



TELSTRA CORPORATION LIMITED

ACCC inquiry into NBN access pricing

Public version

29 November 2019

[CIC begins] = information not to be released without a confidentiality undertaking

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Executive Summary

Telstra commends the ACCC for launching its inquiry into NBN access pricing. The NBN is a critical piece of national infrastructure. If the NBN is to deliver on its intended policy goals, it is essential for its wholesale pricing to be sustainable for the industry, drive take-up, and be affordable for consumers and businesses.

The NBN was originally created to deliver economic growth, productivity and prosperity for Australia. The Government sought to achieve these benefits through two key mechanisms:¹

- much faster and more affordable broadband than was available in 2010; and
- supporting the enduring health and competitiveness of the Australian fixed line retail market.

However, accessing these potential benefits is dependent upon getting consumers connected to and using the high-speed broadband the NBN is being built to provide. The NBN has not yet delivered on the 'step-change' in broadband experience for Australians as was intended. Australia continues to perform poorly in international comparisons, with slower speeds and higher prices than benchmark countries. At the same time, the health of the industry is increasingly at risk. Wholesale broadband prices have nearly doubled under the NBN and are set to increase further, driving a situation that may become unsustainable as retail providers look for ways to bypass the NBN altogether.

Consequently, there is a risk the productivity and societal benefits the NBN was designed to deliver will not be fully realised or will be delayed.

When establishing the inquiry, the ACCC expressed concern that NBN's prices could be driving inefficient outcomes and potentially harming consumers. The ACCC considers that an Access Determination may help address these concerns and promote efficient use of the network. We agree.

Telstra believes, however, that only regulating the lowest speed broadband service (as proposed by the ACCC) will risk entrenching the status quo. Australia will fall even further behind other benchmark countries in terms of broadband speed, and usage and take-up will remain at risk.

The \$51 billion public investment in the NBN is being made on the premise that it will deliver much more than a similar service for a similar price to what was available on the legacy copper network. This was explicitly recognised in the 2010 Implementation Study:²

*"For some time, NBN Co will co-exist with legacy copper and HFC networks...NBN Co should set prices to **deliver a superior offer to service providers compared with such legacy networks**. Based on the Implementation Study's modelling, this involves pricing entry-level wholesale fibre services at between \$30 and \$40 per month – depending on the level of competing copper ULL price...this will enable retailers to offer **much faster broadband speeds without increasing the prices they charge end users**." [emphasis added]*

¹ Government announcement on 7 April 2009 (see: McKinsey & Co and KPMG, NBN Implementation Study, prepared for the Department of Broadband, Communications and the Digital Economy, 2010, p. 1 ("NBN Implementation Study").

² NBN Implementation Study, pp. 32-33.



More ambitious changes to NBN's pricing are required:

- The 50/20 Mbps service should be made the entry level anchor product at \$35 per month, the same price being proposed by the ACCC for the 12/1 Mbps service.
- CVC prices should be zero-rated or, at a minimum, overage charges and penalties need to be removed to encourage greater utilisation of network capacity.
- Temporary discounts and offers should be replaced with permanent, predictable pricing that provides RSPs with certainty and the incentive to compete.
- Complex product and pricing constructs should be replaced with simple ones, enabling retailers to pass more benefits on to consumers. This includes NBN applying the pricing for its proposed new 100/20 Mbps service to its existing 100/40 Mbps service, rather than causing needless cost and complexity by creating two 100Mbps products with different price points.
- The ACCC should also set a regulated anchor covering NBN's voice-only service priced at \$10 per month. This will ensure RSPs can provide the service on a more viable basis, acknowledging that the majority of customers taking this service are older and/or vulnerable members of the community.

We believe that our proposal will best promote the long term interests of end users moving to the NBN. For those already on the NBN (the majority of whom are already on the 50/20 Mbps service), more affordable prices will increase utilisation of the NBN delivering greater socio-economic benefits to Australia and a more efficient use of the taxpayers' investment.

Wholesale pricing that pushes end-users to migrate from legacy services to a low speed service (12/1 or 25/5 Mbps) is not the outcome we should be seeking as an industry and could be detrimental to the NBN consumer experience and perceived value for money.

Recent cross-industry consumer research commissioned by Telstra³ suggests that customers on a 12/1 Mbps entry level plan are about 25 per cent less likely to be satisfied with the speed, value for money and reliability of their service than those with a 50/20 Mbps service. Even worse, the research suggests that this poor perception becomes entrenched, with 67 per cent of 12/1 Mbps customers being unwilling to upgrade to higher speed tiers for modest increases in price (compared to just 30 per cent for 50/20 Mbps customers). Consequently, we don't believe that a 12/1 Mbps anchor will be effective to constrain the price of NBN's higher speed services. NBN will face commercial incentives to demarcate low and higher speed broadband to prevent substitution between the anchor and anchored plans.

Independent economic modelling by WIK⁴ shows the benefits of Telstra's proposal are achievable without compromising NBN's revenues or ability to invest. A 50/20 Mbps entry product and the elimination of usage charges (CVC) results in very similar broadband revenues for NBN compared to its September 2019 pricing. However, under Telstra's proposed approach, by 2024 there are likely to be materially more customers on the NBN, with more on 100 Mbps or above, and GDP could be up to \$18 billion higher over the 2019-2024 period.

We believe that our more ambitious plan is good for customers, as it will encourage more efficient use of the NBN thereby delivering greater socio-economics outcomes. It will also promote competition by making pricing more predictable and viable for RSPs. It will be good for the NBN driving higher revenues as customers take-up higher speeds and utilise the network more efficiently.

³ Telstra Group Research and Strategic Insights, nbn Speed Tiers Research – Final Report, October 2019 ("GR&SI Research").

⁴ WIK, The impact of NBN wholesale pricing on the take-up of NBN services and economic benefits associated with the NBN, Report on behalf of Telstra, 19 November 2019 ("WIK").



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1. Introduction

Telstra welcomes the Australian Competition and Consumer Commission (**ACCC**) inquiry into NBN's access pricing. Our submission supports the ACCC's making of an Access Determination (**AD**), which we believe will provide Retail Service Providers (**RSPs**) with an important regulatory back-stop ahead of the expiry of the current NBN Wholesale Broadband Agreement (**WBA3**) in November 2020.

The remainder of our submission is structured as follows:

- Section 2 sets out the context for this inquiry – the potential for socio-economic gains for Australia that the NBN is intended to deliver, through a step change in fixed broadband speeds and a restructure of the industry to promote healthy retail competition;
- Section 3 explains how NBN's pricing strategies are risking the potential benefits to be gained from the NBN; and
- Section 4 provides our proposal for a more ambitious regulatory back-stop, details how this will meet the statutory criteria for an AD and explains why we consider a 12/1 Mbps anchor will not be effective in achieving the long term interests of end users (**LTIE**).



2. There are high potential socio-economic gains from the NBN

The NBN was originally created to deliver “*economic growth, productivity and prosperity*” for Australia⁵ – and the potential socio-economic benefits that Australians can achieve with high speed broadband remain as large and as achievable today. As the Minister for Communications has recently stated:⁶

a key reason for investing in NBN was to improve our productivity...[w]e want to drive this hard over coming years – because the NBN is an important part of our toolkit for improving our national productivity, and in turn our prosperity and quality of life.

These benefits are largely derived from the availability and use of improved applications such as the delivery of e-health, education, business and government services, and entertainment and assistive applications for consumers. Many of these applications already do, or in the near future will, require consumers to have access to broadband at the minimum speeds expected of NBN or higher – 25 Mbps for all premises and 50 Mbps for 90 per cent of fixed line premises, as set out in NBN's current Statement of Expectations (**SoE**). For example, many health-related applications can be met via a maximum attainable speed of 25 Mbps; however, more advanced applications, such immersive conferencing and remote operation, require higher speeds and latency specifications.⁷

The positive social and economic impact of high speed broadband has been measured in a number of economic studies, summarised below.

⁵ Australian Labor Party, “New Directions for Communications - A Broadband Future for Australia – Building a National Broadband Network”, March 2007.

⁶ Fletcher, Paul, “Speech to CEDA’s 40th State of the Nation – The NBN and Productivity”, 19 September 2019.

⁷ See CSIRO, Caring for the Last 3%: Telehealth Potential and Broadband Implications for Remote Australia, Digital Productivity and Services Flagship, 2012.

**Table 2.1: Summary of GDP impact of high-speed broadband**

Study	Findings
AlphaBeta (contracted by NBN) (2018) ⁸	The additional GDP enabled by the NBN in 2017 was \$1.2 billion, forecast to increase to \$10.4 billion p.a. by 2021.
The Centre for Energy-Efficient Telecommunications (2015) ⁹	Modest service requirements scenario (2.5-12 Mbps down and 5 Mbps up) real Australian GDP increase is negligible (less than 0.2%). High service requirements scenario (10-25 Mbps down and 2.5-10 Mbps up) real GDP increases by 1.8%.
Rohman and Bohlin (2011) ¹⁰	A 1% higher mean speed leads to a 0.003% additional GDP mean growth from base year.
Kongaut, Rohman and Bohlin (2014) ¹¹	A 1% higher mean speed leads to a 0.0591% increase in GDP per capita for higher income countries, such as Australia.
WIK (2018) ¹²	In a 2018 study for Ofcom, WIK estimated that an 18% increase in the mean speed is associated with an additional GDP mean growth of 0.054% from base year, and an increase of 50% in mean speed is associated with an additional GDP mean growth of 0.150% from base year.

However, accessing these potential benefits is dependent upon getting consumers connected to and using the high-speed broadband the NBN is being built to provide. The Government sought to achieve this through two key mechanisms:

- much faster and more affordable broadband than was available in 2010;¹³ and
- supporting the enduring health and competitiveness of the Australian fixed line retail market.¹⁴

Each of these elements is discussed in the sections below.

⁸ NBN Co, Connecting Australia: How the nbn broadband access network is changing Australia. An economic study of the way we work, live and connect (results contained in the report conducted by AlphaBeta), 17 April 2018.

⁹ Centre for Energy-Efficient Telecommunications, Economic Benefit of the National Broadband Network Benefits of the NBN to the Australian Economy, September 2015.

¹⁰ Rohman, Ibrahim Kholilul; Bohlin, Erik, "Does broadband speed really matter for driving economic growth?, Investigating OECD countries", *Discussion Paper Division of Technology and Society, Department of Technology Management and Economics*, Chalmers University of Technology, Gothenburg, Sweden.

¹¹ Kongaut, Chatcha; Rohman, Ibrahim Kholilul; Bohlin, Erik, "The economic impact of broadband speed: Comparing between higher and lower income countries", *25th European Regional Conference of the International Telecommunications Society (ITS)*, Brussels, Belgium, 22-25 June 2014.

¹² WIK-Consult, The Benefits of Ultrafast Broadband Deployment, report for Ofcom, 20 February 2018. Note based on elasticities estimated by Rohman and Bohlin (2011).

¹³ See e.g. the explanation in the NBN Implementation Study (p.1) that "At the heart of the NBN policy is an objective to deliver a step-change improvement in broadband service quality to all Australians".

¹⁴ See e.g. the comments in the explanatory Memorandum to the *Telecommunications (Structural Separation—Networks and Services Exemption) Instrument (No. 1) 2011*: "Separation between the network provider and retail providers will mean better and fairer infrastructure access for service providers, greater retail competition and better services for consumers and businesses".



2.1. A step-change in Australia's broadband capability

The 2010 NBN Implementation Study describes the step-change in Australia's broadband capability the NBN is intended to deliver:¹⁵

*Beyond faster access to current services, **the increased speed and performance that NBN offers will enable a new generation of richer, premium applications. The step change in customer experience will be similar to the change experienced in the move from narrowband to broadband, which enabled a new generation of Internet services - for example, iTunes, YouTube.** [emphasis added]*

The NBN Implementation Study also explored the then current state of broadband speeds, which the NBN was intended to improve upon:¹⁶

*With ADSL2+ now available almost nationally, delivering speeds exceeding 10 Mbps in many areas, a **basic offering of 10 Mbps or less is unlikely to gain traction.** Some ISPs have average customer speeds today in the order of 12-13 Mbps, with some delivering speeds over 15 Mbps. [emphasis added]*

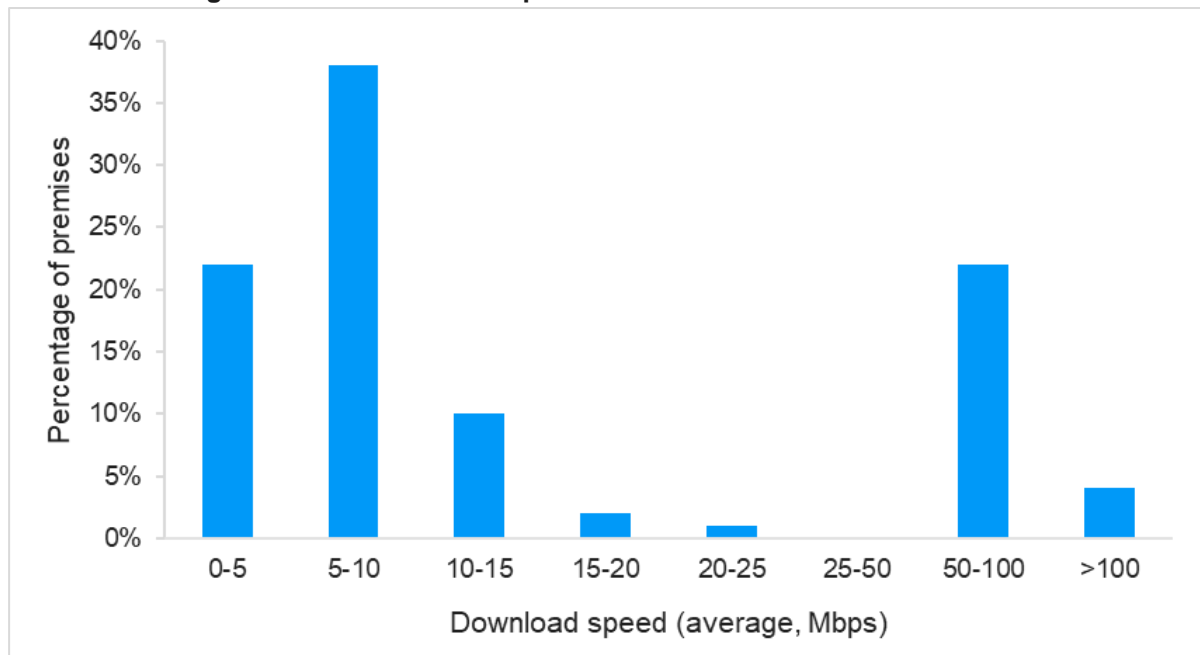
This assessment was informed by more than the speed capability of legacy copper networks. The NBN Implementation Study also had regard to the capabilities of the Telstra and Optus legacy HFC networks, which in 2010 were already capable of delivering “download speeds of 30 Mbps” in the case of Telstra and “download speeds of up to 20 Mbps” in the case of Optus.¹⁷ For much of this decade, however, Telstra and Optus have provided customers with speeds of 100 Mbps over their legacy HFC networks.

Chart 2.1 below illustrates the range of download speeds available in 2014, confirming that over 40 per cent of consumers were able to use speeds of at least 10-15 Mbps.

¹⁵ NBN Implementation Study, p.139.

¹⁶ NBN Implementation Study, p. 198.

¹⁷ NBN Implementation Study, pp. 105-106.


Chart 2.1: Average Australian download speeds in 2014


Note: This chart illustrates the estimated distribution of broadband download speeds by attributing an average download speed to each Australian premises based on the highest performing fixed technology platform available at each premises.

Source: MyBroadband datacube Version 3 and speed test results (as at 29 April 2014); Ookla net Index; Akamai State of the Internet Report 1st Quarter 2014; The CIE.

To achieve much more than what was already being delivered by legacy networks, the government set much higher speed expectations for NBN. These are, per NBN's current SoE, to provide wholesale download speeds of 25 Mbps to all premises and 50 Mbps to 90 per cent of the fixed-line premises.¹⁸

The need for a step change in the take-up of high speed broadband, beyond what was available at the beginning of this decade, is increasingly relevant today. In 2018, WIK forecast the expected demand for bandwidth in the UK by 2025 on behalf of Ofcom. As illustrated by the categories in Table 2.2 below, they expect that consumer demand will be driven by the parallel usage of several applications with higher requirements for download, upload and quality parameters compared to today. Telstra's experience suggests these to be equally applicable in Australia.

¹⁸ NBN Co Ltd, Statement of Expectations, 24 August 2016.

**Table 2.2: Examples of applications for future broadband demand**

Application category	Examples
Basic internet	News/mail, photos, downloads, webTV, social networks, online storage
Media and Entertainment	Video/film, webTV, HD-TV, 3D-TV Ultra HD-TV, 4k, 8k
VPN	Teleworking
(video) Communication	Telephony, chats, IM Video-telephony, video-conferencing, e-learning, teleworking
Cloud computing	SaaS, IaaS, PaaS
Gaming	Online gaming, MMOG, virtual reality
E-Health	Monitoring, remote diagnostics, AAL
E-Home, E-facility	Smart Meter, Home networks, Smart Grid, Security
Mobile	Location-based services, Mobile business, Apps, WiFi Offloading

Source: WIK

The growing fixed broadband speeds required to support such applications forecast by WIK are set out in Table 2.3 below.

Table 2.3: Estimation of bandwidth and quality of service requirements by application for 2025

Application category	2015 Downstream bandwidth (Mbps)	Assumed CAGR (%)	Downstream bandwidth in 2025 (Mbps)	Upstream bandwidth in 2025 (Mbps)
Basic internet	2	25	~20	~16
Home office/VPN	16	30	~250	~250
Cloud computing	16	30	~250	~250
State of the art media and entertainment (4k, 3D, UHD)	14	20	~90	~20
Progressive media (8k, VR)	25	30	~300	~60
Communication	1.5	20	~8	~8
Video communication (HD)	8	15	~25	~25
Gaming	25	30	~300	~150
E-Health	2.5	30	~50	~50
E-Home/E-facility	2.5	30	~50	~50
Mobile Offloading	2	30	~15	~12

Source: WIK



2.2. A healthy and competitive fixed line retail market

By operating as a wholesale-only, open-access network provider, the NBN is also intended to bring about structural reform to ensure the ongoing health and vibrancy of the Australian fixed line retail market. Bill Morrow, the former CEO of NBN, put it as follows:¹⁹

*The anticipated increased retail competition was designed to **improve service levels, lower prices and see the development of new products to suit different end-user needs.***
[emphasis added]

The experience in Australia of ADSL competition following the regulation of Telstra's Unbundled Local Loop and Line Sharing Services is instructive. At that time, RSPs were given strong incentives to innovate and invest in their own services and networks, and to compete for customers. That ensuing competition benefited consumers, resulting in lower prices as well as higher-quality services in terms of speed (roll-out of ADSL2+).²⁰

Critical for the ACCC's consideration is how NBN's pricing strategy provides sufficient margin and incentives to enable a healthy, competitive retail telecommunications market where consumers benefit from a choice of provider, high quality services, affordable prices and innovation.

This applies to both broadband and voice services delivered over the NBN.

The current and potential customer base of NBN voice-only customers is significant. Telstra currently has around [CIC begins] [CIC ends] voice-only consumer customers on the NBN, with an additional [CIC begins] [CIC ends] legacy voice-only consumer consumers within the NBN fixed line footprint.

These customers are disproportionately older, pensioners, and require special medical assistance. Of Telstra's base of NBN voice-only consumer customers:

- [CIC begins] [CIC ends] per cent are aged 60+;
- [CIC begins] [CIC ends] per cent receive a pensioner discount; and
- [CIC begins] [CIC ends] per cent are priority assist.

Fixed line voice services remain important to this large segment of consumers. Recent survey respondents said that fixed-voice services:²¹

- Are easier to use for elderly friends and family (43 per cent of respondents);
- Allow people to be more contactable in an emergency (31 per cent);
- Provide a more reliable connection than a mobile phone (28 per cent); and
- Give the ability to switch off their mobile device but still be contactable (25 per cent).

While mobile services are often less expensive than fixed-line voice and offer greater functionality, the enduring preference of these customers to retain their fixed-line service illustrates the significant value they place on the service.

¹⁹ Morrow, Bill (CEO of NBN Co), "nbn – the challenges of transforming an industry", *NBN Co article*, 2018.

²⁰ NBN Implementation Study, p.469.

²¹ YouGov research for Vtech Australia as quoted in Bushell-Embling, Dylan, "Australians still see benefits to landline phones: survey", *CommsDay*, 12 September 2019.



In particular, having regard to the vulnerable and low-income nature of many of these customers, Telstra considers it important that ACCC regulation of NBN's access prices ensures that continued access to a range of fixed line voice-only services over the NBN can be provided by a choice of competing providers, at affordable prices. For voice-only customers, this is the key benefit of these services being enabled by the NBN now and into the future.



3. Current access pricing is putting NBN benefits at risk

The ACCC's discussion paper states that:

When we initially accepted the SAU, our key aim was to ensure efficient use of the network, encourage certainty in retail markets and provide protections to consumers using the NBN.²²

The ACCC has commenced this inquiry on the basis of concerns “that NBN Co’s wholesale pricing has resulted in inefficient and unfair outcomes for consumers” and that NBN’s approach to pricing “has been driving inefficient and less competitive outcomes in the retail market.”²³

We share the ACCC’s concerns. As explained further below, we consider that there are three key features of NBN’s pricing which should be the focus of the ACCC’s inquiry:

- High broadband charges – which risk limiting the take-up of higher speed (50 Mbps+) plans upon which the socio-economic benefits of NBN broadband depend;
- High voice-only charges – which are harming voice-only customers by causing RSPs to earn **[CIC begins]** margins, in turn making it unviable for RSPs to compete in the voice-only market and, for those who remain in the market, incentivising inefficient retail charging structures that increase the cost of service to consumers; and
- Complex charging structures (usage based charges and reliance on temporary discounts, rebates and offers) – which limit efficient use of the network and impair the ability of RSPs to compete and innovate by subjecting them to unnecessary risk, uncertainty and complexity to the detriment of end users.

Each of these elements is discussed below.

3.1. NBN’s current charges for broadband are too high

It is widely accepted that broadband is only available if it is affordable. The current SoE acknowledges this in its overriding broadband policy objective of “ensuring that all Australians have access to very fast broadband as soon as possible, at **affordable prices.**” [emphasis added]

The core speed and price objectives of the NBN have been clear and consistent from the outset:²⁴

From an end-user perspective, the NBN will address two factors currently limiting broadband in Australia: slow fixed-line data rates, and high costs for data usage.

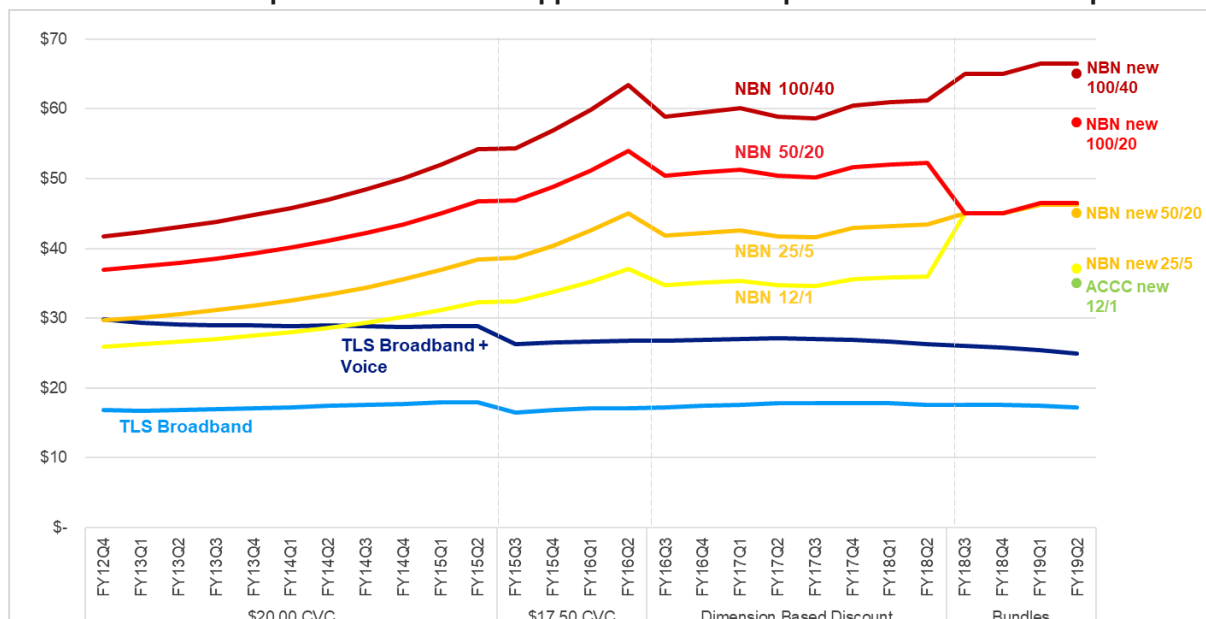
However, the evidence suggests that although the infrastructure is now largely in place to allow significant inroads to be made on these objectives, progress is being hindered by NBN’s high access prices.

NBN’s wholesale prices are nearly double what they were on copper – even factoring in the price reductions proposed by NBN at the conclusion of its 2019 PDF process, the average wholesale price will still be approximately \$44, compared to legacy wholesale prices that average \$25 (Chart 3.1).

²² ACCC, ACCC inquiry into NBN access pricing, Discussion paper, October 2019, p 20 (“Discussion paper”).

²³ Discussion paper, p 7.

²⁴ NBN Implementation Study, p.134.


Chart 3.1: Wholesale prices on Telstra's copper network²⁵ compared to NBN wholesale prices


Source: Internal Telstra analysis, NBN pricing documents,²⁶ ACCC determinations.

Telstra recently engaged WIK to undertake an independent review of the current and expected future impact of NBN access prices on take-up of NBN services and the social and economic benefits for Australia. WIK observed that:

- As at November 2019, Australia continues to rank poorly against leading international benchmark economies in terms of wholesale and retail price levels, fixed broadband speeds, and penetration of full fibre (FTTP); and
- In order to realise the benefits of the NBN, wholesale prices should promote the take-up of superfast speeds (100 Mbps+).

WIK concludes that:²⁷

It is highly likely, that ... NBN's wholesale pricing strategy contribute[s] detrimentally to the state of the Australian broadband market in comparison to other leading economies.
[emphasis added]

This is consistent with the findings of work conducted by Link Economics earlier this year, which found that Australian wholesale prices are amongst the highest of comparable countries.²⁸ Charts 3.2 and 3.3 below show Link Economics' findings on how Australian wholesale prices compare to other comparable countries for 50 Mbps and 100 Mbps services.

²⁵ The wholesale services on Telstra's network were the average of ULL/LSS/WDSL for access seekers providing broadband services and the average of ULLS/WLR+WASL/WLR+LSS for access seekers providing broadband and voice services.

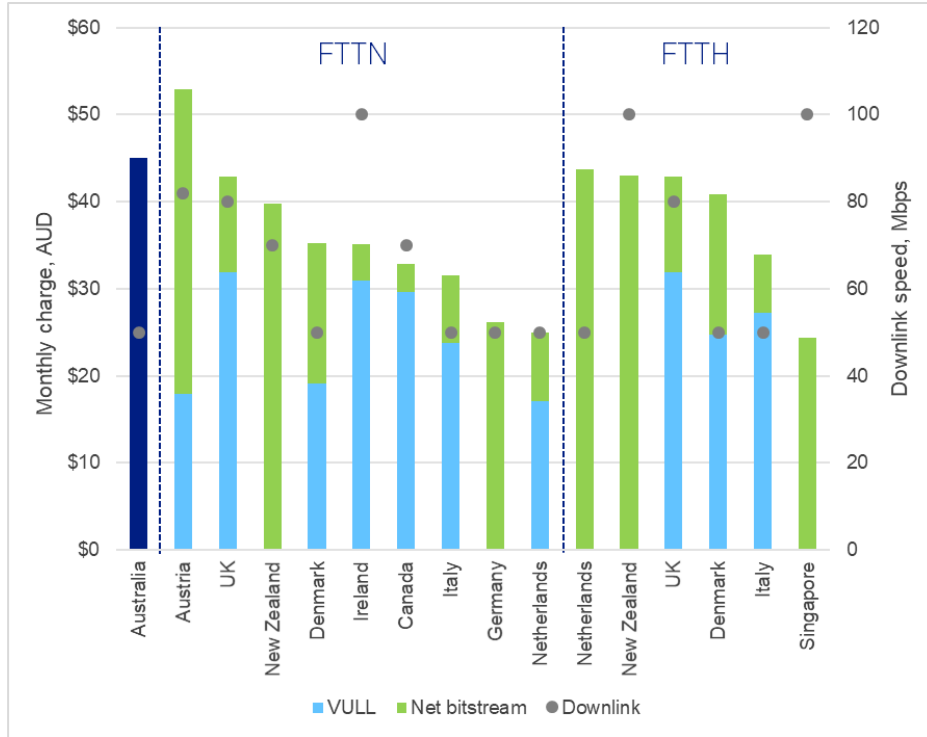
²⁶ Note, chart does not reflect the potential impact of short-term promotional discounts – such as recently proposed temporary discounts for NBN's 100/40 Mbps service, which do not apply to existing 100/40 Mbps customers.

²⁷ WIK, p.22.

²⁸ Link Economics, High Speed Broadband: wholesale price comparison, A report for Telstra, 19 February 2019. Note: Data refers to residential services, for best effort speeds.

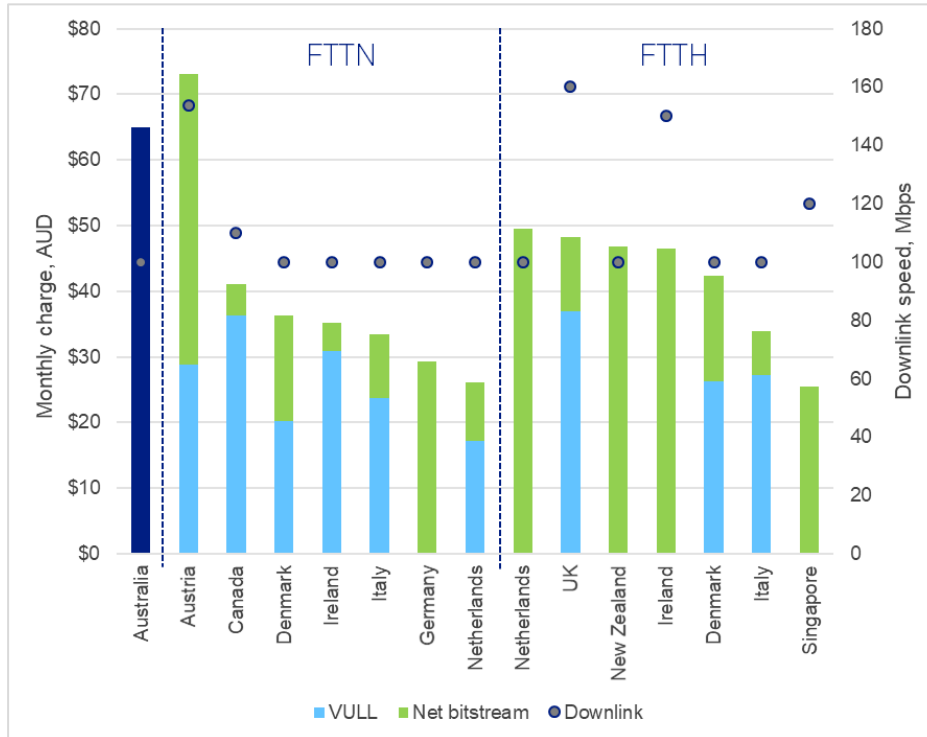


Chart 3.2: Comparison of best efforts, residential 50 Mbps or above, AUD



Source: Link Economics

Chart 3.3: Comparison of best efforts, residential 100 Mbps or above, AUD



Source: Link Economics



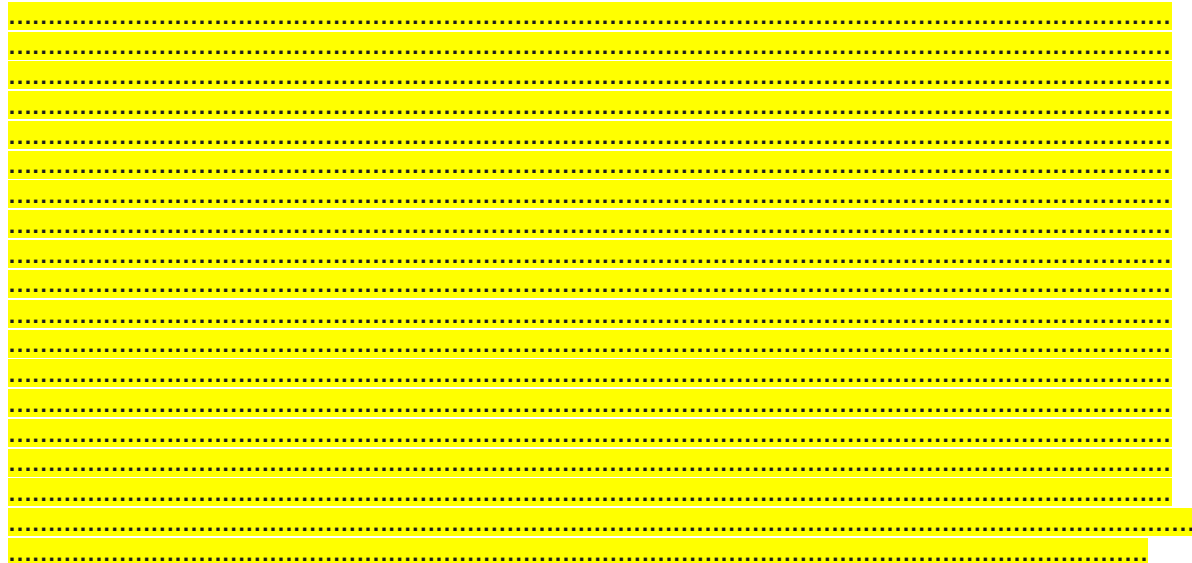
Similarly, when HoustonKemp reviewed the NBN broadband pricing objectives, its key finding was that NBN's pricing appears to be focused on maximising revenue, rather than targeted at stimulating usage in order to maximise the socio-economic returns from the network.²⁹

While take-up of high speed broadband (i.e. 50 Mbps and 100 Mbps) is essential to achieving the high potential socio-economic gains from NBN, high access prices are a deterrent for the efficient use of NBN's network. Chart 3.4 below illustrates the difference between the speeds that end-users could be using on the fixed-lined part of the NBN (with Telstra's line speed capability as a proxy) and those speeds that end-users are taking up.³⁰ It shows that:

- While [CIC begins] [CIC ends] per cent of Telstra's NBN premises can achieve 100 Mbps, only 9 per cent of all NBN customers take-up plans of at least that speed; and
- While [CIC begins] [CIC ends] per cent of Telstra's NBN premises can achieve 50 Mbps or more, only 67 per cent of all NBN customers take-up 50 Mbps plans or higher.

Furthermore, the 67 per cent of plans with speed at least 50 Mbps is that high because [CIC begins] [CIC ends]. It also reflects NBN's effective withdrawal of lower speed plans by making the price higher relative to higher speed plans.

Chart 3.4: [CIC begins]



[CIC ends]

²⁹ HoustonKemp Economists, Review of NBN's broadband pricing objectives, A report for Telstra, 26 June 2019 ("HoustonKemp").

³⁰ Line speed is based Telstra's NBN lines in the fixed line footprint. Take-up is industry-wide – calculated from figures reported in: ACCC, NBN Wholesale Market Indicators Report, September quarter 2019 report, 15 November 2019.



3.2. NBN's current charges for voice-only are too high

The ACCC has focused its inquiry on NBN's broadband access charging. However, voice-only customers' needs are also poorly met by NBN's current access pricing. Indeed, the ACCC's concerns to avoid "inefficient and unfair outcomes for consumers who have no need for the higher speeds that the NBN makes possible"³¹ apply most acutely to voice-only customers.

The minimum \$22.50 wholesale charge RSPs are currently required to pay NBN makes the supply of retail voice-only services [CIC begins] [CIC ends].

Telstra's EBITDA margin in FY19 on NBN voice-only services was [CIC begins] [CIC ends].

We believe the [CIC begins] [CIC ends] likely lower the incentives to continue to supply these services, potentially leading to limited choice of voice-only suppliers on the NBN.

NBN's high access price likely also incentivises retailers to charge separately for calls, in order to promote lower headline prices. For example, Southern Phone charges \$25 per month for its NBN voice-only service with no call inclusions, and offers a \$5 per month discount for pensioners and seniors.³² This means that with a discount it is losing \$2.50 per month. The only way it can recoup its costs is through charges for usage. Alternatively, Southern Phone offers an NBN voice-only plan with unlimited calling for \$60 per month, less \$10 for pensioners and seniors. This is comparable with, but at a higher price than, Telstra's NBN voice-only plan with unlimited calling that costs \$55 per month less Telstra's pensioner discounts [CIC begins] [CIC ends].

Consequently, with the NBN, consumers who only want a voice service face less choice of retailers, higher costs, and greater uncertainty regarding their total bill due to separate call charges. This is detrimental to the interests of these end users and is a disincentive for take-up and use of fixed-line voice services.

3.3. NBN's current charging arrangements are inefficient, complex and uncertain

There are two features of NBN's CVC pricing model that put at risk the broader potential benefits of the NBN:

- the taxing of customers' usage with overage charges; and
- the setting of prices through complex, temporary discounts, credits, rebates and offers.

On the first, it is notable that part of the reason for taxpayers investing in NBN was to address the very problem of taxing usage. Indeed, the 2010 Implementation Study stated:³³

*A unique feature of the Australian broadband market is that **broadband plans typically offer limited or 'capped' usage**. While usage caps are increasing... retailers will continue to charge for usage where they can. For NBN Co usage patterns have limited impact on the cost in the fibre access network **Thus while some usage based pricing could improve its commerciality, Government should encourage NBN Co to keep its usage charges to a minimum.** [emphasis added]*

³¹ Discussion paper, p.7.

³² Southern Phone, Next Home Phone plans, available at <<https://southernphone.com.au/Next-Home-Phone-Plans>> accessed 25 November 2019.

³³ NBN Implementation Study, p.34.



NBN's Focus on 50 campaign demonstrated that lower prices led to a substantial increase in usage. However, as with the existing bundles and even with the bundles proposed by NBN at the conclusion of its 2019 PDF process, if CVC usage exceeds bundle inclusions, overage is paid. Or if the RSP expects to exceed included CVC, it can purchase more CVC. Either way, the RSP pays more.

Consequently, with increasing demand RSPs can either charge higher prices to customers, or cap end users' data consumption. Both will dampen take-up and usage of high speed broadband, limiting the socio-economic benefits of the investment in the NBN.

Indeed, the analysis and international benchmarking conducted by WIK on the impacts of NBN's pricing regime confirm this limiting impact. An important conclusion from its work is that Australia will continue to lag in international comparisons "if NBN retains its practice to offer wholesale products with limited data capacity that lead to higher wholesale prices as data consumption increases."³⁴

The way in which NBN has implemented these campaigns and bundles - through the use of complex temporary discounts, credits, rebates and offers – has created further problems for RSPs and ultimately end users. This is the second main feature of NBN's pricing model that puts at risk the broader potential benefits of the NBN.

For example, NBN reserved the right to withdraw the pricing of its bundles with just six months' notice and, if it exercised this option, pricing would revert to the unbundled price points. This would have a drastic effect on RSPs. The NBN50 bundle, for example, was priced at \$45 but purchasing the same AVC and CVC components on an unbundled basis would cost \$69 under the SAU or \$58 with the volume-based CVC discount³⁵ (which has a minimum notice period of withdrawal of 3 months).³⁶

Recently, NBN has also proposed to introduce needless complexity and uncertainty in relation to its 100 Mbps speed service. NBN has proposed a welcome proposed reduction to the price of the 100 Mbps speed tier. However, instead of simply applying the discount to NBN's existing 100/40 Mbps service, NBN is proposing to create an unnecessary additional 100/20 Mbps product tier. We are concerned that this approach will impair the ability of RSPs to successfully operationalise the changes to benefit consumers. In particular, we believe that having two 100 Mbps services in market at different price points will drive customer confusion, waste resources, increase costs and cause avoidable migrations. There is no positive customer experience rationale for the new product, and we are very concerned that this type of behaviour in protecting its 'back book' is antithetical to efforts RSPs have made to simplify their offers and retail pricing in recent years.

For the reasons above, we support the ACCC's view that "*pricing arrangements should not be unduly complex*" and provide "*price certainty*", and that NBN's pricing arrangements should:³⁷

...allow RSPs to readily calculate and forecast costs associated with providing services based on NBN Co's wholesale products over a reasonable period. They should also enable NBN Co's wholesale products to be transformed to retail services in an efficient manner...
[emphasis added]

Fundamentally, we believe that moving away from CVC and overage charging and simplifying NBN's pricing structure to a one-part tariff will improve the overall level of competition and innovation in the market, by RSPs of all sizes.

³⁴ WIK, p.62.

³⁵ Discussion paper, Table 5.1.

³⁶ NBN Co, Discounts, Credits and Rebates List, version 3.10, p.9.

³⁷ Discussion paper, p.26.



4. A more ambitious regulatory baseline will maximise NBN benefits

The overwhelming majority of customers migrating to the NBN need their fixed broadband service to deliver significantly more than 12 Mbps. They need it to stay connected with family and friends, to do business, to educate their children, for entertainment and to access vital health and government services.

For these customers, Telstra believes that the only way the ACCC will successfully support a smooth transition and positive NBN experience is by ensuring NBN offers an affordably priced entry-level service that offers a material improvement in quality over legacy services. This was explicitly recognised in the 2010 Implementation Study:³⁸

*For some time, NBN Co will co-exist with legacy copper and HFC networks...NBN Co should set prices to **deliver a superior offer to service providers compared with such legacy networks**. Based on the Implementation Study's modelling, this involves pricing entry-level wholesale fibre services at between \$30 and \$40 per month – depending on the level of competing copper ULL price...this will enable retailers to offer **much faster broadband speeds without increasing the prices they charge end users**. [emphasis added]*

The service which best meets these criteria is NBN's most popular 50/20 Mbps service, currently subscribed to by around 58 per cent of NBN end-users.³⁹

Recent cross-industry consumer research conducted for Telstra, which we detail below, supports a conclusion that ensuring the affordability of this service will much better promote a smooth transition to the NBN than access pricing which incentivises take-up of low speed broadband. We also detail below economic analysis by WIK that indicates an affordable entry level 50 Mbps service providing a material uplift in performance will best promote efficient and productive use of the network, and incentivise the take-up of higher speeds necessary for broader socio-economic gain.

The price we propose that the ACCC set for this service is an all-inclusive \$35 bundle price. This is the same price the ACCC proposes in the discussion paper, but for a 50/20 Mbps service rather than the 12/1 Mbps service proposed by the ACCC. We also propose that the CVC price be zero-rated across all plans – or considerably simplified, so that overage charges and penalties are removed.

Modelling by WIK shows that this is possible without compromising NBN's revenues or ability to invest, relative to the base case of NBN's September 2019 pricing.⁴⁰ However, under Telstra's proposed approach, by 2024 there would be 68 per cent more customers on the NBN due to reduced substitution,⁴¹ 73 per cent of customers would be on speeds of 100 Mbps or above,⁴² and GDP would be \$18 billion higher over the 2019-2024 period.

We also propose the ACCC require NBN to offer a voice-only wholesale product, priced at \$10. The only benefit voice-only consumers receive from migration to the NBN is continuity of the fixed-line voice services they value. Yet under current wholesale prices, the supply to voice-only customers over the NBN is **[CIC begins]** **[CIC ends]**. It is paramount that the ACCC ensure RSPs have

³⁸ NBN Implementation Study, pp. 32-33.

³⁹ ACCC, NBN Wholesale Market Indicators Report, September quarter 2019, 15 November 2019.

⁴⁰ Note, WIK modelling of each of the scenarios assumes that the pricing remains constant between 2019 and 2024, for the purposes of enabling comparisons in the impacts generated by the different price levels over the period.

⁴¹ In absolute terms, by 2024 the number of households connected to the NBN today (assumed at 5.68m households) would increase only very modestly per the modelled impact of the base case to 5.84m, but would increase by a much larger amount per the modelled impact of Telstra's proposal, to 9.79m households (WIK, p. 53).

⁴² In absolute terms, by 2024 the percentage of customers on 100 Mbps or more would increase from c 8% today to 17% per the modelled impact of the base case, but would increase to 73% per the modelled impact of Telstra's proposal.



some financial incentive to supply voice-only services, noting that customers of these services are often older and more vulnerable consumers.

The regulation of these two anchor products will promote the objectives of the NBN: increasing usage by providing more affordable access. More broadly, the elimination of complex and risky CVC charging will better promote retail competition as well as enable more usage of the NBN. But these changes are not sufficient without price certainty – NBN needs to move away from temporary discounts and offers to make permanent and predictable changes.

In determining whether to make an AD covering these matters, the ACCC is required to take into account, among other things, the following key criteria:⁴³

- Whether its decision will promote the LTIE, namely whether the AD will:
 - o Promote competition, including removing obstacles to end users gaining access to services;
 - o Achieve any to any connectivity; and
 - o Encourage economically efficient use of and investment in infrastructure.
- The legitimate business interests of NBN, and NBN's investment in facilities used to supply the declared NBN services;
- The interests of all persons who have rights to use the declared NBN services; and
- The direct costs of providing access to the declared NBN services.

We set out below how our proposal meets all of these key criteria, as a more ambitious reset is:

- good for consumers and promotes competition;
- promotes broader socio-economic gains by encouraging economically efficient use of the NBN;
- preserves NBN revenues and ability to invest; and
- encourages ongoing efficient investment.

4.1. A more ambitious baseline is good for customers and promotes competition

We are concerned that setting a \$35 price for a 12/1 Mbps entry level product will generate a poor customer experience and not optimise competition.

Applying the same pricing to create a more affordable 50 Mbps entry-level product will maximise the incentive for RSPs to continue to promote this product where it is available on the NBN, and also to use this as the base from which to entice customers onto higher speeds of 100 Mbps and beyond. This in turn will promote positive customer experiences and enable healthy retail competition, in the LTIE.

The LTIE will also be promoted with a viable voice-only product that enables retailers to continue to serve this often aged and more vulnerable cohort.

These are discussed below.

⁴³ CCA s 152BCA(1); s 152BDAA(1).



4.1.1.A low speed anchor will create poor customer experiences

The ACCC discussion paper considers whether NBN pricing is promoting a smooth migration for legacy broadband users – focusing particularly on NBN services that are functionally equivalent to basic speed DSL services. The paper also considers whether a regulated basic speed NBN service could serve as an anchor price, indirectly constraining the non-regulated access prices for higher speed NBN services.

However, we are concerned that regulating a low speed (12/1 Mbps) broadband plan will encourage customers to take-up low speed broadband, resulting in poor customer perceptions and experience of NBN, and limited achievement of the potential socio-economic benefits.

For many consumers, the value of the higher speeds available on the NBN remains an unknown quantity. Recent research commissioned by Telstra's customer research function – Group Research and Strategic Insights (**GR&SI**) reveals that around half of customers do not know what speeds are available on the NBN⁴⁴ and that, even once they have migrated to the NBN, only 50.1 per cent know what typical evening speed is included in their plan.⁴⁵

Consequently, the choice of NBN plan for many consumers has been guided by the more readily comparable and known feature – price. According to the consumer research that GR&SI commissioned, around 40 per cent of non-NBN consumers will choose a low-price NBN plan when presented with a range of speed options.⁴⁶

In fact, prior to the adjustments to NBN's wholesale pricing to make its slower speed plans less attractive to RSPs, many RSPs were incentivised to promote NBN's cheapest 12/1 Mbps service. As former NBN CEO Bill Morrow explained:⁴⁷

The fact that we have a 12 Mbps product means that is how [telcos] are going to price the cheapest product to [advertise] on the side of a bus.... The 12 Mbps product was for [voice], now it's suddenly being used because it is a cheaper [broadband] product.

As observed by the ACCC's Chairman, the result in 2017 was that:⁴⁸

Currently around 30 per cent of NBN customers have been sold low-speed [12 Mbps] plans, with many not realising their internet speeds may not be any better – and in some cases worse – than existing ADSL services.

The percentage of NBN customers on 12/1 Mbps plans has dropped from 30 per cent to around 16 per cent. However, for the circa one million⁴⁹ consumers who have migrated to 12/1 Mbps plans on the NBN since 2017 and stayed there, this has *not* been a good outcome. In terms of speed improvements for these customers, the ACCC has recently confirmed these as being marginal:⁵⁰

Consumers on NBN 12 Mbps plans received an average download speed of 10.8 Mbps during the busy hours, slightly higher than the 8.0 Mbps download speed observed when averaging busy hour results for each volunteer on ADSL connections.

⁴⁴ Telstra GR&SI, nbn Speed Tiers Research – Final Report, October 2019, p.13 ("GR&SI Research"). Note: Online survey conducted in October 2019 with 1,061 Telstra customers and 464 non-Telstra customers.

⁴⁵ Roy Morgan, "Consumers who know their NBN speed are more satisfied with their provider", Press Release, 26 August 2019, Note: n=1,172. Base: Australians 14+ with a connection to the NBN.

⁴⁶ GR&SI Research, p.27.

⁴⁷ Battersby, Lucy, "Telcos are putting NBN customers on a vice-only speed, Morrow tells committee", *Sydney Morning Herald*, 1 August 2017.

⁴⁸ ACCC, "ACCC wants nbn plan advertising overhaul", Media Release, 21 August 2017.

⁴⁹ ACCC, NBN Wholesale Market Indicators Report, September quarter 2019, 15 November 2019.

⁵⁰ ACCC, "Differences in RSP download speeds are growing", Media Release, 7 November 2019.



It is thus unsurprising that the consumer research GR&SI commissioned⁵¹ reveals that consumers on NBN's 12/1 Mbps speed tier tend to have poorer perceptions about NBN speed, reliability and value for money compared to consumers on 50 Mbps or more. About half of those who are on the 12/1 Mbps speed tier are dissatisfied with the value for money of their service, and 45 per cent of those who are on a 12/1 Mbps service consider the speed for their service to be below expectations (Table 4.1).

Table 4.1: Consumer perceptions of their NBN service

	Expectations	Total	Speed Tier			
			12 Mbps	25 Mbps	50 Mbps	100 Mbps +
Speed	Below	35%	45%	43%	33%	25%
	Meets	49%	51%	47%	48%	45%
	Above	16%	4%	10%	19%	30%
Reliability	Below	27%	37%	26%	28%	18%
	Meets	53%	55%	56%	50%	53%
	Above	20%	8%	18%	22%	29%
Value for money	Below	39%	51%	40%	36%	38%
	Meets	49%	45%	47%	52%	42%
	Above	12%	4%	13%	11%	20%

Source: GR&SI Research. NBN users (Telstra and non-Telstra) n=932 "To what extent does your home broadband meet your expectations, across these aspects?"

In our view, the success of recent NBN initiatives aimed at incentivising customers to take-up speeds of 50 Mbps and above has been a very positive development for consumers, albeit at temporary wholesale prices that were too high. A regulated product at 12/1 Mbps risks a return to customers being dissatisfied on low speed tiers. Indeed we note that NBN has recently stated that "[t]ake up of the Entry Level Bundle has already more than doubled since the change was made [on 1 October 2019]."⁵²

4.1.2. High-speed anchor will generate a better customer experience

The consumer research findings set out in Table 4.1 above suggest that customers on higher speeds (50 Mbps and 100 Mbps+) tend to be more satisfied with their NBN service, with the most satisfied customers being those on speeds of 100 Mbps plus. A regulatory anchor which supports RSPs in encouraging customers to take-up speeds of 50 Mbps and above (wherever the NBN supports these speeds) will therefore tend to promote customer satisfaction upon initial transition to the NBN.

Furthermore, the consumer research commissioned by GR&SI indicates that customers on higher speed tiers (50 Mbps+) are also materially more willing to pay to increase their speed, compared with those on lower speed tiers (12 and 25 Mbps).⁵³ Hence the initial satisfaction levels of customers migrating to 50 Mbps+ services are likely only to grow as they migrate to higher speeds enabling them to do ever

⁵¹ GR&SI Research, p.23.

⁵² NBN co, "NBN Co confirms new wholesale discounts and annual data capacity increases to meet customer demand", Media Release, 26 November 2019.

⁵³ GR&SI Research, p.21. Note research sample sizes by income bracket of respondents were only small. However, the results suggest that the higher willingness of customers on higher speeds to pay to increase their speed remains true, when comparing customers in the same income bracket, other than for those earning less than \$50,000 (GR&SI Research, p.24).



more with their NBN service. This is the *halo effect*, which means the positive perceptions all customers would have of the 50/20 Mbps anchor will lead to them having much more positive perceptions of other higher-speed plans and a higher willingness to pay for them.

By contrast, consumer research shows the overwhelming majority of customers on a 12/1 Mbps service were unwilling to upgrade their service, even when they had expressed dissatisfaction with it. This suggests that a poor perception of the NBN and its ability to offer them a more satisfactory quality of experience may have become entrenched. This is the *horn effect*, which means the negative perceptions customers have of the 12 Mbps plan, will lead to them having much more negative perceptions of higher-speed plans and a lower willingness to pay for them.

Table 4.2 shows the results by speed category of consumer willingness to pay \$10 more to increase to the next speed tier. Customers that aren't willing to pay to upgrade are the 'stayers' and are illustrated by the highlighted cells. This suggests that when your experience of NBN is low speed broadband, you are much more likely to be a stayer, and not have a high willingness to upgrade to higher speeds.

Table 4.2: Proportion of survey respondents willing to spend incremental \$10 to upgrade

From→ To↓	12 Mbps (7% of users)	25 Mbps (26% of users)	50 Mbps (44% of users)	100 Mbps (23% of users)
12 Mbps	67%	3%	0%	1%
25 Mbps	22%	55%	4%	1%
50 Mbps	2%	26%	52%	6%
100 Mbps	4%	9%	30%	30%
250 Mbps +	4%	6%	14%	62%

Source: GR&SI Research. NBN users aware of speed n=679. "If you were offered a new nbn plan from [your current provider] and had the ability to easily change your speeds, which of these options would you choose?"

The improved satisfaction and willingness to pay for speed upgrades generates competition between RSPs for these consumers who are willing to pay for better services.

An AD setting more efficient, all-inclusive wholesale pricing for NBN's 50 Mbps speed tier and protecting RSPs from the ever increasing margin squeeze posed by NBN's current CVC charges will provide greater opportunity for healthy competition, including entry of smaller retailers. It will also protect consumers against the risk that retail prices are set ex ante at excessive levels by RSPs to protect against additional wholesale costs resulting from higher usage.⁵⁴

Additionally, a regulatory anchor for a higher quality broadband service offering a material improvement in capability over legacy broadband services will enable retailers to advertise and explain the value in higher speed NBN broadband products, instead of focusing on price competition at low-end speed tiers.

If retailers are not able to offer products that offer a clear standard of quality for a given price point, there is the risk that price competition will be concentrated in the low speed tiers, without regard to quality. Australians will be stuck in a low speed fixed broadband rut, when considered against the rapid advances in speed and affordability being made in other countries. It is notable in this regard that in both the UK and in New Zealand, the regulated broadband anchor product is of a much higher speed than 12Mbps – 40 Mbps in the UK and 100 Mbps in New Zealand. In both cases, the regulated anchor also reflects the current most popular basic speed product offered by the regulated entity – which in NBN's case is its 50 Mbps service.

⁵⁴ WIK, p. 20.



4.1.3.A viable voice-only plan will benefit customers and promote competition

Telstra proposes that the ACCC include in its AD a voice-only anchor – a 12/1 Mbps AVC with included CVC capped at 150 Kbps.

As set out in section 3.3 above, the current price for voice-only services is [CIC begins] [CIC ends]. A wholesale price of \$10 will enable retailers to more viably supply voice-only services.⁵⁵ This in turn may also encourage greater competition in the supply of these services by RSPs with customer bases to whom these services are important – allowing more retailers to market voice-only products that include calling.

The ACCC has proposed to assess NBN's access pricing against the principle that "*prices should meet consumer demand*." There is a clear cohort of consumers that value fixed-line voice-only services. However, NBN does not offer an access product that is priced for RSPs to profitably meet that demand. Therefore, the ACCC should expand the scope of its AD to protect the interests of this cohort of consumers.

Further, it is our experience to date that many fixed voice-only consumers require additional customer service support. Given the characteristics of the customer base they tend to use more traditional customer service channels (e.g. shops and call centres) as opposed to online. This increases the cost to serve these customers. A \$10 regulated anchor price would improve the margins available to RSPs to provide a positive experience for these customers.

Lastly, we note that the approach of including a voice-only anchor price alongside the anchor price set for the most popular 'entry-level' broadband speed tier is the approach that has been adopted in New Zealand.

4.2. A more ambitious regulatory baseline will promote broader socio-economic outcomes

The NBN was created, essentially, to improve Australia's overall socio-economic performance. When it was announced, on 7 April 2009, the Prime Minister said that it would drive national "*productivity, improve education and health service delivery and connect...cities and regional centres, enhancing...Australia's international competitiveness*."⁵⁶

The potential social and economic gains from taxpayers' investment in the NBN are vast. Higher speed broadband has the potential to transform families and communities and drive a technology-led boost to the Australian economy. NBN services are already growing Australia's GDP, and with the right NBN wholesale pricing to stimulate take-up of higher speeds, Australia's GDP could grow even more.

Analysis conducted by WIK for Telstra shows that the NBN could be adding as much as \$8 billion more p.a. in GDP by 2024, relative to NBN's base case of September 2019 prices.⁵⁷ This amounts to an \$18 billion increase in GDP over the period 2019 to 2024, as shown below in Table 4.3.

⁵⁵ [CIC begins] [CIC ends]

⁵⁶ Hon Kevin Rudd MP, Prime Minister and Senator the Hon Stephen Conroy, Minister for Broadband, Communications and the digital Economy, "New national Broadband Network," Joint Media Release, 7 April 2009.

⁵⁷ Note for comparison purposes, in the modelled base case, WIK have assumed NBN's September 2019 prices remain constant to 2024.

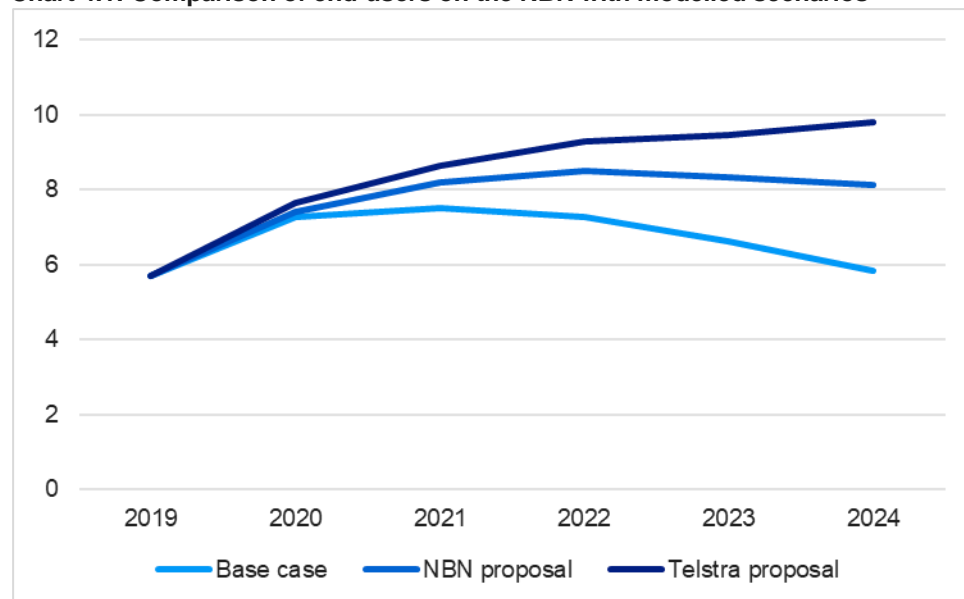
**Table 4.3: Comparison of GDP with NBN base case scenario,⁵⁸ \$millions**

Scenario	GDP in 2024 (nominal) (above base case)	GDP (present value) 2019- 2024 (above base case)
NBN scenario ⁵⁹	4,611	10,188
Telstra scenario ⁶⁰	8,183	18,074

Source: WIK

Critical to the higher GDP generated by Telstra’s proposal is the higher take-up of the NBN (Chart 4.1) and the greater number of customers on higher speed tiers (Table 4.4). WIK concludes that the Telstra scenario ensures the most efficient usage of the NBN infrastructure, as the results from WIK’s analysis indicate that, with Telstra’s proposal:⁶¹

- the number of customers on the NBN is significantly higher than in the base case and the NBN scenario (due to reduced substitution to other technology platforms); and
- the uptake of high speed tiers is much stronger than in both the base case and the NBN scenario: with 73 per cent of NBN customers choosing products of 100 Mbps or more, in comparison to 52 per cent in the NBN proposal and just 17 per cent in the base case.

Chart 4.1: Comparison of end-users on the NBN with modelled scenarios

Source: WIK

The estimated average speeds for each scenario are shown in Table 4.4. The greater uptake of higher speed tiers under the Telstra proposal is driven by the “halo effect” created by having an affordably

⁵⁸ Details of the base case scenario are set out in full in WIK’s report. In summary, they assume that NBN’s current September 2019 pricing remains in effect and constant to 2024.

⁵⁹ In the NBN scenario, WIK assume that NBN puts into effect the pricing proposals in its 2nd PDF consultation, and that these prices remain constant to 2024. We note that NBN released final pricing on 26 November 2019 which adds limited additional CVC to the 100, 250 and 1000 Mbps bundles. These changes are not modelled by WIK, but are expected to have negligible impact.

⁶⁰ Details of the Telstra pricing proposal are set out in full in WIK’s report. In summary, these are that (i) there are no separate CVC charges (i) NBN offer a \$10 voice-only service (ii) basic broadband is offered at the maximum speed supportable on the NBN up to 50/20 Mbps for a price of \$35 (iii) NBN’s 100 Mbps service costs \$58 (iv) NBN’s 250 Mbps service costs \$68 and NBN’s 1000 Mbps service costs \$80. It is assumed these prices remain constant to 2024.

⁶¹ WIK, pp.53-54.



priced entry-level product at 50 Mbps (\$35, no CVC charge). This gets customers onto the NBN using higher speeds, and increases the prospects for upgrades to higher speeds.

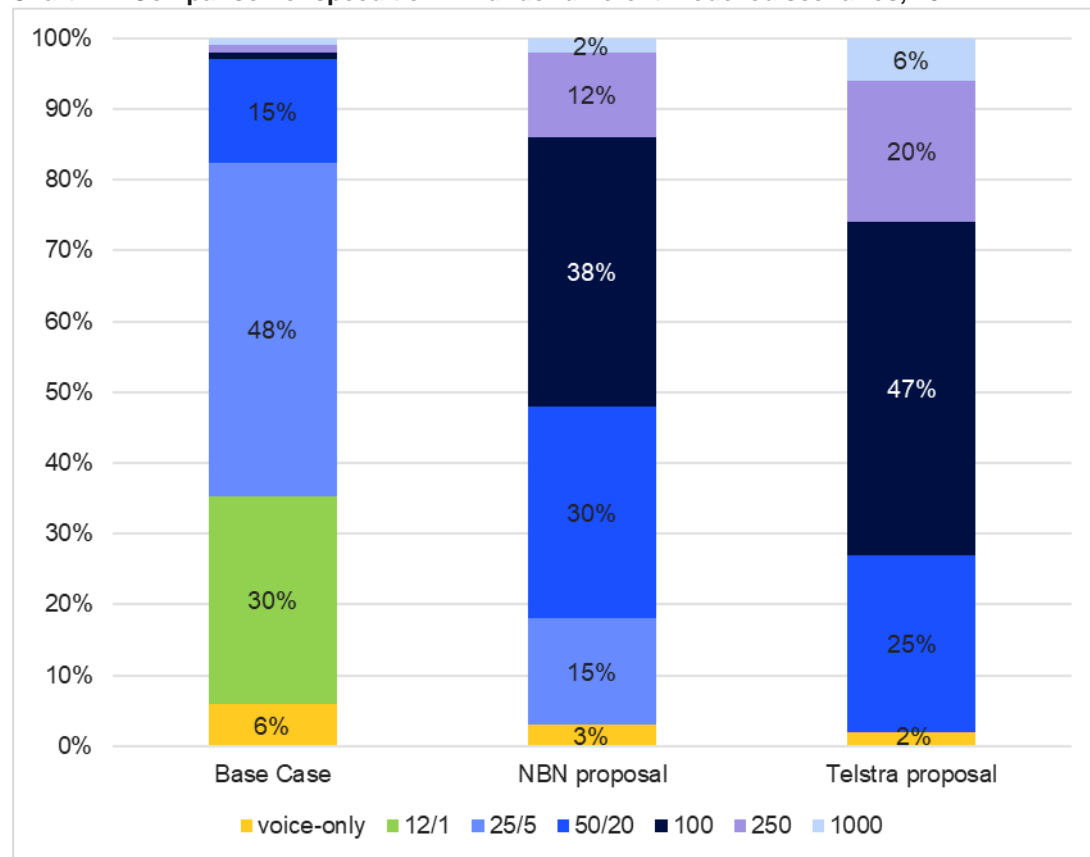
Table 4.4: Estimated speeds under modelled scenarios

	2019	2020	2021	2022	2023	2024	CAGR
Base case	40.25	43.64	45.61	47.13	49.33	51.46	5%
NBN proposal	40.25	47.86	51.15	59.15	78.6	99.02	20%
Telstra proposal	40.25	60.68	83.06	104.31	125.04	155.80	31%

Source: WIK

Chart 4.2 illustrates the differences between the three scenarios in terms of speed tier mix in 2024.

Chart 4.2: Comparison of speed tier mix under different modelled scenarios, 2024



Source:

WIK

To the extent that the ACCC’s proposed regulation of NBN’s 12/1 Mbps service is effective in driving higher take-up of low speed broadband, this will lead to a higher proportion of low speed customers in the speed tier mix, for the reasons discussed in section 4.1.1 and 4.1.2.



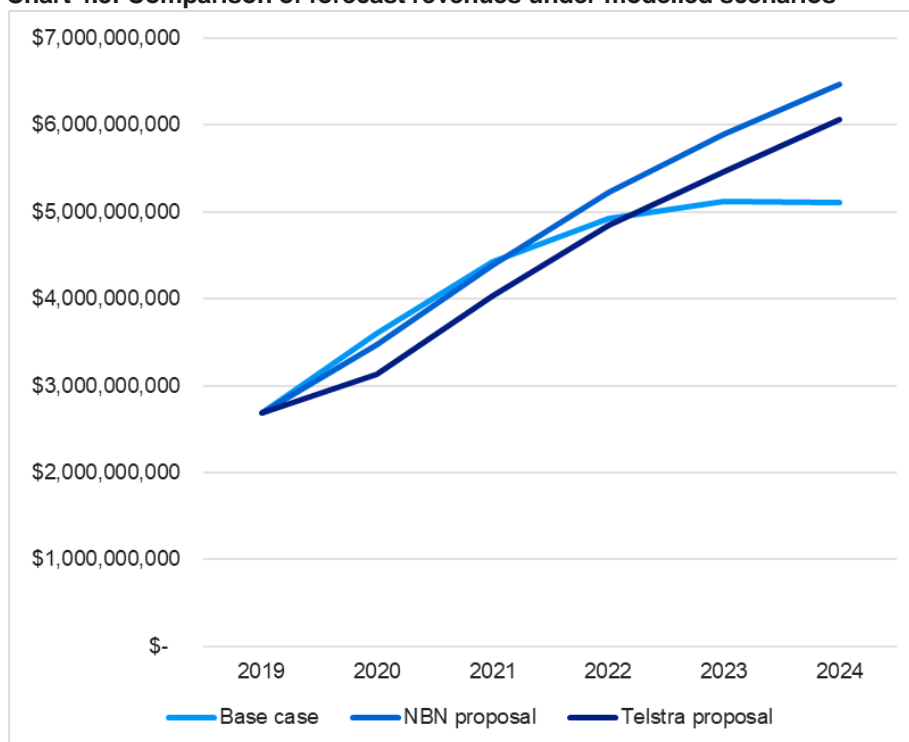
4.3. A more ambitious regulatory baseline is good for NBN

A high speed anchor will enable NBN to get more customers on the NBN and sell greater numbers of higher speed plans. Even with the removal of CVC overage charges and penalties, this enables it to maintain similar revenues, without increasing direct costs. At the same time, we expect that the improved average speeds will improve customer perceptions of and satisfaction with the NBN. This has, for example, been the experience in New Zealand. Thus, Telstra's proposal is in the legitimate business interests of NBN.

4.3.1. NBN revenues are likely to remain high

We have asked WIK to model the expected effects of our proposal on NBN's revenues. Its modelling suggests that adopting Telstra's proposal to offer a high speed anchor, remove CVC overage charges and penalties and offer a \$10 voice-only service results in higher revenues than under NBN's September 2019 prices (the base case) and only slightly lower than under the pricing proposed in NBN's second PDF consultation pricing proposal (the NBN scenario)⁶² (Chart 4.3).

Chart 4.3: Comparison of forecast revenues under modelled scenarios⁶³



Source: WIK

Revenues grow under all scenarios, but under Telstra's proposal the increasing revenue is caused by the number of NBN users growing and the greater take-up of higher speed tiers – a more efficient use of NBN's network. Under the NBN proposal, revenue growth is fuelled by charging a smaller number of

⁶² WIK has not modelled the impact of the final pricing changes released by NBN on 26 November 2019 (which add limited additional CVC to the 100, 250 and 1000 Mbps bundles). However WIK expects the impact of these changes to be small, and generally to reduce NBN's revenues, relative to the modelled NBN Scenario.

⁶³ Note that the base case revenues differ from the NBN Corporate Plan due to one-off revenues, revenues from backhaul and leased lines services as well as revenues with large business customers which are not considered in the WIK model as well as from different assumptions regarding future effective capacity costs.



users higher prices, and restricting the utilisation of the network. The revenue path in the base case is driven by higher prices but take-up declining (due to substitution to alternative technologies).

To the extent that the ACCC's proposed regulation of NBN's 12/1 Mbps service is effective in driving higher take-up of low speed broadband, the likely effect will be to lower NBN's revenues relative to each of the three modelled scenarios, for the reasons discussed in section 4.1.1 and 4.1.2.

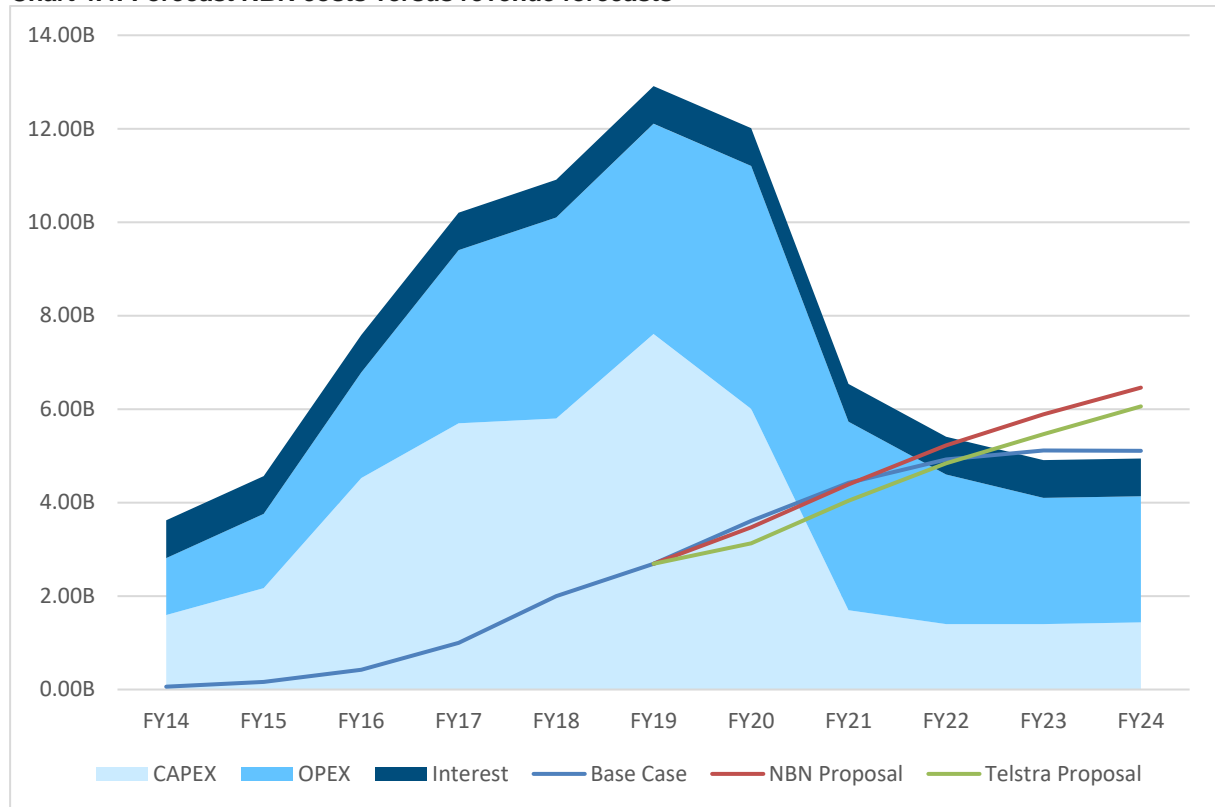
4.3.2. NBN's direct costs

The ACCC must also have regard to NBN's direct costs in making an AD. The cost impact to NBN of providing a 50/20 Mbps instead of a 12/1 Mbps anchor service is unlikely to be material. This is because the majority of the costs to provide port capacity are upfront fixed infrastructure costs that NBN will incur regardless.

Similarly, the direct cost to NBN of removing CVC overage charges and penalties is unlikely to be material.

If there is excess capacity in NBN's backhaul network then the incremental cost of filling that spare capacity is zero. If there is not spare capacity in NBN's backhaul network, then NBN might be required to augment that capacity in the long-run. However, Telstra's proposal does not impact NBN's ability to augment backhaul capacity. As demonstrated by WIK's analysis, the Telstra proposal does not reduce NBN's revenue and, as shown below, NBN's ability to fund ongoing capex from its cash flow will not be materially affected.

NBN has forecast to become net cash flow positive in FY23. The modelling undertaken by WIK demonstrates that in all scenarios this is not affected. Chart 4.4 illustrates this by overlaying the estimated revenues with NBN Co's forecast costs.


Chart 4.4: Forecast NBN costs versus revenue forecasts


Source: NBN Corporate plan, WIK.

This means that the direct costs of providing access to NBN's network are taken into account with Telstra's proposal as well as the legitimate business interests of NBN's investment.

4.3.3. Chorus (New Zealand) has benefited from a regulated high speed anchor

In New Zealand, the main wholesale broadband provider, Chorus, is subject to price caps.⁶⁴ The regulation specifies two capped wholesale fibre "anchor services" which Chorus is required to provide to retailers:

- A voice-only service; and
- An "entry-level" broadband service of 100/20 Mbps.

⁶⁴ The regime is currently in transition given recent legislative changes. The existing price caps were part of commercial agreements with the Government, then rolled over for transition as the regulator sets up the regulatory regime. For background on the regime see: Commerce Commission, New regulatory framework for fibre: Invitation to comment on our proposed approach, 9 November 2018, section 2.



The Government has explained the purpose of this anchor pricing regulation as follows:⁶⁵

The purpose of Anchor Service regulation is to ensure that basic services are available at reasonable prices by providing an upper limit on pricing for a service that is attractive to a large number of people. This will also create a price and quality “anchor” for the other services provided.

The approach adopted in New Zealand has seen Chorus successfully migrate customers to higher speed plans, without a very low-speed base plan. In its recent financial results, Chorus states:⁶⁶

*Chorus reports uptake of one gigabit per second (1Gbps) broadband has **doubled in a year**, reaching 66,000 connections as at the end of August...*

***Gigabit plans are now the second most popular after 100 megabit per second plans (100 Mbps).** Chorus dropped the wholesale price of gigabit broadband to \$60 effective July 1st and as such expects this rapid uptake to continue.*

*‘We’re seeing a **growing proportion of customers opting for higher speed connections** to ensure that they and their families have the capacity to do what they want online, when they want,’ says Ed Hyde, Chorus’ Chief Customer Officer.*

*‘**Broadband providers have been eager to promote gigabit services** to their customers with myRepublic, Orcon, Slingshot and Stuff Fibre leading the pack by share of their fibre base... [emphasis added]*

Of the total mass market fibre connections on the Chorus Network, 71 per cent are 100 Mbps, with about 10 per cent on gigabit, 4 per cent on 200 Mbps, and 15 per cent on 50 Mbps. The proportion of customers on 50 Mbps plans has reduced in the last financial year as the proportion of gigabit plans increases.⁶⁷ These results offer an insight into how such take-up could be stimulated in Australia.

The New Zealand experience is a strong indicator that there is growth potential for NBN by regulating a higher speed anchor. To date, inefficient wholesale pricing for fixed broadband has resulted in Australia’s retail prices being some of the highest in comparable countries.

4.4. A more ambitious reset encourages efficient investment

Earlier this year, Telstra commissioned an independent report by HoustonKemp to review the optimal pricing objectives of the NBN. The observations made by HoustonKemp are relevant to the ACCC’s consideration of whether an AD would encourage efficient investment.

HoustonKemp observes that the investment in the NBN is a public investment, the direct financial returns from which do not presently enable the recovery of the weighted average cost of capital (**WACC**) invested, and may not do so for some time (if ever). In such circumstances, the investment in the NBN is not an economic one, nor would it be an efficient investment by a private entity. The investment made in the NBN is nevertheless an efficient public investment by Government, because Government must also consider the social return from its investments, and the social plus private returns from NBN are potentially significantly higher than NBN’s WACC.

Whether or not an AD promotes “efficient investment” needs to be considered in this context. That is, the ACCC should consider not only the impact of any changes to NBN’s access pricing to the private returns to be generated by the NBN (supporting its ability to make future investments), but also the impact on

⁶⁵ Ministry of Business, Innovation and Employment, Cabinet Paper “Fibre Regulations under the Telecommunications Act 2001”, 22 May 2019.

⁶⁶ Chorus, “Uptake of gigabit broadband doubles in a year”, Media Release, 13 September 2019.

⁶⁷ Proportions on each plan estimated from the chart (except 100 Mbps), see Chorus, 26 August 2019, p.9.



the wider social returns to Government, and to the Australian public (efficient use of the investment already made).

In this context, Telstra's proposal can be seen to clearly encourage efficient investment because it:

- promotes greater take-up of NBN services and encourages customers to upgrade to higher speed tiers;
- is unlikely to raise NBN's direct costs; and
- does not harm NBN's broadband revenues, relative to the base case of NBN's September 2019 pricing.

Therefore, Telstra's proposal increases the social returns from the NBN to Government, without materially harming its private return. Further, on an ongoing basis, NBN's net cashflow and capacity to invest is also unlikely to be harmed relative to NBN's September 2019 pricing, so NBN could afford as much capital expenditure under Telstra's proposal as it had otherwise planned.⁶⁸

⁶⁸ NBN's 2020 Corporate Plan was released on 30 August 2019.



APPENDIX: Response to ACCC Questions

No.	Question	Telstra response
Background		
1	Are there any other NBN product elements, or features of commercial access agreements not mentioned in Section 2 of the paper, that have a major bearing on basic speed access products and entry level retail plans on the NBN? What are these?	<p>Product Elements</p> <p>The paper includes all of the product elements that are necessary to supply NBN services. However, we consider there should be more explicit reference to NBN voice-only product elements / services, as these are also important basic/entry-level consumer services the NBN is intended to support.</p> <p>The product elements with the greatest impact on the retail price are the AVC & CVC. Whilst the cost of the NNI charges is material, this cost is spread over the entire customer base, so changes in these NBN charges have a less direct impact on prices for individual retail services.</p> <p>In addition to these ongoing charges, NBN's once-off wholesale charges also have an impact on RSP costs and retail charges. Currently in this category, the ACCC refers only to NBN's service transfer and transfer reversal charges. We recommend that the scope of the ACCC's inquiry extends to all relevant once-off charges which could have a material impact on costs for RSPs and/or end-users – for example, NBN's charges for professional installation.</p> <p>Commercial Agreements</p> <p>The paper lists all of the relevant commercial access agreements / features. As the ACCC has identified, it is a notable feature of the contractual and regulatory environment in which the ACCC is contemplating making this AD that the NBN Discounts, Credits & Rebates List does not form a part of the WBA or any SFAA; it is a very long and complex ancillary document. As we have previously submitted and as the ACCC acknowledges in the paper, this has been a key cause of wholesale pricing uncertainty, instability and complexity for RSPs which seems set to continue, absent ACCC intervention.</p>
ACCC approach to examining NBN access pricing		
2	How do you consider the 'no worse off' condition for migration of legacy customers onto the NBN should operate?	<p>Generally, we consider customers (as taxpayers) have made a substantial investment in the NBN that is not expected to be recovered from NBN. In this context, customers expect more from that investment than to be no worse off. This is supported by customer research that shows more than half of customers on a 12/1 plan perceive poor value for money and 45% of customers on a 12/1 plan are dissatisfied with the speed of their NBN service.</p> <p>As explained in the body of our submission (refer to section 2), for customers who choose to take-up a fixed broadband subscription on the NBN, we believe it is core to the intent and purpose of the NBN that those customers are able to enjoy a <u>materially better</u> broadband experience than what was previously available on legacy networks.</p>



No.	Question	Telstra response
		<p>However, we support the “no worse off” principle for consumers who “do not value the higher speeds made possible by the NBN”, insofar as we believe that this is the intrinsic protection that should be afforded to NBN <u>voice-only</u> customers – who gain no benefit from migration to the NBN other than continuity of their fixed line voice service.</p>
3	<p>Do you consider that price regulation of a basic speed access product would serve as an effective price anchor on higher speed NBN services? If so, for what range of higher speed TC-4 access products would the price terms for a TC-4 12/1 speed access product provide an effective price anchor?</p>	<p>For the reasons explained in the body of our submission (refer to sections 3 and 4), we consider there is a material risk that a 12/1 Mbps regulated access product would not serve as an effective anchor for NBN’s higher speed services. These reasons include:</p> <ul style="list-style-type: none"> • The fact that the limited download and upload speeds of NBN’s 12/1 Mbps service make it unsuitable for many of the applications customers need their fixed broadband for today, particularly where there are multiple simultaneous users such as is the case for the average family. Further, as set out in the WIK report referred to in our submission, this need for bandwidth is expected to grow over the coming years. • The results of our consumer research, which show a higher proportion of customers on 12/1 Mbps plans will not be tempted to upgrade to a higher speed plan for a small increment in price (see Table 4.2). • NBN’s incentives and opportunities to demarcate low speed and higher speed broadband services to prevent substitution between the anchor and anchored plans. For example, NBN could change the features of its product offerings, to reduce the attractiveness of a regulated 12/1 Mbps product.⁶⁹ <p>We therefore consider there is a significant risk that the regulation of a slow speed 12/1 Mbps product will leave NBN’s pricing of its mainstream higher speed products unconstrained. It is notable, in this respect, that at the conclusion of its 2019 PDF process, NBN is not proposing any change to change the price of its most popular 50/20 Mbps plan.</p> <p>By contrast, as set out in detail in the body of our submission (refer section 4.1), we consider that the regulation of the price terms of NBN’s 50/20 Mbps plan would provide a much more effective price anchor for NBN’s broadband access services. For voice-only users, we recommend an additional anchor price regulating NBN’s 12/1 Mbps plan, with a strict limit of 150 Kbps included CVC.</p>
4	<p>Do you have any comments on the pricing principles proposed by the ACCC for assessing NBN Co’s access prices?</p>	<p>First and foremost, the ACCC must consider the legislative criteria before making an AD. While we accept that adopting principles might make that consideration more practical, they should not be a substitute for the criteria themselves. In this context, Telstra makes the following comments with respect to each of the ACCC’s proposed pricing principles to assess NBN’s access prices:</p> <ul style="list-style-type: none"> • <i>End users should be no worse off as a consequence of migrating to the NBN</i> – see our comments in response to question 2 above. • <i>Basic speed access products should act as an anchor</i> – we support the anchor pricing principle. However, as explained in response to question 3 above and in section 4 of our submission, we consider that there is a material risk that a 12/1 Mbps anchor will fail to meet the ACCC’s objectives. We therefore propose NBN’s 50/20 Mbps service as a more appropriate basic speed anchor product.

⁶⁹ For example, it was recently reported in the media that NBN was considering over-dimensioning its broadband products at speeds of 25 Mbps and above in order to better allow RSPs to offer the full maximum speed to end-users – but not to do this for its 12/1 Mbps service - *Comms Day* 11 November 2019. NBN’s close out paper published on 26 November suggests that it may not proceed with this distinction. But the example does serve to illustrate the potential for demarcation.



No.	Question	Telstra response
		<ul style="list-style-type: none"> • <i>Price certainty and pricing arrangements should not be unduly complex</i> – we strongly agree with the importance of these pricing principles, for the reasons explained in section 3 of our submission. This is why we continue to advocate for NBN to move away from CVC charging and implement a simple, permanent, one-part price structure based on speed tiers. • <i>Prices should meet consumer demand</i> – We agree with this principle. For the reasons set out in sections 3 and 4 of our submission, we believe that consumer demand can best be met by RSPs if they have access to affordable NBN broadband at a basic speed of 50 Mbps with unlimited CVC and regulated access to a viable voice-only product. • <i>Prices should promote downstream competition</i> – We agree. See further detail in section 2.2 and 4.1 of our submission. • <i>NBN Co should have the opportunity to recover efficiently incurred costs</i> – in the context of historically incurred costs, this principle cannot be reconciled with NBN's Corporate Plan that demonstrates NBN is not intending to recover its weighted average cost of capital (WACC). We believe that this principle should be more aligned with the legislative criteria of encouraging efficient investment, which is a more complicated assessment in the context that the Government is the only investor in NBN and gains from potentially high social returns from its investment (see section 5), in addition to private returns from NBN. In terms of future investment by NBN, our pricing proposal will continue to allow NBN to make efficient investments for the reasons set out in our submission (see section 4.3).
5	<p>Do you consider that any other changes to NBN Co's current approach to pricing NBN access services are required to provide pricing certainty for access seekers and to safeguard the interests of end-users?</p>	<p>Yes. Refer to section 4 in our submission and our answers to questions 11 and 12 below.</p>
NBN Access pricing		
6	<p>Do the pricing features covered in this section represent the key pricing elements bearing on the supply of entry level NBN services to end-users by RSPs?</p>	<p>Section 5 of the Discussion Paper covers most of the key NBN pricing elements bearing on the supply of entry level NBN services. However, per our answer to Question 1, we recommend that the paper also:</p> <ul style="list-style-type: none"> • expressly focusses on the elements relevant to the supply of voice-only services; and • covers relevant once-off charges, in addition to NBN's transfer charges. <p>We also note that the ACCC does not include the "Fast Forward" campaign rebates that NBN introduced via its Discounts, Credits & Rebates List, in return for RSPs upselling to the 100 Mbps speed tier (Fast) and placing orders early in the Migration window (Forward). Where applicable, the Forward rebates are also relevant to the pricing of covered entry level services.</p>
7	<p>Do the service transfer charges identified in this section represent the key pricing elements bearing on service transfers?</p>	<p>Yes. However, per our answer to Question 1, we recommend that the paper also considers other once-off charges which could have a material impact on costs for RSPs and/or end-users – for example, NBN's charges for professional installation.</p>



No.	Question	Telstra response
Product and pricing developments in retail fixed-line broadband markets		
8	Are there any additional retail pricing and product changes relevant to this inquiry that resulted from NBN Co's product and pricing changes that took effect in 2018?	<p>Yes. The most significant retail pricing and product changes Telstra has made following NBN 2018 price changes are our new simplified T22 plans. These are:</p> <ul style="list-style-type: none"> • a \$75 plan with 200 GB data; and • an unlimited plan for \$90 a month. <p>The pricing for these plans is the same regardless of the underlying access technology (i.e. whether the customer is on our legacy network or on any of the NBN access technologies). On transitioning from our legacy network to the NBN, customers are thus able to enjoy the same prices for the same plan (200 GB cap or unlimited), plus the additional benefit of potentially higher speeds (50/20 Mbps for our most popular unlimited NBN plan and 25/5 Mbps for the 200 GB cap NBN plan), contrary to the comments by the ACCC at page 34 of the Paper.</p> <p>By way of a general comment, we also note that the section of the paper to which this question relates is focussed on retail pricing and product changes relevant to the transition experience of legacy ADSL customers. However, as the ACCC acknowledges subsequently in section 7.1 of the paper, even NBN's 25/5 Mbps service is slower than most legacy HFC services. There is accordingly a strong argument that an even slower 12/1 Mbps NBN service is not functionally equivalent to legacy HFC services and will not support a smooth and positive migration experience for legacy HFC customers (of whom the ACCC notes there were c 745,000 in December 2018).</p>
9	Are there any further retail pricing and product changes that are being contemplated due to NBN Co's 2018 pricing changes?	<p>As explained in the body of our submission (refer to section 3), the key feature of NBN's 2018 price changes that has the potential to impact Telstra's future retail pricing is what has <u>not</u> changed since then.</p> <p>NBN has now announced closure of its 2019 PDF process. The outcome following that process is that NBN continues to impose risk and cost on RSPs through its CVC charges, and it also continues to subject RSPs to pricing uncertainty through its use of complex temporary discounts and rebates, rather than making longer term changes to its standard pricing. NBN has made no change to the bundle price of its most popular 50 Mbps service, and has included only limited additional amounts of CVC, leaving the pressure on the sustainability of current retail offers from growing customer usage unchanged. The requirement for ACCC regulatory intervention accordingly remains.</p> <p>There has also been no reduction to NBN's charges for voice-only services, which are causing the supply to voice-only customers over the NBN to be financially non-viable. It is paramount that the ACCC ensure RSPs have some financial incentive to continue to supply these services, often used by aged or more vulnerable consumers.</p>
10	What retail pricing and product changes have you made or are contemplating in response to NBN Co's pricing changes outlined in its second consultation paper?	<p>Telstra is continuing to work through the implications of NBN's suite of 2019 PDF proposals, the final version of which was announced on 26 November 2019.</p> <p>We support NBN's introduction of more affordable pricing for higher speed-tier services of 100 Mbps and above. Making these services more accessible for consumers presents a key opportunity for RSPs to engage the community on the full benefits and capabilities of the NBN and improve Australia's fixed broadband speed performance.</p>



No.	Question	Telstra response
		<p>However, we remain of the view that realising this opportunity requires NBN to do more to support RSPs. Specifically, we consider that:</p> <ul style="list-style-type: none"> • NBN should move away from CVC charging and implement a simple, one-part price structure based on speed tiers: better aligning wholesale and retail pricing structures and greatly simplifying network and service management for RSPs. • NBN should apply the proposed 100/20 Mbps price to the existing 100/40 Mbps product. This would better allow savings to be passed on to consumers and would avoid RSPs having to waste time and resources in building, launching and supporting two 100 Mbps services. • As NBN appears to remain committed to CVC charging: <ul style="list-style-type: none"> ○ NBN should include additional CVC, in order to avoid CVC overage charges and penalties; and ○ The current complex CVC utilisation conditions should be removed entirely. • NBN should consistently apply its proposed ‘over-dimensioning’ approach to all speed tiers. • NBN should retain the current speed-based naming conventions, which provide greater clarity and transparency to RSPs and end users. • [CIC Begins] [CIC Ends]. <p>For the reasons set out in the body of this submission, [CIC Begins] [CIC Ends] In terms of our most popular entry-level plan (our unlimited 50/20Mbps NBN plan), as noted above and in the body of this submission, NBN’s pricing proposals do not go far enough to address the margin pressures RSPs are facing from NBN’s high wholesale charges and ever-growing customer usage, [CIC Begins] [CIC Ends] This is why we are urging the ACCC to set a \$35 wholesale charge with no additional fees or charges for overage for this service.</p> <p>Telstra also notes that NBN is separately engaging with RSPs on how to best address the accessibility needs of vulnerable customers. We look forward to working further with NBN on this important initiative. Telstra does not consider that NBN’s proposal to reduce 12/1Mbps broadband prices is likely to address the needs of customers identified as being vulnerable such as aged, disabled & lowest incomes. [CIC Begins] [CIC Ends]. Depending on household circumstances, vulnerable customers have differing needs for connectivity that need to be catered for by an approach designed to improve Australia’s digital inclusion. A one-size fits all scheme designed simply to reduce the price of NBN’s slowest speed service will not meet these requirements.</p>
Considerations for potential regulated NBN access pricing		
11	Which TC-4 ethernet broadband access service speed tier(s) are most relevant to the objective of providing a smooth migration for all or most consumers?	<p>For the reasons set out in further detail in the body of this submission:</p> <ul style="list-style-type: none"> • We believe that for broadband customers this is NBN’s most popular 50/20 Mbps speed tier currently being used by c 57% of NBN broadband users (with sufficient included CVC to ensure no penalties or overage charges).



No.	Question	Telstra response
		<ul style="list-style-type: none"> We consider it unlikely that regulated ACCC anchor pricing of NBN's less popular slow speed 12/1 Mbps service will serve to indirectly constrain the affordability of the higher speed NBN services that we consider to be key to ensuring a smooth and positive migration for legacy ADSL and HFC customers. Due to a lack of consumer awareness and understanding about the different NBN speed tiers, we consider there is a material risk that migrating consumers will select a cheapest priced 12/1 Mbps service based purely on price, without understanding the value of the higher speeds on offer. This will cause them to have a poor NBN experience, entrenching poor perceptions of the NBN, decreasing their willingness to upgrade to and use the higher speed tiers which would maximise the efficient use of the NBN network, and increasing the risk of substitution away from the NBN. <p>For voice-only customers we consider that this is NBN's 12/1 Mbps speed tier (with 150Kbps included CVC).</p> <p>We also note that the approach of regulating the most popular 'entry-level' speed tier plus voice-only services would reflect international best practice – such as the approach to anchor pricing that has been adopted in New Zealand (anchor price regulation of Chorus' 100/20 Mbps service plus voice-only) and in the UK (Ofcom regulation of Openreach's most popular 40 Mbps service).</p>
CVC requirements on commencement		
12	<p>What level of CVC dimensioning for the basic broadband access product do you consider is needed to support a smooth transition of ADSL/ADSL2+ customers to the NBN for a retail price point of \$60 with unlimited data? Could this same level of provisioning be supported on the ADSL/ADSL2+ network for the same price point?</p>	<p>As explained in our response to the ACCC's data request (see sections 1c, 1e and 2d), translating ADSL traffic to the required CVC dimensioning to ensure a smooth transition of ADSL customers to the NBN with unlimited data is possible, but a simple adjustment factor is not appropriate.</p> <ul style="list-style-type: none"> ADSL is provisioned nationally while CVC is purchased at the CSA level.⁷⁰ Because there are less customers to spread fluctuations over (at the CSA level), more headroom is required to prevent a deterioration in performance. There is also variation between each CSA as to the average level of CVC required per SIO. The adjustment factor would therefore vary between CSAs, is likely to evolve over time with migration, and is difficult to forecast. Further, a simple adjustment factor does not account for differences in data demand, line speed capability and congestion between the ADSL and NBN networks. If ADSL lines could achieve higher speeds and were not constrained by congestion, utilisation would be higher. An adjustment factor that does not take these factors into account is potentially misleading. RSPs purchase ADSL capacity at the IGR, which aggregates backhaul from DSLAMs. This makes it more efficient for RSPs to carry aggregated traffic on larger backhaul channels. In contrast, RSPs purchase CVC from NBN Co. at the point closer to the end-user, and required capacity is dependent on the number of customers in the CSA, consumer usage demand, and speed tier mix. As traffic is more distributed/disaggregated at the point closer to the end-user, a smaller number of end-users on the link would require a higher capacity allocation per end user to ensure the same level of performance.

⁷⁰ This is true of historical purchases and remains the case today, although we also note NBN's recent announcements to introduce national pooling from May 2020



No.	Question	Telstra response
		<p>Given that peak utilisation per SIO [CIC Begins] [CIC Ends], to maintain a given level of network performance, CVC requirements will have to increase over time.</p> <p>See further our response to question 15 below.</p>
13	<p>RSPs that are supplying or have previously supplied retail 12/1 speed plans using the NBN, please complete the data request that accompanies this discussion paper.</p>	<p>See our separate response to the ACCC’s data request. Please note that [CIC Begins] [CIC Ends]</p>
14	<p>RSPs that operate ADSL/ADSL2+ networks, please complete the data request that accompanies this discussion paper.</p>	<p>See our separate response to the ACCC’s data request. In reviewing this data, it is important for the ACCC to take into consideration the following points: [CIC begins]</p> <ul style="list-style-type: none"> • [CIC ends] • [CIC ends] • [CIC ends] • [CIC ends]
<p>Adjusting CVC requirements to account for growth in traffic</p>		
15	<p>What rate of indexing of the CVC dimensioning is required on a basic broadband access service for it to continue to provide for a smooth migration over the course of the rollout? Could this same rate of</p>	<p>As a consumer facing business, Telstra’s products and services are shaped by the needs and demands of our customers. As Australians consume ever-increasing amounts of data and have more connected devices in and around their homes and businesses, they in turn demand better performing, higher speed broadband services. At the same time, consumers expect greater simplicity in the way they buy and consume products and rightly continue to demand transparency and flexibility from retail providers.</p>



No.	Question	Telstra response
	<p>indexing be supported on the ADSL/ADSL2+ network?</p>	<p>Telstra currently estimates peak download bandwidth requirements to grow at [CIC begins]..... [CIC ends]. By contrast, at the conclusion of its 2019 PDF process, NBN is proposing increases to data inclusions on the 50 Mbps bundle equivalent to only 12.5% growth in peak bandwidth.</p> <p>Under NBN’s existing and proposed price constructs, predicted growth in data use will significantly increase the effective per customer price over the next three years. Considering the base case of NBN’s September 2019 pricing, we expect growth in CVC coverage will increase the effective price per customer of NBN’s 50 Mbps bundle by 2020 to between [CIC begins] [CIC ends], increasing to [CIC begins] [CIC ends] by the end of the NBN migration period. Following the conclusion of NBN’s 2019 PDF process, it remains the case that these per customer costs –not just the notional headline price points – need to be reduced to promote the long term interests of end users.</p> <p>If separate CVC charging is to be retained, Telstra therefore considers it imperative that any approach to pricing of CVC usage (e.g. indexing CVC dimensioning) achieves the same outcomes as would be the case if NBN were to adopt a simple, one-part price structure. This is an approach which ensures that RSPs:</p> <ul style="list-style-type: none"> • Have access to a 50 Mbps basic broadband service at an affordable and sustainable wholesale price (\$35). • Are not exposed to risks of penalties and overage charges as end-customer usage of the NBN continues to grow [CIC begins]..... [CIC ends] • Do not have to contend with complex CVC utilisation conditions.
16	<p>How should the required growth in CVC dimensioning be accommodated in developing price related terms for the basic speed access product and does this put the \$60 retail price point with unlimited data at risk?</p>	<p>Please refer to our answer to question 15 above. For the reasons set out in section 4.3 of our submission, we do not believe that NBN’s costs of providing access to the capacity we have proposed should cause the overall wholesale price to exceed \$35. This price will in turn allow RSPs to more sustainably supply affordable, quality, entry-level retail broadband services including unlimited downloads.</p>
<p>New product and pricing offer, or use of discount notices?</p>		
17	<p>What do you see as the pros and cons of establishing the price related terms and conditions of access to a basic broadband access product by way of a new product bundle or being implemented by way of a partial waiver/discount?</p>	<p>We agree with the ACCC that ensuring regulatory certainty for RSPs until completion of the initial migration period (2022) is paramount.</p> <p>Ideally NBN would reflect all pricing changes through variations to its SAU pricing and NOT through temporary discount mechanisms, for the reasons we have previously articulated and set out in the body of this submission (refer to section 3).</p> <p>In the context where the ACCC provides certainty to access seekers by issuing price terms in an AD as a regulatory back-stop, this may reduce the concerns surrounding a choice by NBN to reflect the terms of the AD through a discount or rebate. However, it is essential that access seekers would not thereby be exposed to ongoing risk or uncertainty – e.g. it could not be open to NBN to remove the discounts at its discretion, as is generally the case today.</p>



No.	Question	Telstra response
Implications for transformation costs and scale economics		
18	Will NBN Co's proposed pricing in its second consultation paper allow access seekers to rationalise their CVCs?	<p>Telstra maintains the first-best approach to pricing is for NBN to move away from CVC charging and implement a simple, one-part price structure based on speed tiers: better aligning wholesale and retail pricing structures and greatly simplifying network and service management for RSPs.</p> <p>If separate CVC charging is to be retained, we consider that rather than modifying the current CVC utilisation conditions, they should be removed entirely. Telstra considers these rules are increasingly unnecessary, and can lead to unintended impacts from RSPs actively managing their CVCs.</p> <p>In terms of NBN's expectation that its proposals regarding its 25/5 Mbps service should allow RSPs to consolidate services (NBN 2nd Consultation s 3.2), Telstra [CIC Begins]..... [CIC Ends] However, we consider that the proposed change will support more efficient provisioning of NBN services by removing an artificial restriction and impediment to efficient service dimensioning.</p>
19	What further approaches could be considered to facilitate opportunities to reduce transformation costs and/or allow access seekers to exploit scale economies in respect of the basic broadband access product?	<p>As outlined in the body of our submission and the answers to the questions above, we consider these approaches should include:</p> <ul style="list-style-type: none"> • NBN moving away from CVC charging and implementing a simple, one-part price structure; and • Regulation of NBN's 50 Mbps service for an affordable all-inclusive wholesale access price of \$35.
Support for a limited and unlimited quota basic speed retail product		
20	What is your preferred approach to preserving sufficient flexibility to offer limited quota plans over a basic broadband access product?	<p>As set out in the body of our submission:</p> <ul style="list-style-type: none"> • We believe that NBN should retain a 12/1 Mbps product with a hard cap of 150 Kbps of CVC included, to be used to service the needs of voice-only customers. • To meet the needs of NBN broadband customers, we support wholesale pricing that allows a competitive retail market where RSPs have the ability to tailor their retail offers to meet varying consumer demands. We consider it is essential that this includes households who need 50/20 Mbps. • We consider that consumer choice and competition will best be promoted through ACCC regulation of a 50/20 Mbps basic/entry-level broadband service, with either unlimited CVC or sufficient CVC to ensure that RSPs are not exposed to penalties or overage charges in the face of growing consumer data consumption up to the end of the migration period (i.e. to 2022), priced at \$35. We consider that this approach will provide optimal flexibility for access seekers to develop basic speed plans which are either unlimited or which offer reduced data quotas, maximising the potential for consumer choice of varying competing retail offers to suit their needs.
21	Should this be left to individual dimensioning choices of access seekers acquiring a scalable basic access product or should a	<p>For the reasons set out in response to question 20 above, we do not believe that a separate limited quota access product should be developed. We also consider it imperative that any scalable product includes sufficient CVC in the bundled price to ensure that RSPs are not exposed to penalties or overage charges in the face of growing consumer data consumption.</p>



No.	Question	Telstra response
	<p>separate limited quota access product be developed?</p>	<p>As set out in response to question 15, for NBN's 50/20 Mbps product, we propose that the \$35 price include [CIC Begins]..... [CIC Ends] For this reason, Telstra maintains the first-best approach to pricing is for NBN to move away from CVC charging and implement a simple, one-part price structure based on speed tiers.</p>
22	<p>What do you consider to be the level of CVC dimensioning that would support a limited quota, basic speed retail plan?</p>	<p>See our response to questions 20 and 21 above.</p>
<p>Allowing access seekers to achieve a comparable access cost when supplying basic speed retail plans on the NBN</p>		
23	<p>Are there any features of NBN Co's new ELB offer that favours some access seekers or business models over others when it is used to supply a basic speed broadband plan? What are these features?</p>	<p>As set out in the body of our submission (refer to section 4), we consider that the LTIE and competition in the market for retail broadband services in Australia will best be promoted if the ACCC <u>does</u> set pricing so as to incentivise RSPs to encourage end-users to take-up the highest speed basic NBN service their network connection can support (i.e. 50 Mbps wherever available).</p> <p>We consider that this can best be done through ACCC regulation of NBN's 50/20 Mbps service as the entry-level service, and by ensuring that NBN's pricing (including CVC inclusions) for higher speed tiers leaves RSPs with an incentive to invest in marketing and promoting higher speeds.</p> <p>As we explain in response to questions 16 and 20 above, we consider that an overall wholesale price for NBN's 50/20 Mbps service not exceeding \$35 should allow <u>all</u> RSPs to more sustainably supply affordable, quality, entry-level retail broadband services.</p> <p>Our main concern with NBN's new ELB offer is that it is still priced too high to be sustainable for RSPs trying to meet the retail market for a voice-only service on the NBN. Per the main body of our submission, we believe there needs to be a wholesale product specifically intended for use by voice-only customers and including a cap of 150 Kbps of CVC, priced at \$10.</p>
<p>Application to NBN Co's wireless access networks</p>		
24	<p>What approach do you consider should be adopted in respect of basic broadband access products that are supplied over NBN Co's fixed wireless or satellite access technologies?</p>	<p>We recommend that any price and non-price terms set by the ACCC in its AD support a simple, access technology neutral approach to NBN pricing by RSPs (based on simple, access technology neutral NBN wholesale access pricing). A technology neutral approach by the ACCC will also allow the NBN to continue to meet its objectives of uniform national pricing.</p> <p>We note that the Rural Broadband Subsidy is designed to ensure that NBN is able to meet these objectives, in spite of the different costs of different technologies, such as fixed wireless and satellite.</p> <p>These objectives would be met by ACCC regulation of an all-inclusive \$35 access price for all NBN broadband access services up to a maximum speed of 50/20 Mbps.</p>
25	<p>Are RSPs likely to differentiate their prices based on access technology if the Entry Level Bundle is not available over Fixed Wireless networks?</p>	<p>[CIC begins]..... [CIC ends]</p>



No.	Question	Telstra response
Implications for competing networks		
26	Do you consider that NBN Co implementing its revised ELB offer to support a basic speed broadband product would likely have the effect of inhibiting efficient competition?	We agree with the ACCC that requiring NBN to offer affordable basic wholesale broadband prices (i.e. at the \$35 price point the ACCC has proposed for NBN’s 12/1Mbps service, and that we have proposed for NBN’s 50 Mbps service) is unlikely to have any material negative impact on network based competition to the NBN.
Implications for access revenues and costs		
27	What changes, if any, should we make to this framework for assessing the likely effect of price related terms and conditions for a basic broadband access product on NBN Co’s revenues? What changes to input assumptions should we make?	<p>See the proposals set out in the main body of this submission (refer to section 4). As we explain in our submission:</p> <ul style="list-style-type: none"> • We expect our proposal to make a positive contribution to NBN’s revenues, as compared with continuation of its September 2019 pricing • We do not expect our proposal to raise NBN’s costs to any material degree • Due to a lack of consumer awareness of NBN speeds, our consumer research suggests a material number of customers yet to migrate to the NBN will select the cheapest plan, without understanding the value of the other speeds available. If that speed tier is NBN’s 12/1 Mbps service, we would expect to see an uplift in the proportion of migrating customers selecting this speed. NBN’s recent media release⁷¹ advising that take-up of its 12/1 Mbps bundle has already “more than doubled” since NBN reduced the price on 1 October tends to support this view. • Our consumer research suggests that, due to the poor experience of customers on slower 12/1 Mbps speeds, there is a very limited willingness of these customers to upgrade to higher speeds • Conversely, our consumer research suggests that there is limited interest of customers who are currently on speed tiers of 50Mbps or above to downgrade back to lower speed tiers based on price. Due to their positive NBN experience, these customers are much more interested in speed upgrades. <p>[CIC begins]..... [CIC ends]</p> <p>Lastly, we think that it is unlikely that RSPs would invest cost savings on 12/1 Mbps in purchases of additional CVC to offer a better quality retail product. At best, this service offers consumers a 1.2 Mbps uplift in download speeds relative to the average download speed of 10.8 Mbps currently enjoyed by legacy ADSL customers.⁷² It is difficult to see how the investment would create an ability to differentiate on quality in this environment. As we explain in the body of our submission, RSPs marketing to customers who value</p>

⁷¹ <https://www.nbnco.com.au/corporate-information/media-centre/media-statements/nbn-confirms-new-wholesale-discount>

⁷² <https://www.accc.gov.au/media-release/differences-in-rsp-download-speeds-are-growing>



No.	Question	Telstra response
		quality of their NBN experience need affordable wholesale pricing for 50 Mbps+ services so that they can actually deliver fast, reliable broadband experience that is materially better than what customers could experience on legacy fixed technologies.
28	For RSPs supplying a basic broadband access product on the NBN, please complete the migration forecasts contained within the data request accompanying this discussion paper.	Please see our separate response to the ACCC’s data request. Note that as per our response to question 13 above, Telstra has [CIC begins] [CIC ends]
29	How material a contribution to network provisioning costs would growth in CVC dimensioning for basic broadband access services make?	<p>For the reasons set out in the body of our submission (refer section 4.3.2), we do not consider these costs to be material.</p> <p>Our experience also suggest the ACCC is correct when it surmises that NBN Co is likely to have significant amounts of installed or readily scalable capacity that could readily accommodate any step change in CVC dimensioning that could be expected to meet reasonable RSP requirements for CVC (for speeds not just of 12/1 Mbps, but all the way up to 50 Mbps) in the near term (e.g. to end of migration in 2022).</p>
Service transfer and transfer reversal charges		
30	What level of charges do you consider reasonable for these service transfer and reversal charges? Should these be implemented by way of a price change or via a discount?	<p>Telstra believes the key issue with NBN’s service transfer, service transfer reversal, bulk service transfer and AVC re-activation charges is that the charges should represent the costs NBN incurs performing these tasks. If the effort is the same then Telstra accepts that the charges should be the same. If the effort is different, then the charges should be different. Standardising the charges is a secondary objective to relating the charges to the cost of performing the tasks.</p> <p>It is Telstra’s position that the temporary discount on the service transfer fees from \$22.50 to \$5.00 should be a permanent fee change in line with NBN’s stated position of simplicity and certainty of pricing. Telstra notes that if NBN observe inappropriate conduct following the reduction in the service transfer charge, it will review and address inappropriate market behaviour.</p>



ATTACHMENT A: WIK Report



ATTACHMENT B: HoustonKemp Report