The essential guide: What businesses need to do to gain the most out of the nbn™ network
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Introduction

Australia’s National Broadband Network (the nbn network) was conceived with the objective of providing high speed broadband access to all Australians, regardless of their location across diverse geographies. The rollout of the nbn network has picked up pace since 2015, when it changed from a fibre-centric approach to a multi-technology mix approach. Put simply, the nbn network is leveraging existing telecommunications networks instead of installing completely new fibre cables.

For medium-sized businesses, the deployment of the nbn network affords significant new opportunities to tap into higher connectivity speeds based on newer technologies.

Key benefits of migrating to the nbn network include:

- **Coverage** - one of the biggest promises of the nbn network is that all users, regardless of location, will have access to high speed broadband. For users in rural and remote locations that were previously underserved or had no connectivity due to difficult terrain or challenging network economics, nbn access will be a boon. Businesses in remote locations that struggled with poor or unreliable broadband connections in the past can expect nbn to overcome some of the existing issues and deliver more consistent service experience.

- **Speed** - while 75% of Australians already had access to broadband connections before nbn, these were based on legacy broadband infrastructure. The nbn network supports faster broadband speeds of up to 100 Mbps depending on their location and business requirements. The higher speeds will benefit businesses that are struggling to extend bandwidth intensive applications to branch sites without significantly upgrading their networking infrastructure.

- **Business transformation** - from the business point of view, the biggest benefit is the ability to plan and execute on a transformation agenda. Regardless of the industry segment, businesses can evaluate new applications and cloud technologies that will help them deliver superior customer experience, as well as extend collaboration and productivity applications to their employee base. These applications can improve processes and productivity but the lack of high quality connectivity limits the ability to extend them to branch offices outside of major cities. Moreover, businesses can take advantage of nbn to migrate legacy services to more current fibre based connectivity solutions that can in turn, better support more scalable and cost-effective hosted telephony services.
Chapter 1

**Higher productivity for remote workers** – the nbn network also enables businesses to better support a remote workforce. Higher Internet speeds combined with a raft of collaboration and productivity platforms now available can enable businesses to expand the talent pool and improve employee retention. With tools such as instant messaging, team collaboration, email and access to corporate applications, workers can maintain productivity, collaborate with co-workers and become more responsive to customer enquiries without the need to be constantly in the office.

**Improved branch network management** – as businesses connect all their branch offices to the higher broadband connections afforded by the nbn network, new technologies such as software-defined wide area network (SD-WAN) and network function virtualisation (NFV) can be used to improve branch network management. These technologies together with virtual customer premise equipment (vCPEs) allow resources to be allocated, scaled and managed remotely, greatly reducing cost and maintenance for the business. Remote offices and locations will also have consistent and reliable access to the same applications as the head office, increasing productivity and performance.

However, businesses will face some challenges as they look to migrate to new nbn services. These challenges need to be understood in the proper context and analysed so as to make the migration as smooth as possible and minimise or even avoid any disruptions to the business.

**Coverage** – the rollout of nbn services has gained pace since the decision to adopt the multi-technology mix approach. However, businesses with branch offices in multiple locations across Australia will likely have to migrate their Internet services to the the nbn network in phases.

**Installation delays** – potential nbn migration issues can be mitigated with backup services (e.g., 4G wireless) and working closely with the telco account manager for business continuity planning.

**Variable data speeds** – Retail service providers (RSPs) are currently providing a number of broadband package options that offer up to 100 Mbps but the speed is not guaranteed. nbn co is offering is up to 100Mbps for FTTP (Fibre to the premises) with future offering of up to 1000Mbps, but you need to check for availability.

As the nbn network deployment proceeds, businesses using consumer-grade nbn broadband services may encounter slower data speeds lower than the advertised peak rates. The main reason for this is network congestion resulting from multiple connections and higher demand on a shared resource.
nbn™ Migration - What do Businesses need to know?

As the nbn rollout continues across Australia, businesses should take steps to evaluate their options and plan for the eventual migration to the nbn network. There is generally an 18-month period for fixed broadband customers to switch to nbn when their area is ready for service, and using this time to properly plan for it will help to overcome any risk from having their services disconnected.

3 steps for successful migration

1. Conduct site audits
2. Evaluate the nbn Solution Mix
3. Plan your migration
Chapter 2

Given the varied pace and complexity associated with nbn™ rollout across the country, businesses will need to take a number of steps to ensure that they are prepared for the migration and mitigate or avoid disruption to their business. These can be summarised in three principal steps, as follows:

**Step 01**

**Conduct site audits**

Businesses should engage with their Service Provider to help them conduct a site audit. This is a crucial first step to help understand and set a baseline in terms of the current network capacity and ability to scale.

- A major part of this is to assess what kind of applications, especially business-critical services, are currently adopted by the business and identify which ones, or perhaps all, that need to be migrated.

- Assess the current level of connectivity available and evaluate whether to maintain similar capacity levels when migrating to nbn™-based broadband packages or to change.

- Conduct a mapping exercise to see whether legacy services can still be delivered once the nbn™ migration is completed.

- Assess whether business objectives can be maintained with the services offered by nbn™. If not, it will become important to evaluate alternative technology options.

- Assess whether existing customer premise equipment (CPEs) across all locations are capable of working on the nbn™ network or need replacement.

- Assess whether there are any quality issues across locations with respect to the cabling, CPEs and other hubs or router points.
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Step 02
Evaluate the nbn Solution Mix

Once the site audit is completed, businesses can move on to the task of evaluating which solutions they should adopt when they migrate to the nbn network. Businesses need to assess the current connectivity solutions they get from their RSPs and ascertain whether changes need to be made to achieve the current and future business objectives. This analytical exercise could involve key decisions that need to be factored into the migration plan.

For example, businesses may want to introduce collaboration solutions to get their employees connected and give them access to corporate applications. IT departments need to evaluate whether they have the resources to procure, integrate and maintain these new solutions on their own or work with a Service Provider to adopt a "hosted" model.

These decisions will also apply to the type of CPEs that businesses currently use, at one location or across all sites. Different locations may have unique requirements and can be serviced either with dedicated equipment or virtual CPEs managed through an SD-WAN solution. Businesses with international operations have an added layer of complexity to navigate as they look to first connect international locations to their network and then extend varying degrees of access to corporate resources.

Identifying the right mix of solutions and premise equipment should be conducted against the backdrop of any business transformation plans that the business intends to undertake. The migration to nbn should not be looked at purely in cost terms but as an opportunity to effect change.

Step 03
Plan your migration

Next, businesses will need to get down to putting an actual migration plan in place. No two migration plans will be identical as business requirements and objectives will likely be different. Given the complexity associated with most migration plans, businesses should consider engaging with their Service Provider of choice to not only lay out the specific steps of migration but also to quantify the costs associated and the internal resources that will be required.

For example, the nbn rollout could imply that not all locations will be ready for migration at the same time.

Indeed, there might be significant gaps in readiness between locations. While there are complexities and uncertainties in migrating Internet services to the nbn, businesses should not make the mistake of avoiding the decision to migrate until everything is clear. Working with an RSP on the migration plan can remove uncertainty and provide assurances for the business as they look to complete the migration with minimal or no disruption.

Tips to help you plan your migration:

- Check what migration budget is available for your business or secure the budget for migration early
- Engage with your internal business stakeholders to understand their future state/business requirements
- Assess what additional resources, such as Project Managers, you may require to support the migration
Chapter 2

Check the leasing agreements of your office sites

Ensure all Alarm, Fax, security and other onsite equipment that you have is compatible with the replacement nbn service

Contact your service provider early in the planning stage to check for nbn compatibility and if they will need to make changes to lift lines and managed fire alarms

You will need to allow 6 months before your area’s disconnection date, to place your nbn access order

Transitioning to nbn services requires service outages, and depending on your nbn access type some could be longer (30 mins to 4 hours) than others. Check with your Service Provider for options to limit outages during the cutover.

Determine if the nbn service will deliver to your network requirements and if not, discuss what other alternatives are possible with your service provider.
Chapter 3

Careful evaluation can help you create better opportunities

As mid-sized businesses set about planning for their eventual migration to nbn, there are a number of issues that they should evaluate. This is not only to ensure smooth transition to nbn but also to achieve the broader objectives of using new technologies to develop business advantages.

Number of phone lines to be installed – the migration to nbn provides businesses with an opportunity to re-evaluate their voice requirements and consider their strategy around creating a collaborative work environment to support remote, mobile, flexible working, anytime anywhere. This can be achieved by migrating traditional PABX voice communication systems to more flexible/scalable Hosted Telephony Solutions that support video and instant messaging providing fixed mobile convergence without upfront capital investment.

Bandwidth requirement – as part of the business transformation efforts, IT departments should assess the applications they are looking to support to determine the bandwidth requirement. For example, if the business is looking to support widespread use of collaboration solutions with features such as video conferencing and screen sharing, they will need to have symmetrical bandwidth. If the business is in an expansion mode with plans to add new sites, then IT should consider more agile wide area network (WAN) solutions such as SD-WAN and NFV to enable fast deployment and ease of management. Once all these scenarios are mapped out, businesses will get an accurate picture of their bandwidth requirements and can plan accordingly.

Cloud-based workloads – Fibre/nbn provides customers with an opportunity for networking into public and private cloud solutions and add an orchestration platform from Telstra Programmable Network to provide more immediate bandwidth and network scalability as required.

Security – businesses considering moving their applications and workloads to the cloud should consider additional security services from providers which might include: more proactive security monitoring services for their network through facilities and services such as Security Operations Centres, additional security layers for SD-WAN and cloud services.
**Different Traffic Classes for nbn** – businesses should be aware of the different Traffic Classes of service that nbn offer and which ones are better suited for their needs. For example, an uncontended service that provides more consistent bandwidth may be required by head office sites. Nbn offers a basic consumer-grade traffic class of service as well business-grade traffic classes of service.

**Bundling options** – one of the biggest benefits of the nbn is that it enables market competition and encourages RSPs to differentiate through service features, bundling options and customer service. There are benefits to engage with a Service Provider that not only offer basic voice and data services but also offer a range of business applications, security, mobility and international connectivity solutions. This reduces the number of suppliers to manage and at the same time gives the buyer greater bargaining power. Businesses should look for a technology partner that understand their business, can continue to support them as they grow their business, and provide them with insights into new technologies that can deliver business benefits.
Transforming your business through nbn with Telstra

Whether you want to take the first step to understand how the nbn network will impact your existing services, simplify branch network architectures, consolidate your data network, or evolve the way you connect through unified communications, Telstra will help you make the most of this opportunity and can deliver complete, integrated ICT solutions.

Take advantage of our nbn-ready solutions developed for the core network that we build and manage, with the assurance of having a roadmap for future innovation and growth.

In business, you can’t stand still, and that’s especially true with the rollout of the nbn network. As the rollout accelerates, every Australian business will soon be impacted. Telstra is well positioned to help you plan your journey, ensuring we act on your business objectives, so you can create a platform for innovation.
Speak with your Account Executive to start your migration journey today:

Business & Enterprise Customers:

1300 telstra (1300 835 787)
telstra.com.au

Small Business Customers:

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