



Corporate Plan



# Legal Notice

## Introduction

The Corporate Plan 2021 has been prepared by NBN Co Limited (NBN Co) for its shareholder ministers, the Hon Paul Fletcher MP and Senator the Hon Mathias Cormann (Shareholder Ministers) as required by the *Public Governance, Performance and Accountability Act 2013 (Cth)* (PGPA Act) (in particular section 95(1) (b) of the PGPA Act), the *Public Governance, Performance and Accountability Rule 2014 (Cth)* (PGPA Rule), the Commonwealth Government Business Enterprise Governance and Oversight Guidelines (January 2018) (GBE Guidelines) and Australian Government policy as communicated to NBN Co by the Commonwealth from time to time (together, Reporting Obligations).

This Corporate Plan has been prepared for the 2020–21 financial year (FY21) and covers the reporting periods FY21 to FY24.

## Glossary

Defined terms within this Corporate Plan should be read in conjunction with the Glossary on pages 58 to 60.

## Disclaimer

Due to the impacts of the COVID-19 pandemic, publication of NBN Co's Corporate Plan 2021 was delayed until September 2020.

This plan contains various projections, high-level estimates and other forward-looking information (Estimates). This plan also contains Estimates in respect to periods after 30 June 2024, including in the long-term financial outlook section.

These Estimates are based on the best considered professional assessment of present economic and operating conditions, present Commonwealth Government policy, and a number of assumptions regarding future events and actions, which, at the date of this document, are expected to take place.

The Estimates involve known and unknown risks, uncertainties and other factors beyond control that may cause NBN Co's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the Estimates.

While the Estimates are based on the best considered professional assessment, the Management team and officers (as defined in the Corporations Act) of NBN Co do not give any guarantee or assurance to any third party that the results, performance or achievements expressed or implied by the Estimates will actually occur, and the Estimates should not be relied on or considered to be a representation of what will happen by any third party.

Other than required according to Reporting Obligations, NBN Co and its officers have no obligation to update the Estimates based on circumstances, developments or events occurring after the publication date of this document.

Management and the Board do not give any guarantee or assurance that the results, performance or achievements expressed or implied by such Estimates will actually occur.

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# About NBN Co

## Who we are

**NBN Co is helping customers in homes and businesses across Australia realise the social and economic benefits that high-speed broadband can unlock.**

**NBN Co is committed to responding to the digital connectivity needs of all Australians, working with industry, governments, regulators and community partners, to lift the digital capability of Australia.**

As a Government Business Enterprise (GBE), the principal responsibility of NBN Co is to build and operate the National Broadband Network in accordance with the Commonwealth Government's Statement of Expectations<sup>1</sup>, 24 August 2016.

The Company's key objective is to ensure that all Australians have access to fast broadband, at affordable prices, and at least cost to taxpayers.

In addition to building and operating a network that is resilient and secure, NBN Co is committed to delivering access to peak wholesale download speeds of at least 25 megabits per second (Mbps) to all eligible premises, and at least 50Mbps to 90 per cent of fixed-line premises<sup>2</sup>.

As the network wholesaler, NBN Co provides access to all Retail Service Providers (RSPs) on a non-discriminatory basis. This approach is intended to level the playing field in the Australian telecommunications industry, enhancing competition and providing greater choice for customers<sup>3</sup> across the country. It is through RSPs that customers connect to the **nbn**<sup>TM</sup> network for access to high-speed internet.

NBN Co is delivering high-speed broadband to customers across Australia over an area of more than seven million square kilometres. Taking a customer-led approach, the Company is committed to working with partners to enable more Australians to use the network to drive positive social and economic benefits for themselves, their businesses, their communities, and the country as a whole.

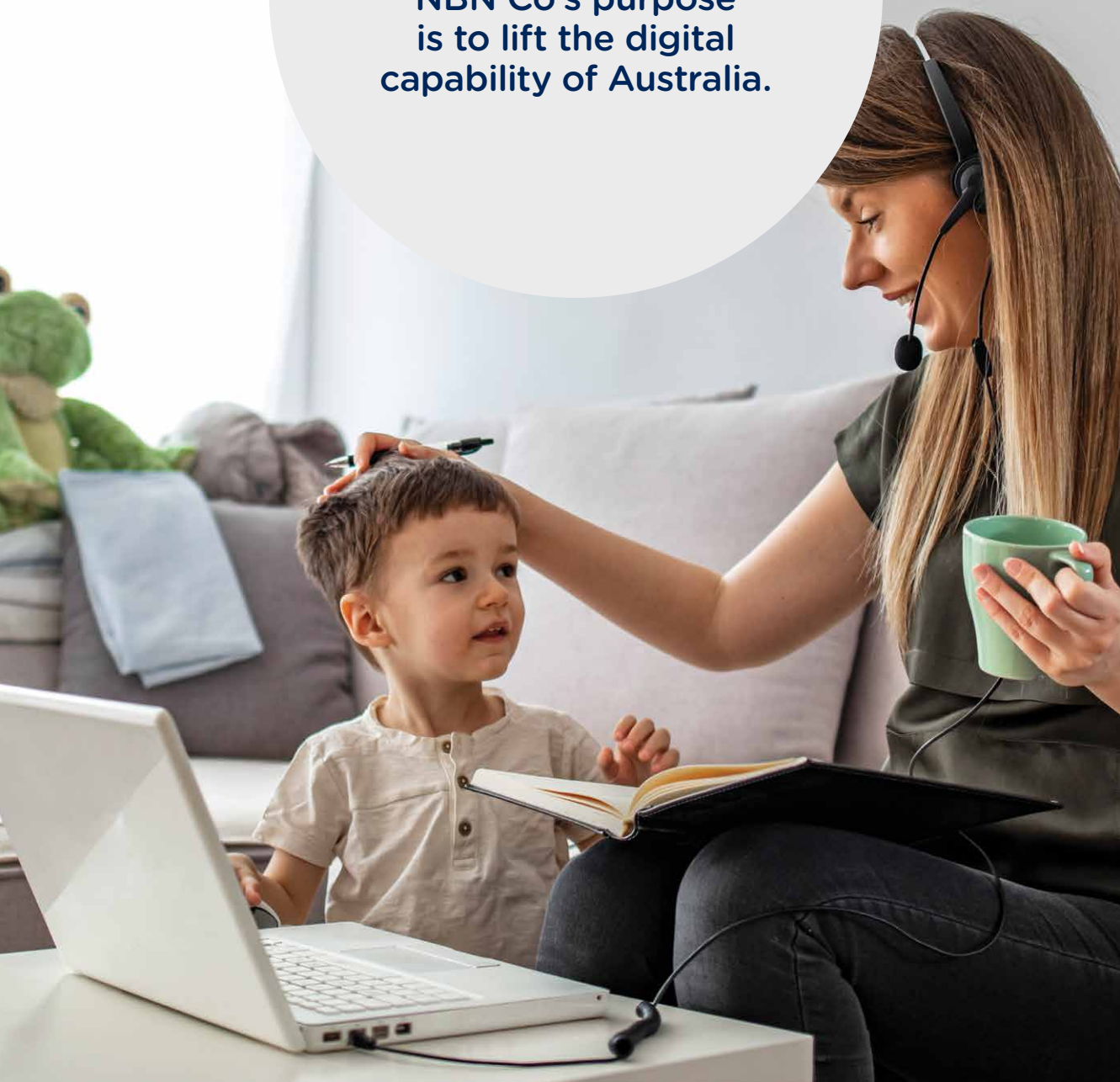
<sup>1</sup> <https://www.nbnco.com.au/corporate-information/about-nbn-co>

<sup>2</sup> This will be achieved at the end of co-existence, which refers to the period where there are active Telstra services running over the parts of the legacy Telstra network that NBN Co has acquired from Telstra.

<sup>3</sup> Final downstream customers to NBN Co's Retail Service Providers (RSPs).



**NBN Co's purpose  
is to lift the digital  
capability of Australia.**



# Our business

## » Our purpose

To lift the digital capability of Australia

## Strategic pillars

Ensure all Australians have access to **high-speed, resilient and secure broadband**



Keep NBN Co a great place to work, **underpinned by a customer-led culture**



Deliver a customer experience that **drives satisfaction, use and network preference**



**Develop a product and pricing portfolio** that addresses our **customers' diverse needs**



**Strengthen relationships** with government, industry and community to optimise customer benefits



**Build capabilities for the future and grow profitability** to enable reinvestment to benefit our customers





# Our values

**Our values underpin the way in which we act and behave. They describe what is important to us and guide us on how we think and interact with our customers, each other, and our communities.**

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## We are one team

**Respect each other**, we create an inclusive environment

**Put team above yourself**, recognise one another's contribution to create an even greater outcome

**Better together**, share ideas and resources across the Company, partner effectively with industry

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## We deliver

**Start by asking**, 'would this make a positive difference for our customers?'

**Set high expectations**, accept accountability and honour our commitments

**Strive and adapt**, being innovative and always finding solutions to achieve excellence

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## We are fearless

**Listen, really listen**, invite feedback and ask 'why' to genuinely understand

**Speak up**, knowing it's safe and expected to call things out, share bold ideas

**Trust and empower** each other to make decisions and get things done

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## We care

**Uphold the safety and wellbeing** of each other and ourselves

**Lead with purpose**, do the best for our communities

**Be curious**, there's always something to learn so together we can grow

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## Chairman and Chief Executive Officer's message

**For more than a decade, NBN Co and its employees have been on a mission to lift the digital capability of Australia by delivering the social and economic benefits that access to fast broadband unlocks.**

Completing the initial build<sup>1</sup> of the **nbn**<sup>™</sup> network this year has not just been a monumental achievement for the Company, it has been an economic, competitive and productivity boon for the nation.

This rollout has helped to reduce the challenges caused by the significant geographic distance between rural and metropolitan communities across this huge country. As a result, patients can access specialist care without having to travel at some of the most vulnerable and difficult times in their lives. It has boosted business productivity and opened global markets to not only existing businesses, but also a new generation of digital entrepreneurs. It has ushered in new competition among the nation's internet providers, and it has improved access to education for not just our children, but all those with a desire to learn. There is always much more to be done to connect Australians with each other and the services they need, but the **nbn**<sup>™</sup> network has made a deep impact already and will continue to strive to do so.

We are immensely proud that the pursuit of our purpose has been realised through building the **nbn**<sup>™</sup> network.

That purpose has grown in importance over these past 12 months as natural disasters of flood and fire and the impacts of the COVID-19 pandemic highlighted the absolute need for fast, reliable and secure broadband.

Without the **nbn**<sup>™</sup> during these trying times, we would have been a nation without the digital means to seamlessly shift our workplace from the office to the home; our children's education would have been hampered by lack of online support; and we all would have felt the isolating effects of this pandemic far worse than we have.

While unexpected, the onset of COVID-19 has underlined for NBN Co and the nation just how important it was for this piece of critical communications infrastructure to be rolled out in the timeframe and manner it was.

But with the completion of the initial build<sup>1</sup> now behind us, it is time to look to the future.

### The next phase

As we move beyond the initial build<sup>1</sup>, we must meet the challenges presented by COVID-19 and the changing landscape of broadband use in Australia.

That is why, with this year's Corporate Plan, we are unveiling the next phase of investment in the **nbn**<sup>™</sup> network: a \$4.5 billion commitment to make our highest wholesale speed plans available to up to 75 per cent of premises in the fixed-line footprint by 2023; to support the digitisation of small and medium businesses by making our business-grade fibre services more accessible and affordable for more businesses; and to establish a dedicated fund to co-invest to improve broadband services for Australia's rural and regional communities.

Investing in the **nbn**<sup>™</sup> network to grow its capability over time to meet future demand has always been part of our plan. Indeed, the 2013 Strategic Review into the **nbn**<sup>™</sup> network recommended that having built the network – as fast as possible and at least cost to the taxpayer – it should continue to evolve as new technologies become available and affordable and as future demand emerges.

<sup>1</sup> NBN Co's build completion commitment was that all standard installation premises in Australia are able to connect to the **nbn**<sup>™</sup> access network as at the build completion date. This excludes premises in future new developments which will be an ongoing activity for the Company beyond the build completion date. It also excludes a small proportion of premises defined as 'complex connections' – which includes properties that are difficult to access, culturally significant areas and heritage sites – where connection depends on factors outside NBN Co's control such as permission from traditional owners, and where network construction to allow such premises to connect will be an ongoing activity of NBN Co beyond the build completion date.



The implementation of COVID-19 quarantine measures has triggered large increases in household and business broadband consumption. While some of this increased demand will be temporary, we expect that significant, accelerated demand will persist into the years ahead, and we are ready to invest to meet it, especially when it benefits small businesses, regional communities and technology centres.

We are investing now to ensure Australia can build upon the strong broadband base we established over the last decade and capitalise on the benefits of network flexibility so we can continue to support individuals, families, businesses and communities across the nation.

### The network investment plan

While we will always continue to invest to improve our business operations, processes and customer experience initiatives, the centrepiece of this year's Corporate Plan is the \$4.5 billion network investment plan.

These investments in the nation's telecommunications infrastructure and digital capabilities include \$3.5 billion to extend fibre, on-demand, deeper into the FTTN footprint to make more homes and businesses FTTP-ready; capability increases across our HFC and FTTC networks to make our highest wholesale speed plans available to more customers on these networks sooner; and in-home wiring initiatives to rectify performance issues that exist beyond the extent of the **nbn**<sup>TM</sup> network but that can have material impacts on customer experience.

As part of our commitment to boost small and medium business digital productivity, we will invest up to \$700 million to improve the affordability and accessibility of our business-grade fibre services. This will mean that business premises across Australia will be able to access business-grade fibre services at more affordable prices.

The final element of our \$4.5 billion network investment plan will be the creation of a \$300 million fund to co-invest with state, local and federal governments to provide regional households, businesses and communities with enhanced broadband technologies and help meet the growing and diverse needs of Australians living in regional areas.

Together these investments will have a real and positive impact on the landscape of Australia's retail and business telecommunication services.

They will improve network performance and customer satisfaction, decrease ongoing maintenance costs, improve the customer offering for retailers, and increase the value of this critical infrastructure for the nation.

The increased returns that this will create for NBN Co will also ensure the Company can continue to reinvest in its business, network and capabilities, far into the future, for the benefit of the nation.



## Social and economic benefits

This plan not only establishes a technology roadmap for NBN Co to follow, it also lays out the digital roadmap for the nation as it looks for new opportunities and to recover from the social and economic dislocation brought on by COVID-19.

By capitalising on the momentum we have built over the last decade, these investments will serve as economic stimulus to the nation when it is needed more than ever – including the creation of an estimated 25,000 jobs over the next two years to help get Australians back into work.

While it is important to increase the value of this asset for the Commonwealth and Australian taxpayers, we believe that the greatest benefit of the **nbn**<sup>™</sup> network will be its role to lift the digital capability of Australia.

Aside from the immediate economic stimulus impact, the \$4.5 billion network investment plan will provide long-lasting benefits to the nation's job landscape, productivity and the future data demand of millions of Australian homes and businesses.

According to analysis by economics firm AlphaBeta, commissioned by NBN Co, these network investments over the next three years are estimated to add \$6.4 billion annually to the economy.

The benefits will not be restricted to the nation's capital cities where the rivers of the economy tend to flow strongest. The economic tributaries will also extend throughout rural and regional Australia where the associated benefits of enhanced broadband services will generate an estimated \$1.5 billion in economic activity, the creation of an additional 2,800 businesses and 10,000 regional jobs.

## Meeting future demand

Investing in the next evolution of the **nbn**<sup>™</sup> network could not have come at a more pressing time. Over the last 12 months, as disasters of fire and flood dislocated communities and the COVID-19 pandemic crushed global economies, Australia's need for fast, reliable and secure broadband has never been clearer.

For NBN Co and the telecommunications industry, COVID-19 resulted in significant increases in data demand across all networks, at all times of the day, as more Australians turned to their broadband services to remain productive and socially connected through this crisis.

These changes have had profound implications on the **nbn**<sup>™</sup> network and the nation's productivity.

They have brought forward years' worth of data demand; they have shifted consumer usage behaviours as more people rely on the network for their personal, social and business needs; and they have cemented the absolute importance of this critical asset for maintaining, supporting and growing the nation's productivity.

We know COVID-19 has brought forward the demand for broadband. Bringing forward our investments to meet this demand will ensure the nation is ready for the future.

## Funding the future

The Company's financial and operational record shows it has the discipline and expertise to build a business that is not just valued by its customers, but also its investors.

Earlier this year, NBN Co's strong financial foundations were on display as the Company completed its inaugural, long-term borrowing from private debt markets with the raising of \$6.1 billion.

This raising was secured with no financial covenants and no government guarantees, which is testament to the strong financial foundations that have been set for this business and confidence in the long-term outlook for NBN Co's ability to create social and economic value for the nation.

We also continue to build on the financial foundations we have laid over recent years as we continue on our trajectory to reach cashflow positive territory. This was evidenced over FY20 when, despite the challenges and financial impost of the COVID-19 crisis, NBN Co generated revenue of \$3.8 billion in FY20, a 36 per cent increase year on year and a \$137 million improvement on forecasts from our previous Corporate Plan.

To fund the new investments outlined in this Corporate Plan, we will again stand on our own two feet and raise the required capital by borrowing against future free cash flows.

This means we will not require any additional investment by the Commonwealth or Australian taxpayers whose equity support has been capped at \$29.5 billion since 2013.

We project these investments will add considerable value to this critical asset we have built for the nation, with a forecast internal rate of return of 3.7 per cent in this Corporate Plan.

Importantly, we expect the value accretive nature of these investments to be underpinned by enabling access to higher speeds across the network with more customers upgrading to our higher speed plans.

### Lifting the digital capability of Australia

When we look back on the history of NBN Co, 2020 will stand out as a watershed year for the company.

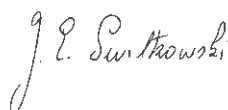
Not only did we complete the initial build<sup>1</sup> and deliver fast broadband services to millions of homes and businesses, but we supported the nation when it needed us most.

We are incredibly proud of the way the **nbn**<sup>™</sup> network has performed during the COVID-19 pandemic and believe it should be acknowledged as a great example of what public investment, the right policy and structural settings can achieve with good execution.

It has re-emphasised the importance of growing our business into a sustainable, and profitable operation so we have the means to continue to invest in the network, improve services and deliver the benefits of this asset to all who depend on it.

Investing in the next stage of the **nbn**<sup>™</sup> network today by extending its reach, speed and capacity will ensure we meet the demand of the future. It will strengthen the value of the Company to our customers who depend on the network every day, to internet retailers whose businesses are dedicated to making the **nbn**<sup>™</sup> network a success, and of course to the Commonwealth that has invested heavily in the Company's success on behalf of all Australians.

We are incredibly excited about this new era facing the Company, an era we believe will see great progress towards the further digitisation of the economy and society and the creation of an even more connected nation that will have the full benefits of fast, reliable and secure broadband at its fingertips.



**Dr Ziggy Switkowski**  
AO  
Chairman




**Stephen Rue**  
Chief Executive  
Officer



<sup>1</sup> For further details on the initial build, refer to footnote 1 on page 6.

## FY20 Highlights

- The 2020 financial year (FY20) was a pivotal period for NBN Co as it completed the initial build<sup>1</sup>, launched new products and services, including higher speed wholesale plans, and helped support the nation's broadband needs through the summer bushfires and the COVID-19 pandemic.

A better  
connected  
Australia



### Initial build<sup>1</sup> complete

11.7m <sup>FY19</sup> 10.0m

Premises Ready to Connect (RTC)

Customers



7.3m <sup>FY19</sup> 5.5m

Premises connected

69% <sup>FY19</sup> 64%

of customers on a  
50Mbps plan or higher<sup>2</sup>

<sup>1</sup> NBN Co's build completion commitment was that all standard installation premises in Australia are able to connect to the nbn™ access network as at the build completion date. This excludes premises in future new developments which will be an ongoing activity for the Company beyond the build completion date. It also excludes a small proportion of premises defined as 'complex connections' – which includes properties that are difficult to access, culturally significant areas and heritage sites – where connection depends on factors outside NBN Co's control such as permission from traditional owners, and where network construction to allow such premises to connect will be an ongoing activity of NBN Co beyond the build completion date.

<sup>2</sup> In this metric, '50Mbps (download) wholesale speed plan' includes wholesale plans available to phone and internet providers with download speeds of 50Mbps and 25–50Mbps.

## Financials



**\$3.8bn** <sup>FY19</sup> **\$2.8bn**

Revenue

**\$1.8bn** <sup>FY19</sup> **\$0.6bn**

EBITDA<sup>1</sup> before subscriber costs

## Health, safety and engagement



**2.7** <sup>FY19</sup> **2.9**

Total Recordable Injury Frequency Rate (TRIFR)

**32%** <sup>FY19</sup> **31%**

Female representation in Management

**86%**

Employee engagement score

YEAR ON YEAR INCREASE

**44 51 68 70 74 79**

FY14 FY15 FY16 FY17 FY18 FY19

<sup>1</sup> EBITDA is defined as earnings before interest, tax, other income, depreciation and amortisation. EBITDA before subscriber costs in FY20 includes the impact of the adoption of AASB 16 Leases, which has reduced reported operating expenditure by approximately \$190 million compared to FY19.

## FY20 Performance

**For NBN Co, the 2020 financial year was a period marked by incredible challenge, change and achievement as the Company completed the initial build<sup>1</sup> of the nbn™ network and continued to fulfil its purpose to lift the digital capability of Australia.**

**The Company completed the initial build<sup>1</sup> of the nbn™ network as it exceeded key construction targets – premises Ready to Connect (11.7 million) and customer activations (7.3 million).**

Rolling out the nbn™ network has involved the construction of more than 300,000 kilometres of fibre-optic cable, the design and construction of a Fixed Wireless network comprising some 2,200 towers and approximately 13,000 cells providing coverage to approximately 250,000 square kilometres and the launch of two satellites, which span some 7.6 million square kilometres of the Australian continent.

NBN Co's performance in FY20 was underpinned by the Company's dual responsibilities to the nation: to provide fast, secure and reliable broadband to homes and businesses, and to generate sufficient revenue to enable reinvestment into the network to meet and stay ahead of customer demand into the future.

While bushfires, floods and the economic and social dislocation caused by COVID-19 disrupted the nation, the Company continued to support and connect homes and businesses as it surpassed operational targets and achieved another period of strong financial performance.

At the end of FY20, more than 11.7 million premises had been declared Ready to Connect (RTC) resulting in NBN Co completing the initial build<sup>1</sup> before the target date of 30 June 2020. As a result of this achievement, NBN Co exceeded its previous Corporate Plan RTC target for FY20 by more than 230,000 premises.

In the 12 months to 30 June 2020, the Company connected more than 1.7 million Australian homes and businesses to close FY20 with almost 7.3 million premises connected to the nbn™ network. With the demand for fast broadband services accelerating during the year, NBN Co achieved its Corporate Plan 2020–23 FY20 activations target two months ahead of schedule.

<sup>1</sup> For further details on the initial build, refer to footnote 1 on page 6.



Having completed its FY20 construction objectives, the Company will continue to connect new homes and business that require access to fast, reliable and secure broadband. NBN Co also remains committed to connecting the remaining 100,000 complex installations that were identified in last year's Corporate Plan.

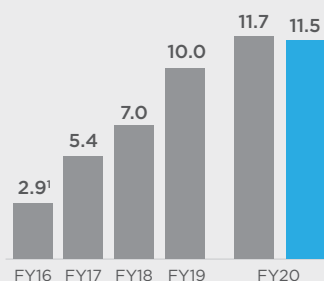
These premises include difficult to reach homes and businesses, new development sites, and heritage and culturally significant sites. The Company has already successfully connected many of these premises and expects that 80 per cent of these premises will be made Ready to Connect by 31 December 2020.

NBN Co forecasts that approximately 8.2 million premises will be connected to the **nbn™** network by 30 June 2021, and approximately 9 million premises will be connected by 30 June 2024.

In FY20, the Company generated revenue of \$3.8 billion, exceeding the Corporate Plan 2020-23 target by \$137 million. This was primarily driven by the significant increase in the number of premises activated, an increase in customers selecting or upgrading to higher speed tiers, and the growth in business revenue to \$666 million.

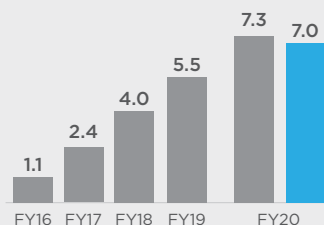
During FY20, NBN Co introduced a suite of significant wholesale discounts and data inclusions across most of its wholesale speed tiers. This included greater data inclusions to the 100Mbps and 50Mbps wholesale speed tiers, modifications to the 12/1 entry level bundle discount, improvements in the value of the 25Mbps bundle discount, and the launch of the Home Fast, Home Superfast and Home Ultrafast higher speed tiers.

### Cumulative RTC Premises (million)

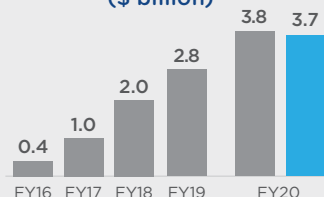


<sup>1</sup> Number of RFS premises - RTC premises not reported in FY16.

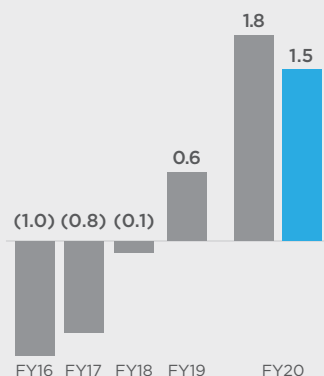
### Cumulative Activations Premises (million)



### Annual Revenue (\$ billion)



### EBITDA before subscriber costs (\$ billion)

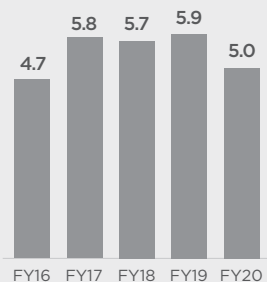


■ Actual  
■ Corporate Plan 2020-23

### EBITDA (\$ billion)



### Capital Expenditure (\$ billion)



### Total Assets (\$ billion)



■ Actuals

At 30 June 2020, 69 per cent of residential and business customers were connected to **nbn**<sup>™</sup> wholesale speed tiers of 50Mbps and above and approximately 80 per cent of new customers continue to sign up to speeds of 50Mbps and above.

To further improve the customer experience of the **nbn**<sup>™</sup> network, the Company also introduced overprovisioning of the download component of most fixed-line wholesale speed tiers by 10–15 per cent, where possible, to assist RSPs to supply higher retail peak download speeds to customers.

The Company also continued to invest in products and services to improve the overall experience of customers.

During FY20, NBN Co improved the connection and service quality of its Hybrid Fibre Coaxial (HFC) network, continued the scaled rollout of its Fibre-to-the-Curb (FTTC) network, supported businesses with business-grade, high-speed services, and put in place better wholesale pricing options so more customers could experience higher speeds with reduced congestion during busy hours.

The value and importance of the **nbn**<sup>™</sup> network to the nation, as well as the strength of the Company's business case, was underlined this year as NBN Co completed its inaugural, long-term borrowing from private debt markets.

This saw NBN Co enter into bilateral agreements with a group of banks to establish credit facilities totalling \$6.1 billion.

## Commitment to regional, rural and remote Australia

**Delivering broadband services to every corner of this vast continent is core to NBN Co's purpose.**

**The Company continues to make good progress on providing consistently fast and reliable broadband services connecting Australians and improving broadband choice and competition in regional and remote communities.**

In October 2019, NBN Co launched a new business unit solely focused on meeting customer needs and raising the digital capability of regional and remote communities across Australia.

The creation of this new business unit, known as Regional Development and Engagement (RDE) addresses a key recommendation in the 2018 Regional Telecommunications Review to assign responsibility for improving NBN Co's regional and remote assets to an experienced member of the Company's senior executive management team.

RDE plays a critical role in bringing together all aspects of the fixed wireless and satellite teams, from engineering through to operations, to ensure regional customers remain front and centre post completion of the initial build<sup>1</sup>.

<sup>1</sup> For further details on the initial build, refer to footnote 1 on page 6.



RDE is as much about community engagement as it is about engineering. To reflect this, RDE has expanded its community engagement team, **nbn™** local, which works across the nation to inform and educate regional residential and business customers about the benefits that fast broadband can deliver.

**nbn™** local dedicates its time listening to the needs and aspirations of regional residents and business owners to help them access the social and economic benefits that fast, secure and reliable broadband services promise for all Australians.

**nbn™** local continues to serve an important role as the Company's rapid response service in times of crisis. Using a fleet of satellite-enabled Road Muster Trucks, the **nbn™** local team has collectively travelled close to 600,000 kilometres and visited more than 2,600 towns across Australia over the last three years, providing mobile Wi-Fi hotspots at evacuation centres as part of state government-coordinated disaster recovery efforts.



## Since its formation RDE has supported:

### The business **nbn™** Satellite Service product launch

- This wholesale satellite service provides access to fast broadband and business-grade support for businesses across Australia, helping them access national and international markets and generate new economic opportunities in regional and remote areas.

### Sky Muster Plus

- Providing access to fast and accessible broadband services with the additional benefit of unmetered data for activities other than streaming video and traffic via virtual private networks.

### Expansion of **nbn™** Local

- Expanding the on-the-ground community and stakeholder engagement team who work to help lift digital capability, improve customer experience, ensure larger local problems and concerns are identified early and addressed; and raise awareness about the social and economic benefits that fast broadband can deliver.

### Fixed Wireless upgrades

- Continued investment to help manage capacity and performance on the Fixed Wireless network into the future.

## Customer experience and industry engagement

### NBN Co understands the importance of industry collaboration and listening to its customers to create value.

As more Australians rely on fast, reliable and secure broadband to meet their evolving needs, NBN Co continues to look for better ways to service its customers through industry and retailer collaboration, its product and pricing strategy and customer experience initiatives.

### Residential

#### Collaboration to create value

Through continued collaboration with its retail service provider (RSP) partners, NBN Co developed a range of new residential wholesale products, services and initiatives throughout FY20 that were designed with customers' future needs in mind.

Some of these initiatives included:

- the launch of three new residential wholesale bundle discount price points: Home Fast, Home Superfast and Home Ultrafast
- the introduction of a modified 12/1 Entry Level bundle discount to provide RSPs with the flexibility to develop more affordable 12/1 broadband plans for a similar price to legacy products

- the introduction of a 10–15 per cent overhead allowance for the downstream component of most wholesale speed tiers, including the Home Fast and Home Superfast speed tiers. By over-provisioning the raw speed delivered through this allowance, NBN Co can help RSPs deliver closer to the maximum theoretical wholesale download speeds to customers
- publication in November 2019 of a TC-4 Bundles Discount two-year rolling roadmap to provide RSPs with greater certainty on future wholesale prices and data capacity inclusions
- national pooling of CVC bundle discount inclusions to allow RSPs to make more efficient use of CVC capacity across all geographic areas associated with 121 Points of Interconnect (POIs)
- targeted incentives for underserved segments of the community including seniors and those who live in shared accommodation
- consulted with the broader industry on a range of customer experience outcomes for consideration in Wholesale Broadband Agreement 4 (WBA4).



## NBN Co's high-speed future



### nbn™ Home Fast

designed to offer peak wholesale download speeds of up to 100Mbps and is available across all fixed-line nbn™ technologies.<sup>1,2</sup>



### nbn™ Home Superfast

designed to offer peak wholesale download speeds of up to 250Mbps and available on FTTP and HFC at launch.<sup>1,2,5</sup>



### nbn™ Home Ultrafast

designed to offer peak wholesale download speeds of 500Mbps to close to 1Gbps<sup>2,3</sup> and available on all FTTP footprint and a limited HFC footprint at launch.<sup>1,4</sup>

- 1 NBN Co provides wholesale services to phone and internet providers. nbn™ wholesale speed tiers available to providers vary depending on the access technology in an end customer's area. End customer experience, including the speeds actually achieved over the nbn™ broadband access network, depends on the nbn™ access network technology and configuration over which services are delivered to their premises, whether they are using the internet during the busy period, and some factors outside NBN Co's control (like their equipment quality, software, chosen broadband plan, signal reception, or how their provider designs its network).
- 2 Where the bandwidth profile is expressed as a range, the range shows the maximum PIR which may be achieved at the nbn™ Network Boundary for the relevant bandwidth profile. The PIR can fall anywhere in the range for the relevant bandwidth profile in respect of a particular AVC TC-4 used to serve a Premises (they are not minimum-maximum PIR ranges).
- 3 Regardless of the retail service customers purchase, the actual wholesale speeds delivered by the NBN Co 1000 wholesale speed tier product will be less than 1Gbps due to equipment and network limitations. Reference to speeds are not end user speeds; they are wholesale layer 2 peak information rate bandwidth provided to the RSP.
- 4 For the HFC Home Ultrafast bandwidth profile, the layer 2 wholesale downstream service will be configured at the layer 2 network management to a Maximum Sustained Information Rate of 750Mbps with the potential to burst up to a maximum of 990Mbps (depending on but not limited to, the Frame Size and line speed capability – see note 2 above) at potential burst durations between 1 to 50 seconds at least once a day (see section 2.2.2.5 of the nbn™ Ethernet Product Technical Specification).
- 5 nbn™ Home Superfast available to 70 per cent of the HFC footprint at launch, with a plan to make it available to order for 100 per cent of the HFC footprint by June 2021.



## Improving customer experience

NBN Co regularly reviews the end-to-end customer journey to understand how to best serve its customers.

These insights are used to develop targeted and scalable improvements that are used in collaboration with our RSPs to improve customer service. These improvements include:

### Aware, choose & connect

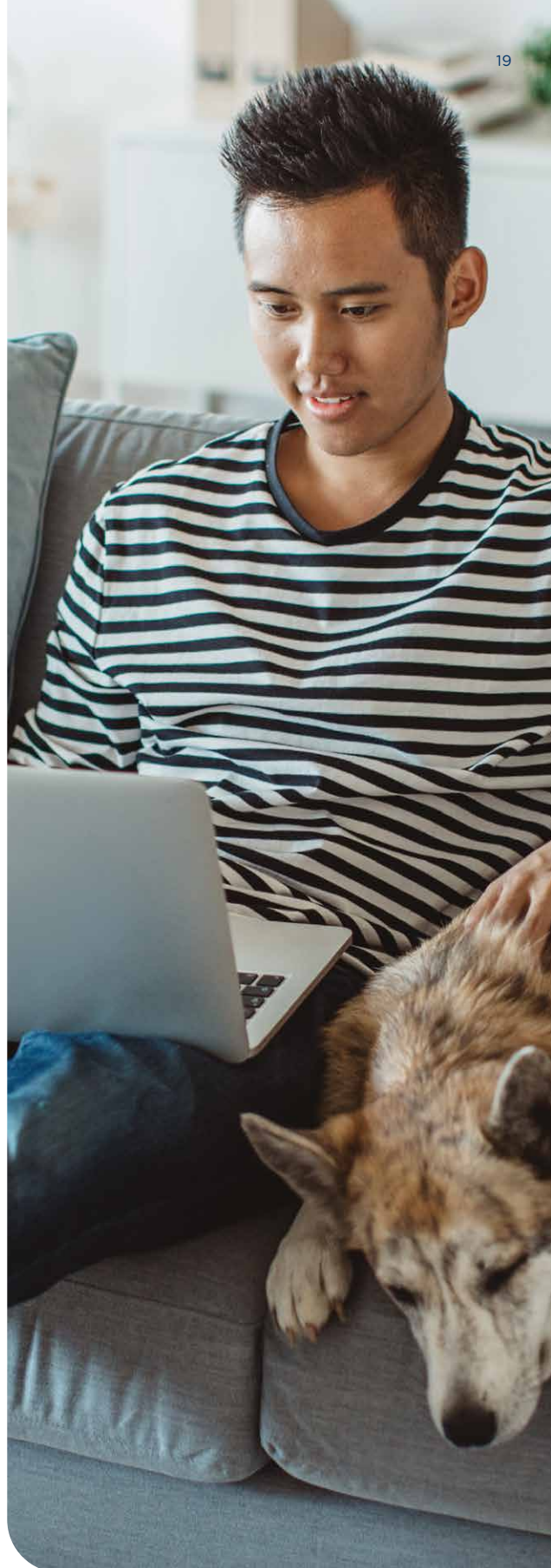
- transformed field workforce and operations to improve forecasting, appointment management and scheduling of technicians
- new systems to match technician skills to jobs, ensuring better and more accurate service.

### Use

- continued work with RSPs to address in-home wiring issues, modem standards, Wi-Fi performance, and customer education programs that can impact connectivity and download speeds experienced in the home
- new processes for how NBN Co communicates network maintenance and repairs to ensure customers are notified in advance and with minimum disruption
- information programs to educate customers about what broadband options can best suit their needs.

### Fix

- reduced impacts of network outages by systematically addressing the key drivers of unplanned and planned outages like third-party power impacts, equipment failure and network upgrades
- new systems, processes, and enhanced training to improve customer service accountability between NBN Co and RSPs
- piloted a 'service health' summary tool for RSPs to have the same access and visibility to NBN Co network/service data so they can better diagnose and resolve customer issues on the network.



The above initiatives have helped improve customers' connection experience in FY20, with agreed installation times met with RSPs on 96 per cent of occasions and 93 per cent of activations connected right first time in June 2020.

In addition, there were 0.7 faults after connection per 100 homes and businesses connected (in June 2020) and NBN Co met agreed fault restoration times 92 per cent of the time in June 2020.

Furthermore, strong performance trends in customer advocacy during FY20 have resulted in record low DSAT (Dissatisfaction) and record high OSAT (Satisfaction) scores being achieved.

Going forward, NBN Co will continue its strong focus on being customer-led by developing compelling value propositions for our RSPs and customers.

Some of these new programs of work include:

#### Excellent product experience

- redefining NBN Co's roadmap to vastly simplify our product proposition and interfaces
- increasing the availability of high-speed tier coverage
- evolving the Company's pricing and products to continue to provide value to our customers and retail partners.

#### Service excellence

- focusing on collaboration and co-design with RSPs on key areas for improvement, including improved fault diagnosis, faster resolution processes and new processes to close the loop with customers, after fault resolution
- minimising disruptions caused by planned outages and improving outage communications to customers
- improving digital service and self-help tools for both RSPs and customers
- investing in the in-home experience to improve internal wiring, Wi-Fi and general set up, and tools to forensically diagnose latent in-home issues, following trials initiated in FY20
- new education campaigns to help customers optimise their broadband services
- new programs to better understand the needs and wants of customers across their end-to-end broadband experience, removing pain points and focusing on the moments that matter.

## Focus on RSPs and customers



**Increased RSP collaboration**, including a pilot to upskill contact centre staff, delivering automated solutions and support with customer scheduling through two-way SMS and RSP webchats



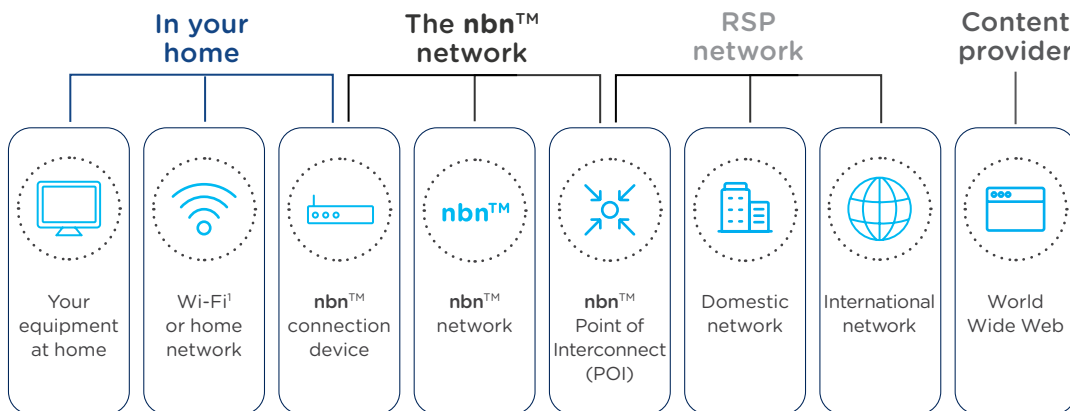
Published **educational campaigns via traditional and digital media channels** to provide tips on getting the right speed plans and how to optimise home set-up



**Raised awareness** and provided information across all media channels and through targeted community engagement to help customers protect themselves against scams

It is important to note that while the Company continues to focus on customer experience, the **nbn™** network is only one part of a complex value chain that influences the service and satisfaction of customers. Customers may still be impacted by the state of wiring inside their homes, the quality of their networking equipment (including routers and modems) and the strength of Wi-Fi signal available on their devices – matters which are ordinarily addressed through direct customer interactions with their RSPs. Customers’ experiences of the **nbn™** network will also be influenced by the amount of connectivity virtual circuit (CVC) purchased by their

RSPs, which will affect the performance of their service during peak time. Therefore, NBN Co will promote a joint industry agenda, collaborating with RSPs, regulators, policymakers and broader industry stakeholders to drive improved customer outcomes, including addressing factors that are outside NBN Co’s control but nevertheless impact customer experience. In collaboration with the industry, any gaps will be identified and a program of works implemented for the benefit of the wide range of customers using the **nbn™** network.



- Managed by you
- Managed by NBN Co
- Managed by Retail Service Provider (RSP)

1 Your Wi-Fi device may be provided by your RSP or you can choose to purchase your own. The quality or type of device may affect your experience.

## Business

In FY20, the Company increased its focus on business customer experience by driving awareness through education for the business market and developing a range of tools to make it easier for businesses to connect to **nbn**<sup>™</sup> services under the banner of business **nbn**<sup>™</sup>.

These included:

- launching business **nbn**<sup>™</sup> marketing campaigns to help customers differentiate a business **nbn**<sup>™</sup> service from a residential **nbn**<sup>™</sup> service. Internal insights revealed that a business grade connection leads to greater satisfaction
- increasing the size of the **nbn**<sup>™</sup> Business Operations Centre (BOC) team. This team offers 24/7 support to RSPs to support business customers with dedicated and specialised service
- publishing the Solution Finder and Business Readiness Tools to help educate businesses on offerings that would best suit their requirements and help create tailored checklists for connecting services over the **nbn**<sup>™</sup> network.

Working closely with RSPs, the supply of business-grade products and services has helped business **nbn**<sup>™</sup> reach a number of milestones, including:

- connecting more than one million business customers to the **nbn**<sup>™</sup> network. Business customers are unlocking the full potential of the **nbn**<sup>™</sup> network through products that offer options to RSPs such as priority for critical business data over the **nbn**<sup>™</sup> network, symmetrical uploads and download speeds and dedicated fibre between the Fibre Access Node (FAN) and the customer's premises<sup>1</sup>
- significant growth in signing up business customers for **nbn**<sup>™</sup> Enterprise Ethernet, which provides access to symmetrical wholesale download and upload speeds of close to 1Gbps<sup>2</sup> across broad geographies and distributed sites
- launching business **nbn**<sup>™</sup> Satellite Services (BSS) in November 2019, which provides business-grade connectivity options to businesses in regional and remote Australia.

## Industry engagement

Delivering a great customer experience involves working closely with the industry – RSPs, universities, research partners and regulators – and customers to maximise the benefits and value of the **nbn**<sup>™</sup> network.

NBN Co's technology innovation program has established formal partnerships with a number of universities and key network and systems suppliers.

1 business **nbn**<sup>™</sup> is not available on the **nbn**<sup>™</sup> Fixed Wireless network. Not all providers offer plans based on the full range of wholesale business **nbn**<sup>™</sup> products, product features and services. Availability of wholesale business **nbn**<sup>™</sup> products, product features and services depends on an end customer's access technology and area. Priority for business-grade data and business-grade symmetry options are not yet available on the **nbn**<sup>™</sup> HFC network. The **nbn**<sup>™</sup> Enterprise Ethernet upgrade option is only available on the **nbn**<sup>™</sup> fixed-line network and for limited premises in the **nbn**<sup>™</sup> Fixed Wireless and Satellite footprints.

2 Regardless of the retail service you purchase, the actual wholesale speeds delivered by the **nbn**<sup>™</sup> Enterprise Ethernet product will be less than 1Gbps and no more than 952Mbps due to equipment and network limitations. **nbn**<sup>™</sup> Enterprise Ethernet is only available on the **nbn**<sup>™</sup> fixed-line network. Your experience, including the speeds actually achieved over the **nbn**<sup>™</sup> network, depends on some factors outside our control (like your equipment quality, software, and how your service provider designs its network).

These partnerships enable NBN Co to explore technology developments such as Software Defined Networking, Machine Learning/Artificial Intelligence and evolutions in access network technologies, that help guide and refine NBN Co's 10-year technology strategies.

Research projects with universities continue to provide NBN Co with greater understanding of emerging technologies, and their applicability to the **nbn**<sup>™</sup> network in the long-term. For example, collaborative research into areas such as 5G has improved NBN Co's understanding of antenna properties for millimetre wave spectrum, and traffic scheduling options for optimising Customer Experience. These examples help NBN Co optimise its strategy for future 5G deployment. Investigations into emerging service delivery architectures have helped NBN Co better understand future options for managing increased data consumption and application demands.

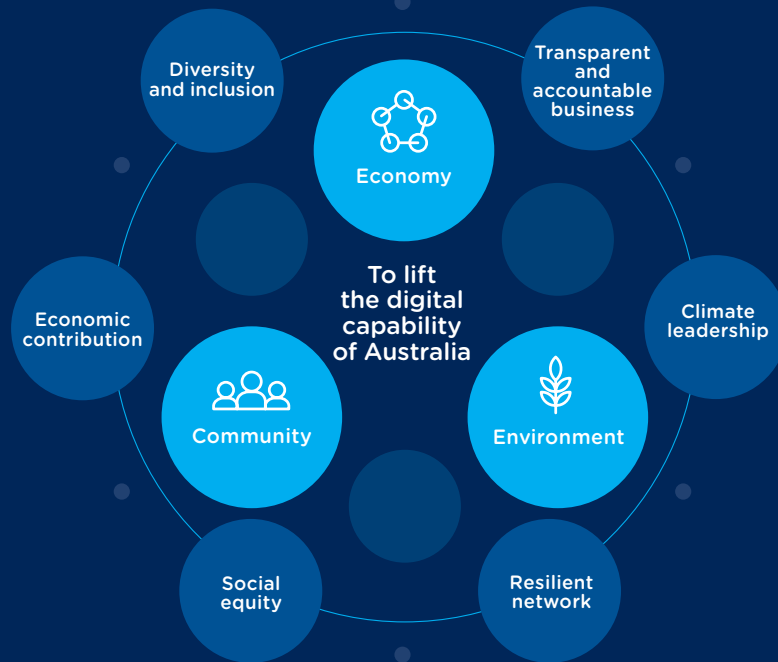
In working closely with its key suppliers, NBN Co continues to explore the next generation of access technologies (e.g. ngPON, DOCSIS<sup>®</sup> 4.0, 5G) in real-world environments, helping determine their suitability to the **nbn**<sup>™</sup> network in the long-term. These studies help NBN Co plan its network evolution in an optimal way.

NBN Co is expanding its technology innovation program to accommodate broader industry research, that will deliver ongoing improvements and efficiencies in end-to-end service delivery.





# Sustainability



**Helping customers unlock the benefits of fast and affordable broadband has been a driving force for NBN Co.**

**The Company takes seriously its responsibility for creating not only a sustainable organisation, but sustainable communities and environments in which it operates.**

Accelerating the maturity of NBN Co's approach to sustainability is strongly aligned with the Company's strategy to become a customer-led service organisation and its purpose to lift the digital capability of Australia.

NBN Co has worked on developing a Company-wide Sustainability Program in FY20, which included undertaking the Company's first sustainability materiality assessment. From this, six key sustainability material topics have been identified to focus on:

## Diversity and inclusion

- Continues to build an inclusive workplace by fostering a culture that celebrates our diversity and one in which all our people are healthy and safe, have a sense of belonging, connection to our purpose and commitment to living the Company's values. NBN Co is focused on five pillars that strengthen its Diversity and Inclusion strategy across the organisation.

## Transparent and accountable business

- Demonstrating the Company's values through ethical and sustainable business practices to build trust with all Australians. NBN Co's ongoing commitment to transparency continues to see the Company publish and introduce new metrics to track and report against a range of network performance criteria, data usage, and customer experience initiatives.

## Climate leadership

- Leading on climate action by reducing the Company's emissions and managing climate risks to support a more sustainable business, network and low carbon Australia. Among other initiatives, this has included the development of a carbon reduction target and implementation plan.



### Resilient network

- Operating a trusted, secure and reliable network to provide all Australians access to the essential infrastructure they need. NBN Co efficiently operates its networks to deliver fewer interruptions, including outages, while also implementing predictive network management to keep up with future demand.

### Social equity

- Creating social equity through digital inclusion and capability to maximise the benefits of connectivity for all Australians. NBN Co continues to collaborate with internal and external stakeholders to identify the social, economic and environmental benefits that the **nbn™** network can enable for all Australians.

### Economic contribution

- Empowering individuals, businesses and communities to stimulate productivity and growth. During the COVID-19 pandemic the **nbn™** network has been critical to supporting business continuity by enabling remote work and ecommerce offerings for small and medium sized businesses.

NBN Co's first Sustainability Report will be released later this year and will reflect the work the Company is undertaking in these areas and its aspirations for the future.

### Health, Safety and Environment (HSE)

The HSE team supports the broader NBN Co business and its partners to make tomorrow safer, healthier and more sustainable than today.

The HSE team provides HSE strategy, processes, systems, support and programs that aim to enhance the physical health and mental wellbeing of NBN Co's people, ensure the safety of everyone every day and the safety of the **nbn™** network and associated infrastructure.

HSE also aims to preserve and minimise the impact on the natural environment, reduce NBN Co's overall energy consumption and waste to landfill, and preserve sites of cultural and heritage significance.

In the year ahead, the HSE team will also remain focused on further embedding risk controls, engaging with Delivery Partners through industry collaboration, uplifting both internal and industry HSE capability, and aligning HSE systems and processes to changing business requirements.

### Corporate Social Responsibility

NBN Co's Corporate Social Responsibility (CSR) strategy is focused on driving greater social inclusion, enabling more efficient digital delivery of essential services such as healthcare, and seeking to generate long-term positive economic outcomes that will underpin the future prosperity of all communities throughout Australia.

In addition to the work that NBN Co performs through our regional and community engagement business units, the Company's CSR program supports a number of IT-based social enterprises, training and mentor programs at schools, and provides opportunities for its employees to volunteer and make pre-tax donations to a variety of charities.

**NBN Co is focused on five pillars that strengthen its Diversity and Inclusion strategy across the organisation:**



**Gender  
Equality**



**Accessibility**



**Culture  
Diversity**



**LGBTI  
Pride**



**First  
Peoples**

## Supporting Australia



**The importance of access to fast, reliable and secure broadband has never been clearer for the nation.**



❖ The value and critical role that broadband access plays in keeping the nation productive, educated and connected with each other and the world, was increasingly demonstrated this year as bushfires, floods and the COVID-19 pandemic tested the nation like never before.

As these disasters presented NBN Co with its biggest test of reliability and resilience of the nbn™ network, the Company doubled down on its commitment to keep communities connected, schools active, businesses operational and the nation productive.



# Bushfires

## The bushfires of December 2019 and January 2020 were a devastating and disruptive force across Australia.

Restoring and providing the essential communication services that families relied on to stay in contact with each other and emergency services during this national bushfire emergency was the Company's highest priority during this time.

While a small number of fixed-line and fixed wireless sites were damaged overall, the **nbn**<sup>™</sup> network was resilient in the face of these devastating fires. Where service outages did occur, these were often due to mains power outages, demonstrating the inextricable link between power and communications, and driving closer collaboration than before.

Impacted sites were restored, on average, in less than 48 hours as the Company worked in close collaboration with government, emergency services and industry partners.

The Company helped support affected communities by establishing vital temporary communication services with its Sky Muster satellite services to 33 evacuation centres across New South Wales and Victoria.

These communication services helped support more than 4,700 residents, business owners, volunteers and other support staff across the evacuation centres, providing a vital link to the outside world.

The impacts of these bushfires were far-reaching and initiated important discussions about how governments, homeowners and businesses need to respond to natural disasters.

NBN Co regularly assesses how to make its networks more resilient and how they can better support emergency services and communities in times of need.

The Company is also working with third parties on a number of initiatives to improve resiliency of networks. These are targeted at:

- increasing visibility of power performance data and impact on the **nbn**<sup>™</sup> network
- sharing of data and knowledge with key power industry players
- the adoption of industry standards for the notification of planned power events to NBN Co in exchange for network incident data, which will assist in the management of power outages and customer experience by power utilities.

Internally, the Company is investing in multiple areas to improve the resilience of the **nbn**<sup>™</sup> network and therefore overall customer experience, including:

- exploring the application of hybrid generators which will not only support the continuity of power supply to various technologies during extended outages but will reduce the Company's carbon emissions. These generators, which combine diesel fuel used by traditional generators with renewable energy sources to create high-efficiency energy systems, are particularly important in servicing fixed wireless sites in regional and remote areas
- investment in battery backup for HFC areas that experience the highest impacts due to loss of mains power. This will reduce the number and duration of customer impacting incidents
- a redundant link and backup site for NBN Co satellite points of interconnect (POI) to ensure failover in the case of a loss of the current POI
- addition of redundancy to transit fibre spurs.

With funding support provided by the Commonwealth Government's \$37 million Strengthening Telecommunications Against Natural Disasters package, NBN Co is also in the process of procuring additional Muster Trucks and fly-away kits to provide deployable satellite connections. A program is also funded to install satellite services at up to 2,000 evacuation centres and regional emergency service facilities across Australia.



# COVID-19



## COVID-19 Downstream impacts

- Typical busy hour growth of up to **30 per cent** during the months of March up to June
  - Six new all-time highs including **14.5 Terabits per second (Tbps)** on 19 May which was a **32 per cent increase** over the pre-COVID-19 baseline<sup>1</sup>
- Typical business hours, growth ranges of up to **70 per cent** during the months of March to June
- Average volume growth per user: **13 per cent increase**
- Average monthly use per user: January 290GB, February 282GB, March 312GB, April 330GB, May 314GB, June 297GB.

## COVID-19 Upstream impacts

- Typical busy hour growth of up to **40 per cent** during the months of March to June
  - Five new all-time highs including **1.06Tbps** on 10 April which was a **38 per cent increase** over the pre-COVID-19 baseline<sup>1</sup>
- Typical business hours, growth ranges of up to **110 per cent** during the months of March to June
- Average volume growth per user: **76 per cent increase**
- Average monthly use per user: January 24GB, February 22GB, March 28GB, April 34GB, May 32GB, June 28GB.

The COVID-19 pandemic has disrupted economies, education and how people remain socially connected with friends and family all around the world.

As COVID-19 forced millions of people into social isolation to lessen the impact of the virus on communities and healthcare systems in Australia, many businesses, educational institutions, and online entertainment providers were able to continue thanks to the widespread availability of the **nbn™** network and the access to reliable, fast and secure broadband it enables.

The Company leveraged local and overseas expertise to fully understand network impacts as large portions of the population migrated online for business, education and personal needs.

These insights allowed NBN Co to quickly deploy resources and introduce a series of relief measures to ensure the nation's broadband and connectivity needs were supported through this crisis.

By working closely with the industry, NBN Co helped support the nation's increasing online needs by:

- offering to boost CVC capacity by up to 40 per cent, at no cost to internet providers from March to November 2020
- doubling the average data download limits on Sky Muster satellite services to help ensure those in rural and regional Australia can stay connected
- releasing \$150 million in financial assistance packages. This relief fund was designed to help internet providers connect low-income households with home schooling needs, support emergency and essential services and assist small and medium businesses and residential customers facing financial hardship.

<sup>1</sup> The pre-COVID-19 baseline is defined as the last week of February between 24 February and 1 March.



The increased reliance on the main **nbn™** wholesale network has resulted in significant increases in data demand and the take up of higher speed tiers as more Australians turned to broadband connectivity for their business, education and entertainment needs.

Since social distancing measures were introduced, data demand across the **nbn™** network increased by up to 70 per cent during the daytime business hours compared to the pre-COVID-19 period.

In the evening busy hours, when network usage peaks at around 9pm, network traffic increased by more than 30 per cent.

While these increases in data demand have been significant throughout the COVID-19 period, they remained well within the capacity headroom built into the **nbn™** network.

Congestion, network faults and outages also remained at very low levels during the most intense periods of COVID-19 related social distancing, with no material increase compared to previous months.

The Company has also led a number of industry forums and initiatives focused on the end user experience, safety of field technicians, and working in collaboration on technology-based solutions to problems created or accelerated by the pandemic.

## Focus on network capability and reliability



Offered **additional capacity of up to 40 per cent CVC bandwidth** at no cost to RSPs from March to November 2020



**Doubled download data limits** for standard **Sky Muster** services up to 90GB at no additional cost to RSPs from March to November 2020



Focused on **network reliability** by limiting non-essential network maintenance to minimise planned outages and to undertake essential maintenance works from midnight to 6am



Led an **industry-wide working group** (including key network carriers, and working with streaming and gaming companies) to deal with issues around network capability, maintenance and security

## Australia's data demand

The **nbn™** network is the nation's digital backbone that connects homes, businesses, schools, health and communication systems to the services and tools needed to create a more prosperous Australia and participate in the digital economy.

### The digital revolution

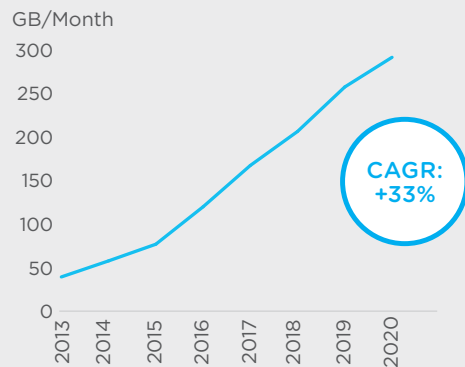
In the last decade, as the number of connected devices and online services used by Australian homes and businesses has continued to increase, the average monthly download per fixed-line customer has grown 30 times, from less than 10GB per month to over 300GB<sup>1</sup>.

In addition to the vast amount of data consumed, Australians are signing up to higher speed internet plans to support increasingly data-intensive applications. The average wholesale speed ordered on the **nbn™** network has grown by 34 per cent over the past five years from 34Mbps<sup>1</sup> in 2015 to 46Mbps<sup>1</sup> in 2020. The take-up of peak wholesale speed plans of 50Mbps or higher (download), now makes up 69 per cent of all plans accessed over the **nbn™** network.

Real-time video streaming continues to be the most common use of data across Australia, representing approximately 45 per cent of downstream application traffic volumes per **nbn™** network traffic data. In addition to entertainment, this includes relying on the **nbn™** network, for work, health, education and social connections, as proven through the COVID-19 period.

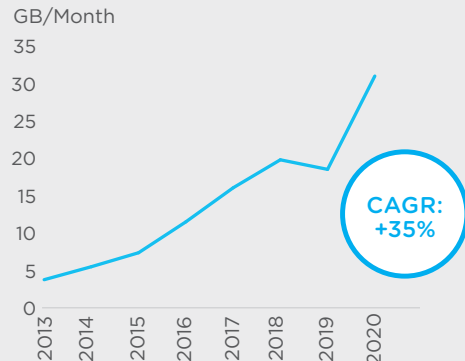
### Download usage

Average GB/month per customer



### Upload usage

Average GB/month per customer



<sup>1</sup> Source: NBN Co network traffic data.

### Remote work

At the start of COVID-19 it was estimated that about 30 per cent of the Australian workforce could feasibly work from home<sup>1</sup> (up from 10–20 per cent prior to the pandemic)<sup>2</sup>. However, with the surge in investment for work from home capabilities, it is expected that this figure has continued to grow. Post-COVID-19 it is expected that remote work will become 80 per cent more common in a wide range of occupations<sup>3</sup>, which is likely to increase job opportunities and stimulate regional and rural economies. Businesses have realised that widespread working from home arrangements are achievable from a technology perspective and have a positive impact on productivity through occupancy and travel cost savings, and greater hiring flexibility.

### Telehealth

Whole-of-population telehealth services are likely to have a lasting effect on Australian healthcare as medical professionals use telehealth services in greater numbers, and as patients increasingly value the convenience. More than three million Australians attended telehealth consultations between March and April 2020<sup>4</sup>.

For the healthcare sector, better internet connections to patients and providers not only transforms how treatments and interventions are managed and delivered, but fundamentally improves productivity and supports better health outcomes.

### Online education

Students from primary to tertiary levels have switched to online learning as educational institutions adapted to COVID-19 closures. Moving forward, online education will continue to grow to support the retraining of workers in an economy that will require them to refresh their knowledge and skills at an increased pace.

In the future, as Australians continue to work remotely, use telehealth and educate themselves online, they will increasingly require fast and reliable internet connections.

The **nbn**<sup>™</sup> network has helped create new businesses across Australia by increasing consumers' appetite for digital services, enabling new business models, and cultivating a more vibrant, competitive start-up ecosystem. Businesses have leveraged the **nbn**<sup>™</sup> network's fast, reliable broadband connections to store their data on the cloud, and sell goods and services online.

1 'There were no occupational groupings for which it was judged that all jobs could be performed at home.' Centre of Future Work (2020), 'Briefing Paper: Working from home opportunities and risks', The Australia Institute

2 Centre of Future Work (2020), 'Briefing Paper: Working from home opportunities and risks', The Australia Institute

3 'The occupations with the greatest capacity to grow WFH post-COVID being clerical and administrative workers, professionals and managers'. AlphaBeta analysis; Centre of Future Work (2020), 'Briefing Paper: Working from home opportunities and risks', The Australia Institute

4 'Australians embrace telehealth to save lives during COVID-19', Department of Health (2020).

## Meeting future data demand

Fixed-line broadband networks continue to carry the vast majority of internet traffic in Australia, accounting for almost 90 per cent of all downloads<sup>1</sup>.

Furthermore, data downloads on **nbn**<sup>TM</sup> retail services account for 69 per cent of all downloads, across all communications networks in Australia<sup>1</sup>.

Data consumption on the **nbn**<sup>TM</sup> network significantly increased in FY20 as the wide-ranging impacts of the COVID-19 pandemic resulted in millions of Australians relying on their broadband connections for work, study and entertainment.

Throughout the COVID-19 pandemic, the Company offered internet providers up to an additional 40 per cent capacity at no cost to support the nation's broadband needs.

This capacity boost helped ensure NBN Co customers had the capacity they needed during periods of social restrictions.

During the peak of COVID-19 and social distancing restrictions, average monthly downloads per user on the **nbn**<sup>TM</sup> network increased by 5 per cent, from 282GB per month in February, to 297GB per month in June, peaking at 330GB in April.

Uploads per user increased by 27 per cent in the same period, from 22GB per month in February, to 28GB per month in June, peaking at 34GB in April.

NBN Co projects that download data demand will grow to over 1,000GB per month by 2029.

Additionally, Australian demand for high-speed internet will continue to grow as more people turn to technology for everyday personal and business activities.

## New opportunities

As data demand continues to grow, it will usher in new opportunities for industries, institutions and the nation to develop businesses and services that will ultimately help grow the nation's prosperity.

More education opportunities will be provided online through virtual learning channels and classrooms using integrated technologies to enhance experiential and personalised learning, and to encourage greater participation.

Additionally, start-ups and home businesses will have a greater use of, and reliance on cloud technologies and other software-as-a-service technologies.

Financial, professional services and ICT sector professionals will increasingly need high-speed, low latency internet for digital payments, storage and analysis of large data sets in the cloud, and significant amounts of IT infrastructure.

There is also a need to keep up with the growing demand that is being driven by population shifts to regional areas, which has averaged 80,000 people per annum over the last decade.

In turn, if this change in consumer behaviour is met by technology capability, it will drive business productivity, changes to consumption of health and education, growth in regional centres driven by teleworking<sup>2</sup>, business opportunities, and assist with urban congestion<sup>3</sup> and the reduction of pollution levels<sup>4</sup>.

NBN Co has responded to increasing demand from customers for higher speed **nbn**<sup>TM</sup> residential broadband services by launching its Home Fast, Home Superfast and Home Ultrafast plans, where supported by the current network.

Continued network investment is required to ensure the **nbn**<sup>TM</sup> network continues to meet the future needs of Australians as the digital backbone of the Australian economy, supporting social and economic growth by staying ahead of future demand for internet speeds, capacity, reliability and latency.

1 <https://www.accc.gov.au/regulated-infrastructure/communications/monitoring-reporting/internet-activity-record-keeping-rule-rkr/december-2019-report>.

2 "Teleworking benefits highlighted include: 1) reducing the time, cost and stress of employees' daily commute to the office 2) Positioning the organisation as an attractive employer for skilled employees, regardless of their location" Teleworking and productivity, The Department of Communications Telework, <https://www.apsc.gov.au/teleworking>.

3 "For every 100,000 Australians who choose to live in small cities rather than our major cities, the savings in congestion costs would be in the order of \$292 million per year or \$4.9 billion over 30 years." House of Representatives Select Committee on Regional Development and Decentralisation (2018), Regions at the Ready: Investing in Australia's Future.

4 "Australia's net emissions in 2017 were 556.4 million tonnes CO<sub>2</sub>-equivalent, to which the Transport sectoral contributed approximately 18%"; "Cars are responsible for almost half (44Mt of CO<sub>2</sub>) of transport emissions". Australia's Rising Greenhouse Gas Emissions 2018, Climate Council of Australia.

Average monthly data usage for June 2020\*

National average

**297GB**  
(16%)

**28GB**  
(36%)

**Downstream**  
(8% increase)

**Upstream**  
(% increase)

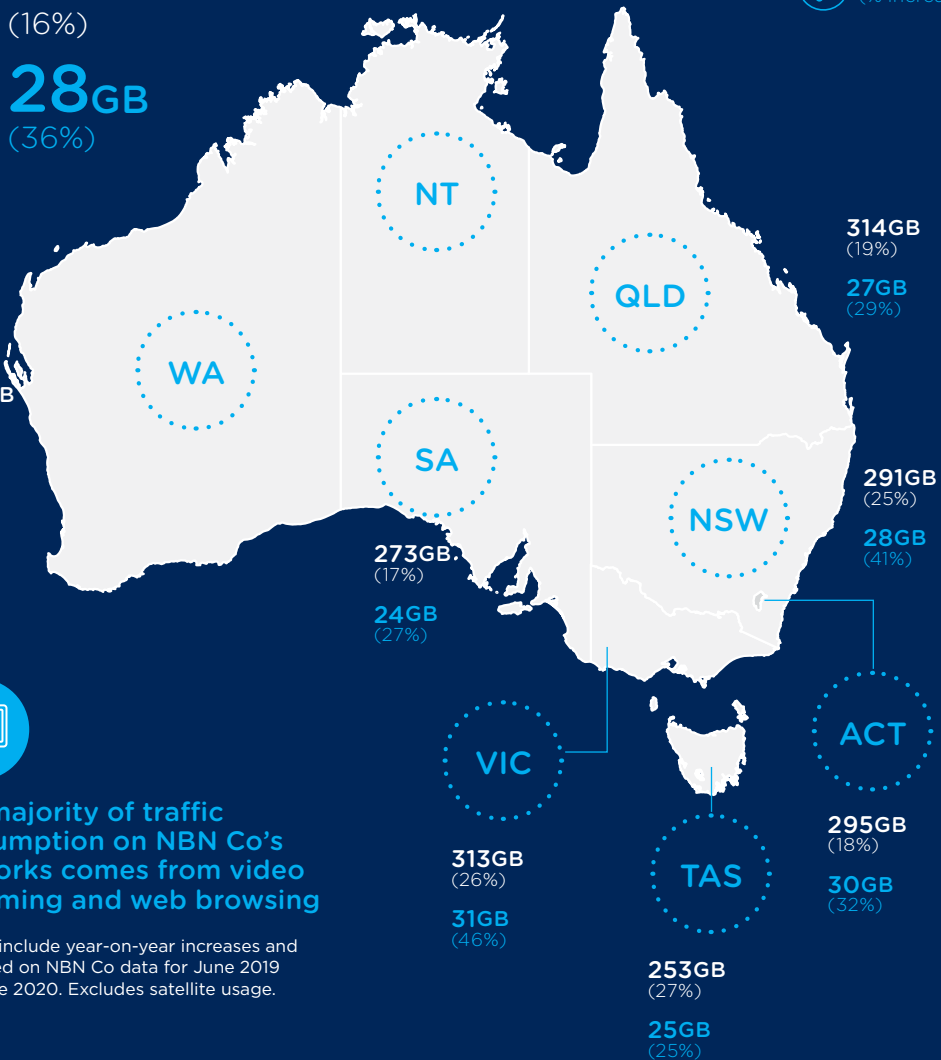
**280GB**  
(10%)

**26GB**  
(22%)



The majority of traffic consumption on NBN Co's networks comes from video streaming and web browsing

\* Figures include year-on-year increases and are based on NBN Co data for June 2019 and June 2020. Excludes satellite usage.



## Investing in our customers

### The Company has chosen to pursue four key initiatives totalling \$1.5 billion.

Prioritisation of these investments is reflective of the current external operating environment and how NBN Co is responding and where the Company believes it can make the greatest impact on lifting the digital capability of Australia.

Funding for these investment initiatives is supported by the long-term debt facilities secured by the Company earlier this year.

These investments also provide a positive financial return and a demonstrable social impact.

**IT simplification:** New functionality and simpler, more efficient IT systems will help reduce costs for NBN Co and internet retailers and improve overall customer experience. This initiative will help NBN Co reduce hardware and software complexity, and move the Company towards software defined networks. The investment into IT simplification is expected to generate an attractive return on investment, while also simplifying the way the Company interacts with internet retailers, delivery partners and its internal workforce.

**COVID-19 support:** By working closely with the industry, NBN Co helped support the nation's increasing online needs during COVID-19 by boosting CVC capacity by up to 40 per cent, at no cost to internet providers from March to November 2020, doubling the average data download limits on Sky Muster satellite services and releasing \$150 million in financial assistance packages to assist internet providers support their customers to stay connected and help connect low-income households with home schooling needs. The support NBN Co has provided during this crisis has contributed to improved customer experience.



**Focus on regional:** An enhanced commitment to rural and regional Australia through targeted investments in fixed wireless and satellite networks, including spectrum, capacity enhancements, network security and new customer connections driven by heightened demand. Investments are also being made in an expansion of fixed-line networks in regional areas and the establishment of the new RDE business unit. RDE plays a critical role in bringing together all aspects of the fixed wireless and satellite teams, from engineering through to operations, to ensure regional customers remain front and centre post completion of the initial build<sup>1</sup> of the **nbn™** network.

**Connecting new premises:** More than 300,000 new premises have been identified outside the previous Corporate Plan forecasts. These include additional premises identified by the Company in the process of rolling out the **nbn™** network and an upward revision in the forecast for new premises that will need to be made Ready to Connect over the period to FY23. These new premises connections are associated with greenfield property developments and re-developments of existing residential and commercial properties and precincts. Connecting these homes and businesses will be an important source of revenue growth for the Company in a competitive environment.



<sup>1</sup> For further details on the initial build, refer to footnote 1 on page 6.

## Investing for the future



**NBN Co is investing now to ensure Australia can build upon the strong broadband base that the nbn™ network has established over the last decade.**





❖ The period set out in this Corporate Plan will be a defining one for NBN Co, and to deliver on its purpose to lift the digital capability of Australia, the Company's strategy for the next four years will focus on:

- delivering as quickly as possible, but within relevant constraints, remaining complex installations that form part of the **nbn**<sup>TM</sup> network. 80 per cent of these are targeted to be made Ready to Connect by the end of 2020
- ending the co-existence of legacy copper networks. This will enable the Company to enhance the performance of the **nbn**<sup>TM</sup> network where the potential for interference within the operation of legacy networks and the **nbn**<sup>TM</sup> network currently exists
- connecting new premises to the **nbn**<sup>TM</sup> network. NBN Co will always continue to extend its network through new greenfield property developments and re-developments of existing residential and commercial properties and precincts to ensure all Australians can access the **nbn**<sup>TM</sup> network
- further advancing customer experience through industry collaboration. The Company's continued collaboration with the industry will be underpinned by our Wholesale Broadband Agreement 4 (WBA4) that will be designed to serve the needs of internet providers and customers
- continuing our focus on enhancing digital capability in regional, rural and remote Australia
- investing in technology and IT systems to improve interactions between customers and internet providers, while also driving internal efficiencies
- investing in the **nbn**<sup>TM</sup> network by taking fibre deeper into the network to enable residential and business customers to attain higher speeds than currently available, and enhancing the performance and reliability of the HFC, FTTC and FTTN networks
- refinancing the \$19.5 billion loan from the Commonwealth Government with debt from Australian and international capital markets by FY24
- driving sustainability across all of the Company's activities and the operation of the **nbn**<sup>TM</sup> network.

### **\$4.5 billion network investment plan**

**Having completed the initial construction of one of the largest infrastructure projects in Australia's history, NBN Co is now focused on the next stage in the planned evolution of the nbn™ network.**

The network investment plan brings forward \$4.5 billion of incremental funding to accelerate network investments that would have been required to commence in future years, based on the pre-COVID-19 trajectory for broadband demand, but which now make financial and economic sense to commence immediately.

The plan will deliver targeted and demand-driven investments to ensure the network keeps pace with increasing demand for higher broadband speeds and greater capacity, lifting customer experience and enhancing customer choice while improving network performance, resilience and reducing operating expenditure.

The network investment plan has three components:

- \$3.5 billion to make NBN Co's highest wholesale speed plans available, as demand arises, to up to 75 per cent of households and businesses in the fixed-line network by 2023 (and up to 68 per cent in the total network)
- Up to \$700 million in a package of initiatives to collaborate with industry to help deliver enhanced digital capabilities supporting business innovation, productivity and growth
- \$300 million to establish a dedicated fund from which the Company can co-invest with governments or local councils to continue to improve broadband services for Australia's rural and regional communities.

While no one could have predicted the COVID-19 pandemic, it has underscored the importance of both universal broadband access and of the decision taken to prioritise the speed of network deployment through the multi-technology mix (MTM). It has also permanently changed the way families, businesses and their employees use and rely on the internet, which has in turn accelerated the trajectory for broadband demand, much of which will persist beyond the pandemic.

The MTM approach always countenanced future investments in the network; the question has only ever been one of timing. With increased forecast demand as a result of economic and social trends that were always going to emerge in the way Australians conducted themselves but have now accelerated, the time is right to commence these investments in preparation for that demand emerging over the next few years.

Record low interest rates provide the Company with a low cost pathway to borrow against future free cash flows, underpinned by the strength of projected earnings and the success of our inaugural long-term private debt raising completed earlier this year.

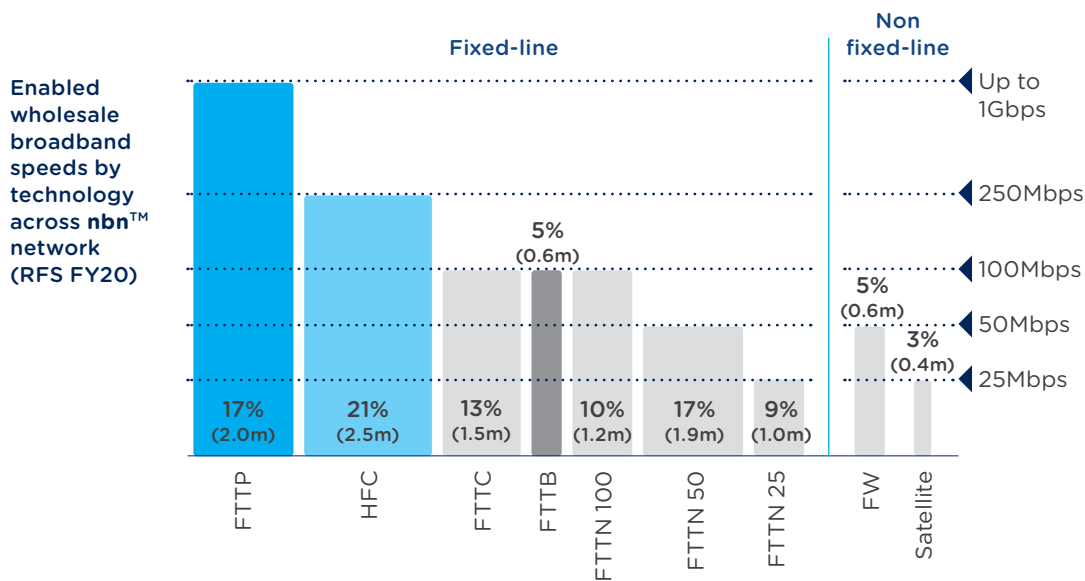
The plan will deliver an estimated 25,000 new jobs over the next two years to provide opportunities for Australians to get back into work and a productivity dividend estimated to add \$6.4 billion to GDP annually from 2024, including \$1.5 billion to Australia's regional economies.

The targeted and demand driven nature of these investments is expected to drive a commercially attractive return on investment, building on the network investments that have been made to date, supporting the profitability of the Company and ultimately the value of the equity held by the Commonwealth Government.

Funding for these investment initiatives is supported in part by the long-term debt facilities secured by the Company earlier this year, as well as future additional debt funding the Company intends to secure from Australian and international capital markets.



## Current network enabled speed



Currently 70% of the HFC network can receive nbn™ Home Superfast speeds and 7% can receive nbn™ Home Ultrafast speeds.  
Assumes post end of co-existence for FTTN.

### Making our highest wholesale speed plans available to more Australians

The nbn™ network is operating very well and its capability exceeds the demand of the majority of households. The Company knows however, that demand is increasing and some elements of the network are not capable of providing access to the highest wholesale speed plans.

NBN Co’s plan to make its highest wholesale speed plans available to up to 75 per cent of households and businesses in the fixed-line network by 2023 (and up to 68 per cent in the total network) will be achieved through four primary network initiatives:

- \$2.9 billion to take fibre deeper into the FTTN footprint, enabling premises to move to an FTTP service when they order a higher speed plan. Importantly, this is not a forced migration and construction of fibre into the home will be linked to demonstrated demand from households

- \$400 million for new capacity investments in the HFC network to enable access by customers on this network to NBN Co’s highest wholesale speed plans
- \$100 million uplift program to provide 100Mbps line speeds for premises on the FTTC network and enable access to NBN Co’s highest wholesale speed plans by 2023 through on-demand enablement and deployment of G.Fast capability or the provision of fibre lead-ins in certain circumstances
- \$50 million for a line speed uplift program to improve in-home speeds for customers on the FTTN network.

NBN Co will generate free cash flow beyond 2023. These cash flows may be applied, amongst other things, to further investments in network capability improvements. The Company will engage with its shareholders in coming years as to the application of these free cash flows, and these decisions will be incorporated in future Corporate Plans.

### Total nbn™ fixed-line premises in Australia - Speeds Potentially Available



Fastest internet plans defined as nbn™ Home Ultrafast Speed Tier, with peak wholesale download speeds of close to 1,000Mbps, increasing from 18% to up to 68% for the total footprint.

### Taking fibre deeper into the FTTN network

An important part of the original MTM strategy was for the nbn™ network to evolve in response to changing consumer demands. In addition to FTTN networks being much quicker to deploy, the 2013 Strategic Review found an upgrade path from FTTN to FTTP was possible at lower economic cost and financially more attractive than building an FTTP network from the outset, so long as the FTTN networks were operational and generating revenue over a certain period of time.

The first FTTN areas have been in operation for five years and the entire FTTN network will soon have generated more revenue than it cost to build and run. That is, the FTTN network will have paid for itself as well as being able to provide very good speeds to millions of Australians over the last five years and well into the future.

It is important to note that NBN Co is not proposing a full-scale overbuild and forced migration of FTTN areas to FTTP.

Rather, the FTTN network will continue to operate and will continue to meet the needs of many Australians for years to come.

NBN Co will proactively build a Local Fibre Network (LFN) from the existing node placing fibre deeper into neighbourhoods. The fibre already built to the nodes as part of the FTTN build, known as the Distribution Fibre Network (DFN), will be utilised and incorporated to deliver new FTTP services. Fibre lead-ins from street frontages to individual premises will only be built when customers order higher speed plans.

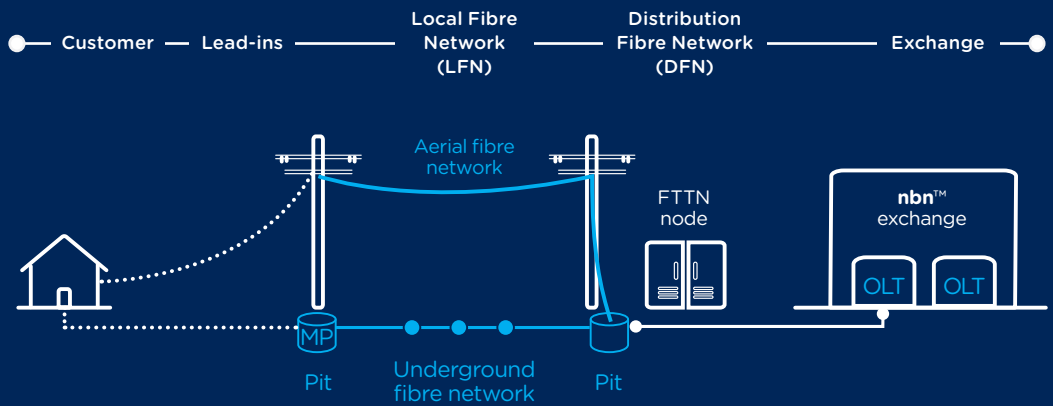
In this way, a significant portion of the investment made by NBN Co is closely linked to demand, and with a return on the investment into the expansion of FTTP services generated by the higher revenues associated with customers taking up NBN Co's higher speed plans.

This on-demand model makes FTTP a cost-effective solution; however, NBN Co will continue its strategy of utilising other suitable technologies where it makes sense to do so.



## Physical build scope

### FTTP network architecture



**Scope**

✓  
Lead-ins  
on-demand

✓  
LFN to FTTP  
multi-port in scope

✓  
Use existing DFN  
to FTTN node

✓  
Upgrade Exchange  
equipment  
as needed

### Supporting the digitisation of Australian businesses

NBN Co will support the digitisation of businesses and essential health services across regional and metropolitan Australia through an investment of up to \$700 million that will make the Company's business-grade fibre services more accessible and affordable to more businesses than ever before.

The initiative will help level the business playing field and improve digital capability for small and medium businesses, helping them build on the experience of COVID-19, which highlighted the advantages of bandwidth intensive applications such as online collaboration and cloud-based tools.

### A dedicated fund for regional co-investment

NBN Co will create a \$300 million fund to invest alongside governments and local councils to improve broadband services for rural and regional communities in circumstances where those investments would otherwise be sub-commercial.

This will provide a dedicated source of funding to partner with governments, enabling NBN Co to generate a threshold commercial return on its contributed capital through the application of co-investment funding.



Having these funds available means the Company can confidently engage with governments in circumstances where they have established funding programs targeted at improving connectivity in regional Australia, and also in cases where long-standing or emerging local priorities can be met through specific co-investment partnerships.

NBN Co will only expend funds under this initiative when it has entered into a co-development arrangement with a third party. In this way, the Company will retain control of expenditure to ensure a threshold commercial return on the investment can be achieved.

### Improved Technology Choice program

In addition to embarking upon the \$4.5 billion network investment plan, NBN Co will also make important improvements to the Technology Choice program. This program enables residential and businesses customers, either individually or collectively as part of a group switch, to upgrade the **nbn**<sup>TM</sup> access technology that serves their premises.

The improvements to the program will focus on making it more cost effective including improved pricing by completing builds at lower cost, especially for 'group switches'. Customer accessibility will also be improved with a simplified website, instant online quotes, and application fee removal.



## Social and economic benefits

- **NBN Co is committed to ensuring all Australians receive the social and economic benefits that access to broadband enables.**

The Company's plan to invest in the **nbn™** network will have long-lasting and material benefit to the nation's employment landscape, productivity and the future data demand of millions of Australian homes and businesses.

The **nbn™** network is critical in cementing Australia's competitiveness as the global economy recovers from the impact of COVID-19. In doing so, it will help to attract foreign investment and create jobs and economic opportunities in Australia.

### Economic impact of investment

#### Australia

Peak jobs created

**25,000**  
by 2022

GDP uplift

**\$6.4bn** p.a  
by 2024

New business created

**12,000**

#### Regional Australia

Peak jobs created

**10,000**  
by 2022

GDP uplift

**\$1.5bn** p.a  
by 2024

New businesses created

**2,800**

### Small and medium business

#### Access to reliable, high-speed broadband has become key to Australia’s recovery and growth.

For small and medium sized businesses, the opportunities and access created by fast, reliable and secure broadband have increased consumer appetite for digital services, enabled new business models and cultivated a more vibrant, competitive start-up ecosystem.

Analysis conducted by economics firm AlphaBeta shows that NBN Co’s investment in its network could support 12,000 new businesses, including 2,800 in regional areas, by 2024. This is in addition to the 39,000 businesses that are expected to emerge as a result of existing nbn™ infrastructure.

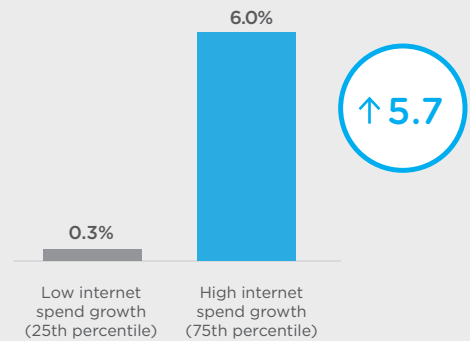
Small and medium businesses (SMBs) are critical to the growth and prosperity of the Australian economy. Representing around 1.4 million fixed broadband connections, SMBs are increasingly using cloud applications, digital tools and real-time communication services to boost productivity and stay connected to their customers and employees.

But despite the high number of SMBs relying on broadband for their business needs, fewer than 10 per cent of SMB sites are connected to business grade, prioritised broadband. Research by AlphaBeta found that increasing technology adoption can help Australian businesses be more productive, successful and competitive in local and global markets.

AlphaBeta also found that internet spending was the strongest indicator of performance among all technology spending categories. Firms with the highest internet spending grew revenue and employment by 6 per cent and 4.8 per cent respectively, versus 0.3 per cent and -0.6 per cent for those in the lowest quartile.

#### Firms with higher internet spending also had higher revenue growth

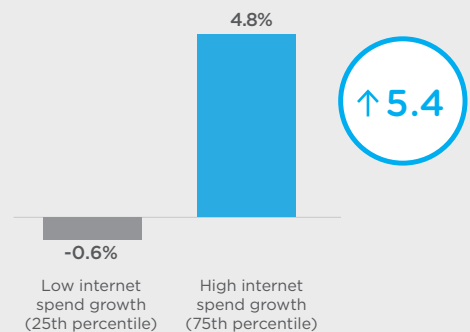
Revenue growth (%) 2015-2017



Source: AlphaBeta, Xero SBI

#### Firms with higher internet spending also had higher employment growth

Employment growth (%) 2015-2017

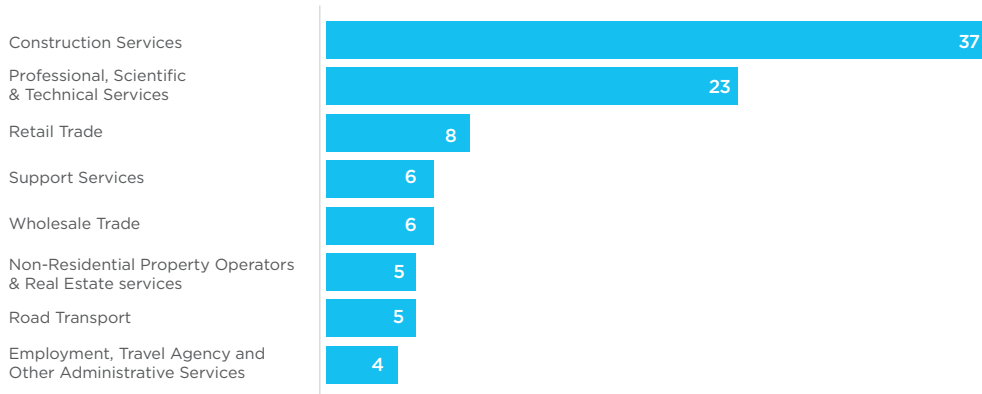


Note: height of the bar represents the expected value of employment growth at 25th and 75th percentiles of internet spend after controlling for other variables.

Source: AlphaBeta, Xero SBI

### Industries with the most indirect jobs created due to extra nbn™ investment

(% of total jobs), FY20-21 to FY23-24



Source: nbn™, AlphaBeta analysis, REMPLAN

### Jobs

**New businesses that are supported by the benefits of fast, reliable and secure broadband access will support tens of thousands of new jobs across the nation, help Australia's recovery from the economic and social dislocation brought on by COVID-19, and stimulate regional economies over the medium to long term.**

AlphaBeta research shows that these network investments, and the associated increase in construction work, would result in a high-impact, low-risk, and immediate stimulus measure that would create 25,000 peak direct, indirect and induced jobs across the nation.

Of those 25,000 jobs, up to 16,600 are expected to be created in the construction, engineering, and project management industries. A further 4,400 jobs will be created further up the supply chain, in the retail trade and transport industries, while economic activity is expected to support another 4,000 jobs.

The Company's network investments will create jobs immediately from this financial year through to FY24. Some 89 per cent of the jobs impact is expected to occur over first two years of the program, including peak job creation of 25,000 in FY22, generating much needed opportunities.



### Supporting the nation’s economic recovery

#### The nbn™ network will play a critical role in keeping Australia competitive as the global economy recovers from the impacts of COVID-19.

Upgrading the nbn™ network will not only provide an immediate boost to jobs across the nation, but it will increase Australia’s Gross Domestic Product (GDP) by improving the productivity of businesses and workers across the economy.

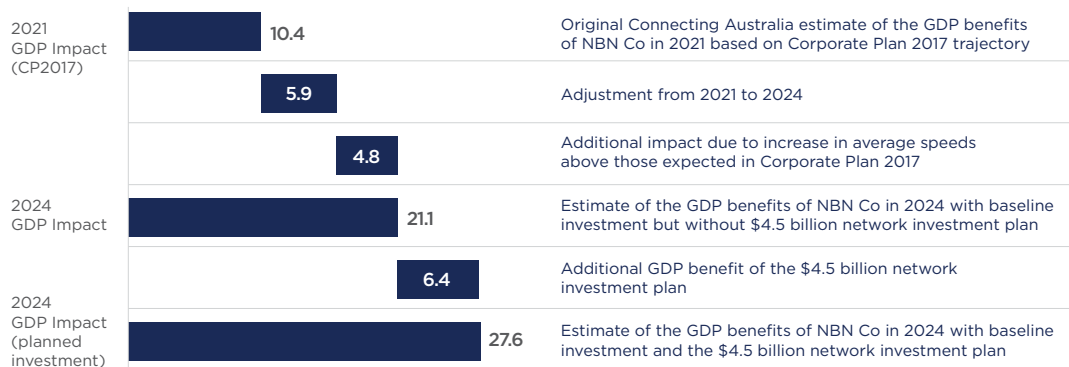
There has long been an established link between broadband connectivity and GDP with the United Nation’s International Telecommunication Union recently finding that an increase of 10 per cent in fixed broadband penetration yields an increase of 0.8 per cent in GDP per capita<sup>1</sup>.

In 2018, AlphaBeta estimated that by 2021, the rollout of the nbn™ network would help add an estimated \$10.4 billion per annum to the nation’s GDP through the creation of new jobs, new businesses and improved productivity<sup>2</sup>. In 2020, AlphaBeta updated its analysis to capture the increase in actual speeds above those forecasted in 2018, as well as extending the calculation to 2024.

AlphaBeta’s revised estimate is that the nbn™ network would add an estimated \$21.1 billion per annum to the nation’s GDP by 2024. Additionally, AlphaBeta forecasts that upgrading the nbn™ network so that up to 75 per cent of all fixed-line services could attain nbn™’s highest wholesale speed plans would add an estimated \$6.4 billion per annum to the nation’s GDP by 2024.

#### Additional GDP estimated to be enabled by investment in the nbn™ network

Estimated impact of nbn™ compared with the ‘no nbn™’ reference case in the stated financial year (\$ billion per annum)



The GDP impact was estimated using a Computable General Equilibrium model, allowing AlphaBeta to detect the impact of the nbn™ access network on the Australian economy. This excludes, and is incremental to, the economic stimulus of the nbn™ network rollout itself, such as capital investments, financing and the workers needed to build the network.

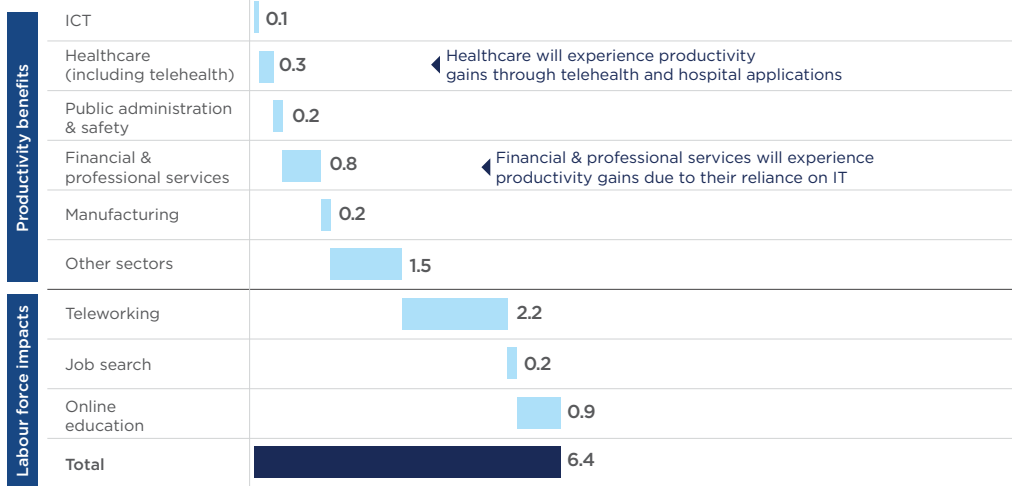
A breakdown of the productivity benefits and labour force impact of the additional investment can be found on the following page.

1 [https://www.itu.int/dms\\_pub/itu-d/opb/pref/D-PREF-EF.BDT\\_AM-2019-PDF-E.pdf](https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-EF.BDT_AM-2019-PDF-E.pdf)

2 NBN Co (2018), ‘Connecting Australia’ [http://www.connectingaustralia.com.au/pdf/Connecting\\_Australia\\_Report.pdf](http://www.connectingaustralia.com.au/pdf/Connecting_Australia_Report.pdf)

## nbn™ planned investment GDP impacts

### Additional GDP estimated to be enabled by investment in the nbn™ network delivered in FY24, by driver (\$ billion per annum)



Industries benefit from the nbn™ network by gaining higher productivity through higher internet speeds. The productivity benefits vary by industry because:

1. Industries have different levels of reliance on IT (i.e. share of costs in IT, % of business in an industry using IT)
2. Some industries were less served by IT than others before the nbn™ network investment plan: e.g. their workforces are in regions with previously lower average speeds.

### Rural and regional

**NBN Co's investments into rural and regional Australia will support the creation of new jobs, boost business productivity and allow more homes to access the Company's highest wholesale speed plans.**

The Company's targeted suite of regional and rural investments will make its highest wholesale speed plans available to more than 1.4 million homes and businesses in areas in need of fast, reliable and secure broadband.

These include 950,000 residential premises and approximately 455,000 business premises in regional Australia.

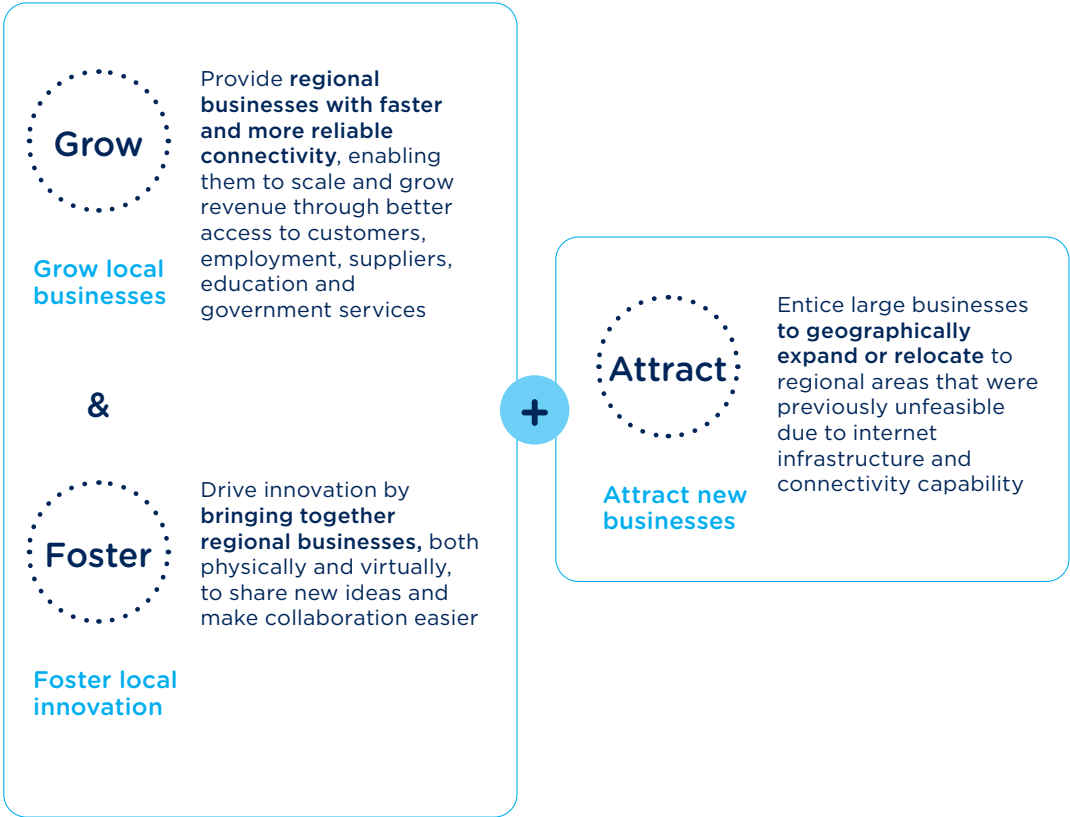
Approximately one-third of the Company's business-grade fibre services investment will also be spent on regional businesses, which will provide them with faster and more reliable connectivity, and the means to scale and grow revenue through better access to customers, employment, suppliers, education and government services.

AlphaBeta estimates that the sum of these initiatives would:

- generate \$1.5 billion in additional GDP for regional Australia in 2024 from the additional growth in businesses, employment and entertainment enabled by faster internet speeds
- support the creation of an additional 2,800 regional businesses
- create around 10,000 regional jobs, including 3,300 indirect and induced regional jobs.

**Business-grade fibre services will bridge the regional technology gap helping to grow and foster existing businesses while attracting new businesses to the area**

Business-grade fibre services will help regional areas to...



## Funding our future strategy

**Over the last decade, NBN Co has funded its business through a combination of equity and debt funding from the Commonwealth Government. This has come in the form of \$29.5 billion of equity and a \$19.5 billion loan that is due to mature on 30 June 2024.**

As the Company continues to evolve into a mature, customer-led operating business, it has started to diversify its sources of funding to support its future growth ambitions. As a first step to raising external third-party funding, in April 2020 NBN Co successfully completed its inaugural, long-term borrowing from the Australian bank market as it raised \$6.1 billion in long-term unsecured credit facilities.

The transaction served as market validation of NBN Co's long-term credit profile and is a testament to the strong financial foundations that have been set for this business and the long-term outlook on NBN Co's ability to create socio-economic value for the nation.

In order to finance the repayment of the Commonwealth loan and to execute the additional investments outlined in this plan, NBN Co is expected to raise a total of \$27.5 billion of external debt by June 2024 plus additional working capital facilities.

The addition of \$8 billion in external debt, on top of the debt currently secured through the \$19.5 billion Commonwealth loan, will be applied to fund the:

- strategy as set out in the previous Corporate Plan, including completion of the initial rollout of the **nbn™** network, consistent with the \$51 billion financing requirement, including \$2 billion of private debt financing, as has previously been identified;
- four key initiatives set out on pages 36 and 37 of this Corporate Plan, with an additional financing requirement of \$1.5 billion;
- and the network investment plan set out on pages 40 to 45 of this Corporate Plan, with an additional financing requirement of \$4.5 billion.

To complete this financing task, NBN Co will look to raise debt from local and global capital markets over the next three years. NBN Co expects the funding task to be achievable based on expectations of an investment grade credit rating, strong outcome in the recent bank financing transaction and overall favourable debt capital market conditions for infrastructure borrowers like NBN Co. The Company has recently updated its Treasury Policy to manage the financial risks involved with managing the contemplated debt program.



# Financial and operational information

## Financial and operational forecasts

**In alignment with NBN Co's strategic imperatives over the Corporate Plan period, the following core operational and financial performance measures and targets have been set.**

These measures directly reflect the Company's purpose to lift the digital capability of Australia by ensuring all homes and businesses have access to fast broadband. Furthermore, they reflect the Company's commitment to growing profitability to enable reinvestment to benefit the nation and its customers. These measures will be reviewed annually and, if required, revised based on actual performance and external factors.

### Ready to Connect and activations FY21-FY24

Table 1: RTC

Cumulative premises (millions)	FY20(A)	FY21	FY22	FY23	FY24
Premises Ready to Connect	11.7	12.0	12.1	12.3	12.5

Table 2: Premises Activated

Cumulative premises (millions)	FY20(A)	FY21	FY22	FY23	FY24
FTTP Brownfields	0.9	0.9	0.9	1.1	1.3
FTTP Greenfields	0.5	0.7	0.8	0.9	1.1
FTTN/B	3.1	3.2	3.2	3.2	3.0
FTTC	0.7	1.0	1.2	1.2	1.2
HFC	1.7	2.0	2.0	2.0	2.0
Fixed Wireless	0.3	0.3	0.3	0.3	0.3
Satellite	0.1	0.1	0.1	0.1	0.1
	<b>7.3</b>	<b>8.2</b>	<b>8.6</b>	<b>8.8</b>	<b>9.0</b>

The RTC measure reflects a point in time when residents and businesses can place an order for an **nbn**<sup>TM</sup> service. Premises activated is the number of premises connected to a service over the **nbn**<sup>TM</sup> access network.

By FY24, NBN Co forecasts overall take-up of 73-75 per cent in fixed-line areas, depending on the prevalence of vacant premises, mobile-only households and any alternative fast broadband network providers.

### Key Financials FY21–FY24

Table 3: Key financials

\$ billions	FY20(A)	FY21	FY22	FY23	FY24
Revenue	3.8	4.5	5.3	5.8	6.2
Subscriber payments	(2.4)	(1.1)	(0.3)	(0.1)	(0.0)
EBITDA	(0.6)	1.3	3.3	4.0	4.5
Net profit after tax	(5.2)	(4.0)	(2.2)	(1.5)	(0.9)
Capital expenditure	(5.0)	(3.4)	(3.8)	(2.4)	(2.2)
Contributed equity	29.5	29.5	29.5	29.5	29.5

Revenue is calculated in accordance with Australian GAAP.

Residential Average Revenue per User (ARPU) is expected to grow to \$49 during the Corporate Plan period.

EBITDA is defined as earnings before interest, tax, other income, depreciation and amortisation and each component is calculated in accordance with Australian GAAP. EBITDA is inclusive of subscriber payments.

Capital expenditure is a non-GAAP measure, which is calculated based on the cost of network and intangible assets additions, excluding additions of leased assets, gifted assets and items classified internally as inventories.

Net profit after tax is calculated in accordance with Australian GAAP.

## Other financial information

### Long-term financial outlook

In the current market, Management and the Board face inherent uncertainty in accurately forecasting long-term financial prospects. NBN Co has a limited factual and operational base for financial projections due to the uncertainty in the long-term market structure and competitive landscape, network usage, regulatory policy, innovation and the impacts of COVID-19 and other potentially disruptive events. This gives rise to a range of possible financial outcomes.

The current estimated enterprise IRR is 3.7 per cent, which is calculated based on estimates in respect to long term cash flows, including ongoing growth in greenfields, growth in highspeed product take-up, growth in sale of business products, inflation adjustments to operating costs and assuming a steady state capital spend based on industry benchmarking.

Management and the Board do not give any guarantee or assurance that the results, performance or achievements expressed or implied by these estimates will actually occur.



## Subsidiaries

The subsidiaries of NBN Co are listed in the table below. NBN Co is in the process of liquidating its two subsidiaries to simplify the operations of the Company.

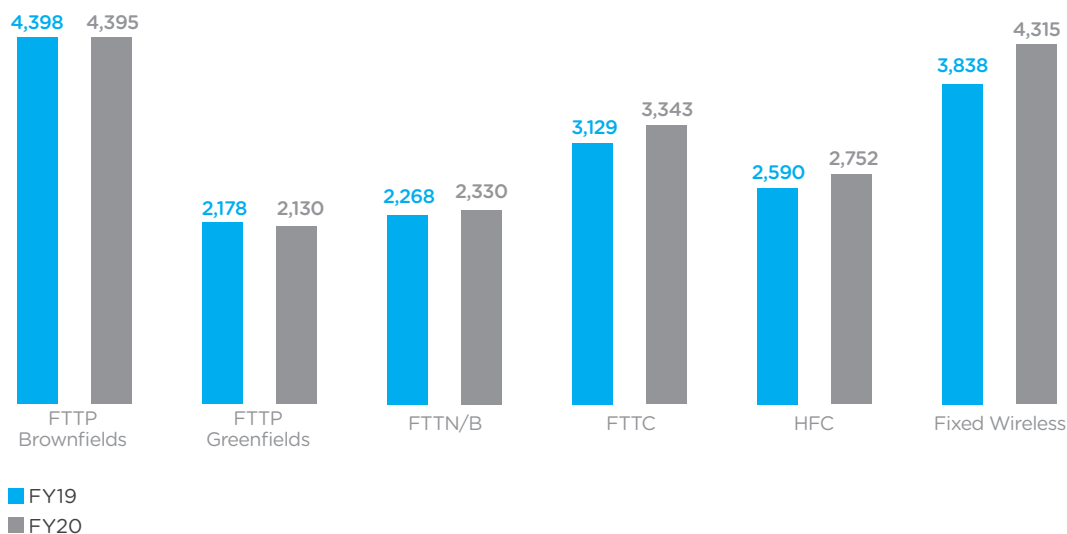
### Subsidiaries of NBN Co

Name of entity	Country of Incorporation	Class of Shares	Equity Holding
NBN Tasmania Limited	Australia	Ordinary	100 per cent
NBN Co Spectrum Pty Ltd	Australia	Ordinary	100 per cent

## Cost per Premises

Cost per Premises (CPP) is an internal management calculation used to assess the comparative incremental costs of the initial build of each access technology. The CPP reported is a weighted average over the build period and depends on some factors such as geographic build conditions, distances from exchanges, the population density of the area considered, the number of premises per multi-dwelling unit, and the extent of re-use of existing infrastructure.

The CPP reflects capital and lease costs associated with the initial build of each access network and excludes common capital expenditure (such as IT and transit network), early release or pilot sites, subsequent capital investment in network capacity, and net operating losses.



# Risk management

**NBN Co's Board of Directors and Management are committed to a robust risk management framework that enables effective identification, quantification, mitigation, and management of the Company's business risks.**

## How does NBN Co manage its risks?

Management and employees play a key role in identifying, assessing and managing their business risks; including providing assurance through formal Executive Governance channels (including the Board Audit and Risk Committee). These roles and accountabilities are formalised through the Company's Enterprise Risk Management Framework, which sets specific requirements for how risks are managed and reported for the attention of Management, the Executive Committee and the Board.

## Overview of risks

The challenges related to building and scaling the network and improving the customer experience remain central to the Company's risk profile. However, the FY21 Corporate Plan business risks have evolved to incorporate the challenges of undertaking a major transformation program and managing the impacts of COVID-19.

COVID-19 continues to have a profound impact on the telecommunications industry and Australia more broadly. To support the country's network needs during the crisis, significant industry-wide steps were taken to help facilitate high-speed and reliable access for Australians. How the industry responds in the longer term will be closely monitored.

## Key corporate risks and COVID-19 implications

### Health and safety of employees, contractors and the public

NBN Co and its partners must operate in a manner that prioritises the health and safety of its staff, contractors, and the public. COVID-19 has heightened risks associated with physical and psychological safety and the wellbeing of NBN Co employees, contractors and customers. The workplace in particular presents challenges to maintain appropriate

social distancing controls to minimise risks of transmission while COVID-19 remains active. These challenges are managed through a risk based HSE management system and regular testing of partner and internal practices.

### Ensuring the security of NBN Co people, information and critical infrastructure

NBN Co must manage exposure to cyber and physical threats that could compromise the security of critical network infrastructure, the welfare and safety of staff, and the confidentiality, integrity and availability of sensitive information. Globally, the cyber threat environment has increased, with COVID-19 themed phishing and ransomware more prevalent. Physical attacks against telecommunications infrastructure attributed to COVID-19 conspiracy theories linked to 5G technology have also taken place. To manage security threats to critical network assets, people and information, NBN Co operates a best practice security model, with aligned security structures, processes and systems.

### Welfare of customers connecting and using the network

NBN Co and its partners must operate in a manner that protects the welfare of customers, including the remaining customers migrating onto the network and vulnerable customers for whom it is critical to have reliable connectivity. Robust processes and industry agreements are in place to manage migration activities and ensure the reliability of the **nbn**<sup>TM</sup> network.

### Executing company transformation whilst maintaining operational commitments

NBN Co must continue to transform its workforce, technology and processes to deliver its customer-led strategy with a competitive cost base, agile digitally-enabled processes, customer-led workforce and simplified technology environment. COVID-19 has impacted the timing of certain transformation initiatives, that are expected to be recovered in FY21. These activities must be navigated against a complex backdrop of managing a safe return to the workplace and overall economic recovery. Transformation efforts are governed and coordinated through a central transformation office.

### **Resilience of NBN Co's network and operations to extreme environmental conditions**

NBN Co is an operator of critical national communications infrastructure, and must design resilience into its network, IT systems and business operations to safeguard people, assets, systems and processes against adverse events, such as extreme weather. The COVID-19 pandemic in addition to the December 2019 and January 2020 Black Summer bushfires has highlighted the risk that NBN Co is required to increase investment in resilient infrastructure above its planned level of investment. A business resilience framework is adopted to manage the impact of adverse events, which includes robust business continuity, incident management and crisis management structures.

### **Meeting increasing network performance expectations within commercial constraints**

NBN Co must balance commercial considerations with stakeholder expectations in relation to network speed, capacity and congestion targets across the **nbn™** network access technologies. These expectations have been increased by COVID-19, which has profoundly changed how the network is used as working from home becomes more prolific. A material demographic shift from cities to regional or urban fringe areas, would further impact the way network capacity is managed and timing of capacity upgrades. Extensive data analytics, performance monitoring tools and industry research is undertaken to inform network forecasts and planning.

### **Responding to infrastructure competition and wireless substitution (incl. 5G) with competitive products**

NBN Co must actively manage the impact of infrastructure competition and mass market offerings for business and residential segments through competitive products and pricing constructs that generate positive brand awareness in the market. Longer term, while COVID-19 has reinforced the value of connectivity, it has also placed pressure on industry revenues, which is likely to result in alternate fixed and mobile infrastructure providers competing more aggressively as the economy recovers. External threats and opportunities are actively monitored, and product strategies adjusted accordingly.

### **Impact of COVID-19 on business markets**

NBN Co must navigate the economic impact of COVID-19 on the business sector and the resultant uptake of business-grade services. This is compounded by businesses actively looking to reduce their office footprints.

Close senior executive oversight of the external economic environment is undertaken, with challenges and opportunities managed through executive sponsored initiatives.

### **Maintaining customer experience, trust and sentiment in the market**

NBN Co must maintain positive customer experience and market sentiment in an environment where COVID-19 has increased network performance expectations and impacted the capacity of the industry's customer facing processes to meet demand. Community trust can be adversely impacted if the **nbn™** network and industry more broadly does not meet customer expectations on an ongoing basis. Extensive independent research and internal analysis of customer experience is undertaken, with key insights built into operational performance metrics.

### **Balancing potential increases in regulatory obligations with cost base and revenue requirements**

NBN Co appreciates that there will always be a need for regulators to be assured of its business segment activities and continued focus on residential pricing, service levels and customer experience. While COVID-19 has increased industry cooperation, NBN Co must ensure that COVID-19 response plans and industry initiatives are effectively managed alongside regulatory obligations. Strong relationships with key regulatory and government stakeholders are maintained, with an emphasis on proactive engagement, while material obligations are actively managed through a formal compliance management program.

### **Ability to secure, optimise and manage financing arrangements**

As NBN Co seeks to refinance and grow, the Company must closely manage its funding and treasury risks. The Company manages its funding and liquidity risk through its treasury initiatives and financial risk management practices which are focused on diversification of funds, optimising cost of debt, and careful planning and cashflow management to ensure there is sufficient funding to meet current commitments and future growth.

## Glossary

Abbreviation or term	Definition
<b>Access Technology</b>	The technology used by NBN Co to deliver the <b>nbn™</b> access network from the exchange location to the network distribution point.
<b>Business Satellite Services</b>	Services providing Sky Muster™ capacity for remote businesses and enterprise customers.
<b>CAGR</b>	Compound Annual Growth Rate.
<b>Data Over Cable Service Interface Specification (DOCSIS®)</b>	A telecommunications standard that permits the addition of high-speed data transfer and internet access through HFC infrastructure.
<b>Delivery Partner (DP)</b>	A third party involved in the build of the <b>nbn™</b> access network. A Delivery Partner is a contractor, which has a contract with NBN Co for the delivery of a certain amount of work/activities in relation to the build and operation of the <b>nbn™</b> access network.
<b>Enterprise Ethernet</b>	Is a layer 2 wholesale broadband product that is designed to provide access to the speed, quality and service needs of enterprise end customers.
<b>Fibre Network</b>	NBN Co's optical fibre telecommunications network that is owned or controlled by NBN Co and which has been accepted into service, ready for the provision of commercial (non-trial) <b>nbn™</b> access network services.
<b>Fibre-to-the-Building (FTTB)</b>	Network design in which the Fibre Network is deployed to the basement of a building and copper lines are used for the connection to the customer premises.
<b>Fibre-to-the-Curb (FTTC)</b>	Network design in which the Fibre Network is deployed to a distribution point near the premises and copper lines are used for the connection between the distribution point and the premises.
<b>Fibre-to-the-Node (FTTN)</b>	Network design in which the Fibre Network is deployed to the node (i.e. a VDSL cabinet), while copper lines are used for the connection between the node and the premises.
<b>Fibre-to-the-Premises (FTTP)</b>	Network design in which the Fibre Network is deployed to each premises. It involves connecting homes and businesses with an optical fibre cable which can be used to provide a range of high-speed broadband services and phone services.
<b>Fixed-line</b>	Delivery of voice, data and broadband services over a physical line from the exchange location to the customer premises (with termination at that premises).
<b>Fixed Wireless</b>	Network design in which network connections are provided through radio signals.
<b>GAAP</b>	Generally Accepted Accounting Principles.

Abbreviation or term	Definition
<b>G.fast</b>	The letter 'G' in G.fast stands for the ITU-T G series of recommendations; fast is an acronym for fast access to subscriber terminals. A technology similar to DSL for carrying broadband signals over copper pairs. It uses different signalling method and much higher frequency spectrum to deliver potential speeds higher than traditional DSL.
<b>Gigabits Per Second (Gbps)</b>	A unit of measurement of transmission speeds equal to one billion bits per second. X/YGbps means a maximum downstream speed of XGbps and a maximum upstream speed of YGbps.
<b>Government Business Enterprise (GBE)</b>	Commonwealth entity or wholly-owned Commonwealth company as defined by the PGPA Act and as prescribed as a GBE under the PGPA Rule.
<b>Greenfields</b>	A new development that can be either New Developments or Infills. Greenfields developments represent the growth of the premises market.
<b>Hybrid Fibre Coaxial (HFC) Cable Networks</b>	Networks utilising both optical fibre and coaxial cable for the delivery of Pay TV, internet and voice services.
<b>Lead-in</b>	The part of the network from the pit in the street to the customer premises.
<b>Local Network</b>	The part of the network from the Fibre Distribution Hub down each street.
<b>Megabits Per Second (Mbps)</b>	A unit of measurement of transmission speeds equal to one million bits per second. X/YMbps means a maximum downstream speed of XMbps and a maximum upstream speed of YMbps.
<b>Multi-Technology Mix (MTM)</b>	An approach used to determine which technologies to be utilised on an area-by-area basis to maximise the speed of the rollout and build the network most effectively.
<b>NBN Co</b>	NBN Co Limited.
<b>Next Generation Passive Optical Network (NG-PON)</b>	A telecommunications network standard capable of increasing speeds over the fibre cables.
<b>Premises</b>	<p>A premises which NBN Co is required to connect is:</p> <ol style="list-style-type: none"> <li>1. an addressable location currently used on an ongoing basis for residential, business (whether for profit or not), government, health or educational purposes;</li> <li>2. a school as defined by the Department of Education, Employment and Workplace Relations;</li> <li>3. within a new development at an addressable location for which NBN Co is the wholesale provider of last resort; or</li> <li>4. a standard telephone service activated in compliance with the USO.</li> </ol>

Abbreviation or term	Definition
<b>Premises activated</b>	Refers to premises which have an active service installed. Premises are activated after receiving and provisioning a service order from a RSP to install a new service at the premises.
<b>Ready for Service (RFS)</b>	A Rollout Region is Ready for Service (RFS) when the majority of premises are passed by the <b>nbn</b> <sup>TM</sup> access network and RSPs are able to begin selling services over the <b>nbn</b> <sup>TM</sup> access network in that Rollout Region.
<b>Ready to Connect (RTC)</b>	A premises is Ready to Connect (RTC) when an <b>nbn</b> <sup>TM</sup> service order can be placed, and the service can be connected within an area that has been declared Ready for Service.
<b>Retail Service Provider (RSP)</b>	A third-party provider of retail broadband services to customers.
<b>Sky Muster<sup>TM</sup> satellite service</b>	NBN Co satellite service which will provide broadband services to Australians in predominantly rural locations.
<b>Statement of Expectations (SoE)</b>	See <a href="https://www.communications.gov.au/publications/nbnstatementofexpectations">https://www.communications.gov.au/publications/nbnstatementofexpectations</a>
<b>Subscriber Payments</b>	Subscriber-related costs primarily reflect contractual payments to Telstra regarding the disconnection of existing services and to Optus regarding the migration of subscribers to services over the <b>nbn</b> <sup>TM</sup> access network.
<b>Technology Choice Program</b>	A program which provides individual or groups of premises with the option to pay for a switch to a different <b>nbn</b> <sup>TM</sup> access network technology.
<b>Wholesale Broadband Agreement (WBA)</b>	A document which sets out NBN Co's supply terms for the <b>nbn</b> <sup>TM</sup> Ethernet Bitstream Service and other related products and services.
<b>5G</b>	Fifth-generation wireless technology.



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