



Australian
Competition &
Consumer
Commission

Superfast Broadband Access Service declaration inquiry

Final decision

July 2016



Australian Competition and Consumer Commission

© Commonwealth of Australia 2016

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attribution 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logo
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, ACCC, GPO Box 3131, Canberra ACT 2601, or publishing.unit@acc.gov.au

www.accc.gov.au

Contents

List of abbreviations and acronyms	i
Glossary.....	ii
Executive Summary.....	v
1 Introduction	1
1.1 Background.....	1
1.2 Public inquiry process.....	2
1.3 Effect of the declaration of superfast broadband access services	3
1.4 Current regulation of superfast broadband.....	3
1.5 Structure of the report.....	8
2 The ACCC's assessment approach	9
2.1 Legislative framework.....	9
2.2 ACCC's assessment against the LTIE.....	12
3 Final decision	13
3.1 Summary of the draft decision	13
3.2 Submissions.....	15
3.3 Markets and state of competition – the ACCC's final decision	19
3.4 Will declaration promote the LTIE – the ACCC's final decision.....	29
4 Service description	48
4.1 Summary of draft decision	48
4.2 Submissions.....	49
4.3 ACCC's final decision	51
4.4 Timing and application of the declaration	58
A SBAS service description	59
B Legislative Framework	62
B.1 Declaration inquiries	62
B.2 The ACCC's approach to the LTIE test	63
C List of submissions	68
D Assessment of change in regulatory burden on affected access providers.....	69

List of abbreviations and acronyms

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
ADSL	Asymmetric Digital Subscriber Line
CBD	Central Business District
CCA	<i>Competition and Consumer Act 2010</i>
c-i-c	commercial in confidence
CLC	Carrier Licence Conditions
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
FAB	Fibre Access Broadband
FAD	final access determination
FTTB	fibre to the basement
FTTN	fibre to the node
FTTP	fibre to the premises
Gbps	gigabits per second
HFC	hybrid fibre-coaxial
IAD	interim access determination
LBAS	local bitstream access service
LTIE	long-term interests of end-users
Mbps	megabits per second
NBN	National Broadband Network
POI	point of interconnection
RSP	retail service provider
SAOs	standard access obligations
SBAS	superfast broadband access service
SAU	Special Access Undertaking
SIO	services in operation
SSNIP	small but significant non-transitory increase in price
ULLS	Unconditioned Local Loop Service
VDSL	very-high-bit-rate digital subscriber line

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 determination	Written determination made by the ACCC relating to access to a declared service after conducting a public inquiry, specifying any or all of the terms and conditions for compliance with any or all of the standard access obligations.
access multiplexer	A device that separates communications carried by means of guided electromagnetic energy to enable an end-user to make use of high data rate services.
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	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).
backhaul	The line carrying traffic from a transmission point (generally the telephone exchange) to a central point (in the IP core).
cable sheath	A cable sheath is the covering on the outside of a cable that holds and protects the copper pairs that are used to supply services to end-users.
CBD	Central Business District.
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 and the terms and conditions set in any final access determination.
downstream	Further along the supply chain. For example, mandating access to network services can promote competition in downstream retail broadband services.
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.
enduring bottleneck	A network element or facility that exhibits natural monopoly characteristics, and is essential in providing services to end-users in downstream markets.
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.
FOAS	Fixed Originating Access Service. Allows a telephone call to be connected from the caller to a point of interconnection with another network (pre-selection and override). The FOAS allows call origination for the facilitation of special number services including 13/1300 and 1800 numbers. The FOAS does not include pre-selection and override services for telephone calls provided over the NBN.
FTAS	Fixed Terminating Access Service. Allows a telephone call to be carried from the point of interconnection to the party being called on another network.
HFC network	Hybrid Fibre-Coaxial Cable network. A combination of fibre optic and copper coaxial cables able to deliver large amounts of data. Typically used to deliver internet services and pay television services.
LBAS	The declared Local Bitstream Access Service. A point-to-point service used to carry communications in digital form between an access provider's network and an end-user. Access seekers use the service to supply superfast broadband services to end-users, connected to non-NBN networks, primarily in new housing estates.
LCS	The declared Local Carriage Service. For a 'per-usage' charge, allows access seekers to resell local calls to end-users without having to invest in their own network and switching equipment. The LCS is purchased in conjunction with the WLR service.
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.
PSTN	Public Switched Telephone Network. The circuit-switched fixed telephone network that allows end-users to make and receive telephone calls via switching and transmission facilities and utilising analogue and digital technologies.

retail service provider	Company that offer telecommunications services to end-users.
SAOs	Standard Access Obligations. Under section 152AR of the CCA, the category A SAOs require an access provider to: <ul style="list-style-type: none"> • 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.
SAU	Special access undertaking. A document given by the access provider proposing the terms and conditions on which it will offer access to its services (if approved by the ACCC, access seekers can obtain supply on these terms).
SIO	Service In Operation. Refers to an active telecommunications service provided to an end-user.
transmission	The point-to-point carriage of voice, data or other communications at a fixed data rate.
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.
WLR	The declared Wholesale Line Rental service. For a monthly 'per-user' charge, it allows access seekers to purchase a line rental service from an access provider, which includes access to the copper line and associated services (including a dial tone and telephone number) supplied using Telstra's equipment.

Executive Summary

There are three circumstances in which fixed line superfast broadband services are supplied in Australia:

- NBN supplies regulated wholesale services under its Special Access Undertaking and published Wholesale Broadband Agreement (which are then on sold by retail service providers (RSPs) to end-users)
- Non-NBN networks built or extended by more than one kilometre since 1 January 2011 are subject to the 'level playing field' obligations in Parts 7 and 8 of the *Telecommunications Act 1997* (the Telecommunications Act), which require operators of superfast networks to operate on a wholesale-only basis (as NBN does) and provide access to superfast carriage services upon request (which are also on sold to end-users by RSPs), and
- Non-NBN networks built before 1 January 2011 are not subject to wholesale access regulations and can be operated on a wholesale only, wholesale and retail or retail only basis.

Given that some fixed line superfast broadband networks are not operated subject to access regulation, and in response to the Vertigan Committee's concerns about the potential for small technical non-NBN monopolies to appear, the ACCC commenced a public inquiry into whether declaring a (non-NBN) superfast broadband access service would be appropriate.

The Australian Competition and Consumer Commission (ACCC) has concluded its public inquiry and has declared a superfast broadband access service (SBAS) on all non-NBN pre-2011 superfast broadband networks. The declared service is:

- a Layer 2 fixed-line broadband service with a download data rate that is normally more than 25 megabits per second or
- a Fibre Access Broadband service, such as that already supplied by Telstra on its fibre networks in the South Brisbane and Velocity estates.

The ACCC remains of the view that all superfast fixed-line broadband networks are likely to display natural monopoly characteristics and that declaring an SBAS will promote the long-term interests of end-users (LTIE). For this reason, the scope of the SBAS declaration continues to encompass all fixed-line networks, with the exception of:

- services supplied on the NBN
- services supplied on the HFC networks that are contracted to be transferred to NBN Co and
- services supplied subject to the level playing field provisions and local bitstream access service (LBAS) declaration
- services to business customers, public bodies or charity customers in CBD areas where these customers are:
- supplied by a fibre-to-the premises (FTTP) configuration or
- supplied from a single or group of access multiplexer devices, like a DSLAM, that exclusively supply superfast broadband services to business customers, public bodies or charity customers (in CBD areas). (The '*competition exclusion*').

These services are not included in the SBAS as these services are already, or will be, supplied subject to existing wholesale regulatory obligations – or because they are exclusively supplying business customers, public bodies or charity customers in CBD areas, where it appears there is effective competition (and hence does not appear to require access regulation).

Without being exhaustive, the SBAS declaration applies to services supplied on networks that existed prior to 1 January 2011 and that are currently exempt from the 'level playing field provisions' in Parts 7 and 8 of the Telecommunications Act. It will also apply to networks that have received ministerial exemptions from this Part, except to the extent that they are caught by the exceptions in the SBAS service description itself. The ACCC's declared SBAS will therefore apply to services supplied on the following networks:

- Telstra's FTTP networks in South Brisbane and Velocity estates
- iiNet's VDSL network in the ACT and HFC networks in regional Victoria
- TPG's FTTB networks, and
- Other networks that supply superfast carriage services, including superfast broadband networks that existed before 1 January 2011 (which are not subject to Part 7 of the Telecommunications Act).

Having considered all submissions received throughout the inquiry and all relevant market information, the ACCC remains of the view that there are economic and potential technological barriers to entry that mean it is unlikely to be economically efficient for multiple infrastructure providers to deploy superfast broadband networks in the same service area and compete in relevant wholesale and retail markets. This appears to be resulting in localised monopolies (or sub-markets) where operators have the incentive and opportunity to seek monopoly rents from end-users and/or access seekers (where wholesale access is offered), and to favour their own downstream operations in the case of vertically-integrated operators.

The ACCC's final view is that the declaration of an SBAS will promote the LTIE because:

- The SBAS will be available in more areas than is currently the case and on terms that are more likely to reflect the underlying efficient costs of providing superfast broadband access services. This will allow more providers to enter retail markets and to compete on their relative merits – particularly where vertically-integrated operators are present – on both price and non-price terms.
- It will promote the economically efficient use of and investment in telecommunications infrastructure. The ACCC considers that declaring the SBAS and then regulating the pricing of this service is likely to see prices shift to more closely reflect the underlying costs of production. In doing so, this will promote productive efficiency and allocative efficiency, as price signals enable decisions to be based on underlying costs.

Declaring the SBAS will also close a number of gaps and promote consistency of regulation across all networks supplying superfast broadband services.

Changes to the scope of the SBAS declaration

As noted above, the ACCC commenced the declaration inquiry into the SBAS in response to a recommendation made by the Vertigan Committee and following the conclusion of its own investigation that found that TPG Limited's (TPG) plans to deploy a fibre-to-the-basement (FTTB) network to large apartment buildings in metropolitan areas would not be in breach of the level playing field provisions in Parts 7 or 8 of the Telecommunications Act.¹

¹ The level playing field provisions of the Telecommunications Act, in conjunction with the ACCC's Local Bitstream Access Service (LBAS) declaration, require the provision of a wholesale Layer 2 bitstream

Having conducted its market analysis, the ACCC considers that enduring bottlenecks are likely to arise in the supply of superfast broadband services as a result of both technological and economic barriers to entry. These enduring bottleneck characteristics are not confined to FTTB networks, but apply to all fixed-line superfast broadband technology platforms.

Hence, the SBAS is very similar to other superfast carriage services supplied on a declared basis by NBN Co and providers who are subject to the level playing field provisions in Parts 7 and 8 of the Telecommunications Act. Consistent with the draft decision, the scope of the final declaration is broader than vectored VDSL2 technology and encompasses all Layer 2 fixed-line broadband services with a download data rate that is normally greater than 25 megabits per second

The superfast broadband access service now specifically includes a Fibre Access Broadband service (FAB service). The ACCC has refined the SBAS service description from that in its draft decision to include the FAB service, to make it explicitly clear that the superfast broadband services Telstra currently supplies in the South Brisbane and Velocity estates are encompassed by the SBAS declaration. This will prevent the possibility that the declaration could require an inefficient investment by Telstra to supply the SBAS, which may not be recovered prior to the transfer of Telstra's South Brisbane and Velocity estate networks to NBN, and which would not promote the LTIE.

The ACCC considers that declaring access to non-NBN superfast broadband services will promote the LTIE and is broadly consistent with the ACCC's technology-neutral approach to access regulation.

There are, however, some services that the ACCC does not consider it is necessary to declare:

- Although Telstra and Optus supply superfast services over their HFC networks without any wholesale obligations or access regulation, there are well-defined plans for these networks to be transferred to NBN Co, or decommissioned, in the near future. NBN Co will operate these networks on a wholesale-only basis and supply declared services. Therefore, the ACCC does not propose the SBAS declaration apply to these services.
- Requiring providers who are already subject to the LBAS and domestic transmission capacity service (DTCS) declarations to also supply the SBAS would produce duplication of regulation and uncertainty for these providers. The ACCC does not propose the SBAS declaration apply to these services.
- The ACCC recognises that in areas where there is competing infrastructure, declaration will not be necessary to promote the LTIE. The ACCC has decided to exclude areas where competition appears to be effective and has further refined the 'competition exclusion' in its draft decision to apply with respect to the exclusive supply of business customers, public bodies or charity customers but only where those end-users are located in CBD areas of capital cities.

The ACCC has done this having had regard to submissions to the draft declaration decision and information available with respect to the presence of alternative superfast networks supplying the relevant markets. The ACCC considers that using this form of 'exclusion' represents an appropriate approach, given the costs for and time it would take to develop a more precise competition test. The ACCC has identified the CBD areas using Australia Post postcodes and decided that the SBAS declaration will not apply where the services are supplied by a FTTP network configuration or provided using a single or group of access multiplexer devices owned or controlled by a supplier.

access service by, and impose wholesale-only obligations on, all operators of networks supplying superfast carriage services.

Compliance costs for smaller providers

In considering the extent to which declaration affects use of and incentives for investment in infrastructure, the ACCC has taken account of the access provider's circumstances. In the draft decision, the ACCC recognised that declaring the SBAS may impose a regulatory burden that could be disproportionately heavy on smaller providers. In light of this and the submissions received, the ACCC has formed a final view that the costs of compliance may be higher for smaller providers, but that a more detailed assessment of these costs is required. The ACCC will address the matter of whether to exempt specified smaller providers from the relevant standard access obligations (SAOs) in an interim access determination (IAD) for the SBAS. It will consider forming a final view on the specific SBAS compliance costs for these smaller providers in the final access determination (FAD) inquiry.

In its draft decision, the ACCC recognised that declaration may not remove all barriers to entry and invited submissions on whether the costs for operators in implementing a wholesale Layer 2 bitstream service and systems would be disproportionately high for smaller operators. On balance, the ACCC has decided not to exempt smaller providers from the SBAS declaration. The ACCC considers, in general, that superfast broadband services supplied on all networks display characteristics of natural monopolies irrespective of their geographic footprint or subscriber base. While some parties favoured an exemption for smaller providers others opposed any exemption, arguing that regardless of their subscriber base, smaller operators would still have the ability to exercise market power, leaving customers exposed to higher prices and poorer services.

However, as questions remain about the extent to which SBAS will be taken up on smaller networks and the likely compliance costs for operators of these networks, the ACCC will further consider the application of standard access obligations as part of the subsequent Final Access Determination inquiry, and in making any Interim Access Determination.

Access determinations for the SBAS

Once a service is declared, the ACCC is required to commence a FAD inquiry within 30 days² and may make an interim access determination if it forms the view that the inquiry is not likely to be completed within six months.³

The ACCC intends to commence a public inquiry to make a FAD for the SBAS.

² Section 152BCI(1) of the CCA

³ Section 152BCG(1)(d) of the CCA

1 Introduction

Under subsection 152AL(3) of the *Competition and Consumer Act 2010 (Cth)*(CCA), the ACCC may declare an eligible service following a public inquiry under Part 25 of the Telecommunications Act, if the ACCC is satisfied that the making of the declaration will promote the long-term interests of end-users of carriage services or services provided by means of carriage services. **Appendix B** sets out the legislative framework for declaration in detail.

The ACCC has made a final decision on the declaration of the SBAS for the next three years. This report sets out the ACCC's findings from the declaration inquiry and the ACCC's reasons for its decision. This is the ACCC's report under section 505 of the Telecommunications Act for the declaration inquiry.

1.1 Background

On 11 September 2014, the ACCC commenced a public inquiry into whether to declare an SBAS under Part 25 of the Telecommunications Act. This inquiry was initiated in response to competition concerns raised by the panel conducting the Vertigan Review regarding the use of vectoring of VDSL services, in its second report of August 2014.⁴ This technology can greatly improve broadband data rates by cancelling out interference, but there were concerns that it also had the potential to exclude competitive entry and result in monopoly provision within particular service areas.⁵

To address these concerns, the panel recommended that the ACCC investigate declaring a new service. In response to the Vertigan Review, the Government announced that it would introduce legislation to repeal Part 7 and amend Part 8 of the Telecommunications Act, with access to services to be dealt with under Part XIC of the CCA.⁶ The ACCC understands that the Government's amending legislation is currently being drafted and may introduce legislation requiring operators of new networks targeting residential consumers to be structurally separated as a default, and to offer non-discriminatory access. The arrangements may also provide for the ACCC to authorise functional separation subject to carriers entering into undertakings setting out arrangements for access and equivalence to minimise anti-competitive effects. Proposed changes would also remove the one kilometre statutory exemption. Section 1.4.2 provides further detail on Part 7 and Part 8 and the potential impact of their repeal/amendment.

The ACCC SBAS declaration inquiry consultation process is described below in section 1.2.

1.1.1 What is a superfast broadband access service?

An SBAS is a wholesale Layer 2 bitstream, fixed-line broadband service that can be used to download communications at a download transmission data rate that is normally more than 25 megabits per second. This definition draws on the definition of a superfast carriage service in the Telecommunications Act.⁷

This generic description is broad and describes services supplied using a range of fixed-line networks and technologies, including:

⁴ www.communications.gov.au/departmental-news/independent-cost-benefit-analysis-nbn

⁵ Review under section 152EOA of the Competition and Consumer Act 2010, pp. 28-29.

⁶ Hon. Malcolm Turnbull, MP, Former Minister for Communications and Senator the Hon. Mathias Cormann, Minister for Finance, *Reform of telecommunications regulation*, media release, 11 December 2014, available at: minister.communications.gov.au/malcolm_turnbull/news/reform_of_telecommunications_regulation#.VrBZNtR-Ah.

⁷ See subsection 141(10) of the Telecommunications Act for the definition of 'superfast carriage services'.

- Fibre to the Premises (FTTP)
- Hybrid Fibre Coaxial (HFC)
- Fibre to the Node (FTTN)
- Fibre to the Basement (FTTB)
- Fibre to the distribution point (FTTdp)

The ACCC notes that FTTN, FTTB and FTTdp all can utilise VDSL technology.

In addition to fixed-line networks, wireless networks are also capable of providing superfast fixed-line broadband services. As outlined below in section 3.3.1, the ACCC does not consider these technologies to be in the same market as the fixed-line superfast services. Wireless technologies include:

- Fixed wireless broadband
- Mobile broadband
- Satellite.

An overview of the regulatory context and the technologies that support superfast broadband services is provided in Chapter 3 of the draft decision.⁸

1.2 Public inquiry process

Under section 152AL of the CCA, the ACCC may declare a service if:

- it has held a public inquiry under Part 25 of the Telecommunications Act
- it has prepared a report about the inquiry under section 505 of the Telecommunications Act
- the report was published during the 180 day period ending when the declaration was made (i.e. approximately six months prior to the declaration) and
- the ACCC is satisfied that the making of the declaration will promote the LTIE.

On 11 September 2014, the ACCC commenced a declaration inquiry under Part 25 of the Telecommunications Act into whether a superfast broadband access service, such as the very-high-bit-rate digital subscriber line (VDSL) service, should be regulated under the CCA. The ACCC commenced this declaration inquiry in response to competition concerns raised by the panel conducting the Vertigan Review.

On 6 May 2015, the ACCC released the discussion paper for the SBAS declaration inquiry. The discussion paper sought industry views about whether the SBAS should be declared and the scope of any service description. Submissions to this paper closed on 19 June 2015. The ACCC received nine submissions.

Subsequently, the ACCC published its draft decision on the SBAS declaration on 6 November 2015. This draft decision proposed the declaration of an SBAS on all fixed-line networks except NBN, HFC networks contracted to be transferred to NBN Co, networks already subject to the local bitstream access service (LBAS) declaration and those that exclusively

⁸ ACCC, *Superfast Broadband Access Service declaration inquiry*, Draft Decision, November 2015, viewed 21 July 2016, www.accc.gov.au/regulated-infrastructure/communications/superfast-broadband-access-service-declaration-inquiry/draft-decision.

supply business customers, public bodies or charity customers. The draft decision defined the SBAS as a supply of Layer 2 bitstream service with a downstream data rate that is normally more than 25 Mbps.

The draft decision indicated that the ACCC was particularly interested in receiving submissions that provided detailed information on:

- the likely regulatory costs of developing and supplying an SBAS (including those associated with developing wholesale business operating and ordering systems) and the benefits of declaration.
- the most appropriate exclusion to adopt in the declaration (if any) so as to avoid over regulating in areas where competition appears to be effective.

The ACCC received eleven submissions from interested parties by the time submissions closed on 4 December 2015. A full list of submissions received by the ACCC is included at **Appendix C**. Public versions of the submissions (where available) are on the ACCC website.

In March 2016, the ACCC undertook further targeted consultation with these submitters on a revised draft service description. The submitters to the targeted consultation provided feedback on the amendments to the service description. Amendments to the service description since the draft decision include the addition of Telstra's Fibre Access Broadband service as well as the exemption for business customers, public bodies and charity customers in CBD areas. Submissions in response to this targeted consultation are also available on the ACCC website.

1.3 Effect of the declaration of superfast broadband access services

From the date of an SBAS declaration, carriers and carriage service providers will be required to comply with the category A SAOs under section 152AR of the CCA.

The category A SAOs are the SAOs that carriers or carriage service providers other than NBN Co must comply with. The category A SAOs require that an access provider must:

- supply the service to an access seeker on request,
- take all reasonable steps to ensure that the quality and fault handling of the service provided to the access seeker is equivalent to that which it provides itself, and
- allow interconnection.⁹

The ACCC may exempt certain access providers from the category A SAOs in an access determination.¹⁰

1.4 Current regulation of superfast broadband

1.4.1 Overview

In making its final decision, the ACCC has taken into account current regulatory arrangements applying to superfast broadband networks; this includes regulation of superfast carriage services:

- Provided by NBN Co - all eligible services that NBN Co supplies must be declared.

⁹ Section 152AR of the CCA.

¹⁰ Section 152BC(3) of the CCA.

- Under the level playing field provisions – Parts 7 and 8 of the Telecommunications Act, subject to any statutory and ministerial exemptions.

Current regulation of superfast broadband services is outlined in the table below.

Table 1.1 Current regulation of superfast broadband services

Network	Regulation	Wholesale access obligations
National Broadband Network	Part XIX of the Competition and Consumer Act 2010 and the NBN Companies Act 2011	Services supplied on a wholesale-only basis as a declared service under NBN's Special Access Undertaking (SAU) and its published Wholesale Broadband Agreement (WBA).
Superfast broadband networks built, upgraded or altered after 1 January 2011	Parts 7 and 8 of the Telecommunications Act and the LBAS	Services supplied on a wholesale-only basis as a declared Layer 2 25/5 Mbps service at \$27 per month as specified in the LBAS FAD ¹¹
Telstra's FTTP networks in South Brisbane and Velocity estates	Ministerial exemptions from Parts 7 and 8 of the Telecommunications Act	A service must be offered at a wholesale level as set out in Ministerial Exemption to Parts 7 and 8 of the Telecommunications Act ¹² No price regulation.
TPG/iiNet's TransACT FTTN network in the ACT and extensions to its HFC network in regional Victoria	Ministerial exemptions from Parts 7 and 8 of the Telecommunications Act	A service must be offered at a wholesale level as set out in Ministerial Exemptions to Part 7 and 8 of the Telecommunications Act ¹³ No price regulation.
Superfast broadband networks in existence before 1 January 2011	No specific regulation on superfast services	No wholesale access obligations
Superfast broadband networks in existence before 1 January 2011 and altered to provide services to residential customers	<i>Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014</i>	Functional separation and a wholesale access obligation for supply of a Layer 2 25/5 Mbps service at \$27 per month.

In addition, the ACCC has considered the commercial operations of other fixed-line superfast broadband network operators. This is set out in Table 1.2, which includes details of the operating model and estimated number of premises capable of being supplied, for each fixed-line superfast broadband network.

¹¹ ACCC, Final Access Determination No.2 of 2012, (LBAS), 2012, Schedule 1.

¹² *Telecommunications (Network Exemption—Telstra South Brisbane Network) Instrument 2012 ; Telecommunications (Network Exemption—Specified Velocity Networks) Instrument 2012.*

¹³ *Telecommunications (Network Exemption—TransACT Upgraded VDSL networks) Instrument 2012; Telecommunications (Network Exemption—TransACT Very Small Scale Networks) Instrument 2012.*

Table 1.2 Fixed-line superfast broadband network operators

Wholesale only	
Small < 20,000	Comverge Networks, Optic Network, Red Train,
Medium < 100,000	The Local Broadband Network Company (LBN Co), OPENetworks, Opticomm,
Large 100,000+	
Vertically integrated - wholesale and retail	
Small < 20,000	
Medium < 100,000	TPG (iiNet-TransACT), Telstra (South Brisbane & Velocity)
Large 100,000+	TPG (AAPT-Pipe)
Vertically integrated - retail only	
Small < 20,000	Arise, Clearstream, Club Links, Frontier Networks, Fuzenet, Halenet, Pivit, Places Victoria, Spirit, UCG
Medium < 100,000	TPG (TransACT-Ballarat, Mildura & Geelong), Vocus (Amcom and M2)*
Large 100,000+	Telstra (HFC), Optus (HFC),

* Vocus also operate the First Path network on a wholesale only basis.

1.4.2 Level playing field provisions

Parts 7 and 8 of the Telecommunications Act set out a range of obligations that apply to networks that are used or proposed to be used to supply superfast carriage services to residential or small business customers (the level playing field provisions). The level playing field provisions prohibit the use of networks that were built, extended, or upgraded after 1 January 2011, other than the NBN, to supply superfast carriage services to small business or residential customers, unless the network operator:

- makes a Layer 2 bitstream service available to access seekers for supply of superfast broadband services to customers or prospective customers using the network (Part 7), and
- supplies on a wholesale basis only (Part 8).

The level playing field provisions do not apply in circumstances where a ministerial exemption or statutory exemption applies. To date, five ministerial exemptions have been granted from the level playing field provisions including Telstra's South Brisbane Exchange Service Area, Telstra Velocity networks and iiNet's VDSL2 network. Some of the services provided by Telstra and iiNet under the terms of these exemptions, are wholesale superfast carriage services. However, the exemptions do not specify an access price for these services. Exemptions were given with regards to several factors, including but not limited to; the limited scope of the relevant network, the existence of the networks predating the level playing field provisions, and the fact that the networks would still be subject to potential regulation by the ACCC under Part XIC of the CCA.¹⁴

The Telstra South Brisbane Exchange network exemptions are to expire on 1 July 2018, the Telstra Velocity Network exemptions and the iiNet VDSL 2 exemptions will expire on the 'designated day' which is currently also set as 1 July 2018.

¹⁴ For example, see Explanatory note, *Telecommunications Act 1997 Telecommunications (Network Exemption-Telstra South Brisbane Network) Instrument 2012*, p.2.

Statutory exemptions apply to networks that were already capable of supplying superfast carriage services to residential or small business customers at 1 January 2011 (i.e. the networks were built before 2011 – for example, the network owned and operating by Clublinks Pty Ltd). This exemption also applies to extensions of these networks provided that no point on the extended network is more than one kilometre from the network as it stood on 1 January 2011 ('1 km exemption').

In September 2013, TPG announced plans to deploy FTTB broadband services to an initial tranche of 500 000 premises in the five mainland state capital cities. The deployment was an extension to its existing networks that were built before 2011. In 2014, the ACCC investigated whether TPG's FTTB network rollout was captured by the level playing field provisions. The ACCC concluded that TPG's networks were capable of supplying superfast carriage services to small business or residential customers by 1 January 2011 and confirmed that TPG was not extending the footprint of these networks by more than one kilometre.

Unless an exemption applies, the level playing field provisions and LBAS declaration both apply to networks that were built after 1 January 2011, or to existing networks that have been extended by more than one kilometre, or upgraded to make the network capable of supplying superfast carriage services, since 1 January 2011 – for example Telstra's South Brisbane and Velocity estates and the network(s) operated by Opticomm Co Pty Ltd.

The draft SBAS declaration decision noted that the Government had announced that it would introduce legislation to repeal Part 7 and amend Part 8 of the Telecommunications Act. The amendments to Part 8 would require operators of new networks targeting residential customers to be structurally separated as a default and offer non-discriminatory access, but also to allow the ACCC to authorise functional separation subject to carriers entering into undertakings setting out arrangements for access and equivalence to minimise anti-competitive effects. The proposed changes would also remove the 1 km exemption. Repealing Part 7 of the Telecommunications Act could remove the ongoing access requirement that exists with respect to supply of a wholesale Layer 2 bitstream service.

The Government has not yet released these legislative amendments for comment.

In relation to managing interference between competing VDSL networks, Comms Alliance is now developing an industry code. This follows the amendment of regulations to give Comms Alliance the required power to develop such a code, as a consequence of the Vertigan Review.¹⁵

1.4.3 LBAS declaration

The *Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Act 2011* (NBN Access Arrangements Act) introduced amendments to both the Telecommunications Act and the CCA regarding Layer 2 bitstream services.¹⁶ These amendments set out a regime to regulate the provision of Layer 2 bitstream services to ensure that these services are offered on an open and equivalent access basis.

Under subsection 152AL(3C) of the CCA, the ACCC was required to declare a Layer 2 bitstream service as soon as practicable after the commencement of the subsection. The ACCC declared the LBAS on 24 February 2012. The LBAS declaration does not have an expiry date and will stay in force indefinitely.¹⁷

¹⁵ www.communications.gov.au/have-your-say/proposed-regulatory-changes-enable-industry-manage-interference-between-next-generation-broadband

¹⁶ Note that references to the Telecommunications Act and the CCA are references to those acts as amended by the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Act 2011.

¹⁷ Subsections 152ALA(1), 152ALA(5) and 152ALA(5A) of the CCA.

This LBAS declaration applies only to services supplied using a designated superfast telecommunications network.¹⁸ The LBAS is a Layer 2 bitstream service that is supplied using a designated superfast telecommunications network and is a superfast carriage service, i.e. is capable of downstream speeds of more than 25 megabits per second. A designated superfast telecommunications network includes a telecommunications network (except the NBN) used, or proposed to be used, to supply one or more Layer 2 bitstream services, and used, or proposed to be used to supply a superfast carriage service, to residential or small business customers, provided that the network:

- came into existence after 1 January 2011, or
- is upgraded after that time and as a result of the upgrade becomes capable of supplying a superfast carriage service.¹⁹

The LBAS declaration does not apply in circumstances where a ministerial or statutory exemption to the level playing field provisions applies (as described above).

The ACCC cannot vary or revoke the Layer 2 bitstream service declaration made under subsection 152AL(3C) of the CCA.²⁰

On 7 April 2015, the ACCC commenced an access determination inquiry in relation to the LBAS. The decision-making period for the LBAS FAD inquiry expires on 7 October 2016. The ACCC intends to conduct the LBAS FAD inquiry concurrently with the SBAS FAD inquiry, given the similarities between these services.

1.4.4 Carrier licence conditions

The Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Consumers) Declaration 2014 (the carrier licence conditions) apply for two years from 1 January 2015 and include two sets of obligations on operators servicing residential customers. These carrier licence conditions (CLC) were envisaged as an interim measure while the ACCC conducted the declaration inquiry.²¹

Transitional obligations (1 January 2015 to 30 June 2015) are that carriers supplying superfast carriage services must provide wholesale services to access seekers on a non-discriminatory and equivalent basis.

Longer-term obligations (1 July 2015 to 31 December 2016) are that carriers supplying superfast carriage services must:

- comply with general separation and supply obligations, and
- offer a 25/5 Mbps wholesale bitstream service at no more than \$27 per port per month.

The Explanatory Statement to the carrier licence conditions stated that the 'government acknowledges that the ACCC's declaration inquiry on FTTB services is currently underway, but notes that the declaration process can take up to a year to complete'.

¹⁸ Subsection 152AL(3D) of the CCA.

¹⁹ Section 152AGA of the CCA.

²⁰ Subsection 152AO(4) of the CCA.

²¹ *Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014*, explanatory statement, p3

1.5 Structure of the report

The final report is set out as follows:

Chapter 2 sets out the factors the ACCC must consider in making a decision to declare a service and the approach taken in this report.

Chapter 3 outlines the ACCC's final view that the declaration of an SBAS is likely to result in the achievement of promoting competition, achieving any-to-any connectivity and encouraging the efficient use of, and investment in, infrastructure by which the service is supplied.

Chapter 4 outlines the final SBAS service description.

Appendix A provides the service description for the SBAS.

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

Appendix C lists the submissions, received by the ACCC to date to this inquiry, and their short titles.

Appendix D sets out the regulatory burden of declaration on affected access providers.

2 The ACCC's assessment approach

This chapter explains the assessment framework the ACCC has adopted in deciding whether to extend, revoke or vary the current declarations or allow them to expire and make new declarations. The framework is summarised below and was discussed in detail in the November 2015 draft decision paper.

This chapter is to be read together with the ACCC's analysis in chapters 3 and 4.

2.1 Legislative framework

In deciding whether to declare SBAS, the ACCC must consider whether declaration will promote the LTIE of telecommunications services, with regard to the extent to which declaration is likely to result in the achievement of the following three objectives:²²

- promoting competition in markets for listed services²³
- 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.²⁴

The May 2015 discussion paper set out the ACCC's detailed approach to the LTIE test and its state of competition analysis. To determine whether the LTIE will be promoted with declaration the ACCC considers the effects of regulated access to particular services in relevant markets, as well as making an overall assessment of the benefits expected to flow to end-users from declaration.

The ACCC notes that Part XIC of the CCA does not require the ACCC to precisely define the scope of the relevant markets in a declaration inquiry. The ACCC's approach to market definition in the context of this declaration inquiry is discussed in chapter 3 of this report.

Once the relevant markets have been broadly defined, the next step is to assess the state of competition in relevant markets. In assessing the state of competition, the ACCC considers dynamic factors such as the potential for sustainable competition to emerge and the extent to which the threat of entry (or expansion by existing suppliers) constrains pricing and output decisions. The state of competition in relevant markets is discussed in chapter 3 of this report.

Promoting competition in markets for telecommunications services

In determining whether declaration will promote the LTIE, the ACCC must have regard to the extent to which declaration of an eligible service is likely to result in the achievement of the objective of promoting competition in markets for listed services.

In determining the extent to which declaration is likely to result in this objective, subsection 152AB(4) of the CCA requires the ACCC to have regard to the extent to which declaration will remove obstacles to end-users gaining access to listed services.

When considering whether declaration is likely to promote competition in markets for listed services, the ACCC identifies the market for the relevant service and the markets in which competition is likely to be promoted (which are generally downstream markets relying on the

²² Subsection 152AL(3)(d) of the CCA.

²³ Listed services include carriage services and services supplied by means of carriage services.

²⁴ Section 152AB of the CCA.

relevant service). In assessing whether declaration is likely to promote competition, the ACCC considers the likely state of competition in the future both with declaration and without declaration.

Achieving any-to-any connectivity

In determining whether declaration will promote the LTIE, the ACCC must have regard to the extent to which declaration is likely to result in the achievement of the objective of any-to-any connectivity in relation to carriage services. Subsection 152AB(8) of the CCA provides that the objective of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, or a similar service, with each other whether or not they are connected to the same network.

In the declaration context, only certain services are relevant to the achievement of any-to-any connectivity. The Explanatory Memorandum to the *Trade Practices Amendment (Telecommunications) Bill 1996* stated that the objective of any-to-any connectivity will only be relevant when considering whether a particular service promotes the LTIE of a carriage service that involves communications between end-users.²⁵ When considering other types of services (such as carriage services which are inputs to an end-to-end service), this criterion will be given little, if any, weight.

The achievement of any-to-any connectivity is particularly relevant when considering services that require interconnection between different networks.

Efficient use of, and investment in, infrastructure

In determining whether declaration will promote the LTIE, the ACCC must have regard to the extent to which declaration is likely to result in the achievement of the objective of encouraging the economically efficient use of, and the economically efficient investment in the infrastructure by which listed services are supplied; and any other infrastructure by which listed services are, or are likely to become, capable of being supplied.

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 through declaration ensures that existing infrastructure is used efficiently where it is inefficient to duplicate the existing networks or network elements. This is likely to be where infrastructure has natural monopoly characteristics and is a bottleneck for the supply of downstream services. However, the benefits of an access regime in supporting efficient use of existing infrastructure and investment in downstream markets must not discourage future investment in networks or network elements where such investment is efficient.

In determining the extent to which declaration is likely to encourage the economically efficient use of, and investment in, infrastructure, subsection 152AB(6) of the CCA requires the ACCC

²⁵ Trade Practices Amendment (Telecommunications) Bill, Explanatory Memorandum, 1996, pp. 40-1.

to have regard to the technical feasibility of providing and charging for the services, the legitimate commercial interests of the supplier(s) of the services, and the incentives for investment in infrastructure. These are discussed further below.

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
- 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 where relevant.

Legitimate commercial interests of the Suppliers

In determining the extent to which declaration is likely to encourage the economically efficient use of, and investment in, infrastructure, subsection 152AB(6) of the CCA requires the ACCC to have regard to the legitimate commercial interests of the supplier or suppliers of services, including the ability of the supplier or suppliers to exploit economies of scale and scope.

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.

As noted above, the ACCC must also have regard to whether providing access may affect the infrastructure operator's ability to exploit economies of scale and scope. Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise where it is less costly for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce the relevant products. The ACCC assesses the effects on an infrastructure operator's ability to exploit both economies of scale and scope on a case-by-case basis.

Incentives for encouraging efficient investment

In determining the extent to which declaration is likely to encourage the economically efficient use of, and investment in, infrastructure, subsection 152AB(6) of the CCA requires the ACCC to have regard to the incentives for investment in the infrastructure by which services are supplied and any other infrastructure by which the services are, or are likely to become, capable of being supplied.

Infrastructure operators should have the incentive to invest efficiently in the infrastructure by which the services are supplied (or are capable, or likely to become capable, of being supplied). In assessing incentives for investment, regard must be had (but is not limited) to the risks involved in making the investment.²⁶

²⁶ Subsections 152AB(7A) and (7B) of the CCA.

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.

2.1.1 Economic rationale for declaring services

In the May 2015 discussion paper, the ACCC sets out the economic rationale for declaring services. The ACCC noted that it uses well-established economic principles to analyse the expected effects of regulating particular services on achieving the three objectives relevant to the LTIE.

The economic principles most relevant to a decision on whether to declare superfast broadband services are:

- whether the relevant infrastructure exhibits enduring bottleneck characteristics that affect competition in related markets, any-to-any connectivity and efficiency in the use of, and investment in, telecommunications infrastructure, including both the infrastructure in question and related infrastructure
- whether requiring access to services provided on telecommunications infrastructure will promote economic efficiency and competition
- whether infrastructure operators are vertically integrated and the likely effects of that vertical integration on competition in related markets, any-to-any connectivity and efficiency in the use of, and investment in, telecommunications infrastructure.

2.2 ACCC's assessment against the LTIE

In making its assessment of whether the declaration of superfast broadband services will promote the LTIE, the ACCC has adopted the above assessment framework which is discussed in detail in chapter 3.

3 Final decision

Key points

- On balance, the ACCC's final decision is that superfast broadband networks, irrespective of their geographic footprint and subscriber base, display characteristics of natural monopolies, due to both technical and economic barriers to entry, and declaring an SBAS will promote the LTIE. In most areas where these services are supplied there is limited, if any, infrastructure competition which supports this conclusion.
- Superfast broadband services are likely to be highly valued and sought after by end-users in the future and declaration of an SBAS will promote competition in retail markets for the supply of superfast broadband services and, to a lesser extent, wholesale markets for the supply of wholesale superfast broadband services.
- Declaration of an SBAS will also promote efficient investment in, and use of, the infrastructure used to supply telecommunications. Productive efficiency will be improved as services will be supplied at the lowest possible cost and allocative efficiency improved as price signals will enable decisions to be based on underlying cost. Further, the ACCC does not consider network investment incentives will be inefficiently affected by the decision to declare an SBAS.
- While the ACCC considers it is technically feasible to supply an SBAS it notes there are costs of complying with the declaration. While these may be disproportionately heavy for some small providers, the ACCC has determined declaration of these networks will promote the LTIE, with benefits outweighing the costs, and that further consideration be given to whether particular small providers should be exempt from the SAOs as a part of the subsequent FAD inquiry and in making any IAD.
- The ACCC does not consider declaration will promote the LTIE where there are a number of different networks supplying superfast broadband to business customers, public bodies and charity customers in the CBD areas of capital cities. In these cases, the ACCC considers that competition appears generally effective and will exempt these superfast broadband services from the declaration. Specifically, the declaration will not apply to superfast broadband services supplied in CBD areas of capital cities from a single DSLAM or other access multiplexer device that exclusively supplies business customers, public bodies or charity customers.
- To avoid duplicative or redundant regulation the ACCC has decided that the scope of the SBAS declaration should not encompass the supply of services:
 - on HFC networks which will be transferred to the NBN
 - supplied under the current LBAS declaration.

3.1 Summary of the draft decision

3.1.1 Relevant markets and state of competition

The ACCC's view in the draft decision was that the relevant markets for the purpose of this declaration inquiry were the wholesale and retail markets for superfast broadband services, that is, fixed-line broadband services providing download data rates normally greater than 25 Mbps, with monthly download limits of around 50Gb.

The ACCC considered that a fixed-line 25 Mbps broadband service is the basic entry-level superfast broadband service as this is currently the most used speed tier on the NBN²⁷—and

²⁷ ACCC, *NBN wholesale markets indicator report*, initial report, 29 April 2016. NBN Co offers plans ranging from 12 Mbps to 100 Mbps on its fibre network.

consumer demand for it is likely to increase in line with increasing demand for data intensive content. Data consumption rates indicate that access to this service is and will increasingly be necessary for access seekers to compete effectively in retail markets.

The ACCC considered other technologies including mobile broadband, ADSL, satellite and fixed wireless networks to be weak substitutes (if at all) for fixed line superfast services and that it is not likely these services would constrain providers of fixed line superfast broadband services from increasing prices or degrading service levels. This is due to the relatively higher prices for large data downloads offered using these alternative technologies.

It also considered that it was appropriate to adopt a national market definition for the retail and wholesale supply of superfast broadband services due to the cost structures and national pricing policies of retail and wholesale providers. However, the ACCC indicated that in assessing the LTIE in a final decision, it would consider the competition effects in specific geographic segments for wholesale and retail services, where appropriate.

The ACCC's draft view was that retail markets for superfast broadband services are showing mixed signs of becoming effectively competitive. While there appears to be more even market share across RSPs in these markets compared to those in copper-based markets, where vertically-integrated operators are present they tend to hold a dominant market position – and there is no retail competition in areas where vertically-integrated operators do not offer wholesale products. The ACCC noted that while retail prices suggest there may be price competition in some areas (particularly those where wholesale access is regulated), the scope of this competition appears limited in areas where there is no or a limited range of wholesale products available to RSPs.

The ACCC considered there to be sufficient competition in the supply of wholesale superfast broadband for use by high revenue business customers as well as public bodies and charity customers operating in the same areas. However, competition was not considered effective in medium-low density areas serving both residential and business customers, reflecting the limited physical presence of competing infrastructure providers.

It also noted that higher-speed broadband technologies such as vectored VDSL and G.fast may have the potential to create technical monopolies and further limit any scope for competition in within geographic areas. The ACCC's draft view was that superfast broadband networks may have natural monopoly characteristics (see below for further discussion).

The ACCC also noted that where price regulation is present, this sets the wholesale prices at a level the ACCC considers are reasonably reflective of an effectively competitive market. However, as outlined in section 1.4, regulation is not present in all geographic areas where superfast broadband services are supplied.

3.1.2 Whether declaration will promote the LTIE

After considering the relevant markets and the state of competition, the ACCC concluded that declaration of an SBAS would promote the LTIE.

The ACCC considered that superfast broadband networks, due to both technical and economic barriers to entry, form enduring bottlenecks. As a result, declaration of SBAS would promote the LTIE by both promoting competition and encouraging efficient investment in, and use of, infrastructure.

As natural monopolies, it was considered the extent to which SBAS networks would face competitive tension from infrastructure competition was limited. Declaration was therefore considered to promote competition in the retail markets for the supply for the supply of superfast broadband services and, to a lesser extent, wholesale markets for the supply of wholesale superfast broadband services. However, it was noted that the extent to which the benefits of competition would flow through to end-users would depend on access seekers taking the declared service and using it to supply retail superfast broadband services.

It was also considered that declaration of an SBAS would promote efficient investment in and use of the infrastructure used to supply telecommunications. This included likely intangible benefits and efficiencies from declaration relating to the streamlining of regulation of superfast broadband access services under one instrument rather than under an array of exemptions (as per Part 7 of the Telecommunications Act).

The ACCC considered that it was technically feasible to supply an SBAS (as the technologies to supply the service were already in use). However, the ACCC recognised the costs of complying with the declaration might be disproportionately heavy, particularly for some small providers. The ACCC was of the view it might be appropriate to consider exempting certain providers, or classes of providers, from the SAOs. Submissions were invited on this issue.

The ACCC also noted that alternatively it could automatically exempt all smaller carriers from the declaration by setting a minimum threshold network subscriber base in the service description. At the time of the draft decision, the ACCC had not identified any threshold level of subscribers or potential subscribers below which the costs of supplying an SBAS would outweigh any competition gains. The ACCC invited submissions that addressed the merits of exempting some operators from the SBAS and the form of any such exemption should take.

The ACCC did not consider declaration would promote the LTIE where there are a number of different networks supplying superfast broadband services in an area, i.e. where there is infrastructure competition. As identified in the state of competition analysis, this was identified as generally occurring in high density areas serving high revenue end-users (typically business end-users).

A number of options to exclude services where effective competition is present were identified and the ACCC concluded that an exclusion from the declaration framed around the class of end-user served would be the most appropriate. In this light the draft decision set out that declaration would not apply to superfast broadband services supplied from a single DSLAM or other access multiplexer device that exclusively supplies business customers, public bodies or charity customers. However, the ACCC noted that it is possible that some of these customers in regional and rural areas (for example, those in a business park in a regional location) may have limited or no alternative supply of superfast broadband services other than the network owner/operator. Submissions were sought on the most appropriate exemption to adopt in the declaration (if any) and the extent to which this exemption should operate in less densely populated areas.

The ACCC also decided that services supplied on the Telstra and Optus HFC networks which will be transferred to the NBN and those services supplied under the current LBAS declaration should also be exempt from the declaration.

In relation to any-to-any connectivity, the ACCC considered that given SBAS is an input to an end-to-end service declaration it would not have an impact on achieving this objective, nor should it be weighted heavily in assessing the implementation of a declaration.

3.2 Submissions

The ACCC received eleven submissions on the draft decision. A variety of opinions were expressed about the effectiveness and impact of an SBAS declaration, although only TPG considered that an SBAS should not be declared.²⁸ Most submissions focused on the impact of the declaration, and possible exemptions, on competition. Submissions did not focus heavily on market definition.

²⁸ All of the positions TPG take come with the proviso that they are a secondary preference to the ACCC choosing not to declare an SBAS. TPG, public submission to the ACCC draft decision, 7 December 2015, p. 1.

3.2.1 Relevant markets and state of competition

Telstra agreed with the proposed market definition but considered that the SBAS should seek to replicate the outcomes of existing legislative obligations including the CLCs. It was of the view that there are legitimate reasons why various networks are exempt and that the ACCC had gone beyond the scope of its inquiry in considering the declaration of all networks. Telstra considered that declaration will only be in the LTIE if the scope of a SBAS declaration is appropriately defined. Telstra believed that exempting its South Brisbane and Velocity estate networks is in line with the recommendations of the Vertigan Committee which said that there should be “...*appropriate grandfathering provisions for infrastructure already subject to these exemptions*”. Telstra also focused on South Brisbane and considered that the ACCC was too limited when defining the market in South Brisbane and had suggested competition concerns that do not exist.²⁹

Optus supported the proposed market definition. It noted that in relation to competition in the retail market, the willingness of RSPs to connect to multiple wholesale SBAS networks may be restricted by several barriers to entry. These include limited revenue due to restricted addressable markets, increased costs associated with multiple network interconnection and inconsistent wholesale product constructs.

Two submissions recommended changing the scope of the declaration, which is also relevant to how the relevant markets are defined:³⁰

- NBN Co submitted that the threshold for identifying superfast networks should be 12 Mbps, rather than 25 Mbps.
- TPG considered that if the ACCC chooses to implement the SBAS, it should only cover networks between 25 Mbps and 100 Mbps, as services in excess of 100 Mbps are still contestable in the medium term.

3.2.2 Whether declaration will promote the LTIE

Several submitters were of the view that all SBAS networks should be declared as they are natural monopolies with end-users facing no or limited wholesale fixed network choice or retail competition. Declaration was seen to ensure wholesale access is provided and promote competition in the retail markets for superfast broadband services.

In this regard, a number of submissions opposed the exemption of small networks from an SBAS declaration. In particular:³¹

- Optus was of the view end-users will be subject to the potential for monopoly rents and discrimination without competition or declaration.
- NBN considered declaration of all networks was required to enable maximum benefits to flow through to end-users.
- Macquarie considered all superfast broadband networks have the incentive and ability to avoid supplying wholesale access irrespective of the network size. It is unclear how it would promote the LTIE to allow islands of unregulated networks to develop if there were small provider exemptions.

²⁹ Telstra, public submission to the ACCC draft decision, 4 December 2015, pp. 7-9, 14.

³⁰ NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 3; TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5.

³¹ NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 1; Optus, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2; Macquarie Telecom, public submission to the ACCC draft decision, December 2015, p. 2; TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5; ACCAN, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2; CCC, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2.

- TPG submitted it does not make sense to exempt any provider, including small providers, if the purpose is to provide access to natural monopolies.
- ACCAN noted the significant risk to consumers of not declaring smaller networks and that caution should be exercised when considering exemptions.
- The Competitive Carriers' Coalition (CCC) was of the view that for downstream competition benefits to be realised, access to monopoly network elements, especially last mile, must be consistently applied. Further, that the ACCC should reconsider the approach of trying to find a proxy for developing a competition test.

Spirit Telecom and Frontier Networks supported exemptions for small networks. Spirit considered restructuring requirements may be onerous and discourage market participation. Further, it submitted that regulation is not in the interests of end-users and is unnecessary given it is unlikely there will be considerable wholesale business. Spirit also considered that its network does not form a bottleneck due to its unique characteristics, where it engages wholesale operators to carry traffic from buildings to Spirit's equipment located in third party data centres using wholesale fibre networks that existed pre-2011.³² Frontier submitted that not exempting smaller networks would have a chilling impact on competition as they would be at a competitive disadvantage to construct new networks given they could not absorb compliance costs.³³

Clublinks noted that unless it was exempt as a small provider it would be required to set up a separate wholesale company and that this company would not anywhere cover the cost of providing the service.³⁴

Three networks proposed minimum subscriber thresholds below which declaration would not apply, as set out in Table 1.

Table 3.1 - Proposed minimum subscriber thresholds³⁵

Company	Proposed threshold
Spirit Telecom	100,000
Frontier Networks	100,000 or 1% of all national subscribers
Pivit	[c-i-c starts] [REDACTED] [c-i-c ends]

As noted above, Optus considered there were several barriers to entry to the retail markets. It noted that if SBAS network operators were subject to effective competition they would develop wholesale products and interfaces consistent with minimising the costs of RSPs in order to maximise their own revenues. Optus recommended ensuring the terms of access in the IAD and FAD address inconsistencies between NBN Co and small scale SBAS networks.

Both NBN Co and Macquarie Telecom also considered that to the greatest extent possible, the access price and conditions for SBAS should be comparable with those of NBN Co. Macquarie also noted that access to end-users would be made even more complicated and expensive if

³² Spirit Telecom, public submission to the ACCC draft decision, 4 December 2015, p. 1.

³³ Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, p. 5.

³⁴ Clublinks, public submission to the ACCC draft decision, 7 December 2015, pp. 2-3.

³⁵ Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, p. 8; Spirit Telecom, public submission to the ACCC draft decision, 4 December 2015, p. 1; Pivit, confidential submission to the ACCC draft decision, 9 December 2015, p. 2.

the network operator was not obliged to offer access (e.g. if they were exempt as a small provider).³⁶

Frontier Networks noted that given the small size of the addressable market, and the high costs to develop systems to order, activate, interconnect and bill this market, it would not be economically viable for RSPs to access their SBAS.³⁷

Several submissions commented on the proposed exemption for networks supplying businesses, public bodies and charities. Optus supported the exemption noting declaration will not promote competition where there are already a number of networks supplying superfast broadband services in the same area. As well as networks used to provide business services, it also considered that networks that are over-built by NBN Co and networks to be transferred to the NBN should be exempt.³⁸ Similarly, Telstra noted that its South Brisbane network could be transferred to NBN Co, pending further negotiation, and therefore should be exempt in line with other networks being transferred to the NBN.³⁹

Telstra also considered larger companies are unlikely to need intervention to ensure retail competition in the supply of superfast broadband services to their businesses, whereas small businesses should be treated similarly to residential customers and require a level playing field.⁴⁰ NBN Co was of the view that the same potential technological and economic barriers to entry exist for residential and business customers. However, if the ACCC was to proceed with an exemption for service providers supplying business customers it submitted the exemption should only apply to CBD areas.⁴¹

The CCC and Macquarie submitted the ACCC should reconsider the approach of using proxies (i.e. supply to business, public body and charity customers) instead of a competition test to determine what services should be exempt.⁴² Macquarie noted that its experience in corporate markets suggests any of the exemption classes proposed by the ACCC are likely to prove fraught in practice and there is strong likelihood that all the proposed proxies would result in anomalies where competition and consumer interests are compromised.⁴³

Both TPG and Frontier Networks considered that infrastructure based competition exists noting they faced competition from the NBN overbuilding their networks and competition from other technologies including ADSL2+, HFC, wireless, and mobile. They considered mobile broadband as a possible substitute for fixed-line broadband. Frontier Networks also noted that it faced competition when tendering to construct its network.⁴⁴

In relation to the costs of declaration, and the question of whether the costs outweigh the benefits, NBN Co submitted that declaration of an SBAS is unlikely to result in a material increase in the regulatory burden faced by providers, noting the proposed changes to the legislative environment.⁴⁵ However, several submissions expressed concern in relation to the costs associated with declaration and that they may be disproportionately high compared to the benefits. These costs were quantified by a number of businesses (see Table 3.2). All indicated that the costs outweigh the benefits of declaration.

³⁶ NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 4; Macquarie Telecom, public submission to the ACCC draft decision, December 2015, p. 1.

³⁷ Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, p. 6.

³⁸ Optus, public submission to the ACCC draft decision, 4 December 2015, p. 2.

³⁹ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 22

⁴⁰ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 22

⁴¹ NBN Co, public submission to the ACCC draft decision, 4 December 2015, pp. 2 -3.

⁴² CCC, public submission to the ACCC draft decision, 10 December 2015, p. 2.

⁴³ Macquarie Telecom, public submission to the ACCC draft decision, December 2015, pp. 1-4.

⁴⁴ TPG, public submission to the ACCC draft decision, 7 December 2015, p. 3; Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, p. 3.

⁴⁵ The ACCC understands that NBN Co was referring to the Government introducing legislation to repeal Part 7 of the Telecommunications Act when noting the proposed changes to the legislative environment. NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 2.

Table 3.2 - Estimated costs of compliance⁴⁶ [c-i-c starts]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED] [c-i-c ends] Clublinks also noted that if regulation forced them out of business, their 1600 customers would be left without the service Clublinks currently provides and would have to resort to Mobile 4G services.⁴⁸

Telstra and Frontier networks both stated that networks not supplying Layer 2 services should be exempt given the costs of implementing SBAS will be disproportionately large for these networks.⁴⁹

In relation to efficient use of, and investment in, infrastructure TPG submitted that declaration of SBAS would:

- Stifle any impetus to build out new infrastructure to service customers in general, as well as business customers specifically, by creating uncertainty for potential investors, decreasing investment and potential infrastructure competition.
- Not promote the efficient use of infrastructure given infrastructure competition already exists and for the most part regulation of superfast broadband networks has not resulted in their being significant use by access seekers.⁵⁰

The ACCC did not receive any submissions in relation to whether declaration would achieve any-to-any connectivity.

3.3 Markets and state of competition – the ACCC’s final decision

Consistent with the draft decision, the ACCC finds the lack of retail options on vertically-integrated networks suggest the pressure to remain competitive both on price and non-price terms is limited or not present and may, over time, lead to a larger divergence between retail

⁴⁶ Spirit Telecom, confidential submission to the ACCC draft decision, 4 December 2015, p. 1; Frontier Networks, confidential submission to the ACCC draft decision, 4 December 2015, p. 5; TPG, confidential submission to the ACCC draft decision, 7 December 2015, p. 5; Telstra, confidential submission to the ACCC draft decision, 4 December 2015, p. 4.

⁴⁷ [c-i-c starts] [REDACTED] [c-i-c ends]

⁴⁸ Clublinks, public submission to the ACCC draft decision, 7 December 2015, p. 4; Pivit, confidential submission to the ACCC draft decision, 9 December 2015, p. 2.

⁴⁹ Telstra, public submission to the ACCC draft decision, 4 December 2015, pp. 16-19; Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, p. 8.

⁵⁰ TPG, public submission to the ACCC draft decision, 7 December 2015, pp. 4-5.

offerings by vertically-integrated providers not subject to regulation and those where retail competition through wholesale access services is present.

Consistent with the draft report, the ACCC has decided that the relevant markets are the retail and wholesale markets for superfast broadband services – that is fixed line broadband services providing data download rates normally more than 25 Mbps with monthly download limits of 50Gb per month or more.

The ACCC considers that it is reasonable to maintain its view that the 25 Mbps broadband service is the basic entry level superfast broadband service, noting that it is, increasingly, the most used tier on the NBN.⁵¹ This view reflects that consumer demand for this product is likely to rise with increasing use of data-intensive content by consumers.

NBN Co submitted to the draft decision that the SBAS service description (and therefore the relevant markets) should be defined to capture speed tiers below 25 Mbps (12 Mbps as the minimum speed tier) as well as the higher speed tier services available to ensure there is no gap in the regulatory approach between NBN and non-NBN services.⁵² In its submission to the discussion paper, NBN Co proposed the service description be defined as a download data rate of at least 25 Mbps at Layer 2, under normal operating conditions, but at the same time also noted that the service description should not include restrictions based on download rate.⁵³ The ACCC does not consider that download rates below 25 Mbps are representative of the basic entry-level superfast broadband service, as is evidenced by current demand on the NBN.⁵⁴ Further, the ACCC notes the lower speed broadband services are also subject to regulation given that wholesale ADSL, ULLS and LSS are currently declared services.

When considering TPG's proposal to limit SBAS to networks slower than 100 Mbps,⁵⁵ the ACCC does not believe imposing a ceiling on SBAS download rates to be appropriate as it could lead to inefficient investment in order to avoid regulation and these networks would still form enduring bottlenecks. Consequently the ACCC does not accept TPG's view that the declaration should be limited to networks slower than 100 Mbps.

3.3.1 Retail markets

The ACCC does not accept TPG's view that mobile broadband is a substitute for superfast broadband services, given the functional attributes of the mobile service, substantial disparity in data allowances and per gigabyte pricing between mobile and fixed-line broadband services and the fact that there is no new evidence to suggest otherwise in the submissions to the draft decision.⁵⁶ As set out below, fixed line superfast broadband products are typically around the 25/5 Mbps level with monthly download limits of around 100Gb. One such offer from Exetel costs \$49 per month.⁵⁷ In contrast, the latest large mobile offerings that TPG refers to in its submission in respect of mobile data offerings are for 50 Gb at 12/1 Mbps and cost \$70 a month.⁵⁸

In line with the analysis in the draft report, the ACCC does not consider ADSL and ADSL2+ broadband to be a substitute given its maximum download speeds are 24 Mbps (and can be much lower depending on an end-users proximity to the exchange/DSLAM). Further, fixed wireless broadband is not considered to be a substitute given its limited availability. The ACCC also does not consider satellite broadband a substitute for superfast broadband services,

⁵¹ ACCC, *NBN Wholesale markets indicator report*, initial report, 29 April 2016.

⁵² NBN Co, public submission to the ACCC draft decision, December 2015, pp. 2-3.

⁵³ NBN Co, public submission to the ACCC discussion paper, June 2015, p. 12.

⁵⁴ ACCC, *NBN Wholesale markets indicator report*, initial report, 29 April 2016. NBN Co offers plans ranging from 12Mbps to 100Mbps on its fibre network.

⁵⁵ TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5.

⁵⁶ TPG, public submission to the ACCC draft decision, 7 December 2015, pp. 3-4.

⁵⁷ Retail offer retrieved 19 May 2016 at: www.exetel.com.au/.

⁵⁸ TPG, public submission to the ACCC draft decision, December 2015, p. 3; Optus, retail prices retrieved on 20 May 2016 at: www.optus.com.au/.

despite the launch of NBN Co's Sky Muster™ service, as its price appears relatively higher than fixed line connections. For example, a 150Gb service costs around \$140 per month.⁵⁹ The availability of Sky Muster™ remains limited to eligible customers outside of the NBN fixed and fixed wireless zones.

Number of suppliers

Consistent with the draft decision, the ACCC finds that while wholesale-only network operators have attracted multiple access seekers supplying downstream retail services, vertically-integrated network owners often have fewer (if any) access seekers.

The vertically integrated providers (i.e. Telstra's FTTP in South Brisbane and Velocity estates and iiNet/TransACT's VDSL2/FTTP in Canberra) are the same as the draft decision. The ACCC notes that while Telstra's ministerial exemption⁶⁰ was last amended on 23 December 2015, its wholesale arrangements largely remain unchanged.

Since the draft decision, Talk Up, a retail service provider of wholesale-only providers Opticomm and OPENetworks has ceased to supply. At the same time, there have been new entrants into the retail market including Adam Internet, LocalNet, Novatel, OriginNet, ToZoom and Valve networks.⁶¹ The ACCC notes that there has led to a small increase in the total number of retail service providers on these networks operating under the LBAS declaration. Optic, LBN Co, Red Train, Comverge and Vocus also provide wholesale access to various RSPs.

As noted in the draft decision, there are also a number of vertically integrated carriers (who provide retail services and may not be caught by current wholesale requirements (potentially because the networks existed prior to 2011) – for example, Pivit and Clublinks. The ACCC has not received any submissions or market information indicating the numbers of these carriers have changed materially since the draft decision – or to suggest others are reselling services on their networks.

Market shares

There remains limited information on market shares in the retail market for superfast broadband services and the new information that has been identified supports the ACCC's draft observations.

The ACCC notes that there have been minor changes in the distribution of access lines on the NBN fibre access network since the draft decision. However, after taking the merger of iiNet and TPG into account, the proportion of access lines for each carrier remains similar with Telstra acquiring 47.1 per cent of access lines. TPG acquired 26.8 per cent of access lines after the merger – the second highest proportion of access lines on the NBN fibre access network⁶²

Overall, in the absence of evidence to the contrary in the submissions, and consistent with the draft decision, the ACCC remains of the view that actual retail market shares on undeclared non-NBN networks will be less dispersed among providers. On those networks where wholesale services are not provided and there is no infrastructure competition, the vertically-integrated operator will automatically have 100 per cent market share.

⁵⁹ Clearnetworks and Ipstar retail prices retrieved 1 June 2016 at: www.clearnetworks.com.au/nbn-skymuster/skymuster-plans, www.ipstarbroadband.com.au/nbnskymuster/.

⁶⁰ *Telecommunications (Network Exemption—Telstra South Brisbane Network) Instrument 2012* and *Telecommunications (Network Exemption—Telstra Specified Velocity Networks) Instrument 2012*.

⁶¹ OptiComm and OPENetworks retailer lists retrieved 20 May 2016 at: www.opticomm.net.au/, www.openetworks.com.au/.

⁶² ACCC, *NBN Wholesale markets indicator report*, initial report, 29 April 2016.

As an example of the retail market share on a non-NBN superfast broadband network operated by a vertically integrated provider, as at 13 November 2015, although Telstra advised that there are [c-i-c starts] [c-i-c ends] RSPs utilising the Fibre Access Broadband (FAB) service in the South Brisbane Exchange Service Area which together provide approximately [c-i-c starts] [c-i-c ends] per cent of the total broadband services provided on the South Brisbane FTTP network, the ACCC continues to hold concerns about retail competition in the area.⁶³ Despite further investigations to identify these RSPs, the ACCC could only identify two service providers (Exetel and Internode) who, in addition to Telstra itself, which is vertically integrated, currently offer retail services to new end-users on this network. This suggests the extent to which providers are competing to supply end-users connected to the South Brisbane network is limited.⁶⁴

Retail pricing

Broadly, entry level plans (25/5 Mbps data rates plus a 50Gb download allowance) for superfast broadband services on regulated networks start at around \$50 per month. Monthly charges then increase with a positive correlation to both broadband data rates and download allowances. This is likely to be influenced by both regulated wholesale pricing as well as similar ADSL services in areas where both networks have been rolled out or where there is a national pricing regime. The ACCC notes that while there is pricing similarity, the ADSL services have lower download data rates.

Tables 3.3 and 3.4 outline some of the smaller and larger NBN offerings on the market respectively. Since NBN wholesale prices are regulated, they provide a broad point of comparison with the offerings on non-regulated networks shown in Tables 3.5 and 3.6. The ACCC notes that direct comparison cannot be made across networks due to the economies of scale of the NBN, the unique costs of each network, and the NBN's operation of a national pricing scheme that averages the costs of its network across high and low cost regions. However, the ACCC would expect that SBAS network costs are likely to be lower than NBN's, given that SBAS networks are not generally being rolled out in higher cost areas. Despite this, a comparison between the NBN and unregulated SBAS networks does show that there are large differences in prices offered to retail customers around Australia (with NBN retail prices generally being lower), as well as retail price and service competition on the NBN network which is not present to the same degree on other superfast networks.

⁶³ [c-i-c starts] [c-i-c ends]

⁶⁴ Exetel, market offers retrieved 20 May 2016 at: www.exetel.com.au/; Internode, market offers retrieved 20 May 2016 at: www.internode.on.net/.

All packages outlined in Tables 3.3-6 include home phone and line rental.

Table 3.3 Entry level NBN packages⁶⁵

Retailer	Data allowance	Speed (Mbps)	Extras	Sign up fee	Contract length	Price per month
Exetel	100Gb	25/5	N/A	\$0	12 months	\$49.00
Dodo	50Gb	25/5	N/A	\$0	24 months	\$49.90
iPrimus	50Gb	25/5	Free modem	\$0	24 months	\$59.90
Telstra	50Gb	25/5	Free modem	\$59.00	24 months	\$69.00
iiNet	200Gb	25/5	Unlimited local/national calls. Free modem	\$0	24 months	\$69.99
TPG	500Gb (250 peak/off peak)	25/5	Unlimited local/national calls. Free modem	\$0	18 months	\$69.99

Table 3.4 High allowance NBN packages⁶⁶

Retailer	Data allowance	Speed (Mbps)	Extras	Sign up fee	Contract length	Price per month
Exetel	Unlimited	25/5	N/A	\$0	12 months	\$69.00
Dodo	Unlimited	25/5	N/A	\$0	24 months	\$69.90
iPrimus	Unlimited	25/5	Free modem	\$0	24 months	\$79.90
TPG	Unlimited	25/5	Unlimited local/national calls. Free modem	\$0	18 months	\$79.99
iiNet	1000Gb	25/5	Unlimited local/national calls. Free modem	\$0	24 months	\$79.99
Optus	Unlimited	25/5	Unlimited local calls. Free modem.	\$0	1 month	\$90.00
Telstra	1000Gb	25/5	Free modem. Telstra TV	\$59.00	24 months	\$99.00

Large allowance NBN retail prices have converged around \$70 a month, or \$80 a month with a modem and calls included. Both Optus and Telstra have higher prices but offer other incentives to compensate (no lock-in contract and Telstra TV respectively). Although prices have converged, retailers appear to be trying to differentiate their NBN bundles by offering extra services. There is more variety in terms and allowances for the entry level NBN packages.

The ACCC has observed an increase in download allowances since the draft decision.⁶⁷ For example, the download allowance of iiNet's NBN plan in Table 3.4 increased from 250Gb as at

⁶⁵ Retail offers retrieved 19 May 2016 at: www.exetel.com.au/, www.new.dodo.com/, www.iprimus.com.au/, www.telstra.com/, www.iinet.net.au/, www.tpg.com.au/.

⁶⁶ Retail offers retrieved 19 May 2016 at: www.exetel.com.au/, www.new.dodo.com/, www.iprimus.com.au/, www.tpg.com.au/, www.iinet.net.au/, www.optus.com.au/, www.telstra.com/.

23 October 2015 to 1000Gb, with the price only increasing marginally from \$74.90 per month to \$79.99 per month. Similarly, the download allowance of TPG's NBN plan increased from 50Gb as at 23 October 2015 to 500Gb, with an increase in price from \$59.99 per month to \$69.99 per month. Telstra have doubled the data allowance on both their NBN and non-NBN bundle deals.⁶⁸ These changes, when coupled with the differentiation in extras, show retail competition in both price and extras within the regulated side of the market.

Table 3.5 Entry level non-NBN superfast broadband offers⁶⁹

Retailer	Wholesaler	Type	Data allowance	Speed (Mbps)	Extras	Sign up fee	Contract length	Price per month
Internode	OPENetworks, OptiComm	Fibre	300Gb	25/5	N/A	\$0	24 months	\$74.95
Pivit	Pivit	Fibre	100Gb	30/30	N/A	\$0	24 months	\$75.00
Clublinks	Clublinks	Fibre	200Gb	25/5	N/A	\$140.00	1 month	\$102.95
Telstra	Telstra (Sth Brisbane)	Fibre	100Gb	30/1	NA	\$59.00	24 months	\$75.00
Exetel	Telstra (Sth Brisbane)	Fibre	100Gb	30/1	N/A	\$59.00	12 months	\$80.00
Internode	Telstra (Sth Brisbane)	Fibre	100Gb	30/1	N/A	\$99.00	3 months	\$99.90
CBIT	iiNet (TransACT)	VDSL 2	100Gb (50 peak/ off peak)	30/5	N/A	\$79.95	24 months	\$79.00
Velocity Internet	iiNet (TransACT)	VDSL 2	150Gb (75 peak/ off peak)	30/5	Unlimited uploads	\$79.95	24 months	\$84.95

⁶⁷ See analysis beginning on page 26.

⁶⁸ Retail offers retrieved 19 May 2016 at: www.iinet.net.au/, www.tpg.com.au/, www.telstra.com/.

⁶⁹ Retail offers retrieved 19 May 2016 at: www.internode.on.net/, www.pivit.com.au/, www.clublinks.com.au/, www.telstra.com/, www.exetel.com.au/, www.cbit.net.au, www.velocitynet.com.au/. CBIT and Velocity retail prices created by adding the \$50 TransACT wholesale fee retrieved 19 May 2016 at: www.transact.com.au/internet/vdsl2.

Table 3.6 High allowance non-NBN superfast broadband offers⁷⁰

Retailer	Wholesaler	Type	Data allowance	Speed (Mbps)	Extras	Sign up fee	Contract length	Price per month
Internode	OPENetworks, OptiComm	Fibre	1000Gb	25/5	N/A	\$0	24 months	\$104.95
iiNet	iiNet (TransACT)	VDSL 2	1000Gb	30/5	Unlimited local/national calls. Free modem	\$59.99	24 months	\$69.99
CBIT	iiNet (TransACT)	VDSL 2	1000Gb (500 peak/off peak)	30/5	N/A	\$0	24 months	\$149.00
Velocity Internet	iiNet (TransACT)	VDSL 2	400Gb (200 peak/off peak)	30/5	Unlimited uploads	\$0	24 months	\$114.95
Telstra	Telstra (Sth Brisbane)	Fibre / HFC	1000Gb	30/1	Unlimited local/national calls. Free modem. Telstra TV	\$59.00	24 months	\$99.00
Exetel	Telstra (Sth Brisbane)	Fibre	Unlimited	30/1	N/A	\$59.00	12 months	\$100.00
Internode	Telstra (Sth Brisbane)	Fibre	250Gb	30/1	N/A	\$0	24 months	\$149.90
Clublinks	Clublinks	Fibre	500Gb	25/5	N/A	\$140.00	1 month	\$132.95
Spirit Telecom	Spirit Telecom	Fibre	Unlimited	25/25	N/A	\$0	18 months	\$68.00
Pivit Telecom	Pivit Telecom	Fibre	1000Gb	30/30	N/A	\$0	24 months	\$115.00

Compared to NBN based services, there is a broader spread in the prices and terms offered on non-NBN networks. There are also fewer extras offered. The ACCC notes that there has been a slight drop in price of some retail plans since its draft decision. For example, on the fibre networks where Opticomm and OPENetworks supply the declared LBAS, and Internode's 300Gb offer in Table 3.5 has decreased \$5 from its price as at 23 October 2015. However, these prices are still higher than those NBN services offering a similar download allowance.

The retail plans in South Brisbane and in Velocity estates have largely remained unchanged from the prices in the draft decision. These prices are higher than those offered on the NBN and other regulated networks. For example, Exetel offers a 30/1 Mbps service with a 100Gb data allowance, provided on Telstra's FAB network in South Brisbane, for \$80 per month. This

⁷⁰ Retail offers retrieved 19 May 2016 at: www.internode.on.net/, www.iinet.net.au/, www.cbit.net.au/, www.velocitynet.com.au/, www.telstra.com/, www.exetel.com.au/, www.clublinks.com.au/, www.spirit.com.au/, www.pivit.com.au/. CBIT and Velocity retail prices created by adding the \$50 TransACT wholesale fee retrieved 19 May 2016 at: www.transact.com.au/internet/vdsl2.

can be compared to Exetel's offer of a 25/5 Mbps NBN service with the same allowance for \$49 a month.⁷¹

When comparing retail offers on the FAB, Telstra offers the lowest price with Exetel priced competitively. Internode's offers, especially its largest offering of 250Gb, are not priced competitively.

Given that the FAB is owned by Telstra, all retail offerings on the FAB are priced higher than those on the NBN, and Telstra has the most competitive retail offer, the ACCC is concerned that Telstra has the incentive and the opportunity to exert its power as the sole supplier of wholesale broadband in order to:

- extract monopoly rents in the South Brisbane market or
- entrench its market dominance prior to the transition to the NBN.

There has been some change in prices on the TransACT network. Between 5 May 2016 and 20 May 2016, CBIT lowered the price of its offers on the TransACT network, with its 200Gb offer decreasing from \$119 to \$99 per month.⁷² However this is still priced higher than iiNet's 1000Gb offer at \$69.99 per month in Table 3.6 raising concerns about competition on the vertically integrated network.

Retail prices for vertically-integrated providers not subject to wholesale access regulation (typically in greenfields areas) still appear to be varied. iiNet offers a 100/20 Mbps service with 1000Gb data allowance over its HFC network for \$79.99.⁷³ Pivit Telecom have lowered their retail prices by \$5 but also decreased the download limit from 220Gb to 100Gb per month.⁷⁴

The ACCC finds the lack of competitive retail options suggest there is insufficient pressure on vertically-integrated suppliers to remain competitive both on price and non-price terms and may, over time, lead to a larger divergence between retail offerings by vertically-integrated providers and those where wholesale competition is present.

3.3.2 Wholesale markets

Since the draft decision, the ACCC has considered the issues raised in submissions about whether there is effective competition in the supply of superfast broadband services to business customers, public bodies or charities. It has also further reviewed the information available to it from its Audit of the Infrastructure Record Keeping Rule (Infrastructure RKR). The ACCC has refined its view from the draft decision and considers that there appears to be effective competition in the supply of wholesale superfast broadband to business customers, public bodies or charity customers operating the CBD of the capital cities. In this regard, there appears to be infrastructure competition and reasonable duplication of superfast broadband networks in these areas. This reflects the high density of these areas as well as the high-revenue products or volumes supported by business, public bodies or charity customers.

However, in areas serving both business and residential customers (typically medium-low density) the limited physical presence of competing networks leads the ACCC to conclude that competition is not effective and natural monopoly characteristics are likely to exist.

⁷¹ Exetel, retail offers retrieved 20 May 2016 at: www.exetel.com.au/broadband/fbre.

⁷² CBIT, retail prices retrieved 5 and 20 May 2016 at: www.cbit.net.au/internet-transact-plans.html. Retail prices created by adding the \$50 TransACT wholesale fee retrieved on 19 May 2016 at: www.transact.com.au/internet/vdsl2.

⁷³ iiNet, retail offer retrieved 23 March 2016 at: www.iinet.net.au/internet/fibre/cable/; Pivit, retail offer retrieved 23 March 2016 at: www.pivit.net.au/index.php/services/residential-services/new-make-your-own-plans. The stated prices are for a 24-month contract. The prices increase by \$10 per month and \$20 per month if the contract length is 12 months and 1 month respectively.

The ACCC maintains the view it held in the draft decision that it is possible that higher-speed broadband technologies such as vectored VDSL and G.fast have the potential to create technical monopolies and further limit any scope for competition in all geographic areas – although this is yet to be seen in practice. (The potential interference issues caused by vectored VDSL and G.fast are explained later in this section).

On balance, the ACCC's final view is that it remains appropriate to exempt from the SBAS service description services that use access multiplexers that exclusively serve business, public body and charity customers but that this should be refined to only include those access multiplexers in CBD areas of the major capital cities. The ACCC has formed this conclusion after reviewing the geographic location of fibre networks based on the information it collects in its Infrastructure RKR⁷⁵. It was found that competing fibre networks are typically limited to high density CBD areas of capital cities.

In some areas there are multiple network operators offering wholesale services. However, in other areas only one operator offers these services. Economies of scale and the large sunk costs associated with rolling out telecommunications infrastructure mean that it is not necessarily the case that wholesale competition will emerge in areas that are already serviced by an existing network operator. That is, superfast broadband networks may have natural monopoly characteristics. This will be a significant factor in the ongoing competitiveness in wholesale markets for superfast broadband services – regardless of whether or not technical monopolies also emerge.

As noted in the draft decision, the ACCC acknowledges that it is difficult to be conclusive about the state of competition in the wholesale market for superfast broadband services based on an examination of wholesale prices due to the presence of access regulations on a number of these networks. Where price regulation is present, prices are set at a level the ACCC considers are reasonably reflective of an effectively competitive market.

The ACCC concludes that the state of competition in wholesale markets largely remains the same since the draft decision. Accordingly, the ACCC confirms its findings in the draft decision on wholesale markets. The ACCC's position on the wholesale markets is summarised below:

- There still appears to be little duplication of superfast broadband networks except in high density areas such as CBDs and inner metropolitan areas of large cities.⁷⁶ While a number of smaller network owners supplying retail services have been identified since the draft decision, the number of wholesale providers appears to remain unchanged.
- The ACCC considers that current prices for wholesale access to most superfast broadband networks at least on the entry-level tiers (25-30 Mbps downstream) appear to be reasonable and promote competition and efficient use of the networks. Some of these prices are outlined below. However, in relation to new developments and monopolies that are not overbuilt by NBN Co, these networks may have significant market power in the supply of superfast broadband services. This market power may provide the incentive and ability to charge above efficient prices (i.e. seek monopoly rents) and/or in the case of vertically-integrated operators, a greater incentive to favour their own downstream operations. Such market power could be transient in the event of future investment by the NBN, but the prospect and timing of an NBN overbuild remains unclear. Further, the ACCC is not aware of an update in the position NBN Co indicated in May 2015 that it would adopt

⁷⁵ The Infrastructure RKR and the providers required to provide information (see Schedule 1) can be found at: www.accc.gov.au/system/files/Infrastructure_RKR. While the Infrastructure RKR does not cover all fibre providers, it captures those with significant networks, and provides indicative information about where there is infrastructure competition.

⁷⁶ Department of Communications and the Arts, *Telecommunications in New Developments Map*, viewed 5 November 2015, at: www.communications.gov.au/what-we-do/internet/competition-broadband/telecommunications-new-developments-map.

a case-by-case approach whereby it would likely not overbuild where a first mover had achieved a high market share in a particular building.⁷⁷

- In relation to NBN Co, for the 25 Mbps downstream/ 5 Mbps upstream product, the NBN access service sets an access charge of \$27 per SIO per month.⁷⁸ The ACCC notes that NBN Co recently announced a new discount model for its Connectivity Virtual Circuit (CVC) charge, with a CVC price as low as \$11.50, depending on the average CVC bandwidth that industry provisions to all end-users. The model responds to the rapid increase in data consumption by Australian consumers and aims to reward retailers with a discount for delivering a better customer experience through the better allocation of CVC to end-users. The model was introduced on 1 June 2016.⁷⁹
- A carrier providing the LBAS must offer a wholesale product with a number of characteristics including a downstream data rate of 25 Mbps and 5 Mbps upstream data rate. It sets the price ceiling for access at \$27 per SIO per month (excluding Goods and Services Tax (GST)) and does not set an aggregation charge.⁸⁰ To set the LBAS price, the ACCC adopted a benchmark pricing approach which sets the price at the price of another wholesale superfast broadband product with similar characteristics to the LBAS. In the LBAS IAD, the ACCC decided that the benchmark product and price would be set with reference to NBN Co's regulated service.
- The wholesale product supplied by Telstra for its South Brisbane and Velocity estates networks is the Fibre Access Broadband (FAB) product. Monthly wholesale prices for this service, as published on Telstra's website, remain the same as in the draft decision at \$25.40 for each end user in Zone 1 (\$30.80 in Zone 2) for 30 Mbps downstream and 1 Mbps upstream. End-users on a 100 Mbps/5 Mbps rate incur a \$40 per month monthly charge in Zone 1 and \$45 in Zone 2. For aggregation, the access seeker must also purchase Subscribed Data Speeds (VLAN charges) in each state in which it has end-users to aggregate their end-users traffic. Telstra advised that as of end of October 2015, it had [c-i-c starts] [c-i-c ends] wholesale customers actively acquiring FAB services in South Brisbane, although the ACCC's further targeted consultation with submitters to the draft decision revealed that, at least in one instance, the wholesale customer was maintaining the customer-base that existed prior to the decommissioning of the South Brisbane exchange, rather than acquiring new customers.⁸¹ As noted previously, Telstra acknowledged [c-i-c starts] [c-i-c ends] wholesale customers in its submission to the draft decision, and the ACCC could only identify two. The very limited number of wholesale customers competing to supply new customers, together with the fact that it is a localised monopoly, leads the ACCC to conclude that the extent to which Telstra's FAB prices promote competition is limited.
- Carriers subject to the superfast carrier licence conditions must provide a Layer 2 superfast broadband service of 25 Mbps downstream / 5 Mbps upstream with a maximum price of \$27 per service per month (excluding GST).⁸² This was set with reference to the NBN and LBAS wholesale pricing for a similar wholesale product.

⁷⁷ Department of Communications and the Arts, viewed 3 June 2016 at: www.communications.gov.au/what-we-do/internet/national-broadband-network.

⁷⁸ See: NBN Co SAU pp. 69-70, at: www.accc.gov.au/regulated-infrastructure/communications/national-broadband-network-nbn/nbn-co-special-access-undertaking-2013/final-decision. Access seekers also face an aggregation charge of \$17.50 per Mbps per month.

⁷⁹ NBN Co, *CVC Dimension Based Discount notice*, 5 May 2016, available at: www.nbnco.com.au/content/dam/nbnco2/documents/sfaa-cvc-dimension-based-discount-notice_20160505.pdf.

⁸⁰ ACCC, *LBAS Final Access Determination No. 2 of 2012*, October 2012, p. 5, available at: www.accc.gov.au/regulated-infrastructure/communications/fixed-line-services/local-bitstream-access-service-lbas-final-access-determination-2012/final-determination.

⁸¹ Confidential information provided from Telstra to the ACCC on 27 January 2016.

⁸² *Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014*.

- Interference issues may prevent the optimum performance of simultaneous DSL services such as ADSL, VDSL and vectored VDSL, and also G.Fast. This could be a particular issue for new entrants seeking to supply where vectored VDSL2 is used to provide services to premises over copper pairs in the same copper sheath, although the ACCC understands that the code to manage these issues is still being developed by Communications Alliance.

Overall, therefore, and consistent with its draft decision the ACCC notes that although industry is developing solutions to enable the coexistence of DSL technologies, economic factors may also inhibit overbuild by new entrants where existing superfast broadband services are in operation. This will particularly be the case in residential areas and low-medium density locations where potential revenues tend to be lower.

Geographic dimension

Consistent with the draft decision, the ACCC has decided to adopt a national market definition for the retail and wholesale supply of superfast broadband services (due to cost structures and national pricing policies of retail and wholesale providers). In assessing the LTIE, the ACCC will consider the competition effects in specific geographic segments for wholesale and retail services where appropriate given that some networks are being rolled out to discrete geographic localities.

3.4 Will declaration promote the LTIE – the ACCC’s final decision

In deciding to declare a service, the ACCC must be satisfied that declaring a service will promote the LTIE of telecommunications services.⁸³ Further, 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 services⁸⁴
- 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.⁸⁵

On balance, the ACCC’s final decision is that superfast broadband networks, irrespective of their geographic footprint and subscriber base, display characteristics of natural monopolies, due to both technical and economic barriers to entry, and declaring an SBAS will promote the LTIE. In most areas where these services are supplied there is limited infrastructure competition which supports this conclusion.

Superfast broadband services are likely to be highly valued and sought after by end-users in the future. In this context, the ACCC considers that declaration of an SBAS will promote competition in retail markets for the supply of superfast broadband services and, to a lesser extent, wholesale markets for the supply of wholesale superfast broadband services. However, the extent to which the benefits of competition will flow through to end-users depends on access seekers taking the declared service and using it to supply retail superfast broadband services (see section 3.4.1 for further discussion).

Declaration of an SBAS will also promote efficient investment in, and use of, the infrastructure used to supply telecommunications. Productive efficiency will be improved as services will be

⁸³ Subsection 152AL(3)(d) of the CCA.

⁸⁴ Listed services include carriage services and services supplied by means of carriage services.

⁸⁵ Section 152AB of the CCA.

supplied at the lowest possible cost and allocative efficiency improved as price signals will enable decisions to be based on underlying cost. Further, the ACCC does not consider investment incentives will be impacted by the decision to declare an SBAS.

While the ACCC considers it is technically feasible to supply an SBAS it notes there are costs of complying with the declaration. While these may be disproportionately heavy for some small providers, the ACCC has determined declaration of these networks will promote the LTIE, with benefits outweighing the costs, and that further consideration be given to whether small providers should be exempt from the SAOs as a part of the subsequent FAD inquiry and in making any IAD.

The ACCC does not consider declaration will promote the LTIE where there are a number of different networks supplying superfast broadband services in an area. The ACCC considers this occurs for business customers, public bodies and charity customers in the CBD areas of capital cities and will exempt these superfast broadband services from the declaration. Specifically, the declaration will not apply to superfast broadband services supplied in CBD areas of capital cities from a single DSLAM or other access multiplexer device that exclusively supplies business customers, public bodies or charity customers.

The ACCC has decided that the scope of the SBAS declaration should not encompass the supply of services:

- on HFC networks which will be transferred to the NBN
- supplied under the current LBAS declaration.

The ACCC's draft decision and the views received through submissions are summarised in sections 3.1 and 3.2. The ACCC's final decision on whether declaration of a SBAS service will promote the LTIE is detailed below in sections 3.4.1 to 3.4.3.

3.4.1 Promoting competition

In determining whether declaration of an SBAS would promote the LTIE, the ACCC must assess whether declaration would result in the promotion of competition in the relevant markets for these services. The ACCC considers it useful to apply the 'with and without test' to undertake this assessment (see below).

The exemption granted to Telstra in relation to its fibre network in South Brisbane is scheduled to expire on 1 July 2018, if an SBAS is declared and an access determination is made in relation to the SBAS, or on 1 July 2017 if the ACCC does not make an SBAS declaration.⁸⁶ Other ministerial exemptions from the level playing field rules expire on the 'designated day,' when the structural separation of Telstra is deemed to be complete. This is currently set at 1 July 2018, but may be changed by the Minister for Communications by written instrument.⁸⁷

While the LBAS declaration could apply to some of the currently exempt services, the ACCC notes that, in December 2014, the Government announced its intention to repeal Part 7 of the Telecommunications Act and amend Part 8 to require all new networks targeting residential consumers to be structurally separated, with an alternative option available to carriers to seek authorisation from the ACCC to operate on a functionally separated basis.⁸⁸ In these

⁸⁶ *Telecommunications (Network Exemption—Telstra South Brisbane Network) Instrument 2012.*

⁸⁷ *Telecommunications (Network Exemption—Telstra Specified Velocity Networks) Instrument 2012;*
Telecommunications (Network Exemption—TransACT Upgraded VDSL Networks) Instrument 2012;
Telecommunications (Network Exemption—TransACT Very Small Scale Networks) Instrument 2012.

⁸⁸ Hon. Malcolm Turnbull, MP, Former Minister for Communications and Senator the Hon. Mathias Cormann, Minister for Finance, Reform of telecommunications regulation, media release, 11 December 2014, available at: www.minister.communications.gov.au/malcolm_turnbull/news/reform_of_telecommunications_regulation#.VeAS4tR-Uk; Australian Government, *Telecommunications Regulatory and Structural Reform*, December 2014, pp. 5,7, available at:

circumstances, the carrier would submit undertakings setting out how it would provide access, among other things. The Government has indicated that these revised arrangements under Part 8 will not apply to networks that were in place prior to 2011.⁸⁹

The ACCC has considered the consequences of these proposed legislative changes in applying the 'with and without test'. In particular, noting that with the repeal of Part 7 of the Telecommunications Act it may be appropriate to consolidate any LBAS and SBAS declarations into a single declaration.

Given all this, in the 'without' scenario, there is likely to be monopoly provision of superfast broadband services on networks that are not subject to regulated terms of access. At various points in time these will or could include:

- TPG's FTTB network
- Telstra's South Brisbane and Velocity fibre networks
- iiNet's VDSL2 and HFC networks
- Other networks that supply superfast carriage services, including superfast broadband networks that existed before 1 January 2011 (which are not subject to Part 7 of the Telecommunications Act).

Future without declaration

As noted in the draft decision, there are a number of local optical fibre networks that appear to be operating as local monopolies in a number of geographic areas in Australia. There are various operating models for these networks:

- Vertically-integrated and operating only at the retail level (e.g. Clublinks, Frontier Networks, Pivit and Spirit)
- Vertically-integrated and operating at the wholesale and retail levels (e.g. Telstra's Velocity and South Brisbane exchange area networks and iiNet/TransACT's VDSL2/FTTP in Canberra)
- Operating only at the wholesale level (e.g. Opticomm and OPENetworks).

The ACCC continues to consider that the majority of superfast broadband networks are enduring bottlenecks and that the technical and economic characteristics of the networks mean that in many geographic areas it is, or will be, more efficient for one network provider to install superfast broadband infrastructure in a particular service area. For these networks, while it is clear that the economic returns are there for first movers, there are likely to be barriers to entry for subsequent entrants. These include the lack of economies of scale factors in areas that are not high density or serving high revenue end-users (typically business end-users) and the issues associated with managing interference and use of various spectrum bands.

From a technical perspective, if vectoring is deployed then this has the potential to further preclude the implementation of competing telecommunications infrastructure at the node or basement to supply superfast broadband services on copper lines contained within the same

www.communications.gov.au/sites/g/files/net301/f/Telecommunications%20Regulatory%20and%20Structural%20Reform%20Paper.pdf.

⁸⁹ Australian Government, *Telecommunications Regulatory and Structural Reform*, December 2014, p. 7, available at:

www.communications.gov.au/sites/g/files/net301/f/Telecommunications%20Regulatory%20and%20Structural%20Reform%20Paper.pdf.

cable sheath. As noted in section 1.4.2 the Comms Alliance is developing an industry code to deal with partitioning of spectrum for superfast broadband service protocols. However, there remains a risk that the deployment of one technology (e.g. VDSL2 from the basement) will preclude the entry of another infrastructure provider or increase the costs faced by subsequent entrants (due to both economies of scale and potentially also higher than other wise implementation costs – for example, necessitating FTTB deployment rather than FTTN).

Many submissions supported the ACCC's draft view that superfast broadband networks are enduring bottlenecks and economic and technical factors act as barriers to entry. Further, that these enduring bottlenecks exist irrespective of the size of the network or service provider.⁹⁰

The ACCC is of the view that superfast broadband services supplied on all networks that display characteristics of natural monopolies, including small localised monopolies that supply small numbers of subscribers in particular geographic areas, are enduring bottlenecks. Therefore, without declaration, the impacts outlined below will exist for all networks, including those operated by small providers.

In contrast, some submitters were of the view that infrastructure competition exists, that there is already competition in the supply of superfast broadband services and that declaration is not required. This includes competition from different types of infrastructure. For example TPG and Frontier Networks considered that superfast broadband networks face infrastructure competition from NBN, ADSL2+, HFC, fibre and Ethernet, wireless and mobile networks.⁹¹

The ACCC does not consider that there have been any changes in the industry since the draft decision which justify a change to its conclusion that ADSL, wireless and mobile networks do not provide an effective competitive constraint in respect of the supply of superfast broadband services.

In relation to the NBN, while it operates on a wholesale-only basis and supplies its wholesale products at prices the ACCC has found to be reasonable, the ACCC notes that the rollout is not scheduled for completion until 2020.⁹² Further, the extent to which it will overbuild local alternative fibre-based monopolies and act as a competitive constraint is not yet clear. While the ACCC understands that NBN Co has rolled out its network over the top of some existing superfast broadband networks, as the Government transitions to measures allowing for greater competition with NBN Co and for other providers to take on 'infrastructure provider of last resort' obligations,⁹³ the number of areas where NBN Co and other networks overlap is likely to remain constant (and represent a diminishing proportion of the total number of areas where superfast broadband services are supplied).

The extent of overlap between the NBN and other competing fibre networks (and therefore the extent to which NBN Co can act as a competitive constraint on these networks) appears to be relatively limited at present and occurring in specific geographic locations. For example, TPG and Spirit both note in their submissions to the draft decision that there is overlap with their networks, particularly in the CBD areas.⁹⁴ There are also reports that Open Networks and LBN Co have overlap in specific locations, e.g. Sydney Park Village and estates in Western

⁹⁰ Optus, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2; NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 1; Macquarie Telecom, public submission to the ACCC draft decision, December 2015, p. 2; ACCAN, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2; CCC, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2.

⁹¹ TPG, public submission to the ACCC draft decision, 7 December 2015, pp. 2-3; Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, p. 3.

⁹² NBN, *Corporate Plan 2016*, p. 10 at: www.nbnco.com.au/content/dam/nbnco2/documents/nbn-corporate-plan-2016.pdf.

⁹³ Department of Communications and the Arts, viewed 3 June 2016 at: www.communications.gov.au/what-we-do/internet/national-broadband-network; Australian Government, *Telecommunications Regulatory and Structural Reform*, December 2014, p. 7, available at: www.communications.gov.au/sites/g/files/net301/f/Telecommunications%20Regulatory%20and%20Structural%20Reform%20Paper.pdf.

⁹⁴ TPG, public submission to the ACCC draft decision, 7 December 2015, p. 3; Spirit Telecom, public submission to the ACCC draft decision, 4 December 2015, p. 1.

Australia.⁹⁵ There have also been reports of potential overbuild of TPG's FTTN network in the ACT following the release of NBN's rollout plans for the next three years in late 2015.⁹⁶

Despite these developments in the market, the ACCC does not consider that in a future without declaration the NBN will act as a strong competitive restraint in the national wholesale market for superfast broadband services. It is not clear where there will be overlap of superfast broadband networks, or where this may ultimately occur (that is, the extent of any overlap). In instances where it does occur then it is quite often (and is likely to primarily be) in CBD areas of the major capital cities.

The CBD areas of the major capital cities currently appear to have some infrastructure competition with multiple fibre networks, including the NBN, in existence. There appears to be effective competition in these areas without declaration and therefore, in considering a future with declaration below, CBD areas in major capital cities are examined in terms of possible exemptions from the declaration.

As economies of scale and barriers to entry exist for the majority of superfast broadband networks, and there is not widespread infrastructure competition, localised geographic monopolies (which are sometimes small numbers of end-users) have arisen, or will arise, and vertically-integrated operators will have the incentive and opportunity to:

- avoid supplying a wholesale product so as to extract monopoly rents from end-users in retail markets, or
- supply a wholesale product at a price and on terms that favour its own downstream operations.

In this regard, the ACCC notes that retail prices for superfast broadband products supplied by vertically-integrated operators of local monopoly networks who are retail only suppliers, and are not subject to wholesale access regulation, appear somewhat higher than elsewhere (where either regulation or competing superfast networks are present).

This can be seen from Clublinks and Pivit Telecom's pricing, which is relatively high for high allowance offers compared to both that in South Brisbane and supply across the NBN network. For example, Clublinks charges \$132.95 per month for 500Gb at 25/5 speeds, while Pivit Telecom charges \$115 per month for 1000Gb at 25/5 speeds (see Table 3.6) in comparison to Telstra's offering in South Brisbane of \$99 per month for 1000Gb at speeds of 30/1 (see Table 3.6) and iiNet's NBN offering of \$79.99 for 1000Gb at speeds of 25/5 (see Table 3.4). While Pivit's lower allowance offers (see Table 3.5) are in the same range as other providers on non-regulated wholesale networks, even with Pivit reducing its price by \$5 since the draft decision, they are still higher compared to similar NBN offerings. For example, Pivit charges \$75 per month for 100Gb at 30/30 speeds, as compared to Internode's offering (using OPENetworks and Opticomm networks) of \$74.95 for 300Gb at speeds of 25/5 and iiNet's NBN offer (see Table 3.3) of \$69.99 per month for 200Gb at speeds of 25/5. Clublinks lower allowance offers are relatively higher than all of these offerings, at \$102.95 per month for 200Gb at speeds of 25/5.

The exception to this is Spirit, which offers unlimited data downloads at speeds of 25/25 for \$68 per month. This likely reflects that it supplies residential and business customers in more densely populated areas such as the CBD areas of Melbourne, including the Docklands, (in addition to the inner Melbourne suburbs of South Yarra and Richmond) where there is some infrastructure competition.

⁹⁵ ABC, news article, *NBN Co accused of duplication, overbuilding existing internet services*, 4 December 2015, available at: www.abc.net.au/news/2015-12-03/nbn-co-accused-of-duplicating-internet-services/6999452.

⁹⁶ Delimiter, new article, *Nonsensical farce: NBN massively overbuilding Canberra's FTTN with ... more FTTN*, 17 October 2015, available at: www.delimiter.com.au/2015/10/17/nonsensical-farce-nbn-massively-overbuilding-canberras-fttn-with-more-fttn/.

Where there are vertically-integrated suppliers providing wholesale access and retail services, the extent of competition, particularly in terms of retail prices, appears to be more limited than would otherwise be the case (e.g. where either regulation or competing superfast broadband networks are present).

For example, iiNet is currently providing retail services over its VDSL network in the ACT at around \$70 less than one of its wholesale customers, with it charging \$69.99 per month for a 1000Gb, 30/5 plan and CBIT charging \$149 per month for the same plan (see Table 3.6). In addition, Velocity Internet⁹⁷, another wholesale customer of iiNet charges \$114.95 for a 400Gb, 30/5 plan. The ACCC considers that declaration of an SBAS on this network will allow for greater competition with iiNet in providing retail superfast broadband services.⁹⁸

As in its draft decision, the ACCC notes that the level of competition in the supply of retail broadband services in the South Brisbane exchange area appears to have diminished since Telstra replaced its existing copper network with a fibre-to-the-premises network and the originally agreed rebates on its wholesale FAB product expired (they were interim measures only). Specifically, since the expiry of the rebate, Telstra has charged higher wholesale access prices, which has led to higher retail prices for end-users.

In its submission to the draft decision, Telstra noted that it is not reasonable to compare the pricing in the South Brisbane and Velocity estates to regulated networks given the differences between the FAB service and regulated superfast broadband services. However, it considered that based on the ACCC's analysis the retail price offerings in South Brisbane and Velocity estates appear to compare favourably to the regulated services. It noted in South Brisbane Telstra offers a bundled service (including telephone) of 100Gb, 30/1 for \$75 per month.⁹⁹ The ACCC has examined this offering and notes that Exetel offers a 100Gb, 30/1 for \$80 per month in South Brisbane and Internode offers a plan of 100Gb, 30/1 for \$99 per month (see Table 3.5). Exetel, which generally markets itself as a low cost provider of broadband services, is offering a retail plan in South Brisbane that is more expensive than Telstra's. The ACCC still does not consider that these price service offerings demonstrate competitive outcomes.

Telstra stated that the ACCC's inclusion of only two retail providers in its analysis is a significant understatement. As noted in section 3.3.1, consistent with its draft decision, and from its further investigations of RSPs' websites the ACCC remains aware of only two providers (Exetel and Internode) other than Telstra, who currently offer retail services in South Brisbane (with their pricing outlined above). While there may be other RSPs providing services, it is unclear how actively this is occurring and what market share they have given the ACCC has not found evidence on their websites that they are engaging in active promotion.¹⁰⁰ Overall, the ACCC's conclusion is that in South Brisbane it appears access seekers may be acquiring wholesale FAB services from Telstra in order to maintain current subscriber numbers and market share, but that the extent of active competition between RSPs appears limited at best – and not indicative of vigorous or effective competition.

Future with declaration

The ACCC remains of the view that superfast broadband services are likely to be highly valued and sought after by end-users in downstream markets in the future. This reflects the increasing volume of data downloaded and the take-up of superfast broadband technology.¹⁰¹ Increasing download limits, including unlimited data, are now being offered in the retail market to match

⁹⁷ Velocity Internet is a RSP as distinct from Telstra's Velocity Estates.

⁹⁸ See Appendix B section 2.1 for how competition benefits consumers.

⁹⁹ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 11.

¹⁰⁰ The ACCC conducted a desktop review of all the providers Telstra named in its submission as being supplied with the FAB service.

¹⁰¹ ABS statistics on volume of data downloaded by access connection, for ISPs with more than 1,000 subscribers accessed on 26 May 2016 at: www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8153.0December%202015?OpenDocument; Statistics on the take-up rate of superfast broadband technology can be found in the NBN weekly progress reports at: www.nbnco.com.au/corporate-information/about-nbn-co/corporate-plan/weekly-progress-report.html.

this demand for superfast broadband services (see Tables 3.4 and 3.6). The ACCC remains of the view that RSPs will need to be able to acquire superfast broadband services in order to effectively compete in downstream markets in the future.

Further, as noted above, it is also of the view that the majority of superfast broadband networks are enduring bottlenecks and that the technical and economic characteristics of the network mean that in many geographic areas it is, or will be, more efficient for one network provider to install superfast broadband infrastructure in a particular service area. This is consistent with the limited amount of infrastructure competition present in many areas.

Given this, the ACCC considers that declaring an SBAS and allowing service providers to access wholesale superfast broadband services on reasonable terms will promote competition where it facilitates the entry of RSPs in the markets for superfast broadband services. Providing access to superfast broadband access services at cost-reflective prices will provide greater scope for RSPs to compete on price terms and innovate to provide a wider array of differentiated retail products. This in turn will have flow on benefits for end-users, including the possibility of additional service providers to choose from, as well as more differentiated and reasonably priced services. Therefore the declaration of an SBAS will remove obstacles to end-users gaining access to a superfast broadband service.¹⁰²

Further, the ACCC considers that by declaring an SBAS and subsequently setting a regulated price that reflects the criteria in subsection 152BCA(1) of the CCA,¹⁰³ the SBAS is likely to be available:

- in more areas (specifically, local monopoly areas) than is currently the case (particularly where vertically-integrated operators are present), and
- on terms that are more likely to reflect the underlying efficient costs of providing superfast broadband access services.

This will enable access seekers to compete in the supply of retail superfast broadband services in more geographic areas and on their relative merits (as a result of facing similar cost structures to other providers, including vertically-integrated providers). Further, declaring a Layer 2 wholesale service on this network will give access seekers greater flexibility in how they package their retail service offerings and how they differentiate themselves from other service providers.¹⁰⁴

Declaring wholesale access in areas where the network operator has to date been the only retailer of superfast broadband services will create a new opportunity for RSPs to compete in supplying these services to end-users. This may increase the level of price competition and see greater innovation and product differentiation of retail products. It may also improve competition to the extent it creates a wholesale market for an SBAS where previously none existed.

For example, for those networks currently operating using a vertically-integrated retail only model (e.g. Clublinks, Pivit and Frontier), it appears there are opportunities for retail price reductions with declaration (as discussed above). This is particularly the case if wholesale access prices for SBAS more closely reflect NBN service prices, given the differences between retail pricing on these networks and on the NBN.¹⁰⁵

¹⁰² Pursuant to subsection 152AB(4) of the CCA.

¹⁰³ Pursuant to section 152BCI of the CCA.

¹⁰⁴ This includes Telstra's FAB service, which it notes in its submission to the draft decision emulates some characteristics of a Layer 2 services, although is not equivalent to the NBN's layer 2 bitstream service offerings over FTTP. Telstra, public submission to the ACCC draft decision, 4 December 2015, pp. 15-16.

¹⁰⁵ If the wholesale access price is assumed to be set with reference to the NBN wholesale prices then with an AVC charge of \$27 per SIO per month and a CVC charge of \$17.50 per Mbps, assuming a contention ration of 1.15 Mbps, and a retail mark up of 20%, this results in a retail price of \$57, which is significantly lower than the retail prices of those providers using the vertically integrated retail only operating model, suggesting there is opportunity for retail price reductions.

Further, there also appear to be opportunities for retail price reductions for the vertically-integrated operators who provide wholesale and retail supply (e.g. Telstra's Velocity and South Brisbane networks, iiNet/TransACT's VDSL2/FTTP network in Canberra and TPG / AAPT's FTTB network).¹⁰⁶

The ACCC considers that declaration would promote competition in the ACT where iiNet's VDSL2 networks are in existence, particularly in the downstream markets serviced by these networks. The ACCC notes that while iiNet's VDSL network is currently subject to wholesale access obligations under a ministerial exemption to Part 7 of the Telecommunications Act, this does not include regulated prices for the wholesale product and the exemption is due to expire on 1 July 2018. The ACCC's considers that declaration is likely to bring some benefit from competition particularly in terms of price reductions. This is illustrated above, where it appears there are opportunities for retail price reductions by those access seekers using iiNet's network (e.g. CBIT and Velocity). Using a price that more closely reflects NBN access prices could also result in price reductions for iiNet.¹⁰⁷ The decision to declare a superfast broadband service will also ensure consistency of regulation and that wholesale regulation is in place even if there is a delay in the government's introduction of legislation to repeal Part 7 of the Telecommunications Act.

The ACCC considers that declaration of an SBAS that encompasses the FAB services supplied by Telstra in South Brisbane and Velocity estates will promote the LTIE as it is likely to see increased competitive tension put on Telstra's retail market share ahead of the transition to the NBN. While the South Brisbane network is expected to be incorporated into the NBN, Telstra advised in its submission to the draft decision that negotiations in relation to the transfer have been put on hold while other NBN transition related activities have taken priority.¹⁰⁸ As a result, there is no current forecast for when the network will begin to be incorporated into the NBN.

While these networks are being operated on the current basis and on current prices and product structures, the ACCC considers that the potential for competition in downstream markets served by these networks is being unduly constrained. The exemptions in relation to the Velocity estate networks are due to expire on 1 July 2017, or 1 July 2018 (depending upon the outcome of this inquiry and any subsequent access determination inquiry). However, the ACCC has decided that declaration would bring some benefit from competition to the approximately [c-i-c starts] [redacted] [c-i-c ends] end-users served by these networks in the intervening period and beyond (with no implementation costs to Telstra¹¹⁰). The ACCC also considers it will promote the LTIE to have declaration in place to ensure that bottleneck infrastructure services are subject to regulation as soon as possible, so as to discourage the entrenching of market share and market power during the transitional period to an NBN environment.

Telstra's submission to the draft decision noted that its FAB service in South Brisbane and the Velocity estates requires that there be an in-use PSTN service to the end-user (retail or wholesale line rental (WLR)). Further, it submits that the ACCC also directly regulates the majority of components of the FAB service – the existing legacy regulation of the WLR, and that commercial supply of the FAB is on a similar basis to regulated wholesale ADSL (WADSL).¹¹¹ The ACCC accepts this and in the subsequent SBAS FAD inquiry (and any IAD)

¹⁰⁶ This would occur through the removal of barriers to entry in the retail market. See section 3.3.1.

¹⁰⁷ As in footnote 116, using NBN wholesale access prices and additional assumptions around usage and retail mark up, a retail price of around \$57 may be possible (compared to iiNet's current retail offering of \$69.99 for 1000GB, 30/5 speeds).

¹⁰⁸ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 22.

¹⁰⁹ [c-i-c starts] [redacted]

[c-i-c ends]

¹¹⁰ Reflecting that under the SBAS declaration, Telstra would not need to change its systems to enable its FAB service to provide a Layer 2 service equivalent to that of NBN.

¹¹¹ Telstra, public submission to the ACCC draft decision, 4 December 2015, pp. 12, 14-16.

the ACCC will have regard to the current regulated WADSL and WLR prices in any making any subsequent access determination. The ACCC notes that if the current ACCC-determined WADSL and WLR access prices are used as benchmarks to price Telstra's supply of the SBAS, there may be some, but limited benefits which immediately flow to customers from declaration.¹¹² However, over time, there are likely to be opportunities for further price reductions for Telstra's supply of the SBAS as data usage increases and costs can be spread over this greater demand, particularly in relation to the Aggregating Virtual Circuit (AGVC) charge. This is likely to promote further competition in the South Brisbane area and thereby promote the LTIE.¹¹³

Declaration also provides the possibility of greater competition, and flow on retail price benefits, for customers on TPG / AAPT's FTTB network. The ACCC understands that TPG currently supplies services over its network via Wondercom, who has one service offering at \$69.99 per month for unlimited data and 50 to 100Mbps speeds. While this offering is comparable to those being offered by providers on the NBN (see Table 3.5), the benefits from competition may come from an increased variety of offerings across a spectrum of data usage.

In relation to those networks operating at the wholesale level (e.g. Opticomm and OPENetworks), open access is provided by these networks, many of them are captured by the LBAS declaration and have multiple RSPs supplying superfast broadband to end-users. Therefore, competition already exists for supply on these networks and it would appear that the benefits of declaration are unlikely to be significant in terms of retail price reductions. The ACCC notes, however, that declaration of an SBAS and the setting of a cost reflective wholesale access price is likely to bring some benefits to end-users on those networks not covered by the LBAS declaration (e.g. LBN Co and Red Train). These would exist to the extent that any determined access prices are below those currently in place via commercial negotiations.

It is difficult to be conclusive about the extent of any such benefits from examining the retail price offerings which are available on these networks given the variety of offerings available. However, the range of retail prices for the same or similar data and speed offerings suggests that there are likely to be some benefits from regulated wholesale access prices. This range is illustrated by the following:

- Exetel has an offering across the Opticomm, Open Networks and LBN Co networks of \$59 per month for 500Gb of data at 25/5 speeds which is the same as its offering on the NBN network

¹¹² Telstra's current reference offer for the FAB service port charge is \$25.40 per SIO per month (for a Zone 1, 30 Mbps service) whereas the ACCC's current determined WADSL port charge is \$22.14 per SIO per month, suggesting that if the WADSL charge is used as a benchmark there may be some, but limited, price benefits from declaration and setting regulated prices. In relation to the aggregation charge, it is understood that this is based on current contracts, which are likely to be at or above the ACCC's current determined WADSL charge. Further, if the wholesale access price is assumed to be set with reference to the WADSL and WLR prices then with a WLR of \$20.69, an AVC charge of \$22.14 per SIO per month and a AGVC charge of \$29.27 per Mbps per month, assuming a contention ratio of 1.15 Mbps, and a retail mark up of 20%, this results in a retail price of approximately \$91. This would suggest there is some, but limited, opportunity for retail price reductions, e.g. against Telstra's current retail pricing of \$99 per month for 1000Gb at 25/5 speeds.

¹¹³ In this regard, the ACCC notes that in its August 2015 consultation on the pricing of the AGVC component of the WADSL service, the ACCC observed that demand for greater AGVC/VLAN capacity (to meet increased demand from the uptake of video streaming services) could result in an AGVC/VLAN charge that would not be strictly cost-reflective and could distort competition. While ultimately the ACCC maintained a uniform price increase for all fixed line services, including the AGVC component of the WADSL service, a cost-reflective price that more closely aligns with demand trends would have seen an AGVC price of approximately \$17.90 per Mbps per month, which would represent a fall of 45 per cent compared to the regulated level at the time. The ACCC notes that these considerations are particularly relevant to future pricing of Telstra's FAB service on the next generation fibre networks in South Brisbane and Velocity estates. ACCC Proposal – Consultation on wholesale ADSL, August 2015; Public Inquiry into final access determinations for fixed line services, final decision, 9 October 2015.

- Fuzenet charges \$79.95 per month for 500Gb of data at 25/5 speeds on the Opticomm, Open Networks, LBN Co and Red Train networks
- Clear networks charges \$84.95 per month for 500Gb of data at 25/5 speeds on the Opticomm, Open Networks and Red Train networks.

The ACCC recognises that declaring SBAS does not ensure the competitive outcomes outlined above will be achieved. Even though the barriers to entry at the retail level are lowered by declaration, RSPs may make commercial decisions not to offer services on particular networks, as a number of submissions to the draft decision noted.¹¹⁴ This may be due to the costs and logistical difficulties associated with on-boarding on these networks, such as integration and interoperability of systems. It may also be due to the relatively small addressable customer bases on these networks and the prospects of low revenue yields.

While the ACCC acknowledges this may be an issue, it notes that across the wholesale only networks operated by Opticomm, OPENetworks, LBN, Red Train and Vocus there are around 30 RSPs supplying services. The ACCC considers these networks are broadly similar to those operated by vertically integrated providers who currently only operate at the retail level such as Spirit, Pivit and Clublinks. For example, these companies all operate FTTP or FTTB networks. Therefore, it maintains the view that it would also be possible for these, or other, RSPs to also operate on these networks and that there is at least a reasonable prospect of competitive entry in supplying retail services on smaller fibre networks. This would be supported by declaration and setting wholesale access prices that are reflective of cost.

In the draft decision the ACCC acknowledged that while declaration of an SBAS may be in the LTIE nationally for specific networks, the costs of compliance for a single supplier, in supplying the SBAS, may potentially be higher than the competition gains from regulating it, particularly as the extent to which the wholesale product will be taken up by RSPs is unclear. Some submissions to the draft decision noted the issue of the costs for small vertically integrated providers who currently only operate at the retail level, that these may outweigh the benefits of declaration and provided an indication of these costs, submitting that they should be exempt from the declaration.¹¹⁵

However, the information provided by small vertically integrated providers about the costs of compliance varied significantly and was generally high level with little disaggregation of costs. A key issue driving the variance was the costs included. Some submitters appeared to estimate costs based on separation obligations (which are outside the scope of the proposed declaration) and/or a requirement to only supply a wholesale SBAS product (and therefore vacate the retail market(s) which is also outside the scope of the proposed declaration).¹¹⁶ Further, others did not distinguish clearly between one-off and ongoing costs. In this regard, the ACCC considers that submitters most likely overestimated the costs associated with declaration.

¹¹⁴ Optus, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2; NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 1; Macquarie Telecom, public submission to the ACCC draft decision, December 2015, p. 2; ACCAN, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2. In a similar vein, submissions to the draft decision from TPG and Clublinks advised that they have had limited and no interest from access seekers in their respective networks. TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5; Clublinks, public submission to the ACCC draft decision, 7 December 2015, p. 4.

¹¹⁵ For example, Clublinks sought a minimum exemption of three years, until December 2018 and Frontier Telecommunications suggested exemptions from the SBAS for providers of service to Senior Housing Communities, for providers with less than 100,000 data services in operation or for providers who do not currently offer Layer 2 services. Clublinks, public submission to the ACCC draft decision, 7 December 2015, p. 3; Frontier Networks, public submission to the ACCC draft decision, 4 December 2015, pp. 7-9.

¹¹⁶ For example, Frontier's estimate appeared to assume it would need to structurally separate and run a wholesale only company. Clublinks' estimate was based on ongoing cost (which it was not clear to the ACCC were solely related to providing wholesale access) and did not appear to take into account initial set-up costs. It also assumed revenue consistent with the LBAS charge of \$27 per SIO/month. Spirit's estimate appeared to include ongoing costs as a part of its initial set-up costs.

In contrast, other submitters did not support exemption of small providers. ACCAN states that caution should be applied in extending exemptions to small networks, noting that customers in these networks are then left exposed to higher prices and poorer services.¹¹⁷ NBN Co said there should be no exemptions to the declaration.¹¹⁸ It said small network providers are aware of the structural changes they will be required to implement so the regulatory burden will not be “disproportionately heavy”. NBN Co also noted [c-i-c starts]

[c-i-c ends].¹¹⁹ Macquarie Telecom said there should not be a ‘small provider’ exemption noting network owners, regardless of size, have the incentive and ability to avoid supplying wholesale access or to exercise their market power.¹²⁰ Similarly Optus stated there should not be exemptions for smaller providers, as end-users will still be potentially subject to monopoly rents and discrimination in related markets.¹²¹

As outlined above, the ACCC considers that in general, superfast broadband services supplied on all networks display characteristics of natural monopolies irrespective of their geographic footprint or subscriber base. The ACCC notes there may be transitional issues for small operators in having to supply access to an SBAS but considers that declaration will promote competition by addressing the ability and incentive for these localised monopolies to favour their own operations over their competitors’ and/or recover monopoly prices for superfast broadband services. The ACCC expects that by declaring an SBAS retail prices for superfast broadband services should move closer to those already observed where wholesale regulation is currently present or where there appears to be effective competition, or that greater non-price competition will occur in the nature of the service products and packages offered.

That said, because there remains some question about the extent to which an SBAS supplied by a small network operator will be taken up, and the extent of compliance costs smaller SBAS providers will face, the issue of whether small operators supplying a superfast broadband service should be exempt from the SAOs will be further considered as part of the subsequent SBAS FAD inquiry and in making any Interim Access Determination.

As noted above, and in the draft decision, the ACCC considers that in some areas there are a number of infrastructure owners supplying high-revenue end-users and there is significantly more competition, at both the wholesale and retail levels. Further, in the draft decision the ACCC considered that where there is infrastructure competition superfast broadband networks should not be subject to declaration, i.e. they should be exempt. This reflected the view that declaration would not promote further competition and would impose unnecessary regulation.

In the draft decision the ACCC proposed to use a ‘competition proxy’ to specify these areas. The proxy proposed was for a service where all services supplied from the access multiplexer only supply superfast broadband services for the use by downstream business customers, public bodies or charity customers, regardless of their geographic location. The ACCC invited submissions on the proxy, whether there is effective competition in the supply of business customers, public bodies or charity customers and whether the exemption should be geographically limited.

Several submitters agreed that there are a number of areas already subject to infrastructure competition without declaration (specifically competition from competing fibre /VDSL networks and not alternative technologies).¹²² However, as summarised in section 3.2, there were a variety of views around both where there is competition and whether a proxy approach is appropriate as compared to a more detailed test for competitiveness.

¹¹⁷ ACCAN, public submission to the ACCC draft decision, 4 December 2015, p. 2.

¹¹⁸ NBN Co, public submission to the ACCC draft decision, 4 December 2015, pp. 3-4.

¹¹⁹ NBN Co, confidential submission to the ACCC draft decision, 4 December 2015, p. 4.

¹²⁰ Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p. 2.

¹²¹ Optus, public submission to the ACCC draft decision, 4 December 2015, p. 2.

¹²² Optus, public submission to the ACCC draft decision, 4 December 2015, p. 2; NBN Co, public submission to the ACCC draft decision, 4 December 2015, pp. 2-3; Telstra, public submission to the ACCC draft decision, 4 December 2015, pp. 21-22; Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, pp. 1-4.

Overall, the ACCC's final decision is that it remains appropriate to exempt from the SBAS service description services that use access multiplexers that exclusively serve business, public body and charity customers, but that this should be further refined to only include those access multiplexers in CBD areas of the major capital cities. The ACCC has formed this conclusion having regard to submissions and after reviewing the geographic location of fibre networks based on the information it collects in its Infrastructure RKR.

This information indicates that there are a number of alternative infrastructure providers in the CBD areas of the major capital cities, noting that the information only relates to the streets where fibre networks are located and not which buildings are connected on those streets. In the latest return of information under the Infrastructure RKR (March 2016), the ACCC can also see evidence of continued rollout of fibre networks within CBD areas. The ACCC considers this information suggests there is sufficient competition in the supply of, and the incentive to enter, superfast broadband services to these classes of end-users in CBD areas of capital cities areas without declaration.¹²³

The ACCC also notes that most submissions to the draft decision did not address the issue of specifically where, and in what locations, there is (and is not) infrastructure competition. Some references were made to specific overlap between superfast broadband networks and the NBN (as noted above) and NBN Co also suggested that any exemptions provided for business customers should only exclude CBD areas. However, evidence to illustrate where infrastructure competition exists was not provided.

In contrast to CBD areas of capital cities, in metropolitan, regional and rural areas, where there is medium to low density, it appears from the Infrastructure RKR information that there is limited, if any, presence of competing infrastructure to supply superfast broadband services. As a result in these areas the ACCC considers that SBAS networks are enduring bottlenecks and do not generally display characteristics of an effective competition. In these areas the ACCC concludes that declaration is likely to promote competition.

The ACCC notes that to the extent an access provider considers it competes in a competitive wholesale market (due to the presence of competing superfast networks), then it may seek an exemption from the SAOs. This may occur as part of the FAD inquiry that will follow the final declaration decision or by requesting a variation of a relevant SBAS FAD, at any point in time.

The ACCC has taken the approach of using a proxy because, as explained in the draft decision, developing a more precise test for competitiveness in the relevant superfast broadband markets would involve considerable costs for both industry participants and the ACCC. This would include the time and resource costs associated with obtaining the necessary data from market participants, analysing and then applying it, as well as continuing to update it over time. For these reasons the ACCC has used the twofold test of end-user type and geographic location.

Macquarie Telecom also submitted in response to the draft decision that an exemption based on a proxy may cause anomalies and unforeseen circumstances where competition and consumer interests are compromised. For example, a RSP may not be able to compete for a customer with national or dispersed networks of offices because one or two key locations are not subject to declaration.¹²⁴

The ACCC does not consider that significant competition and consumer issues will occur as a result of exempting SBAS networks which exclusively serve business customers, public bodies and charities in CBD areas of the major capital cities. This reflects its conclusion that in those areas there is sufficient competition and the ACCC would expect an access seeker should be able to negotiate access to a SBAS network in order to provide services to customers.

¹²³ In CBD areas of capital cities, buildings which serve residential customers exclusively are not considered to have sufficient revenue streams to be likely to be served by multiple infrastructure providers.

¹²⁴ Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, pp. 1-4.

The ACCC notes Telstra's submission to the draft decision and iiNet's submission to the discussion paper that argue the service description should be restricted to the same networks that are subject to the superfast carrier licence conditions. However, the ACCC also notes that these providers have a strong self-interest in taking this position. As set out in above, the ACCC considers that there are concerns in the wholesale supply of superfast broadband services on Telstra's and iiNet's networks and that declaration will promote competition in the downstream markets.

In preparing the Final Access Determination for SBAS, the ACCC will continue to monitor developments within the industry and any changes to Part 7 and 8 of the Telecommunications Act which may impact on the level of infrastructure competition.

Overall, the ACCC's final view is that declaration of the SBAS and the implementation of regulated terms that reflect the criteria in section 152BCA of the CCA, will promote competition by providing greater scope for access seekers to enter retail markets and to compete with incumbents on price and non-price terms.

The ACCC also considers that declaring an SBAS is likely to close a number of gaps that are present in existing regulation of superfast networks and provide greater consistency of regulation across all networks supplying superfast broadband services.

3.4.2 Economically efficient use of and investment in infrastructure

As set out above, the ACCC considers that declaring an SBAS and then regulating the wholesale prices of this service at an appropriate cost reflective level will promote greater competition in downstream markets (particularly those where there is a single, vertically-integrated retail only provider). This in turn will impact on the economically efficient use of, and investment in, infrastructure. In particular, as the likely wholesale prices more closely reflect the efficient and underlying costs of production:

- Productive efficiency will be improved with greater competition giving access providers and seekers the incentive to both invest and innovate in ways that ensure they produce services at the lowest possible cost in the future. Further, it will encourage greater use of superfast broadband network infrastructure that has been invested in, particularly where it is currently only used to supply retail services. For example, by regulating a local monopoly superfast broadband network declaration will enable access seekers to use this sunk investment.
- Allocative efficiency will be improved by providing pricing signals that allow access seekers to allocate resources to supplying superfast broadband services based on their relative cost and value to end-users. Further, it will enable consumers to make consumption decisions based on the underlying costs of supplying superfast broadband services and their relative value compared to other consumption goods and services.

As noted elsewhere in this decision, at present a number of networks that offer wholesale services (either voluntarily or under a ministerial exemption – for example, Telstra's South Brisbane and Velocity estate networks and TransACT/iiNet's VDSL and HFC networks) are not subject to price regulation. These networks are charging prices for these wholesale services that do not appear to be set at a level at which the ACCC considers reflect competitive outcomes or are cost-reflective. The ACCC considers that if it declares an SBAS and then goes on to make an SBAS FAD that includes price terms that more appropriately reflect cost (having regard to the matters in section 152BCA), this will provide for wholesale prices for superfast broadband retail products that will promote efficient (both in terms of productive and allocative efficiency) investment decisions and use of infrastructure services.

The ACCC notes that some networks are currently subject to price regulation of their wholesale services (e.g. TPG's network under the carrier licence conditions). While declaration of an SBAS is unlikely to promote significantly greater efficiency in the use of, and investment in, infrastructure in the case of these networks, declaration (and consequent price regulation) would ensure efficient outcomes continue should this regulation end. For example, the ACCC

considers it will enable efficient outcomes to continue in respect of TPG's FTTB network from 1 January 2017, when the current carrier licence condition expires. While the efficiency gains may be relatively small if current wholesale access prices reflect current regulated prices (e.g. as benchmarked against the NBN), over time there may be further price reductions as usage increases and the costs, can be spread over this greater demand, particularly in relation to the CVC/AGVC charges. This issue will be considered further in the subsequent SBAS FAD process.

Similarly, it is also likely to promote efficiency in respect of the use of Telstra's South Brisbane and Velocity estates and TransACT/iiNet's VDSL and HFC networks, following any legislative changes to Part 7 of the Telecommunications Act which affect current exemptions and/or regulation.

Increased competition in retail markets is also likely to promote dynamic efficiencies in downstream markets by encouraging the adoption of new technologies and innovation in the quality and features of retail products by RSPs, so as to differentiate their offerings and compete for end-users. The ACCC also considers that there are likely to be some intangible benefits associated with streamlining the regulation of superfast broadband access services under the one declaration instrument which consistently applies to all providers for the same period of time (rather than under the carrier licence conditions and exemptions from Part 7 of the Telecommunications Act). The ACCC has quantified the efficiency gains for providers of superfast carriage services in terms of administrative compliance cost savings in Appendix D. A simpler approach may also provide some efficiency gains for access seekers in terms of determining whether or not a service on a particular network is regulated and the terms on which it is regulated.

Investment incentives

In the draft decision the ACCC took into account access providers' circumstances in considering the extent to which declaration might affect incentives for investment in infrastructure. After examining the information available around investment plans, it did not consider the decision to declare an SBAS would affect access providers' incentives to invest.

Most submissions to the draft decision did not comment on the ACCC's analysis of these incentives or provide updated information about investment plans.

The exception to this was TPG, who submitted that the threat of regulatory burdens on builders of infrastructure, particularly those without significant market power, acts as a serious detriment to investors who would consider investing capital to such products. Further, that if SBAS was declared it will create considerable uncertainty for the investors of capital looking at bringing new technologies to Australian consumers.¹²⁵ While making this statement, the ACCC notes that TPG has also previously submitted that providing wholesale access to its FTTB network (that was AAPT's) was always its intention, without access regulation through the carrier licence conditions requiring it to.¹²⁶

The ACCC does not consider declaring an SBAS will have a significant effect on TPG's network investment plans. This is supported by:

- Its statement that it was always intending to provide wholesale access.
- No announced reductions in the scope of the proposed FTTB network originally announced by TPG, or plans in relation to its VDSL or HFC networks acquired from iiNet, including at

¹²⁵ TPG, public submission to the ACCC draft decision, 7 December 2015, pp. 1-2.

¹²⁶ TPG, submission to the Government's *Carrier Licence Conditions (networks supplying superfast carriage services to residential customers)* Declaration 2014 - draft, 14 November 2014, p.1.

its Annual General Meeting in December 2015 and half year results presentation in March 2016.¹²⁷

- Information in the March 2016 Infrastructure RKR which demonstrates continued rollout by TPG of its fibre networks since over the previous 12 months.

The ACCC also notes that Telstra has not announced plans to deploy further superfast broadband networks, including at its most recent investor day in May 2016.¹²⁸

In relation to smaller operators of fibre networks in new developments that will be subject to declaration to the first time, wholesale operators such as Opticomm and OPENetworks appear to be continuing to expand their infrastructure deployments despite being required to provide the declared LBAS.¹²⁹ Given the SBAS and the declared LBAS are similar services, with similar cost inputs, the ACCC considers that other smaller network operators (even those vertically-integrated) will likely face similar cost structures to Opticomm and OPENetworks. The ACCC therefore expects that smaller network operators will continue to invest in network infrastructure and declaration will not in and of itself discourage efficient investment in infrastructure.

Rather, without declaration of an SBAS, providers may be forced to inefficiently invest in their own superfast broadband infrastructure in order to provide retail services to end-users. However, as noted above, in most circumstances there is not likely to be sufficient end-users in the serving area to support more than one network and provide an appropriate return on the investment. Accordingly, the ACCC considers declaration is more likely to promote economically efficient investment in infrastructure than not declaring an SBAS.

That said, there remains some question about the extent of compliance costs smaller SBAS providers will face. This issue is discussed above and also outlined below in relation to technical feasibility of supplying a service. However, the ACCC also notes the potential impact on investment incentives, and possibility of inefficient investment, if it was to exempt smaller providers from regulation.

Technical feasibility

As set out in the draft decision, there are three technologies that are currently being used in Australia that are capable of supporting superfast broadband services: fibre, HFC cable and VDSL. All three technologies are capable of supplying wholesale access and wholesale services are currently supplied over fibre and VDSL networks in Australia. NBN Co is also currently on boarding and business readiness testing the wholesale supply of HFC networks (that it acquired from Telstra and Optus) for planned initial product release in June 2016.¹³⁰

The ACCC notes wholesale access over HFC is becoming more mainstream given NBN Co's testing, and imminent supply, and that Opticomm currently provides wholesale access on its HFC network. Further, Starhub provides wholesale access on its HFC network in Singapore.¹³¹ In this context, the ACCC expects that off-the-shelf software will become available in the future and the costs of implementing a wholesale product are likely to reduce.

Given this, the ACCC considers that it is technically feasible for the SBAS to be supplied and charged for on these networks given the technologies to supply the service are already in use and currently used to supply wholesale superfast broadband services.

¹²⁷ www.tpg.com.au/about/pdfs/TPM2015AGMPresentation.pdf;

www.tpg.com.au/about/pdfs/TPMHY16Presentation.pdf.

¹²⁸ www.telstra.com.au/uberprod/groups/webcontent/@corporate/@about/documents/document/uberstaging_299378.pdf

¹²⁹ According to both the OptiComm and OPENetworks websites, they have current active projects listed or projects completed in the last six months.

¹³⁰ NBN Co, viewed 9 June 2016, at: www.nbnco.com.au/content/dam/nbnco/documents/Integrated-Product-Roadmap.pdf

¹³¹ StarHub, viewed 5 November 2015, at: www.starhub.com/business/products-services/data-connectivity/wholesale-services/wholesale-broadband-access-service.html.

The ACCC considers that the costs that would be involved in supplying and charging for the services depend to a large extent on whether wholesale Layer 2 services are already available. Layer 2 services are seen to be the appropriate layer at which to regulate so as to allow the greatest possible scope for access seekers to differentiate their service offerings, promoting competition and efficient use of, and investment in, infrastructure.

In the draft decision the ACCC noted the Telstra and Optus HFC networks are currently not configured to supply wholesale services, which would involve significant short term costs. Further, that following their transfer to NBN Co, and the required reconfiguration is undertaken, they would be supplied on a wholesale-only basis and subject to non-discrimination and access obligations (including price regulation).¹³²

The ACCC notes that this has not changed since the draft decision, and as a result it does not consider declaration of the Telstra and Optus HFC networks will encourage the efficient use of these services. As a result, it will exempt these networks from the service description.

The ACCC also noted in the draft decision that while the SBAS is likely to resemble the LBAS to a significant degree, there nevertheless may be some key differences. To avoid potential duplication of regulation, and uncertainty for providers of the LBAS whose services may also fall within the scope of the SBAS declaration, the ACCC proposed to explicitly exempt from the draft declaration services supplied subject to the LBAS declaration.

The ACCC continues to hold this view, and notes that while supply of LBAS and SBAS services is technically feasible, the costs associated with the duplication of regulation, will not encourage efficient use of these services. The ACCC will therefore explicitly exempt from the SBAS service description LBAS services.

As in the draft decision, the ACCC also notes that the Government's intention to repeal Part 7 of the Telecommunications Act may ultimately result in the LBAS declaration expiring or being revoked. In this event, with the SBAS service description, this will result in the SBAS declaration then applying to those services currently supplied under the LBAS declaration without the need for the ACCC and industry to face further 'red tape' costs in considering a variation to the SBAS declaration as a consequence of changes to the Telecommunications Act.

In the draft decision the ACCC considered there were unlikely to be additional costs in providing a declared SBAS on Telstra's South Brisbane and Velocity estates, TPG's FTTB network or Pivit's FTTP networks, as these providers have already put in place systems to supply a wholesale Layer 2 service over these networks. It noted that while these services may not strictly fit within the service description of the declared service supplied over the NBN they do fall within the proposed SBAS service description definition (see Chapter 4 and Appendix A of this report).

In its submission to the draft decision Telstra noted that its FAB service is not equivalent to the Layer 2 Ethernet bitstream service as deployed by NBN and in South Brisbane alone it would cost [c-i-c starts] [REDACTED] [c-i-c ends] if it was required to provide such a service.¹³³ The ACCC continues to consider that Telstra's FAB network should fall within the scope of the SBAS to be declared and is a layer 2 bitstream service as defined in the draft SBAS service description. However to address Telstra's concerns and avoid the potential for further, inefficient investment in Telstra's South Brisbane and Velocity estate networks, the ACCC has decided to explicitly include a FAB service in the SBAS service description. This will mean Telstra does not need to reconfigure its FAB network or incur additional costs in supplying wholesale access.

In the draft decision the ACCC also noted that while iiNet provides a Layer 3 wholesale service on its VDSL2 network, it already has some business systems in place that allow for the supply

¹³² Division 2, Section 9 of the *National Broadband Network Companies Act 2011*; section 152AXC of the CCA.

¹³³ Telstra, confidential submission to the ACCC draft decision, 4 December 2015, p. 4.

of wholesale products. Further, that with TPG's acquisition of iiNet, the systems of TPG's fully owned subsidiary, AAPT, as a wholesaler of its own FTTB network, would be shared and implemented for both iiNet's VDSL2 network and also (at least in respect of billing and sales systems) for iiNet's HFC network. The ACCC considered that these would provide for some cost efficiencies in putting in place wholesale access on iiNet's VDSL2 network that would not have been possible for iiNet prior to its acquisition.

In its response to the draft decision TPG noted that contrary to the ACCC's views about iiNet and AAPT, the costs to implement a revised arrangement for the VDSL network will be very significant. TPG advised that its AAPT system relies on being able to directly manage its network. iiNet's VDSL network has been in place for many years and the systems are quite different to those which AAPT would use. While TPG was unable to make an assessment of the likely cost, it considered that it would be in the range of [c-i-c starts] [c-i-c ends].¹³⁴ The ACCC notes that this is lower than the estimate provided by iiNet in response to the discussion paper where it noted that the changes required would [c-i-c starts] [c-i-c ends].

The ACCC accepts that there are likely to be costs associated with changing the iiNet VDSL and HFC networks such that they are able to provide a wholesale access at the Layer 2 level. While a range of costs [c-i-c starts] [c-i-c ends] has been provided, the ACCC is of the view that these one-off costs will be outweighed by the benefits from declaration. In particular, the benefits from competition with access seekers being able to better compete iiNet's retail price offering. For example, as noted in section 3.4.1, iiNet is currently providing retail services over its VDSL network in the ACT at significantly lower prices than its wholesale customers. Specifically, iiNet charges \$69.99 per month for a 1000Gb, 30/5 plan while CBIT charges \$149 per month for the same plan and Velocity Internet charges \$114.95 for a 400Gb, 30/5 plan. The ACCC considers end-customers will benefit through lower prices from the provision of regulated SBAS services and that these benefits will outweigh the one-off costs associated with providing wholesale access at the Layer 2 level.

That said, the ACCC also notes that provision of wholesale access at the Layer 2 level is unlikely to occur immediately, and may take [c-i-c starts] [c-i-c ends] to be possible. Given this, the ACCC will consider exempting iiNet's VDSL and HFC networks from the SAOs as part of the subsequent SBAS FAD inquiry and in making any Interim Access Determination.

Several small vertically-integrated, retail only providers, including Spirit Telecom, do not currently provide wholesale access. As the SBAS declaration will apply to some providers where the networks pre-date the level playing field provisions, they will incur some costs in implementing systems to supply a wholesale Layer 2 product upon request.

In its draft decision the ACCC noted these one off costs of implementing changes to supply a Layer 2 wholesale service. It expected that small providers would face lower costs than large providers, such as iiNet, as they would not be required to develop large-scale business-to-business interfaces for processing a high volume of access seeker orders. Where the ACCC considered the likely costs of complying with the declaration were disproportionate to the likely competition benefits, it noted it may be appropriate for the ACCC to exempt a carrier from either the declaration or the SAOs which apply to the declared service. It noted that smaller carriers could be exempt from the declaration by setting a threshold network size in the service description, below which the declaration does not apply. The ACCC invited submissions to on these matters.

Submissions to the draft decision provided a variety of views in relation to this issue and possible exemptions for small vertically-integrated providers as set out in sections 3.2.1 and 3.2.2.

As previously noted, the ACCC considers:

¹³⁴ TPG, confidential submission to the ACCC draft decision, 7 December 2015, p. 5.

¹³⁵ iiNet, confidential submission to the ACCC discussion paper, 5 June 2015, pp. 9-10.

- In general, superfast broadband services supplied on all networks display characteristics of natural monopolies, irrespective of their geographic footprint or subscriber base. There may be transitional issues for small vertically-integrated operators currently only supplying retail services in having to supply access to an SBAS, but considers that declaration will promote competition.
- There remains some question about the extent to which an SBAS supplied by a small vertically-integrated network operators will be taken up.
- The information provided by the small vertically integrated providers currently only supplying retail services about the costs of compliance varied significantly, appeared to overestimate the costs associated with declaration and did not allow for definitive conclusions.
- Small wholesale only providers, such as Opticomm and OPENetworks, currently provide access and recover their network costs, and those associated with the provision of access, via the LBAS wholesale access price (currently set at \$27 per service). This suggests that low cost operational arrangements to provide wholesale access are possible.

The ACCC has decided to declare the SBAS and will further examine the issue of whether small vertically-integrated operators supplying a superfast broadband service should be exempt from the SAOs as part of the subsequent SBAS FAD inquiry and in making any Interim Access Determination.

Appendix D sets out the ACCC's assessment of the change in the regulatory burden associated with SBAS declaration and providing wholesale access at the Layer 2 level.

The legitimate commercial interests of the infrastructure operator

In reaching the view that declaration of an SBAS is likely to encourage economically efficient investment, in and use of, infrastructure, the ACCC has taken into account the legitimate commercial interests of SBAS providers including their ability to exploit economies of scale and scope. As noted in section 2.1 an infrastructure operator's legitimate commercial interests relate to its obligations to the owners of the firm (i.e. shareholders), including the need to recover the costs of providing services and to earn a normal commercial return on the investment in infrastructure.

The ACCC considers that declaration would not adversely affect a provider's ability to earn a commercial return including its ability to exploit economies of scale and scope because the regulatory regime would allow providers to recover the efficient costs of supplying and charging for these services through the regulated prices for an SBAS. The ACCC notes that several SBAS providers are already providing access to wholesale Layer 2 services under commercially agreed terms and that requiring these providers to comply with the Category A SAOs would be a minimum (cost) burden.

However, the ACCC acknowledges that the costs of compliance may be higher for smaller providers and may, as a result, adversely affect these providers from recovering their efficient costs and seeking a commercial return in providing wholesale access. As discussed in section 3.4.1 the ACCC will address the matter of whether to exempt specified smaller providers from the SAOs in an SBAS FAD inquiry and any IAD for the SBAS.

3.4.3 Any-to-any connectivity

The ACCC has noted that the objective of any-to-any connectivity in achieving the LTIE is only relevant to the declaration context in respect of certain services. The Explanatory Memorandum to the *Trade Practices Amendment (Telecommunications) Bill 1996* stated that the objective of any-to-any connectivity will only be relevant when considering whether a particular service promotes the LTIE of carriage services that involves communications

between end-users.¹³⁶ The SBAS draft decision stated that when considering other types of services (such as carriage services which are inputs to end-to-end services) this criterion will be given little, if any weight.

As noted in section 2.1 above, generally the objective of any-to-any connectivity will only be relevant when considering whether declaration of a particular service promotes the LTIE where the service involves communications between end-users. When considering other types of services this criterion will be given little, if any, weight.

The ACCC did not receive any submissions in response to the draft decision about any-to-any connectivity. As a result, consistent with its draft decision, given that SBAS is an input to an end-to-end service, the ACCC does not consider that declaration of this service will have an impact on the objective of achieving any-to-any connectivity.

¹³⁶ Explanatory Memorandum, Trade Practices Amendment (Telecommunications Bill) 1996, pp. 40-41.

4 Service description

Key points

- The ACCC has decided to declare a Superfast Broadband Access Service.
- The ACCC has refined the draft service description that applied to superfast broadband services supplied on all networks providing superfast broadband access services, so that it includes a Layer 2 Bitstream Service and also a Fibre Access Broadband service.
- The service description does not include those superfast broadband services supplied:
 - on the NBN
 - on HFC networks that will be transferred to NBN Co or
 - under either the Local Bitstream Access Service (LBAS) declaration or the Domestic Transmission Capacity Service (DTCS) declaration.
- The ACCC has also refined its exclusion of services supplied exclusively to businesses, public bodies and charity customers from a single DLSAM or multiplexer. The service description excludes this supply of services to only those end-users located in CBD areas of Australian capital cities.
- The ACCC considers that the SBAS should apply immediately, for a period of five years.
- The ACCC has decided that the issue of whether small operators supplying a superfast broadband service should be exempt from the SAOs will be considered as part of the subsequent FAD inquiry and in making any IAD. Transitional arrangements in relation to the supply of the SBAS on iiNet TransACT FTTN and Victorian HFC networks will also be dealt with in the subsequent FAD inquiry and or any IAD.

4.1 Summary of draft decision

The ACCC's draft decision was to declare a superfast broadband access service that is technology neutral and included all fixed-line connections with a downstream rate that is normally more than 25 Mbps. The draft service description defined the service as a Layer 2 bitstream superfast carriage service.¹³⁷

The draft service description was to apply to superfast broadband services supplied on all networks except those services supplied:

- on the NBN
- exclusively to businesses, public bodies and charity customers (either directly or indirectly) from a single DSLAM or access multiplexer device
- on HFC networks that will be transferred to NBN Co, and
- on networks that are regulated under the LBAS declaration.

¹³⁷ A Layer 2 Bitstream service is defined in section 7 of the *Telecommunications Act*. A superfast carriage service is defined in Part 8 of the *Telecommunications Act*.

The service description was drafted to apply to services supplied over a range of technology choices supplying the relevant services and it was proposed that it would apply immediately (from declaration), for a period of five years.

4.2 Submissions

4.2.1 Submissions to the draft decision

Of the six submissions specifically responding to the draft service description presented in the draft decision, only TPG opposed the declaration. See section 3.2 for the discussion of submissions on declaration. All other submitters supported the declaration in some form although some submitters sought changes to certain aspects of the service or argued that they should be exempt from the declaration.

Only three submissions discussed whether the draft service description appropriately captured the definition of a superfast broadband access service. Telstra said that the draft decision went beyond the scope of competition issues that the SBAS declaration inquiry was intended to address.¹³⁸ Telstra noted that the Vertigan Committee recommendations for the ACCC to investigate declaring VDSL services was intended to focus on the potential competition issues that arise due to the technical features of vectored VDSL.¹³⁹ Telstra submitted that the service description should be refocused on services covered by the superfast carrier licence conditions.¹⁴⁰

Telstra also argued that if it is required to offer a Layer 2 service under the SBAS, it would have the effect of voiding the ministerial exemptions it received from Part 7 of the Telecommunications Act and would retrospectively capture networks (its South Brisbane and Velocity Estate Networks) built under different regulatory and legislative obligations. Telstra noted the Layer 2 Fibre Access Broadband service it offers in these network areas is different to the service description and that if it were required to develop a Layer 2 bitstream service, it would cost Telstra at least [c-i-c starts] [REDACTED] [c-i-c ends] to develop this service in its South Brisbane network alone.¹⁴¹

NBN Co submitted that the service description should include download data transmission rates of 12 Mbps or more, to cover potential entry-level offerings at lower speed tiers and ensure consistency in regulatory approach between NBN and Non-NBN services.¹⁴² In contrast TPG proposed that the SBAS service description should be limited to services that are between 25 Mbps and 100 Mbps.¹⁴³

Submitters did not object to the exemptions for Telstra/Optus HFC networks to be transferred to NBN Co, the NBN or services supplied under the LBAS declaration. However, the views of submitters differed regarding exemption from declaration where competition appears to be effective. Section 3.2 examines these in detail. Submitters argued variously for:

- no exemptions¹⁴⁴
- exemptions based on location or a strict competition test,¹⁴⁵

¹³⁸ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 3.

¹³⁹ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 7.

¹⁴⁰ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 21.

¹⁴¹ Telstra, confidential submission to the ACCC draft decision, 4 December 2015, p. 4.

¹⁴² NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 4.

¹⁴³ TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5.

¹⁴⁴ Examples of submissions advocating for no exemptions included Macquarie Telecom and the NBN.

Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p. 3; NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 2.

- exemption based on subscriber numbers ranging from [c-i-c starts] [redacted] [c-i-c ends], or¹⁴⁶
- exemption based on whether services were overbuilt by the NBN.¹⁴⁷

Some submitters made comment on the duration of the service description. Telstra and NBN Co agreed with the ACCC's draft decision that the duration of the SBAS declaration should be five years from the date the declaration was made.¹⁴⁸ Macquarie Telecom submitted that an appropriate duration for the declaration would be four years with a mandated two-year interim review, in which the ACCC should assess whether the declaration is operating effectively, and to account for any material changes in the industry or technology.¹⁴⁹ TPG argued that a two-year period at most is sufficient, given the fast pace of developments in the relevant markets.¹⁵⁰

As acknowledged in the draft decision the starting point for the SBAS service description was the current LBAS as it regulates superfast broadband services, in a technology-neutral manner.

Submissions to the draft decision generally did not raise concerns with this approach (except as noted above in respect of Telstra). Submitters generally accepted the desirability of consistent access arrangements for both NBN and non-NBN services, and to allow access seekers to compete effectively in the supply of superfast broadband services regardless of the network or technology used.

Submissions to the draft decision indicated that the service description:

- may not capture the superfast broadband services supplied by Telstra in its South Brisbane and Velocity estate networks
- exemption to supply services for business, public bodies and charity customers was too broad and potentially excluded some network operations that displayed characteristics of a natural monopoly, specifically in non-CBD areas, and
- did not identify the classes of carriers who would be exempted from the SAOs of the service.

4.2.2 Further consultation and submissions

On 21 March 2016, the ACCC wrote to the submitters to the draft decision and provided a revised service description for comment. This draft included changes in the service description:

- defining the term '*Fibre Access Broadband*' to make it clear that the service description applies to Telstra's superfast broadband services in South Brisbane and Velocity estates
- excluding from the service description services supplied exclusively to business, public bodies and charities in CBD areas

¹⁴⁵ ACCAN proposed a location based exemption and the CCC proposed a competition test. ACCAN, public submission to the ACCC draft decision, 4 December 2015, p. 2; CCC, public submission to the ACCC draft decision, 10 December 2015, pp.1-2

¹⁴⁶ Spirit Telecom, public submission to the ACCC draft decision, 4 December 2015, p. 3; Pivit, confidential submission to the ACCC draft decision, 9 December 2015, pp. 1-2.

¹⁴⁷ Optus, public submission to the ACCC draft decision, 4 December 2015, p. 2.

¹⁴⁸ Telstra, public submission to the ACCC draft decision, 4 December 2015, p. 22; NBN Co, public submission to the ACCC draft decision, 4 December 2015, p.1.

¹⁴⁹ Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p.9.

¹⁵⁰ TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5.

- clarifying that the SBAS does not apply to services regulated by the Domestic Transmission Capacity Service Declaration 2014
- changing the term '*user-network interface (UNI)*' to '*end-user interface*' to avoid potential confusion due to varying use of the term UNI in the industry, and
- other minor drafting changes.

We received responses from all parties although only five provided substantive comments.

Telstra considered that amending the definition of an SBAS to specifically include a FAB service is appropriate and consistent with the FAB service supplied by Telstra in South Brisbane and Velocity estates. Telstra also recommends that the exemption for business, public bodies and charity customers be amended to be consistent with the carrier licence conditions which includes the phrase 'wholly or principally' for the supply of services.

NBN Co maintains that all 'superfast broadband capable networks' should be subject to the declaration. NBN Co expressed concern that the included definition of Telstra's FAB service might create uncertainty in the application of the declaration. Its concern was that the included maximum transmission speeds for some FAB service products were less than the normal transmission speed of superfast carriage service. The NBN Co suggested that the ACCC consider clarifying and amending the proposed wording, so as to ensure that the ACCC's stated intention is achieved, and that certain superfast broadband capable networks do not fall outside the scope of the declaration.¹⁵¹

Macquarie Telecom expressed concern with the proposed exemption for business, public body and charity customers in defined CBD areas. It indicated Macquarie Telecom could not support the exemption without details as to how the ACCC has determined that the listed postcodes actually have competitive services. Macquarie Telecom suggested that there should be a public statement in the Service Description confirming that the ACCC will review the exempted CBD areas in 12-months' time to assess whether the markets in those defined CBD areas are actually competitive and functioning as expected.

Spirit argued for the retention of the exemption for business, charity and government end-users across the board so as to also include non-CBD areas. Spirit noted that in almost all sites where Spirit could establish its services, major carriers are already capable but have elected to not provide services despite their input cost advantages and, in doing so, can restrict the capability of smaller providers to offer wholesale-supported supply. Spirit considers that the proposed changes to the service description disadvantage small players since it is often the smaller providers which concentrate outside of the CBD areas.¹⁵²

In its submission to the draft decision, Frontier networks had sought for small providers and the residential age care sector to be included in the exemptions set out in the service description. Responding to the revised service description it sought clarification as to whether the ACCC had rejected its request for such an exemption.

4.3 ACCC's final decision

The ACCC's final decision is to declare an SBAS that captures all superfast fixed-line broadband networks that are likely to display natural monopoly characteristics and which are not already captured by other service declarations. The declared SBAS service description is set out at Appendix A.

Specifically, the service captures all fixed line superfast broadband services supplied that are either a Layer 2 Bitstream Service or a Fibre Access Broadband service *and* also a superfast

¹⁵¹ NBN Co, submission responding to the revision of the service description, 30 March 2016, p. 2.

¹⁵² Spirit Telecom, submission responding to the revision in the service description, 4 May 2016, p. 1.

carriage service. This ensures the services captured supply a carriage service to an end-user with a download transmission speed of normally more than 25 Mbps. The service description, included at Attachment A, makes clear the SBAS is a Layer 2 bitstream service that is a superfast carriage service or a FAB service. The definition of the FAB service has been amended to note the service is normally 25 Mbps or more as well as references to the maximum speeds of the components of the FAB service.

The SBAS does not include services supplied:

- to customers who are business, public bodies or charities (either directly or indirectly) served from a single DSLAM or access multiplexer based in multi-dwelling unit complexes in CBD areas
- by a NBN corporation
- using a hybrid-fibre coaxial cable (HFC) network that was in existence on prior to the SBAS declaration that will be transferred to a NBN corporation, and
- services captured under other service declarations including the Local Bitstream Access Service Declaration 2011 or the Domestic Transmission Capacity Service Declaration 2014.

This reflects the ACCC's final decision, as set out in section 3.4, that declaration of these services would not promote the LTIE.

Having further considered the drafting of the SBAS service description and parties' submissions on the draft decision and the revised service description circulated in March 2016, the service description for the SBAS as presented in the draft decision has been modified to:

- note the point to point service supplied is to an *end user interface*
- include a definition of Fibre Access Broadband that is consistent with the service that Telstra delivers and is a speed requirements for a superfast carriage service
- limit the exemption to supply services for business public bodies and charity customers to CBD areas only, and
- expand the services exempted to include the recently finalised Domestic Transmission Capacity Service.

The application of the SBAS to the Telstra's FAB service is consistent with the requirements of the CCA. The ACCC does not accept the suggestion that the declaration is retrospective, given that the Part XIC access regime and the possibility of declaration have been present in respect of all telecommunications networks since 1997. Further, the Explanatory Statement to the Ministerial Exemptions for Telstra FAB services clearly contemplate the possibility of the service being declared under Part XIC of the CCA.¹⁵³ As noted in Chapter 3, the declaration applies to the FAB service as it is provided. As such Telstra will not need to undertake any additional investment in order to comply with the obligations are imposed under the SBAS declaration.

The ACCC also does not consider it necessary to further adjust the exemption in respect of the supply of superfast broadband services to business, public bodies or charities so that it applies to the supply of these customers 'wholly or principally'. The ACCC considers such an approach is likely to raise questions about where the declaration applies and add unnecessary regulatory uncertainty.

¹⁵³ Explanatory note - *Telecommunications (Network Exemption—Telstra South Brisbane Network) Instrument 2012*, p.2

4.3.1 Consideration of technological neutrality

The ACCC's final decision is to capture all local fixed line monopoly networks capable of supplying superfast carriage services, regardless of whether they use vectored VDSL2, G.fast or any other technology, within the SBAS service description.

In the draft decision the ACCC noted the LBAS service description, while being technology-neutral, was not sufficient to capture the service delivered to an end-user through technologies other than FTTP. One significant difference was the network boundary point at the end-user side. The ACMA submission to the discussion paper noted issues in using the definition of a network boundary point in the Telecommunications Act.¹⁵⁴

To address these concerns the service description in the draft decision identified an SBAS as a point to point service supplied from a network-network interface to the user network interface (UNI) where the UNI was either the point where the provider's network terminates at the end-user's premises or the jumper cable termination on the customer side of the main distribution frame. The ACCC noted that the service description in the draft decision did not capture in-building cabling.

However, this additional definition of the UNI could also be described as a Network-to-Network Interface and therefore has the potential to create uncertainty or confusion. The ACCC has therefore replaced the UNI definition so the final service description includes a new 'end user interface' definition. This definition identifies that the interface is where the end user physically connects with the network, irrespective of whether that is a direct connection or through cabling (such as in-building cabling) that is indirectly provided by a third party. In defining the end-user interface, the service description now refers (at limb (b)) to the jumper cable termination on the *customer* side of the MDF.

The final decision also excludes from the service description services captured under the Domestic Transmission Capacity Service. Superfast broadband services may be delivered over backhaul transmission networks. Such services are separately regulated with specific price and non-price terms and conditions.

4.3.2 Consideration of Layer 2 applicability

The ACCC's final decision is to retain the use of the definition of a Layer 2 bitstream service in the first limb of the SBAS service description as presented in the draft decision. In the draft decision the ACCC decided on this because 'Layer 2' is a well understood term in the telecommunications industry, use of it was consistent with the ACCC regulatory approach to regulate services at the lower network layers where possible so as to allow the greatest possible scope for access seekers to differentiate their service offerings and because it would maintain consistency with the LBAS service description. The draft decision noted that the term 'bitstream' is not defined in the statute, but it was included in the service description because it refers to the basic functionality that the access provider would be required to provide to allow an access seeker to transmit a data stream across a physical point-to-point link.

In the draft decision the ACCC stated that it considered Telstra's FAB service is a Layer 2 bitstream service and would be subject to the SBAS declaration. However, in its submissions to the draft decision, Telstra expressed concern that while the end user receives a Layer 2 service and Telstra uses Layer 2 tunnelling protocols it (Telstra) considers its FAB service is not a Layer 2 bitstream service. As discussed in section 3.4.2, Telstra states that in order to provide a Layer 2 bitstream service as set out in the service description as well as reconfigure the FAB service to offer an unbundled data only service would incur a significant cost.

As stated in above the ACCC considers Telstra's FAB service should be covered by the SBAS declaration to ensure end users of these services receive some benefit from increased

¹⁵⁴ ACMA, public submission to the ACCC discussion paper, 19 June 2015, p. 2.

competition in the network. Further, as discussed in section 3.4.1 above, the ACCC considers it would not promote the LTIE to declare the SBAS in such a way that it required Telstra to make significant network investments to modify the provision of its FAB service provided to end users when ultimately (albeit at an unknown date) the South Brisbane and Velocity estate networks will be transferred to NBN Co and operated under the regulated terms in NBN Co's SAU. Accordingly, while the ACCC remains of the view that Telstra's FAB service is a Layer 2 bitstream service, for the avoidance of doubt the ACCC has amended the service description in the final decision to explicitly include the FAB service supplied by Telstra in South Brisbane and Velocity estates. The ACCC anticipates that in doing so Telstra will not need to reconfigure its FAB product or the business and operating support systems it uses to supply this service. While this adds a greater degree of technical specificity to the service description, the ACCC considers this change is appropriate to provide greater certainty for industry and avoid the possibility of inefficient investment that would not promote the LTIE.

In the draft decision the ACCC considered that iiNet's TransACT and HFC networks in Victoria had the technical capacity to deliver a Layer 2 bitstream service and that its wholesale access should be captured by the SBAS declaration. Section 5.3.1 of the draft decision noted the service arrangements for these networks, and that the ACCC assessed that prices applied by iiNet to supply the service in these networks were not cost reflective.¹⁵⁵ The ACCC assessed that through iiNet's acquisition by TPG subsidiary, AAPT, that iiNet could achieve some cost efficiencies in putting in place wholesale access on iiNet's VDSL2 network that would not have been possible for iiNet prior to its acquisition.¹⁵⁶

In its response to the draft decision TPG noted issues in integrating subsidiary AAPT and iiNet services. TPG estimated that it would not be possible to immediately provide an SBAS and estimated the cost to deliver such a service in the ACT alone would be [c-i-c starts] [redacted] [c-i-c ends].¹⁵⁷

Consistent with the final decision, that it is in the LTIE to declare all SBAS services, the ACCC has decided *not* to exempt iiNet's TransACT and HFC networks in regional Victoria, from the SBAS service description (or the SBAS declaration). While declaring the SBAS is likely to necessitate iiNet incurring some costs in order to be able to supply a wholesale layer 2 bitstream service on its VDSL and HFC networks, the ACCC's view, as outlined in section 3.4 and Appendix D, is that these one-off costs will be outweighed by the benefits from declaration.

However, the ACCC accepts that iiNet may be unable to deliver a Layer 2 wholesale access service on these networks immediately upon declaration. Accordingly, the ACCC will consider exempting iiNet's VDSL and HFC networks from the SAOs as part of the subsequent SBAS FAD inquiry and in making any Interim Access Determination.

4.3.3 Scope of the service description

4.3.3.1 Competition exemption

The ACCC's final decision is to exempt from the SBAS service description services that use access multiplexers that exclusively serve business, public body and charity customers in CBD areas, on the grounds that there appears to be sufficient competition in the supply of superfast broadband services to these customers. The ACCC's final decision narrows the exemption in the draft decision to only this class of end users in postcodes identified as CBD areas by Australia Post.

In the draft decision, the ACCC proposed exempting services that used access multiplexers that exclusively served business, public body and charity customers, on the grounds that the market for these services appeared to be effectively competitive. This is because the presence of competing network services can be observed primarily in the supply of services to high-

¹⁵⁵ ACCC, *Superfast Broadband Access Service Declaration Inquiry draft decision*, 6 November 2015, p. 42.

¹⁵⁶ ACCC, *Superfast Broadband Access Service Declaration Inquiry draft decision*, 6 November 2015, p. 44.

¹⁵⁷ TPG, confidential submission to the ACCC draft decision, 7 December 2015, p. 5.

revenue business customers as well as public bodies or charity customers operating in the same areas.¹⁵⁸ The draft decision noted that in medium to low density areas, where the presence of competing infrastructure to supply superfast broadband services is limited, that the ACCC did not see such effectively competitive markets.¹⁵⁹

Some submissions have questioned the value of applying a proxy instead of a competition test. The Competitive Carriers Coalition does not support a proxy without a rigorous competition test.¹⁶⁰ Macquarie Telecom argues that without a rigorous competition test the CBD exemption disadvantages any provider who does not offer universal coverage because universal providers can provide services on discriminatory terms between areas.¹⁶¹ While these submitters have argued for a rigorous competition test, the ACCC has decided to maintain a 'proxy' approach because developing a test for competitiveness in the relevant superfast broadband markets would involve considerable costs for both industry participants and the ACCC. This would include market participants providing the necessary data, the necessary time delay in obtaining the data and analysing and applying it, as well as the associated resource costs. For these reasons the ACCC has used the twofold test of end-user type and geographic location.¹⁶² This position was supported by assessments, provided to the ACCC through infrastructure report keeping rules, that superfast broadband fibre was sufficiently supplied in high density areas.

In the draft decision the ACCC sought submissions on this exemption, on whether the exemption should be geographically limited and on whether there were other markets where there was effective competition. A discussion of their views is captured in submissions at section 3.2.2. In summary the views expressed was that:

- there should be no exemptions for business, public body and charity customers
- exemptions provided to these customers should be on the basis of a rigorous competition test, or that
- exemption could be provided on a location by location basis but that it should be limited to CBD areas.

While Macquarie Telecom and the Competitive Carriers Coalition opposed exempting services to business, public body and charity customers on the grounds that such customers are likely to have offices in multiple localities and are likely to want a single service provider for all localities the ACCC has decided, on balance to exempt the supply to these end-users in CBD areas.¹⁶³ While the ACCC has considered whole-of-business arguments in deciding to declare services in the past, this was primarily in situations where, for many end-users there were no alternative retail substitutes to the services in question and prices in unregulated CBD areas were higher than in non-CBD areas that were subject to price regulation.¹⁶⁴ In contrast, the nature of superfast broadband services supplied using different fixed line networks and technologies appear largely the same from an end-user perspective (for example, superfast broadband using a FTTB network configuration is likely to be a full substitute for a superfast broadband service supplied using a FTTP configuration), and the ACCC's observation is that retail prices for superfast broadband services in CBD areas appear reasonable where wholesale regulation is already in place or where there appear to be a number of alternative fibre providers. (See also Chapter 3).

Following the draft decision, the ACCC considered options for suitable proxies to identify CBD areas. These included:

¹⁵⁸ ACCC, *Superfast Broadband Access Service Declaration Inquiry draft decision*, 6 November 2015, p. 45.

¹⁵⁹ ACCC, *Superfast Broadband Access Service Declaration Inquiry draft decision*, 6 November 2015, p. 26.

¹⁶⁰ CCC, public submission to the ACCC draft decision, 10 December 2015, p. 2.

¹⁶¹ Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p. 3.

¹⁶² ACCC, *Superfast Broadband Access Service Declaration Inquiry draft decision*, 6 November 2015, p. 26.

¹⁶³ Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p. 3; CCC, public submission to the ACCC draft decision, 10 December 2015, p. 2.

¹⁶⁴ ACCC, *fixed line services inquiry final decision*, 9 October 2015, p. 210.

- Postcodes identified by Australia Post in its Domestic Parcel Guide – January 2015 as CBD for its Express Post parcel delivery services
- CBD definitions defined in previous ACCC declaration inquiries (including Exchange Service Areas and zones around ESAs)
- ABS definitions of CBD areas – being within 1.5 km of a capital city GPO.

Of these options the ACCC adopted postcodes identified by Australia Post as being easy to identify, and consistent with the areas the ACCC has broadly identified as having a number of fibre networks present that. (See section 3.3.2 above) While noting that many ESAs can currently be identified as CBD ESAs, the ACCC did not consider they are a suitable delineation given these ESAs are a category determined by Telstra and would not necessarily be transitioned to the NBN environment. The use of the ABS definition was also considered unsuitable as the areas that would be covered were noticeably smaller than areas the ACCC has observed appear to have a number of fibre networks present.

In the revised service description the ACCC sought feedback from parties who have submitted to the SBAS inquiry draft decision on the use of Australia Post postcodes for CBD areas (as identified in its Domestic Parcels Guide (January 2015)). The ACCC also sought views from submitters on whether additional postcodes should be included, to identify whether regulated entities were aware of service areas where competition might be effective outside CBD areas. No specific submissions were made arguing for a wider range of postcodes while some parties were concerned about the availability of superfast carriage services for all end-users in non-CBD areas. A submission from ACCAN stated that declaration would support retail competition by removing barriers to RSPs accessing networks, and provide a greater range of services and products that better suit the needs of consumers in such areas.¹⁶⁵ To ensure that the SBAS declaration results in real benefits to end-users, the Optus submission said that the ACCC should ensure that the terms of access in any Access Determination addresses inconsistencies between NBN Co and small-scale SBAS networks, and ensure integrated SBAS providers do not discriminate in favour of their own downstream retail products.¹⁶⁶

The ACCC's final decision is to maintain the exemption from declaration for services supplied exclusively to business, charity and public body customers, but further limit it to end-users supplied in CBD areas. Narrowing of the declaration in this way will only exempt services that are supplied in areas where competition is likely to be effective and minimise the risk of exempting the supply of services to end-users in non-metropolitan areas where there is only one superfast broadband provider. The ACCC acknowledges the market for superfast broadband services continues to evolve but notes that the subsequent SBAS FAD process and possible future changes to Parts 7 and 8 of the Telecommunications Act are likely to provide further opportunity for the ACCC to examine industry developments and consider whether modification of the specific exemption provided in this decision is necessary.

4.3.3.2 Application to smaller providers

The ACCC's final decision, on balance, is to declare an SBAS that applies to superfast broadband services supplied on all networks that display characteristics of natural monopolies, including small localised monopolies that supply only a small number of subscribers in particular geographic areas. The ACCC notes there may be transitional issues for small operators have to supply an SBAS but considers that declaring access to an SBAS on these services will promote the LTIE by addressing the ability and incentive for these localised monopolies to favour their own operations over their competitors' and/or recover monopoly prices for superfast broadband services. The ACCC expects that by declaring an SBAS retail prices for superfast broadband services should move closer to those already observed where wholesale regulation is currently present or where there appears to be effective competition, or

¹⁶⁵ ACCAN, public submission to the ACCC draft decision, 4 December 2015, pp. 1-2.

¹⁶⁶ Optus, public submission to the ACCC draft decision, 4 December 2015, pp. 3-4.

that greater non-price competition will occur in the nature of the service products and packages offered.

In the draft decision the ACCC acknowledged that while declaration of an SBAS may be in the LTIE nationally and for specific networks, the costs of compliance for a single supplier, in supplying the SBAS, may potentially be higher than the competition gains from regulating it, particularly as the extent to which the wholesale product will be taken up by RSPs is unclear. In this regard, the ACCC sought submissions from providers on the costs of supplying an SBAS (including those associated with developing wholesale business operating and ordering systems) versus the benefits of declaration.

However, the ACCC has some concerns with the reliability of the information parties provided. Firstly, the nature of the cost information provided by parties was largely headline figures without disaggregation and further, it appears a number of these submitters overstated compliance costs by basing their estimates upon separation obligations (which are outside the scope of the proposed declaration) and/or a requirement to only supply a wholesale SBAS product (and therefore vacate the retail market(s)).¹⁶⁷

The ACCC notes a number of submitters did not support exemption of small providers. These submission are discussed in section 3.2.3 and can be summarised as follows:

- that customers in these networks are then left exposed to higher prices and poorer services.¹⁶⁸
- that small network providers are aware of the structural changes they will be required to implement so the regulatory burden will not be “disproportionately heavy”¹⁶⁹
- that exemption allows network owners, regardless of the size of their subscriber base, the incentive and ability to avoid supplying wholesale access or to exercise their market power¹⁷⁰

Because of the ACCC’s view that declaration will promote the LTIE, the limited reliable information about the actual compliance costs smaller providers will face and the submissions arguing against exempting small providers from the declaration, the ACCC has decided to declare a broad SBAS that applies to all non-NBN networks (other than those already subject to long term wholesale access regulation) and to further consider the issue of exemptions for small operators in considering the appropriate access determination (if any) to apply in respect of the SBAS.

That said, because there remains some question about the extent to which an SBAS supplied by a small network operator will be taken up, the extent of compliance costs smaller SBAS providers will face, and possibly also the need to provide a transitional period for parties to implement the declaration, the issue of whether small operators supplying a superfast broadband service should be exempt from the SAOs will be further considered as part of the subsequent SBAS FAD inquiry and in making any Interim Access Determination.

4.3.4 Other drafting changes

Following the draft decision, the ACCC made the following minor drafting changes to the SBAS service description to address issues of technical accuracy. These are as follows:

- Definition of *access multiplexer* – changed from electronic energy to *electromagnetic energy*

¹⁶⁷ Pivit, confidential submission to the ACCC draft decision, 9 December 2015, pp. 1-2; Clublinks, confidential submission to the ACCC draft decision, 8 December 2015, pp. 2-3.

¹⁶⁸ ACCAN, public submission to the ACCC draft decision, 4 December 2015, p. 2.

¹⁶⁹ NBN Co, public submission to the ACCC draft decision, 4 December 2015, p. 2..

¹⁷⁰ Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p. 2.

- Definitions that refer to definitions in other legislation now refer to the primary legislation rather than secondary source of the definition (e.g. *NBN corporation* was defined with reference to section 152AC of the *Competition and Consumer Act 2010* and is now defined with reference to the *National Broadband Companies Act 2011*, which is referred to in s152AC).

4.4 Timing and application of the declaration

Subsection 152ALA(1) of the CCA requires the ACCC to specify an expiry date for a declaration. In specifying an expiry date the ACCC must have regard to the principle that an expiry date for a declaration should occur within the period that begins three years after the declaration was made and ending five years after the declaration was made, unless the ACCC forms the opinion that there are circumstances that warrant a longer or shorter declaration period.¹⁷¹ This is intended to enable the ACCC to provide longer-term regulatory certainty, where appropriate, in order to promote competition and investment.¹⁷²

Subsection 152ALA(4) allows the ACCC to extend or further extend the expiry date of a specified declaration as long as the extension or further extension is for a period of not more than five years.

The ACCC's final decision is to maintain a five year period for the SBAS declaration, from the date the declaration is made. This will provide regulatory certainty and to allow the benefits of regulation to take effect over time as the changes to exemptions, legislation and regulations currently flagged take place.¹⁷³ While some submissions favoured a shorter duration because of the 'faster pace' of changes taking place in the relevant markets¹⁷⁴ the ACCC remains of the view that five years is an appropriate figure to provide certainty. Further, the ACCC will continue to monitor industry during the course of the subsequent SBAS FAD inquiry and once proposed changes to Part 7 and Part 8 of the Telecommunications Act have been implemented, it may be an appropriate time for the ACCC to review the nature and scope of both the declared LBAS and SBAS, without the need to explicitly include a review mechanism in the declaration instrument itself.

¹⁷¹ Subsection 152ALA(2) of the CCA.

¹⁷² Explanatory Memorandum to the *Competition and Consumer Safeguards Act 2010*, p. 167.

¹⁷³ Hon. Malcolm Turnbull, MP, Former Minister for Communications and Senator the Hon. Mathias Cormann, Minister for Finance, *Reform of telecommunications regulation*, media release, 11 December 2014, available at: minister.communications.gov.au/malcolm_turnbull/news/reform_of_telecommunications_regulation#.VrBZNtR--Ah.

¹⁷⁴ TPG, public submission to the ACCC draft decision, 7 December 2015, p. 5; Macquarie Telecom, public submission to the ACCC draft decision, 7 December 2015, p. 9.

A SBAS service description

The superfast broadband access service is a point to point service for the carriage of communications in digital form between a **network-network interface** and an **end-user interface** that is:

- (a) a **Layer 2 bitstream service** and is a **superfast carriage service**; or
- (b) a **Fibre Access Broadband service**.

This service does not include:

- i. a service supplied through an **access multiplexer** located in a **multi-dwelling complex** in a **central business district area** or in a **node** in a **central business district area** where all end-users of the services supplied or proposed to be supplied through that access multiplexer and any other access multiplexers owned or controlled by the same access provider located in the same **multi-dwelling complex** or **node** are **business customers, public bodies** or **charity customers**;
- ii. a service supplied other than through an **access multiplexer** located in a **multi-dwelling complex** or in a **node** where the premises of the end-users of the service is in a **central business district area** and all end-users of the service are **business customers, public bodies** or **charity customers**;
- iii. services supplied, or capable of being supplied, by an **NBN corporation**;
- iv. services supplied, or capable of being supplied, using a hybrid-fibre coaxial cable network that was in existence on 29 July 2016 and in respect of which there are agreements for the network to be transferred to NBN corporation;
- v. the local bitstream access service defined in the Local Bitstream Access Service Declaration 2012, while that declaration is in operation; or
- vi. the domestic transmission capacity service defined in the Domestic Transmission Capacity Service Declaration 2014, as that declaration may be varied, extended or replaced from time to time.

Definitions

Unless otherwise defined in this declaration, words or phrases defined in the *Competition and Consumer Act 2010* or the *Telecommunications Act 1997* have the same meaning in this declaration.

access line means the line used to connect the access multiplexer to the end-user interface.

access multiplexer means a device that separates communications carried by means of guided electromagnetic energy to enable an end-user to make use of high data rate services.

business customer means a customer that:

- (a) carries on a business or enterprise from a premises, regardless of whether there is any incidental use of the premises for occupation (from time to time) as a place of residence; and
- (b) has an ABN for the business or enterprise.

central business district area means a geographic area with one of the following postcodes:

- (a) Canberra CBD: 2600-2601
- (b) Sydney CBD: 1000-1299; 2000-2009
- (c) Melbourne CBD: 3000-3010; 8000-8010
- (d) Brisbane CBD: 4000-4004
- (e) Adelaide CBD: 5000-5005; 5800-5879
- (f) Hobart CBD: 7000-7003; or
- (g) Perth CBD: 6000-6005; 6800-6899.

charity customer means a charity registered with the Australian Charities and Not-for-profits Commission.

end-user interface means an interface located at either:

- (a) a physically defined end-user's premises where the access provider's network is directly or indirectly present to an end-user; or
- (b) the jumper cable termination on the customer side of the Main Distribution Frame located in the multi-dwelling complex.

Fibre Access Broadband service means a carriage service that:

- (a) is supplied or offered to be supplied by means of an optical fibre line; and
- (b) is offered as a **superfast carriage service** or with the following maximum transmission speeds;
 - (i) download transmission speed of 30Mbps and upload transmission speed of 1Mbps; and
 - (ii) download transmission speed of 100Mbps and upload transmission speed of 5Mbps; and.
- (c) has the following configurations:
 - (i) a 'best effort' or non-prioritised service, as characterised by the Differentiated Services Code Point Default Forwarding per-hop behaviour; and
 - (ii) connectivity made with static Layer 2 Tunnelling Protocol (L2TP) tunnels and Broadband Virtual Local Area Networks giving direct access to end user sessions; and
 - (iii) end-user sessions are aggregated together via static L2TP tunnels supplied over Ethernet.

Layer 2 bitstream service has the meaning given in the *Telecommunications Act 1997*.

line means a wire, cable, optical fibre, tube, conduit, waveguide or other physical medium used, or for use, as a continuous artificial guide for or in connection with carrying communications by means of guided electromagnetic energy.

multi-dwelling complex means a building that consists of multiple separate units for occupation (from time to time) which are used as a place of residence or business.

NBN corporation has the meaning given in the *National Broadband Network Companies Act 2011*.

network-network interface means an interface provided by an access provider at a **point of interconnection** where the access seeker's telecommunications network can interface to the access provider's network.

node means a roadside cabinet, pillar, pit or distribution point, but does not include an exchange, that:

- (a) houses the equipment for the supply of services, including access multiplexers, and
- (b) enables the physical connection to the end-user premises using access lines.

point of interconnection is a physical point of interconnection which allows the interconnection of facilities in accordance with subsection 152AR(5) of the *Competition and Consumer Act 2010*.

public body means:

- (a) the Commonwealth, a State or a Territory; or
- (b) a municipal authority or other local governing body; or
- (c) a public authority that is constituted by or under a law of the Commonwealth, a State or a Territory.

superfast carriage service means a carriage service, where:

- (a) the carriage service enables end-users to download communications; and
- (b) the download transmission speed of the carriage service is normally 25 megabits per second or more; and
- (c) the carriage service is supplied using a line to premises occupied or used by an end-user.

telecommunications network has the meaning given in the *Telecommunications Act* .

B Legislative Framework

Part XIC of the *Competition and Consumer Act 2010* (CCA) sets out a telecommunications access regime. 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.¹⁷⁵ 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.¹⁷⁶ 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) is an example of a service that facilitates 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.¹⁷⁷

B.1 Declaration inquiries

The ACCC may declare a specified eligible service if we:

- hold a public inquiry about its proposal to make a declaration
- prepare a report about the inquiry
- publish that report within a 180-day period ending when the declaration is made, and
- are satisfied that the declaration will promote the LTIE of carriage services or of services provided by means of carriage services (the LTIE test).¹⁷⁸

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.¹⁷⁹

Where a service is already declared, the ACCC must commence an inquiry during the 18 months prior to the expiry of the declaration about whether to extend, vary or revoke the declaration, or let the declaration expire with or without issuing a new declaration.¹⁸⁰ The ACCC can combine two or more public inquiries about proposals to declare services.¹⁸¹

¹⁷⁵ Where the service is supplied, or capable of being supplied, by a carrier or carriage service provider (whether to itself or other persons). See subsection 152AL(1) of the CCA.

¹⁷⁶ Section 7 of the Telecommunications Act.

¹⁷⁷ Subsections 152BC(3) and 152BC(8) of the CCA.

¹⁷⁸ Subsection 152AL(3) of the CCA.

¹⁷⁹ Subsections 152AL(3), 152AL(3B) and 152AL(8A) of the CCA.

¹⁸⁰ Subsection 152ALA(7) of the CCA.

¹⁸¹ Section 152AN of the CCA.

B.2 The ACCC's approach to the LTIE test

Part XIC of the CCA provides that the ACCC may declare a service if it is satisfied that the declaration of the service will promote the LTIE. When determining whether something 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:

- promoting competition in markets for listed services¹⁸²
- 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.¹⁸³

B.2.1 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 end-users) through lower prices, the level of service quality preferred by end-users, and a greater choice of services.

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)¹⁸⁴ 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 the 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*.¹⁸⁵

Section 4E of the CCA provides that a market includes any goods or services that are substitutable for, or otherwise competitive with, the goods or services under analysis. Accordingly, substitution is key to market definition. The ACCC's approach to market definition in the 2008 *Merger Guidelines* focuses on two dimensions of substitution – the product dimension and the geographic dimension.¹⁸⁶

¹⁸² Listed services include carriage services and services supplied by means of carriage services.

¹⁸³ Section 152AB of the CCA.

¹⁸⁴ Subsection 152AB(5) of the CCA.

¹⁸⁵ ACCC, *Merger guidelines*, 21 November 2008, p. 16.

¹⁸⁶ ACCC, *Merger guidelines*, 21 November 2008, pp. 15-23.

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 providers, and
- supply-side substitution, which involves suppliers switching inputs, including networks and/or network components.

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.¹⁸⁷

A method to determine if a product or service is a close substitute for the purposes of market definition is to use the hypothetical monopolist or 'SSNIP' test.¹⁸⁸ 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.

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.

In the 2009 fixed services review declaration inquiry,¹⁸⁹ the ACCC determined that the relevant markets for the fixed-line services were the national markets for:

- the retail and wholesale provision of fixed voice services
- the retail and wholesale provision of fixed broadband services, and
- the retail and wholesale provision of bundled fixed voice and fixed broadband services.

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 or the LTIE. In assessing the state of competition, the ACCC considers dynamic factors such as the potential for sustainable competition to emerge and the extent to which the threat of entry (or expansion by existing suppliers) constrains pricing and output decisions.

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.

¹⁸⁷ A useful list of information the ACCC may consider when identifying close substitutes to the relevant product is contained in the *Merger Guidelines*, 21 November 2008, p. 19.

¹⁸⁸ SSNIP stands for small but significant non-transitory increase in price.

¹⁸⁹ ACCC, fixed line services inquiry final decision, 16 July 2009, p. 36.

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 position¹⁹⁰
- 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]',¹⁹¹ and
- 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'.¹⁹²

These five factors are indicators of 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 will be used to assist us in determining whether declaration will promote the LTIE.

B.2.2 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.¹⁹³

The any-to-any connectivity requirement is particularly relevant when considering services that require interconnection between different networks.

¹⁹⁰ Olivier Boylaud and Giuseppe Nicoletti, *Regulation, market structure and performance in telecommunications*, OECD Economics Studies, no. 32, 2001/1.

¹⁹¹ *Re Queensland Co-operative Milling Association Ltd and Defiance Holding Ltd* (1976) 25 FLR 169.

¹⁹² This is not intended to be an exhaustive list of the characteristics of effective competition.

¹⁹³ Subsection 152AB(8) of the CCA.

B.2.3 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 must not discourage investment in networks or network elements where such investment is efficient.

Subsection 152AB(6) requires the ACCC to have regard to a number of specific matters in examining whether declaration is likely to encourage the economically efficient use of, and investment in, infrastructure in accordance with paragraph 152AB(2)(e). Some of these are outlined below.

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 infrastructure operator

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

Infrastructure operators should have the incentive to invest efficiently in the infrastructure by which the services are supplied (or are capable, or likely to become capable, of being supplied). In determining incentives for investment, regard must be had (but is not limited) to the risks involved in making the investment.¹⁹⁴

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.

¹⁹⁴ Subsections 152AB(7A) and 152AB(7B) of the CCA.

C List of submissions

Submissions received in response to the November 2015 Draft Decision on the declaration inquiry
ACCAN, 4 December 2015
Competitive Carriers Coalition (CCC), 10 December 2015
Clublinks, (confidential and public versions), 8 December 2015
Frontier, (confidential and public versions), 4 December 2015
Macquarie, 7 December 2015
NBN Co, (confidential and public versions), 4 December 2015
Optus, 4 December 2015
Pivit, (confidential version), 9 December 2015
Spirit, (confidential and public versions), 4 December 2015
Telstra, (confidential and public versions), 4 December 2015
TPG, (confidential and public versions), 7 December 2015
Submissions received in response to the March 2016 Consultation on service description
Clublinks, 29 March 2016
Macquarie, 31 March 2016
NBN Co, 30 March 2016
Spirit, 4 May 2016
Telstra, 31 March 2016
TPG, 31 March 2016

D Assessment of change in regulatory burden on affected access providers

Declaration of the SBAS

The ACCC has declared a broadband access service (SBAS) under Part XIC of the *Competition and Consumer Act 2010* (CCA). The SBAS is a wholesale service provided by a superfast broadband network operator (e.g. Telstra, TPG) to allow access seekers to sell superfast broadband services to retail end-users. The superfast broadband network operator providing the SBAS charges the access seeker a fee, which the access seeker incorporates into its retail prices.

Declaration is the process by which a service is brought within the scope of the Part XIC access regime. Once a service is declared, an access provider must provide any 'active declared service' in accordance with the standard access obligations (SAO).¹⁹⁵ The ACCC may make a written access determination, which sets out the terms and conditions (including regulated prices) for accessing the service.¹⁹⁶

A declared service is 'active' when an access provider supplies the service either to itself or to others. Under the standard access obligations, the access provider must:

- 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.¹⁹⁷

Estimating the change in the regulatory burden of the SBAS declaration

The Office of Best Practice Regulation's (OBPR) framework for measuring regulatory burden identifies the following types of costs:

- Substantive compliance costs to deliver the regulated outcome, for example IT and billing system changes associated with the supply of wholesale services
- Administrative costs incurred by regulated businesses primarily to demonstrate compliance with the regulation, for example reporting and record keeping costs
- Delay costs, which are expenses and loss of income incurred by a regulated entity through an application delay and/or an approval delay.

Substantive compliance costs

The ACCC considers that several access providers likely to be affected by an SBAS declaration (are already providing access to wholesale Layer 2 services under commercially agreed terms. For example, LBN Co, Telstra and TPG's FTTB network (previously Pipe), The ACCC considers that there will be minimal additional burden imposed on these providers to comply with the Category A SAOs. This is because they have the necessary equipment and infrastructure (including hardware and software) to enable interconnection, billing and fault detection for superfast broadband access services.

¹⁹⁵ Section 152AR of the CCA.

¹⁹⁶ Section 152BC of the CCA.

¹⁹⁷ Section 152AR of the CCA.

The ACCC understands that one provider, however, currently has networks that either do not provide wholesale access or do so but not using Layer 2 services. In particular, wholesale access is not provided on TPG's cable networks in regional Victoria and while wholesale access is provided to its VDSL network in Canberra, this is not done using Layer 2 services.

Information provided to the ACCC in the course of the SBAS declaration inquiry indicates that the development and deployment of a wholesale Layer 2 service for a larger provider could cost up to [c-i-c starts] [redacted] [c-i-c ends] per network.¹⁹⁸ The major component of this cost is the development of systems and software, with much of the work outsourced. The ACCC therefore considers that these are primarily one-off costs.

In relation to TPG's VDSL network in Canberra, given wholesale access is already in effect, it is unlikely the full extent of these costs would be incurred. However, for the purpose of establishing regulatory burden we have assumed the full extent of costs.

Estimate of change in substantive compliance costs = 2 networks x [c-i-c starts] [redacted] [c-i-c ends] in the first year, and zero in further years. The increase in burden over 5 years is [c-i-c starts] [redacted] [c-i-c ends] per year (as declaration is for 5 years).

The ACCC received submissions to the draft decision from smaller providers not currently providing wholesale access in which they submitted that the costs for them of providing a wholesale Layer 2 service may be relatively high.

As noted in section 3.4.1 of the final decision, the information provided by small vertically integrated providers about the costs of compliance varied significantly and was generally high level with little disaggregation of costs. In this regard, the ACCC considered that submitters overestimated the costs associated with declaration. Further, there remains some question about the extent to which an SBAS supplied by a small network operator will be taken up. Given this the issue of whether small providers supplying a SBAS should be exempt from the SAOs will be further considered as part of the subsequent SBAS FAD inquiry and in making any Interim Access Determination. On this basis, the ACCC has not included any substantive compliance for these networks.

As such, the estimated total change in substantive compliance costs is [c-i-c starts] [redacted] [c-i-c ends] per year the five year duration of the declaration.

Administrative costs

The administrative costs of demonstrating compliance with the regulation are estimated based on this requiring two hours a week of time for each network, each year, applying the default hourly cost for employees as provided by OBPR (\$37.4*1.75) for the five years of declaration. That is:

- 2 hours x 52 weeks x \$37.40 x 1.75 = \$6,806.80 per network annum
- 5 years x \$6,806.80 = \$34,034.00 per network

The two hours each week is an allowance for determining and demonstrating compliance with the Standard Access Obligations (SAOs) e.g. the equivalence requirements in relation to the ordering and provisioning of a service and the technical and operational quality of the service.

- The ACCC considers that the following networks will incur administrative costs in compliance with the SBAS declaration.

¹⁹⁸ Varying cost estimates were provided during the course of the declaration inquiry, between a range of [c-i-c start] [redacted] [c-i-c ends]. The ACCC has adopted a conservative approach and used the upper end of the range for the purpose of establishing the regulatory burden. TPG, confidential submission to the ACCC draft decision, 7 December 2015, p. 5; iiNet's confidential submission to the ACCC discussion paper, 5 June 2015, pp. 9-10.

Compliance costs from the SBAS declaration over 5 years

Provider (network)	Administrative costs (\$)
LBN Co	\$34,034.00
Vocus	\$34,034.00
Telstra (South Brisbane and Velocity)	\$34,034.00 x 2 for both South Brisbane and Velocity networks
TPG / AAPT (metro areas, Wondercom retail supply)	\$34,034.00
iiNet (Canberra, Geelong, Ballarat, Mildura)	\$34,034.00 x 2 for both the Canberra and Victorian networks
Total	\$238,238.00
Total per annum	\$47,647.60

Some providers are already subject to access regulation (via Ministerial exemptions to Part 7 and 8 of the *Telecommunications Act 1997* and the Carrier Licence conditions) and face administrative costs in ensuring they are complying with that regulation. In particular, Telstra, TPG / AAPT and iiNet. The ACCC understands that LBN Co and Vocus have sought Ministerial exemptions to Part 7 and 8 of the *Telecommunications Act*, and in line with the conservative upper bound estimates of this analysis, the ACCC has assumed the exemptions will be granted.

The ACCC considers that the SBAS declaration presents a compliance regime which is simpler than the existing regulations and this will present some administrative savings for these providers by removing the existing obligations, even as it implements new ones. Accordingly, the ACCC estimates that these providers will, on average, incur reduced costs associated with about 50 less hours of staff time and external legal advice per network per year.

- 7 networks x 50 hours per annum x \$37.40 x 1.75 per hour = \$22,907.50 per annum reduction.

The estimated change in administrative compliance costs is:

- \$47,647.60 - \$22,907.50 = \$24,740.10 per annum.

The total administrative costs across the seven regulated networks are:

- 5 years x \$24,740.10 = \$123,700.50

Delay costs

Declaration of SBAS will not give rise to any delay costs.