



AUSTRALIAN COMPETITION
& CONSUMER COMMISSION

Wholesale ADSL declaration inquiry

Final decision

December 2021



Australian Competition and Consumer Commission

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List of abbreviations and acronyms

ACCAN	Australian Communications Consumer Action Network
ACCC	Australian Competition and Consumer Commission
ADSL	asymmetric digital subscriber line
CAN	customer access network
CBD	central business district
CCA	<i>Competition and Consumer Act 2010</i>
CMUX	customer multiplexer
CSP	carriage service provider
DSL	digital subscriber line
DSLAM	digital subscriber line access multiplexer
ESA	Exchange service area—the area of copper wire served by one local telephone exchange
FAD	final access determination
HFC	hybrid fibre coaxial
IAA	Internet Association of Australia
L2TP	layer 2 tunnelling protocol
NBN	National Broadband Network
POI	point of interconnection
RIM	remote integrated multiplexer
RSP	retail service provider
SAO	standard access obligations
SIP	statutory infrastructure provider ¹
Telecommunications Act	<i>Telecommunications Act 1997</i>

¹ The Statutory Infrastructure Provider (SIP) regime has been introduced so that all Australians can access modern broadband services. The SIP regime commenced on 1 July 2020. It is set out under Part 19 of the *Telecommunications Act 1997*. SIPs are carriers that must provide basic wholesale broadband services in the areas they service. This includes voice services if they operate fixed-line or fixed-wireless networks.

Executive Summary

The ACCC has decided to further extend the expiry date of the declaration of the wholesale asymmetric digital subscriber line (WADSL) service until 30 June 2024. The declaration will continue to apply to WADSL services available in Telstra Exchange Service Areas.

We consider that extending the declaration until 2024 will promote the long-term interests of end-users of carriage services. The extension will also align the expiry of the declaration with that of other Telstra fixed line legacy services currently declared by the ACCC, enabling a holistic review of the regulatory arrangements that apply to Telstra's remaining legacy services after June 2024.

We received submissions from ACCAN, IAA, Optus, Telstra and TPG in response to our July 2021 consultation and position paper proposing to extend the WADSL service declaration. All submitters except Telstra supported our proposal and Telstra agreed that 30 June 2024 is an appropriate declaration period if the ACCC were to extend the declaration.

The WADSL service is a point-to-point service delivered over Telstra's legacy copper network. It enables retail service providers (RSPs) to purchase a wholesale telecommunications service from Telstra without the need to install their own infrastructure at a Telstra exchange. This enables RSPs to compete in providing high speed fixed-line broadband services to end-users inside and outside of the NBN fixed line footprint.

As the migration of end-users to the NBN progresses, the use of Telstra's WADSL service is declining. However, for the period of the declaration at least, Telstra's legacy network is likely to continue to be useful to many end-users, prior to their migration to the NBN fixed network and in NBN fixed wireless and satellite areas where ADSL services remain available.

We consider that extending the declaration until June 2024 will continue to promote competition as well as providing certainty to RSPs about regulated access and pricing arrangements over this period. Allowing the WADSL service declaration to expire may limit competition as removing access regulation could create an incentive for Telstra to charge access seekers higher prices for WADSL services, while offering their own retail ADSL services at prices and terms other RSPs could not compete with.

We consider that extending the WADSL service declaration until June 2024 will also continue to promote the economically efficient investment in, and economically efficient use of, telecommunications infrastructure providing high-speed fixed-line broadband services.

The WADSL service is one of seven declared fixed line services provided by Telstra over its legacy copper network. The ACCC has declared the other six services until 30 June 2024. Final Access Determinations for the seven declared services, setting prices and non-price terms and conditions for access, are also in place until 30 June 2024.

1. Introduction

This document sets out the ACCC's Final Decision following our public inquiry into the WADSL service declaration under Part 25 of the *Telecommunications Act 1997*.

We were required to conduct this inquiry during the 18-month period preceding the expiry of the current WADSL service declaration on 13 February 2022.

The inquiry considered whether the WADSL service declaration should be further extended, revoked, varied, allowed to expire, or extended and then allowed to expire.

1.1. Inquiry and consultation process

In April 2021 we held preliminary discussions with a number of industry stakeholders to seek their views on whether we should extend declaration of the WADSL service or let it expire.

Stakeholders' preliminary views generally showed a preference to extend the declaration to June 2024 to align its expiry with Telstra's other declared fixed line services. Telstra's preliminary view was that if the ACCC was not inclined to allow the declaration to expire in February 2022 as was their preference, Telstra would support the declaration simply rolling over and aligning in term to the declarations that apply to the remaining fixed line services, expiring June 2024.

Stakeholders considered that extending the WADSL service declaration until 30 June 2024 would enable a holistic review of whether wholesale access to Telstra's remaining legacy fixed line services should continue after the NBN migration is complete

We commenced our formal inquiry on 30 July 2021 with the release of a consultation and position paper.² We sought submissions from interested stakeholders in response to a range of questions and on our preliminary position to extend the WADSL service declaration until 30 June 2024. The submission period closed on 10 September 2021.

We received submissions from ACCAN, IAA, Optus, Telstra and TPG which are available on our website.³ A list of submissions is provided in Appendix D of this document.

² ACCC, Wholesale ADSL service declaration inquiry 2021, [consultation and position paper](#), 30 July 2021

³ Submissions can be found at: <https://www.accc.gov.au/regulated-infrastructure/communications/fixed-line-services/wholesale-adsl-service-declaration-inquiry-2021/consultation-and-position-paper>

2. Legislative framework

Access to telecommunications services in Australia is usually unregulated, meaning that there is no general right of access to those services unless they are declared. Once declared, an access seeker can gain access to that service and the access provider (the owner of the network or facility) must provide access in accordance with the access obligations set out in the CCA. The regulatory arrangements do not preclude access seekers and providers agreeing to terms of access through negotiation.

The ACCC may only declare a service, or vary a declaration, after holding a public inquiry under Part 25 of the *Telecommunications Act 1997* (Telecommunications Act), if it is satisfied that doing so would promote the long-term interests of end-users.⁴

Once declared, we must hold a public inquiry about a proposal to make an access determination for that service. An access determination may include a broad range of matters, but if it includes terms and conditions relating to access to the service it must specify price or a method of ascertaining price.⁵ An access determination usually serves as a fall back that parties can rely on if they are unable to reach agreement on the terms and conditions or price of access.

In deciding whether declaration will promote the long-term interests of end-users, we must consider the extent to which declaration is likely to result in the achievement of the following three objectives:

1. promoting competition in markets for telecommunications services
2. achieving any-to-any connectivity
3. encouraging the economically efficient use of, and economically efficient investment in, telecommunications infrastructure.

We are required to consider only these objectives when determining whether declaration would be in the long-term interests of end-users of carriage services.

The Telecommunications Act allows the ACCC to have regard to prior evidence, submissions and other material and information and prior findings⁶ when undertaking a declaration inquiry.⁷

The legislative framework is set out in Appendix C of this document.

Promoting competition

To determine the extent to which declaration will promote competition, we:

- identify and define the relevant markets
- assess the current state of competition in those markets
- assess how declaration may affect competition in those markets.

In identifying the relevant markets, we consider the market(s) that are relevant to the supply of the service and any downstream markets that may rely upon this service. We generally give most attention to the markets for downstream (or retail) services, as these (rather than the upstream or wholesale markets) are usually the markets in which declaration may

⁴ CCA, section 152AL.

⁵ CCA, subsections 152BC(3) and (8).

⁶ For example, the ACCC's Wholesale ADSL service declaration inquiry, Final decision, February 2017.

⁷ Telecommunications Act, sections 505A and 505B.

promote competition. When defining a relevant market, we also consider whether there are effective substitutes for the relevant service.

The ACCC does not need to take a definitive position on market definition, and market analysis under Part XIC of the CCA is in the context of showing whether declaration would promote competition.

In considering the effect that declaration will have on competition in a relevant market, we consider the likely future state of competition in the relevant market, with and without declaration of the service. Among other things, this requires consideration of whether declaration will establish conditions under which competition will improve and whether these conditions would develop without declaration.

Achievement of any-to-any connectivity

Declaration of a service will promote any-to-any connectivity if it allows end-users of a telecommunications service to communicate with other end-users, whether they are directly connected to the same network. This is particularly relevant when considering services that require interconnection between different networks. When considering other types of services (such as carriage services, which are inputs to an end-to-end service), we will generally give this factor less weight.

Economically efficient use of, and economically efficient investment in, telecommunications infrastructure

We must have regard to several matters when assessing whether declaration will promote the economically efficient use of, and economically efficient investment in, telecommunications infrastructure. This includes:

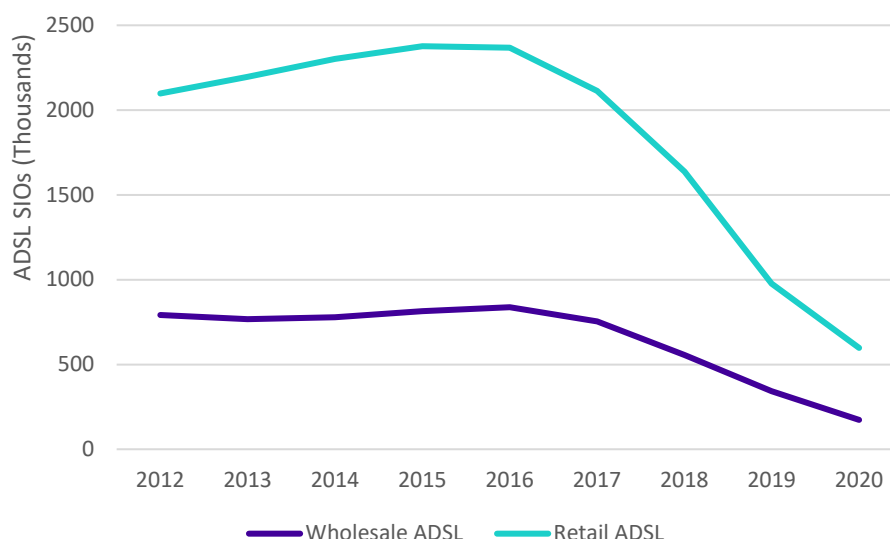
- whether it is technically feasible to supply the service
- the legitimate commercial interests of suppliers of the service
- the incentives for investment in the infrastructure used to supply the service under consideration, and other telecommunications services.

When considering incentives for investment in infrastructure, we consider how declaration may affect incentives for investing in existing infrastructure as well as how it may affect decisions about maintenance, improvement and extension of existing infrastructure, and investment in new infrastructure.

3. Background and industry developments

Prior to the NBN rollout, DSL technology over copper networks was the major source of broadband internet connections in Australia.⁸⁹ At that time, ADSL services¹⁰ had higher data rates than the alternative services available to most residential and small business customers. The number of ADSL services in operation (SIOs) peaked in 2015-16 (see Figure 1).

Figure 1: Wholesale and retail ADSL services in operation: 2012-2020



Source: Telstra Economic Model, Public Reports (2012-2020)¹¹

Note: Telstra's TEM reporting obligation ceased in 2020

In the four years since the ACCC's 2017 WADSL service declaration, there has been a decline in demand for WADSL¹² and retail ADSL services due to the progressive migration of broadband services to the NBN. There were more than 8.5 million retail broadband internet services in operation in the September 2021 quarter.¹³ Of these, DSL SIOs make up around 4% of the services.

Figure 2 shows that Telstra's DSL SIOs have declined over the past five years but as at September 2021, there were still around 317,000 DSL SIOs still on Telstra's copper network. Many of these end-users continue to rely on ADSL services as they may not have access to equivalent or better broadband services outside the NBN fixed line footprint.

⁸ DSL service is a carriage service for the provision of DSL services along a metallic line using access technology, which allows the transmission of data from a modem at an end-user's premises to an exchange, and using the non-voice spectrum of the communications wire.

⁹ DSL technologies can be asymmetric or symmetric. ADSL (asymmetric) services have a high downstream data rate service coupled with a lower rate upstream service.

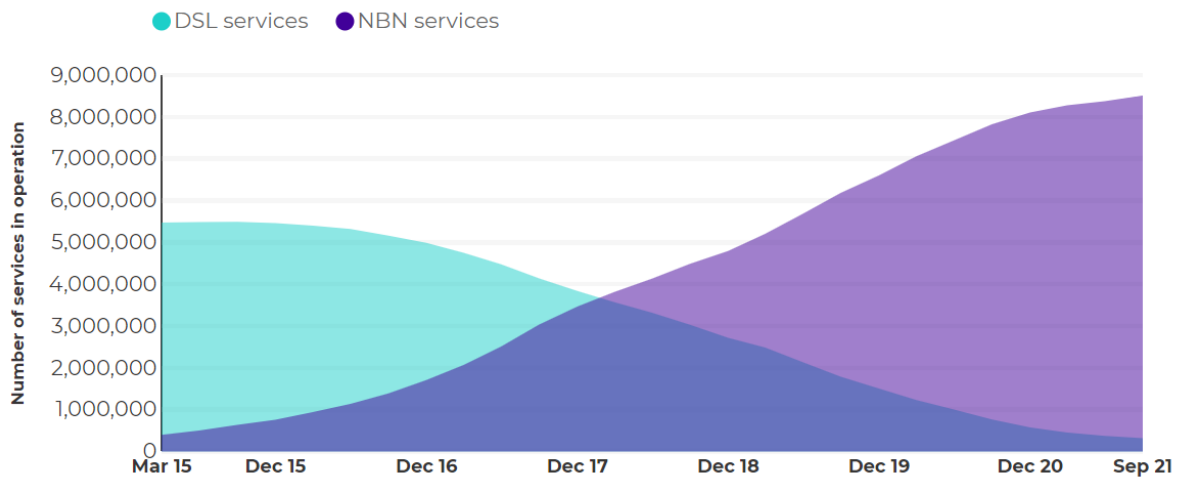
¹⁰ ADSL was the dominant fixed-line broadband technology in Australia prior to the NBN rollout used by residential or small business customers. ADSL services are specified as being capable of supporting maximum download / upload data rates of 24 Mbps / 2.5 Mbps. However, actual attainable speeds are dependent upon line length and quality and localised interference with the consequence that deployed speeds are below the specified maximums.

¹¹ Telstra, [TEM Public Reports](#), 2012-2020.

¹² The wholesale ADSL service comprises both a local access component and a transmission component between DSL enabled exchanges and points of interconnect.

¹³ ACCC, [NBN Wholesale Market Indicators Report](#), September 2021.

Figure 2: Total number of Telstra Digital Subscriber Line and NBN Services in Operation: 2015-2021



Source: ACCC, NBN Wholesale Market Indicators Report, September 2021

The decline in the number of SIOs connected to Telstra’s copper network reflects Telstra’s obligations under its Structural Separation Undertaking and the Migration Plan. Telstra has been required to refuse new ADSL service orders and service modification requests within the NBN fixed line footprint when the NBN rollout has reached specified milestones. Telstra is also required to disconnect ADSL services after location specific NBN switchover periods for migration have ended.

As these requirements have taken effect within the NBN fixed line footprint, Telstra’s standard access obligations under the WADSL service declaration have progressively been wound back by operation of subsection 152AR(4) of the CCA, which provides exceptions to the standard access obligations. However, Telstra’s standard access obligations under the WADSL service declaration outside the NBN fixed line footprint are not affected.

Outside the NBN fixed line footprint, Telstra still offers WADSL services over its copper network, and consumers will have the choice of retail ADSL services, as well as NBN wireless or satellite broadband services, for the foreseeable future.

4. Will declaration promote the long-term interests of end-users?

In deciding to declare a service, the ACCC must be satisfied that declaration will promote the long-term interests of end users of carriage services or services supplied by means of carriage services.

In deciding whether declaration is likely to promote the long-term interests of end users, 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, telecommunications infrastructure.

This section sets out the ACCC's consideration of whether declaration of the wholesale ADSL service is likely to promote the long-term interests of end users.

4.1. Promoting competition

In determining whether continued declaration of the wholesale ADSL service will promote the long-term interests of end-users, we must have regard to the extent to which declaration is likely to promote competition in the relevant markets. To do this, we have considered the likely future state of competition in the relevant markets with and without declaration. We have also considered the extent to which declaration will remove obstacles for end-users to gain access to listed services.¹⁴

In the 2017 WADSL declaration final decision, we considered that without declaration, Telstra would have similar incentives and opportunities as there were prior to the 2012 declaration to engage in entry-detering or expansion-detering conduct, to maintain and grow its market share.

At the time of the 2012 declaration and its extension in 2017, market share in the high-speed broadband fixed-line market (i.e., ADSL) was important for gaining future market share for NBN based services. Also, investment in non-NBN infrastructure that would compete with Telstra's DSL network and the NBN was declining due to the NBN roll-out and because the payoff period for new investment in competing services would be limited. We considered this would increase the incentive and potential for Telstra to engage in conduct that would raise competition concerns, as the constraint offered by the threat of competitive entry would diminish.

We considered that without declaration the ability of access seekers (i.e., wholesalers and RSPs) to compete with Telstra in supplying ADSL services would be reduced. This was because:

- network owners had smaller DSLAM footprints (compared with Telstra) which meant they were unable to provide their wholesale customers with WADSL services on a national basis using just their own networks

¹⁴ Section 152AB(4) of the CCA.

- many potential purchasers of WADSL services required national coverage so that they could supply their retail customers, specifically business and government customers that had operations in metropolitan and regional areas across Australia
- there were likely to be significant incremental costs to sourcing WADSL services from multiple suppliers.

In our 2021 WADSL declaration consultation and position paper, we acknowledged that unlike 2017, NBN services are now available on a near ubiquitous basis, either over fixed lines within the NBN fixed line footprint or through wireless or satellite networks outside of the fixed line footprint. This has enhanced the level of competition in the broadband services market, particularly within the NBN fixed line footprint.

However, as noted in section 3 of this Final Decision, around 317,000 DSL services are still currently in use. Without the WADSL service declaration, RSPs using these access services at regulated prices to supply end-users may face barriers to competing for market share and maintaining existing service plans in the latter stages of the NBN migration.

In the absence of the declaration, Telstra's ability to charge higher prices for the WADSL service than set in the FAD would allow it to offer its retail services more cheaply than other RSPs. This would be advantageous to Telstra for retaining end users as retail customers when they choose an NBN-based or alternative broadband service in the future.

Submissions

Telstra did not agree with our preliminary position that allowing the WADSL declaration to expire would be detrimental to competition for high-speed fixed-line broadband services.¹⁵ This is because, according to Telstra, there remains a very small number of wholesale ADSL services and virtually no demand for new services. Telstra also submitted that a wide range of alternatives are available to WADSL customers and that there are SIP obligations in place that support the provision of superfast broadband services to all Australians. Telstra considered that there was little to be gained by limited the WADSL service declaration to a sub-set of Exchange Service Areas (ESA)¹⁶, thus agreeing with our position on this matter in the 2021 consultation and position paper.¹⁷

All other submissions agreed with our preliminary position that further extending the WADSL service declaration would promote competition.¹⁸

ACCAN submitted that allowing the WADSL service declaration to expire would be detrimental to competition for highspeed fixed-line broadband services.¹⁹ ACCAN submitted data from an online survey it ran in mid-2021.²⁰ ACCAN found that respondents (64%) felt they had very limited choice of ADSL provider. 71% of respondents purchased their ADSL service from Telstra, with the remaining 29% purchasing their ADSL service from twelve other retail providers. ACCAN submitted that it is important that the choice of provider remains available.²¹ According to ACCAN, within NBN's fixed line footprint, until all services have transitioned from ADSL to NBN, there is merit in extending the WADSL service declaration to promote competition and provide certainty to consumers.²²

¹⁵ Telstra, Response to the ACCC's Wholesale ADSL declaration inquiry, Public version, 10 September 2021, pg. 5.

¹⁶ The area of copper wire served by one local telephone exchange.

¹⁷ Telstra, Response to the ACCC's Wholesale ADSL declaration inquiry, Public version, 10 September 2021, pg. 5.

¹⁸ ACCC, WADSL service declaration inquiry 2021, Consultation and position paper, [Submissions](#).

¹⁹ ACCAN, Submission to the WADSL declaration inquiry, 7 September 2021, pg. 2.

²⁰ Ibid, pg. 4-12.

²¹ Ibid, pg. 2.

²² Ibid, pg. 2.

ACCAN also submitted that declaration ensures that other retail service providers (RSPs) can offer ADSL services, which is particularly valuable to consumers who do not have access to the range of technologies and providers that are available in urban areas.²³ ACCAN noted that respondents to its survey considered the capacity limits of satellite services, as well as speed, reliability, latency and cost issues, are a deterrent to customers using these services.²⁴ ACCAN submitted that outside NBN's fixed line footprint, there needs to be further consideration to determine whether satellite and fixed wireless technologies necessarily provide competition to ADSL services given service quality differences.²⁵ ACCAN further submitted that extending the WADSL service declaration in all ESAs will promote competition in the relevant markets.²⁶

TPG submitted that without declaration, Telstra has the ability and incentive to raise prices of competing access seekers, including TPG, or otherwise seek to limit access or reduce the quality of services.²⁷ According to TPG, Telstra also has the ability and incentive to discriminate and favour itself in the supply of ADSL services.²⁸ TPG submitted that the risk in not declaring the WADSL service is that it gives Telstra the opportunity to take advantage of its market position to offer its own retail services more cheaply than competing access seekers.²⁹ TPG considered that Telstra can then benefit from this position when those ADSL customers choose an NBN or alternative home broadband service in the future.³⁰ TPG submitted that this reduces the overall ability of other retail service providers to compete with Telstra, which leads to an unfair and anti-competitive outcome, and overall is not in the long-term interests of end-users.³¹ TPG supported extending the declaration of WADSL service for all ESAs until June 2024.³²

IAA supported the WADSL service declaration being extended until 30 June 2024. According to IAA, although the consultation and position paper noted that demand for WADSL and ADSL services has fallen, IAA believes this is not necessarily the case in remote, rural and regional areas. IAA considered that in those locations, competition is weak as Telstra operates its copper network without much opposition. IAA submitted that a fair number of consumers still rely on continuing access to declared WADSL services, which will be necessary until an equivalent or better service from NBN Co becomes available.³³

Optus submitted that even though the NBN rollout has progressed, it does not alter the enduring bottleneck characteristics of the Customer Access Network (CAN) and that access to Telstra's CAN is essential for access seekers to be able to provide downstream telecommunications services. Optus considered that while WADSL is an old technology and its use is declining, it would be premature to allow declaration to lapse before all premises in the fixed line footprint are serviceable by the NBN.³⁴

²³ Ibid, pg. 2.

²⁴ Ibid, pg. 1.

²⁵ Ibid, pg. 2.

²⁶ Ibid, pg. 2.

²⁷ TPG, Submission to the WADSL service declaration inquiry, 10 September 2021, pg. 1.

²⁸ Ibid, pg. 1.

²⁹ Ibid, pg. 2.

³⁰ Ibid, pg. 2.

³¹ Ibid, pg. 2.

³² Ibid, pg. 2.

³³ Internet Association of Australia, Submission to the WADSL service declaration inquiry, 10 September 2021, pg. 1.

³⁴ Optus, Submission in response to ACCC Consultation and Position Paper, Wholesale ADSL service declaration inquiry, Public version, September 2021, pg. 4.

ACCC's decision

We maintain that without continued declaration and access regulation of the WADSL service, there currently is still an incentive and the ability for Telstra to charge access seekers higher prices than set in the FAD for these services. This in turn could act to limit the choice of RSPs providing broadband services for end-users and competition for high-speed fixed-line broadband services, and by extension, competition in the superfast broadband market.

We recognise that the competitive landscape for broadband services is evolving and will continue to during the final stages of the NBN migration. We consider that in 2023-24, when the NBN migration is completed, there is an opportunity to commence a holistic and well-informed review of regulatory arrangements for Telstra's remaining WADSL and other declared fixed line services provided over its legacy networks.

Having considered submissions to this declaration inquiry and the assessment criteria for declaration we consider that extending the WADSL service declaration until June 2024 will continue to promote competition in the supply of high-speed fixed-line broadband services.

4.2. Achievement of any-to-any-connectivity

As noted in our 2021 WADSL service declaration consultation and position paper, we do not consider that any-to-any connectivity is directly relevant to declaration of the WADSL service. This is because the WADSL service is an input to an end-to-end service and, with no switching capability, does not in and of itself involve communications between end-users.

We note that stakeholders' submissions did not raise any issues regarding any-to-any connectivity.

4.3. Economically efficient use of, and economically efficient investment in, telecommunications infrastructure

In the 2017 WADSL service declaration final decision, we considered that continued declaration would not affect Telstra's ability to exploit economies of scale and scope, or its ability to make a return on its investment, and was therefore not detrimental to its legitimate commercial interests. We noted that the regulated prices set under the WADSL FAD would allow Telstra to make a normal commercial return on investment.

We also considered in the 2017 final decision that continued declaration of the WADSL service would not adversely affect Telstra's efficient investment in its existing network. Further, we took the view that the declaration did not require Telstra to invest in a new network or additional infrastructure to provide the WADSL service. To the extent that existing DSL infrastructure was insufficient to meet demand and further equipment, or ports were required, we expected that such investment to be incremental and relatively small compared to the equipment already in place. We also considered that declaration would promote efficient use of Telstra's existing infrastructure. This was because, without declaration, Telstra would have the ability and incentive to charge prices for the WADSL service that exceeded efficient cost and limited efficient use.

In our 2021 WADSL service declaration consultation and position paper, we considered that extending declaration of the WADSL service was likely to continue to promote the economically efficient investment in, and economically efficient use of, telecommunications infrastructure.

Submissions

Telstra did not agree that extending the WADSL service declaration would promote efficient use of relevant infrastructure. Telstra's submission noted that although it has not yet determined an end-of-life date for the ADSL platform, Telstra is likely to do so within the next couple of years and did not consider it economically efficient to continue operating the network indefinitely.³⁵

All other submissions agreed with our preliminary position that extending the WADSL service declaration was likely to promote the economically efficient investment in, and economically efficient use of, telecommunications infrastructure.

ACCAN submitted that given that an extended declaration and FAD will allow access prices to reflect efficient costs, the declaration would promote efficient use of infrastructure.³⁶

Optus submitted that our consideration of the efficient use of infrastructure in the 2017 inquiry is still relevant today. Optus considered that continued declaration of the WADSL service would allow existing Telstra and access seeker infrastructure to be efficiently used until all premises within the NBN fixed line footprint are NBN serviceable. Optus also submitted that declaration would also continue to allow for efficient use of infrastructure outside of the NBN fixed line footprint.³⁷

ACCC's decision

We maintain that extending the WADSL service declaration over the latter stages of the NBN migration will ensure that the cost to access seekers for the service continues to be reasonable and helps to maintain the economically efficient use of Telstra's DSL infrastructure over its remaining service period.

We recognise that within the NBN fixed line footprint, Telstra's legacy copper network is being progressively decommissioned. However, as noted in Telstra's submission, an end-of-life date for the ADSL platform has not to date been confirmed by Telstra.

We note Telstra's view that alternative broadband services are currently available to WADSL customers and there are SIP obligations in place for the provision of superfast broadband services nationally. However, we also recognise the current limitations of services available outside the NBN fixed line footprint as noted by ACCAN and the IAA. Further investment would be required to connect more premises to alternative broadband networks outside the NBN fixed line footprint that can provide a superior service to ADSL. It is important to provide sufficient time to allow this investment to occur while the ADSL platform is still available. Extending the WADSL service declaration will support a transition path for RSPs and end-users that choose to move from DSL infrastructure to better alternative networks in the future, while supporting competition and the economically efficient use of this infrastructure over its remaining service period.

We consider that the infrastructure currently used to supply the WADSL service will be sufficient to meet demand by access seekers over the declaration period and that declaration will not of itself result in inefficient investment in the existing infrastructure.

We consider that extending the WADSL service declaration until June 2024 will ensure access prices continue to reflect efficient costs, promote the efficient utilisation of DSL

³⁵ Telstra, Response to the ACCC's Wholesale ADSL declaration inquiry, Public version, 10 September 2021, pg. 5.

³⁶ ACCAN, Submission to the WADSL declaration inquiry, 7 September 2021, pg. 2.

³⁷ Optus, Submission in response to ACCC Consultation and Position Paper, Wholesale ADSL service declaration inquiry, Public version, September 2021, pg. 4.

infrastructure, and allow for an appropriate return on past investment in this infrastructure over the declaration period.

Having considered submissions to this declaration inquiry and the assessment criteria for declaration we consider that extending the WADSL service declaration until June 2024 will continue to promote the economically efficient investment in, and economically efficient use of, telecommunications infrastructure.

5. The declared service

5.1. Service description

The 2017 decision to extend the WADSL service declaration retained the service description for the WADSL service from our 2012 declaration. The 2017 final decision considered the existing service description was an appropriate functional description of the declared service and accurately described the wholesale access service that was technically feasible to regulate through price and non-price terms of access.

As set out in the 2017 final decision, the WADSL 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 remote integrated multiplexer (RIM) or customer multiplexer (CMUX); and

(b) uses a static Layer 2³⁸ tunnelling protocol over a transport layer to aggregate communications to the point of interconnection.

As noted in our 2021 WADSL service declaration consultation and position paper, we considered that the WADSL service description in our 2017 final decision remained current and is appropriate. All submissions to the consultation and position paper agreed.

In extending the existing WADSL service declaration until 30 June 2024 we have retained the service description from our 2017 final decision on declaration. The service description is set out in Appendix A of this document.

5.2. Declaration coverage

We consider the extension of the WADSL declaration should apply to all Telstra Exchange Service Areas (ESA).

In our 2021 WADSL service declaration consultation and position paper, we considered that declaration of the WADSL service covering all ESAs will continue to promote competition in the national retail market for high-speed fixed-line broadband, and by extension, the related superfast broadband market.

We note however that the Telstra Migration Plan limits standard access obligations for Telstra's declared services in NBN fixed line areas. That is, in such areas Telstra is not obliged to connect new services and can disconnect existing services at the end of the NBN switchover period.

We agree with comments in submissions that there is little to be gained by limiting the declaration to a sub-set of exchange areas and consider such an approach is unnecessary and would also make the declaration overly complex to comply with and administer.

5.3. Declaration duration

For the reasons set out in this Final Decision we consider that further extending the WADSL service declaration³⁹ until 30 June 2024 will promote the long-term interests of end-users of carriage services.

³⁸ Layer 2 has the same meaning as in the Open System Interconnection (OSI) Reference Model. In general terms, it provides a point-to-point dedicated connection between two fixed points in a network.

The extension will also align the expiry of the declaration with that of other Telstra fixed line legacy services currently declared by the ACCC, enabling a holistic review of the regulatory arrangements that apply to Telstra's remaining legacy services after June 2024.

5.4. Regulatory burden

We consider that declaring the WADSL service until 30 June 2024 will not result in increased regulatory burden as the declaration contains no changes in the regulatory arrangements for this service other than the duration of the declaration.

³⁹ The current WADSL declaration is due to expire on 13 February 2022.

6. Final decision

The ACCC has decided to further extend declaration of the WADSL service until 30 June 2024. The declaration will continue to apply to all Telstra Exchange Service Areas.

We consider that extending the declaration until 2024 will promote the long-term interests of end-users. The extension will also align the expiry of the declaration with that of other Telstra fixed line legacy services currently declared by the ACCC, enabling a holistic review of the regulatory arrangements that apply to Telstra's remaining legacy services after June 2024.

We consider that extending the declaration until June 2024 will continue to promote competition as well as providing certainty to RSPs about regulated access and pricing arrangements over this period. Allowing the WADSL service declaration to expire may limit competition as removing access regulation could create an incentive for Telstra to charge access seekers higher prices for WADSL services, while offering their own retail ADSL services at prices and terms other RSPs could not compete with.

We consider that extending the WADSL service declaration until June 2024 will also continue to promote the economically efficient investment in, and economically efficient use of, telecommunications infrastructure providing high-speed fixed-line broadband services.

Appendix 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*.

Appendix B - Overview of digital subscriber line services

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.

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.

The wholesale ADSL service comprises both a local access component, and a transmission component between DSL enabled exchanges and CBD points of interconnect (POI).

Appendix 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 long-term interests of end users 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.⁴⁰ 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.⁴¹

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.⁴²

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.⁴³

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

⁴⁰ 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).

⁴¹ *Telecommunications Act 1997*, section 7.

⁴² CCA, subsections 152BC(3) and 152BC(8).

⁴³ 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.⁴⁴

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 long-term interests of end users.

In deciding whether declaring the wholesale ADSL service would promote the long term interests of end users, 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.⁴⁵

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.⁴⁶ Access determinations can cover a broad range of terms and conditions but must specify price or a method of ascertaining price.⁴⁷

The ACCC's approach to the long-term interests of end users test

In deciding whether declaring the wholesale ADSL service would promote the long-term interests of end users, 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

⁴⁴ CCA, section 152AN.

⁴⁵ 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.

⁴⁶ CCA, subsection 152BCI(1).

⁴⁷ CCA, subsections 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.⁴⁸

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.⁴⁹

⁴⁸ ACCC, Merger guidelines, November 2008

⁴⁹ 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.⁵⁰ 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 long-term interests of end users 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 position⁵¹
- 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]’,⁵² and

⁵⁰ SSNIP stands for small but significant non-transitory increase in price.

⁵¹ Olivier Boylaud and Giuseppe Nicoletti, Regulation, market structure and performance in telecommunications, OECD Economics Studies, no. 32, 2001/1.

⁵² 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'.⁵³

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 long-term interests of end users.

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 long-term interests of end users 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 long-term interests of end users.

Any-to-any connectivity

The objective of any-to-any connectivity is achieved when each end-user can communicate with other end-users, whether they are connected to the same telecommunications network.⁵⁴

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.

⁵³ This is not intended to be an exhaustive list of the characteristics of effective competition.

⁵⁴ CCA, subsection 152AB(8).

Efficient use of and investment in infrastructure

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

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.⁵⁵

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).

⁵⁵ CCA, subsections 152AB(7A) and (7B).

Appendix D - List of submissions

Submissions received in response to ACCC July 2021 consultation and position paper

- Australian Communications Consumer Action Network (ACCAN), 7 September 2021
- Internet Association of Australia (IAA), 8 September 2021
- Telstra, (confidential and public versions), 10 September 2021
- TPG Telecom, 10 September 2021
- Optus, (confidential and public versions), 15 September 2021