008 (inter-exchange transmission capacity in metropolitan areas) and Individual Exemption Determination No.9 of 2008 (inter-exchange transmission capacity in CBD areas). See also *ACCC Final Report on reviewing the declaration of the domestic transmission capacity service*, March 2009.

[12] Telstra Corporation Ltd, Public inquiry to make final access determinations for the Domestic Transmission Capacity Service – Submission on the need to consider further geographic exemptions as part of the final access determination process – for the public register, 5 August 2011, pp.2-17.

such, the ACCC considers it unnecessary to include a clause in the DTCS FAD to specify that the FAD does not apply to the following exemptions:

- ACCC Class Exemption Determination No. 4 of 2008 made on 25 November 2008
- ACCC Individual Exemption Determination No.7 of 2008 made on 25 November 2008 (in respect of capital-regional routes)
- ACCC Individual Exemption Determination No.8 of 2008 made on 25 November 2008 (in respect of inter-exchange transmission capacity in metropolitan areas)
- ACCC Individual Exemption Determination No.9 of 2008 made on 25 November 2008 (in respect of inter-exchange transmission capacity in CBD areas)

The ACCC notes that the FAD maintains the above exemptions and *only* applies to areas that are not exempt from the DTCS declaration.

1.4 The ACCC's approach to pricing the DTCS

The ACCC determined it would use a domestic benchmarking approach to transmission pricing in November 2010.[13] This followed a public consultation process on different approaches to pricing the DTCS, including bottom-up long-run incremental cost, top-down long-run incremental cost, fully allocated cost (FAC), international and/or domestic benchmarking and a combined approach.[14]

The ACCC maintains the view that prices for transmission services in competitive areas provide a reasonable indication of prices that should prevail in areas with less competition (the current declared areas). Further, those transmission services that are not subject to regulation are considered to be provided in relatively mature markets served by a number of service providers. Information about the prices of competitive transmission services in unregulated markets therefore provides a sound basis for prices and price structures in less competitive markets.

In December 2010, the ACCC sought pricing data from transmission providers and the data received informed the development of price terms in the DTCS IAD published in April 2011. The IAD price terms are based on the average price of the most common services at different capacities and distances across service providers.

After the DTCS IAD was published, some industry participants indicated that the IAD prices were higher than those generally available in the market, particularly for longer regional routes. The difference was due to a variety of factors, in particular the range of price structures used by service providers, specifically in relation to distance based

[13] Previously, the ACCC had been guided by its 1997 Access Pricing Principles and the DTCS: Pricing Principles for Declared Transmission Capacity Services - Final Report which described TSLRIC+ as the relevant pricing principle for the DTCS.
[14] In April 2010, the ACCC issued a discussion paper on different approaches to pricing the DTCS and a report by Frontier Economics on the Economics of Transmission Capacity Services.

charging, definitional issues as to how the prices are applied and issues around the level of protection and quality of service. The key issues raised during the consultation process have been explored extensively and are discussed in Chapter 2.

In addressing the pricing concerns raised by industry, the ACCC has developed a regression model using updated DTCS pricing information (the Final Regression Model). The ACCC is of the view that the Final Regression Model generates prices which more accurately capture the relationship between price and the different variables which impact the price of the service. Chapter 3 provides further discussion on the ACCC's Final Regression Model.

2 Key issues

2.1 Transmission categories

The ACCC has traditionally recognised the following types of transmission services:[15]

- inter-capital transmission – transmission predominantly between call charge areas (CCAs) in different mainland capital cities (Melbourne, Sydney, Perth, Brisbane, Adelaide and Canberra, but not Darwin or Hobart)
- 'other' transmission (e.g. capital–regional routes) – transmission between different CCAs other than inter-capital transmission (as above)
- inter-exchange transmission – transmission within a single CCA between a point of interconnection (POI) at an access provider's exchange where the POI and exchange are in the same CCA; and
- tail-end transmission – transmission within a single Exchange Service Area (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.[16]

In practice, transmission services are generally classified in the market as inter-capital, metropolitan and regional services. While the inter-capital concept is commonly understood, other service categories vary considerably. Categories such as 'metropolitan', 'outer-metropolitan', 'regional' and 'urban' are widespread, however there is no consistency in the defining parameters of each category.

The ACCC has therefore decided to more explicitly define its categories of transmission services for the purposes of determining appropriate price terms to include in the DTCS FAD. The refinements are necessary to more accurately identify the services to benchmark for the purposes of setting price terms in the DTCS FAD. The revised categories are not intended to indicate that the ACCC has a view about whether a service should be exempt from the DTCS declaration. [17]

The revised categories are set out below:

- an **inter-capital route** is a route from an ESA within the boundary of a capital city to an ESA within the boundary of another capital city.
- a **regional route** is a route where either or both the A-end and B-end are outside the boundary of a capital city.

[15] See for example the types of transmission services defined in the following ACCC documents: Deeming of Telecommunication Services -30 June 1997, Review of the declaration for the domestic transmission capacity service Final Report - April 2004, An ACCC Final Report on reviewing the declaration of the domestic transmission capacity service – March 2009.
[16] ACCC, *Domestic Transmission Capacity Service – An ACCC final report reviewing the declaration of the domestic transmission capacity service*, March 2009.
[17] The ACCC would only form such a view in a declaration inquiry under section 152AL(3) of the Act. The ACCC considers a DTCS declaration inquiry to be beyond the scope of the FAD inquiry and notes the next DTCS declaration inquiry is due to occur before the declaration expires in March 2014.

- a **metropolitan route** is a route where both the A-end and B-end are within the boundary of a capital city.

- a **tail-end** services is:

  a **regional tail-end route** is a route wholly within a single ESA outside the boundary of a capital city.

  a **metropolitan tail-end route** is a route wholly within a single ESA inside the boundary of a capital city.

A service that is provided with protection in the form of a separate redundant path that is substantially outside the relevant boundary will not fall outside the revised category solely due to the route of the redundant path. The ACCC considers this approach promotes efficient use of and investment in infrastructure by encouraging transmission paths that are as short and direct as possible without disadvantaging the providers of a level of protection that is appropriate for the DTCS.[18]

Examples of each of the new categories are given below.

Box 1 – Examples of revised transmission categories

An **inter-capital route** is a route from an exchange service area (ESA) within the boundary of a capital city to an ESA within the boundary of another capital city. For example, a service from: • Glebe (Sydney) to Waymouth (Adelaide) • Pier (Perth) to Doncaster (Melbourne)
A **regional route** is a route where either or both the A-end and B-end are outside the boundary of a capital city. For example, a service from: • any location outside the boundary of a capital city to any other location outside the boundary of a capital city, for example a service from Armidale to Tamworth (NSW) • any location within the boundary of a capital city to any other location outside the boundary of a capital city, for example a service from Doncaster to Traralgon (Victoria) • any location outside the boundary of a capital city to any location within the boundary of a capital city, for example a service from Maroochydore to Fortitude Valley (Queensland).
A **metropolitan route** is a route wholly within the boundary of a capital city. For example, from: • Homebush to Blacktown (Sydney) • Mount Gravatt to Brisbane Airport (Brisbane)
A **metropolitan tail-end route** means a route wholly within a single ESA within the boundary of a capital city. For example, a service from: • the Fremantle exchange (Perth) to the University of Notre Dame (Fremantle ESA, Perth) • an exchange to a B-end within the same ESA.
A **regional tail-end route** means a route wholly within a single ESA outside the boundary of a capital city. For example, a service from: • Ellengowan Drive (Casuarina ESA, NT) to Karama (Casuarina ESA, NT) • Stirling Hospital (Stirling ESA, SA) to Bridgewater via Heathfield (both in Stirling ESA) • Mildura exchange to Mildura Private Hospital (Mildura ESA, Victoria) with protection via a redundant path to Carlton exchange in Melbourne (Carlton ESA, Melbourne).

[18] The pricing of protected services is considered further in section 2.5 below.

The following subsections 2.1.1 to 2.1.4 provide more detail on the ACCC's reasoning in relation to the definition of transmission categories.

2.1.1 Capital city boundaries

The DTCS service description exempts transmission between capital cities[19] from regulation but does not define the boundaries of the capital cities. This creates uncertainty and at times a level of ambiguity in classifying transmission routes for the purposes of benchmarking prices.

In general, service providers determine prices using common geographical classifications such as inter-capital, CBD, metropolitan and regional categories. Prices are set in terms of data rate and distance based increments. The increments vary between service providers but generally fall within the following ranges:

- CBD - 0 to 5km of a capital city GPO
- metropolitan - between 0 to 40, 50 or 60 km of the CBD, and
- regional - these vary widely.

Submissions to the DTCS FAD Discussion Paper broadly support the ACCC's proposal to define the ESAs that mark the boundaries for each capital city, although submissions varied as to the appropriate radial distance that should be used to demarcate these boundaries. At the industry forum in August 2011 the ACCC proposed and subsequently posted on its website a list of ESAs that would define capital city boundaries for the purpose of the FAD.

Macquarie Telecom (Macquarie) submitted that the capital city boundary for Brisbane should be expanded by 10-15km to allow for growth,[20] Optus sought that the radial distance for Melbourne be expanded to 50km,[21] while VHA submitted that the radial distance boundaries for a number of capital cities may be overly conservative. [22] AAPT however did not consider it necessary to define capital city boundaries.[23]

Basslink and NBN Co proposed the use of local government areas or the use of fibre serving areas/connectivity servings in defining geographic boundaries.[24] Basslink submitted that geographic boundaries should not be defined on an ESA basis, given that these ESAs mark the physical limits of copper extending from an exchange.[25] In

[19] Excluding Hobart and Darwin.
[20] Macquarie Telecom Pty Ltd, *MT Sub DTCS*, Public Submission, August 2011 (Macquarie, Submission to the DTCS FAD Discussion Paper), p.5.
[21] Singtel Optus (Optus), *Optus Submission in response to the ACCC's discussion paper, Domestic Transmission Capacity Service: Public Inquiry to make Final Access Determinations*, Public Submission, June 2011, (Optus, Public Submission to the DTCS FAD Discussion Paper), p.12, paragraph 3.9.
[22] Vodafone Hutchison Australia Pty Limited (VHA), *Submission to the Australian Competition and Consumer Commission*, August 2011 (VHA, Submission to the DTCS FAD Discussion Paper), p.5.
[23] AAPT, *Submission by AAPT Limited ACCC Discussion Paper Public Inquiry into a final access determination for the DTCS, dated June 2011*, Public Submission, August 2011, (AAPT, Public Submission to the DTCS FAD Discussion Paper), p.11.
[24] NBN Co Ltd (NBN Co), *Domestic Transmission Capacity Service – Final Access* Determination *NBN Co Submission*, September 2011 (NBN Co Submission to the DTCS FAD Discussion Paper), p.5.
[25] Basslink Telecoms Pty Ltd (Basslink), *Basslink DTCS* Submission, Public Submission, August 2011 (Basslink, Public Submission to the DTCS FAD Discussion Paper), p.10.

contrast, Nextgen takes the view that ESAs are an appropriate starting point for determining capital city boundaries because they are relevant to the network architecture of transmission services.[26] However Nextgen argues that this approach to defining boundaries should be supplemented with an understanding of where competing fibre is located and relevant ABS and population density data.[27]

Telstra submitted that its network structure should be used as the reference point for determining geographic boundaries, given that it is well understood by industry and has formed the reference point from which competition has evolved.[28]

Nextgen further submitted that the ACCC's proposed geographic boundaries should be dynamic, to ensure it is relevant in an NBN environment.[29] Macquarie also supports the view that capital city boundaries should be allowed to change over time, to reflect market developments.[30]

In aligning geographic boundary definitions with industry practice, Optus also sought a 'no detriment principle' be applied, whereby the ACCC ensures that access seekers are no worse off under the new boundaries than with current industry definitions.[31] Telstra agrees that boundary definitions should be aligned with industry practice[32], however it submitted that Optus's proposed 'no detriment principle' is not in the LTIE as it fails to adequately account for the interests of the service provider.[33]

The Tasmanian Government and Aurora submitted that the capital-city boundary for Tasmania should be the supplier's data centre closest to the CBD. They considered that a wider capital city boundary definition could result in stranding infrastructure and discourage Aurora and other carriers from investing in local infrastructure.[34]

The ACCC considers that specifying the boundaries of capital cities using a transparent and simple approach provides greater certainty for access seekers and access providers. The ACCC recognises that Australian Bureau of Statistics (ABS) information and Local Government Area boundaries could be used for this purpose. However, the ACCC notes that the ABS is introducing a new standard (the Australian

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[26] Nextgen Networks Pty Ltd (Nextgen), *Response to ACCC Discussion Paper, Public Inquiry into Final Access Determination for the Domestic Transmission Capacity Service (DTCS)*, Public Submission, August 2011 (Nextgen, Public Submission to the DTCS FAD Discussion Paper), p.4.
[27] Nextgen Public Submission to the DTCS FAD Discussion Paper, p.4.
[28] Telstra Corporation Limited (Telstra), *Public Inquiry into a Final Access Determination for the Domestic Transmission Capacity Service, Telstra's response to the Commission's Discussion Paper – Price terms and conditions*, Public Submission, August 2011 (Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper), p.85, response to question 6.
[29] Nextgen, Public Submission in response to the DTCS FAD Discussion Paper, p.4
[30] Macquarie, Submission in response to the DTCS FAD Discussion Paper, p.5.
[31] Optus, Public Submission in response to the DTCS FAD Discussion Paper, p.12, paragraph 3.10.
[32] Telstra, Public Submission on price terms in response to the DTCS FAD Discussion Paper, p.85.
[33] Telstra Corporation Limited (Telstra), *Public Inquiry into a Final Access Determination for the Domestic Transmission Capacity Service, Telstra's response to the Public Submissions to the Final Access Determination Discussion* Paper, Public Submission, September 2011 (Telstra, Supplementary Public Submission to the DTCS FAD Discussion Paper), p.7. paragraphs 27-28.
[34] Tasmanian Government, *Tasmanian Government Submission –Domestic Transmission Capacity Service Final Access Determination*, Public Submission, August 2011(Tasmanian Government Submission to the DTCS FAD Discussion Paper), p.8. Aurora Energy (Aurora), *Response to ACCC Discussion Paper for public inquiry into a final access determination for the DTCS*, Confidential Submission, August 2011 (Confidential Submission to the DTCS FAD Discussion Paper), p.4.

Statistical Geography Standard) with revised definitions and categories for geographic data. The new arrangements also have implications for Local Government Area boundaries determined under previous ABS arrangements, including the 2006 Census. Given these changes, the ACCC does not consider ABS or Local Government Area boundaries are appropriate for the DTCS FAD at this time.

In the absence of appropriate ABS data, the capital city boundaries in the draft DTCS FAD are based on an examination of continuous urban development from the CBD ESAs in each city. The capital city boundaries are defined as the ESAs that fall (wholly or partially) within the distance limits noted below:

- Adelaide – a 25 km radius from a CBD ESA
- Brisbane – a 25 km radius from a CBD ESA
- Canberra – a 15 km radius from a CBD ESA
- Darwin – a 10 km radius from a CBD ESA
- Hobart – a 10 km radius from a CBD ESA
- Melbourne – a 45 km radius from the Kooyong ESA[35]
- Perth – a 30 km radius from a CBD ESA
- Sydney – a 50 km radius from a CBD ESA

The ACCC considers that the demarcation of capital city boundaries is in the LTIE as it reduces uncertainty about the classification of route types, promotes pricing certainty to both access seekers and access providers and may thereby facilitate investment in infrastructure.

A Route Category Workbook with maps of each capital city boundary and the list of ESAs within the boundaries above is available on the ACCC website at www.accc.gov.au.

In its submission, Telstra sought clarification over the ACCC's 50km radial distance boundary for Sydney and what implications this would have for the Sydney to Campbelltown route.[36] The ACCC's proposed capital city boundary definition for Sydney includes Campbelltown as a 'metropolitan' region. As such, routes between any ESA falling within the definition of Sydney and the Campbelltown ESA will be considered as a metropolitan route for pricing purposes, and subsequently not included within the scope of the declared service for pricing purposes (see section 2.1.3 below).

2.1.2 Darwin and Hobart

The DTCS declaration service description does not include transmission services to Darwin or Hobart as exempt inter-capital services.[37] Rather, these services have been

[35] Kooyong is slightly east of the Melbourne CBD. It has been taken as the centre to account for the development of Melbourne's eastern suburbs.
[36] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.38, paragraph 89.
[37] In the 2004 DTCS Declaration Inquiry, the ACCC considered transmission to Darwin and Hobart as a type of 'other transmission'.

considered as 'other' services, distinct from the exempt inter-capital services, in the context of the DTCS declaration. In general, submissions to the DTCS FAD Discussion Paper broadly agreed that transmission routes to Darwin and Hobart should continue to be declared routes, given their unique cost attributes and that competition on these routes is still to fully develop.[38]

For pricing purposes, the ACCC notes that transmission providers generally include Hobart and Darwin in their definitions of 'capital city'. Information from stakeholders indicates that, in practice, transmission services to Darwin and to Hobart are priced as both capital-regional services or as inter-capital services. There is a general level of agreement among stakeholders that the unique costs of providing services to Darwin (distance and low levels of demand) and Hobart (low demand and the need for an undersea cable) should be taken into account in any pricing analysis.[39]

The draft DTCS FAD includes price terms for transmission services between Darwin and other capital cities and between Melbourne and Hobart as regional services. This more accurately reflects the nature of the services now provided, which is consistent with a domestic benchmarking approach. The Melbourne-Hobart route is now supplemented by a second undersea cable link (BassLink) which, while limited in terms of available fibre pairs, is capable of providing alternative services between Melbourne and Hobart. Transmission services to Darwin have also been expanded by the Regional Backbone Blackspots Program (Nextgen) that has the potential to open up services to Darwin.

Telstra and Basslink, the primary providers of Bass Strait services, consider routes between Melbourne-Hobart as capital-regional transmission routes.[40] Basslink submits that the Melbourne-Hobart route cannot be compared to other exempt inter-capital routes, given its relatively small population size, low traffic volumes and low demand.[41] In addition to these attributes, Telstra submits that route length and customer access network (CAN) line to these areas are also key cost determinants for service provision on these routes.[42]

Other submissions agreed that there should be a level of upward adjustment for the undersea cable component for the Melbourne-Hobart route.[43] However AAPT is of the view that the undersea cable component is irrelevant to pricing considerations.[44]

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[38] AAPT, *Submission to DTCS FAD Discussion Paper*, p.10.Macquarie, *Submission to DTCS FAD Discussion Paper*, p.5.Optus, Pubilc Submission to DTCS FAD Discussion Paper, p.12. VHA, Submission to DTCS FAD Discussion Paper, p.6. Nextgen, Public Submission to DTCS FAD Discussion Paper, p.4, Tasmanian Government, Submission to DTCS FAD Discussion Paper, p.3, NBN Co, Submission to DTCS FAD Discussion Paper, p.5.

[39] Basslink Telecoms Pty Ltd (Basslink), Basslink DTCS Submission, Confidential Submission, August 2011 (Basslink, Confidential Submission to the DTCS FAD Discussion Paper), p.7. Macquarie, Submission to DTCS FAD Discussion Paper, p.5. VHA, Submission to DTCS FAD Discussion Paper, p.6. Nextgen, Public Submission to DTCS FAD Discussion Paper p.4.. Telstra, Submission on price terms to DTCS FAD Discussion Paper, pp40-42, paragraphs 105 – 117.

[40] Telstra, *Public Submission on price terms to DTCS FAD Discussion Paper*, p.40, paragraph 107. Basslink, Public Submission to DTCS FAD Discussion Paper, p.7.

[41] Basslink, Public Submission to the DTCS FAD Discussion Paper, p.11.

[42] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.40, paragraph 106.

[43] Nextgen, Public Submission to DTCS FAD Discussion Paper, p.4, Telstra Corporation Limited (Telstra), *Public Inquiry into a final access determination for the domestic transmission capacity service, Telstra's response to the Commission's Discussion Paper – price terms and conditions*,

In its submission, Telstra argued that compared to terrestrial cables, submarine cables are more expensive to manufacture and incur substantial costs in cable-laying and the deployment of cable maintenance ships.[45] Aurora submitted that the IAD pricing on the Melbourne-Hobart route is 'market leading' and will seriously impact the value chain for suppliers.[46] Telstra and the Tasmanian Government submit that below cost pricing on these routes will discourage network upgrades, encourage resale supply, reduce competition and potentially force providers to exit the market.[47]

The ACCC is aware that transmission routes to Darwin and Hobart exhibit different cost structures to those observed on other inter-capital routes and that it is in the LTIE to ensure that service providers are adequately compensated for their costs of service delivery on these routes. The ACCC considers that the distance variable in the Final Regression Model adequately accounts for Darwin's long distance from other capital cities.

In order to provide for the higher maintenance and repair costs of undersea cables for the Melbourne to Hobart service the ACCC proposes an uplift factor of 40 per cent to be added to results generated by the Final Regression Model for regional routes of the same length (radial distance). The uplift factor is based on a comparative analysis of market prices for regional routes of similar distance with prices for the Melbourne to Hobart service and only applies to the subsea component of a service between the mainland and Tasmania. The ACCC considers the differences in price between routes of similar length is indicative of the higher capital, maintenance and repair costs that have to be taken into account when determining a price for this route.

Further information about how the 40 per cent uplift is to be calculated is given in the Price Terms Chapter.

2.1.3 Regional area boundaries

The DTCS service description exempts a number of transmission services from capital cities to various regional centres, but does not define the boundaries of the regional areas.[48]

Submissions propose a range of approaches to defining regional centre boundaries, including using council maps, ABS population density measures, maps commonly available on the internet, Telstra ESAs and Telstra call collection areas (CCAs). Optus noted that a 'no detriment' principle should apply, whereby access seekers are no worse off under any reclassification of geographic boundaries.[49] Telstra disagreed

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Confidential Submission, August 2011 (Telstra, Confidential Submission on price terms to the DTCS FAD Discussion Paper), p.42, paragraph 113. Macquarie, Submission to DTCS FAD Discussion Paper, p.5.

[44] AAPT, Public Submission to the DTCS FAD Discussion Paper, p.10.

[45] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.42, paragraph 114.

[46] Aurora, Confidential Submission to the DTCS FAD Discussion Paper, p.3.

[47] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.43, paragraph 117. Tasmanian Government, Submission to the DTCS FAD Discussion Ppaer, p.3.

[48] The service description also does not define the boundaries of CBD or metropolitan areas, but it does set out exempt CBD and metropolitan ESAs.

[49] Optus, Public Submission to the DTCS FAD Discussion Paper, p. 12, paragraph 3.10.

with Optus' proposal and submitted that this principle will fail to adequately account for the interests of the service provider.[50]

AAPT submitted that only the ESA for the relevant town centre should be exempt because competition for DTCS is unlikely to have developed beyond this boundary.[51] Another view is that a narrow definition of regional boundaries risks ignoring the presence of competing fibre providers in regional locations.

As discussed earlier, the ACCC considers a regional area to be that outside the boundary of a capital city. In light of this, the ACCC has taken the view that regional centre boundaries for the purposes of benchmarking competitive prices in regional areas should be defined by the central ESA in that regional centre. Where there is no obvious central ESA in the regional centre, or where the urban development of that regional centre encompasses more than one ESA, the ACCC has used more than one ESA to define the regional centre.

The ACCC considers that defining regional area boundaries is in the LTIE as it promotes pricing certainty and thereby facilities efficient investment by service providers. In defining regional centre boundaries the ACCC has had regard to the level of competing fibre infrastructure, thereby also promoting the legitimate business interest of the service provider.

The 2010 DTCS declaration service description excludes the route between Campbelltown and Sydney. As noted above, the ACCC considers that the Campbelltown ESA now falls wholly within the boundary of the Sydney capital city boundary and is unlikely to be considered a capital-regional route. As such, all routes between Campbelltown and any other exempt ESA within Sydney (and vice versa) are considered to be exempt routes for pricing purposes.

The remaining regional centres on exempt routes are defined by the following ESAs for the purposes of pricing in the FAD:

[50] Telstra, Supplementary Public Submission to the DTCS FAD Discussion Paper, p. 7, paragraphs 27-28.
[51] AAPT, Public Submission to the DTCS FAD Discussion Paper, p. 11.

State	Regional centre	ESAs
NSW	Albury	Albury, Lavington, Wodonga
	Lismore	Lismore, Goonellabah
	Newcastle	Mayfield, Hamilton, Wolfe, New Lambton, Wallsend, Cardiff, Charlestown
	Grafton	Grafton
	Wollongong	Wollongong, Unanderra, Corrimal, Dapto
	Taree	Taree
	Dubbo	Dubbo
	Gosford	Gosford
	Coffs Harbour	Coffs Harbour
	Goulburn	Goulburn
Victoria	Ballarat	Ballarat
	Bendigo	Bendigo
	Geelong	Geelong, North Geelong
	Shepparton	Shepparton
Queensland	Toowoomba	Toowoomba, Withcott, Middle Ridge, Newtown, Drayton
	Gold Coast	Southport, Nerang, Merrimac, Arundel, Bundall Surfer's Paradise, Robina, Mudgeeraba
	Townsville	Townsville, Kirwan, Gulliver
	Rockhampton	Rockhampton, Frenchville
	Bundaberg	Bundaberg
	Maryborough	Maryborough
South Australia	Murray Bridge	Murray Bridge
	Port Augusta	Port Augusta

2.1.4 Tail-end services

The ACCC has traditionally regarded tail-end transmission services as transmission services provided within an ESA between a customer location and a POI on the access seeker's network.[52] Where Telstra provides a tail-end service, the transmission is between the customer location or POI and the local Telstra exchange.

The ACCC notes that in practice, there are two types of tail-end transmission service offered in the market:

1. a service between a wholesale customer point of presence (POP) and another wholesale customer POP (a POP-to-POP service), and
2. a service from a wholesale customer POP to an end-user location (a POP-to-end-user service).

In both cases, the POP may or may not be co-located in a Telstra exchange.[53] Telstra submits that POP-to-end-user services are generally longer in length, have lower utilisation and are therefore generally more expensive than a POP-to-POP service.[54]

The vast majority of tail-end services are provided by Telstra as part of a bundle with an inter-capital, metropolitan or regional service. Telstra submits that it is not technically, operationally or economically feasible to sell stand-alone CAN tail services and that disaggregating bundled prices creates risks of under or over recovery.[55] As such, its prices for inter-capital, metropolitan and regional routes include the tail-end component at each end of the service.

In determining a price for tail-end services, Telstra suggests that the ACCC develop a 'notional tail price' by taking the difference between a POP-to-end user service and a POP-to-POP service.[56] Optus submits that this pricing approach will still produce inflated tail-end prices, given that Telstra tail prices are inherently monopoly prices.[57] The ACCC is of the view that the current dataset available to the ACCC does not easily lend itself to adopting this pricing approach.

Submissions note that tail-end pricing should not be based on distance, while Optus notes that the majority of tail services it purchases from Telstra are located less than 2km from the local exchange in both metro and regional area.[58] There is also broad industry consensus that a separate price for stand-alone tail services could encourage market entry for tail-end services and encourage additional fibre build.

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[52] ACCC, *Telstra's Domestic Transmission Capacity Service exemption application Final Decision*, November 2008, p.15.
[53] An example of a POP-to-POP tail-end transmission service is Telstra's x162 service (with no inter exchange component). It runs from a wholesale customer POP to another wholesale customer POP, which may or may not be in a Telstra exchange. An example of a POP-to-end-user tail-end transmission service is Telstra's x163 service (with no inter-exchange component), which runs from a wholesale customer POP to an end-user.
[54] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.62, paragraph 188.
[55] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.64, paragraph 200.
[56] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.65, paragraph 204.
[57] Optus, Public Submission to the DTCS FAD Discussion Paper, pp.7-8, paragraph 2.20.
[58] Optus, Public Submission to the DTCS FAD Discussion Paper, p.9, paragraph 2.27.

While there may be economies of scale in bundling tail and trunk services, the ACCC is of the view that tail-end transmission services have enduring bottleneck characteristics. The provision of a separate tail-end price for stand-alone tail services is in the LTIE as it introduces pricing transparency for tail-services and may encourage more competitive service offerings in the market.

The ACCC notes that tail-end services are declared services. This means it is not possible to determine prices for tail-end services based on a benchmark of competitive tail-end services. The ACCC considers that the differences in nature and underlying costs of delivering tail-end services compared to other DTCS services do not warrant pricing for tail-end services to be set using an alternative approach to that used for other DTCS services. Given that tail end services are currently bundled with inter-exchange services, a benchmark approach will appropriately capture the tail component in the price.

The ACCC therefore proposes to use the metropolitan and regional prices from the final regression model to determine tail-end prices, assuming a tail distance of 2km. This approach to tail-end pricing maintains the benchmarking methodology by adopting competitive metropolitan and regional route pricing to price declared tail-end routes. Further, this pricing approach addresses the monopoly element of tail-end prices and does not discriminate between whether the tail service is a POP-to-POP service or a POP-to-end user service.

The different types of tail-end services delivered in the market will be distinguished based on the data rate of the service and the route category (metropolitan and regional). The ACCC proposes to use these parameters as inputs into the regression model to set the price for tail-end services.

The ACCC acknowledges views that the DTCS IAD prices for tail-end services did not always reflect market prices and may increase access seekers' costs if access providers charge for tail-end services separately and in addition to the charges for the other services that are part of the bundle (i.e. inter-capital, regional or metropolitan services).

It is not the ACCC's intention that prices for stand-alone tail-end services should create an incentive for service providers to unbundle tail-end services from bundled products and charge for each separately. This would be at odds with the DTCS service description which defines the DTCS as a point-to-point service.

Accordingly, the price terms in the DTCS FAD that apply to tail-end services only apply to tail-end services that are provided as stand alone services and not to tail-end services that are supplied in a bundle with other transmission services (e.g. inter-capital, metropolitan or regional services). The separate DTCS FAD price terms that apply to inter-capital, metropolitan and regional services will apply to those services, irrespective of whether they are bundled with a tail-end service.

This approach is consistent with the DTCS declaration service description which defines the DTCS as a point-to-point service rather than by its component parts.

2.2 Data rate

The DTCS declaration sets a minimum capacity of 2.048 Mbps or above which an access provider provides to itself or others.

There is general agreement among stakeholders that the ACCC should set prices for the capacities that are commonly available for transmission services. The majority of services are provided at 2Mbps and slightly higher – generally up to 155Mbps for Synchronous Digital Hierarchy (SDH) and 100Mbps for Ethernet services – with far fewer services currently offered at higher capacities, for example, 622Mbps or 1Gbps and above.

Macquarie and NBN Co submitted that the FAD should also price for higher bandwidths such as 1Gbps and 10Gbps to facilitate future data rate requirements for NBN services and NBN backhaul to points of interconnect.[59] NBN Co however noted that an extrapolation of a regression model beyond the historical range of services (i.e. high data rate services) may produce unrealistic results.[60] In determining prices for SDH transmission capacities of higher orders, Optus proposes that the ACCC apply a multiplier to the prices set for lower SDH capacities.[61]

The ACCC will be guided by the level of accuracy in the predictive capabilities of the regression model taking into account prediction intervals around the model's point predictions. Where these are reliable the ACCC proposes to use the model to predict prices for as high a range of capacities as possible.

Optus also proposed that the FAD price different capacities for each type of geographic route, while other submissions supported this and also submitted that capacities be priced according to particular network interfaces.[62] The ACCC considers that such an approach is unnecessary and may distort investment decisions by the service provider.

The ACCC notes that the IAD prices are based on an average of transmission pricing on various route types and capacities, based on the DTCS dataset available to it at that time. The ACCC has however updated this dataset and incorporated a 'data rate' variable in addition to other variables into the Final Regression Model, to capture the dynamic relationship between price and data rate.

The ACCC considers that setting regulated prices for commonly available capacities reflects current industry practice while accommodating the growing availability of higher data rate services in the transition to the National Broadband Network (NBN). This pricing approach will promote efficient entry of firms and competition in dependent markets by facilitating access to data rate levels that are ultimately sought and acquired by end-users.

[59] Macquarie, Submission to the DTCS FAD Discussion Paper, p. 7. NBN Co, Submission to the DTCS FAD Discussion Paper, p.5.
[60] NBN Co, Submission to the DTCS FAD Discussion Paper, p. 4.
[61] Optus, Public Submission to the DTCS FAD Discussion Paper, p.14.
[62] Optus, Public Submission to the DTCS FAD Discussion Paper, p.15.

2.3 Radial distance

Service providers use a number of methods to measure distance for the purposes of pricing transmission services: radial distance between the start (A-end) and end (B-end) points of a service and the length of 'specified' regional routes. Radial distance is commonly used to measure the straight line between the start and end points of a service. In the case of specified regional route pricing, distance is measured to a central point in a call charge area (CCA) for all services to any location in that CCA.

The ACCC notes that radial distance is widely used in the market and can be readily calculated using publicly available resources (for example Google Maps). It therefore provides a transparent measure of distance that can be readily implemented and applied in the determination of prices from the Final Regression Model.

Specified regional route pricing however uses an approach that averages distances for all locations within a CCA to a central charging point within the CCA. While this results in some pricing anomalies, it is a generally accepted charging method, at least for Telstra services. For example, a Telstra transmission service from Brisbane to Toowoomba (106kms) is charged at the same rate as a service from Brisbane to Roma (over 477 km), as the CCA charge point for both services is the same

Submissions were broadly supportive of a radial distance based approach to pricing transmission services. However Telstra and Nextgen both submitted that a radial distance approach understates the costs of providing services. Telstra submitted that radial distance measures significantly understate the real length of a route, but given that industry has used this as the basis for pricing, it is an appropriate pricing construct.[63] Nextgen proposed that the ACCC should consider actual path kilometres in order to reflect a service providers underlying actual cost of providing services. Nextgen noted that the service provider incurs the cost of operating the *entire* route/link and having capacities available at all points in order to deliver the service, rather than just the radial distance.[64]

The ACCC is of the view that a distance measure based on actual route length is complex and may introduce significant regulatory uncertainty and opportunities for gaming. The ACCC considers that while the radial distance approach used in the Final Regression Model is an estimate of actual route length, the simplicity and transparency of this method to pricing will promote regulatory certainty. Increased transparency and regulatory certainty is in the LTIE. It promotes the making of infrastructure use and investment decisions on the basis of known information. This provides parties with a sound basis for engaging in commercial negotiations and making decisions about whether to enter and compete in relevant downstream markets.

The ACCC has therefore used the radial distance between the A-end and B-end of a transmission service as the distance measure to determine FAD prices under the regression model.

[63] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.36, paragraph 80.
[64] Nextgen, Public Submission to the DTCS FAD Discussion Paper, p.5.

2.4 Quality of service

Service providers differ in the quality of service (QoS) they can provide. This is primarily due to different levels of network coverage, range of potential services and levels of availability and reliability. In submissions to the DTCS FAD discussion paper, only Telstra expressed views concerning quality of service.

Telstra argues transmission services are vary in terms of technology, protection, coverage, redundancy and support features, and that a 'one size fits all approach' to pricing is not in the LTIE and risks distorting innovation and investment.[65] Telstra argued that its superior network coverage and its numerous dedicated support services enables it to provide a higher quality of service to its customers.[66] Furthermore, transmission services offered by its competitors are more limited in terms of geographic path diversity, equipment redundancy and have higher repair and maintenance downtimes. Telstra argued that these firm-specific differences should be reflected in any benchmarking regression analysis. Examples of these differences include network size, choice of technologies, the customer mix, population density, the level of protection and quality of services, firm size and location of operation.[67]

The ACCC recognises there may be higher costs which are associated with providing different levels of quality of service and considers it appropriate to reflect these costs in the price terms of the draft DTCS FAD.

Using a factor to reflect a high quality of service will ensure that regulated prices account for the highest quality service and do not under-price a large proportion of current services and thereby discourage investment and innovation. Services which are characterised by lower quality features will be constrained by the regulated price and can compete in the market with lower prices to reflect the standard of the service being supplied. The ACCC therefore proposes to base the prices set for the DTCS FAD on the highest quality of service offered in the market.

On this basis, the draft DTCS FAD defines "Quality of service 1 (QOS 1)", which is a term used in the formula to determine prices, to mean the quality of service that is available using a transmission service that:

- is a Protected Service (see further under the chapter on protected services);
- is provided using a network that is capable of delivering the Service by means of more than two geographically diverse paths, and
- has an overall service reliability of 99.9 per cent.

The network coverage aspect refers to overall network capability, whereas a Protected Service reflects a level of redundancy that an Access Provider has contractually agreed to provide and therefore accounted for in the price of the service. The overall service reliability aspect is considered to be a well understood industry measure.

[65] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p. 4, paragraph v.
[66] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.51, paragraphs 147-149.
[67] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p. 22, paragraph 43g.

2.5 Protected services and unprotected services

The DTCS service description does not refer to protected or unprotected services. In the 2010 review of DTCS pricing, the ACCC adopted the preliminary view that transmission services are priced efficiently if they reflect a resilient network structure with redundant paths and that a pricing mechanism which encouraged investment in networks with ring or loop structures was desirable.[68]

The ACCC notes that protection is provided in a number of ways, including in the form of dual customer interfaces or equipment, diverse building entry points, diverse exchanges or facilities, diverse fibre strands (e.g. a 'folded loop' with separate fibre strands in the same bundle of cables in the same pits, pipes, ducts and cabinets), diverse geographic fibre paths (separate routes, pits, pipes, ducts and cabinets, e.g. a 'ring network' structure), diverse transmission media (e.g. fixed plus wireless, fibre plus microwave) and the purchase of unprotected services (to provide redundancy).

Submissions to the DTCS FAD Discussion Paper broadly agreed that protection is a relevant pricing variable, however a number of submitters sought further clarity on the definition of protection.[69] In general, it was considered that a premium of approximately 15-30 per cent is currently applied to protected transmission services. Telstra submitted that variability on the premium for protection depends on the route type. For example, inter-capital routes have a more extensive ring network architecture and a greater amount of geographic diversity in the inter-exchange network (IEN) compared with regional routes.[70]

Submissions generally agreed that there is no significant difference in protection between SDH and Ethernet network services. In contrast, VHA submitted that there are technical differences in the provision of protection for SDH and Ethernet interfaces which may result in different costs of supply between the network interfaces.[71]

Nextgen submitted that the ACCC should price inter-capital and regional routes as protected (but not geographically diverse) and metropolitan and tail-end services as unprotected and encourage parties to negotiate their own terms of protection above these base levels.[72] Telstra submitted that protection should be defined based on standard industry transmission practices and argued that SDH prices be based on the service being protected in the inter-exchange (IEN) and Ethernet prices be based on the service being unprotected in the IEN.[73]

NBN Co argued that unprotected services provide the smallest building block from which transmission networks are constructed, and therefore the DTCS FAD should be

[68] *ACCC Discussion Paper on Pricing the DTCS*, April 2010, page 10.
[69] Aurora, Confidential Submission to DTCS FAD Discussion Paper, p.4. Macquarie, Submission to DTCS FAD Discussion Paper, p.8. Nextgen, Public Submission to DTCS FAD Discussion Paper, p.7. VHA, Submission to DTCS FAD Discussion Paper, p.8. Telstra, Public Submission on price terms to DTCS FAD Discussion Paper, p.7
[70] Telstra, Supplementary Public Submission to the DTCS FAD Discussion Paper, p.10, paragraph 42b
[71] VHA, Submission to the DTCS FAD Discussion Paper, p. 8.
[72] Nextgen, Public Submission to the DTCS FAD Discussion Ppaer, p.8.
[73] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, , p.53-54, paragraph 161.

for unprotected services.[74] In contrast, Optus submitted that the regulated DTCS should include an element of redundancy given that most interexchange transmission services are sold as a protected service, although access seekers should be also able to buy an unprotected path separately.[75]

The ACCC remains of the view that transmission services are priced efficiently if they reflect a resilient network structure with redundant paths and that a pricing mechanism which encouraged investments in networks with ring structures was desirable.

Under this approach, a service is considered to be protected where it is provided with geographically diverse service paths – meaning it has more than one path between the A-end and B-end, and is unprotected where there is only one path between the A-end and B-end. The draft DTCS FAD therefore includes a definition of a "Protected Service" as a service where an Access Provider has contractually agreed to provide more than one geographically diverse path between the A-end and B-end. This is intended to capture services which an Access Provider has contractually agreed to provide with a level of geographically diverse path redundancy and consequently reflected this feature of the service in the price.

In pricing the DTCS as a protected and unprotected service (with the exception of tail end services which are only priced as unprotected services) the regression model reflects the manner in which transmission services are currently sold in the market.

The ACCC has chosen to account for the effects of protection through an explicit 'protection' term in the final regression model, given the statistical significance of this variable. Where an access provider can reasonably provide protection (in the form of geographic path diversity) to itself or others, the DTCS FAD price terms allow prices to be set for protected services. Where protection (in form of geographic path diversity) cannot reasonably be provided or is not desired, price terms allow prices to be set for unprotected services.

Capturing the effects of protection on pricing is in the LTIE, as it ensures that the service provider is adequately compensated for investing in network enhancements to ensure path protection and network resiliency is available and provides the incentives for efficient infrastructure investment in protection. This also ensures that end-users are also able to access services of varying quality including protected transmission services.

[74] NBN Co, Submission to the DTCS FAD Discussion Paper, p.5.
[75] Optus, Public Submission to the DTCS FAD Discussion Paper, p. 3, paragraph 1.4.

2.6 Network interfaces – Ethernet and SDH

The DTCS service description is technology neutral and applies to all transmission services regardless of the underlying network interface used, including Ethernet, Plesiochronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH) interface protocols.

Submissions to the DTCS FAD Discussion Paper noted that Ethernet and SDH services should be priced separately in the FAD as they have different cost structures and are at different levels of maturity in terms of their market development.[76] While Ethernet is an evolving service and is increasingly being sought by access seekers as a transmission delivery method, the vast majority of transmission services sold in the market are SDH based services.

Nextgen submitted that the network interface used on a transmission service may also depend on the route length or route type. Nextgen submitted that Ethernet does not include sufficient network management protocols for long distance management and is therefore commonly used for tail services while SDH is still the common interface for carrying regional services.[77]

Telstra submitted that although SDH is a mature technology, the ring based topology for SDH services means that network upgrades for SDH services are difficult and costly.[78] Telstra also argued that although the DTCS pricing data it has supplied to the ACCC is reflective of the current state of development in SDH and Ethernet markets, the data may not be representative of the future state of supply in Ethernet service.[79]

The ACCC understands that compared to Ethernet, SDH technology is more mature and is likely to have different levels of protection and different cost characteristics which are reflected in current prices. While the vast majority of transmission services are SDH, the ACCC expects future growth in transmission services to be Ethernet based, particularly for National Broadband Network backhaul services.

However, as the variable for network interface was found to be insignificant at the 5 per cent level it was not included in the Final Regression Model. Given both interface types cover a similar range of capacities the data analysis found little variation across the range of SDH and Ethernet prices. As such, the ACCC considers that separate pricing in the FAD for Ethernet and SDH services is not warranted.

[76] Optus, Public Submission to DTCS FAD Discussion Paper, p.16.VHA, Public Submission to DTCS FAD Discussion Paper, p.8. Telstra, Public Submission on price terms to DTCS FAD Discussion Paper, p.44. Basslink, Public Submission to DTCS FAD Discussion Paper, p.13.
[77] Nextgen, Public Submission, to the DTCS FAD Discussion Paper p.7.
[78] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.25, paragraph 57.
[79] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.25, paragraph 57.

2.7 Demand

The ACCC indicated in its DTCS FAD Discussion Paper that it is considering the inclusion of additional pricing variables such as demand in the Final Regression Model to allow the model to more accurately explain the variations in prices.

Submission to the DTCS FAD Discussion Paper indicated that while demand may be a factor in explaining the variations in price, it is likely to be captured through other variables such as route type. VHA agreed that demand is only relevant if economies of scale are significant and are not captured through another variable, however the economies of scale effect is likely to be captured through the variable for data rate.[80] AAPT submitted that demand should be a minor variable in any regression analysis and could be captured through population density.[81] Nextgen submitted that the regression model should account for demand given that the benchmarking methodology uses prices from competitive routes which are likely to have high levels of demand.[82] Nextgen proposed that demand be reflected through variables such as GNAFs and ABS statistics such as urban centre localities (UCL).

In taking into consideration the public submissions on this issue, the ACCC explored a number of demand metrics. While GNAFs may serve as a useful proxy for estimating demand, the ACCC is of the view that it does not reflect take-up levels or active services in operation and therefore may not reflect appropriate utilisation levels. The ACCC's analysis of the ABS UCL data and Australian population census data also indicates that UCLs do not correlate with current fibre transmission paths and therefore fails to explain demand relationships.

A number of alternative demand metrics were explored for the purpose of assessing their significance to the regression model. These metrics included:

- aggregated demand for DTCS on routes reported by the market to have DTCS
- average population density on routes reported to have DTCS
- the number of 'services in operation' as collected under the ACCC's Telstra customer access network record keeping rule.[83]

The ACCC considers that while it is in the LTIE for prices to take account of utilisation on particular routes and economies of scale so that service providers are adequately compensated for service provision, the analysis shows that demand is already factored into the prices negotiated in the competitive segments of the transmission market. The ACCC therefore considers it unnecessary to include a separate demand variable in the pricing approach. This assessment was also substantiated by the statistical analysis of the pricing data provided by industry.

[80] VHA, Submission to the DTCS FAD Discussion Paper, pp .4-5.
[81] AAPT, Public Submission to the DTCS FAD Discussion Paper, p.9.
[82] Nextgen, Public Submission on price terms to the DTCS FAD Discussion Paper, p.3.
[83] The ACCC considered other approaches to determine demand as proposed in the submissions, such as using GNAFs and ABS urban centre localities and related population statistics. However, preference was given to demand factors that explained higher levels of variability in the DTCS prices and for data that could be reliably refreshed for any future DTCS price revisions.

2.8 Connection charges

Unlike recurring monthly/annual charges for the DTCS, ACCC analysis indicates there is no significant relationship between connection charges and price. The ACCC has priced connection charges separately in the draft DTCS FAD and proposes to use the same approach for the final DTCS FAD.[84]

Submissions to the DTCS FAD Discussion Paper note the connection charges specified in the IAD are higher than current market prices.[85] Telstra however submitted that the connection charges specified in the IAD are broadly consistent with industry practice for a minimum 12 month contract term.[86]

Telstra, AAPT, Nextgen and Optus noted that parties are often offered discounts on connection charges when they enter into longer-term contracts. [87] Telstra further submitted that where the service term is three years or longer in duration, connection charges may even be waived by the supplier.[88] Telstra also submitted that the location of the service (metropolitan versus regional area) and bandwidth may also explain variations in connection charges.[89]

VHA argues that connection charges should be cost reflective and notes that there may be some variation in connection charges between Ethernet and SDH network interfaces.[90] AAPT submitted that connection charges should be benchmarked against the average pricing of efficient service providers in competitive areas.[91] Telstra however submitted that the FAD should adopt connection charges in the same manner as the IAD, in order to promote flexibility in commercial negotiations.[92]

The ACCC considers that the inclusion of connection charges in the DTCS FAD allows service providers to recover initial costs of connecting a service to a customer and helps reduce capital risks undertaken by the service provider. This promotes investment certainty as service providers are assured of recovering the costs of their efficiently incurred investments, this encourages efficient investment and promotes competition in relevant downstream markets. It also meets the legitimate business interests of the service provider by enabling them to recoup their up-front fixed costs of service provision. The ACCC appreciates that commercial connection charges may vary depending on the bargaining power of the negotiating parties, bundling effects, contract length or the level and/or degree of volume discounts. However it is not feasible for the ACCC to incorporate these effects into an FAD based on the available information and the many different ways that parties could legitimately negotiate connection charges.

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[85] AAPT, Public Submission to DTCS FAD Discussion Paper, p.14. Macquarie, Submission to DTCS FAD Discussion Paper, p.9.

[86] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.70, paragraph 219.

[87] Telstra, Public Submission on price terms to DTCS FAD Discussion Paper, p.70, paragraphs 219-221. AAPT, Public Submission to DTCS FAD Discussion Paper, p.8. Nextgen, Public Submission to DTCS FAD Discussion Paper, p.9. Optus, Public Submission to DTCS FAD Discussion Paper, p.18.

[88] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.70, paragraphs 219-221

[89] Telstra, Public Submission on price terms to DTCS FAD Discussion Paper, p.69, paragraph 215

[90] VHA, Submission to the DTCS FAD Discussion Paper, p.9.

[91] AAPT, Public Submission to the DTCS FAD Discussion Paper, p.14.

[92] Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, p.71, paragraph 223.

The ACCC recognises that connection charges are not the only non-recurring charge used in the market in relation to access to the DTCS. Other charges include charges for feasibility studies, special linkage charges and early cancellation charges. The nature of these charges varies considerably with circumstances. The ACCC considers any regulatory problems associated with these charges should be addressed on a case-by-case basis.

Moreover, the ACCC considers that the FAD is intended to address issues relating to basic access to a declared service. Should the ACCC come to the view that particular ancillary charges are unjustifiable and deter or deny access to the declared DTCS, the ACCC has regulatory options available to it including issuing a binding rule of conduct or vary the FAD.

3 Price Terms

In having regard to the issues raised by stakeholders discussed in the previous chapter, the ACCC has decided to pursue a differentiated approach to setting price terms for the DTCS. This differentiated approach is shaped by the information gathered and takes into account the various idiosyncrasies of the Australian DTCS market. Prices for the vast majority of the declared DTCS are set employing a pricing model based on advanced statistical analysis of a substantial data set obtained for the purposes of domestic benchmarking. The prices for the routes to Tasmania and Darwin, tail-end services and connection charges for the DTCS are determined separately with the intent to complement the pricing model.

3.1 Pricing model

For the purpose of determining prices for the DTCS FAD the ACCC developed a pricing model based on key variables such as data rate and distance. The ACCC engaged Data Analysis Australia Pty Ltd (DAA) to provide the statistical modelling. This resulted in three reports delivered by DAA to the ACCC.

DAA's first report

DAA's first report reviewed and examined the initial data-set obtained from various service providers. Exploratory data analysis techniques were used to identify the relationships between the annual charge and other service variables. This exploratory analysis suggested that log-transformations of the annual charge, data rate and distance variables are key components for the purposes of modelling DTCS prices.

A review of the ACCC's initial regression model which was based solely on these variables showed that such a model performs poorly for several data points and that the model could be improved by including further relevant explanatory variables.

The report recommended the development of a model based on linear regression, log-transformations of annual charges, distance and data rate variables and combinations of potential explanatory variables such as route category, interface type, provider and protection or redundancy status.

DAA's second report

The second report set out DAA's draft regression model based on the outcome from the exploratory data analysis. The model constructed annual charges for services on exempt routes which could then be applied to declared routes. This model took into account the effects of the following variables which were each found to be statistically significant:

- Data rate
- Distance
- Transmission categories
- Difference between providers
- Redundancy (protection)

- Network interfaces

Based on pricing data from seven transmission providers coefficients for each provider were calculated to adjust the prices depending on where an access provider's prices sat in the overall pricing range. Statistical measures for the predictive capabilities of the model indicated the predicted annual charge was estimated with high level of accuracy.

Telstra submitted that the approach of reversing the logarithm transformation for the model output by applying the exponential transformation ignored a well understood mathematical principle known as Jensen's Inequality.[93] In their submission Telstra suggested to rectify this by augmenting the regression equation by an estimated correction term or scaling parameter.

In relation to the predictive capabilities of the model Telstra noted that as a result of the nonlinear functions involved, the model would struggle to produce unbiased point predictions and suggested the use of prediction confidence intervals.

Although the draft regression model for exempt routes could be used to estimate annual charges for declared routes the ACCC decided to engage DAA to conduct further statistical analysis to consider the influence of the quality of service provided, the provider offering the service and the demand for the service. This analysis should also estimate a correction term for the back-transformation of the price prediction and determine how the pricing model could be used to develop prediction confidence intervals for the annual charges estimated for each type of service.

DAA's third report and Final Regression Model

Provided with an updated DTCS pricing data set, DAA carried out further exploratory data analysis to review their previous understanding of the relationships between potential price determinants. The initial assessment of the data identified the need for minor adjustments to the data set before any modelling work could commence. Specifically, price information for services with capacities less than 2Mbs had to be excluded from any further analysis as these capacities fall outside the DTCS service description.

In their modelling approach DAA used an automated model selection algorithm to generate a set of eligible pricing models. In this process the algorithm starts from a list of potential price determinants to then fit models to all possible combinations of these determinants and their pair-wise interactions. In order to assess the various models generated, the Bayesian Information Criterion was employed as a goodness-of-fit measure. This criterion attempts to strike a balance between improved model accuracy and growing complexity brought about by increases in the number of variables considered.

DAA provided two possible modelling scenarios for the ACCC to consider – a 'Service Provider' model and a 'Quality of Service' (QoS) model. The Service Provider model included a service provider specific term, data rate, distance,

[93] This inequality states that the convex transformation of a mean is less than or equal to the mean after convex transformation.

protection and several interaction terms to predict prices for the DTCS and fitted the data quite well. The QoS model option included a term for the quality of service, route category, data rate, distance, protection and various interaction terms and had a slightly less accurate fit than the service provider model.

In considering both models the ACCC has come to the view that the QoS model should be adopted as the Final Regression Model in the Draft DTCS FAD. Access providers' underlying transmission networks are likely to have differing transmission network topologies and coverage and will face different economic and commercial characteristics. If such firm specific heterogeneity is not accounted for, there is a significant risk that downside error will arise because prices will not be sufficient to recover costs or maintain investment incentives.

The ACCC proposes to base the prices for the DTCS FAD on the highest quality of service offered in the market, defined as QoS 1. Basing prices on the highest quality service ensures that regulated prices do not under-price current services which would discourage investment and innovation. Services which are characterised by lower quality features will be constrained by the regulated price and can compete in the market with lower prices to reflect the standard of the service being supplied. In this way the DTCS FAD sets a maximum level for access prices to the regulated service that can be used to inform commercial negotiations and serve as a safety net in the absence of commercial agreement.

Telstra, in its submission referred to the bias raised by Jensen's inequality. Jensen's inequality is a standard mathematical result that says the average of a logarithm transformed variable is always below the logarithm function applied at the average of the original variable.[94] To address this issue, DAA calculated a scaling parameter of 1.102 assuming a normally distributed error term.

The Final Regression Model proposed by the ACCC to set the majority of prices in the DTCS FAD takes the following form:

$$\textbf{Price} = \exp[\log_e(\textbf{Annual Charge})] \times 1.102$$

In the equation above, the term $\log_e(\textit{Annual Charge})$ is defined as set out below:

[94] Telstra, Review of Benchmarking activity Domestic Transmission Capacity Service by Professor Trevor Breusch, , p.28.

$$log_e(Annual\ Charge) =$$

$$7.682 + 0.623 \times log_e(Speed) + 0.199 \times log_e(Distance) + c + t$$

$$where: \quad c = \begin{cases} 0.078 & Protected\ Service \\ 0.000 & Unprotected\ Service \end{cases}; \ and$$

$$t = \begin{cases} 0.000, & Intercapital\ Routes \\ -0.081, & Metro\ Routes \\ 0.052, & Regional\ Routes \end{cases}$$

The proposed DTCS FAD includes a note stating that the "t" coefficients have been established based on a network having QOS 1 (Quality of Service 1).

In relation to the use of prediction intervals used in the regression analysis, the ACCC proposes to use the point predictions of the Final Regression Model to set the price for the DTCS. The ACCC considers this a more transparent approach with regard to setting regulated prices in the absence of an alternative method with a clear basis for identifying a point in a particular prediction interval.

The ACCC has prepared a draft DTCS pricing calculator implanting the formula above and is available on the ACCC website: www.accc.gov.au.

3.2 Prices for routes to Tasmania and Darwin

Routes to Tasmania

While other inter-capital routes have been exempt from declaration, services to Hobart remain declared. Some submissions from mainland service providers claim that, in practice, services to Hobart are generally regarded as inter-capital services. However the primary service providers of transmission services to Tasmania, Telstra and Basslink, submit that these services are more like regional services than inter-capital services because of their location, traffic density, demand and the unique need for submarine connections.

The ACCC agrees that services to Hobart should be regarded as regional services for the purposes of setting FAD prices. However, there is little data available to draw reliable conclusions or predict prices on routes with undersea cable components. While there is a limited range of services provided by a small number of service providers, the services provided are not readily comparable.

DAA compared pricing on undersea cable routes with mainland inter-capital (exempt and declared) routes. This showed that the average price for undersea routes is 39 per cent higher than the average price of competitive mainland inter-capital routes ($129,300 versus $93,300). The ACCC notes this is a basic price comparison that does not account for differences due to variables such as data rate or distance. In general, the undersea routes are shorter and have lower capacities than the mainland inter-capital routes.

Based on the available information and analysis, the ACCC is inclined to consider that an uplift of 40 per cent to the prices of services on routes from the mainland to Tasmania would reflect the higher cost of provisioning and maintaining the undersea cable link. The ACCC considers it appropriate to apply this uplift to a notional length of the subsea component of 300 km for any service between the mainland and Tasmania to reflect the radial distance of the longest link currently available. This intended to ensure that regulated prices capture the cost of the longest service currently provided between the mainland and Tasmania.[95]

For pricing purposes a service from any point A on the mainland to any point B in Tasmania the following steps need to be taken applying the pricing formula discussed in the previous section:

1. calculate the radial distances between A and B: dist(A,B);
2. calculate the proportional length of the subsea component:
   $ratio_{subsea}$ = 300 km / dist(A,B);
3. determine $Price_{A-B}$, the price for a regional service of length dist(A,B);
4. add to the price determined in step 3 an uplift of 40 per cent for the proportional length of the subsea cable:

   Final $Price_{A-B}$ = $Price_{A-B}$ + $Price_{A-B}$ x $ratio_{subsea}$ x 40 per cent

   = $Price_{A-B}$ x (1+ $ratio_{subsea}$ x 40 per cent).

The following example illustrates the four steps set out above:

Example: A protected 2Mbs service between Sydney and Hobart

A: Sydney

B: Hobart

1. radial distance Sydney – Hobart: 1,058 km;
2. ratio subsea component – overall length: 28.36 per cent;
3. price for a protected 2Mbs regional service of 1,058 km radial distance: $16,761;
4. Final $Price_{Sydney-Hobart}$ = $16,761 x (1 + 28.36% x 40 per cent) = $18,662.

[95] The ACCC notes that Basslink reports a length of 290 km for their link between the mainland and Tasmania.

Routes to Darwin

For Darwin, transmission services from other capital cities remain declared under the DTCS Declaration. The limited competition and long distance from other capital cities has resulted in relatively high prices compared to other inter-capital routes. While the Regional Backbone Blackspots Program (RBBP) will provide an alternative transmission link to Darwin this link remains to be fully established and currently provides limited services.

The long distance to Darwin, its isolation from other mainland capital cities, population density and level of transmission competition suggest that services to Darwin are more appropriately regarded as regional services for the purposes of the FAD. The ACCC proposes to price connections to Darwin as regional routes based on the assessment that the regression model's distance component adequately reflects the long distances from other capital cities to Darwin.

3.3 Prices for tail-end services

The ACCC proposes to set stand alone tail-end prices using the regression model with an average distance of 2km. This will provide a tail-end price for both regional and metropolitan areas for a range of capacities.

3.4 Connection charges

As discussed in chapter 2, the ACCC understands there is no significant relationship between connection charges and other factors that may be determinants of price. The ACCC has priced connection charges separately in the draft DTCS FAD and proposes to use the same approach and prices as in the DTCS IAD.

4 Non-price terms and conditions

The ACCC has decided to include a base set of non-price terms in the draft DTCS FAD which are broadly based on a number of relevant provisions in the ACCC *Model Non-Price Terms and Conditions Determination 2008* (Model Terms).

In its submission to the DTCS FAD Discussion Paper, Telstra has argued that there is no need for any non-price terms and conditions to be included in the FAD.[96] The ACCC has sought to balance the need for regulatory certainty with the need to provide appropriate flexibility for industry to negotiate commercial agreements on a case by case basis to reflect different circumstances.

The ACCC has therefore only included non-price terms that are relevant to the DTCS and terms that the ACCC considers are an important set of base terms in the event that commercial agreement cannot be reached. The ACCC has not included non-price terms where there is insufficient information at this time to establish provisions that are appropriate to serve as binding terms.[97] The ACCC considers this will provide a reasonable level of regulatory certainty about the minimum standards without being unnecessarily prescriptive.

The ACCC has included non-price terms and conditions covering the issues below:

- billing and notifications
- creditworthiness and security
- general dispute resolution procedures
- confidentiality provisions
- suspension and termination
- liability and indemnity[98]
- network upgrade and modernisation, and
- facilities access.

This is consistent with the ACCC's approach to non-price terms and conditions in final access determinations for other declared services.

The ACCC has included a clause to the facilities access schedule of the Draft FAD to specify that technical feasibility studies must be completed within a reasonable period of time (see Clause 9.29). The ACCC seeks views on the appropriate timeframe to include in this clause, having regard to the complexities of the process involved.

The ACCC's assessment of the terms against the legislative criteria in section 152BCA is set out in section 7 below.

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[96] Telstra Corporation Limited (Telstra), *Public Inquiry into a final access determination for the domestic transmission capacity service, Telstra's response to the Commission's Discussion Paper – Non-price terms and conditions*, August 2011 (Telstra, Submission on non-price terms and conditions to the DTCS FAD Discussion Paper), p.34.

[97] The ACCC has not included non-price terms and conditions dealing with changes to operating manuals, ordering and provisioning, communications with end-users and network modernisation.

[98] The DTCS IAD did not include liability provisions however the DTCS FAD Discussion paper noted that the relative bargaining positions of DTCS access seekers and access providers may warrant the inclusion of liability provisions in the DTCS FAD.

5 Commencement and expiry

Section 152BCF of the Act sets out the commencement and expiry rules for FADs. The CCA provides that an FAD should expire when the associated declaration expires unless there are circumstances that warrant a different date.[99] The related explanatory memorandum states that declarations and FADs should run in parallel to promote regulatory certainty and procedural efficiency as it enables the ACCC to conduct a declaration inquiry and FAD inquiry at the same time.

The ACCC proposes the FAD will commence on publication. This will automatically revoke the DTCS IAD which is due to expire the day before the DTCS FAD commences.

There is general support among submissions for the DTCS FAD commencing on publication and expiring when the DTCS Declaration expires on 31 March 2014.

However, the ACCC considers the DTCS FAD should expire after the DTCS Declaration expires because the scope of DTCS declaration will need to be determined in a declaration inquiry before the prices in exempt areas can be benchmarked using regression analysis for the purposes of setting prices in an FAD. The ACCC therefore considers the DTCS FAD should expire on 31 December 2014, nine months after the DTCS Declaration is due to expire.

If DTCS prices change significantly to affect the proper functioning of the FAD, the ACCC has the power to intervene by conducting a variation inquiry or issuing a binding rule of conduct in the interim if there is an urgent need for regulatory intervention.[100]

[99] Section 152BCF(6) of the CCA
[100] ss.152BD and 152BDC of the CCA

6 Assessment of the pricing approach against the subsection 152BCA(1) criteria

6.1 LTIE

Section 152AB(1) of the Act notes in determining whether a thing promotes the LTIE regard must be had to the objectives of:

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

6.1.1 Promoting competition

In assessing the price terms of the draft FAD against this criterion, the ACCC has considered the relevant markets for this service, and for services supplied by means of this service, and determined whether the price terms remove obstacles for end-users gaining access to telecommunication services.[101]

In September 2010, the ACCC released its final report on varying the DTCS declaration - *An ACCC Final Report on reviewing the declaration of the domestic transmission capacity service*. The ACCC concluded that the relevant downstream markets for the declared DTCS include data services, mobile (voice and data) services and general communications services delivered over transmission networks including national long distance calls, international calls and IP-related markets. The ACCC is of the view that these markets continue to be the relevant markets for the supply of the declared DTCS.

In determining the price terms of access for the draft FAD, the ACCC has considered transmission prices that are being offered in the undeclared (i.e. exempted) ESAs and undeclared transmission routes. Since the DTCS was first deemed a declared service in 1997, the ACCC has successively carved out of the declaration those ESAs for which the transmission service has been deemed to be competitive. The ACCC has removed regulation on most inter-capital transmission routes, 23 capital-regional ESAs, transmission between almost all CBD ESAs and between more than half the metropolitan ESAs. The ACCC regards transmission routes that are not subject to regulation as relatively mature markets served by a number of service providers.

The ACCC considers the prices on exempt routes are generally competitive and are closer to efficient costs including a component for normal profits (normal returns on investment) than the prices of comparable services on declared routes. Basing price terms and the structure of prices in the draft FAD on currently prevailing prices for the exempt routes is considered likely to lower the cost for access seekers of obtaining regulated transmission services, thereby encouraging new market entry and lower costs to be passed on to downstream markets.

[101] See subsection 152AB(4) of the Act.

This is expected to remove the obstacle of high prices (above-cost) of access to essential backhaul services which is a cost saving that access seekers can pass on to downstream service providers and end-users of telephony, broadband and other communication services served by the declared routes. The ACCC has therefore used pricing information from competitive routes as a useful basis for determining prices and price structures on non-competitive routes, through a domestic benchmarking approach.

Using a domestic benchmarking approach, the ACCC has developed a regression model to estimate prices that are likely to exist if there is effective competition in the supply of the DTCS in declared areas. The ACCC considers these prices are closer to efficient costs than those charged for DTCS in uncompetitive areas. The Final Regression Model captures the key determinants of the price of DTCS when provided on a competitive basis, including distance, data rate, protection and route category. The explanatory variables and the interaction terms of the model capture the complexity of the relationships between different variables and price and the complexity of the underlying infrastructure and the way different services are sold.

The ACCC considers that the price terms of the draft FAD, as estimated through the model, are a closer approximation of the efficient cost of supply than what is currently charged on many declared transmission routes. This enables current and new service competitors to access a range of transmission services at different levels of quality and at reasonable prices, thereby encouraging competition in markets which would otherwise not be competitive. The resulting increase in competition would be likely to also remove obstacles to end-users gaining access to telecommunication services.

The draft DTCS FAD aims to provide a regulatory price 'cap' for the declared DTCS. That is, the price terms intend to set a maximum price for the DTCS, while recognising that access agreements (to the extent of any inconsistency with the FAD) will prevail over the terms of an FAD. As such, the ACCC considers that the price terms of the FAD will be used as a tool by industry to guide commercial negotiations. The ACCC is of the view that the price terms of the FAD will promote competition by enabling industry to commercially negotiate lower DTCS access charges for a range of transmission services at the highest quality of service.

Through the draft FAD, the ACCC has also set a price structure that enables competitors to purchase bundled and standalone products, such as the declared tail-end service. The ACCC considers that the structure of the draft DTCS price terms will encourage competition in different DTCS market segments, by allowing competitors and new market entrants greater flexibility over how they offer their services.

The ACCC considers that that the price terms and the structure of prices in the draft FAD lower the cost of transmission services, thereby encouraging new market entry and lower costs to be passed on to downstream markets. This serves to remove obstacles to end-users gaining access to telephony, broadband and other communication services in downstream markets.

6.1.2 Any-to-any connectivity

In considering this criterion the ACCC has assessed whether the price terms in the FAD remove obstacles of achieving any-to-any connectivity, as defined by subsection 152AB(8) of the Act.

Any-to-any connectivity is achieved only if each end-user is able to communicate with each other end-user who is supplied with the same service or a similar service. This must be the case whether or not the end-users are connected to the same telecommunication network.[102]

The ACCC considers that price terms that closely reflect the efficient cost of supplying the service will remove price obstacles to access seekers seeking any-to-any connectivity for voice and data services that use underlying transmission networks.

This may help to improve the reliability of transmission services because lower access prices will allow new competitors to enter the market. It will also create the potential for existing providers to incorporate resilience into their networks by lowering the costs of an alternative transmission service to back-up existing services. These lower access prices should also provide enhanced connectivity between networks and encourage a greater use of the underlying transmission service for the provision of both wholesale and retail services.

The ACCC is of the view that the price terms specified in the Draft DTCS FAD do not create obstacles for the achievement of any-to-any connectivity and will help to ensure that end-users are able to communicate with other end-users who are supplied with the service.

6.1.3 Economically efficient use of and investment in infrastructure

Efficient use

The ACCC considers that the price terms of the draft DTCS FAD promote efficient use of existing infrastructure. The price terms are low enough to promote entry into uncompetitive markets and promote efficient use of existing transmission infrastructure and high enough to encourage incentives for efficient investment.

The price terms of the draft DTCS FAD are based on the Final Regression Model, which draws on competitive prices from exempt routes to price declared routes. The ACCC considers that transmission prices on exempt routes are relatively mature, competitive and reflect prices which allow cost recovery and a normal return on investment.

The Final Regression Model also aims to estimate the efficient cost of service provision by incorporating key explanatory variables which affect price - distance, data rate, protection and route type. These variables taken together, more closely explain how the DTCS is efficiently priced and sold in the market. Access charges which are cost reflective encourage efficient market entry and competition in the supply of services in dependent markets. New market entry and the subsequent increase in competition will promote dynamic and productive efficiency, as firms are encouraged to innovate, improve their productivity, minimise costs of production and increase their range and quality of services.

Cost reflective access charges also allow the access provider to recoup their efficiently incurred costs, including a commercial return on investment, thereby encouraging efficient use of infrastructure and promoting allocative efficiency. By

[102] Subsection 152AB(8) of the Act.

sending appropriate cost-base pricing signals to users, or potential users of the DTCS, this will help to prevent over or under use of existing infrastructure by those users.

Currently, access providers with less extensive transmission networks share assets and infrastructure in order to provide point to point wholesale transmission services and related retail services. The ACCC considers that there still remains a degree of spare capacity in existing transmission networks and that lower DTCS prices, as estimated by the model, are therefore likely to promote greater use of currently underutilised capacity in declared areas by giving access seekers greater incentives to purchase access to that capacity.

The regulatory certainty provided by the FAD also promotes efficient use of infrastructure, as it promotes certainty around how the declared DTCS will be regulated and priced.

The ACCC also considers that the flexible structure of the draft DTCS FAD price terms (including the potential unbundling of tail-end services) will serve to open up different segments of transmission markets and enable access to previously unused transmission infrastructure.

The ACCC considers it likely therefore that the draft DTCS FAD price terms will encourage appropriate buy (purchase more network links) decisions in transmission markets and thereby promote increased efficient use of infrastructure.

Efficient investment

The ACCC considers that the price terms contained in the draft DTCS FAD encourage efficient investment in infrastructure.

The ACCC notes the range of transmission networks acquired or rolled-out by different access providers. The ACCC is of the view that current market prices reflect, amongst other things, different access provider cost structures when providing a return on investment. In addition to using current market prices on competitive routes as a proxy for non-competitive routes, the Final Regression Model also takes into account the level of protection, route type, distance and data rate for a service of the highest quality. The ACCC considers that such measures provide for a price which is closer to efficient cost than the prices of comparable services in competitive areas.

In relation to the highest quality of service, the ACCC recognises higher qualities of service involve higher costs and considers it appropriate to reflect these costs in the price terms of the draft DTCS FAD. Using a factor to reflect a high quality of service is intended to ensure that regulated prices account for the highest quality service available in the market without under-pricing such services, and thereby discourage investment and innovation. Services provided with lower quality features and therefore a lower cost base can compete in the market with lower prices to reflect the standard of the service being supplied.

Protection in the form of geographic path protection is another aspect incorporated in the pricing model which encourages efficient investment. The ACCC remains of the view that transmission services are priced efficiently if they reflect a resilient network structure with redundant paths and that a pricing mechanism which encourages investments in networks with ring structures is desirable. Capturing the effects of protection on pricing is in the LTIE because it ensures the service provider is

compensated for investments in geographically diverse infrastructure to ensure protection is available.

Setting price terms for the draft FAD that are cost reflective ensures that access providers can recoup efficiently incurred costs and earn a commercial return on investment. This provides sufficient (and appropriate) incentives for efficient investment in transmission infrastructure and encourages dynamic efficiency in the market.

The ACCC is of the view that the legitimate commercial interests of access providers, including their ability to exploit economies of scale, are best served by prices which are close to the cost of supply. This has been achieved by developing a Final Regression Model which provides an estimate for the efficient cost of supply. While the ACCC is cognisant of the high level of fixed and sunk costs (and low incremental costs) associated with the rolling out of transmission networks, the ACCC considers that the risks associated in making these investments are mitigated by regulated prices which enable a return on the efficient costs of investment (inclusive of a normal return on investment).

6.1.4 The ACCC's overall conclusion on whether the draft DTCS FAD price terms are in the LTIE

The ACCC considers that the draft DTCS FAD price terms are in the LTIE as they serve to ensure that regulation of the DTCS encourages competition in relevant DTCS markets, promotes any-to-any connectivity between end-users and encourages efficient use, and investment in, infrastructure used to provide the DTCS (and related downstream markets).

The ACCC considers that the structure of the draft DTCS FAD price terms will promote competition in DTCS markets by tailoring prices to the requirements of different market needs. The ACCC also considers that the price terms will promote competition through prices which are close to the cost of supply of the highest quality of service, having regard to the key determinants of price.

The explanatory variables captured in the Final Regression Model help to promote the LTIE, as they capture the complexity of the way in which the DTCS is priced and sold in the market. In determining cost reflective prices through the model, this reduces the risk of monopoly profits which may have been previously charged.

The ACCC considers that price terms which are flexible and more closely reflect the efficient cost of supply will encourage efficient market entry, promote competition and encourage the economically efficient use of and investment in infrastructure. Efficient market entry will also serve to encourage any-to-any connectivity between end-users in relation to voice and data services which use transmission services.

The ACCC notes that the draft DTCS FAD price terms are based on a dataset which only uses contract prices from competitive routes and which is more extensive and robust.

The ACCC notes the submissions from stakeholders over the importance of sending appropriate build-buy signals and access provider concerns over regulated pricing

which do not enable cost recovery or returns on investment.[103] The ACCC considers that the robustness of the final data set and Final Regression Model enables the model to estimate prices which are close to the cost of supply. This will help ensure cost recovery and reasonable returns on investment. As such, the proposed regulated prices are likely to create an environment which not only encourages efficiencies in the production of transmission services, but also provide the right incentives for both efficient investment in and efficient use of existing transmission infrastructure.

Further, the ACCC also considers that the draft DTCS FAD will provide stakeholders with increased regulatory certainty and that this will assist in business decisions over whether to build or buy transmission services, and whether to enter relevant downstream markets.

6.2 Legitimate business interests and investment in facilities

The ACCC considers that the legitimate business interests pertaining to the prices set in the FAD relate to an access provider's interest in earning a normal commercial return on its investments having regard to the relevant risks of investment.[104] In considering the legitimate business interests of the access provider the ACCC has had regard to what it sees as necessary to maintain those interests.

Since 1997 when regulation of the DTCS market commenced, the ACCC has deregulated transmission markets on certain competitive DTCS routes. The ACCC considers that prices for the DTCS on exempt routes are competitive market prices.[105] Further, the ACCC has observed continued investments in infrastructure facilities on those exempt routes.

The ACCC considers that the prices that business set on exempt routes are at a level that reflects access providers' interest in earning a normal commercial return while allowing for recovery of costs on any investments made. The ACCC considers that prices that are set in the declared uncompetitive DTCS market may be characterised by monopoly or duopoly rents. Hence, the ACCC has not used prices associated with declared DTCS routes to determine prices which reflect legitimate business interests.

The ACCC is aware that investment in different transmission markets may involve different levels of risk, and therefore prices differ depending on factors related to the investment decision. The ACCC's pricing approach takes into account a number of factors that bear on the risk of investment, therefore the ACCC considers that the price terms adequately account for those risks.

The ACCC notes the submissions made by the Tasmanian State Government, Aurora Energy and Basslink Telecoms in relation to the Hobart to Melbourne route.[106] The ACCC recognises that the cost of investment and the risks of operation of DTCS on a route that contains a significant subsea proportion of fibre is not easily comparable to

[103] Nextgen Networks Pty Ltd (Nextgen), *Response to ACCC Discussion Paper, Public Inquiry into Final Access Determination for the Domestic Transmission Capacity Service (DTCS),* Confidential Submission, August 2011, p.13. Telstra, Public Submission on price terms to the DTCS FAD Discussion Paper, pp.77-79.

[104] ACCC, *Resolution of telecommunication access disputes – a guide*, March 2004 (Revised), p.56.
[105] ACCC, *Final report on reviewing the declaration of the DTCS*, March 2009, Appendix 1.
[106] Tasmanian Government, *Submission to DTCS FAD Discussion Paper*, pp. 2-3; Basslink, Public Submission to the DTCS FAD Discussion Paper, p5.

prices on routes that are exempt and that are of a terrestrial nature. In its approach to determining prices for the Melbourne to Hobart route, the ACCC has taken an approach that aims to reflect the higher costs associated with the use of an undersea cable.

The ACCC considers that the prices set in the DTCS FAD are likely to promote the legitimate business interests of users and suppliers of DTCS related carriage services and telecommunications facilities.

6.3 Interests of all persons who have rights to use the service

The ACCC considers that this criterion requires the ACCC to have regard to the interests of access seekers.

Transmission networks form a key input for downstream services including voice and broadband internet services, available over both fixed and wireless platforms. The recent growth in broadband and mobile data uptake has focussed attention on the availability and cost of transmission services. Access seekers have indicated that the lack of access to competitively priced transmission has inhibited the rollout of competitive high-data rate retail services in regional areas.

To address access seeker and industry concerns, the ACCC has adopted a benchmarking approach to setting prices for the DTCS using up-to-date DTCS pricing information sourced from competitive markets. The ACCC considers that the draft DTCS FAD price terms are closer to the efficient cost of supply of the DTCS and will therefore encourage access seeker take up of transmission services in order to effectively compete in downstream retail markets.

The ACCC notes Optus' submission that the ACCC should not set terms which are detrimental to access seekers and that as a rule proposed FAD prices should be 20 per cent lower than those in contracts involving Telstra in order to counterbalance Telstra's current market power. Optus also submits that international benchmarking be used as a filter to check the proposed regulated prices.[107]

The ACCC notes that regression analysis of transmission pricing shows that prices on competitive routes are considerably lower than those on routes with less competition. The ACCC considers that a reduction of 20 per cent is unnecessary given that the draft DTCS FAD price terms are based on prices in competitive areas and on competitive routes where there are at least two other competitors present in the market apart from the incumbent.

The ACCC considers the price terms provide greater transparency and certainty about the key determinates of prices. This transparency benefits access seekers by allowing more informed investment decisions.

The ACCC considers that the structure of the draft DTCS FAD price terms enable access to regulated prices in accordance with access seeker needs. For instance, access seekers may access regulated pricing for services on a particular geographic route and with a particular data rate, distance, level of protection and quality of service.

[107] Optus, Public Submission to the DTCS FAD Discussion Paper, pp.4-5.

In relation to the different capacities at which the DTCS may be purchased, the ACCC has sought to reflect the prices of the most common capacities provided in the market. The ACCC notes submissions which suggest that the FAD price terms should not apply to higher data rate services above those commonly sold for each type of transmissions service. The ACCC has addressed these concerns by setting a cap on the inputs for data rate and distance which reflect the most commonly provided services in the market.

The draft DTCS FAD price terms also offer access seekers the choice to purchase stand-alone tail-end services or metropolitan, inter-capital and regional routes with a tail-end component.

The ACCC agrees with the submissions which suggest that pricing of tail-end services separately will serve to stimulate competition in different segments of the transmission market even though current practice is for tail-end services to be bundled with other transmission routes.

The ACCC considers that by pricing stand-alone tail-end services separately, the draft DTCS FAD price terms allow service providers to unbundle metropolitan, inter-capital and regional routes from tail-end services. The unbundling of services is likely to encourage competition in these markets and offer more choice to access seekers should they wish to purchase different types of services from different providers.

The ACCC has, in recognition of the efficiencies which may be gained from the bundling of services, also provided regulated pricing of metropolitan, inter-capital and regional routes with a tail-end component on the basis that the interests of access seekers as best served by price terms which are tailored to their needs. This means the prices of metropolitan, inter-capital and regional services include the price of tail-end services.

The ACCC does not intend that tail-end services must be unbundled from other services or that the separate prices for tail-end services be added on to the prices of metropolitan, inter-capital and regional services. The draft DTCS FAD prices for tail-end services apply only to tail-end services that are sold and acquired on a stand alone basis.

Finally, the ACCC has provided clarification on the definition of geographic boundaries in the context of route categories to further increase pricing transparency and certainty for access seekers and providers.

6.4 Direct costs of providing access to the declared service

The direct costs of providing access to a declared service encompass those costs that are necessarily incurred (or caused) by the provision of access. In this context the phrase ‘direct costs’ is interpreted to mean that an access price should cover the direct incremental costs incurred in providing access including contribution for indirect costs, but not compensation for loss of any ‘monopoly profits’ that occur as a result of increased competition.[108]

The ACCC recognises the need to exercise care about its assessment of costs, given

[108] See for example, *Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill* 1996, p. 44.

the limited direct cost information available on specific market based DTCS pricing points. The ACCC considers that the prices set by the market allow efficient access providers to recoup the direct costs incurred by the provision of access, even though direct costs may be allocated across a number services provided by the access provider. Therefore in using the market based prices on competitive exempt routes, the ACCC considers that in general, the access provider will be able to recoup the direct costs of providing access to the declared DTCS service.

6.5 The value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC stated in the 1997 Access Pricing Principles that if an access seeker enhances the facility to provide the required services, the access provider should not attempt to recover any costs related to this enhancement for themselves. Equally, if an access provider must enhance a facility to provide the service, it is legitimate for the access provider to incorporate some proportion of the cost of the doing so in the access price.[109]

In its submission to the DTCS FAD public inquiry, Telstra suggested that this criterion is relevant to any proposed terms and conditions which would require Telstra to make changes to its IT systems and otherwise, at significant cost, enhance the capability of its facilities in order to comply.[110] However, Telstra did not specify any particular examples of where this would be required.

The ACCC considers that significant extensions or enhancements of capability will not be required in order to enable the DTCS service. The ACCC has not received any comments in the submissions to the draft FAD that suggest significant extensions or enhancements would be necessary. Therefore, this criterion is not considered to be relevant in the context of setting regulated prices for the declared DTCS.

6.6 Safety and reliability requirements

The ACCC considers that this criterion requires that terms of access should not compromise the safety or reliability of carriage services and associated networks or facilities. The ACCC has previously stated in the context of its model non-price terms and conditions that terms and conditions should reflect safe and reliable operations and should not require work practices that would be likely to compromise safety or reliability.[111]

The ACCC is of the view that the regulated price for the DTCS will not deter safe and reliable operations. The regulated price is based on market prices that take into account the costs associated with ensuring appropriate safety and reliability standards. In setting the price at a level that reflects these costs, access providers are able to undertake the required operational and technical expenditure to ensure safe and reliable operations.

In its submission to the DTCS FAD public inquiry, Telstra asserted that access providers need to recover their costs through access pricing in order to have sufficient

[109] 1997 Access Pricing Principles, p. 11.
[110] Telstra, Telstra's *response to the Commission's Discussion paper – Price terms and conditions*, Public submission, 29 August 2011, p.80.
[111] ACCC, *Final determination – Model Non-price Terms and Conditions*, November 2008, p. 8.

funds available to maintain safe and reliable services. In the case of the DTCS, Telstra suggested that this includes the cost of redundancy and protection to ensure reliable transmission services and to minimise disruptions to the provision of carriage services that rely on DTCS backhaul.[112]

The regression model used by the ACCC to determine the regulated prices takes into account differences in protection on certain routes. By capturing the effects of protection on pricing, the service provider is adequately compensated for investing in network enhancements to ensure protection is available and is provided with the incentives for efficient investment in protection. This enhanced protection will contribute to the reliable operation of the network.

Therefore, the ACCC considers that in determining the FAD it has had appropriate regard to the operational and technical requirements necessary for the safe and reliable operation of carriage services, telecommunications networks or facilities. The regulated prices set by the ACCC are not considered to lead to work practices that would be likely to compromise safety or reliability.

6.7 Economically efficient operation of a carriage service, a telecommunications network or a facility

The ACCC's *Access Dispute Guidelines* note that the phrase 'economically efficient operation' embodies the concept of economic efficiency as discussed earlier under the LTIE. This calls for a consideration of productive, allocative and dynamic efficiency. It would not appear to be limited to the operation of carriage services, networks and facilities by the access provider supplying the declared service but would seem to include those operated by others (for example, service providers using the declared service).[113]

A consideration of the productive, allocative and dynamic efficiencies in relation to the DTCS market is set out in the section that relates to the LTIE.

The methodology employed by the ACCC to determine prices for the DTCS FAD is underpinned by the assumption that prices are based on prices in competitive markets for the DTCS that reflect a higher level of economic efficiency than those found in declared DTCS markets with monopolistic pricing characteristics. Accordingly, the ACCC considers that the price terms set in the DTCS FAD promote the economically efficient operation of carriage services provided by access providers as well as those operated by access seekers using the DTCS to supply downstream services.

In addition, the way in which regulated prices for the DTCS are set accounts for the levels of investment required to ensure that the DTCS operates at an economically efficient level. For instance, the prices the ACCC have used are based on competitive market prices that reflect levels that encourage efficient investment in and the operation of the DTCS. Further, the regulated prices are not set too high so as to encourage unnecessary duplication of DTCS infrastructure. The ACCC therefore considers that the prices set in the DTCS FAD are likely to promote the economically efficient operation of carriage services and telecommunications facilities.

[112] Telstra, *Telstra's response to the Commission's Discussion paper – Price terms and conditions*, public submission, 29 August 2011, p.80.
[113] ACCC, *Access Dispute Guidelines*, p. 57.

7 Assessment of the non-price terms and conditions against the subsection 152BCA(1) criteria

As indicated above, the ACCC has decided to include in the draft FAD non-price terms and conditions covering the issues identified below:

- Billing and notifications
- Creditworthiness and security
- General dispute resolution procedures
- Confidentiality provisions
- Suspension and termination
- liability and indemnity[114]
- network upgrade and modernisation, and
- facilities access.

The ACCC has considered the inclusion of these non-price terms and conditions against the statutory criteria in subsection 152BCA(1) of the CCA and has set out its views in the sections below.

In determining non-price terms and conditions for inclusion in the draft FAD, the ACCC has included terms which are relevant and appropriate to the DTCS and are consistent with similar terms for other declared services. Since the release of the IAD, the ACCC has also implemented drafting changes to the non-price terms and conditions of the FAD, to improve the clarity and interpretation of these schedules by industry.

Schedule 2 – Billing and notifications

The terms regarding Billing and Notifications are set out in Schedule 2 of the draft FAD. These terms concern how an access provider may bill for services and sets out billing dispute procedures.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has considered whether the terms and conditions in Schedule 2 of the draft FAD will promote the LTIE. The ACCC has formed the view that the terms and conditions set out in the schedule will promote competition in markets relevant for the DTCS.

The terms and conditions set out in Schedule 2 of the draft FAD specify the timeframes for providing invoices and making payments for the DTCS provided, thereby promote certainty regarding these transactions. This provides assurance as to how the costs of investment will ultimately be recouped and lowers the risk of investment. This in turn promotes the economically efficient investment in

[114] The DTCS IAD did not include liability provisions however the DTCS FAD Discussion paper noted that the relative bargaining positions of DTCS access seekers and access providers may warrant the inclusion of liability provisions in the DTCS FAD.

infrastructure by which listed services are supplied, and any other infrastructure by which listed services are capable of being supplied.

Telstra submits that this schedule should be removed from the FAD.[115] The ACCC considers it important to include a billing and notification schedule in the DTCS FAD to minimise capital risks and encourage efficient investment in infrastructure. The ACCC considers that the amendments to this schedule, as proposed by Nextgen and Telstra are unnecessary and are not in the LTIE.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has balanced the legitimate business interests of the access provider with other competing considerations under subsection 152BCA(1) of the CCA. The ACCC considers that the terms and conditions in Schedule 2 of the draft FAD allow the access providers to earn a normal return on their investment, having regard to the relevant risks involved. For example, the schedule stipulates the timeframe within which an invoice is payable to the access provider, which facilitates timely recovery of payment for services provided. This consequently promotes certainty and encourages efficient investment in the declared service.

The terms and conditions also set a timeframe in which a billing dispute notice may be given to an access provider, and a process whereby a billing dispute can be escalated. Telstra submits that clause 2.7 of this schedule should be amended to enable access providers to escalate Billing Disputes after a period of five Business Days, rather than 20 Business Days.[116] Telstra submits that such an amendment will encourage faster resolution processes. The ACCC considers that this would fail to balance the legitimate business interests of access providers with other persons who have the right to use the service. The ACCC is of the view that a 20 Business Day timeframe for escalating disputes appropriately balances the interests of all parties.

Telstra requests that clause 2.31 to this schedule be deleted, because its consequences are disproportionate to the error that it is intended to discourage and fails to recognise that such an error may be unintentional.[117] The ACCC recognises that the intended effect of clause 2.31 is to deter incorrect billing by the access provider. However the ACCC admits that the consequences of this clause may be disproportionate to the error it is intended to deter, particularly where the error is unintended. The ACCC therefore considers that removing this clause is in the legitimate business interests of the service provider. Further, it is the ACCC's view that clause 2.30 adequately incentivises the access provider to provide accurate billing information.

The ACCC considers that an access provider's legitimate business interests will benefit from the certainty of clear and timely billing dispute resolution processes.

[115] Telstra, Submission on non-price terms and conditions to the DTCS FAD Discussion Paper, p.13.
[116] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paper, p.14, paragraph 35.
[117] Telstra, Telstra, Submission on non-price terms and conditions to the DTCS FAD Discussion Paper, p.16, paragraph 47.

Paragraph 152BCA(1)(c) – interests of all persons who have the rights to use the declared service

The ACCC considers that this criterion requires it to have regard to the interests of access seekers. The terms and conditions in Schedule 2 of the draft FAD create obligations regarding payment of invoices and billing dispute notification. However, it is relevant to note that these obligations are not excessive to the point of deterring potential access seeker entry into the market (which in turn could displace less efficient service providers).

The clear and practical processes set out in Schedule 2 will assist parties who rely on the FAD by setting rules and responsibilities around billing and dispute resolution. Such procedures can reduce the time spent in disputes and lead to more efficient and economical dispute resolution outcomes.

Telstra requests that the ACCC refine the definition of 'Billing Dispute' in this schedule, to confine it to a dispute about an alleged inaccuracy, omission or error in a charge in an invoice.[118] The ACCC considers that such an amendment will unnecessarily narrow the definition of 'Billing Disputes' to the detriment of access seekers and all persons who have the right to use the service. The ACCC proposes to retain the original definition of 'Billing Dispute' in the DTCS FAD.

Telstra requests that clauses 2.30 of this schedule be deleted.[119] The ACCC considers that the Billing Dispute procedures under clause 2.30 incentivise the access provider to provide accurate billing information and prevents unnecessary disruptions to the business activities of access seekers and other users of the declared service. The ACCC therefore considers it appropriate to retain clause 2.30 in the DTCS FAD.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC considers that the terms and conditions in Schedule 2 of the draft FAD do not directly impact on the direct costs of providing access to the declared services. Rather, the terms stipulate the invoicing processes by which costs are recovered.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the terms and conditions in Schedule 2 of the draft FAD will not affect the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else because this schedule refers to billing and notifications and not the value of network enhancements.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 2 of the draft FAD will not affect operational and technical requirements necessary for the safe and

[118] Telstra, Submission on non-price terms and conditions to the DTCS FAD Discussion Paper, p.13, paragraph 32.
[119] Nextgen, Confidential Submission to the DTCS FAD Discussion *Paper*, p.30. Telstra, Submission on non-price terms and conditions to the DTCS FAD Discussion Paper, p.15, paragraph 42.

reliable operation of a carriage service, as they do not address operational and technical requirements.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 2 of the draft FAD help to promote the economically efficient operation of a carriage service. Clear billing and dispute resolution procedures help to make operations more efficient by reducing time spent on dispute resolution and facilitate certainty about payment.

Schedule 3 – Creditworthiness and security

The terms regarding creditworthiness and security are set out in Schedule 3 of the draft FAD. These clauses concern the access provider's rights to make enquiries of the access seeker's ability to pay, and to require that security be provided in certain circumstances.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has considered whether the terms and conditions in Schedule 3 of the draft FAD will promote the LTIE.

Unnecessary or excessive creditworthiness information or security requirements could potentially delay or frustrate an access seeker's ability to acquire services, which may be an obstacle to their ability to compete in the markets for telecommunication services. The ACCC does not consider the terms and conditions in the schedule to be unnecessary or excessive to the extent that they would deter entry or hinder an access seeker's ability to compete in telecommunication markets.

Telstra requests an amendment to the definition of 'Ongoing Creditworthiness Information', to require access seekers to submit management prepared balance sheets, profit and loss statements and other information to assess the access seeker's creditworthiness.[120] The ACCC considers that such amendments are unnecessary and would be burdensome on access seekers and therefore not in the LTIE.

The ACCC has clarified the scope of what is intended by 'alter' in clause 3.5 of this schedule, to promote certainty about how this clause is to be interpreted and understood by industry. In making this amendment, the ACCC has sought to maintain consistency with similar clauses used for other declared services. The ACCC considers that such clarification and consistency with other FADs is in the LTIE.

Further, the ACCC considers that the terms relating to the creditworthiness information and security by the access seeker minimise the financial risk of the access provider. This indirectly promotes the economically efficient investment in infrastructure because the access provider has greater assurance that it will recover the costs of its investment.

[120] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion, p.20, paragraph 64.

The ACCC considers that practical and functional creditworthiness and security terms will satisfy the objective of promoting competition by removing unnecessary barriers for access seekers, while providing protection for the access provider. The terms and conditions in Schedule 3 effectively balance the interests of access seekers and the access providers.

The ACCC considers that the terms and conditions in Schedule 3 of the draft FAD do not directly concern the connectivity of telecommunication networks.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The terms and conditions in Schedule 3 of the draft FAD go to the access provider's legitimate business interest in achieving a normal return on investment, having regard to the relevant risks involved.

There are a number of specific terms in Schedule 3 which benefit the access provider. The clause of security itself protects the access provider's interests in being paid for a debt due. Allowing the access provider to request security before all credit checks are completed benefits the access provider by not exposing it to the risk of default in the intervening period of supply.

The access provider's ability to request creditworthiness information from the access seeker, to receive it within a certain timeframe and then require security to be altered, further supports the legitimate business interests of the access provider.

Telstra requests that clause 3.7 be amended to ensure that the access seeker is required to disclose when providing ongoing creditworthiness information (OCI) material adverse changes in circumstances since the OCI was prepared. The ACCC accepts that this a legitimate business interest of the carrier and has amended the DTCS FAD accordingly.

The ACCC considers that the terms and conditions in Schedule 3 of the draft FAD benefit the legitimate business interests of a carrier or CSP by facilitating the management of financial risk and protecting its commercial return on investments.

Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC considers that the terms and conditions in Schedule 3 of the draft FAD strike a balance between the interests of access seekers who have the right to use the declared service and access providers.

Telstra and other parties (provided in confidential submissions) request that clause 3.1 and 3.4 be amended to allow the access provider to determine the amount and form of security, and that providing security in the amount and form determined by the access provider should be pre-conditioned to supply.[121] The ACCC disagrees with these views and submits that such amendments could create unnecessary delays in access to the declared service and would not be in the interests of access seekers.

[121] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion, p.18, paragraphs 55-56.

The interests of all access seekers are supported because access is not conditional on the completion of credit checks or the provision of security. Such conditions would have potential to frustrate access and deter entry into telecommunication markets. Rather, the terms to this schedule specify that conditional access is to be requested in certain circumstances only. This could be when the access seeker first acquires the service and where it does not have a credit history, or when a subsequent event occurs that would give rise to genuine concerns around the access seeker's ability to pay its debts.

In response concerns raised in a confidential basis, the ACCC considers it appropriate to amend clause 3.3 and clarify that an access provider can only request for security (and any varied security) where they doubt an access seeker's ability to pay for services. This would promote greater clarity and understanding of how the clause is triggered and is in the interests access seekers who have the right to use the declared service.

Further, the ACCC does not consider the timeframes related to creditworthiness information or security to be onerous on access seekers to the extent that it would deter access seeker entry. The timeframes strike a balance between an access seeker's ability to develop and conduct its business operations and the access provider's interest in managing financial risk.

The terms and conditions also provide for the access seeker to reduce its security where the access seeker can demonstrate an improvement in its creditworthiness or a material change in circumstances. Such credit reviews have the potential to free up working capital for the access seeker. This counterbalances the lack of incentive for the access provider to reduce security requirements for its downstream competitors.

For these reasons, the ACCC considers that the terms and conditions in Schedule 3 of the draft FAD accommodate the interests of all persons who have the right to use the declared service.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The creditworthiness and security terms and conditions in Schedule 3 of the draft FAD will not impact the direct costs of providing access to the declared services, as they do not contribute to those costs. Indirectly, the protections afforded to the access provider mean that any direct costs incurred are likely to be recovered.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the terms and conditions in Schedule 3 of the draft FAD will not affect the value to a person of extensions, or enhancement of capability, whose cost is borne by someone else because this schedule does not relate to changes to the network.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 3 of the draft FAD will not affect operational and technical requirements necessary for the safe and

reliable operation of a carriage service, as they do not address operational and technical requirements.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 3 of the draft FAD will not affect the economically efficient operation of a carriage service, as they do not impact on the ability of the access provider and access seeker to operate their respective services, networks and facilities in an economically efficient manner.

Schedule 4 – General dispute resolution procedures

The terms regarding the general dispute resolution procedures (as distinct from the billing dispute procedures in Schedule 2) are set out in Schedule 4 of the draft FAD.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC does not consider that the terms and conditions in Schedule 4 of the draft FAD directly impact on the promotion of the LTIE.

In respect of promoting competition, the terms and conditions do not deal explicitly with substantive issues regarding access to the DTCS, however any dispute about access may be dealt with under this schedule.

In terms of any-to-any connectivity, the terms and conditions do not deal directly with the connectivity of telecommunication networks.

This schedule does not deal directly with issues that would impact on the economically efficient use of the infrastructure or with incentives for investment in infrastructure.

Indirectly however, the LTIE is promoted by having defined and balanced dispute resolution procedures. Such procedures can reduce the time and expense of dispute resolution for all parties.

Telstra requested an amendment to clause 4.1 to preclude an access seeker from initiating a Billing Dispute and Non-Billing dispute regarding the same subject matter.[122] The ACCC considers that such amendments would not be in the LTIE as the same subject matter could give rise to both a Billing Dispute and Non-Billing Dispute.

The ACCC recognises that dispute resolution processes which provide too much discretion to one party can undermine the operation of other terms and conditions and would not be in the LTIE. Therefore the ACCC has sought to maintain a well defined and balanced dispute resolution process to promote regulatory certainty and encourage parties to confidently engage in commercial negotiations.

[122] Telstra, Submission on non-price terms and conditions to the DTCS FAD Discussion Paper, p.21, paragraph 75.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC is of the view that the general dispute resolution procedures strike a balance between the legitimate business interests of the access provider and the interests of the access seeker. The procedures, obligations and rights in Schedule 4 of the draft FAD apply equally to both access providers and access seekers.

Schedule 4 of the draft FAD will benefit both the legitimate business interests of the access provider and the access seeker, as it encourages dispute resolution procedures which are simple, flexible, quick and inexpensive and thereby promotes commercial certainty. This prevents undue reliance on legal proceedings or arbitrations.

Further, schedule 4 provides for mediation processes in accordance with objective dispute resolution guidelines from the Australian Commercial Dispute Centre. It also provides for equal representation at mediation and consideration by the Expert Committee. Each party is also required to bear its own costs of mediation and the expert committee, and share the costs of the mediator or the independent member of the expert committee. In this way, the terms clearly do not place an unreasonable share of the costs on one party.

Telstra requests that a new clause (4.12) be inserted to this schedule, so that this schedule do not apply to Non-billing disputes where there are dispute resolution procedures available under other regulatory obligations (such as a Structural Separation Undertaking).[123] The ACCC considers that this would be in the legitimate business interests of the carrier or CSP and proposes to adopt this clause.

Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

For the reasons set out above, the ACCC is of the view that dispute resolution procedures benefit both the legitimate interests of the access provider and the interests of the access seekers who have the right to use the declared service.

Telstra request that clause 4.11(g) be varied, to allow the timeframe within which the Expert Committee is required to make a decision be varied by agreement between parties.[124] The ACCC accepts that such an amendment is reasonable, will allow flexibility for parties to make arrangements that suit their individual circumstances and is therefore in the interests of all persons who have the right to use the service.

The ACCC has considered whether the priority of disputes in clause 4.2 is appropriate. In the interests of all persons who have the rights to use the declared service, this clause has been amended to allow an independent or third party to determine the choice of dispute procedure.

The ACCC recognises that all communication between parties during the course of a dispute should be made on a without prejudice and confidential basis and has amended clause 4.8 accordingly.

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[123] Telstra Corporation Limited (Telstra), *DTCS Non-price Submissions – Proposed Amendments to the IAD,* August 2011 (Telstra, Submission to DTCS FAD Discussion Paper – Proposed amendments to IAD), p.38.
[124] Telstra, *Submission to DTCS FAD Discussion Paper – Proposed amendments to IAD,* p.37.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC considers that the terms and conditions in Schedule 4 of the draft FAD do not affect the direct costs of providing access to the declared service, as they do not directly contribute to the costs of providing access to the declared service. Indirectly however, the dispute resolution procedures can reduce the time and expense of dispute resolution for all parties involved, as it sets out defined and balanced procedures for resolving disputes.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the terms and conditions in Schedule 4 of the draft FAD do not relate to extensions, or enhancement of capability, whose cost is borne by someone else because this clause does not refer to the value of network enhancements.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 4 of the draft FAD will not affect operational and technical requirements necessary for the safe and reliable operation of a carriage service.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 4 of the draft FAD will not affect the economically efficient operation of a carriage service, as they do not impact on the ability of the access provider and access seeker to operate their respective services, networks and facilities in an economically efficient manner.

Schedule 5 – Confidentiality provisions

The terms regarding use and protection of confidential information are set out in Schedule 5 of the draft FAD.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC considers that the terms and conditions in Schedule 5 of the draft FAD will promote the LTIE. Schedule 5 protects the confidential information of both access seekers and access providers from unauthorised use by the other party. Under the terms and conditions, parties are not able to use confidential information inappropriately.

The ACCC considers that the terms and conditions do not have an effect on any-to-any connectivity, because they only concern the use of information.

Access seekers are more likely to make efficient investments in infrastructure knowing that their confidential information is protected and will not be used by the

access provider to gain a competitive advantage to the detriment of the access seeker. This will ensure that the access seeker and access provider can compete on a level playing field in downstream markets.

Telstra submits that this schedule should not be included in the FAD.[125] The ACCC considers that confidentiality clauses are necessary to protect the sensitivity of information that is exchanged during normal business operations and is in the LTIE for this schedule to be maintained.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC considers that the terms and conditions in Schedule 5 promote the efficient use of confidential information, minimise costs to parties in disclosing information and promote the legitimate business interests of the access provider. If the confidential information of the access provider is not properly protected, the access provider may suffer losses. These clauses help to prevent that loss.

Telstra submits that disclosure of confidential information should be extended to contractors and sub-contractors, as such information may be needed by these parties to facilitate business operations.[126] The ACCC accepts that an amendment to this effect is appropriate and is in the legitimate business interests of carriers and CSPs to facilitate normal business operations. The amendments have been reflected in the draft FAD.

Telstra also requests that clause 5.5(b) be amended to broaden the scope of disclosure to include disclosure to a professional person for the purpose of determining the rights and obligations of the party to whom the disclosure has been made.[127] The ACCC accepts that this amendment is reasonable and is in the legitimate businesses of the service provider.

Paragraph 152BCA(1)(c) – interests of all persons who have the rights to use the declared service

The ACCC considers that the terms and conditions at Schedule 5 of the draft FAD serve the interests of access seekers. They help to protect the confidential information from misuse by the access provider by outlining procedures for handling confidential information.

Telstra suggests removing circumstances where the information is reasonably required to facilitate access to services at a particular exchange from those which require a confidentiality undertaking (clause 5.5j).[128] The ACCC disagrees with this view and submits that although there are interests in improving the efficient provision of services, given the sensitive nature of information provided, the requirement to provide a confidentiality undertaking should be retained.

[125] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paper, p22.
[126] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paper, p.23, paragraph 84.
[127] Telstra, Submission to DTCS FAD Discussion Paper – Proposed amendments to IAD, p.41.
[128] Telstra, Submission to DTCS FAD Discussion Paper – Proposed amendments to IAD, p.42.

Telstra seeks an amendment to clause 5.11 to change the circumstances in which an independent audit is triggered.[129] The ACCC considers these amendments to be too onerous on the access seeker and would limit the availability of an audit to limited situations, which would not be in the interests of all persons who have the rights to use the declared service.

The ACCC recognises that the confidential information that is provided by access seekers when provisioning services is potentially very valuable. Protecting that information from misuse is in the access seekers interests and the ACCC has taken this into account in Schedule 5 of the draft FAD.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC understands that the confidentiality clauses in Schedule 5 may require an access provider to develop systems to comply with the clauses, as was noted in the 2008 Model Terms.[130] The ACCC considers that any costs associated with this development are not unreasonable given the necessity of protecting confidential information. The ACCC considers that the terms and conditions in Schedule 5 of the draft FAD strike the right balance between imposing additional costs and protecting the interests of access seekers.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that this criterion is not relevant because the terms and conditions in Schedule 5 of the draft FAD only include processes for confidentiality, not any network enhancements.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that this criterion is not relevant because the terms and conditions in Schedule 5 of the draft FAD do not have implications for the safe and reliable operation of the network.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the terms and conditions in Schedule 5 of the draft FAD promote the economically efficient operation of a carriage service by outlining procedures for secure information sharing. Without the fear of confidential information being disclosed, parties are able to candidly share information necessary for the provision of services.

Schedule 6 – Suspension and termination

The terms regarding suspension and termination of services are set out in Schedule 6 of the FAD.

[129] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paper, pp 24-25, paragraphs 94-97.
[130] ACCC, 2008 Model Terms, p. 25.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has considered the LTIE in determining the suspension and termination clauses in Schedule 6 of the draft FAD.

The ACCC considers that the suspension and termination clauses in Schedule 6 of the draft FAD are not relevant to the objective of any-to-any connectivity.

The ACCC considers that the access provider may only suspend the service of an access seeker once it has given notice of its intention to suspend the service to the access seeker. These clauses are likely to encourage investment in infrastructure service and will not be indiscriminately suspended or terminated inappropriately.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has taken into account the legitimate business interests of the access provider when including the terms and conditions in Schedule 6 of the draft FAD. The suspension and termination clauses are important for the access provider. It is a means by which it can protect its legitimate business interests in achieving a normal return on its investment, having regard to relevant risks.

The ACCC has considered whether an amendment is needed to allow the access provider to terminate services if protracted force majeure. The ACCC considers that this is a legitimate business interest of the access provider, however notes that this issue has been addressed in clause 6.7(f) to this schedule.

Where there has been a failure to pay monies payable under the FAD, the ACCC considers that this should warrant a suspension event. The ACCC accepts that this is in the legitimate business interests of access providers and has accordingly amended this schedule.

Telstra requests that a subclause be added to clause 6.4, to allow the access provider to cease supply of a service to the access seeker if the supply of those services has been suspended for three months or longer.[131] The ACCC accepts that this is a reasonable amendment and that it would be in the legitimate business interests of the access provider to have the option to cease supply to an access seeker following suspension.

Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC has also taken into account the interests of other parties when including the terms and conditions in Schedule 6 of the draft FAD. The interests of access seekers have been addressed, because the clauses ensure that their businesses are not disrupted inappropriately. In situations where an access seeker is in breach of an access agreement, the terms in Schedule 6 protect the interests of access seekers by providing that the access provider can only suspend or terminate a service after giving notice of its intention to do so and providing an opportunity for the breach to be remedied. This ensures that a service will not be unreasonably interrupted.

[131] Telstra, Submission to DTCS FAD Discussion Paper – Proposed amendments to IAD, p.72.

The ACCC has considered whether a breach of law should be an event which entitles the access provider to immediately suspend services. It is the ACCC's view that immediate suspension of services would be inappropriate for minor legal or regulatory obligations and considers that serious breaches of law are likely to be captured under 6.1(b) of the schedule. The ACCC has amended this schedule to ensure an appropriate balance of interests between access providers and access seekers.

Telstra also proposes other amendments which would give rise to a right of suspension under certain circumstances, including the requirement for access seekers to complete remedial action within 10 business days of receiving notice.[132] The ACCC does not consider this amendment to be in the interests of all persons who have the rights to use the declared services, as it would be onerous on access seekers to complete remedial action within 10 business days. However, access providers are able to suspend the service where an access seeker has failed to pay monies under the FAD and has not instituted remedial action within 10 business days of receiving a suspension notice. The ACCC considers that this achieves an appropriate balance between the interests of all parties who have rights to use the declared service.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

Providing access to a declared service imposes direct costs on the access provider. The ACCC has had regard to these costs in including the terms and conditions in Schedule 6 of the draft FAD. Schedule 6 provides a means by which the access provider may suspend or terminate a service of an access seeker in specific circumstances. This allows the access provider to protect itself from commercial risks such as an access seeker that is not paying its bills.

This schedule also provide some protection for access seekers where the service has been terminated. An access provider must refund to an access seeker a fair and equitable proportion of those sums paid under the FAD for a period extending beyond the date on which the supply of the service has been terminated.

The terms and conditions in Schedule 6 of the draft FAD therefore balance the interests of all parties in relation to the costs associated with access to the declared service.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the terms and conditions in schedule 6 of the draft FAD are not relevant to extensions, or enhancement of capability, whose cost is borne by someone else. This is because the clauses relate to the circumstances under which an access provider may suspend or terminate a service, rather than the circumstances under which a party may recover costs relating to network enhancements.

[132] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paperp.30, paragraph 120(a).

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms and conditions in schedule 6 of the draft FAD do not limit arrangements to ensure safe and reliable operation of carriage services.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The clauses in Schedule 6 of the draft FAD allow an access provider to suspend the supply of a service when the access seeker has failed to pay money owing or has otherwise breached its obligations under the FAD. The ACCC considers that these clauses encourage and support the economically efficient operation of carriage services and associated networks of the access provider and access seekers. It is not economically efficient for an access provider to be required to supply a carriage service where an access seeker is consistently defaulting on payment.

Schedule 7 – Liability and indemnity

The liability and indemnity clauses are set out in Schedule 7 of the draft FAD. These clauses concern who should be responsible for damage to property or personal injury, i.e., to make repairs and/or compensate parties that have suffered loss. These clauses can also set caps on liability and require parties to limit their losses to the extent they are able.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC considers that the Liability and Indemnity clauses to this schedule are not relevant to the objective of achieving any-to-any connectivity.

The objective of achieving the economically efficient use of and investment in infrastructure is achieved by this schedule, as it manages the allocation of capital risks between parties, thereby encouraging parties to make efficient investment decisions.

While Telstra and Optus disagree with the inclusion of liability and indemnity clauses, Nextgen, Macquarie and VHA submit that the inclusion of these clauses in the DTCS FAD will enable and support commercial negotiations.

Macquarie submits that the Liability and Indemnity clauses of the 2008 Model Terms and Conditions are *unlikely* to be agreed to by an access provider in a bilateral negotiation.[133] The ACCC considers that the inclusion of liability and indemnity clauses in the draft FAD helps to promote competition by reducing barriers to entry, as it assists parties in their commercial negotiations regarding the management of liabilities and losses. As such, the ACCC considers it important to retain this schedule in the FAD.

The ACCC considers that by facilitating parties to more effectively engage in commercial negotiations, the inclusion of liability and indemnity clauses is in the LTIE.

[133] Macquarie, Submission to DTCS FAD Discussion Paper, pp 10-11.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has considered the legitimate business interests of carriers and CSPs in developing the liability and indemnity clauses of this schedule.

The legitimate business interests of access providers are protected from the commercial risk of ensuring that they are not held liable for the conduct of access seekers.

Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC considers that the inclusion of liability and indemnity clauses is in the interests of all persons who have the right to use the service, as it ensures that risks are appropriately apportioned between parties and allow parties to make repairs and compensate those who have suffered loss.

Macquarie submits that the liability and indemnity clauses of the 2008 Model Terms have the effect of limiting the liability of either party to the other, and that such clauses are unlikely to be agreed to by an access provider in a bilateral negotiation.[134] VHA also notes that terms and conditions relating to liability and risk allocation are often biased in favour of the access provider.[135]

The ACCC agrees that the inclusion of these clauses enables and encourages commercial negotiations, as otherwise these liability and indemnity issues may impose significant barriers to entry and parties could be made to carry the risk of losses that are not under their control.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC recognises that liability and indemnity provisions may contribute to the indirect costs of providing access to the declared service. However the ACCC is of view that these provisions are necessary and should be included in the FAD, as they help to mitigate commercial risks between parties and thereby facilitate commercial negotiations.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the terms and conditions of this schedule are not relevant to extensions or enhancement of capability, whose cost is borne by someone else because this schedule does not refer to the value of network enhancements.

[134] Macquarie, Submission to DTCS FAD Discussion Paper, p.10.
[135] VHA, Submission to DTCS FAD Discussion Paper, p.10.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms and conditions of this schedule do not affect the operations and technical requirements necessary for the safe and reliable operation of a carriage service.

However, the liability and indemnity clauses of this schedule specifically address safety and reliability issues and therefore help ensure that access provider networks are operated in a safe and reliable manner.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the terms and conditions to this schedule help to manage risk between parties and therefore encourages the economically efficient operation of carriage services and telecommunications facilities,

Schedule 8 – Network upgrade and modernisation

The terms and conditions regarding network upgrade and modernisation are set out in schedule 8 of the FAD.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC has taken the LTIE into account in developing the terms and conditions to this schedule.

The ACCC considers that network upgrades and modernisation clauses help to manage service disruptions and any adverse consequences of network disruptions which may impact on the availability or quality of services. Through managing these service disruptions, these clauses will help ensure reliable services are available in competition with other services and thereby promote competition between access seekers and access providers.

If the notification time is too long, access seekers face the increased risk of stranded investments and potentially losing customers. Conversely, if the timeframe is unduly limited, the access provider's ability to upgrade and invest in its network will be constrained. The ACCC considers that it has found a balance between the interests of access providers and access seekers that will result in sufficient time to migrate customers' services from the existing platform to an alternative. This will ensure ongoing any-to- any connectivity and ultimately promote the LTIE.

This schedule does not deal directly with issues that would impact on the efficient use of the infrastructure or with incentives for investment in infrastructure.

While Telstra considers that network modernisation and upgrade clauses are not relevant to the DTCS, Optus supports the inclusion of these clauses and requests that such clauses ensure equivalence between access seekers and access providers.[136]

The ACCC recognises that network upgrades are important to supply new services and to improve the quality of existing services. Upgrades will also be undertaken to upgrade old or outdated equipment in order to improve the efficiency with which existing services are provided. Such changes will have a direct and positive impact on the overall efficiency of the network and is in the LTIE.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has taken into account the access provider's legitimate business interests when including the proposed network upgrade and modernisation terms and conditions at Schedule 8 of the FAD.

The ACCC recognises that it is a legitimate business interest of carriers and CSPs to make network changes that are necessary to supply new or additional services or to improve the quality of existing services. In particular, the ACCC has considered the practical implications of the notification requirements resulting from the network upgrades and the timing of those notifications.

The ACCC is of the view that the notification requirements specified to this schedule are appropriate in commercial negotiations and promote the necessary level of certainty to allow efficient investment by the access provider in the infrastructure.

Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

The ACCC considers that the notice periods outlined in this schedule take into account the interests of all persons who have the right to use the declared service and provide sufficient notification of upgrades.

The ACCC has given weight to access seekers' legitimate interests of being informed of planned upgrades and consulted on how a network upgrade is to be implemented. The ACCC has also taken these factors into account in determining the appropriate notification obligations on the access provider.

Optus submits that without this schedule, access seekers are not in a position to know how to optimise their networks and services in the most efficient manner and in the timeframes provided by Telstra.[137]

The ACCC is of the view that the inclusion of minimum notification requirements in the FAD will allow access seekers to have access to relevant information so that they can make informed business decisions in access the declared service.

[136] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paper, p.29, paragraph 114. Optus, Public Submission to DTCS FAD Discussion Paper, p.24, paragraph 8.30.
[137] Optus, Public Submission to DTCS FAD Discussion Paper, p.24, paragraph 8.33.

The ACCC considers that the proposed terms strike an appropriate balance between the access provider's legitimate interests in upgrading its network and ensuring that access seekers are given sufficient time to incorporate knowledge of such upgrade into their planning and investment decisions.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC has taken into account the impact of the network modernisation and upgrade clauses on the costs of providing access to the declared service.

The ACCC considers it appropriate that an access provider be able to recover a normal return on upgrades and modernisations to their network, having regard to relevant risks.

The ACCC is of the view that the additional cost incurred by the access provider in providing the information under the proposed notification requirements will be minimal, and the access provider is likely to have access to the required information under the prescribed notice period. In addition, the ACCC considers that the benefits of providing the information in the required notices outweigh the costs.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else, is not relevant to this schedule because the cost of such upgrades and modernisations are born by the access provider.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that the terms and conditions specified to this schedule specifically relate to and thereby take into account the operational and technical requirements necessary for the safe and reliable operation of a carriage service.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the economically efficient operation of carriage services and associated networks of the access provider and access seekers will be encouraged by parties having greater information available to them in making investment decisions. This is because it will remove information asymmetry which may deter investment.

Schedule 9 – Facilities access

Terms and conditions relating to 'Facilities access' are set out in Schedule 9 of the draft FAD. These terms and conditions specify how an access seeker can access an access provider's exchange in order to interconnect its equipment to the access providers' network and acquire a core service.

Paragraph 152BCA(1)(a) – whether the determination will promote the LTIE

The ACCC considers that facilities access clauses to this schedule are in the LTIE.

Facilities access clauses promote competition by reducing barriers to entry and enabling access seekers entry to an access provider's exchanges. As noted by Optus, access to exchanges is particularly important in the lead up to the NBN, as it ensures that access seekers can purchase transmission supply from the service provider and interconnect with the NBN.[138]

The ACCC considers that this schedule is necessary to ensure that there are no obstacles to the interconnection of facilities and thereby helps to promote any-to-any connectivity.

Facilities access clauses achieve the objective of encouraging the economically efficient investment in and use of infrastructure, by setting guidelines for the appropriate use of and access to exchange facilities.

Paragraph 152BCA(1)(b) – legitimate business interests of a carrier or CSP

The ACCC has considered the legitimate business interests of carriers and CSPs in developing this schedule.

Optus requests that an access provider not deny an access seeker access to an exchange on the basis of its own reasonably "anticipated requirements" (clause 9.4).[139] Instead, Optus requests that exchange space only be reserved for future requirements if the access provider has firm plans to use the space within a reasonable period of time. The ACCC considers that the timeframe for what is a 'reasonable period of time' may vary depending on circumstances and an amendment to this effect may not be in the legitimate business interests of the service provider.

Paragraph 152BCA(1)(c) – interests of all persons who have rights to use the declared service

In the past, access seekers have been concerned by the potential for them to be denied access to an exchange when there is available capacity.[140] They have also been concerned by the potential for extensive delays in gaining access to available and/or expanded capacity at an exchange, and what they see as insufficient consultation arrangements around facilities access.

The ACCC is aware of the view that facilities access provisions should not be included in the FAD. Telstra contends that facilities access is not necessary to provide the DTCS.[141] In contrast, Optus argues that facilities access is necessary, especially as

[138] Optus, Public Submission to the DTCS FAD Discussion Paper, p.21, paragraph 8.18.
[139] Optus, Public Submission to the DTCS FAD Discussion Paper, p.22, paragraph 8.22.
[140] Australian Competition and Consumer Commission v Telstra Corporation Limited [2010] FCA 790
[141] Telstra, Submission on non-price terms and conditions to DTCS FAD Discussion Paper, p.32, paragraph 125.

access seekers must purchase Telstra transmission services before being able to interconnect with the NBN.[142]

Optus submits that the inclusion of facilities access clauses in the DTCS FAD is necessary to prevent Telstra from discriminating against other access seekers.[143] However Optus requests that clause 9.4 be amended to limit the length of time which Telstra can reserve capacity for its own requirements.[144] Optus proposes a time limit of 18 months. The ACCC considers that this is reasonable, is in the interests of access seekers and has amended the clause accordingly.

Optus requests that there be a clause for access seekers to reserve capacity for their own requirements, before capacity is reserved by Telstra.[145] The ACCC considers that this would not be in the legitimate business interests of carriers and CSPs, would be unreasonable and would unfairly give access seekers greater priority over access providers.

The ACCC recognises that facilities access clauses are important to access seekers, as difficulties in gaining access to facilities effectively limit their ability to acquire core services and supply transmission services. Improvements to facilities access arrangements for access seekers may enable a more robust framework to support commercial negotiations over facilities access. However in providing such facilities access arrangements, the ACCC has sought to ensure that arrangements appropriately balance the interest of access seekers with access providers.

Optus submits that it is unreasonable to require an access seeker to demonstrate that it is considering undertaking Common Infrastructure Works, as it could be misused by the access provider to delay works that would allow access to be granted.[146] The ACCC considers that this would be unfairly weighted to the interests of access seekers and therefore does not consider it appropriate to make this amendment.

Optus and other parties have requested for greater transparency regarding technical feasibility studies, including details regarding the timing for these feasibility studies.[147] The ACCC considers that this is reasonable and would be in the interests of access seekers, as it would improve certainty for access seekers and enable them to compete with the access provider for the provision of retail services. This would also prevent the distortion of competitive processes whereby one access provider is favoured over others.

The ACCC considers that it may be useful for industry to have benchmark facilities access terms and conditions, given that access seekers and access providers can no longer have recourse to the arbitration clauses contained in the old Part XIC access regime.

[142] Optus, Public Submission to the DTCS FAD Discussion Paper, p.21, paragraph 8.18.
[143] Optus, Public Submission to the DTCS FAD Discussion Paper, p.21, paragraph 8.18.
[144] Optus, Public Submission, to the DTCS FAD Discussion Paper, p.22, paragraph 8.22.
[145] Optus, Public Submission to DTCS FAD Discussion Paper, p.22, paragraph 8.23.
[146] Optus, Public Submission to the DTCS FAD Discussion Paper, p.23, paragraph 8.27
[147] Optus, Public Submission to the DTCS FAD Discussion Paper, p.20, paragraph 8.14.

Paragraph 152BCA(1)(d) – direct costs of providing access to the declared service

The ACCC has considered the direct costs of promoting facilities access to the declared services. The ACCC recognises that facilities access provisions can impose costs on the access provider, however the ACCC considers that the recurring and non-ongoing charges paid by the access seeker compensates for these costs.

Further, the ACCC considers that facilities access arrangements are necessary for access seekers to interconnect their equipment to the network and compete in the market.

Paragraph 152BCA(1)(e) – value to a person of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC considers that the value to a party of extensions, or enhancement of capability, whose cost is borne by someone else, is not relevant to the proposed terms and conditions in this schedule.

Paragraph 152BCA(1)(f) – operational and technical requirements necessary for the safe and reliable operation of a carriage service

The ACCC considers that this criterion is not relevant because the terms and conditions in this schedule do not have implications for the safe and reliable operation of the network.

Paragraph 152BCA(1)(g) – economically efficient operation of a carriage service

The ACCC considers that the economically efficient operation of carriage services and associated networks of the access provider and access seekers will be encouraged by access seekers having the ability to access and utilise facilities.

Appendix I: DTCS declaration

TRADE PRACTICES ACT 1974

Variation of declaration under sections 152AL and 152AO

1. Pursuant to sections 152AL and 152AO of the *Trade Practices Act 1974* (Act), and with effect from 29th September 2010, the Australian Competition and Consumer Commission (Commission) varies the domestic transmission capacity service (DTCS) declaration which took effect from 1 April 2009 under section 152AL of the Act (the DTCS declaration) by deleting Annexure 1 to the DTCS declaration and replacing it with Annexure 1 to this instrument.

2. Pursuant to subsection 152ALA(1) of the Act, the expiry date of the DTCS declaration is 31 March 2014.

   Note: this expiry date is unchanged.

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Graeme Julian Samuel
Chairman
Australian Competition and Consumer Commission

Dated: 29th September 2010

Annexure 1 – 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) interface protocols 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