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Consumer
Commission

Wholesale ADSL service declaration inquiry

Final decision

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List of abbreviations and acronyms

| | |
|-------|------------------------------------------------|
| ACCC | Australian Competition and Consumer Commission |
| ADSL | asymmetric digital subscriber line |
| AGVC | aggregating virtual circuit |
| CAN | customer access network |
| CBD | central business district |
| CCA | <i>Competition and Consumer Act 2010</i> |
| DSL | digital subscriber line |
| DSLAM | digital subscriber line access multiplexer |
| DTCS | domestic transmission capacity service |
| ESA | exchange service area |
| FAD | final access determination |
| FTTB | fibre to the basement |
| FTTN | fibre to the node |
| FTTP | fibre to the premises |
| HFC | hybrid fibre-coaxial |
| IGR | internet gateway router |
| LSS | line sharing service |
| LTIE | long-term interests of end-users |
| Mbps | megabits per second |
| NBN | National Broadband Network |
| POI | point of interconnection |
| PoP | point of presence |
| PSTN | public switched telephone network |
| RIM | remote integrated multiplexer |
| RSP | retail service provider |
| SAOs | standard access obligations |
| SIO | services in operation |
| SSU | structural separation undertaking |
| TWBGE | Telstra's wholesale business grade Ethernet |
| ULLS | unconditioned local loop service |
| VLAN | virtual local area network |
| WWS | wholesale wavelength service |

Glossary

| | |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| access agreement | A commercial contract between the access provider and an access seeker which sets out negotiated terms and conditions of supply for an agreed period of time. |
| access seeker | Telecommunications companies that seek access to the declared service (that is, the right to use the declared service). |
| access provider | Telecommunications companies that provide access to a declared service. |
| ADSL | <p>Asymmetric Digital Subscriber Line. A technology for transmitting digital information at high data rates on existing copper phone lines. It is called asymmetric because the download and upload data rates are not symmetrical (that is, download is faster than upload).</p> <p>ADSL2+ is a version of ADSL that gives a higher data rate.</p> <p>NB: All references to the wholesale ADSL service in this decision includes both ADSL and ADSL2+.</p> |
| declaration inquiry | The process by which the ACCC holds a public inquiry to determine whether a service should be declared. |
| declared service | A service that the ACCC regulates under Part XIC of the CCA. Once declared, a service provider must supply the service to other parties in accordance with the standard access obligations. |
| DSLAM | Digital Subscriber Line Access Multiplexer. A device which makes use of the copper access lines to provide high data rate services, enabling broadband services to be provided over copper lines. It is generally located in a telephone exchange (or a node) that links many customer DSL connections (copper wires) to a core IP network via a backhaul system. It may also be located in a building to enable FTTB services. |
| end-user | Retail consumer of telecommunication services. |
| exchange | Place where various numbers and types of communication lines are switched so as to establish a connection between two telephones. The exchange also houses DSLAMs, enabling broadband services to be provided over copper lines to end-users. |
| FAD | Final Access Determination. The FAD is made by the ACCC and sets the terms and conditions (including prices) on which a service provider may be required to supply a declared service. |
| fixed-line services | Telecommunications services provided over fixed networks, such as Telstra's copper network and HFC networks. The 'declared fixed line services' are the ULLS, LSS, WLR, LCS, wholesale ADSL, FOAS and FTAS. |
| HFC network | Hybrid Fibre-Coaxial Cable network. A combination of fibre optic and metal coaxial cables able to deliver large amounts of data. Typically used to deliver internet services and pay television services. |
| LSS | The declared Line Sharing Service. Allows access seekers to share the use of the copper line connecting end-users to the telephone exchange, allowing them to provide fixed internet services using their own equipment. An alternative provider provides the voice services. |
| retail service provider | Company that offer telecommunications services to end-users. |

Standard Access Obligations. Under section 152AR of the CCA, the category A SAOs require an access provider to:

- supply the service to an access seeker on request
- take all reasonable steps to ensure that the technical and operational quality and fault detection, handling and rectification of the service provided to the access seeker is equivalent to that which it provides to itself, and allow interconnection.

SAOs

SIO Service In Operation. Refers to an active telecommunications service provided to an end-user.

ULLS The declared Unconditioned Local Loop Service. Allows access seekers to use the copper line connecting end-users to the local telephone exchange, allowing them to provide both fixed internet (broadband) and voice services using their own DSLAMs and other exchange equipment.

Wholesale ADSL The declared wholesale ADSL service. Allows access seekers to purchase a wholesale ADSL product from an access provider and resell internet services to end-users.

Executive Summary

The Australian Competition and Consumer Commission (ACCC) has formed the final view that the wholesale asymmetric digital subscriber line (ADSL) service declaration should be extended for a further five years until 13 February 2022.

The wholesale ADSL service is a point-to-point service which enables network providers to deliver high speed fixed-line broadband internet services to their customers.

After consideration of submissions received in response to the *Wholesale ADSL Service Declaration Inquiry Draft Decision* (the draft report), the ACCC maintains the view that continued declaration of the wholesale ADSL service will promote the long-term interests of end-users (LTIE) in the lead up to the National Broadband Network (NBN) completion. In particular, declaration will:

- promote competition – declaration will continue to promote competition in the markets for high speed and superfast fixed-line broadband services by allowing retail service providers (RSPs) to continue to actively compete to build market share prior to moving to the NBN. Telstra currently retains the dominant position in both the national retail and in the wholesale market for high-speed fixed-line broadband services. In particular, competition in the supply of wholesale ADSL is minimal. Maintaining access to the service, with regulated price and non-price terms and conditions, will ensure access seekers continue to compete effectively in the wholesale and retail markets to the benefit of end-users.
- not impact the achievement of any-to-any connectivity.
- encourage the economically efficient use of, and investment in, infrastructure –
 - the supply of the wholesale ADSL service does not raise concerns around technical feasibility or have a negative impact on the operation or performance of the network. The supply of the wholesale ADSL service will involve costs that are likely to be reasonable.
 - declaration would not have an effect on Telstra's ability to exploit economies of scale and scope or its ability to make a return on its investment.
 - declaration is unlikely to negatively impact investment incentives and will promote efficient investment in infrastructure where such investment is necessary. The slowing investment in the unconditioned local loop service (ULLS), line sharing service (LSS) and digital subscriber line (DSL) equipment is likely to be a result of access seekers reaching the capacity limits of their current investments and the increasing pace of the NBN rollout with the transition of customers to NBN-based services.
 - declaration will promote efficient use of the wholesale ADSL service and the underlying fixed-line infrastructure of Telstra and access seekers' DSL networks. Telstra's scale and scope means it is best placed to supply the wholesale ADSL service in the most economically efficient way.

The ACCC notes that submitters to the draft report (released in October 2016) broadly supported the ACCC's view to maintain declaration of the wholesale ADSL service, and only raised concerns on a number of specific issues.

Geographic Exemptions

Telstra maintained that a number of exchange service areas (ESAs) are competitive and should be exempt from declaration. The ACCC acknowledges that when considering ESAs

on an individual basis, there are signs of more dispersed market shares in some ESAs. However, as the ACCC's analysis indicates, Telstra remains the largest single wholesale and retail fixed-line broadband provider at a national level and the dominant supplier of wholesale ADSL services in a number of the 289 ESAs where it has sought exemption. The ACCC therefore considers it is appropriate to assess the state of competition on a national basis, rather than on an 'ESA by ESA' basis. This reflects that retail competition occurs on a national basis, particularly when RSPs provide whole-of-business offerings.

The ACCC's final view is that declaring the wholesale ADSL service (including all 289 ESAs which Telstra argues should be exempt) will promote the LTIE in the current industry environment where transition to the NBN is progressing. This is because declaration will promote competition (and therefore, lead to positive outcomes for end-customers) by:

- ensuring RSPs obtain access to the wholesale ADSL service on terms and conditions that reflect competitive market conditions in all geographic areas in order to provide alternative national wholesale and retail market offerings, and
- limiting the opportunity, in an environment where there is the incentive, for Telstra to potentially engage in anti-competitive conduct in those 289 ESAs or favour its own operations.

The ACCC considers otherwise, without declaration, competition at the national wholesale and retail levels may lessen as:

- Telstra would have similar incentives and opportunities as it did prior to the 2012 declaration to engage in entry-detering or expansion-detering conduct to maintain and grow its market share
- Telstra may leverage its position as the dominant provider in the national market to charge above-cost prices for its wholesale ADSL service offerings and limit access seekers' abilities to compete effectively in the supply of whole-of-business offerings nationally and also more generally within the national market for high-speed broadband services
- contrary to Telstra's submission, the market for wholesale ADSL services is extremely limited and access seekers (which have smaller DSLAM footprints when compared with Telstra) would be unable to provide their wholesale customers with wholesale ADSL services on a national basis using their own network, and
- there may be significant incremental costs to sourcing wholesale ADSL services from multiple suppliers, which inhibits competitive entry.

Service description

The ACCC's final decision is to retain the current service description on the basis that it adequately describes the wholesale ADSL service.

While the ACCC does not consider it necessary to alter the service description at this time, the ACCC notes that information available to it suggests that Telstra is requiring access seekers to obtain a Telstra backhaul access product or service (such as Telstra's wholesale business grade Ethernet product) when they acquire the wholesale ADSL service. (It also appears that other providers may be similarly bundling wholesale ADSL services with backhaul access products). The ACCC will monitor the supply of backhaul access products with the supply of the declared wholesale ADSL service in order to ensure the bundling of these services does not inhibit competitive outcomes.

The ACCC's final decision is also to adopt a declaration period of five years. This is because having a longer regulatory period will provide certainty during the rollout of the NBN.

The ACCC's final decision extends the expiry date of the declaration to 13 February 2022.

1. Introduction

1.1. Purpose

This report sets out the ACCC's final decision to extend the expiry date of the declaration of the wholesale ADSL service until 13 February 2022, pursuant to section 152ALA of the *Competition and Consumer Act 2010* (CCA).

The ACCC is required to conduct this review during the 18 month period preceding the expiry of the current wholesale ADSL service declaration, which is set to expire on 13 February 2017. The purpose of the review is to determine whether the declaration should be remade, extended, revoked, varied, allowed to expire or extended and then allowed to expire.¹

1.2. Consultation

The ACCC commenced a review of the wholesale ADSL service declaration on 4 July 2016 under Part 25 of the *Telecommunications Act 1997* by publishing the *Wholesale ADSL Service Declaration Inquiry Discussion Paper* (the discussion paper) for comment by interested parties. The discussion paper and public submissions that were lodged are available from the ACCC's website at www.accc.gov.au.

On 14 October 2016, the ACCC released the *Wholesale ADSL Service Declaration Inquiry Draft Decision* (the draft report). The draft report sets out the ACCC's draft decision about whether declaration of the wholesale ADSL service will promote the LTIE having regard to the submissions made to the discussion paper and other available information. The draft report and public submissions to the draft report are available at www.accc.gov.au. Appendix D lists the submissions received to the draft report.

The ACCC notes that on 29 November 2016 it identified a drafting error in the service description extracts included in the discussion paper and draft report. The ACCC wrote to interested parties advising them of this error. One submission was received.

On 6 December 2016, the ACCC sent an information request to Telstra seeking further information to clarify its understanding of products used to facilitate the transmission of traffic between the point of interconnection (POI) and the point of presence (PoP) and how they are supplied with the wholesale ADSL service. Telstra supplied the ACCC with its response on 16 December 2016.²

1.3. Overview and background

1.3.1. Legislative framework

Under Part XIC of the CCA, the ACCC can declare a specified eligible service³ if it is satisfied that this will promote the LTIE of carriage services or of services provided by means of carriage services.⁴

¹ See subsection 152ALA(7) of the CCA.

² Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public version.

³ An 'eligible service' is (a) a listed carriage service (as defined by the *Telecommunications Act 1997* (Cth) (Telco Act)); or (b) a service that facilitates the supply of a listed carriage services (as defined by the Telco Act), where the service is supplied, or is capable of being supplied, by a carrier or a carriage service provider (whether to itself or to other persons): section 152AL(1) CCA.

⁴ CCA, section 152AL.

When determining whether declaration of the service promotes the LTIE, the ACCC must have regard to the extent to which declaration is likely to result in the achievement of the following three objectives:⁵

- promoting competition in markets for telecommunications services⁶
- achieving any-to-any connectivity
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied, and any other infrastructure by which such services are, or are likely to become, capable of being supplied.

Appendix C sets out the legislative framework in more detail, including the ACCC's approach to the LTIE test and the key issues that it will consider under the test.

If a service is declared, it is subject to the standard access obligations (SAOs) and the access provider must provide access, if requested, to that service to access seekers.⁷ The access provider may also be required to comply with regulated price and non-price terms and conditions set by the ACCC.⁸

1.3.2. The wholesale ADSL service

DSL technology provides fixed-line broadband services over copper networks and is currently the major technology for broadband internet connections in Australia. ADSL broadband services have a high downstream data rate coupled with a lower upstream data rate and are typically used by residential or small business customers. As the NBN is being rolled out, the ADSL fixed-line broadband services will no longer be available as services are progressively migrated from Telstra's legacy network to the NBN network. More information on DSL technology can be found at Appendix B.

The ACCC first declared the wholesale ADSL service in February 2012.⁹ The ACCC declared the wholesale ADSL service as it considered this would promote the LTIE in the following ways¹⁰:

- Promoting competition – declaration would address the ongoing concerns about the level and structure of Telstra's wholesale ADSL pricing. It would also address concerns about Telstra's ability to leverage its market power in the supply of the wholesale ADSL service to impede competition through restrictive contractual terms. Declaration would also prevent the potential for anti-competitive price discrimination between wholesale ADSL access seekers. These were seen to be important in providing certainty in the lead-up to the NBN.
- Achieving any-to-any connectivity – declaration would not have any impact on the achievement of any-to-any connectivity.

⁵ CCA, section 152AB.

⁶ By 'telecommunications services', the ACCC means 'carriage services or services supplied by means of carriage services.'

⁷ CCA, section 152AR.

⁸ CCA, section 152AY.

⁹ ACCC, *Declaration of the wholesale ADSL service under Part XIC of the Competition and Consumer Act 2010, Final decision (Wholesale ADSL service declaration – Final decision)* February 2012, <https://www.accc.gov.au/system/files/Declaration%20of%20the%20wholesale%20ADSL%20service%20-%20final%20decision%20paper.pdf>.

¹⁰ ACCC, *Wholesale ADSL service declaration – Final decision*, February 2012, p. 1-2.

- Encouraging economically efficient use of, and economically efficient investment in, infrastructure – declaration would be unlikely to impact on the incentives for efficient investment given significant further expansion of the footprint for wholesale ADSL services using competitive infrastructure (ULLS and DSL infrastructure) was not anticipated. Further, Telstra’s legitimate commercial interests would not be impacted given its ability to continue to make a return on its existing investments.

The ACCC has made a final access determination (FAD) establishing the regulated price and non-price terms and conditions to apply where commercial agreement cannot be reached.¹¹ The ACCC decided the wholesale ADSL service FAD and SAOs would only apply to Telstra and not to other carriers or carriage service providers. This was because Telstra remains the dominant provider of the wholesale ADSL service and there was no significant benefit in applying the SAOs to non-Telstra providers given they were already effectively constrained in the supply of the wholesale service through competition with Telstra.¹²

As the ACCC has decided to declare the wholesale ADSL service using the same service description as in the 2012 final declaration decision,¹³ the current FAD¹⁴ would remain in place.¹⁵ Section 3 of the wholesale ADSL service declaration inquiry discussion paper provided further background to the current declaration of the wholesale ADSL service, related processes and outlined some key issues and trends in the industry.¹⁶

1.4. Structure of the Report

The draft report is set out as follows:

Section 2 sets out the ACCC’s final views about whether the declaration of the wholesale ADSL service is likely to promote the LTIE, including whether declaration will result in the achievement of the objectives of promoting competition, achieving any-to-any connectivity and encouraging the economically efficient use of, and economically efficient investment in, infrastructure by which the service is supplied.

Section 3 outlines the ACCC’s final views in relation to the wholesale ADSL service description, the length of the declaration and the regulatory burden associated with declaration.

Appendix A provides the service description for the wholesale ADSL service.

Appendix B sets out an overview of DSL technology.

Appendix C provides an outline of the legislative framework the ACCC must have regard to in deciding whether to declare a service.

Appendix D lists the submissions, received by the ACCC to the draft report, and their short titles.

¹¹ ACCC, *Public inquiry into final access determinations for fixed line services*, Final Decision, October 2015, <http://www.accc.gov.au/system/files/FSR%20FAD%20Final%20Decision%20Report%20-%20Public%20Version.pdf>

¹² ACCC, *Public inquiry into final access determinations for fixed line services*, Final Decision, October 2015, p. 227.

¹³ ACCC, *Wholesale ADSL service declaration – Final decision*, February 2012, p. 60.

¹⁴ *Final Access Determination No.8 of 2015 (WADSL)*, <http://registers.accc.gov.au/content/item.phtml?itemId=1190014&nodeId=334e39870420b8779c7d7cb1908bc110&fn=Final%20Access%20Determination%20Nos.%202%20to%208%20of%202015%20for%20Fixed%20Line%20Services.pdf>

¹⁵ The current FAD has an expiry date of 30 June 2019. Telstra applied to the Federal Court for judicial review of the ACCC’s fixed line services FADs on 5 November 2015.

¹⁶ ACCC, *Wholesale ADSL service declaration inquiry, Discussion paper*, July 2016.

2. Will declaration promote the LTIE

Key points

- The ACCC considers declaration of the wholesale ADSL service will promote the LTIE.
- Consistent with its approach in 2012, the ACCC considers the relevant markets are the national wholesale and retail markets for high speed fixed-line broadband internet services. The ACCC considers the superfast broadband market is a separate but related market.
- The ACCC considers:
 - Declaration is likely to continue promoting competition in the relevant markets by providing ongoing national access to the wholesale ADSL service on regulated price and non-price terms and conditions so access seekers can effectively compete now and into the future.
 - Declaration of the wholesale ADSL service is unlikely to impact the objective of achieving any-to-any connectivity, and
 - Declaration of the wholesale ADSL service is likely to encourage the economically efficient use of, and the economically efficient investment in, infrastructure. Declaration will not affect Telstra's ability to exploit economies of scale or make a return on its investment. Declaration is also likely to encourage more efficient investment in infrastructure by Telstra and access seekers, where such investment is necessary, whilst also encouraging the efficient use of both Telstra's and access seekers' existing infrastructure.

In deciding to declare a service, the ACCC must be satisfied that declaration will promote the LTIE of carriage services or services supplied by means of carriage services. In deciding whether declaration is likely to promote the LTIE, the ACCC must have regard to the extent to which declaration is likely to result in the achievement of the following three objectives:

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

This section sets out the ACCC's final decision on whether declaration of the wholesale ADSL service is likely to promote the LTIE.

2.1. Relevant markets including substitutes

As discussed in section 1.3.1, the CCA requires the ACCC to consider whether declaring a service is likely to promote competition in markets for listed services.¹⁷ This involves identifying the markets in which the eligible service is supplied and in which declaration is likely to promote competition. To define the market, the ACCC considers the service in question and substitutes for that service. The ACCC is not required to define the scope of relevant markets precisely for the purpose of a declaration inquiry. It is sufficient to broadly identify the scope of the markets likely to be affected by the declaration.¹⁸

On the functional dimension aspect, the ACCC's draft view was that the relevant markets for this inquiry were the wholesale and retail markets for fixed-line broadband internet services.

¹⁷ Subsection 152AB(2) of the CCA.

¹⁸ ACCC, *A guideline to the declaration provisions for telecommunications services under Part XIC of the Competition and Consumer Act 2010*, August 2016, p.33.

In relation to the wholesale market for fixed-line broadband, the ACCC considered that, consistent with the 2012 final declaration decision, the wholesale market can be further categorised into two segments:

- the self-supply of fixed-line wholesale broadband services, including RSPs' use of their own ULLS/LSS networks to self-supply at the wholesale level, and
- the resale by RSPs of fixed-line wholesale broadband services. That is, where RSPs supply wholesale ADSL services to other RSPs using their own ULLS/LSS networks and/or resale of wholesale ADSL from Telstra.

On the product dimension aspect, the ACCC's draft view was that high speed and superfast fixed-line broadband markets are separate but related markets. This is because superfast broadband services are a replacement for high speed fixed-line services and ultimately, customers will not have a choice about transitioning to the NBN. It was noted that customers may have some choice as to when they take up an NBN service.

The ACCC's draft view did not consider the following services to be strong substitutes for high speed or superfast fixed-line broadband services for the following reasons:

- mobile broadband services – while data rates are comparable, customers currently appear to maintain a preference for fixed-line broadband for data intensive activities given the more expensive retail prices and smaller data allowances for mobile broadband services.
- fixed wireless broadband services – limited availability of the service and the cost of retail plans and data inclusions are not currently comparable to fixed-line broadband services.
- satellite broadband services – more expensive retail plans with smaller data allowances, usage restrictions and limited availability of the satellite broadband service.

The ACCC's draft view was also to retain a national market definition for the purpose of conducting the LTIE analysis as Telstra competes nationally in the supply of broadband services to end-users, including offering national retail prices.¹⁹

Submissions

Macquarie Telecom supported a national market definition, while overall Optus supported declaration of the wholesale ADSL service on a national basis.²⁰ While Telstra was also broadly supportive of the draft report, it raised questions about whether the current legislative framework is able to accommodate the roll-back of access regulation in circumstances where segments of the national fixed-line market are, in Telstra's view, highly competitive.²¹

ACCC's final decision

Consistent with its draft view, the ACCC considers the relevant markets are the national wholesale (comprising of self-supply and resale segments) and retail markets for high speed fixed-line broadband products. The ACCC considers the superfast broadband market is a

¹⁹ Telstra, *Wholesale ADSL service declaration inquiry, Telstra's response to the Commission's Discussion Paper*, Public version, 29 July 2016, p.17.

²⁰ Macquarie Telecom, *Submission in support of the ACCC's draft decision in the wholesale ADSL declaration inquiry*, 21 November 2016, p.1; Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p.3.

²¹ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.3.

separate but related market, and maintains its view that there are currently no strong substitutes for high-speed fixed-line broadband services.

2.2. State of competition

This section sets out the ACCC's assessment of the effectiveness of competition in the relevant markets.

The ACCC's draft view was that Telstra retains a dominant position in both the national wholesale and retail markets for high speed fixed-line broadband services. On a more disaggregated, ESA-basis, the ACCC acknowledged that there are instances where there appears to be some infrastructure competition in the wholesale market (via the ULLS and access seeker's DSL infrastructure). However, infrastructure competition does not exist on a national basis and as a result there is limited competition at the retail level on a national basis.

In relation to the wholesale market for superfast broadband services, the ACCC's draft view was that Telstra has a dominant market position and that promoting competition in the market for high speed broadband services was likely to have flow on benefits to the market for superfast broadband services.

Submissions

Both Macquarie Telecom and Optus agreed that the circumstances that existed prior to 2012 largely still exist today. Macquarie Telecom submitted that the key circumstances that justified the original declaration (namely, Telstra's ownership of the copper network) are likely to remain at least until the NBN is fully deployed.²² Optus submitted that DSL technology is currently the major technology for fixed-line broadband internet connections in Australia, and that Telstra holds the dominant position in both the national retail and wholesale markets for high speed fixed-line services.²³ Optus also considered that the state of competition will be impacted during the transition to the NBN and this impact will vary in both size and scope.²⁴ Optus submitted that:

- demand for high speed broadband services will continue to exist. It is unlikely that overall demand for broadband services will diminish over time, rather it may simply shift from legacy (copper-based) technologies to those delivered over the NBN network
- continued investment in DSL networks will be limited. For example, the payback period for new investments due to NBN policy and shutdown of legacy copper network will be narrowed as a result, and
- the current access platforms for downstream DSL services are not fully effective substitutes for ADSL. The ability for access seekers to supply end users will be constrained by access to available ports at an exchange.²⁵

²² Macquarie Telecom, *Submission in support of the ACCC's draft decision in the wholesale ADSL declaration inquiry*, 21 November 2016, p.1

²³ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p.2.

²⁴ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 6.

²⁵ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 6.

Optus further submitted that notwithstanding the continued rollout of the NBN, it is still expected that there will be an increase in the number of ADSL services that could be supplied by Telstra's DSL.²⁶

Telstra maintained its view that the 289 ESAs it proposes should be exempt from declaration are competitive and that declaration should not extend to these areas. Telstra noted that access seeker combined market share across the 289 ESAs²⁷ has increased to [c-i-c begins] [REDACTED] [c-i-c ends], with [c-i-c begins] [REDACTED] [c-i-c ends] of services supplied in these areas supplied via ULLS or LSS.

ACCC's final decision

The ACCC maintains its draft view that Telstra remains the dominant provider in both the national wholesale and retail markets for high speed fixed-line broadband services, and that infrastructure competition on a national level is limited. The ACCC also maintains the view that market share in the high speed fixed-line broadband market is likely to have flow on effects on the market for superfast broadband. As demonstrated below, the state of competition has changed very little since the release of the draft report.

Market for high-speed broadband services

The market shares for ADSL services (as at September 2016) are set out in Table 2.1. These illustrate that nationally Telstra retains its dominant market position. Competition remains strongest in Bands 1 and 2.

Table 2.1 - Telstra DSL service market shares based on customer access network (CAN) RKR data

| | Telstra* | Other** | Change in non-Telstra market share since June 2016 ²⁸ |
|--------------------------------------------------|--------------------|---------|------------------------------------------------------------------|
| National market share | 61.24% | 38.76% | + 0.38% |
| Share in Bands 1 and 2 | 48.69% | 51.31% | + 0.32% |
| Share in Bands 3 and 4 | 95.72% | 4.28% | - 0.10% |
| Number of exchanges with a DSLAM presence | 2830 ²⁹ | 604 | |

Source: Based on ACCC, *Snapshot of Telstra's customer access network as at September 2016*.

*Telstra's market share is based on voice and DSL and DSL only SIOs

**Other's market share is based on ULLS and LSS SIOs

These market shares reflect that Telstra currently supplies DSL services in approximately 2830 ADSL enabled ESAs – 43 less than at July 2016³⁰ (likely due to the NBN roll-out) – out of a total 5067 ESAs nationally. In comparison, access seekers that utilise ULLS/LSS and their own DSL infrastructure, supply competing wholesale and retail ADSL services in 604

²⁶ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 6.

²⁷ Based on ULLS and LSS SIOs.

²⁸ Based on ACCC, *Snapshot of Telstra's customer access network as at June 2016*.

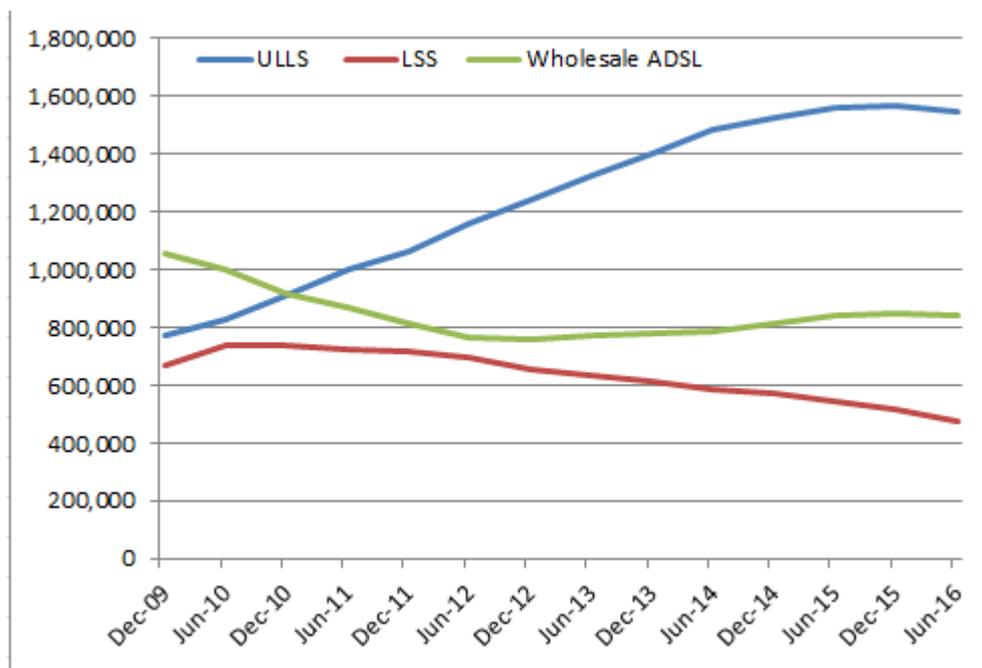
²⁹ <https://www.telstrawholesale.com.au/products/broadband/adsl.html>, retrieved 6 December 2016.

³⁰ <https://www.telstrawholesale.com.au/products/broadband/adsl.html>, retrieved July 2016.

ESAs (2 less than at June 2016³¹). This demonstrates that access seekers who utilise their own infrastructure continue to account for only 21 per cent of Telstra’s ADSL footprint.

As noted in the draft report, recent access seeker investment in ULLS has plateaued and slightly declined despite strong growth observed prior to December 2014. Chart 2.1 illustrates this investment trend for ULLS and also shows the trends for LSS and wholesale ADSL via SIOs.

Chart 2.1 - Number of access seekers’ services in operation



Source: Data sourced from Telstra Corporation Ltd Financial results 2010-12 and Financial results supporting material 2013-16 at: <https://www.telstra.com.au/aboutus/investors/financial-information/financial-results>. The ACCC notes slight differences in SIO numbers provided by Telstra in the Telstra Economic Modelling (TEM) reports.

This trend appears to correlate with the increased acceleration of the NBN rollout and commercial decisions being made to minimise investment in DSL infrastructure as the payoff period becomes limited.

Market share in the 289 ESAs Telstra proposed for exemption

The ACCC understands that most of the ESAs Telstra proposes for exemption are in Band 2 (273), with the remainder (16) being in Band 1. Table 2.2 sets out Telstra’s market share in the ESAs proposed for exemption, showing this by 10 per cent bands to illustrate the range of the market shares across the 289 ESAs. This is based on the ACCC’s analysis of the 289 ESAs listed in Attachment B of Telstra’s submission to the discussion paper and CAN RKR data as at September 2016.³²

³¹ Based on ACCC, *Snapshot of Telstra’s customer access network as at June 2016*.

³² Telstra, *Wholesale ADSL service declaration inquiry, Telstra’s response to the Commission’s Discussion Paper*, Public version, 29 July 2016, Attachment B.

Table 2.2 –Telstra’s market share in those ESA’s Telstra proposed should be exempt from declaration³³

| Number of ESAs | Telstra’s market share (%) |
|------------------|----------------------------|
| [c-i-c begins] ■ | ■ |
| ■ | ■ |
| ■ | ■ |
| ■ | ■ |
| ■ | ■ |
| ■ | ■ [c-i-c ends] |
| 289 | |

Source: Telstra, CAN RKR data, September 2016

Telstra has the largest market share in [c-i-c begins] ■ [c-i-c ends] of the ESAs proposed for exemption,³⁴ and a significant market share (of 30 per cent or more) in [c-i-c begins] ■ [c-i-c ends] of the ESAs. This indicates that competition in the relevant 289 ESAs varies significantly. The ACCC notes the bulk of the lines represent ULLS/LSS lines being used to self-supply ADSL, rather than use for supply of a wholesale ADSL service.

The ACCC acknowledges that when considering ESAs on an individual basis, market shares are more dispersed between operators in some ESAs and sections of the market. However, the ACCC remains of the view that it is appropriate to assess the state of competition on a national basis, rather than on an ‘ESA by ESA’ basis. This is because:

- retail competition occurs on a national level; Telstra competes nationally in supplying broadband services to end-users, including offering national retail prices³⁵ and competing in the supply of whole-of-business national offerings
- despite different levels of competition in particular areas of the market, Telstra remains the largest single wholesale and retail fixed-line broadband provider at a national level, and has significant market share in most of the ESAs, and
- all stakeholders, including Telstra have demonstrated support for a national market definition. The ACCC notes that while Telstra, in its submission to the discussion paper, considered the ACCC should look at segments of the market and consider whether regulation in those segments will promote the LTIE, it supported that the relevant market to be considered in the context of this inquiry is national.³⁶

The ACCC notes that it has considered whether it would be appropriate to exempt a small subset of the 289 ESAs. However, for the reasons discussed in section 2.3 below, the ACCC considers declaration of the wholesale ADSL service nationally, in all geographic regions, is likely to promote competition in the relevant markets (and therefore, the LTIE).

³³ The ACCC’s analysis indicates that some ESAs proposed for exemption do not meet Telstra’s threshold test for exemption.

³⁴ Where TPG and iiNet market share is combined. Telstra, CAN RKR data, September 2016.

³⁵ Telstra, *Wholesale ADSL service declaration inquiry, Telstra’s response to the Commission’s Discussion Paper*, Public version, 29 July 2016, p.17.

³⁶ Telstra, *Wholesale ADSL service declaration inquiry, Telstra’s response to the Commission’s Discussion Paper*, Public version, 29 July 2016, p.17.

Wholesale market for resale of fixed-line wholesale broadband services

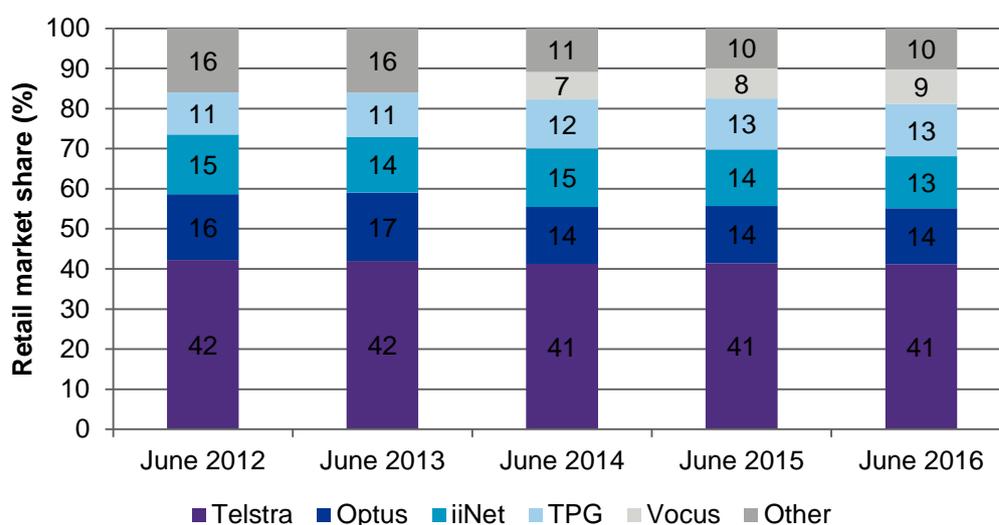
As noted in the draft report, there are alternative providers such as Optus, Vocus and AAPT reselling wholesale ADSL services. However, resale competition is extremely limited and it is clear that there is no depth of competition in the supply of wholesale ADSL services.

Confidential market share information provided by stakeholders during the 2013 Fixed Line Services FAD inquiry clearly indicates that Telstra is the dominant provider in the national resale market.³⁷ As at June 2015, Telstra provided [c-i-c begins] [redacted] [c-i-c ends] wholesale ADSL services compared to the second largest resale provider [c-i-c begins] [redacted] [c-i-c ends] which provided just [c-i-c begins] [redacted] [c-i-c ends] wholesale ADSL services.³⁸ [c-i-c begins] [redacted] [c-i-c ends]

Retail market for fixed-line broadband services

Telstra retains a relatively strong position in the national retail market for high speed broadband services. As indicated in Chart 2.2, Telstra had the highest proportion of subscribers as at June 2016 (unchanged since 2012).

Chart 2.2 Retail market shares for fixed-line broadband services



Source: ACCC Division 12 RKR data (DSL and cable subscribers) for all named carriers except for Vocus, whose figures are based on publicly available data, and Australian Bureau of Statistics, *Internet Activity Australia* (8153.0).

Since the merger of TPG and iiNet in September 2015, there are now four large retail fixed-line broadband providers, which based on the market shares as at June 2016, supply 90 per cent of the market. As Chart 2.2 indicates, Telstra holds a relatively strong position in the retail market for fixed-line broadband services, with 15 per cent more market share than the second largest provider, TPG,⁴⁰ and 27 per cent more market share than the third largest provider, Optus.

³⁷ ACCC, *Fixed Line Services FAD inquiry: request for further information*, 3 June 2015.

³⁸ [c-i-c begins] [redacted] [c-i-c ends]; Telstra, *Fixed-line Services FAD inquiry: Response to request for further information*, confidential version, 11 August 2015.

³⁹ [c-i-c begins] [redacted] [c-i-c ends]

⁴⁰ TPG and iiNet market share combined.

The ACCC acknowledges that there appears to be a degree of retail competition in the national market. As noted in the draft report, this is evidenced by the variety of price/service offerings generally available and consistent nationwide, and the differentiation that occurs when services are being supplied on-net compared to off-net (that is, on a RSP's own network as compared to on Telstra's network or that of another wholesale provider). This variety of price/service offerings is illustrated by the following ADSL2+ plans that are currently in the market:

- Telstra has plans ranging from \$75 per month for 100GB of data to \$120 per month for 1000GB of data⁴¹
- Optus has a standalone plan of \$80 per month for unlimited data⁴²
- TPG has on-net plans ranging from \$29.99 per month for 50GB of data to \$59.99 per month for unlimited data and off-net plans ranging from \$49.99 per month for 50GB of data to \$99.99 per month for unlimited data⁴³
- iiNet has on-net plans ranging from \$59.99 per month for 250GB of data to \$79.99 per month for unlimited data and off-net plans ranging from \$69.99 per month for 100GB of data to \$89.99 per month for 250GB of peak and 250GB of off peak data⁴⁴
- Dodo (in the M2 group) has plans ranging from \$24.90 per month for 50GB of data to \$34.90 per month for unlimited data⁴⁵
- iPrimus (in the M2 group) has plans ranging from \$54.90 per month for 30GB of data to \$79.90 per month for unlimited data⁴⁶
- Exetel has bundled plans ranging from \$39.99 per month for 100GB of data to \$54.99 per month for unlimited data.⁴⁷ It no longer offers naked ADSL2+ services.⁴⁸

There were also real price reductions in retail ADSL broadband prices of 0.7 percent over 2015-16 (less 1.1 per cent than during 2014-15 as noted in the draft report)⁴⁹, which similarly suggests some level of price competition.⁵⁰ However, this reduction was less than the overall real price reduction of 1.5 per cent recorded for all telecommunications services, and less than the average annual reduction in ADSL broadband prices of 2.6 per cent experienced since the index was baselined in 2006-07.⁵¹

The ACCC notes that a current driver for competition in the retail market for high speed broadband services appears to be the transition to NBN services. From submissions to the discussion paper, there seems to be benefit in RSPs acquiring market share in the high speed broadband services market, as this can then be transferred, through the migration

⁴¹ Telstra did not appear to have standalone high speed broadband plans and these prices included calls <https://www.telstra.com.au/broadband/home-broadband> accessed 5 January 2017.

⁴² <http://www.optus.com.au/shop/broadband/home-broadband/plans?bt=UDSL&tl=LAU> accessed 5 January 2017.

⁴³ http://www.tpg.com.au/products_services/adsl2-standalone and http://www.tpg.com.au/products_services/broadband-offnet accessed 5 January 2017.

⁴⁴ Includes home phone line rental. <https://www.iinet.net.au/internet-products/broadband/adsl/> and <https://www.iinet.net.au/internet-products/broadband/adsl/offnet/> accessed 5 January 2017.

⁴⁵ <http://www.dodo.com/internet/quick-links/adsl-plans/> accessed 5 January 2017.

⁴⁶ Includes line rental and local and national calls <http://www.iprimus.com.au/products/adsl-broadband/#/TELSTRA2> accessed 5 January 2017.

⁴⁷ Includes line rental. <https://www.exetel.com.au/broadband/adsl-standalone> accessed 5 January 2017.

⁴⁸ <https://www.exetel.com.au/broadband/adsl-faq> accessed 5 January 2017.

⁴⁹ ACCC, *Competition in the Australian telecommunications sector: Price changes for telecommunications services in Australia 2014-15*, February 2016, p 75.

⁵⁰ ACCC Division 12 RKR data.

⁵¹ ACCC Division 12 RKR data.

process, to the market for superfast broadband services (in which NBN services are supplied).⁵²

It is also likely that the level of competition achieved to date in the retail market for high speed broadband services has been a result of the suite of regulated services available – namely the ULLS, LSS and wholesale ADSL service – which have allowed access seekers to build market share and manage investments based on regulated prices that broadly reflect Telstra’s underlying costs of supplying the service, and which have limited Telstra’s ability to favour its own operations.

Wholesale market for superfast broadband services

In relation to the market for superfast broadband services, the wholesale market shares in Table 2.3 illustrate that Telstra retains a relatively dominant market position. The ACCC considers promoting competition in the market for high speed broadband services is likely to have flow on benefits to the market for superfast broadband services.

Table 2.3 – NBN wholesale market share

| Access Seeker Group | Total | Fibre to the basement | Fibre to the node |
|----------------------------|--------------|------------------------------|--------------------------|
| Telstra | 56% | 46% | 58% |
| TPG | 22% | 28% | 21% |
| Optus | 12% | 17% | 11% |
| Vocus | 9% | 8% | 9% |
| Other | 1% | 1% | 1% |

Source: ACCC, *NBN wholesale market indicators report* (table 4), September 2016.

2.3. Promoting competition

In determining whether declaration of the wholesale ADSL service will promote the LTIE, the ACCC must have regard to the extent to which declaration is likely to promote competition in the relevant markets. As part of its assessment, the ACCC has considered the likely future state of competition in the relevant markets with and without declaration. The ACCC has also had regard to the extent to which declaration will remove obstacles for end-users to gain access to listed services.⁵³

The ACCC’s draft view was that declaration will continue to promote competition in the markets for high speed and superfast fixed-line broadband services. The ACCC considered that the conditions and circumstances that existed prior to the 2012 final declaration decision also largely exist today. Without declaration, the ACCC considered Telstra would have similar incentives and opportunities as it did prior to the 2012 declaration to engage in entry deterring or expansion deterring conduct to maintain and grow its market share in the high speed fixed-line broadband market. The ACCC considered that allowing access to regulated terms and conditions for the wholesale ADSL service (in the event that they are unable to reach agreement with Telstra) would enable service providers to continue competing in the downstream retail market. This, in turn, would allow service providers to develop and offer different ADSL broadband products to meet the needs of end-users.

⁵² Exetel, *Submission to discussion paper: Appendix A: Questions on which submissions are sought – Exetel*, public version, p.4; Vocus, *ACCC WADSL service declaration inquiry discussion paper – Vocus submission*, p.4; Optus, *Submission in response to ACCC Discussion Paper, Wholesale ADSL Service Declaration Inquiry*, Public Version, July 2016, p.15.

⁵³ Section 152AB(4) of the CCA.

The ACCC noted in its 2012 final declaration decision that the availability of the wholesale ADSL service on reasonable terms during the deployment of the NBN was important as it would enable access seekers to effectively compete with Telstra for retail customers and then migrate them onto the NBN.⁵⁴ The ACCC noted in the draft report that compared to 2012 the NBN rollout is now more advanced, and competition for customers and market share in the superfast fixed-line broadband market is more of a focus. In this regard, the ACCC considered that a future without declaration of the wholesale ADSL service would heighten the incentives for Telstra to engage in entry or expansion deterring conduct, as Telstra could secure a dominant market share in the superfast fixed-line broadband market.

The ACCC also noted in its draft report a recent decline in competing ULLS/LLS and DSL infrastructure, and considered the prospect of future investment in ULLS/LSS and DSL infrastructure unlikely. The ACCC acknowledged that there appears to be instances of limited competition, including within some of the 289 ESAs that Telstra considered as being effectively competitive. However, the ACCC considered that while customers could be supplied via existing DSL infrastructure (primarily Band 1 and 2 ESAs), competition for other customers beyond the capacity of the existing DSL infrastructure could only occur via the wholesale ADSL service.

The ACCC noted ULLS and/or LSS based wholesale ADSL services are unlikely to be sufficient alternatives to Telstra's wholesale ADSL service because access seekers have a smaller DSL footprint. The ACCC noted there is unlikely to be significant new DSL investment and access seekers with existing DSL infrastructure are constrained by the capacity of their DSLAMs.

In relation to Telstra's geographic exemptions proposal, the ACCC considered it appropriate to examine the issue of whether competition will be promoted within the context of a national market, as Telstra competes nationally in the supply of wholesale broadband products. The ACCC considered that declaration would promote competition in the 289 ESAs because it would:

- ensure the ability of access seekers with DSLAM networks to compete with Telstra in the national wholesale and retail high speed fixed-line markets, and
- limit the opportunity for Telstra to potentially engage in anti-competitive conduct, particularly within an environment where there is incentive to do so.

Submissions

Promoting competition

Optus supported the ACCC's draft view that declaration of the wholesale ADSL service will promote competition in the national markets for high speed fixed-line broadband services.⁵⁵ Optus considered that the wholesale ADSL service is important to compete in the market for fixed broadband during the transition to the NBN, especially given Telstra's 'auto-migration' of its customer base from ADSL to NBN.⁵⁶ Optus considered the delay in the NBN roll-out means that access seekers are likely to rely on access to legacy wholesale services for a longer period.⁵⁷

⁵⁴ ACCC, *Wholesale ADSL service declaration – Final decision*, February 2012, p. 44.

⁵⁵ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 3.

⁵⁶ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 2.

⁵⁷ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p.2.

Optus also noted that declaration of the wholesale ADSL service was, and remains, a key component of Telstra's Structural Separation Undertaking (SSU). Optus submitted that 'the ACCC made clear that the declaration of the WADSL service was a condition for acceptance of the SSU'.⁵⁸

Macquarie Telecom also supported the ACCC's draft view, submitting that the decision will promote competition by allowing access to a wholesale ADSL service at a regulated price and therefore, benefit end-users by allowing competitors to Telstra to offer differentiated services.⁵⁹

Telstra submitted that declaration in highly competitive areas will not promote the LTIE.⁶⁰ In this regard, Telstra maintained its proposal to exempt from declaration 289 ESAs which it considers are demonstrably competitive based on a two-part test: 1) where there are four or more infrastructure competitors utilising ULLS or LSS and 2) non-Telstra competitors have a market share of at least 30 per cent in an ESA.⁶¹

Telstra considered it was incorrect to infer that regulation is justified in competitive areas because across all areas there is insufficient competition.⁶² Telstra argued that as applied in the domestic transmission capacity service (DTCS) declaration decision, the CCA allows the ACCC to ascertain the geographic scope of declaration and carve out competitive areas. Telstra submitted that it is not clear why the legislative framework allows for geographic roll-back of regulation for the DTCS but appears not in relation to the wholesale ADSL service.⁶³

Geographic exemptions

Telstra argued that exemption of the 289 ESAs would not reduce the ability of access seekers with DSLAM networks to compete on a national basis in wholesale and retail markets.⁶⁴ Rather, declaration of the 289 ESAs could have a negative impact on competition, to the extent that all carriers come to rely more on Telstra's wholesale ADSL service. Telstra argued:

- declaration would not limit the opportunity for Telstra to engage in anti-competitive conduct beyond the limitations it is already subject to – those imposed by competition and the general and telecommunications-specific competition law provisions⁶⁵
- competition is better able to deliver reasonable price and non-price terms than regulation.⁶⁶ It argued that competition in the 289 ESAs, when combined with regulated access to Telstra's wholesale ADSL service outside of the 289 ESAs, is already ensuring that access seekers have access to the wholesale ADSL service in all geographic locations on reasonable terms, and

⁵⁸ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p.3.

⁵⁹ Macquarie Telecom, *Submission in support of the ACCC's draft decision in the wholesale ADSL declaration inquiry*, 21 November 2016, p.1.

⁶⁰ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.5.

⁶¹ See Telstra, *Wholesale ADSL service declaration inquiry, Telstra's response to the Commission's Discussion Paper*, Public version, 29 July 2016, p14.

⁶² Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.5.

⁶³ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.5.

⁶⁴ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, pp 5-6.

⁶⁵ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.9.

⁶⁶ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.9.

- there are not 'significant incremental costs' to sourcing wholesale ADSL services from multiple suppliers, nor barriers to entry (as carriers are already supplying national services in wholesale and retail markets) as suggested by Exetel's submission to the discussion paper⁶⁷ which indicated that Exetel currently acquires wholesale services from multiple providers.

Telstra disagreed that absent declaration in the 289 ESAs, it would have the incentive to potentially engage in anti-competitive conduct.⁶⁸ Telstra considered competition from ULLS/LSS-based carriers in these ESAs provides a sufficient competitive constraint, and means Telstra would lose customers to its competitors if it attempted to engage in such conduct. While Telstra agreed that non-Telstra suppliers of the wholesale ADSL service are unable to provide their customers with a national service using their own network, it noted they are able to do so by reselling Telstra's (and others') wholesale ADSL services outside their own footprints.⁶⁹ Telstra used AAPT and Vocus as examples of providers that use third party infrastructures to supplement their wholesale networks.

Optus supported the ACCC's draft view not to grant any geographic exemptions.⁷⁰ In particular, Optus agreed that the opportunities for competition would be reduced were the service declared with geographic exemptions than if the service was declared without the exemptions.

Optus argued that Telstra remains in a unique position as the only supplier with a national network and that the existence of alternative inputs and alternative downstream services does not address the fact that the inputs and retail services are not effective substitutes for Telstra's wholesale ADSL service.⁷¹ Optus considered geographic exemptions may be problematic given that the retail broadband market requires RSPs to compete on a national basis, which often requires access to alternative wholesale services as inputs where they do not have an existing network.⁷² Optus argued diverse alternative inputs do not cover the same geographic reach as the wholesale ADSL service, which it considered is evidenced by the network boundary for Telstra's DSL network which occurs at the internet gateway router (IGR) as opposed to the Telstra exchange. Optus further noted that, even where alternative inputs are available (such as ULLS), it would not be efficient to encourage investment in these services given that they will be 'shared by the NBN rollout'.⁷³

Macquarie Telecom also strongly supported the need for all 289 ESAs to be declared.⁷⁴ Macquarie Telecom noted ADSL is a national service and there is a national market, and that in the transition to the NBN it is expected to become 'impossible' to deploy in the exchange to acquire ULLS (which will be decommissioned as NBN connects), leaving wholesale ADSL as the only commercially viable access technology.⁷⁵ Macquarie Telecom

⁶⁷ Exetel, *Appendix A: Questions on which submissions are sought – Exetel*, Public version, pp. 2-3.

⁶⁸ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p. 8.

⁶⁹ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p. 6.

⁷⁰ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 3.

⁷¹ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 4.

⁷² Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 4.

⁷³ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 4.

⁷⁴ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

⁷⁵ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

therefore considered it important to have regulated access to the wholesale ADSL service to ensure a competitive market for retail services to end-users.⁷⁶

In addition, Macquarie Telecom noted that it requires national coverage to supply its customers and would face additional costs if it had to split a customer's network between various different wholesale ADSL suppliers.⁷⁷

ACCC's final decision

The ACCC's final decision is that declaration of the wholesale ADSL service on a national basis without giving effect to any exemptions is likely to promote competition in the relevant markets. In forming this conclusion it has considered the likely future state of competition with and without declaration.

Future without declaration

As set out in the draft report, the ACCC considers that without declaration, Telstra, as the vertically integrated national supplier, would have similar incentives and opportunities as it did prior to the 2012 declaration to engage in entry-detering or expansion-detering conduct to maintain and grow its market share. This is likely to be heightened as market share in the high speed fixed-line market is being used to gain superfast broadband market share, and future investment in competing ULLS/LSS and DSL infrastructure is being reduced (due to the NBN roll-out and apparent decisions being made to minimise investment in DSL infrastructure as the payoff period becomes limited). Given future DSL investment is unlikely, competition for customers beyond the capacity of existing DSL infrastructure would only be able to occur via the wholesale ADSL service.⁷⁸ This would likely increase the incentive and potential for Telstra to engage in conduct that raises competition concerns, as the constraint offered by the threat of competitive entry in the supply of the wholesale ADSL service (which is already limited) would diminish and, so too, would the risk Telstra faces in losing market share (or customers) by favouring its own retail operations.

Consistent with its draft view, the ACCC considers that without declaration the ability of access seekers to compete with Telstra in supplying wholesale ADSL services in the national wholesale and retail markets would be reduced. This is because:

- access seekers have smaller DSLAM footprints (compared with Telstra) which means they are unable to provide their wholesale customers with wholesale ADSL services on a national basis using their own network. As noted in section 2.2, access seekers operate over only 21 per cent of Telstra's ADSL footprint.
- many potential purchasers of wholesale ADSL services require national coverage (for example, Macquarie Telecom, AAPT and Vocus)⁷⁹ so that they can supply their retail customers, specifically business and government customers that have operations in metropolitan and regional areas across Australia, and

⁷⁶ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

⁷⁷ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

⁷⁸ The ACCC understands that the largest DSLAMs service 384 customers.

⁷⁹ Macquarie noted in its submission that it requires national coverage. Telstra also indicated AAPT and Vocus serve customers with a national service. Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1. Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.6.

- there are likely to be significant incremental costs to sourcing wholesale ADSL services from multiple suppliers. As noted by Macquarie Telecom, it would face additional costs if it had to split a customer's network between multiple suppliers.⁸⁰ The ACCC considers these additional costs incurred by RSPs would reduce the ability of access seekers with DSLAM networks to compete with Telstra in supplying wholesale ADSL services to a significant segment of the wholesale market.

Moreover, absent declaration, different price equivalence arrangements under Telstra's SSU would apply. The ACCC has previously publicly stated its view that the SSU price equivalence arrangements when the wholesale ADSL service is not declared appear comparatively weak to those that apply when the service is declared.⁸¹ The SSU price equivalence arrangements were considered comparatively weak because:

- Telstra would retain considerable latitude in developing and applying the pricing methodology
- the measures do not prevent Telstra from engaging in discriminatory behaviour, and
- the ACCC would be limited in its ability to direct Telstra to change its pricing conduct under the equivalence commitment.

In the ACCC's 2012 final declaration decision, the ACCC did not accept Telstra's submission that the proposed SSU would address concerns in relation to Telstra's supply and pricing decisions such that declaration is unnecessary.⁸² The price equivalence arrangements have not changed since the wholesale ADSL service was declared in 2012.

All these limitations on competition in the supply of wholesale ADSL when the service is not declared will be reflected in the high speed broadband retail market and are likely to flow through to the superfast broadband retail market, as Telstra will remain the vertically integrated operator who is the dominant retailer in the national market for high speed fixed-line broadband services. Therefore, the ACCC's view is that without declaration, and with the incentive and greater opportunity for Telstra to favour its own wholesale and retail operations over those of its competitors, competition in downstream high speed broadband markets would be likely to diminish. This is likely to translate across to market share and competition in the related market for superfast broadband services.

Geographic exemptions

As noted in the draft report, the ACCC considers it appropriate to examine the issue of whether competition will be promoted within the context of a national market in the current environment, where transition to the NBN is occurring. This is because, as noted in section 2.2, Telstra competes nationally in the supply of broadband services; Telstra remains the largest single wholesale and retail fixed-line broadband provider at a national level; and all stakeholders (including Telstra) have demonstrated support for a national market definition. The ACCC also notes that RSPs compete with Telstra in providing whole-of-business offerings on a national basis.

The ACCC considers the circumstances in this inquiry differ to the DTCS declaration inquiry. The ACCC notes that the DTCS declaration did not adopt a national market definition, but rather defined the relevant markets as a limited combination of particular geographic areas

⁸⁰ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

⁸¹ ACCC, *Wholesale ADSL service declaration – Final decision*, February 2012, p. 44. The SSU price equivalence arrangements were considered comparatively weak because Telstra would retain considerable latitude in developing and applying the pricing methodology, the measures do not prevent Telstra from engaging in discriminatory behaviour, the ACCC would be limited in its ability to direct Telstra to change its pricing conduct under the equivalence commitment.

⁸² ACCC, *Wholesale ADSL service declaration – Final decision*, February 2012, p. 32.

and particular route category types when determining the scope of the declaration.⁸³ The ACCC considered it was in the LTIE to assess the DTCS based on separate geographic markets because:

- distinct transmission markets exist, and in most cases, are not substitutable for each other. The DTCS is commonly characterised on the basis of inter-capital, metropolitan and regional areas rather than a national market, and access seekers are likely to purchase the DTCS based on a combination of routes.⁸⁴ Routes are typically not substitutable for each other. For example, a point to point capital-regional route is not a demand substitute for another route (e.g. Sydney-Tamworth is not substitutable for Sydney-Dubbo) although they are likely to be on the same transmission ring,⁸⁵ and
- transmission service characteristics vary across the broad DTCS market. This is reflected in the pricing of DTCS which differs geographically. As per the DTCS FAD, the price terms of access to the DTCS vary for different capacities, geographic route categories and distances.⁸⁶ The wholesale ADSL service has uniform national pricing as evidenced by Telstra's national retail price offerings.⁸⁷

The ACCC does not consider that the terms of Part XIC of the CCA preclude it from considering market segments when determining the scope of regulation under that Part. While the ACCC maintains a national market definition is appropriate for considering markets in which high speed broadband services are supplied, it has considered whether there are segments of the relevant markets where there is effective competition in deciding whether or not declaring the wholesale ADSL service (on a national or other basis) is in the LTIE.

The ACCC's final view is that Telstra remains the dominant provider in a number of the ESAs proposed for exemption and that in the transition to the NBN, without declaration, Telstra would have the incentive and ability to leverage its position in the 289 ESAs to favour its own operations over those of its competitors. The ACCC does not consider that exemptions can better deliver reasonable price and non-price terms and conditions in these 289 ESAs as submitted by Telstra for the reasons set out in this section.

The ACCC considers that the competitive constraint on Telstra from ULLS/LLS based providers is minimal. As noted in section 2.2, resale competition is extremely limited. As at June 2015, Telstra provided almost [c-i-c begins] [REDACTED] [c-i-c ends] times as many wholesale ADSL services compared to the second largest resale provider – [c-i-c begins] [REDACTED] [c-i-c ends].

Further, ULLS/LSS-based wholesale ADSL services are insufficient alternatives (on a national basis) to Telstra's wholesale ADSL service. Access seekers have a smaller DSL footprint than Telstra, and as future ULLS/LSS investment is unlikely, alternative DSL providers will be limited by the capacity of their existing DSL infrastructure to service new customers. As such, ULLS/LSS alternatives represent a diminishing competitive threat to Telstra's wholesale ADSL supply. The ACCC notes that Telstra accepts there is unlikely to be significant further expansion in the footprints of competitors' DSLAM networks, given the NBN roll out.⁸⁸

⁸³ ACCC, *DTCS declaration – Final report*, March 2014, p. 27.
<https://www.accc.gov.au/system/files/ACCC%20Final%20Report%20on%20the%20review%20of%20the%20declaration%20for%20the%20DTCS.pdf>.

⁸⁴ ACCC, *DTCS declaration – Final report*, March 2014, p. 26.

⁸⁵ ACCC, *DTCS declaration – Final report*, March 2014, p. 27.

⁸⁶ ACCC, *Final Access Determination (DTCS)*, April 2016.

⁸⁷ Telstra, *Wholesale ADSL service declaration inquiry, Telstra's response to the Commission's Discussion Paper*, Public version, 29 July 2016, p.17.

⁸⁸ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.7.

In this context, access seekers with their own infrastructure that want to service national customers or customers beyond the capacity of their existing infrastructure within any of the 289 ESAs would have to purchase the wholesale ADSL service where required to supplement their DSLAM networks. Therefore, if an access seeker cannot get access to wholesale ADSL services in any one of the 289 ESAs (and consequently, new customers beyond the capacity of the access seeker's own infrastructure), it could reduce their ability to compete in the national retail market, and on a more disaggregated basis, within any of the 289 ESAs as well.

The ACCC considers declaration would limit the opportunity for Telstra to engage in anti-competitive conduct by ensuring access seekers can acquire the wholesale ADSL service on reasonable terms and conditions. As mentioned above, without declaration in these areas, different price equivalence arrangements under Telstra's SSU would apply. The ACCC considers these arrangements are comparatively weak to those that would apply if the service was declared.

The ACCC notes that in its response to the ACCC's information request to this inquiry, Telstra considered that there is sufficient capacity within the 289 ESAs for access seekers to continue to invest in ULLS and DSLAM-based service provision.⁸⁹ Telstra noted that **[c-i-c begins]** [REDACTED]

[c-i-c ends] The ACCC considers that while it may appear there is some spare port capacity in the 289 ESAs, this is likely attributable to the roll-out of the NBN. Customers will most likely be acquiring NBN services in these ESAs, so any spare port capacity would be irrelevant (except to the limited and unlikely extent a customer may be transitioning from one ADSL provider to another).

In addition, the ACCC maintains that there are likely to be material incremental costs to sourcing wholesale ADSL services from multiple suppliers in order to service end-customers with national operations. While Exetel's submission to the discussion paper indicates it acquires wholesale services from multiple providers,⁹¹ Macquarie Telecom noted that it requires national coverage to supply its customers and would face additional costs if it had to divide a customer's network between different wholesale ADSL suppliers.⁹² Further, in a separate Part XIC inquiry, Telstra itself has noted that interfacing with numerous third-party networks is costly and technically complex.⁹³ RSP decisions to use third-party infrastructure will depend on the extent to which they must spend additional capital to develop ordering, activation, interface and network service and supply processes for each network.⁹⁴ Notwithstanding Telstra's comments relate to a different service, similar barriers to using multiple wholesale providers are also likely to operate with respect to wholesale ADSL, given access seekers are similarly required to integrate with an access provider's network systems and interface in order to acquire the wholesale ADSL service and deliver it to end-users.

⁸⁹ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, p.2.

⁹⁰ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Confidential Version, pp.2-3.

⁹¹ Exetel, *Appendix A: Questions on which submissions are sought – Exetel*, Public version, pp. 2-3.

⁹² Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

⁹³ Telstra, *SBAS and LBAS FAD Joint Inquiry, Telstra's response to the Commission's discussion decision*, Public version, 21 October 2016, p.6.

⁹⁴ Telstra, *SBAS and LBAS FAD Joint Inquiry, Telstra's response to the Commission's discussion decision*, Public version, 21 October 2016, p.6.

Increased incremental costs may also be evidenced by the difference in off-net and on-net pricing, where resale DSL is more costly than where a RSP uses their own infrastructure, and off-net pricing between RSPs differs.

The ACCC considers that if the 289 ESAs were not included in the declaration, Telstra may (and will have the incentive to) leverage its position as the dominant (and insufficiently constrained) provider in the national market to charge above-cost prices for its wholesale ADSL service offerings in exempt ESAs. This has the potential to reduce the competitiveness of access seekers in providing 'whole of business' arrangements to end-users with national operations (such as business and government customers) by requiring them to purchase wholesale ADSL services across both regulated and non-regulated areas, with prices in unregulated areas that would likely be set above their reasonable costs. This would limit the ability of access seekers to compete with Telstra and offer competitively priced packages (particularly since Telstra would not face the higher wholesale costs in unregulated areas). In these circumstances, the likely outcome would be that competition in the national retail market for high speed broadband would not be as vibrant and active as would be the case with declaration of the wholesale ADSL service, and this could be expected to translate across to competition in the market for superfast broadband services as the transition to the NBN occurs.

The ACCC notes that similar concerns relating to above-cost pricing by Telstra in unregulated areas have been previously raised by stakeholders in the past, where geographic exemptions were granted for the WLR, LCS and PSTN OA services and subsequently withdrawn as a result.⁹⁵ The ACCC considers these concerns may be realised if the 289 ESAs were exempted, given that alternative providers of the wholesale ADSL service do not appear to act as a significant competitive constraint on Telstra in the 289 ESAs, as discussed above.

For these reasons, the ACCC considers that without declaration nationally, including the 289 ESAs for which Telstra has sought exemption, an access seeker's ability to compete with Telstra in the national wholesale and retail markets for high speed fixed-line and superfast broadband services would be reduced, and in turn, negatively impact end-users.

Future with declaration

The ACCC considers a future with declaration of the wholesale ADSL service in all ESAs, including the 289 ESAs Telstra seeks exemption for, is likely to promote competition in relevant markets and therefore, promote the LTIE.

Consistent with its draft view, the ACCC considers competition is likely to be promoted by:

- providing the opportunity for RSPs to obtain access to the wholesale ADSL service on terms and conditions that reflect competitive market conditions in all geographic areas in order to provide alternative national wholesale and retail market offerings, and
- limiting the opportunity, in an environment where there is the incentive, for Telstra to potentially engage in anti-competitive conduct in those 289 ESAs or favour its own operations.

Telstra submitted that declaration could negatively impact competition to the extent that all carriers come to rely more on Telstra's wholesale ADSL service and it considered exempting

⁹⁵ Access seekers argued that exemptions in certain ESAs allowed for Telstra to cross-subsidise national operations with above-cost commercial prices in unregulated areas. Access seekers indicated that expected competitive restraints failed to materialise and that Telstra had considerable market power to force access seekers into 'whole of business' deals. See ACCC, *Inquiry into varying the exemption provisions in the final access determinations for the WLR, LCS and PSTN OA services – Final Report*, Public version, December 2011, pp. 44-6; ACCC, *Public Inquiry into the fixed line services declarations*, Final Report, Public version, April 2014, pp. 35-38.

the 289 ESAs would see infrastructure-based competitors rely more on their own infrastructure.

The ACCC considers carriers will come to rely more on Telstra's wholesale ADSL service only to the extent that their own infrastructure cannot meet the demand for the wholesale ADSL service due to capacity constraints. In this regard, the ACCC considers the ability to continue to rely on the wholesale ADSL service in all ESAs will allow access seekers to continue to compete to gain new subscribers and build market share in the lead up to the NBN. The ACCC therefore considers that declaration will promote competition in the national retail market for high speed fixed-line broadband, and by extension, the related superfast broadband market.

The ACCC does not consider declaration would see a decrease in the reliance of access seeker's on competing DSL networks because declaration is not likely to affect the incentive to invest in maintaining existing infrastructure. As discussed above, access seekers are using market share in the high speed fixed-line broadband market to gain market share in the superfast broadband market prior to transitioning to the NBN. While new ULLS investment is expected to be limited, the ACCC considers the need to maintain and build market share is likely to provide a strong incentive for non-Telstra competitors to continue to maintain and improve existing infrastructure during the roll out of the NBN, so as to maintain service quality levels and prevent a loss of market share.

This incentive is augmented by an access seeker's apparent preference to use, where available, its own DSL network, as suggested by retail pricing off-net (resale DSL) as compared to on-net (use of own DSL infrastructure). Off-net pricing tends to be more expensive than on-net, with higher costs passed onto end-customers (see section 2.2). An access seeker that uses its own infrastructure also has an increased ability to product differentiate to compete for customers. As such, this would also provide incentive for infrastructure-based competitors to continue to use, maintain and improve their equipment to provide retail ADSL broadband services.

The ACCC acknowledges that market shares in the relevant 289 ESAs vary significantly, and has considered whether to exempt a small subset of the 289 ESAs for which Telstra has sought exemption. However, the ACCC considers that while retail market shares have become more dispersed between RSPs, this has largely come about following the declaration of the ULLS, LSS and wholesale ADSL services and that the level of competition in the national retail markets could not be considered effective, given Telstra's overall dominance. With access seeker expansion limited to the vacant capacity of existing DSLAMs (given the roll-out of the NBN), Telstra's national market dominance potentially allows it to leverage its position to maintain market share with higher prices in exempt ESAs, and the consequent scope for competitive pressure from these alternative wholesale ADSL suppliers being very limited and diminishing, declaration of the wholesale ADSL service nationally in all geographic regions is likely to promote competition in relevant markets (and therefore, the LTIE).

2.4. Any-to-any connectivity

The CCA provides that the objective of any-to-any connectivity is achieved when each end-user is able to communicate with other end-users, whether or not they are connected to the same telecommunications network.⁹⁶

The achievement of any-to-any connectivity is particularly relevant when considering services that require interconnection between different networks. When considering other types of services (such as carriage services that are inputs to an end-to-end service or

⁹⁶ CCA, subsection 152AB(8).

distribution services such as the carriage of pay television), the ACCC generally considers that this matter will be given less weight.⁹⁷

The ACCC's draft view was that declaration of the wholesale ADSL service was unlikely to impact the objective of achieving any-to-any connectivity, consistent with the 2012 declaration.

Submissions

Optus supported the ACCC's draft view that declaration of the wholesale ADSL service will not have an impact on any-to-any connectivity.⁹⁸

While Macquarie Telecom and Telstra broadly supported the draft report, neither of these parties explicitly addressed any-to-any connectivity in their submissions.⁹⁹

ACCC's final decision

Consistent with its view expressed in the draft report, the ACCC considers the continued declaration of the wholesale ADSL service is unlikely to impact the objective of achieving any-to-any connectivity. The ACCC notes that the wholesale ADSL service continues to be an input to an end-to-end service with no switching capability and does not in and of itself involve communications between end-users.

2.5. Economically efficient use of, and economically efficient investment in, infrastructure

The CCA requires the ACCC to have regard to the extent to which declaration is likely to encourage the economically efficient use of, and the economically efficient investment in, infrastructure.

The ACCC's draft view was that declaration of the wholesale ADSL service is likely to encourage the economically efficient use of, and the economically efficient investment in, infrastructure. In reaching this view, the ACCC considered that:

- technical feasibility – declaration would not raise any concerns about technical feasibility in the supply of the wholesale ADSL service given that Telstra currently supplies and charges for the service.
- a supplier's legitimate commercial interests – declaration would not affect Telstra's ability to exploit economies of scale and scope or its ability to make a return on its investment because Telstra would not be required to invest in a new network or additional infrastructure to provide the wholesale ADSL service. The ACCC understands that Telstra may need to invest in additional backhaul transmission capacity (and other things) as traffic levels rise. The ACCC does not, however, consider any further substantial investment is likely to be required. This is discussed in further detail below.

⁹⁷ ACCC, *A guideline to the declaration provisions for telecommunications services under Part XIC of the Competition and Consumer Act 2010*, August 2016, p.40.

⁹⁸ Optus, *Submission in response to ACCC Draft Decision, Wholesale ADSL Service declaration inquiry*, Public version, November 2016, p.6.

⁹⁹ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016; Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016.

- efficient investment in existing infrastructure – declaration is unlikely to adversely impact Telstra’s efficient investment in its existing network or access seeker investment in their existing competing DSL networks.
- efficient use of existing infrastructure – declaration would promote efficient use of Telstra’s existing infrastructure until the PSTN network is replaced by the NBN.

Submissions

Telstra submitted that declaration of the 289 ESAs it proposes should be exempt from declaration is unlikely to encourage the economically efficient use of, and economically efficient investment in, infrastructure. Telstra considered that, to the extent that ULLS/LSS based carriers’ capacity on, and incentives to invest in, their existing DSLAM networks are limited (e.g. due to the NBN roll out), declaration would increase stakeholder reliance on Telstra’s network. Telstra stated that this would reduce competing DSLAM network providers’ incentive to invest in maintaining and improving the quality of their existing network.¹⁰⁰

Optus submitted that given the rollout of fixed-line services to the NBN, there will be considerably reduced incentive to invest in competing DSL networks.¹⁰¹ Optus also noted it would not be efficient to encourage investment in alternative inputs (such as ULLS) given these services will be ‘shared by the NBN rollout’.¹⁰² However, Optus has advised the ACCC that [c-i-c begins] [REDACTED] [c-i-c ends]

Macquarie Telecom supported the ACCC’s view that declaration will encourage economically efficient use of infrastructure, particularly in the face of the transition to the NBN. It considered that the decision is unlikely to materially affect investment by Telstra in the context of its arrangements with the NBN.¹⁰⁴

ACCC’s final decision

The ACCC’s final decision is that extending declaration of the wholesale ADSL service is likely to promote the economically efficient investment in, and economically efficient use of, infrastructure by which high speed fixed-line broadband services are provided.

The ACCC considers declaration would not raise concerns about technical feasibility in the supply of the wholesale ADSL service given Telstra currently supplies and charges for the service. The ACCC also considers that the compliance cost for Telstra in complying with the SAOs would be reasonable given Telstra is providing the service and already has relevant systems in place.

In relation to a supplier’s legitimate commercial interests, the ACCC considers that declaration would not affect Telstra’s ability to exploit economies of scale and scope, or its ability to make a return on its investment. The ACCC notes that the regulated prices set under a FAD would allow Telstra to make a normal commercial return on investment and

¹⁰⁰ Telstra, *Wholesale ADSL declaration inquiry, Telstra’s response to the Commission’s draft decision*, Public version, 14 November 2016, p. 7.

¹⁰¹ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 6.

¹⁰² Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 4.

¹⁰³ [c-i-c begins] [REDACTED] [c-i-c ends]

¹⁰⁴ Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

provides an appropriate incentive for Telstra to maintain, improve and invest in the efficient provision of the wholesale ADSL service.¹⁰⁵

The ACCC also considers that declaration of the wholesale ADSL service is unlikely to adversely impact Telstra's efficient investment in its existing network. The ACCC notes that Telstra has continued to invest in its DSL network (as evidenced by its recent announcement in June 2016 to invest \$250 million in its infrastructure to improve network performance, with one of the key areas being increasing ADSL broadband capacity).¹⁰⁶ While the exact scale of the ADSL investment is unclear, the ACCC notes that Telstra Wholesale has forward investment plans (at least for 2017) on its website relating to ADSL capacity increases in exchanges, the access network and DSLAM backhaul relief.¹⁰⁷ More recently, at the company's Investor Day in November 2016, these plans for further investment in the network core and backhaul capacity were again referred to, with Telstra noting routes used to build capacity are re-useable for the NBN – this was with the knowledge of the ACCC's draft decision to declare the wholesale ADSL service.¹⁰⁸

Further, the ACCC considers that Telstra is unlikely to be required by the declaration to significantly further invest in a new network or additional infrastructure to provide the wholesale ADSL service (notwithstanding it may make commercial decisions to continue to do so). To the extent that existing DSL infrastructure (both Telstra and others') is insufficient to meet demand and further equipment or ports are required, the ACCC expects such investment to be incremental and relatively small compared to the equipment that is already in place. In this regard, the ACCC considers that Telstra, as the national supplier of the wholesale ADSL service, has the scope and scale to be able to most efficiently undertake this marginal investment (which is consistent with the investment decisions outlined above) and will be able to recover its reasonable costs, including a reasonable return on its investment, under the terms specified in the current wholesale ADSL FAD.

In addition, the ACCC does not consider declaration will negatively impact incentives for efficient investment in competing DSL networks by access seekers. This is because further significant investment in competing DSL networks is unlikely given the accelerating NBN rollout. It appears commercial decisions are being made to minimise investment in DSL infrastructure as the payoff period becomes limited, and some ESAs (particularly in regional and rural areas) exhibit natural monopoly characteristics which makes investment in these areas uneconomical as reflected in the broadband market shares in Table 2.1.

However, where it is efficient to continue to invest, the ACCC considers access seekers are likely to continue to do so. In particular, the ACCC notes there is likely to be continued incentive for non-Telstra competitors to invest in maintenance and improvements to their existing infrastructure during the roll out of the NBN, and declaration of the wholesale ADSL service would not adversely impact their efficient investment incentives. This is because competition in the high speed fixed-line broadband market is important in gaining market share in the superfast broadband market, and as discussed above, access seekers appear to prefer using their own infrastructure where available so they can better product differentiate to win retail customers. Further, the ACCC considers declaration would promote efficient use of Telstra's existing infrastructure. This is because, without declaration, Telstra would have the ability and incentive to charge prices for the wholesale ADSL service that exceeds the efficient cost of supplying the service and also limit the efficient use of the wholesale ADSL service.

¹⁰⁵ ACCC, *Public inquiry into final access determinations for fixed line services*, Final Decision, October 2015, p.235. ACCC, *A guideline to the declaration provisions for telecommunications services under Part XIC of the Competition and Consumer Act 2010*, August 2016, p.44.

¹⁰⁶ <https://exchange.telstra.com.au/2016/06/29/improving-network-performance/> accessed 13 December 2016.

¹⁰⁷ <https://www.telstrawholesale.com.au/products/broadband/adsl/adsl-reports-plans.html>, accessed 13 December 2016.

¹⁰⁸ See <https://www.telstra.com.au/content/dam/tcom/about-us/investors/pdf-e/Investor-Day-Presentation-Nov2016.pdf> and <http://www.zdnet.com/article/video-streaming-drives-new-telstra-investment-in-adsl-backhaul/>.

3. The declared service

Key points

- The ACCC considers that a service description that reflects national coverage remains appropriate and should be retained.
- The ACCC considers that the current scope and wording of the service description remains appropriate and should be retained.
- The ACCC has considered concerns raised in relation to the supply of backhaul access products with the wholesale ADSL service but has decided to maintain the current service description. The ACCC will continue to monitor the supply of backhaul access products with the wholesale ADSL service to ensure that bundling of these services does not inhibit competitive outcomes in relevant markets.
- The ACCC considers the declaration period of the wholesale ADSL service should be five years to provide certainty during the NBN roll out. While the ACCC recognises there may be some merit in aligning the expiry of the wholesale ADSL service declaration with the other fixed-line services declarations, this does not warrant a declaration period that is less than three years. Re-examining the declaration in such a short time period is likely to be unnecessary and impose an additional regulatory burden on industry when it could well be avoided as a result of the NBN's expected completion in 2020.

3.1. Coverage

The ACCC's draft view was that it remains appropriate to retain a service description which has national coverage. The ACCC considered that wholesale and retail high speed fixed-line broadband services are provided in a national market and that it is appropriate to consider the state of competition and whether declaration promotes the LTIE on this basis, rather than on an ESA by ESA basis. This reflects that retail competition occurs on a national basis, which is promoted by the availability of competitive wholesale inputs on a national basis.

Submissions

Both Macquarie Telecom and Optus supported the ACCC's draft view to adopt a service description with national coverage.¹⁰⁹

While supportive of the ACCC's decision to maintain the current service description, Telstra maintained its position that declaration should not extend to the 289 ESAs which it considers are highly competitive.¹¹⁰

ACCC's final decision

The ACCC's final decision is that it is in the LTIE to declare wholesale ADSL in all geographic areas and adopt a service description with national coverage, to reflect that wholesale and retail high speed fixed-line broadband services are provided in a national market and that retail competition occurs on a national basis.

¹⁰⁹ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p. 4; Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p. 1.

¹¹⁰ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.3.

3.2. Service description

In developing the current service description, the ACCC had regard to the following principles as set out in the 2012 declaration final decision:¹¹¹

- While some degree of technical specification will be required, the ACCC's preference is to make the service description in terms which are as functional as possible.
- The eligible service should be described in a manner which provides sufficient clarity for application of the SAOs.
- The service should be technically feasible to supply and charge for. Additionally, the service should be one which potential access providers are supplying to themselves and others.
- Terms and conditions of access should not be included in the service description.

The ACCC's draft view considered the current service description adequately described the wholesale ADSL service and therefore should be retained.

In its draft view, the ACCC also discussed Optus' submission on Telstra's wholesale business grade Ethernet (TWBGE) product. The ACCC did not consider it necessary to specify in the service description that the only applicable charges for the wholesale ADSL service are the port and AGVC/VLAN charges, as Optus requested. However, the ACCC sought information from stakeholders about how the TWBGE product is sold and whether there were any concerns in acquiring the product.

Submissions

Macquarie Telecom did not submit on the service description. Optus submitted that the wholesale ADSL service description requires amendment to make clear that the declared wholesale ADSL service delivers the 'full' wholesale ADSL service between the end-user and access seeker network and without the requirement on access seekers to purchase any other 'bottleneck' services.¹¹² Optus argued that if any additional elements are required to supply a full and functional wholesale ADSL service, these should be provided to access seekers at no additional charge to the FAD price.¹¹³

Optus submitted that Telstra imposes an underlying requirement on access seekers to acquire additional services in order to supply a functional wholesale ADSL service to end-users. Optus argued that these backhaul products are part of the wholesale ADSL service because the costs associated with backhaul access products are recovered through the VLAN charge set in the fixed line services FAD. Optus further claimed that these backhaul products cannot be self-supplied or acquired from a third-party, while the DTCS is not seen as a suitable alternative to the TWBGE.¹¹⁴

Telstra considered the current service description adequately captures the wholesale ADSL service.¹¹⁵ In its submission, Telstra confirmed that the wholesale ADSL service is between the user-network interface and POI, with additional backhaul capacity required to transmit

¹¹¹ ACCC, *Wholesale ADSL service declaration – Final decision*, February 2012, p. 57.

¹¹² Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, pp. 4-5.

¹¹³ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, pp.4-5.

¹¹⁴ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, pp. 5.

¹¹⁵ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.10.

information from the POI to the RSP's PoP.¹¹⁶ Telstra indicated that the TWBGE product is one of a range of options required for access seekers to obtain the necessary backhaul access capacity. Other options include Telstra's wholesale wavelength service (WWS) and broadband aggregation services.¹¹⁷

Telstra provided further information on these backhaul access products in response to an information request from the ACCC in December 2016. Telstra submitted that the relevant POI used to supply the declared wholesale ADSL service is located at the IGR (on the external side) and that the regulated port and AGVC/VLAN charges only recover the costs of supplying the wholesale ADSL service from the end-user to the IGR.¹¹⁸ Telstra advised that it requires customers with VLAN requirements greater than 1Gbps to purchase an access option which incorporates a degree of redundancy, noting that an access seeker that has total traffic requirements in a state of less than 1Gbps would typically use the TWBGE service.¹¹⁹

Telstra further advised that backhaul access services such as the TWBGE are different from the DTCS, namely in that they are contended services and allow traffic engineering principles to be utilised.¹²⁰ It indicated investments in upgrading capacity would be required in order to allow for the DTCS network to transport wholesale ADSL traffic, and submitted that it would be unlikely to recover the costs of such upgrades given that demand for capacity is expected to peak in 2019 (given the roll-out of the NBN and the time frame needed to develop equivalent products).¹²¹ Telstra also indicated that DTCS could be used to provide a similar function to the WWS, and noted that [c-i-c begins] [REDACTED] [c-i-c ends]¹²²

Further, Telstra advised that the pricing for backhaul access services used for wholesale ADSL traffic is highly variable and depends on a range of factors.¹²³ While prices are not regulated, Telstra submitted that it does not charge 'at any level it sees fit'.¹²⁴ Telstra indicated relevant price factors include: access service used, access seeker PoP location relative to the Telstra IGR, bandwidth acquired, service term, access seeker protection/redundancy requirements, and commercial negotiations. Telstra [c-i-c begins]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [c-i-c ends]¹²⁵

¹¹⁶ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.10.

¹¹⁷ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.10.

¹¹⁸ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, Public version, 16 December 2016, p. 3.

¹¹⁹ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.11.

¹²⁰ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.10.

¹²¹ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, Public version, 16 December 2016, p. 7.

¹²² Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Confidential Version, p. 9.

¹²³ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.11.

¹²⁴ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.12.

¹²⁵ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Confidential Version, pp. 9 - 10.

In addition, Telstra outlined the inability for access seekers to self-supply their own transmission equipment in lieu of Telstra's backhaul access products. Telstra stated that if access seekers were hypothetically able to do so, new products and technical specifications would need to be created and tested, while changes to both current network architecture and processes such as quality assurance and fault rectification would need to transpire.¹²⁶ Telstra states that these arrangements would take significant time to develop and implement, and would carry a significant cost. Telstra [c-i-c begins] [REDACTED]

[REDACTED] [c-i-c ends]¹²⁷

Telstra further advised that TWBGE and WWS are purchased by customers for a range of different purposes including: connecting an end-user's branch offices to its head office or end-user premises to a customer's PoP, connecting PoPs with data centre sites, or with Telstra equipment buildings where customers have equipment.¹²⁸ Telstra considered purchase to be discretionary since there are multiple suppliers of comparable services.¹²⁹ Telstra also considered purchase of the Broadband Aggregation product (which is used with Telstra's NBN wholesale services) is discretionary given that there are multiple suppliers of wholesale NBN services.¹³⁰

Innovative Synergies submitted alterations to the service description with the intention of removing perceived ambiguity. Innovative Synergies considered that the current service description does not provide a 'full internet connection',¹³¹ as it omits inclusion of the high capacity link required between the POI and 'the other end of the POI that connects to the main carrier's competitive switch' (that is, a RSP's PoP).¹³² Innovative Synergies also considered the terms 'layer 2 tunnelling protocol', 'point of interconnection', and 'nearest upstream exchange or RIM or CMUX' are incorrect or unnecessary.¹³³

ACCC's final decision

The ACCC's final decision is that the current service description adequately describes the wholesale ADSL service and will be retained. The ACCC considers the current service description is an appropriate functional description of the declared service, and accurately describes the service.

The wholesale ADSL service (as it is currently described in the service description) is a communications carriage service between an end-user network boundary and a POI. Telstra has identified that the POI used to supply its wholesale ADSL service offerings to access seekers is located on the external side of the IGR. The ACCC considers incorporating a direct link to the RSP's PoP within the service description does not appear to be necessary at this time.

¹²⁶ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, p. 2, p. 4.

¹²⁷ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Confidential Version, p. 6.

¹²⁸ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, pp. 5-6.

¹²⁹ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, p. 6.

¹³⁰ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, p. 6.

¹³¹ Innovative Synergies, *ACCC description of wholesale ADSL service: submission to the wholesale ADSL declaration inquiry*, December 2016, p.5.

¹³² Innovative Synergies, *ACCC description of wholesale ADSL service: submission to the wholesale ADSL declaration inquiry*, December 2016, p.1.

¹³³ Innovative Synergies, *ACCC description of wholesale ADSL service: submission to the wholesale ADSL declaration inquiry*, December 2016, p.5.

The ACCC notes that most access seekers have not submitted on the technical feasibility of the supply of the service and, with the exception of Optus and Innovative Synergies, have not sought changes to, or clarification of, the service description. While the ACCC considers there is some merit in the points raised by Innovative Synergies, the ACCC maintains its view that the current service description remains adequate. This is because the wholesale ADSL service as currently described is well understood by industry (with the appropriate level of functional description and technical specification for the supply of the wholesale ADSL service), and is consistent with the structure of Telstra's network to which declaration will relate.¹³⁴

Supply of the wholesale ADSL service with ancillary backhaul access products

The wholesale ADSL service is currently described as a point to point service for the carriage of communications between an end-user network boundary and a POI, that is supplied by ADSL technology over a twisted metallic pair, and uses a static layer 2 tunnelling protocol to aggregate communications to the POI.

The ACCC understands that some form of backhaul access product or service is needed to provide the required functionality of transmitting data between an IGR (where the POI is typically located) and a RSP's PoP.

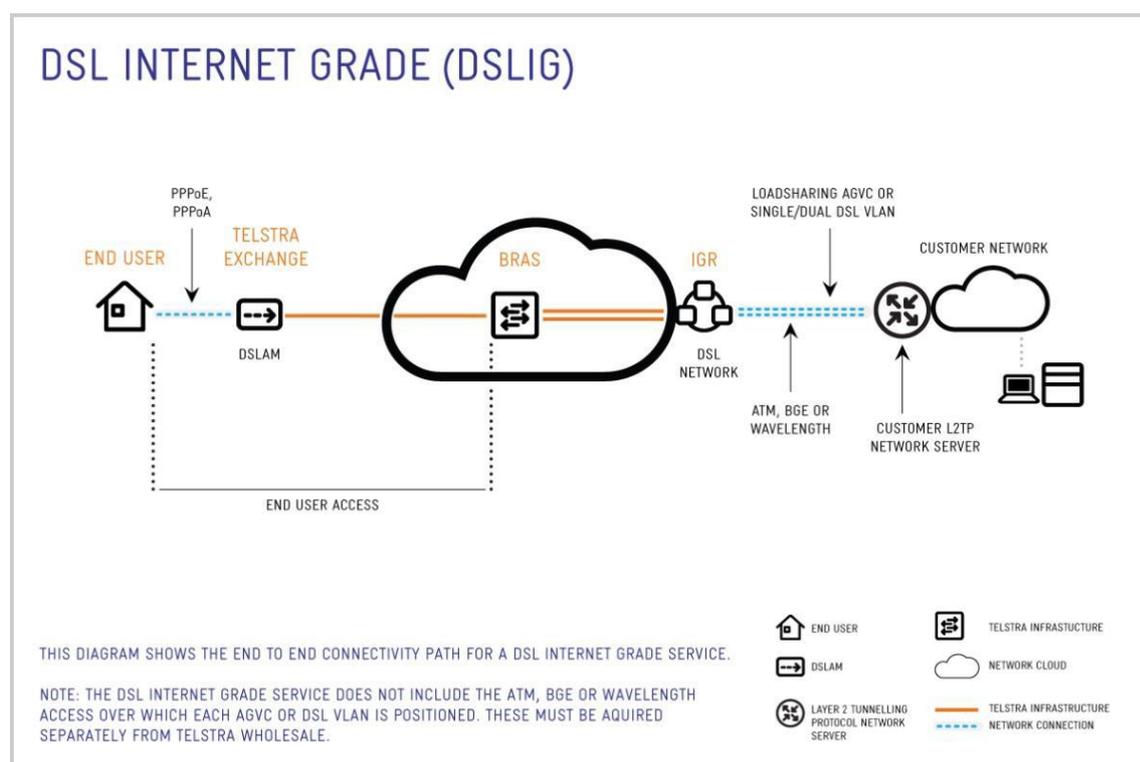
Optus has expressed concern in this inquiry that Telstra requires access seekers to purchase backhaul access products (such as the TWBGE service) in order to supply ADSL services to their respective retail customers.

Diagram 3.1 replicates the image provided in Optus' submission to the discussion paper¹³⁵ (based on a Telstra Wholesale diagram) that depicts the wholesale ADSL service schematics.

¹³⁴ The ACCC notes 'layer 2 tunnelling protocol' is the relevant protocol used by Telstra in the supply of the wholesale ADSL service, and that as noted by Innovative Synergies, some RIMs and CMUX have DSLAMs attached (therefore are relevant to the service).

¹³⁵ Optus, *Submission in response to ACCC Wholesale ADSL Service Declaration Inquiry Discussion Paper*, Public version, July 2016, p.19.

Diagram 3.1: Wholesale ADSL service schematics as per Optus' submission to the Discussion Paper



Source of image: Telstra Wholesale (<https://www.telstrawholesale.com.au/products/broadband/adsl.html>)

Telstra has advised the ACCC that, when an access seeker purchases a wholesale ADSL service from Telstra, the TWBGE product is one of a range of backhaul access services Telstra makes available to perform the required basic function of connecting the Telstra ADSL network to the access seeker's network over a transmission link.¹³⁶ These services comprise TWBGE, WWS and Broadband Aggregation, as well as ATM services.¹³⁷

The ACCC understands that, while these backhaul access products are required to ensure that a RSP's end-users are supplied a retail service,¹³⁸ they are not exclusively used for the transmission of wholesale ADSL traffic, and can vary in the underlying technology and network elements used. The backhaul access product allows access seekers to purchase sufficient access capacity from Telstra's IGR (which Telstra identified as where the relevant POI is located in the wholesale ADSL context) to the access seeker's PoP in order to facilitate the transport of end-user traffic over Ethernet/VLAN transmission. It allows the two different networks to connect. The ACCC further understands that backhaul access products described by Telstra are used to support all 'internet grade best efforts traffic' on Telstra's ADSL network, including traffic for unregulated ADSL services.¹³⁹

The ACCC has contacted a number of other RSPs during the course of this inquiry in order to determine the level of concern about the supply of this ancillary service with the declared

¹³⁶ Telstra, *Response to ACCC information request on Wholesale ADSL – Fixed Line Services FAD Inquiry 2013*, August 2015, p. 5.

¹³⁷ Telstra, *Response to ACCC information request on Wholesale ADSL – Fixed Line Services FAD Inquiry 2013*, August 2015, p. 5.

¹³⁸ Telstra, *Response to ACCC information request on Wholesale ADSL – Fixed Line Services FAD Inquiry 2013*, August 2015, p. 5; Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.10.

¹³⁹ Telstra, *Response to ACCC information request on Wholesale ADSL – Fixed Line Services FAD Inquiry 2013*, August 2015, p. 7.

wholesale ADSL service. Limited information was provided during the inquiry. One access seeker indicated that [c-i-c begins] [REDACTED]

[REDACTED]

[REDACTED] [c-i-c ends]¹⁴⁰ Another access seeker [c-i-c begins] [REDACTED]

[REDACTED]

[REDACTED] [c-i-c ends]¹⁴¹

The ACCC understands that when access seekers purchase a wholesale ADSL service from Telstra, there are technical and practical reasons (typically cost-related) which limit an access seeker's ability to transport traffic between the Telstra IGR and the access seeker's PoP via a product or service that is self-supplied or otherwise obtained from a third party. Telstra stated that, in a hypothetical scenario where access seekers could self-supply this service, new products and technical specifications would need to be created and tested, while changes to both current network architecture and processes such as quality assurance and fault rectification would need to transpire.¹⁴² Telstra stated that these arrangements would take significant time to develop and implement, and would carry a significant cost.

The ACCC has also obtained a requested wholesale ADSL access agreement from another access provider. [c-i-c begins] [REDACTED]

[REDACTED] [c-i-c ends]

While there may be greater technical efficiency and other benefits achieved by using access provider backhaul access products (such as the TWBGE product or WWS),¹⁴⁴ the ACCC understands that an access seeker could aggregate its end-users' traffic back to its PoP using its own network equipment and infrastructure, or the services supplied on another operator's infrastructure (for example, using a point-to-point service similar to the DTCS). However, on the information submitted to the ACCC, it appears this is a particularly inefficient and costly course of action for access seekers to take.¹⁴⁵ This is also likely to present a non-trivial cost burden on Telstra to facilitate this, involving rearrangements and alterations to Telstra's network architecture.¹⁴⁶

Overall, the ACCC recognises that access seekers are likely to need to acquire a backhaul access product as an ancillary service alongside the wholesale ADSL service. However, in the context of the transition of all wholesale ADSL services to the NBN in the foreseeable future and the limited extent of access seeker concern, the ACCC has decided not to

¹⁴⁰ [c-i-c begins] [REDACTED] [c-i-c end].

¹⁴¹ [c-i-c begins] [REDACTED] [c-i-c end]

¹⁴² Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, p. 2, p. 4.

¹⁴³ [c-i-c begins] [REDACTED] [c-i-c end]

¹⁴⁴ The ACCC understands that Telstra's intention with its backhaul access products is to provide additional functionality that serves to enhance the quality of network elements, connections at its POI, aggregation of traffic and to ensure adequate redundancy in the network. Telstra describes these as contended services that utilise existing infrastructure efficiently. While this transmission technology is present in the Telstra Core DSL network, and also lies between the IGR and the access seeker's PoP, this does not necessitate or imply that Telstra can, is, or intends to recover costs on this transmission under the regulated VLAN charge.

Source: Telstra, *Cost Allocation Framework for the ACCC Fixed Line Services Model, Public Version*, July 2014; Telstra, *Response to ACCC information request on Wholesale ADSL – Fixed Line Services FAD Inquiry 2013*, August 2015; Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016.

¹⁴⁵ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the request for information*, 16 December 2016, Public Version, pp. 4-5.

¹⁴⁶ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016.

incorporate any other form of backhaul access product into the wholesale ADSL service description.

Service bundling and impact on competition

While the ACCC maintains its view that the current service description adequately describes the wholesale ADSL service, concerns raised in Optus' submission to the draft report suggest that Telstra may be imposing a commercial and mandatory requirement for the purchase of Telstra backhaul access products with the declared wholesale ADSL service.¹⁴⁷

The ACCC is aware that the bundling of Telstra backhaul access products is a feature of some commercial agreements. The ACCC is concerned that contract terms in access agreements compelling access seekers to acquire backhaul access products only from their wholesale ADSL provider could be used by access providers to favour their own operations. The ACCC understands that **[c-i-c begins]** [REDACTED]

[REDACTED]
[REDACTED] **[c-i-c ends]**¹⁴⁸

While Telstra has stated to the ACCC that (when a wholesale ADSL service is purchased from Telstra) an access seeker is required to ensure there is a backhaul access service in place to connect the Telstra ADSL network and the access seeker's network,¹⁴⁹ this is **[c-i-c begins]** [REDACTED] **[c-i-c ends]**.¹⁵⁰ However, on the information available to the ACCC at present, purchasing a backhaul access product from Telstra appears to be a practical option for many RSPs.

While the ACCC has decided not to change the current service description for the wholesale ADSL service, it will continue to monitor the supply of backhaul access products with the wholesale ADSL service in order to ensure the bundling of these services is not compromising competitive outcomes in relevant markets. Should significant concerns be raised by access seekers or identified by the ACCC, the ACCC would consider if regulatory or enforcement action is appropriate under the CCA or relevant provisions of the *Telecommunications Act 1997*.

3.3. Duration of declaration

The CCA states that in specifying an expiry date the ACCC must have regard to the principle that an expiry date for a declaration should occur in the period:

- beginning three years after the declaration was made; and
- ending five years after the declaration was made.¹⁵¹

The ACCC has discretion to specify an expiry date for a declared service that is shorter than three years or longer than five years if it considers that circumstances warrant it.¹⁵²

¹⁴⁷ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p.5.

¹⁴⁸ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Confidential version, November 2016, p.5.

¹⁴⁹ Telstra, *Response to ACCC information request on Wholesale ADSL – Fixed Line Services FAD Inquiry 2013*, Public version, August 2015, p. 6; Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.10.

¹⁵⁰ **[c-i-c begins]** [REDACTED] **[c-i-c ends]**

¹⁵¹ CCA, subsection 152ALA(2)(a).

¹⁵² CCA, subsection 152ALA(2).

The ACCC's draft view was to adopt a declaration period of five years which results in a declaration expiry date of 13 February 2022. The ACCC noted that the longer regulatory period takes into account any potential delays to the NBN rollout and minimises the need to potentially conduct another declaration inquiry for the wholesale ADSL service. If the NBN rollout is completed before 2022, the ACCC could consider initiating revocation of the declaration.

The ACCC did not consider the alternative options of aligning the wholesale ADSL service declaration with the expiry of the other fixed line services declarations or aligning declaration with forecast completion date of the NBN rollout to be appropriate.

Submissions

Optus and Macquarie Telecom supported the draft decision to adopt a declaration period of five years while Telstra re-iterated its view that the wholesale ADSL declaration period should be aligned to the other declared services that utilise the PSTN (that is, until 31 July 2019).¹⁵³

Telstra considered an earlier expiry date would allow the ACCC to consider defining a regulatory rollback ahead of the planned NBN completion date in 2020 consistently, across all regulated, PSTN based services.¹⁵⁴ Telstra supported the ACCC's intention to minimise the regulatory burden faced by the sector, however submitted that aligning the expiry dates for the declarations would be the best way to achieve this given the overlap in the issues needed to be considered in deciding whether to declare wholesale ADSL and other services that utilise the PSTN network. Telstra considered allowing submissions to be made in one process would reduce resources the sector needs to dedicate to taking part in the process.

Telstra considered the question of regulatory burden will only arise where there is a delay to the NBN roll-out, however, that if this is the case the ACCC would need to conduct a declaration inquiry in relation to the other declared services that utilise PSTN in any event.¹⁵⁵ Telstra considered, while the ACCC could revoke the wholesale ADSL declaration if the NBN roll-out is completed before the declaration expires, a consistent approach across all services that utilise the PSTN network would reflect better regulatory practice.

ACCC's final decision

The ACCC's final decision is to adopt a declaration period of five years, until 13 February 2022. As declaration is likely to be required at least until the roll-out of the NBN is complete (for the reasons specified in section 2.5), a longer declaration period is likely to be the most appropriate option. The NBN expected completion date is currently 2020. As such, a longer declaration period will ensure a degree of certainty during the rollout of the NBN, and is likely to lead to the least amount of regulatory burden – as industry would not need to participate in another declaration inquiry for the wholesale ADSL service (because if the NBN is complete the declaration will be redundant). That said, in the event there is a delay in the NBN's completion, the five year period will ensure that the wholesale ADSL declaration does not continue to operate for an extended period without review of its ongoing promotion of the LTIE.

¹⁵³ Optus, *Wholesale ADSL service declaration inquiry, Submission in response to ACCC Draft Decision*, Public version, November 2016, p.6; Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.13; Macquarie Telecom Group, *Submission to wholesale ADSL draft decision*, Public version, 21 November 2016, p.1.

¹⁵⁴ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.13.

¹⁵⁵ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.13.

The ACCC notes an expiry date of 31 July 2019 would mean that the ACCC would be required to commence a new declaration inquiry after only one year of the declaration as extended.¹⁵⁶

While aligning the expiry of the wholesale ADSL service declaration with the expiry of the fixed-line services declarations may provide some benefit to industry (namely, considering similar issues in a single process), the ACCC does not consider the circumstances warrant a declaration period of less than three years. The ACCC considers price and non-price issues associated with the wholesale ADSL service could still be considered consistently with the other fixed-line services (that is, services that utilise PSTN) notwithstanding a declaration period of five years. This is because the timing of the FADs for the wholesale ADSL service and the other fixed-line services are aligned, and the ACCC would be able to revoke declaration prior to declaration expiry if declaration is no longer in the LTIE. Overall, the ACCC considers a five year declaration period appropriately balances the need to minimise the regulatory burden on industry associated with participating in regulatory inquiries, the need to provide regulatory certainty and the need to test the appropriateness of ongoing regulation in the event of delay in the completion of the NBN.

3.4. Regulatory burden associated with declaration

The ACCC's draft view was that declaration of the wholesale ADSL service would not lead to a substantial increase in regulatory burden since there would be no change in the scope of declaration and that existing costs are already being faced by an access provider. Given this, the ACCC considered there would be minimal additional costs imposed by declaration.

Submissions

Telstra considered that adopting a longer declaration period would impose a higher regulatory burden on industry, than if a shorter declaration period in line with the other fixed-line service declarations was adopted.¹⁵⁷ Telstra considered making submissions in a single process would reduce the resources it would require to participate in the declaration process.

Macquarie Telecom and Optus did not submission on this issue.

ACCC's final decision

The ACCC does not consider declaration will lead to a significant increase in regulatory burden given the wholesale ADSL service has already been supplied for some time.

The ACCC's final decision is to extend the declaration of the wholesale ADSL service for a further five years. The proposed scope of the declaration of the wholesale ADSL service remains the same as the 2012 declaration.

The ACCC notes that the Office of Best Practice Regulation's framework for measuring regulatory burden identifies the following types of costs:

- administrative costs incurred by regulated businesses primarily to demonstrate compliance with the regulation, for example reporting and record keeping costs
- substantive compliance costs to deliver the regulated outcome, for example IT and billing system changes associated with the supply of wholesale services ,and

¹⁵⁶ CCA, subsection 152ALA(7) requires the ACCC to hold a public inquiry during the 18-month period preceding the expiry of an existing declaration to determine whether the existing declaration should be extended, revoked, varied, allow to expire or re-made.

¹⁵⁷ Telstra, *Wholesale ADSL declaration inquiry, Telstra's response to the Commission's draft decision*, Public version, 14 November 2016, p.13.

- delay costs, which are expenses and loss of income incurred by a regulated entity through an application delay and/or an approval delay.¹⁵⁸

The ACCC considers that an access provider affected by declaration will already be providing access to the service and already has relevant systems and processes in place, and the people to administer them. This includes:

- regulatory staff/managers that, among other things, make sure that their contractual arrangements comply with the SAOs for each of the declared telecommunications services, including the wholesale ADSL service. Staff are also responsible for many other compliance functions, not just for the wholesale ADSL declaration.
- the necessary equipment and infrastructure (including hardware and software) to enable interconnection, billing and fault detection for the wholesale ADSL service. The ACCC notes that this equipment and the relevant systems were already in place prior to the original declaration in 2012 and are also used for the supply of other wholesale services – both regulated and unregulated.

The ACCC notes that there may be ongoing administrative costs faced by the access provider associated with extending declaration of the wholesale ADSL service. However, these costs are currently incurred in respect of the 2012 wholesale ADSL service declaration now in place and are likely to be relatively small, associated with some staff time being used to monitor and ensure compliance with the declaration. These are estimated to be \$6,800 per annum for the five years of the declaration. The ACCC considers that there are no substantive delay costs.

¹⁵⁸ OBPR, *Regulatory burden measurement framework*, Guidance Note, February 2016.

A. Wholesale ADSL service description

The wholesale asymmetric digital subscriber line service (wholesale ADSL service) is an internet-grade, best efforts point to point service for the carriage of communications in digital form between a **point of interconnection** and an **end-user network boundary** that:

- (a) is supplied by means of **Asymmetric Digital Subscriber Line (ADSL)** technology over a twisted metallic pair that runs from the end-user network boundary to the nearest upstream exchange or RIM or CMUX; and
- (b) uses a static **Layer 2** tunnelling protocol (L2TP) over a transport layer to aggregate communications to the point of interconnection.

Definitions

Where words or phrases used in this declaration are defined in the *Competition and Consumer Act 2010* or the *Telecommunications Act 1997*, they have the meaning given in the relevant Act.

In this Annexure:

Asymmetric Digital Subscriber Line technology or **ADSL** means the protocols, recommendations and standards set out in the ITU-TG.992 Recommendations.

Layer 2 has the same meaning as in the Open System Interconnection (OSI) Reference Model for data exchange.

a **point of interconnection** means an interface that is:

- (a) a physical point of interconnection which allows the interconnection of facilities in accordance with subsection 152AR(5) of the *Competition and Consumer Act 2010*; and
- (b) located in the same state/territory that the access provider associates with the exchange service area in which the **end-user network boundary** is located.

an **end-user network boundary** means the boundary point of the telecommunications network that is:

- (i) associated with the end-user premise; and
- (ii) ascertained in accordance with section 22 of the *Telecommunications Act*.

B. Overview of DSL

DSL technologies enable access seekers to provide end-users with broadband carriage services. There are a number of features or functionalities which distinguish the DSL services:

- The service is provided over the existing copper wire infrastructure. The use of legacy copper networks limits the data rates that DSL can support and the maximum data rates that can be provided fall as the distance between the customer and the exchange building increases.
- The service is always on, that is, no dial-up is required (allowing the user to maintain a permanent connection to the network enabling real time delivery of services such as email).
- Users of the service can utilise both voice and data services simultaneously.
- The service enables faster upstream and downstream data rates than dial-up internet.

DSL technologies can be asymmetric or symmetric. ADSL (asymmetric) services have a high downstream data rate service coupled with a lower rate upstream service. This service is typically used by households/consumers. Symmetric DSL services have symmetric Bandwidth capacity and are typically used by businesses.

ADSL2+ is part of the DSL technologies, which can achieve higher data rates than standard ADSL technologies. Whereas “standard” ADSL can only achieve data rates of up to 8 Mbps downstream and 384 Kbps upstream, ADSL2+ can achieve data rates in excess of 20 Mbps downstream and 1 Mbps upstream.

ADSL services are marketed to both residential and business users. Telstra separately markets a residential ADSL product and a wholesale business DSL product.¹⁵⁹

The wholesale ADSL service comprises both a local access component, and a transmission component between DSL enabled exchanges and CBD points of interconnect (POI). In this respect, the wholesale ADSL service is generally a more bundled service than the services, which are currently declared (e.g. ULLS and DTCS).

¹⁵⁹ Telstra Wholesale, *DSL internet*, www.telstrawholesale.com/products/data/dsl-internet-grade.htm.

C. Legislative framework and the ACCC's assessment approach

Legislative framework

Part XIC of the CCA sets out a telecommunications access regime. The access regime aims to promote the LTIE of telephone services by promoting competition through connectivity of any user to any other user no matter whose infrastructure is utilised for that purpose. The ACCC may declare an eligible service, making it subject to regulation under the Part XIC access regime.

An eligible service is a carriage service or a service that facilitates the supply of a carriage service.¹⁶⁰ A carriage service is defined in the *Telecommunications Act 1997* as a service for carrying communications by means of guided and/or unguided electromagnetic energy.¹⁶¹ This includes communications services, such as telephone and internet services, that are provided using fixed-lines, satellite-based facilities, mobile towers and certain radio communications links. The unconditioned local loop service is an example of a carriage service, while access to facilities (such as ducts and exchange space) are examples of services that facilitate the supply of carriage services.

Once a service is declared, an access provider (typically an infrastructure operator) that supplies the declared service to itself or others must also supply the service, upon request, to service providers (or access seekers) in accordance with the standard access obligations set out in section 152AR of the CCA. The ACCC must also commence a public inquiry into making an access determination for that service. The access determination may include a broad range of terms and conditions but must specify price or a method of ascertaining price.¹⁶²

Declaration inquiries

Section 152AL(1) allows the ACCC to declare a specified eligible service if it:

- holds a public inquiry about its proposal to make a declaration
- prepares a report about the inquiry
- publishes that report within a 180 day period before any declaration is made, and
- is satisfied that the making of the declaration will promote the LTIE of carriage services or of services provided by means of carriage services.

Prior to commencing a public inquiry about a proposal to declare a service that is not already declared, the ACCC must consider whether to hold a public inquiry for an equivalent service that is supplied or capable of being supplied by a specified NBN Corporation.¹⁶³

Where a service is already declared, under section 152ALA(7), the ACCC must commence an inquiry during the 18 months prior to the expiry of the declaration and determine whether to:

- Extend, revoke or vary the declaration

¹⁶⁰ Where the service is supplied, or capable of being supplied, by a carrier or carriage service provider (whether to itself or other persons). CCA, subsection 152AL(1).

¹⁶¹ Telecommunications Act 1997, section 7.

¹⁶² CCA, subsections 152BC(3) and 152BC(8).

¹⁶³ CCA, subsections 152AL(3), 152AL(3B) and 152AL(8A).

- Allow the declaration to expire without making a new declaration
- Allow the declaration to expire and then make a new declaration under section 152AL or
- Extend the declaration by a period of not more than 12 months and allow the declaration to expire without making a new declaration.

The ACCC can combine two or more public inquiries about proposals to declare services.¹⁶⁴

Declaration ensures service providers have access to the inputs they need to supply competitive communications services to end-users on terms and conditions that promote the LTIE.

In deciding whether declaring the wholesale ADSL service would promote the LTIE, under section 152 AB(2), the ACCC must have regard to the extent to which declaration is likely to result in the achievement of the following three objectives:

- promoting competition in markets for listed services (which includes carriage services and services supplied by means of carriage services)
- achieving any-to-any connectivity (the ability of end-users on a particular network to communicate with end-users on any other network) and
- encouraging the economically efficient use of and the economically efficient investment in infrastructure by which the listed service is supplied, or is capable of being supplied.¹⁶⁵

Once a service is declared:

- An access provider supplying the declared service to itself or another person must also supply the service, upon request, to service providers in accordance with the standard access obligations set out in section 152AR.
- The ACCC must commence a public inquiry within 30 days regarding making an access determination for that service.¹⁶⁶ Access determinations can cover a broad range of terms and conditions but must specify price or a method of ascertaining price.¹⁶⁷

The ACCC's approach to the LTIE test

In deciding whether declaring the wholesale ADSL service would promote the LTIE, the ACCC must have regard the achievement of:

- promoting competition
- achieving any-to-any connectivity and
- encouraging efficient use of and investment in infrastructure.

Promoting Competition

Competition is the process of rivalry between firms, where each firm is constrained in its price and output decisions by the activity of other firms. Competition benefits consumers (the

¹⁶⁴ CCA, section 152AN.

¹⁶⁵ CCA, subsection 152AB(2). In determining the extent to which a particular thing is likely to result the achievement of promoting competition and encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure, regard must be had to other matters listed in subsections 152AB(4), (6) and (7) CCA.

¹⁶⁶ CCA, section 152BCI(1).

¹⁶⁷ CCA, sections 152BC(3) and 152BC(8).

end-users) through lower prices, the level of service quality preferred by end-users, and a greater choice of services.

Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms to constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market for a significant period of time.

An access regime such as Part XIC addresses the structure of a market, limiting or reducing the sources of market power, by allowing third parties to negotiate access to certain services on reasonable terms and conditions. Competition is promoted when market structures are altered such that the exercise of market power becomes more difficult. For example, barriers to entry may have been lowered (permitting more efficient competitors to enter a market and thereby constraining the pricing behaviour of the incumbents) or because the ability of firms to raise rivals' costs is restricted.

Subsection 152AB(4) of the CCA provides that, in determining the extent to which declaration is likely to result in the objective of 'promoting competition', regard must be had (but is not limited) to the extent to which declaration will remove obstacles to end-users of listed services gaining access to listed services.

Denying service providers access to necessary wholesale services on reasonable terms is a significant obstacle to end-users gaining access to services. Declaration can remove such obstacles by facilitating the entry of service providers, which promotes competition in markets supplying end-users.

When conducting a declaration inquiry, the ACCC is required under subsection 152AB(2) of the CCA to consider whether declaration of a service is likely to promote competition in relevant markets. The ACCC's approach to assessing this objective involves defining the relevant markets and assessing the level of competition in those markets. These concepts are explained below.

Identifying relevant markets

Section 4E of the CCA provides that the term "market" means a market in Australia for the goods or services under consideration, as well as any other goods or services that are substitutable for, or otherwise competitive with, those goods or services. The ACCC's approach to market definition is discussed in the ACCC's 2008 merger guidelines.¹⁶⁸

Substitution involves switching from one product to another in response to a change in the relative price, service or quality of the product that is the subject of the inquiry. There are two types of substitution:

- demand-side substitution, which involves customer switching, and
- supply-side substitution, which involves supplier switching.

There may be associated switching costs or difficulties which, if significant, can impede the substitutability of products.

When considering whether a product is substitutable, the ACCC may consider customer attitudes, the function or end use of the technology, past behaviours of buyers, relative price levels, and physical and technical characteristics of a product.¹⁶⁹

¹⁶⁸ ACCC, *Merger guidelines*, November 2008.

¹⁶⁹ A useful list of information the ACCC may consider when identifying close substitutes to the relevant product is contained in the 2008 Merger Guidelines, p. 19.

One of the methods the ACCC can use to determine if a product or service is a close substitute for the purposes of market definition is the hypothetical monopolist or ‘SSNIP’ test.¹⁷⁰ The test establishes an area of product and geographic space over which a hypothetical monopolist would likely impose a ‘small but significant non-transitory increase in price’ (SSNIP). A SSNIP in the context of the hypothetical monopolist test usually consists of a price rise for the foreseeable future of 5 to 10 per cent above the price level that would prevail under competitive market conditions.

Delineation of the relevant geographic markets involves the identification of the area or areas over which a carrier or carriage service provider (CSP) and its rivals currently supply, or could supply, the relevant product.

Part XIC of the CCA does not require the ACCC to precisely define the scope of the relevant markets in a declaration inquiry. The ACCC considers that it is sufficient to broadly identify the scope of the relevant market(s) likely to be affected by the declaration. Accordingly, a market definition analysis under Part XIC should be seen in the context of shedding light on how declaration would or would not promote competition and the LTIE in those markets.

Assessing the state of competition

Once the relevant markets have been defined, the next step in the analysis is to assess the state of competition in relevant markets. If competition is determined to be effective, then declaration of the eligible services is not likely to have an effect in terms of promoting further competition. In assessing the state of competition, the ACCC considers factors such as the potential for sustainable competition to emerge and the extent to which the threat of entry (or expansion by existing suppliers) constrains pricing and output decisions.

At the theoretical level, the concept of ‘perfect competition’ describes a market structure in which no producer or consumer has the market power to influence prices. Economic theory suggests that perfectly competitive markets have a large number of buyers and sellers, goods or services are perfect substitutes, all firms and consumers have complete knowledge about the pricing/output decisions of others and all firms can freely enter and exit the relevant market. In reality, these conditions are rarely found in any market or industry, even those where competition between rival firms is relatively intense.

The concept of ‘effective competition’ recognises the practical limitations of the theory of perfect competition, especially when applied to the fixed-line telecommunications markets. Some characteristics of effective competition are that it:

- is more than the mere threat of competition – it requires that competitors are active in the market, holding a reasonably sustainable market position¹⁷¹
- requires that, over the long run, prices are determined by underlying costs rather than the existence of market power
- requires that barriers to entry are sufficiently low and that the use of market power will be competed away in the long run, so that any degree of market power is only transitory
- requires that there be ‘independent rivalry in all dimensions of the price/product/service [package]’,¹⁷² and

¹⁷⁰ SSNIP stands for small but significant non-transitory increase in price.

¹⁷¹ Olivier Boylaud and Giuseppe Nicoletti, *Regulation, market structure and performance in telecommunications*, OECD Economics Studies, no. 32, 2001/1.

¹⁷² Re Queensland Co-operative Milling Association Ltd and Defiance Holding Ltd (1976) 25 FLR 169.

- does not preclude one party from holding a degree of market power from time to time but that power should 'pose no significant risk to present and future competition'.¹⁷³

These factors demonstrate the extent to which competition constrains market participants to supply products and services of a given quality at prices that are based on efficient costs.

When assessing whether effective competition exists in a relevant market, the ACCC examines certain structural and behavioural factors in the market, including but not limited to:

- structural factors, including the level of concentration in the market
- the potential for the development of competition in the market including planned entry, the size of the market and the existence and height of barriers to entry, expansion or exit in the relevant market
- the dynamic characteristics of the market, including growth, innovation and product differentiation as well as changes in costs and prices over time, and
- the nature and extent of vertical integration in the market.

Our assessment of the current state of competition during this review has been used to assist us in determining whether declaration will promote the LTIE.

Assessing the impact of the declaration on relevant markets

The next step is to assess the likely effect of the proposed declaration on competition in each relevant market. As noted above, subsection 152AB(4) requires regard to be had to the extent to which a particular thing will remove obstacles to end-users gaining access to listed services.

The ACCC generally considers it helpful to apply the future with and without test as one way to determine whether the LTIE will be promoted by declaration. The test will compare the likely future situation if the wholesale ADSL service was declared and the likely future situation without the wholesale ADSL service declaration before deciding which situation will promote the LTIE.

Any-to-any connectivity

The objective of any-to-any connectivity is achieved when each end-user is able to communicate with other end-users, whether or not they are connected to the same telecommunications network.¹⁷⁴

The any-to-any connectivity requirement is particularly relevant when considering services that require interconnection between different networks. When considering services which do not require user-to-user connections (such as carriage services that are inputs to an end-to-end service or distribution services, such as the carriage of pay television), this criterion is generally less of an issue.

Subsection 152AB(8) states that the objective of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, with other end-users whether or not they are connected to the same network.

Efficient use of and investment in infrastructure

¹⁷³ This is not intended to be an exhaustive list of the characteristics of effective competition.

¹⁷⁴ CCA, subsection 152AB(8).

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

Economic efficiency has three components:

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

Facilitating access plays an important role in ensuring that existing infrastructure is used efficiently where it is inefficient to duplicate the existing networks or network elements. An access regime should not discourage investment in networks or network elements where such investment is efficient.

Paragraph 152AB(6)(a) requires the ACCC to have regard to a number of specific matters in examining whether declaration is likely to lead to achievement of the objective in paragraph 152AB(2)(e).

Technical feasibility

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

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

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

The legitimate commercial interests of the supplier

An infrastructure operator's legitimate commercial interests relate to its obligations to the owners of the firm, including the need to recover the costs of providing services and to earn a normal commercial return on the investment in infrastructure. Allowing for a normal commercial return on investment provides an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service.

Paragraph 152AB(6)(b) of the CCA also requires the ACCC to have regard to whether providing access may affect the infrastructure operator's ability to exploit economies of scale and scope. Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise where it is less costly for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce the relevant products.

Declaration may be more likely to impact on an infrastructure operator's ability to exploit economies of scope than economies of scale. A limit in the capacity available to the owner may constrain the number of services that the owner is able to provide using the infrastructure and thus prevent the realisation of economies of scope associated with the production of multiple services. In contrast, economies of scale derive from the use of the capacity of the network and can be realised regardless of whether that capacity is being used by the owner or by other carriers or carriage service providers. The ACCC assesses the effects on an infrastructure operator's ability to exploit both economies of scale and scope on a case-by-case basis.

Incentives for investment

Infrastructure operators should have the incentive to invest efficiently in the infrastructure by which the services are supplied (or are capable, or likely to become capable, of being supplied). In determining incentives for investment, regard must be had (but is not limited) to the risks involved in making the investment.¹⁷⁵

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

Firms should have the incentive to invest efficiently in the infrastructure by which the services are supplied (or are capable, or are likely to become capable, of being supplied).

¹⁷⁵ CCA, subsections 152AB(7A) and (7B).

D.List of submissions

| Submissions received in response to ACCC October 2016 Draft Decision paper |
|-----------------------------------------------------------------------------------|
| Telstra, (confidential and public versions), 14 November 2016 |
| Optus, (confidential and public versions), 14 November 2016 |
| Macquarie Telecom Group, 21 November 2016 |
| Innovative Synergies, 7 December 2016 |