

Superfast Broadband Access Service and Local Bitstream Access Service declaration inquiry

Draft Decision

December 2020



Australian Competition and Consumer Commission

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ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
ADSL	Asymmetric Digital Subscriber Line
CBD	Central Business District
CCA	Competition and Consumer Act 2010
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
HFC	Hybrid Fibre-Coaxial
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
SAO	Standard Access Obligation
SBAS	Superfast Broadband Access Service
SAU	Special Access Undertaking
SIO	Services in Operation
TC-4	A standard, best effort traffic class used for delivering residential and non-critical business broadband services.
VDSL	Very-high-bit-rate Digital Subscriber Line
WLR	Wholesale Line Rental
3G / 4G / 5G	Third/fourth/fifth generation mobile communications

List of abbreviations and acronyms

Executive summary

The Australian Competition and Consumer Commission's (ACCC) draft decision is that declaration of the Superfast Broadband Access Service (SBAS) and the Local Bitstream Access Service (LBAS) remains in the long-term interests of end-users (LTIE).

The ACCC's draft decision is to declare a wholesale Layer 2 fixed-line broadband service supplied over non-NBN networks. Only broadband access services that are provided over a superfast network are proposed for declaration. However, there is no minimum or maximum speeds nominated in the declaration which would limit the range of access products that an access seeker could request from the access provider.

The ACCC considers that continuing the declaration of the SBAS and LBAS for a period of five years until July 2026 would be in the LTIE because it:

- is required to promote competition in the downstream retail market for superfast broadband services
- will promote the efficient use of, and investment in, infrastructure, as in the absence of declaration, network operators have incentives to set prices to maximise their revenues at the expense of meeting end-user demand.

This draft decision varies the current SBAS declaration to combine the SBAS and LBAS under a single SBAS declaration instrument. The new SBAS declaration would apply to networks built, upgraded or altered both before and after 1 January 2011. The ACCC intends to revoke the current LBAS declaration.

The SBAS declaration would not apply to services:

- supplied on the NBN, Hybrid-fibre Coaxial (HFC) networks that will be transferred to NBN Co and services already subject to the Domestic Transmission Capacity (DTCS) declaration. These services are subject to other access regulation under Part XIC of the CCA.
- that exclusively supply business, charity and public body end-users in central business district (CBD) areas of capital cities, on the basis that competition in the supply of these services is considered to be effective.

The draft decision is not to include services provided over fixed wireless or satellite networks within the scope of the declaration on the basis that such networks would not have monopoly pricing power in a given location due to the presence of the NBN, which will continue to be subject to regulation, or a competing superfast network. The ACCC also does not intend to include broadband delivered over mobile networks within the scope of the declaration, on the basis that these services are already exhibiting strong competition between multiple network providers.

Superfast broadband services are highly valued and sought after by end-users. Consumer demand for data has increased exponentially since the ACCC's last LBAS and SBAS declaration reviews, as a result of increased usage of cloud computing and streaming services such as video-on-demand. More recently the COVID-19 pandemic has highlighted the essential need for home-based broadband services for work, education and medical services.

The ACCC considers that economic and technical barriers to entry generally prevent multiple fixed line network providers from operating in the same service area and competing at a wholesale level. There is usually insufficient customer demand to sustain two rival fixed line networks, and where competition from mobile and fixed wireless networks is not effective, this results in localised monopolies with the ability to extract monopoly rents from end-users.

The ACCC considers that it is vital for retailers to be able to acquire wholesale superfast broadband services at reasonable prices, either from NBN or non-NBN networks, in order to effectively compete in downstream markets and service the growing demand for broadband services.

The ACCC recognises that in some areas it may be commercially viable for multiple superfast broadband networks to co-exist. The ACCC will consider the merit or otherwise of a framework to exclude networks covered by the SBAS/LBAS declaration from future regulation under the declaration. We will give further consideration to this issue and a number of other issues discussed in this draft decision having regard to submissions.

The ACCC is seeking submissions from interested parties by 19 February 2021.

1. Introduction

This draft decision forms part of the ACCC inquiry into the Superfast Broadband Access Service (SBAS) and Local Bitstream Access Service (LBAS) declarations. On 9 July 2020, the ACCC released a Discussion Paper commencing a declaration inquiry under Part 25 of the *Telecommunications Act 1997* (the Telecommunications Act) into whether the SBAS and LBAS should continue to be regulated.¹

The current SBAS declaration expires on 28 July 2021 and the ACCC is required to hold a public inquiry in the 18-month period before its expiry.² The current LBAS declaration does not expire, however it is open to the ACCC to vary, revoke, make a new declaration or allow the current declaration to remain in force.

This draft decision sets out the ACCC's view on whether continued declaration of the SBAS and LBAS will promote the long-term interests of end-users (LTIE), having regard to the submissions made to the Discussion Paper and other relevant information.

The ACCC is now seeking submissions from interested parties on the ACCC's draft decision before it makes a final decision.

1.1. The ACCC's approach to declaring services

Under Part XIC of the *Competition and Consumer Act 2010* (CCA), the ACCC can declare a specified eligible service³ if it is satisfied that this will promote the LTIE of carriage services or of services provided by means of carriage services.⁴

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

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

Once declared, the ACCC must hold a public inquiry about a proposal to make an access determination for that service. An access determination may include a broad range of matters, but if it includes terms and conditions relating to access to the service it must specify price or a method of ascertaining price.⁶ Parties can rely on the terms and conditions set out in an access determination, or they can negotiate commercial terms and conditions. An access determination usually serves as a fall back that parties can rely on if they are unable to otherwise reach agreement about the terms of access.⁷

¹ ACCC, LBAS and SBAS declarations inquiry, Discussion paper, July 2020,

² Pursuant to subsection 152ALA(7) of the Competition and Consumer Act 2010 (Cth) (CCA).

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

⁴ CCA, paragraph 152AL(3)(d).

⁵ CCA, subsection 152AB(2).

⁶ CCA, subsections 152BC(3) and 152BC(8).

⁷ CCA, section 152AY.

Our approach to declaration inquiries is set out in further detail including the legislative background in the ACCC's *Guideline on Declaration Inquiries* (published on the <u>ACCC website</u>). We encourage stakeholders to review the Guideline before making a submission.

1.2. Consultation process

On 9 July 2020, the ACCC released a Discussion Paper commencing a declaration inquiry under Part 25 of the Telecommunications Act into whether the SBAS and LBAS should continue to be regulated. The ACCC received submissions from eight stakeholders in response to the Discussion Paper which are available on the <u>ACCC's website</u>.

The ACCC invites submissions on this draft decision. The ACCC will take submissions into account in its final decision which it expects to make by May 2021.

Submissions are due by 19 February 2021.

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

Submissions should be sent to: superfastbroadbandinguiry@accc.gov.au

1.2.1. Confidentiality

To foster an informed and consultative process, all submissions will be considered as public submissions and will be posted on the ACCC's website. Interested parties wishing to submit commercial-in-confidence material to the ACCC should submit both a public and a commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or 'c-i-c'.

The ACCC has published a Confidentiality Guideline which sets out the process parties should follow when submitting confidential information to communications inquiries commenced by the ACCC. The Guideline describes the ACCC's legal obligations with respect to confidential information, the process for submitting confidential information and how the ACCC will treat confidential information provided in submissions. A copy of the Guideline can be downloaded from the website.

The ACCC/AER Information Policy June 2014 sets out the general policy of the ACCC and the Australian Energy Regulator (AER) on the collection, use and disclosure of information. A copy of the guideline and policy are available on the <u>ACCC's website</u>.

2. Background

2.1. Overview of the current declared services

The SBAS and LBAS are declared fixed line broadband services able to be used by access seekers (i.e. retail service providers) to supply downstream superfast broadband services to end-users. Both services are Layer 2 bitstream services with a download data rate of normally 25 Mbps or more. The SBAS and LBAS declarations do not apply to the National Broadband Network (NBN), Hybrid-fibre Coaxial (HFC) networks to be transferred to the NBN and in other specific cases which are noted below.

Fixed wireless, satellite and mobile technologies are also capable of supplying superfast broadband services (defined as services capable of download data rates of normally 25 Mbps or more) but are not covered by the SBAS and LBAS declarations.

The SBAS and LBAS generally have the same service characteristics and can be considered as counterpart services provided over networks built *before* 1 January 2011 (i.e. SBAS) and *after* 1 January 2011 (i.e. LBAS).

The SBAS also applies to networks built after 1 January 2011 covered by ministerial exemptions to Part 8 of the Telecommunications Act.

LBAS networks are subject to legislative structural or (subject to ACCC approval) functional separation requirements. Further information about these requirements is available <u>here</u>. The SBAS networks for the most part are not subject to separation requirements.⁸

2.2. LBAS declaration

The LBAS is a declared fixed line broadband service provided on a network built after 1 January 2011, able to be used by access seekers to supply downstream superfast broadband retail services to end-users.

The LBAS declaration requires operators of fixed line superfast broadband networks used, or proposed to be used, to supply residential or small business customers to provide access to a Layer 2 bitstream service with a download data rate of normally 25 Mbps or more on request.

The LBAS applies to all networks, local access lines and carriers that supply a Layer 2 service unless they have received a Ministerial exemption under the Telecommunications Act.⁹

The LBAS currently applies to services supplied on networks that supply superfast carriage services that were built, altered or extended after 1 January 2011, which includes networks owned and operated by Uniti Group (Uniti).

The ACCC was required to declare an LBAS under amendments to the CCA in 2011, associated with the introduction of the NBN and the level playing field rules.¹⁰ These amendments set out a regime to regulate the provision of Layer 2 bitstream services to ensure that access to these services is offered on an open and equivalent basis, regardless of provider.¹¹

⁸ Except for networks which are captured by the superfast carrier license conditions (discussed in chapter 3), which are required to operate on a functionally-separated basis.

⁹ As a result of the passage of the *Telecommunications Legislation Amendment (Competition and Consumer) Act 2020* the power to grant such exemptions no longer exists.

¹⁰ Subsection 152AL(3C) of the CCA (subsequently repealed). The level playing field rules are discussed further in chapter 3.

¹¹ The amendments requiring provision of a Layer 2 service have since been repealed. See chapter 3 for further discussion on the Government's legislative changes to the regulation of superfast broadband.

The ACCC declared the LBAS on 24 February 2012 following a public inquiry under Part 25 of the Telecommunications Act. The current LBAS declaration does not expire, however it is open to the ACCC to vary, revoke, make a new declaration or allow the current declaration to remain in force.

2.3. SBAS declaration

The SBAS is a declared fixed line broadband wholesale service provided on a network built before 1 January 2011, able to be used by access seekers to supply downstream superfast broadband retail services to end-users.

The SBAS is a point-to-point service that is either:

- a Layer 2 bitstream service and a superfast carriage service (that is, with a download data rate of normally 25 Mbps or more), or
- Telstra's Fibre Access Broadband (FAB) service.

The SBAS declaration currently applies to services supplied on the following networks:

- Telstra's Fibre-to-the-premises (FTTP) networks in South Brisbane and Velocity Estates
- TPG Telecom's (TPG) Very-high-bit-rate Digital Subscriber Line (VDSL2) network in the ACT and HFC networks in regional Victoria
- TPG's Fibre-to-the-basement (FTTB) networks in capital cities
- Other networks that supply superfast carriage services, including superfast broadband networks that existed before 1 January 2011 (which are not subject to the level playing field rules).

The SBAS does not apply to services:

- supplied on the NBN, HFC networks that will be transferred to NBN Co, and services already subject to the LBAS or Domestic Transmission Capacity Service (DTCS) declarations. These services are subject to other access regulation under Part XIC of the CCA
- that exclusively supply business, charity and public body end-users in central business district (CBD) areas of capital cities, on the basis that competition in the supply of these services is deemed to be effective.

The ACCC declared the SBAS in July 2016 following a public inquiry under Part 25 of the Telecommunications Act. In deciding to declare the SBAS, the ACCC considered that:

- superfast broadband services, irrespective of their geographic footprint and subscriber base, display characteristics of natural monopolies, due to both technical and economic barriers to entry
- in most areas where these services are supplied, there is limited, if any, infrastructure competition.

The ACCC also considered that superfast broadband services were likely to be highly valued and sought after by end-users in the future, and declaration of the SBAS would promote competition:

- in retail markets for the supply of superfast broadband services
- to a lesser extent, in wholesale markets for the supply of superfast broadband services.

The ACCC also considered that declaration of the SBAS would promote efficient investment in, and use of, the infrastructure used to supply telecommunications services. The ACCC's decision concluded that productive efficiency would be improved as services would be supplied at the lowest possible cost, and allocative efficiency improved as price signals would enable decisions to be

based on underlying cost. The ACCC did not consider network investment incentives would be inefficiently affected by the decision to declare the SBAS.

Any-to-any connectivity is not of substantial relevance to considering declaration for SBAS and was not discussed in detail in the ACCC's 2016 Final Declaration Decision.¹²

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. This was identified as generally occurring in high density areas serving high revenue end-users (typically business end-users). Specifically, the declaration did 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.¹³

2.4. Final access determination for SBAS and LBAS

Following declaration of the SBAS, the ACCC released a final decision in May 2017 on its inquiry to make a combined final access determination (FAD) for the LBAS and SBAS, incorporating price and non-price terms and conditions of access until July 2021 (i.e. in the absence of commercial agreement between access providers and access seekers).

Under the 2017 FAD, SBAS (but not LBAS) providers supplying up to 12,000 end-users are not required to offer regulated wholesale access to their networks.¹⁴ This is because the compliance costs for these operators are expected to be high relative to the expected wholesale revenues, and the aggregate benefits to end-users from retail competition on these smaller networks were not considered to outweigh the compliance costs.

¹² ACCC, SBAS declaration inquiry – Final Decision, July 2016.

¹³ While public bodies and charity customers were not necessarily considered high-revenue customers for the purposes of assessing infrastructure competition, many of these customers are serviced from the same DSLAM or other access multiplexer device as business customers. The ACCC considered it was in the public interest to extend the competition exemption to public bodies and charity customers so as to not adversely impact incentives to supply services to these customers.

¹⁴ ACCC, SBAS and LBAS FAD – Final Decision, May 2017, p. 8.

3. Market and regulatory developments

The following sets out developments impacting the superfast broadband market since the ACCC's LBAS and SBAS declaration inquiries in 2012 and 2016, respectively. In chapter 4 we consider the impact of these market developments on the future of regulation for superfast broadband services and whether continued declaration of the SBAS and LBAS remains in the LTIE.

3.1. Industry and technology developments

Rollout of the National Broadband Network and network competition

The NBN rollout has advanced significantly since the ACCC's 2016 SBAS declaration inquiry. As at 19 November 2020, 11.8 million premises are able to connect to the NBN, with 7.8 million already connected.¹⁵ The NBN access network is now available to over 90 per cent of Australia,¹⁶ with further towns and suburbs being added progressively.

A number of locations in Australia have pre-existing fibre networks providing high-speed broadband services. The Australian Government's former policy was that NBN Co should not overbuild alternative networks offering NBN-comparable services unless it was commercially viable and Shareholder Ministers agree.¹⁷

On 1 September 2020 the Government released a new Telecommunications in New Developments (TIND) policy. The policy's removal of the requirement for NBN Co to obtain Shareholder Ministers' approval before overbuilding existing networks providing NBN-comparable services¹⁸ is considered relevant to the SBAS/LBAS declaration inquiry. This change raises the prospect of greater competition in broadband services networks within local geographic areas in the future, within the bounds of NBN Co adhering to competition law and competitive neutrality requirements.

Market structure

NBN Co is the predominant builder and operator of fixed line superfast broadband networks in both brownfield (i.e. developed) and greenfield (i.e. new development) areas.

In brownfield areas, NBN Co faces very limited network competition from other fixed line operators. Competition from non-NBN network operators appears to be generally limited to point-to-point fibre networks in business districts, and existing multi-point networks of limited reach covered by the SBAS declaration.

The ACCC understands that there are approximately ten alternative fixed line superfast network operators that compete with each other and NBN Co to build and serve new developments, although this number is reducing through network consolidation. Past consolidation includes NBN Co acquiring TPG/TransACT's larger networks serving new developments, and Uniti acquiring OPENetworks, Pivit, LBN Co, Clublinks and Capital Fibre. Uniti has most recently acquired OptiComm, thereby consolidating the largest two alternative providers to NBN Co in new developments.

Table 1 shows the number of lots planned or passed by the largest operators prior to Uniti and OptiComm merging. OptiComm and Uniti have been able to establish a strong footing in the new developments market of around 25 percent of total lots. As a consequence, there are signs that the

¹⁵ NBN Co, Weekly progress report, 19 November 2020. <u>https://www.nbnco.com.au/corporate-information/about-nbn-co/corporate-plan/weekly-progress-report</u>.

¹⁶ iiNet, Check the NBN coverage for your address. Accessed October 2020 at: <u>https://www.iinet.net.au/internet-product/broadband/nbn/coverage</u>.

¹⁷ Department of Infrastructure, Transport, Regional Development & Communications (DITRDC), *Review of the 2015 TIND policy: Request for Comments*, November 2019, p. 4.

¹⁸ DITRDC, *TIND policy*, September 2020.

market is supporting some competition between broadband fixed network builders notwithstanding that NBN Co retains a commanding share of the market.

Network provider	Residential lots	Other lots	Total lots
OptiComm	224,001	23,746	247,747
Uniti*	113,098	5,233	118,331
NBN Co (greenfield)	nr	nr	1,100,000
NBN Co (brownfield)	nr	nr	9,900,000

Table 1	Indicative greenfield	lots passed and	d planned by m	ajor networks, June 2020
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Notes: Data varies by reporting date and level of comprehensiveness and should be regarded as indicative only. *Uniti data is for LBN Co and OPENetworks. nr = not reported.

Source: For non-NBN networks - DITRDC's Telecommunications in New Developments dataset available on its website accessed June 2020. For NBN Co from Corporate Plan 2020-2023, Table 3, p. 49, excluding wireless and satellite.

Several State governments are also intending to roll out alternative high-speed networks using fixed line and fixed wireless technologies, primarily to serve low density rural and remote areas. These include the Queensland Capacity Network (QCN) Fibre and Gig State projects being developed by the Queensland and New South Wales governments, respectively. If these planned networks proceed they would compete with the NBN in some areas and also provide high-speed broadband services outside the NBN footprint.

Consumer trends

To assist in our review of market developments the ACCC has considered the Australian Communications and Media Authority's (ACMA) <u>Communications Report 2018-19</u>. The Communications Report provides an in depth and wide-ranging review of developments and consumer behaviours and trends. The review is relevant to the high-speed broadband market and this declaration inquiry, and includes comparisons that span the last four years.

Some of the most notable changes in relation to consumer preferences include:

- increased reliance on internet access. In the six months to June 2019, 89 per cent of Australian adults accessed the internet 74 per cent went online three or more times a day
- the volume of data downloaded across all markets increased dramatically, increasing fivefold from 2015 to 2019. Fixed broadband services accounted for 88 per cent of all data downloaded in Australia in 2019
- greater demand for higher download data rates the 50 Mbps broadband service is, increasingly, the most used tier on the NBN at 55 per cent of services. This is a notable shift from 2017 when the 50 Mbps rate accounted for only 4 per cent of services
- continued growth in demand for higher data rates accompanied by high download limits, driven by consumers' appetite for streaming services, as well as content and video-rich social media, gaming and other applications. Applications such as virtual and augmented reality, gaming and video are expected to drive a three-fold increase in traffic over the next five years.¹⁹

These drivers for fixed broadband growth indicate a strong need for affordable and reliable broadband services which allow for growing data usage. The COVID-19 pandemic and its impact on

¹⁹ Cisco, Cisco Virtual Networking Index: Forecast and Trends, 2017–2022 White Paper. Accessed October 2020 at: <u>https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-741490.html</u>.

home-based work, education and medical services, among other things, has further emphasised the importance of affordable and reliable high speed broadband services:

- using the last week of February 2020 as its pre-pandemic baseline, NBN Co has reported daytime peaks for downstream traffic that are 81 per cent higher than the baseline, and daytime upstream traffic peaks 107 per cent higher than the baseline²⁰
- at June 2020, 77 per cent of Australian adults used an app to communicate via messages, video or calls in the past six months up from 67 per cent with 72 per cent using broadband services for social networking and 42 per cent to work from home²¹
- demand for streaming services in Australia has also grown, in part due to other entertainment options being restricted or unavailable during the pandemic. It is estimated that there are now 37 million subscriptions across video, music and gaming as of June 2020, up 18 per cent from June 2019.²²

Even accounting for normal traffic growth since February 2020, it appears a step change in traffic levels is occurring with traffic unlikely to return to pre-pandemic levels. With many people transitioning to more flexible ways of working and obtaining education and medical services, it is likely that reliance on home based broadband services in the future will be greater than prior to COVID-19.

5G rollout

The allocation of the first 5G spectrum in the 3.6 gigahertz (GHz) band in December 2018 has enabled the mobile network operators (MNOs) to start rolling out 5G networks and offer 5G services in Australia.²³ As was the case with every new generation of mobile technology, 5G improves the quality of mobile services for consumers by providing faster speed and lower latency. Moreover, the technical capability of 5G means 5G mobile networks will increasingly become general purpose networks. This means the networks can be used to provide services to meet a variety of use cases which will enable the MNOs to expand their presence in other markets.

The market for home broadband services has traditionally been heavily reliant on fixed line networks. While the MNOs have been offering wireless broadband services for some time, these services are typically not able to provide the same speed, reliability and data allowances at comparable prices with those offered on fixed line networks. As such, broadband services provided over mobile networks have so far only been able to meet the home internet needs of a small proportion of consumers.

With 5G technology, the MNOs can now use their mobile networks to provide home broadband services that are comparable to those offered over fixed line, in terms of speed, data allowance and price. Optus was the first MNO to offer a 5G home broadband product with unlimited data and a speed guarantee. Telstra followed with its 5G home internet plans, on an initial invitation-only basis. TPG has similarly announced plans to launch a 5G home broadband product in the first half of 2021. While there has been much speculation about the implications of 5G for fixed-wireless substitution, these product offerings from the MNOs provide the first real indication that there are sufficient commercial incentives for MNOs to build a stronger presence in the home broadband market.

²⁰ For the week ending 16 October 2020: <u>https://www.nbnco.com.au/corporate-information/about-nbn-co/updates/dashboard-september-</u> 2020

²¹ Communications Day, 28 October 2020.

²² Telsyte, Subscription home entertainment sours in Australia, 17 August 2020. Accessed October 2020 at: <u>https://www.telsyte.com.au/announcements/2020/08/17/subscription-home-entertainment-soars-in-australia</u>

²³ Prior to the 3.6 GHz band allocation, Telstra and Optus had some existing holdings in the adjacent 3.4–3.5 GHz band, which is also being used to provide 5G services.

At this stage, the impact of 5G home broadband services is likely to be small due to the limited 5G footprint of the MNOs. This means only a small proportion of households currently have a real choice between using fixed line networks and 5G mobile networks for their home broadband services. As the MNOs continue to expand their 5G networks, and as more spectrum is allocated or re-farmed for 5G use over time,²⁴ the MNOs will be able to provide improved 5G home broadband services to more households. However, the benefits of 5G investment are unlikely to be the same for everyone, with those living in more densely populated areas likely to benefit more or sooner than those in in less populated areas where it is less commercially attractive to build competing infrastructure.

3.2. Legislative and regulatory changes

In 2014 an independent panel of experts released its report into the broadband services market and regulation (the Vertigan Review),²⁵ outlining its findings following a cost-benefit analysis and review of the regulatory arrangements for the NBN.

On 11 December 2014 in response to that report, the Government released its 'Telecommunications Regulatory and Structural Reform' paper, in which the Government proposed a number of reforms (known as the 'level playing field' reforms) to provisions in Parts 7 and 8 of the Telecommunications Act. Those parts of the Act had mandated that owners of superfast broadband services provide, by law, a wholesale Layer 2 bitstream service, and also required owners of superfast broadband networks to operate on a wholesale-only basis (unless exempted).

In 2020 the Government passed the *Telecommunications Legislation Amendment (Competition and Consumer) Act 2020* (TLA Act), which received Royal Assent on 25 May 2020. The TLA Act gives effect to the Government's reform proposals.

The TLA Act gives superfast network operators the option of operating on a functionally separated basis, including under a deemed functional separation undertaking. It also allows the ACCC to make class exemptions from the separation requirements. The TLA Act removes lines serving small business customers from the separation requirements.

The TLA Act also repealed Part 7 of the Telecommunications Act, thereby removing the provisions requiring superfast network operators to supply a Layer 2 bitstream service. The repeal of Part 7 took effect on 26 May 2020. However, the requirement to provide wholesale access to a Layer 2 bitstream service is still covered by the LBAS and SBAS declarations made by the ACCC.

The Government has also enacted its Statutory Infrastructure Provider (SIP) legislation to ensure that all premises are able to access superfast broadband services. The legislation requires NBN Co to:

- connect premises to a fixed line network
- provide wholesale services of normally 25/5 Mbps or more to Retail Service Providers (RSPs) on request.

Under the SIP legislation, the Minister for Communications, Cyber Safety and the Arts has the power to designate non-NBN networks as having SIP obligations where appropriate - for example, where a network has already been built in a new housing development. In these circumstances, the provider must connect all premises and supply wholesale broadband services to RSPs. The SIP obligations came into effect from 1 July 2020, and the Minister has announced that 17 operators have been designated as SIPs.²⁶

²⁴ The first millimetre wave (mmWave) spectrum to be allocated in Australia, the 26 GHz band, is scheduled for auction in April 2021.

²⁵ DITRDC, NBN Market and Regulation Report, October 2014. Accessed November 2020 at: <u>https://www.communications.gov.au/departmental-news/nbn-market-and-regulation-report.</u>

²⁶ DITRDC, 17 new Statutory Infrastructure Providers for broadband announced, August 2020. Accessed November 2020 at: <u>https://www.communications.gov.au/departmental-news/17-new-statutory-infrastructure-providers-broadband-announced</u>.

4. Should superfast broadband services continue to be declared?

The ACCC's draft decision is that declaration of broadband access services supplied over fixed line superfast networks that hold monopoly pricing power remains in the LTIE.

Competition at the wholesale level for superfast broadband services is unlikely to be effective in most areas of Australia in the foreseeable future. Economic and technical barriers to entry generally prevent multiple fixed network providers from operating in the same service area and competing at a wholesale level. Generally, there is insufficient customer demand to sustain more than one network. In many regional and rural areas, delivery of broadband services by one network operator is often not commercially viable, as demonstrated by the need for a Regional Broadband Scheme (RBS).²⁷ In urban areas it can be commercially viable for multiple superfast broadband networks to co-exist, however this is generally the exception rather than the norm. Where there are localised monopolies the opportunity for the network provider to extract monopoly rents from end-users will be present.

In the period since the ACCC's 2012 LBAS declaration and the 2016 SBAS declaration, superfast broadband services have become more highly valued and sought after by end-users, as shown by high penetration of broadband services and very strong growth in broadband data discussed in chapter 3. The ACCC remains of the view that RSPs will need to be able to acquire superfast wholesale broadband services at reasonable prices in order to effectively compete in these markets.

The ACCC therefore considers that extending declaration of superfast broadband access services would be in the LTIE because it:

- is required to align wholesale prices with the efficient cost of the service, to promote competition in the downstream retail market for superfast broadband services
- will promote the efficient use of, and investment in, infrastructure, as in the absence of declaration, network operators have incentives to set prices above efficient costs.

Consistent with the current SBAS declaration, the ACCC does not consider declaration will promote the LTIE where there are a number of different networks supplying superfast broadband services 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 declaration.

The ACCC's reasoning for this draft decision is provided below.

4.1. Relevant markets including substitutes

The CCA requires the ACCC to consider whether declaring a service is likely to promote competition in markets for listed services.²⁸ This involves identifying the markets in which the eligible service is supplied and in which declaration is likely to promote competition. To define the market, the ACCC considers the service in question and any substitutes for that service. The ACCC is not required to define the scope of relevant markets precisely for the purpose of a declaration inquiry. It is sufficient to broadly identify the scope of the markets likely to be affected by the declared service.²⁹

²⁷ The Government enacted the RBS to fund the loss-making components of the NBN (i.e. fixed wireless and satellite services) through a levy on fixed line infrastructure providers. Under the Scheme, carriers will be required to pay \$7.10 per month for each premises on their network with an active high speed superfast broadband service provided over a local access line.

²⁸ Subsection 152AB(2) of the CCA.

²⁹ ACCC, A guideline to the declaration provisions for telecommunications services under Part XIC of the Competition and Consumer Act 2010, August 2016, p. 33.

In previous declaration decisions, the ACCC considered the relevant markets for the purpose of the SBAS and LBAS declarations were the wholesale and retail markets for superfast broadband services – that is fixed line broadband services providing data download rates of normally 25 Mbps or more with (specifically to the SBAS) monthly download limits of at least 50 Gigabytes (Gb).³⁰

The ACCC also considered that alternative technologies including mobile broadband, ADSL, satellite and fixed wireless were weak substitutes for fixed line superfast broadband services and were not a competitive constraint on fixed line providers. This was primarily due to the relatively higher prices for large data downloads on these alternative technologies.

Wholesale markets for superfast broadband services

Stakeholders providing submissions to this inquiry had varying views on the appropriate market definition and possible substitute services, particularly whether the currently declared services are still relevant. While not all stakeholders addressed whether the market should be defined on a national basis, those that did agreed a nation-wide definition should continue to be used.³¹

While some supported the maintenance of current service descriptions³² in the declarations there were also contrasting views provided on whether the declared services should be narrowed or broadened.

Southern Phone submitted that SBAS/LBAS access seekers should be able to obtain services at multiple speed tiers beyond the 25 Mbps level currently regulated. This view has regard for NBN's most popular speed now being the 50 Mbps tier and SBAS/LBAS networks being able to provide significantly faster speeds than the current speed specified in the SBAS/LBAS declarations.³³

NBN Co submitted that the threshold for identifying superfast networks should be 12 Mbps, rather than 25 Mbps.³⁴ It suggested alternative access technologies, including fixed wireless, and networks that exclusively serve business customers should also be included in the declaration to ensure symmetrical and technology neutral regulation.³⁵ NBN Co also submitted that to promote a 'level playing field', declaration should apply regardless of whether or not it has overbuilt a superfast broadband access network in a particular area.³⁶

Gary McLaren suggested the relevant market should be defined using a set of competition criteria so that only monopoly areas are regulated, primarily where the NBN has not been rolled out. Mr McLaren submitted that overbuilding of existing networks is a key indicator of where a monopoly no longer exists. Mr McLaren also submitted that areas where continued declaration may be warranted include some greenfield areas and Telstra's South Brisbane FTTP network.³⁷

ACCC view

The ACCC considers that the relevant markets are the retail and wholesale markets for all broadband services supplied over fixed-line superfast broadband networks.

The ACCC recognises that a fixed line 25 Mbps broadband service is the minimum *superfast* broadband service consistent with both <u>government policy</u> and NBN Co's <u>statement of expectations</u>

³⁰ The ACCC considered that a fixed line 25 Mbps broadband service is the basic entry-level superfast broadband service as it was the most used speed tier on the NBN at the time of the 2016 decision, comprising 56 per cent of total services.

³¹ See for example, NBN Co submission (p. 8), TPG submission (p. 7) and ACCAN submission (p. 15).

³² TPG, Submission to the SBAS & LBAS declaration discussion paper, public version, September 2020, p. 8 (TPG submission).

³³ Southern phone, Submission to the SBAS & LBAS declaration discussion paper, public version, September 2020, pp. 2-3 (Southern Phone submission).

³⁴ NBN Co submission, p. 8.

 $^{^{\}rm 35}$ NBN Co submission, pp. 8-9.

³⁶ NBN Co submission, pp. 4-5.

³⁷ Gary McLaren submission, p. 14.

on the minimum reference standards to ensure that all people in Australia have access to high speed broadband network infrastructure.

The ACCC's <u>wholesale market indicators report</u> shows increasing take-up of 50 Mbps and higher speed services, with 5 million 50 Mbps and higher speed services currently in operation. The 50/20 Mbps tier NBN plans are now overwhelmingly the most popular.³⁸ Consumer internet usage has also increased, with bandwidth demand for fixed line broadband in households predicted to increase from 24 Mbps in 2018 to 56 Mbps in 2028, and average monthly downloads to increase from 199GB to 767GB during this period.³⁹

As data consumption continues to increase, consumer appetite for higher data rates, accompanied by relatively high download limits, is also anticipated to increase. Therefore, access to a superfast broadband service at this level is, and will increasingly be, essential for wholesale access seekers to compete effectively in retail markets.

The ACCC's draft decision is to adopt an open-ended service description for the SBAS/LBAS declaration which encompasses entry level offerings at lower speed tiers (e.g. below 25 Mbps) as well as higher speed tier services. Only broadband access services that are provided over a superfast fixed line network (e.g. offered over FTTP, FTTN, FTTC or HFC) are proposed for declaration. However, there is no minimum or maximum speeds nominated in this draft decision on declaration which would limit the range of services that an access seeker could request from an access provider.

The ACCC has previously expressed concerns about the continued availability and affordability of entry-level broadband services for people transitioning from legacy networks, as discussed in our recent public inquiry into NBN access pricing.⁴⁰ These concerns stemmed from the market's progressive withdrawal of basic speed retail plans and the shift to higher priced plans, leaving consumers at risk of being left on plans that do not reasonably meet their needs due to affordability and/or the preference for a basic entry-level plan.⁴¹ While the benefits of lower speed broadband services are expected to decline over time as bandwidth needs increase, a significant number of end-users will continue to value having access to an entry-level low speed plan.

An open-ended service description for the SBAS/LBAS declaration will enable RSPs to access the declared service to meet all end-user demand for broadband within the footprint of the declared service, and allow RSPs to fall back on regulated access terms where the products and pricing that the access provider is willing to supply are not in the LTIE. Over time, this should also lead to greater use of and investment in infrastructure as the needs of these customers change and they take up higher speed services. The ACCC recognises that there are likely to be a range of views on an appropriate lower speed tier for a suitable entry-level wholesale access product, especially over a longer timeframe as consumer bandwidth needs continue to grow. We will give further consideration to this issue in our final decision on the SBAS/LBAS declaration having regard to submissions to this draft decision.

Geographic dimension

Non-NBN superfast broadband networks are usually available in discrete areas – a particular building that has been enabled for FTTB or a new housing development where FTTP has been deployed. However, the ACCC notes that as a general rule both RSPs and access providers tend to

³⁸ Take-up of the NBN Co 50/20 Mbps data rate tier has increased from 17 per cent of total services in 2017 to 55 per cent in 2019. Source: ACCC, Telecommunications Report 2018-19, p. 18.

³⁹ DITRDC, Demand for fixed line broadband in Australia 2018-2028 – working paper, July 2020, p. 9.

⁴⁰ ACCC, Inquiry into NBN access pricing, November 2020.

⁴¹ This appears to be well progressed on at least some alternative fibre networks, with entry-level pricing on Uniti networks more expensive than on the NBN. For example, Exetel prices for the 25/5 Mbps service on Uniti networks are currently priced at \$79/month, compared to \$69/month on the NBN.

price their services on a national basis rather than according to a particular local or regional geographic market.

The ACCC considers it appropriate to adopt a national market definition for the retail and wholesale supply of superfast broadband services, given the predominantly national pricing policies of service providers and in support of administrative simplicity regarding application of the declaration and related FAD. The ACCC recognises that there may be areas in which local competition is present and RSPs operating on a national basis respond by pricing at the local level.

Retail markets for superfast broadband services

There were a variety of views expressed by stakeholders regarding the substitutability of services at the retail level particularly regarding fixed wireless technologies and the SIP requirements.

NBN Co submitted that in declaring the superfast broadband services, wireless broadband services such as fixed wireless and mobile (5G) should also be included. NBN Co noted announcements made by Telstra and Optus regarding their intention to roll out networks competing with the NBN using these technologies and it considered the exclusion of these technologies from declaration to be a regulatory gap.⁴²

ACCAN submitted that the service description for the SBAS and the LBAS should be updated in-line with the SIP requirements, so that where a wholesale network provider is a SIP for an area it should be subject to the declaration regardless of the technology type it uses to provide a broadband service.⁴³ ACCAN argued that while wireless technologies can be considered substitutable for some users (predominately low usage users), wireless technologies will not be substitutable for many users who require greater speeds or data allowances.⁴⁴ ACCAN further contended that while 5G could be considered a substitute for a fixed line service, 5G is currently only available in limited geographic areas.⁴⁵

Gary McLaren submitted that wireless technology is not expected to efficiently service the majority of end users because of spectrum constraints and costs of more densely deployed cell sites. Mr McLaren commented that 5G services are likely to have a significant market share in the future, but considered that satellite and mobile services will not be direct substitutes for fixed line broadband services.⁴⁶

TPG also considered that wireless broadband services are not wholly substitutable for fixed line services.⁴⁷

ACCC view

Superfast broadband services provided over fixed lines can be delivered over a number of technologies, for example HFC, FTTP, Fibre-to-the-node (FTTN), Fibre-to-the-curb (FTTC) and FTTB. From a functional and a consumer perspective, the services supplied over these different technologies are generally capable of supporting similar downstream applications and most are

⁴² NBN Co submission, pp. 6-7.

⁴³ ACCAN submission, pp. 4-5.

⁴⁴ ACCAN submission, pp. 10-11.

⁴⁵ ACCAN submission, p. 11.

⁴⁶ Gary McLaren submission, p. 13.

⁴⁷ TPG submission, p. 6.

likely to be effective substitutes from an end-user perspective, with some possible exceptions where very high data rates are required.

The following considers whether other technologies including ADSL, mobile broadband, fixed wireless and satellite would as potential substitutes for superfast broadband services constrain providers of these services from increasing prices or not maintaining or improving service levels.

ADSL

The ACCC does not consider ADSL and ADSL2+ broadband to be a substitute for fixed-line superfast broadband services.

The ADSL network has declined significantly in relevance over the last five years due to the NBN rollout. Within the NBN fixed line rollout area, end-users must migrate to the NBN or another high speed network as the legacy ADSL services are progressively being disconnected and decommissioned.

Wireless broadband

Wireless broadband services, delivered over mobile and fixed wireless networks, are becoming a substitute for fixed line broadband services due to their increasing speeds and data allowances. However, wireless broadband services are currently substitutes in only a limited number of areas and scenarios. The extent to which wireless broadband services can be regarded as an effective substitute depends on geographic coverage, usage needs and income.

Low usage users particularly those on lower incomes may find mobile broadband an affordable substitute; mobile networks could offer a less expensive alternative to NBN's entry level products. However, this is not an option for families or individuals who require more consistent speeds or higher data volumes than are typically available from mobile services at present. As discussed in chapter 3, the need for non-limiting data allowances and reliable download and upload speeds is increasing.

Trends in data usage suggest that end-users are currently not substituting their fixed line service in favour of a mobile broadband connection. Fixed line broadband connections continue to grow and account for an increasing share of download volumes.

From June 2019 to June 2020, the number of fixed line subscribers (over NBN and non-NBN networks) increased by 15 per cent.⁴⁸ In 2020, NBN take-up rates continued to remain high, with around 75 per cent of customers connected to the NBN owning an active NBN service.⁴⁹ Data from the ACMA shows that the proportion of Australians who were 'mobile only' for internet declined from 23 per cent in 2014 to 16 per cent in 2019.⁵⁰ These trends suggest that the majority of Australians are presently using a mobile broadband service as a complement to a fixed line broadband service, rather than as a substitute. This is further demonstrated by the levels of data downloaded by mobile devices compared to fixed line connections. Consumers appear to strongly prefer fixed broadband over mobile networks when downloading bandwidth intensive content such as video. Data downloaded by fixed line broadband accounted for 90 per cent of total internet downloads for the quarter ending 30 June 2020.⁵¹

In terms of service characteristics, 5G mobile broadband can become a substitute for fixed line broadband services where 5G services are offered and as more unlimited data plans become available. 5G 'fixed' mobile services are in some areas becoming increasingly attractive to

⁴⁸ ACCC, Internet Activity Report & NBN Wholesale Market Indicators Report, June 2020.

⁴⁹ Mr Andrew Madsen, Assistant Secretary, Broadband Implementation, Department of Communications and the Arts, *Proof Committee Hansard*, 30 January 2020, p. 30.

⁵⁰ ACMA, Mobile-only Australia: living without a fixed line at home, October 2019.

⁵¹ ACCC, Internet Activity Report, June 2020.

consumers as an alternative to fixed line services. For example, Optus offers two unlimited '5G Home Internet' plans, one for \$75 a month with a maximum speed of 100 Mbps, and the other for \$90 a month with an uncapped speed. This service is price competitive with comparable NBN plans.⁵² However, 5G is currently available in a limited geographic footprint. In the short to medium term, it is unlikely that 5G will be ubiquitous and offer a universal substitute for fixed line broadband services across Australia.⁵³

Given the constraints on 5G network availability and the presence of high data usage households, the ACCC does not believe that the MNOs' 5G broadband services will at this stage be targeted at all households. For example, Telstra has stated that it will initially offer 5G broadband on an invitation-only basis.⁵⁴ Optus is currently taking a more expansive approach but is still selective about migrating customers to its network. This is likely to be due to the average fixed line broadband customer using significantly more data than the average mobile customer.⁵⁵ MNOs need to manage the balance of fixed and mobile customers on their networks without exceeding capacity constraints that degrade performance.

In addition, MNOs appear to be focussing on customers who are attracted to the higher speeds available through 5G (particularly in areas where NBN Co has deployed FTTN) but are lower users of data. The typical target customer for this product will likely be those on lower speed fixed line plans.⁵⁶ While 5G has the potential to be a substitute for fixed line networks for many end-users, it is currently uncertain whether 5G could be considered a real alternative to most households and a genuine competitive constraint on fixed networks in those areas where 5G is available.

As discussed above and in chapter 3, at this stage the impact of 5G as a substitute for fixed line broadband services is likely to be small due to the limited 5G footprint and because only a small proportion of households currently have the choice of 5G or a fixed line service. As the MNOs expand their 5G networks, and as more spectrum is allocated for 5G use over time, the MNOs will be able to provide improved 5G home broadband services to more households. However, it is premature to form a view at this stage on the extent to which competition between fixed line and 5G networks will emerge and the implications for economic regulation.

The ACCC also notes that NBN Co's corporate plan assumes a level of wireless-only households (over mobile and fixed wireless networks) of around 15 to 20 per cent, ⁵⁷ an estimate that has remained relatively stable over the last five years. While it has been forecast that the mobile share of total connections may reach between 20 to 30 per cent in 2023,⁵⁸ and the rollout of 5G is likely to result in users of mobile services progressively upgrading to 5G, the availability of 5G may not of itself lead to a significant expansion of wireless-only households over coming years in the absence of strong price, data allowance and equipment inducements to end-users.

Whilst fixed wireless plans now offer unlimited data at a competitive price, the ability of fixed wireless to offer an alternative to fixed line broadband is also limited by its geographic footprint. Adoption of these services appears to be limited and they are generally only available in discrete metro areas where multiple network owners (including NBN Co) co-exist. The ACCC considers that

⁵² Source: Optus website. These plans are available for those consumers residing within Optus' 5G coverage footprint which is currently limited.

⁵³ For 5G to be used to provide a comprehensive alternative to NBN, the operator would be required to deploy a huge array of small cells and acquire sufficient spectrum capacity, which is likely to be unsustainable unless the operator were capable of capturing a large revenue base of end-users.

⁵⁴ Telstra website. Accessed 25 October 2020 at: <u>https://exchange.telstra.com.au/fast-speeds-at-home-with-telstra-nbn-and-5g/</u>.

⁵⁵ The average data consumed per user on the NBN is between 250 and 300GB a month, far greater than the 16 to 20GB a month of data consumed per user over mobile networks.

⁵⁶ Venture Insights, Australian Household 5G Fixed Wireless Substitution Forecast, October 2020, pp. 5-6.

⁵⁷ Mr Luke van Hooft, Director, Economic Regulation, Optus, *Proof Committee Hansard*, 30 January 2020, p. 15. This estimate is consistent with NBN Co's take-up rate projections from its 2020-23 corporate plan (p. 50).

⁵⁸ Gary McLaren, Submission to Discussion Paper, September 2020, p. 13. Alternatively, Venture Insights forecasts wireless households to reach around 18 percent by June 2023. Source: Venture Insights, *Australian Household 5G Fixed Wireless Substitution Forecast*, October 2020.

while fixed wireless services are potentially substitutable for a fixed line superfast broadband service, fixed wireless networks would generally not have monopoly pricing power in a given location due to the presence of the NBN, which will continue to be subject to regulation, or a competing superfast network.

Satellite

The ACCC does not consider satellite broadband services to be a substitute for fixed line superfast broadband services. Satellite broadband services are currently available on a limited geographic basis and generally do not compete directly with superfast fixed network broadband services. Most satellite services are currently provided over NBN Co's Sky Muster,⁵⁹ the availability of which remains limited to eligible regional customers outside of the NBN fixed line and fixed wireless zones.

In its Discussion Paper for this inquiry, the ACCC acknowledged the development of Low Earth Orbit Satellite Broadband (LEOSB) networks, for example OneWeb and SpaceX's Starlink, both of which are currently being deployed and promoted as offering download speeds between 50-150 Mbps.⁶⁰ The ACCC does not consider these services to be substitutable for a superfast broadband fixed line service, at least in the short to medium term, due to uncertainty about when these services will be available and the expected high cost to end-users. For example, SpaceX currently charges around US\$99 (A\$138.75) per month for its satellite service, with installation costs of US\$499 (A\$699).⁶¹ Starlink, the most progressed LEOSB network, is not anticipated to begin offering broadband services until 2021-22. These networks are still in development and require regulatory approval to operate in Australia,⁶² as well as further investment in satellite ground stations and offices to supply, install and bill for services.⁶³ While LEOSB services have the potential to be both a complement to, and competitor with, existing superfast broadband services in different circumstances (the latter particularly in under-served regional areas), the ACCC considers they are yet to be established as real potential substitutes for fixed line superfast broadband services.

The ACCC realises the rapid pace of development in the superfast broadband market, and the degree to which end-users may substitute their fixed line service for alternative technologies may change as further investment occurs in wireless and satellite technologies and additional spectrum is released. The ACCC has considered these impacts in setting a declaration term as discussed in chapter 5.

As discussed above, ACCAN submitted that in some instances the recently introduced SIP legislation may allow for premises to be connected by a satellite or fixed wireless network. ACCAN further noted that the SIP in such a service area will likely be the monopoly provider of broadband services and create a bottleneck for the downstream market.⁶⁴ We note that the SIP obligations require these networks to operate on an open access and non-discriminatory basis, which prohibits their ability to reasonably deny access. As of November 2020, there are no third-party fixed wireless or satellite networks designated as a SIP, and the ACCC understands that most existing networks operate in areas where regulated NBN services are available.

Though not our present intention, the ACCC would consider broadening the SBAS/LBAS declaration to include services provided over a superfast wireless or satellite network to a fixed location if a compelling case could be made that the operators of such networks have strong market power so as to set monopoly prices. For example, evidence of areas where a provider has a monopoly in the supply of a satellite or fixed wireless service and an NBN service is not available.

⁵⁹ A discrete number of end-users **[c-i-c]** across regional Australia are additionally serviced by Telstra's Iridium satellite network. ⁶⁰ Results from Starlink's 'Better than nothing' beta test. Source: Communications Day, 29 October 2020.

Nesults nom stammers better than nothing beta test. Source, Communications Day, 29 October 2020.

⁶¹ Analysys Mason, <u>The Starlink LEO satellite network will significantly change fixed broadband services worldwide</u>, September 2020.

⁶² Starlink is currently the only LEOSB network which has received ACMA approval to offer internet in Australia, which it received in August 2020.

⁶³ The ACCC notes that Vocus has recently announced its intention to resell LEOSB services. Source: Communications Day, 29 October 2020.

⁶⁴ ACCAN submission, p. 5.

The ACCC does not intend to include mobile networks within the scope of the declaration, on the basis that these services are already exhibiting strong competition between multiple network providers.

We will give further consideration to the need for regulation of non-NBN satellite or fixed wireless networks under the SBAS/LBAS declaration in our final decision on the declaration having regard to submissions to this draft decision.

4.2. State of competition in relevant markets

The following sets out the ACCC's assessment of the effectiveness of competition in the relevant markets. When assessing the effectiveness of competition, the ACCC considers current conditions and behaviour. It also considers features likely to affect the competitive supply of services in the future, which include the potential for sustainable competition to emerge and the extent to which the threat of entry (or expansion of existing suppliers) constrains pricing and output decisions of incumbents.

Wholesale market for superfast broadband services

Stakeholders provided mixed views about the current state of competition in the wholesale market for superfast broadband services. ACCAN observed that while there are instances where infrastructure competition is present, in most areas fixed line superfast networks are likely to remain a natural monopoly as there is not enough customer spending to sustain multiple network operators in a single location.⁶⁵ Vocus similarly noted that in most areas where these services are supplied, there is limited, if any infrastructure competition.⁶⁶ Southern Phone submitted that the new TIND policy observes that in many greenfield areas there will only be one provider (which may not be NBN Co), and this underscores the need for an effective means to ensure that retailers can access non-NBN networks on reasonable terms.⁶⁷

In contrast, TPG submitted that NBN Co provides effective and extensive competition to non-NBN wholesale networks currently covered by the LBAS and SBAS declarations.⁶⁸ Gary McLaren also submitted that the ACCC should change its position that superfast broadband networks are, irrespective of geographic footprint, natural monopolies.⁶⁹ He contended that the rollout of the NBN into markets covered by private operators highlight that these geographic areas are no longer natural monopolies.⁷⁰ However, Mr McLaren acknowledged that regulation of certain networks where infrastructure competition does not exist may be warranted.⁷¹

ACCC view

Effective wholesale competition can occur in areas where there is more than one network operator offering superfast broadband services, allowing RSPs to choose which network operator to purchase wholesale services from. However, as discussed in chapter 4, competition at the wholesale level is unlikely to be effective in most areas of Australia in the foreseeable future. Economic and technical barriers to entry generally prevent multiple network providers from operating in the same service area and competing at a wholesale level. Where there are localised monopolies the opportunity for the network provider to extract monopoly rents from end-users will be present.

⁶⁵ ACCAN submission, pp. 8-9.

⁶⁶ Vocus submission, p. 2.

⁶⁷ Southern Phone submission, p. 4.

⁶⁸ TPG submission, p. 4.

⁶⁹ Gary McLaren submission, p. 9.

⁷⁰ For example, Canberra, Geelong, Ballarat, Mildura and FTTB apartments provided by TPG.

⁷¹ Gary McLaren submission, pp. 9-10.

Greater wholesale competition may develop in the future with the recent amendments to the Telecommunications Act which allow superfast fixed line broadband networks to operate on a functionally separated basis, subject to ACCC approval, as opposed to on a strictly wholesale-only basis. Additionally, small network operators can elect to be bound by the class exemption⁷² made pursuant to subsections 143A(1) and (2) of the Telecommunications Act, which exempts them from the requirement to operate on a wholesale-only basis. These regulatory changes are intended to encourage new network operators to enter the market, and create more competition at the wholesale and retail level. However, the ACCC considers it too early to form a view on the likely extent of new entry and potential competitive constraint on incumbent network operators. In areas with high costs and low density of end-users there is a heightened risk that competition will not develop at all in the future.

The ACCC is aware of some instances where NBN Co has improved network competition in superfast broadband markets. For example, NBN Co overbuilt TPG's VDSL2 network in Canberra and a significant proportion **[c-i-c]** of TPG's FTTB network in metro areas.⁷³ In greenfield developments, the ACCC understands that NBN Co has overbuilt some private FTTP networks with its own FTTP infrastructure.⁷⁴

As discussed in chapter 3, the Government recently amended its TIND policy to remove the protections precluding NBN Co from overbuilding non-NBN networks supplying residential premises without seeking approval from its Shareholder Ministers. The ACCC is unable to currently form a view on the extent to which this policy change will result in NBN Co overbuilding non-NBN networks. In residential areas in particular, there is generally not enough customer demand to maintain two rival networks. The ACCC considers that in the short to medium term, the threat of entry by NBN Co to incumbent network operators is likely to be low.

Where there is a larger pool of customers, for instance in higher density areas such as CBDs, multiple network operators co-exist. Where RSPs have a choice of wholesale networks including the NBN, this is likely to serve as a competitive constraint on network operators extracting monopoly rents from RSPs and end-users. In such cases superfast broadband services are not likely to be bottleneck services.

The ACCC has reviewed the information currently available to it from its <u>Audit of the Infrastructure</u> <u>Record Keeping Rule</u> (Infrastructure RKR) and, consistent with its 2016 decision on SBAS declaration, considers the supply of wholesale superfast broadband services to business customers, public bodies or charity customers operating in Central Business District (CBD) areas of capital cities to be effectively competitive. In this regard, there is evidence of competing superfast broadband network infrastructure in these areas. This reflects the high customer density of these areas as well as the high-revenue products and data volumes being supported by customers in these areas. However, in areas serving both business and residential customers, typically in medium-low density areas, the limited presence of competing networks suggests that infrastructure competition is not generally occurring and natural monopoly characteristics are more likely to exist.

On balance, the ACCC's view is that it remains appropriate to exempt from the SBAS service description, services that use access multiplexers that exclusively service business, public body and charity customers in CBD areas of the major capital cities. The ACCC has formed this view after reviewing the geographic location of fibre networks based on the information it collects in its Infrastructure RKR⁷⁵ and considering the submissions to this declaration inquiry. The ACCC considers that there is sufficient competition in the supply of superfast broadband services to these

⁷² Telecommunications (Superfast Broadband Network Class Exemption) Determination 2020 available at: <u>https://www.legislation.gov.au/Details/F2020L01061</u>.

⁷³ Gary McLaren submission, pp. 5-7.

⁷⁴ The ACCC notes networks operated by OPENetworks in <u>Gold Coast, Sydney and Melbourne</u> as examples.

⁷⁵ The Infrastructure RKR and the providers required to provide information (see Schedule 1) is available at: <u>Infrastructure RKR</u>. While the Infrastructure RKR does not cover all the fibre providers, it captures those with significant networks and provides indicative information about where there is infrastructure competition.

classes of end-users in CBD areas of major capital cities areas and that declaration of services in these areas is not in the LTIE.

Retail market for superfast broadband services

The ACCC received two submissions on the current state of competition in the retail market for superfast broadband services.

ACCAN submitted that the current state of competition and RSP choice on non-NBN networks is considerably weaker than on the NBN.⁷⁶ It observes that reviews and commentary available online appear to show that many consumers are frustrated by the lack of choice and being forced to choose smaller less-known RSPs.⁷⁷ ACCAN noted that the willingness of RSPs to provide services over multiple wholesale LBAS/SBAS networks may be restricted by barriers to entry. ACCAN referred to barriers such as limited revenue due to the size and density of the market, increased costs associated with multiple network interconnection, and inconsistent service characteristics.⁷⁸ However, ACCAN still considered the level of competition attained at the retail level to have materially increased as a result of the declaration of the LBAS and SBAS.⁷⁹

The ACCC received an anonymous submission that identified Telstra's Velocity networks as an example of a market with a lack of retail competition. The submission noted that in many Telstra Velocity Estates there is no choice of retail provider.⁸⁰ ACCAN similarly observed the absence of retail competition on these networks.⁸¹

ACCC view

The retail market for superfast broadband services in Australia continues to be concentrated despite the rollout of the NBN, with around 84 percent of connections on the NBN currently shared between three RSPs.⁸²

However, the ACCC considers that the NBN footprint for fixed broadband provides a geographic area where competitive entry at the retail level is open and subject to regulatory safeguards. As of August 2020, there were 180 RSPs providing NBN services to residential consumers.⁸³ It should be noted that most of these retailers do not service the whole of Australia, and some provide only fixed wireless and satellite services. Notwithstanding this, the majority of consumers accessing the NBN have a large choice of retail providers compared to non-NBN networks. Other things being equal, this is expected to result in RSPs competing on price and non-price terms more vigorously on the NBN compared to non-NBN networks.

Although the NBN covers most of Australia's population, as identified in the Discussion Paper for this inquiry,⁸⁴ there are several hundred thousand customers that are served by non-NBN networks.

On alternative networks, there is significantly less choice of RSPs for consumers. Most current RSPs offering NBN based services do not provide non-NBN services for a variety of reasons. For example, where the service characteristics of a non-NBN product differ significantly from the

⁸¹ ACCAN submission, p. 10.

⁷⁶ ACCAN submission, pp. 9-10. ACCAN considered that the NBN footprint for fixed broadband provides a geographic area where competition at the retail level can be considered effective

⁷⁷ ACCAN submission, pp. 9-10.

⁷⁸ ACCAN submission, pp. 9-10.

⁷⁹ ACCAN submission, p. 14.

⁸⁰ Anonymous submission, p. 2.

⁸² The NBN Wholesale Market Indicators Report for June 2020 records that 84.02 percent of services are operated by the largest three providers, with Telstra maintaining a 46.4 percent market share. Even where such services are resold by other retailers, the provider is responsible for provisioning such that the quality of the service is at least in part controlled by the provider.

⁸³ NBN Co, List of phone and internet providers. Accessed 12 October 2020 at: <u>https://www.nbnco.com.au/residential/service-providers</u>.

⁸⁴ ACCC, SBAS & LBAS declarations inquiry 2020 – Discussion Paper, July 2020, p. 19.

characteristics of services an RSP is already purchasing from NBN Co, it may not be attractive for the RSP to retail the non-NBN product from a marketing perspective. Furthermore, the smaller market size of non-NBN networks may limit potential revenue to the point where it is not commercially attractive to enter local retail markets given the costs to establish a market presence and operate a service.

Telstra's South Brisbane and Velocity networks provide an example of where there is an absence of strong retail competition. The ACCC is aware of only three RSPs actively offering services on these networks: Telstra retail, Vocus and Exetel, though Exetel has confirmed its plans to cease its resale of services on Telstra's Velocity networks.⁸⁵ Telstra Retail maintains a very high market share of **[c-i-c]** customers on these networks and its pricing is not attractive to end-users compared to the NBN, particularly for low data users.⁸⁶

Other networks, such as those operated by LBN Co⁸⁷ and OptiComm, have benefitted from steady increases in the number of RSPs offering services since the LBAS was declared in 2012. As of August 2020, around 30 retail providers offer broadband services over each of these networks. However, most of these are small or local RSPs and not all RSPs offer services in all areas. Larger retailers like Telstra, Optus and TPG generally do not supply fixed line services to residential customers on non-NBN networks.⁸⁸ As noted by ACCAN in its submission, reviews and commentary available online appear to show that consumers on non-NBN networks continue to be dissatisfied with the lack of choice (particularly not being able to access the range of offers available in the broader market such as bundled plans, content add-ons, and range of download and upload speeds which consumers on the NBN can access) and being limited to smaller less-known RSPs.⁸⁹

Therefore, whilst the SBAS and LBAS declarations have played a role in encouraging competition in the retail market for superfast broadband services, the ACCC considers there is still progress to be made in ensuring end-users of non-NBN networks are able to receive services at prices comparable with or better than those available on the NBN.

4.3. Promoting competition

In determining whether declaration of the SBAS will promote the LTIE, the ACCC must have regard to the extent to which declaration is likely to promote competition in the relevant markets. As part of its assessment, the ACCC has considered the likely future state of competition in the relevant markets with and without declaration. The ACCC has also had regard to the extent to which declaration will remove obstacles to end-users gaining access to listed services.⁹⁰

Submissions

NBN Co submitted that regulated access to the non-NBN superfast broadband networks should increase the number of RSPs that are able to supply end-user premises; thereby increasing the level of retail competition.⁹¹

ACCAN submitted that the barriers to entry that led the ACCC to declare SBAS in 2016 still exist, that is, network operators continue to have the incentive and opportunity to seek monopoly rents

⁸⁵ Source: Comms Day, 11 November 2020.

⁸⁶ The cheapest internet plan available on Telstra's South Brisbane network is \$75/month, with 500 GB included and speeds of 30/1 Mbps. Exetel's lowest offering is \$90.99/month. Meanwhile, on the NBN, plans as low as \$50/month are commonly available for users with low data requirements.

⁸⁷ LBN Co is a subsidiary of Uniti.

⁸⁸ Though TPG's iiNet and Vocus' iPrimus subsidiaries offer retail services on some non-NBN networks.

⁸⁹ ACCAN, submission to Discussion Paper, p. 10. See also the case studies in Appendix 1 of ACCAN's submission.

⁹⁰ Section 152AB(4) of the CCA

⁹¹ NBN submission, pp. 3-4.

from access seekers and by extension end-users. Thus, ACCAN considered that the continuation of the declarations will promote competition and protect the LTIE.⁹²

Southern Phone and Vocus also submitted that continued declaration will promote competition on non-NBN networks. Southern Phone considered that the declarations are important in allowing it and other retailers to provide high speed broadband services to customers on competitive terms and allow them to expand their customer base and footprint.⁹³ This view was supported by Vocus.⁹⁴

In contrast, TPG opposed continued declaration of the LBAS and SBAS, submitting that the declarations have not stimulated competition in the wholesale and retail markets.⁹⁵ TPG argued that if the ACCC wishes to promote competition it should remove the declaration of the LBAS and SBAS, in order to lower regulatory barriers which prevent non-NBN network providers from competing with NBN Co in the wholesale market.⁹⁶

Gary McLaren argued that the declarations should be limited to monopoly areas in order to promote competition and economically effective use of infrastructure, noting that these will be, by definition, areas where the NBN is not available.⁹⁷

Stakeholders were divided about whether recent legislative changes (associated with the new TIND policy and the TLA Act) enhanced or diminished the need for declaration. ACCAN and Southern Phone both considered it too early to tell whether recent legislative changes would have a demonstrable impact on competition.⁹⁸ ACCAN submitted that these recent legislative changes create greater need for declaration as new entry may result in 'islands' of monopolies which, without sufficient regulation, could leave consumers little choice in retail provider whilst paying uncompetitive prices.⁹⁹ Conversely, TPG submitted that removing declaration of the LBAS and SBAS would be consistent with the intention of the Government's recent reforms; to increase the ability of third-party providers to compete with NBN Co.¹⁰⁰

ACCC view

As noted previously in this chapter, there are several local fibre networks that appear to be operating as local monopolies in a number of geographic areas. Some of these networks¹⁰¹ operate on a vertically integrated basis and offer wholesale access (regulated under the SBAS / LBAS declarations) in addition to competing in the downstream retail markets. Others operate on a wholesale-only basis.

The ACCC maintains that the majority of superfast broadband networks are enduring bottlenecks and that in many geographic areas it is more efficient and commercially attractive for only one network to operate. For these areas, there are barriers to potential new entrants and in the absence of declaration, the incumbent network operator will have the incentive and opportunity to seek monopoly rents from access seekers and by extension end-users.

The continued declaration of the SBAS will constrain the ability of network operators to set unreasonable terms of access and inefficiently high prices. Declaration alone is unlikely to generate greater competition in competing networks and the wholesale market within which superfast broadband services are provided. However, the ACCC expects declaration will promote competition

⁹² ACCAN submission, p. 14.

⁹³ Southern Phone submission, p. 4.

⁹⁴ Vocus submission, p. 2.

⁹⁵ TPG submission, p. 4.

⁹⁶ TPG submission, p. 5.

⁹⁷ Gary McLaren submission, p. 14.

⁹⁸ ACCAN submission, pp. 12-13. Southern Phone submission, pp. 5-6.

⁹⁹ ACCAN submission, pp. 12-13.

¹⁰⁰ TPG submission, p. 5.

¹⁰¹ For example, Telstra's South Brisbane and Velocity networks and those operated by the merged OptiComm/Uniti.

in downstream retail markets where it facilitates the entry of RSPs utilising the incumbent's monopoly infrastructure. Over the period of the current SBAS and LBAS declarations there is clear evidence of RSP entry to areas covered by regulated networks. For example, in 2016, LBN Co, which is covered by the LBAS, had 9 RSPs retailing its services. Today, there are 30 RSPs retailing LBN Co's services.¹⁰² OptiComm currently supplies services to 44 RSPs, compared to 22 in 2016.

Further, as discussed in chapter 3, superfast broadband services have become more highly valued and sought after by end-users with the high growth in consumer demand for data.¹⁰³ As data downloads increase, consumer demand for higher data rates accompanied by high download limits and choice in service offerings will also increase.¹⁰⁴ The ACCC remains of the view that RSPs will need to be able to acquire superfast broadband services on reasonable terms in order to service and compete in the growing retail markets for these services. Declaration of the LBAS and SBAS will help to remove obstacles to end-users gaining access to superfast broadband services at reasonable price and non-price terms.¹⁰⁵ Providing end-users with additional RSPs to choose from will provide greater scope for RSPs to compete on price and non-price terms and innovate to provide a wider range of retail products. This in turn will have flow on benefits for end-users.

Under the legislated changes to Part 8 of the Telecommunications Act (the wholesale-only rules), network operators will be able to voluntarily submit undertakings to the ACCC for approval to operate on a functionally separated basis as opposed to a structurally separated basis. Additionally, small network operators can elect to be bound by the ACCC's class exemption, which exempts them from the requirement to operate on a wholesale-only basis. These legislative changes are intended to encourage infrastructure-based competition and provide greater commercial flexibility for superfast network operators. The ACCC considers that whilst these legislative changes should help to promote further infrastructure competition, the changes also create a greater need for the LBAS and SBAS declarations in order to protect consumer interests. Specifically, encouraging new network operators to enter the market may result in monopolies which, without sufficient wholesale access regulation could leave end-users little choice in retail provider. Whilst there may be certain geographic areas where network operators will compete, such as highly populated areas, there will continue to be areas where it is not commercially viable for carriers to deploy duplicated fixed line networks. Where these circumstances prevail, and in the absence of effective competition from other technologies such as mobile, fixed wireless or satellite, access and price regulation will be necessary to protect the LTIE.

Overall, the ACCC's view is that continued declaration of the SBAS and LBAS, and regulated terms that reflect the criteria in section 152BCA of the CCA, will promote competition by providing greater scope for RSPs to enter retail markets and compete. Further, declaring a Layer 2 wholesale service will give RSPs flexibility in how they package their retail service offerings and how they differentiate themselves from other service providers.

The ACCC recognises that declaring wholesale access does not ensure that competitive outcomes are 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 or in particular geographic areas. RSPs may choose not to enter markets in certain areas due to logistics, interconnection and transmission costs, limitations on revenue due to the size and density of the market, and the presence of other RSPs already servicing the market, among other things. This is likely to be the case where a network will be (or has been) overbuilt by NBN Co. [c-i-c]

¹⁰² Source: <u>LBN Co website.</u>

¹⁰³ The average end-user on a 25 Mbps fixed line NBN plan currently uses around 158Gb/month. Source: ACCC, *Internet Activity Report, June 2020*, October 2020.

¹⁰⁴ For example, take-up of the NBN Co 50/20Mbps data rate tier has increased from 17 per cent of total services in 2017 to 55 per cent in 2019. Source: ACCC, *Communications Report 2018-19*, December 2019, p. 18.

¹⁰⁵ Pursuant to subsection 152AB(4) of the CCA.

However, in areas where there is sufficient infrastructure-based competition, the ACCC recognises that declaration would not necessarily promote further competition and may impose unnecessary regulation and cost. Therefore, the ACCC will consider the merit or otherwise of a framework to exclude networks covered by the SBAS/LBAS declaration from future regulation under the declaration, following a case-by-case assessment process. The ACCC considers that the key criteria for such an assessment would be whether there are competing fixed line providers supplying services and there is evidence of effective competition benefitting end-users.

In addition to the presence of multiple competing operators, the ACCC considers that a core requirement of any future exemption framework would be the absence of significant market power. As discussed in chapter 3, non-NBN network operators collectively hold only a small share of the wholesale superfast broadband market, and to the extent that effective competition exists (including from the ubiquitous NBN) this may constrain their ability to misuse their market power within a geographic area.

However, the ACCC does not accept NBN Co's view that failing to apply equivalent regulation of NBN and non-NBN services will place NBN Co at a competitive disadvantage. The ACCC considers that regulation of NBN Co is appropriate and indeed necessary from a competition policy perspective. This view reflects NBN Co's dominant position as a supplier of wholesale fixed line superfast broadband services nationally. Such an approach is consistent with that adopted previously by the ACCC in its fixed line services declarations.¹⁰⁶

We will give further consideration to this issue in our final decision on the SBAS/LBAS declaration having regard to submissions to this draft decision. As previously stated, the ACCC's view is that it remains appropriate to exempt from the SBAS/LBAS declaration, services that exclusively service business, public body and charity customers in CBD areas of the major capital cities. Services supplied over these networks are presently exempt from the SBAS declaration and the ACCC's draft decision is to maintain this exemption.¹⁰⁷

4.4. Any-to-any connectivity

Any-to-any connectivity is achieved only if each end-user is able to communicate with other endusers supplied with the same service or a similar service, whether or not the end-users are connected to the same telecommunication network.¹⁰⁸

In determining whether to remake, vary or extend the current declarations, the ACCC must make an assessment as to whether this is likely to achieve any-to-any connectivity in relation to carriage services that involve communication between end-users.

The ACCC did not receive any submissions regarding any-to-any connectivity. The ACCC considers that declaration of the LBAS and SBAS is unlikely to impact the objective of achieving any-to-any connectivity, consistent with the 2016 SBAS declaration.

¹⁰⁶ In 2011, the ACCC varied the fixed services FADs to remove the exemptions it previously granted (in 2008) to Telstra from having to comply with regulation in CBD areas. In making its decision, the ACCC found that despite the presence of multiple alternative providers in these areas, Telstra was able to misuse its dominant market position as the owner of the ubiquitous customer access network to charge prices which were substantially higher than its supply costs.

¹⁰⁷ The ACCC also considers that 'larger business customers' are less likely to require special intervention, given the responsiveness of service providers to the needs of those customers. As noted in its Communications Market Report 2019-2020 (p.16), competition in the enterprise market has intensified markedly since NBN Co's entry into the market in 2018.

¹⁰⁸ CCA, s.152AB(8).

4.5. Encouraging efficient use of, and investment in, infrastructure

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

Submissions

NBN Co submitted that where a geographic region is served by a non-NBN network and end-users on that network have a choice of RSPs offering affordable access, there is likely to be little justification for NBN Co to overbuild the non-NBN network. However, NBN Co noted that there could be a stronger case to overbuild if it was to experience pressure from RSPs and end-users on the basis that there was inadequate competition or there were barriers to RSP entry. NBN Co noted that continued declaration would promote the efficient use of existing infrastructure as it would reduce the commercial incentives of network providers to overbuild.¹⁰⁹

TPG submitted that regulation of superfast broadband networks has not resulted in significant use by wholesale access seekers and was designed as a policy to protect the NBN from competition.¹¹⁰ Gary McLaren argued that the declarations should be limited to monopoly areas in order promote competition and economically effective use of infrastructure.¹¹¹

ACCC view

Subsection 152AB(6) of the CCA requires the ACCC to have regard to specific matters in examining whether declaration will encourage the economically efficient use of, and the economically efficient investment in, infrastructure. These matters include the technical feasibility of supplying and charging for particular services, the legitimate commercial interests of the supplier(s) and the incentives for investment in infrastructure.

We note that it is technically feasible to supply the LBAS and SBAS as they have been supplied and charged for as wholesale services since their declaration. With regard to a supplier's legitimate commercial interests, the ACCC recognises this encompasses a supplier's obligations to its owners, including the opportunity to recover the cost of providing services and earn a normal commercial return on investment.

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. The ACCC considers that this objective can be met for the SBAS and LBAS by setting the price terms in an access determination at a level that recovers the costs of supplying the services including a normal commercial return. This would be considered in a FAD inquiry following a final decision by the ACCC on declaration. It is through declaration and regulated prices under a FAD that access providers are constrained from charging monopoly rents. In this way, declaration and regulated pricing provides a framework for access providers to recover only the efficient costs of investing in infrastructure.

TPG raised concerns that regulatory burden through the LBAS and SBAS declarations is detrimental to investment which will impede the evolution of effective competitors to the NBN.¹¹² The ACCC notes that TPG has previously expressed its intention to provide wholesale access to its FTTB network even without access regulation through declaration or the Government's carrier

¹⁰⁹ NBN Co submission, p. 6.

¹¹⁰ TPG submission, p. 3.

¹¹¹ Gary McLaren submission, p. 14.

¹¹² TPG submission, pp. 6-7.

licence conditions.¹¹³ Since the SBAS was declared in 2016, TPG has continued to operate a vertically-integrated network offering superfast broadband services at rates competitive with NBN-based retail plans whilst delivering comparable speeds.¹¹⁴ The ACCC therefore does not consider that continued declaration will have a significant effect on TPG's ability to undertake efficient investment and compete with the NBN.

In relation to other builders and operators of fibre networks (predominately in new developments), the ACCC notes that OptiComm and Uniti have continued to expand their infrastructure while being subject to the LBAS declaration. There is no evidence that continued declaration of the SBAS and LBAS would discourage efficient investment. The ACCC therefore considers that network builders and operators will continue to invest in network infrastructure if the SBAS and LBAS remain declared.

¹¹³ 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.

¹¹⁴ For example, TPG's FTTB service is priced at \$60 per month and offers typical evening speeds of 90Mbps. Comparatively, TPG's NBN100 plans cost \$90 per month with typical evening speeds of 80.1Mbps. Source: <u>TPG website</u>.

5. The declared services

5.1. Service description

The ACCC has had regard to the following principles in developing a service description for the declared services:

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

Submissions

Several submissions sought changes to certain aspects of the SBAS and LBAS service descriptions.

NBN Co advocated that the scope of regulation should be extended to capture additional services (12/1Mbps, competing 5G broadband services and networks exclusively servicing business customers in CBD areas) to ensure there is no regulatory gap between NBN and non-NBN services.¹¹⁵ As discussed above, ACCAN submitted that the ACCC should extend the scope of declarations to capture fixed wireless and satellite broadband technologies, to align the declarations with the SIP obligations.¹¹⁶

ACCAN, NBN Co, Southern Phone and Vocus all supported combining the LBAS and SBAS under a single declaration instrument. NBN Co observed that it is difficult to justify two separately declared services in which the primary difference is the date when the networks were built.¹¹⁷ Southern Phone submitted that a combined declaration would be administratively simpler and aligns with the ACCC's approach in its May 2017 FAD to consider the pricing for these services together.¹¹⁸

There were mixed views on the current treatment of Telstra's Velocity and South Brisbane networks in the SBAS declaration, where a separate service description (the Fibre Access Broadband (FAB) service) is provided for these networks. NBN Co and an anonymous submitter opposed extending the current arrangements. NBN Co submitted that the current treatment is an example of regulatory asymmetry justified on the basis of minimising the cost of regulation for a single market participant, as opposed to being justified on the basis of being in the LTIE.¹¹⁹ The anonymous submitter argued that continuation of the exemption hinders competition and results in a material loss for consumers.¹²⁰ ACCAN and Telstra both submitted that the current arrangements should be extended. ACCAN submitted that the current treatment of Telstra's Velocity and South Brisbane networks in the SBAS declaration should align with the term of the Ministerial exemption to ensure service continuity for end-users.¹²¹ Telstra submitted that the current arrangements should be extended into the next declaration period, stating that implementing a Layer 2 bitstream service

¹¹⁵ NBN Co submission, pp. 5-6,8.

¹¹⁶ ACCAN submission, p. 5.

¹¹⁷ NBN Co submission, p. 3.

¹¹⁸ Southern Phone submission, p. 2.

¹¹⁹ NBN Co submission, p. 7.

¹²⁰ Anonymous submission, p. 1.

¹²¹ ACCAN submission, p. 5. The current Ministerial exemption expires the earlier of 1 July 2022 or 90 days after the completion of system migration to the network's new owner.

would not be achievable by July 2021 and would have significant financial costs, potentially delay transfer of ownership and increase wholesale prices.¹²²

ACCC view

The ACCC's draft decision is to vary the current SBAS declaration to combine the SBAS and LBAS under a single SBAS declaration instrument. The new SBAS declaration would apply to networks built, upgraded or altered both before and after 1 January 2011. The ACCC also proposes to revoke the current LBAS declaration. As noted by stakeholders, the LBAS and SBAS generally have the same service characteristics and the ACCC considers that combining the LBAS and SBAS into a single declaration would promote administrative simplicity.

The proposed combined LBAS/SBAS service description is set out at Appendix A. The service description captures all fixed line superfast broadband services supplied that are either a Layer 2 Bitstream Service or a FAB service provided over a fixed line superfast network. The service description excludes services supplied on the NBN (including on HFC networks transferred to the NBN) and services subject to the DTCS declarations,¹²³ as well as superfast broadband services provided to business customers, public bodies or charity customers in CBD areas of capital cities.

Telstra's South Brisbane and Velocity networks

The ACCC's draft decision is to maintain the current treatment of Telstra's South Brisbane and Velocity networks for the next declaration period, that is, until July 2026.

The ACCC recognises that the cost of upgrading the networks is likely to preclude a Layer 2 bitstream service being available on these networks prior to their sale to a new owner during the next declaration period. **[c-i-c]**

On 16 December 2020 Telstra entered into a binding agreement to sell its South Brisbane and Velocity networks to Uniti.¹²⁴ There will be a transition period as Uniti undertakes investment to be able to supply a Layer 2 service to wholesale customers. **[c-i-c]**. The migration of customers is expected to commence in July 2022 and take approximately 12-15 months to complete.¹²⁵

The ACCC considers that an extension to the current arrangements will ensure service continuity for end-users and regulatory certainty while the networks are transferred to a new owner during the next declaration period.

5.2. Duration of declaration

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

- beginning three years after the declaration was made
- ending five years after the declaration was made.¹²⁶

The ACCC has discretion to specify an expiry date for a declared service that is shorter than three years or longer than five years if it considers that circumstances warrant it.¹²⁷

¹²² Telstra submission, p. 11, 14

¹²³ These services are subject to other access regulation under Part XIC of the CCA.

¹²⁴ Telstra will also become an RSP on Uniti's national FTTP networks (including OptiComm) as a condition of the sale. Source: <u>ASX</u> <u>announcement: Uniti acquires Telstra and South Brisbane exchange assets</u>, 16 December 2020.

¹²⁵ Ibid.

¹²⁶ CCA, paragraph 152ALA(2)(a).

¹²⁷ CCA, subsection 152ALA(2).

Submissions

There were varying views in submissions regarding the length of the declaration period. This reflected the need to balance regulatory certainty against the expected changes in the superfast broadband services market discussed in chapter 3. In support of a three-year declaration period, stakeholders referred to upcoming changes in the industry, including the deployment of 5G, completion of the NBN rollout, reforms to the superfast broadband rules, and the ownership of Telstra's Velocity & South Brisbane networks.¹²⁸

NBN Co, Southern Phone and Vocus supported a declaration period of five years. NBN Co and Vocus both submitted that a five-year declaration period would promote regulatory certainty.¹²⁹ Southern Phone also considered that a period of five years is important for commercial certainty regarding the terms on which RSPs can supply superfast broadband services after the expiry of existing access agreements.¹³⁰

TPG did not support continued declaration but noted that three years is an appropriate period if declaration was to continue given the process of significant change in the industry.¹³¹ ACCAN also supported a declaration period of three years.

ACCC view

The ACCC's draft decision is that the SBAS/LBAS declaration be for a period of five years, that is, until July 2026.

The ACCC recognises that the telecommunications industry is likely to experience significant transformation in coming years, particularly with the deployment of potentially substitutable technologies such as 5G. The ACCC considers that the length of the declaration should strike an appropriate balance between providing stakeholders with regulatory certainty and enabling the regulatory regime to respond flexibly to future industry changes.

The ACCC's view is that this balance can be achieved through a five-year declaration period. The ACCC notes that should there be a significant change in circumstances warranting an earlier review it may commence an inquiry to amend the declaration at an earlier time.

¹²⁸ TPG submission, p. 6; ACCAN submission, pp. 7, 16.

 $^{^{\}rm 129}$ NBN Co submission, p. 9; Vocus submission, p. 2.

¹³⁰ Southern Phone submission, p. 4.

¹³¹ TPG submission, p. 6.

Appendix A

A.1.1 Proposed service description for combined SBAS and LBAS declaration

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 a superfast carriage service; or

(a) a Layer 2 bitstream service and is supplied over a superfast telecommunications network; 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;
- 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
- v. the domestic transmission capacity service defined in the Domestic Transmission Capacity Service Declaration 2014 2019, 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.

For the avoidance of doubt, if a **line** in a **multi-dwelling complex** is used to supply a superfast carriage service to an end-user occupying or using a unit in the building:

- (a) the line is taken to be an access line; and
- (b) the line is taken to form part of the infrastructure of a **telecommunications network**.

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 data transfer rates;

(i) download transmission speed data transfer rate of 30Mbps and upload transmission speed data transfer rate of 1Mbps; and

(ii) download transmission speed data transfer rate of 100Mbps and upload transmission speed data transfer rate 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.

Layer 2 bitstream service means a carriage service that is:

- (a) a Layer 2 Ethernet bitstream service; and
- (b) a listed carriage service; and
- (b) supplied using a line to premises occupied or used by an end-user.

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

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) a building that has two or more units for occupation as a place of residence or business, or

(b) a building in a complex, where each building has two or more units for occupation as a place of residence or business.

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.

superfast telecommunications network means a telecommunications network, where:

(a) the network enables end-users to download communications; and

(b) the network is normally capable of enabling end-users to download communications with a data transfer rate of 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.

The word "normally" is akin to "usually"; it recognises that circumstances may arise that temporarily displace usual data transfer rates.

telecommunications network has the meaning given in the Telecommunications Act.

Appendix B

Network	Regulation	Key wholesale access obligations
National Broadband Network	Part XIC 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	Part 8 of the Telecommunications Act and the LBAS declaration and FAD	Services supplied on a structurally or (subject to ACCC approval) functionally separated basis at the price of the NBN Co product TC-4 25/5 Mbps with aggregation capacity (including discounts).
Telstra's FTTP networks in South Brisbane and Velocity estates	SBAS declaration and FAD	Requirement to supply a declared FAB 30/1 Mbps service at \$13.01 per month (Zone 1) and \$18.15 per month (Zone 2) and \$29.27 per Mbps per month for aggregation. An RSP seeking an access service would also have to purchase Telstra's wholesale line rental service, which is an additional \$20.69 per month.
TPG's VDSL network in the ACT and extensions to its HFC network in regional Victoria	SBAS declaration and FAD	Requirement to supply a declared Layer 2 25/5 Mbps service at the price of the NBN Co product TC-4 25/5 Mbps with aggregation capacity (including discounts).
Superfast broadband networks in existence before 1 January 2011	SBAS declaration and FAD	Requirement to supply a declared Layer 2 25/5 Mbps service at the price of the NBN Co product TC-4 25/5 Mbps with aggregation capacity (including discounts).
Superfast broadband networks in existence before 1 January 2011 and altered to provide services to residential customers ¹³²	Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014 and the SBAS declaration and FAD	Functional Separation and the requirement to supply a declared Layer 2 25/5 Mbps service at the price of the NBN Co product TC-4 25/5 Mbps with aggregation capacity (including discounts).
Service areas designated as a SIP by the Minister for Communications ¹³³	SIP obligations ¹³⁴	Requirement to supply a 25/5 Mbps service upon reasonable request

B.1.1 Current regulation of superfast broadband services

¹³² Provided the lines have not been altered, upgraded or extended after the amended Part 8 rules take effect on 26 August 2020.

¹³³ The ACMA maintains a <u>register of SIPs</u> and their service areas.

¹³⁴ SIP standards and rules prevail over all inconsistent regulations and commercial agreements.

B.1.2 Regulation of superfast broadband services without the LBAS and SBAS declarations

Network	Regulation	Key wholesale access obligations
National Broadband Network	Part XIC 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 SAU and its published WBA.
Superfast broadband networks built, upgraded or altered after 1 January 2011	Part 8 of the Telecommunications Act	Services supplied on a structurally or (subject to ACCC approval) functionally separated basis.
		No price regulation.
Telstra's FTTP networks in South Brisbane and Velocity estates	Ministerial exemptions from Part 8 of the Telecommunications Act	A service must be offered at a wholesale level as set out in Ministerial Exemption from Part 8 of the Telecommunications Act ¹³⁵
		No price regulation.
TPG's VDSL network in the ACT and extensions to its HFC network in regional Victoria	Ministerial exemptions from Part 8 of the Telecommunications Act	A service must be offered at a wholesale level as set out in Ministerial Exemptions from Part 8 of the Telecommunications Act ¹³⁶
		No price regulation.
Superfast broadband networks in existence before 1 January 2011	No regulation of access to superfast broadband services	No wholesale access obligations or price regulation.
Superfast broadband networks in existence before 1 January 2011 and altered to provide services to residential customers	Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014	Functional separation and a wholesale access obligation for supply of a Layer 2 25/5 Mbps service at \$27 per port per month.
Service areas designated as a SIP by the Minister for Communications	SIP obligations	Requirement to supply 25/5 Mbps service upon reasonable request

¹³⁵ Telecommunications (Network Exemption—Telstra South Brisbane Network) Instrument 2012 ; Telecommunications (Network Exemption—Specified Velocity Networks) Instrument 2012.

¹³⁶ Telecommunications (Network Exemption—TransACT Upgraded VDSL networks) Instrument 2012; Telecommunications (Network Exemption—TransACT Very Small Scale Networks) Instrument 2012.