



THE
SMALL BUSINESS GUIDE
TO THE **NBN**



COMSOURCE

1300 882 896
info@comsource.com.au

THE SMALL BUSINESS GUIDE TO THE **NBN**

Contents

1	Introduction	3
2	What is the NBN and how does it work?	5
3	The NBN Connection Box (NTD) for FTTP Users	10
4	In what ways will the NBN affect my business?	12
5	Phone Calls and the NBN?	14
6	Phone Systems and the NBN?	19
7	Fax and the NBN?	20
8	EFTPOS and the NBN?	22
9	HICAPS and the NBN?	25
10	Security and the NBN?	27
11	The Internet and the NBN?	29
	Time to get Ready!	32





Introduction



A message to business owners...

Like most Australian small business, your telephone and internet connections are most likely the backbone of your enterprise. They drive your sales, your communication with partners, clients and suppliers and they're key to ensuring that your staff are profitably productive.

That's why it is imperative that your business is prepared as the new National Broadband Network is rolled out across the country. It's important that you understand what is happening so that you can get ready to make the shift in the smartest way possible.

There has not been such a mandatory change to the way you operate on a daily basis since the introduction of the GST over 15 years ago. But unlike the GST introduction, an ill-prepared NBN transition can cost your business thousands of dollars in unworkable communications, wasted phone system upgrades and a loss of potential clients and sales.

You may have already heard horror stories from business owners who have been left without working phone lines, EFTPOS machines or internet connection for weeks because they haven't properly made the switch. This is an all too common mistake because there's not a lot out there that gives businesses exactly the information they need to ensure this doesn't happen to them.

These horror stories can be avoided and won't happen to your business if you take the time to read this guide fully and take the necessary next steps to ensure a smooth transition by discussing your NBN plan with your Comsource Account Manager.

It's no secret the NBN rollout hasn't been as smooth as the government would like. The entire process has copped a beating in the press and thousands of complaints about the NBN have been registered with the Telecommunication Industry Ombudsman.

The aim of this guide is to paint a much clearer picture for you, whether you choose the help of our experienced team and services or not.

Best of luck,

The Team at Comsource

P.S. This guide addresses the most common concerns and issues encountered by around 94% of Australian small businesses. We obviously can't address your specific infrastructure requirements in this document and recommend that you consult your Comsource Account Manager to get an NBN ready audit well in advance of your Ready For Service Date (RFSD)



What is the NBN and how does it work?

There has been lots of talk about the NBN and the benefits it's bringing to everyday Australians. But what exactly is the NBN and how will it ACTUALLY benefit your business?

The National Broadband Network (NBN) is being rolled out across the country by the government as an upgrade to Australia's telecommunications infrastructure.

NBN Co. is the Australian government-owned corporation that has been responsible for developing, installing and operating Australia's National Broadband Network

Because the NBN is a Multi Technology Mix (MTM), it will be delivered differently in different places. Fibre optic cables are being installed throughout the country to replace old copper wire cables that currently power phone lines and broadband networks for homes and businesses. In most cases, existing wires will be removed, in others, they will be used differently. For rural and remote locations where installation of fibre optics is unrealistic, broadband will be supplied via NBN Fixed Wireless or NBN Satellite.

NBN Fibre is expected to reach approximately 65% of Australian households and offices, while 8% of the country will depend on Fixed Wireless and NBN satellite. For the rest, NBN co. will use wiring developed by cable television companies to transfer broadband into homes (a technology known as HFC-Hybrid Fibre Coaxial). These projections have changed a lot since the NBN rollout began, and continue to change weekly, but that's quite another story.

Basically, you have no choice which type of NBN you get, but NBN Co. will use what they believe is best technology based on the location of your business.

The whole idea is to reach the entire country through a mix of these different technologies to give homes and offices access to high-speed Internet and enhanced phone services. Below you will find an explanation of each type in detail.

Types of NBN Connection

It's important to know the difference between the three main ways the NBN could be delivered to your business, because it can influence the type of changes you need to make to ensure your transition to the NBN is a smooth one.

There are BIG differences in how your phone and internet will work with the NBN, depending on which type of NBN you have installed! Prepare early to guarantee a smooth transition for your business.

While it is more than likely that your business will be utilising one of the two fibre optic delivery systems we mention below, it's crucial that you know for certain, so that you can plan ahead and save time, money and a whole lot of hassle.

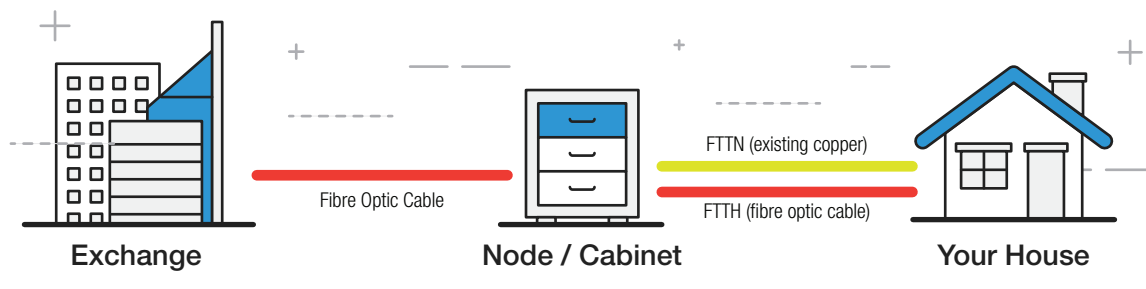
Fibre Optic NBN

Fibre To The Premises (FTTP)

In very general terms, Fibre to The Premises is a system where super-fast fibre-optic cable carries the broadband signal from Comsource all the way to a connection box inside your premises. On the way, it passes through nodes (a box in your area that contains network equipment that supplies your area.), which act as midway connection points between your office and the local telephone exchange.

If you have FTTP, a technician will install a Network Termination Device inside your premises. The NTD can be used to connect your telephone line.

At the moment, Fibre to the Premises is a given for new developments that do not already have any telecommunications infrastructure in place. However, it will also be installed in areas where the copper network is found to be in such disrepair that it needs to be entirely replaced. **Existing copper wires will be removed, so your existing services WILL NO LONGER WORK once the NBN rollout is completed in your area.**



Fibre To The Home vs. Fibre To The Node

Either Fibre Optic Cable to your house or or Fibre Optic Cable to the node (and copper after)

Fibre To The Node (FTTN)

Fibre to the Node technology, as the name suggests, involves the fibre optic cable carrying the broadband connection to the nearest node to your business. From the node, the broadband connection is delivered to your premises by “hitching a ride” on the existing copper wiring, rather than fibre optic cables.

You won't have an NTD installed in your premises, but will connect to the NBN using a router over the existing copper cables going into your premises. This means that your existing services WILL NOT WORK once the NBN has been installed in your area.

You will have to replace your internet, phone lines, and everything that has used your wall phone outlet in the past.

Fibre To The Building (FTTB)

Fibre to the Building is for multi-dwelling premises such as high rises and apartment buildings and works in a similar way to Fibre to the Node. The difference is that, instead of the fibre optic cables stopping at a public node, they stop at a communications room in the basement of the building. After that, the broadband connection is carried to individual apartments or offices via the existing copper infrastructure inside the building.

Like FTTN, FTTB will use a router that is plugged into your existing phone line socket - but this doesn't mean it will work in the same way it used to! Every service you currently use will need to be replaced.

A note on the politics of fibre optic NBN

Now, while we don't want to get too side-tracked, we think it's important to touch on the political debates that have centred on how NBN Fibre is being rolled out, because it is a common question we get from customers. Here's a brief summary of why the NBN seems like such a mess.

The Original Plan

When the Labour government were drafting their original plans for the NBN, they wanted every household to be connected with FTTP. They asserted that it was more efficient, would be cheaper and easier to maintain in the long term, and would not result in a more expensive rollout than FTTN would.

The Change of Plan

When the current government came to power, they disagreed. The plan was that the majority of homes and businesses would be connected to FTTN, while only new developments, and areas where current copper infrastructure has been too degraded, connected to FTTP technology. It would be faster, cheaper, and just as reliable... they said.

The Current Dilemma

Copper infrastructure has proven to be pretty degraded, in quite a lot of places. As a result, it needs to be removed anyway and replaced with FTTP, which means the rollout has been more expensive (and is taking a lot longer) than it was supposed to.

Another aspect that concerns a lot of people is that FTTN results in slower internet speeds when compared to FTTP - and a lot of consumers are finding that they aren't getting the super highway they thought they'd be getting. And (finally), FTTN connections will also require a greater level of ongoing maintenance (again, because of the state of existing copper), which will mean more costs in the longer term.

Why you need to be alert

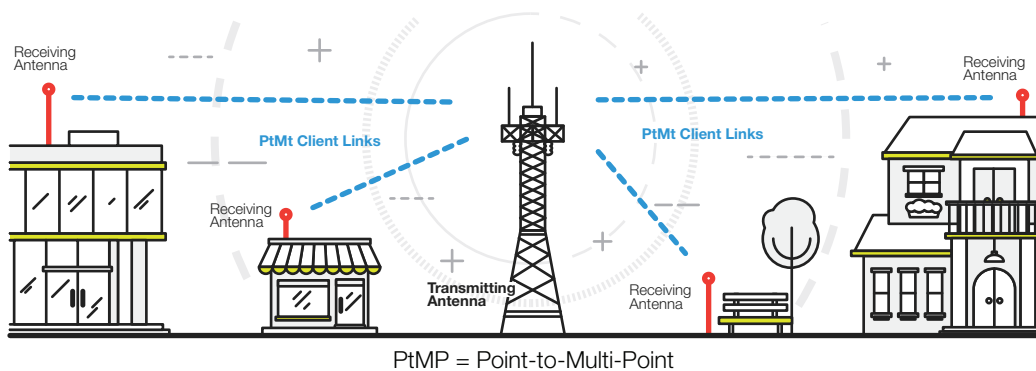
But the most frustrating part (in our opinion) can be the fact that all of this uncertainty means that HOW and WHERE the different types of NBN are installed, and what will be switched off, changes frequently. This is why it's so important to be prepared for the NBN long before you have no choice but to switch.

Fixed Wireless NBN

The NBN Fixed Wireless network will provide access to broadband services to a specific number of premises within a coverage area using LTE or 4G technology.

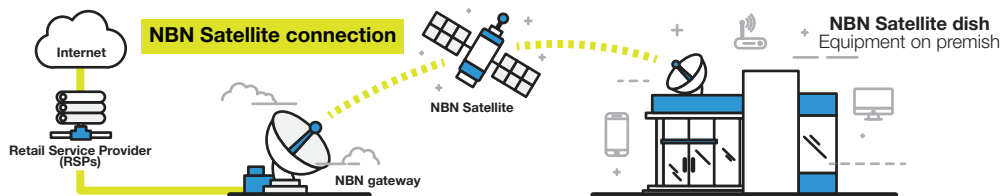
Yes - it's like the mobile data you get on your handheld devices through your mobile service provider, only faster and more consistent and only available to a specific number of premises within an area. That means that not just anybody can access it.

Each premise that's connected to fixed wireless will have a receiving antenna installed by a technician from NBN Co, as well as an NTD inside their premises. At this stage, **existing infrastructure WILL NOT BE REMOVED**, so you can continue to use your current services, if you wish.



Satellite NBN

The NBN Sky Muster™ satellite service was named by remote Australian students who will benefit from having access to broadband internet. Where FTTN and Fixed Wireless are logistically impossible, the satellite service will take effect, notably in central and northern Australia, Tasmania and remote islands. Again, there will be an NTD installed in your premises, but it will look slightly different to that which is installed in FTTP premises. You can continue to use your current phone and internet services in this case, because existing infrastructure WILL NOT be removed.



It's important to remember that **you don't have a say in which technology option is installed at your business** under the current rollout plans and, in most cases, you will have to change your existing phone and internet services to the NBN (whether you like it or not).



The NBN Connection Box (NTD) for FTTP Users

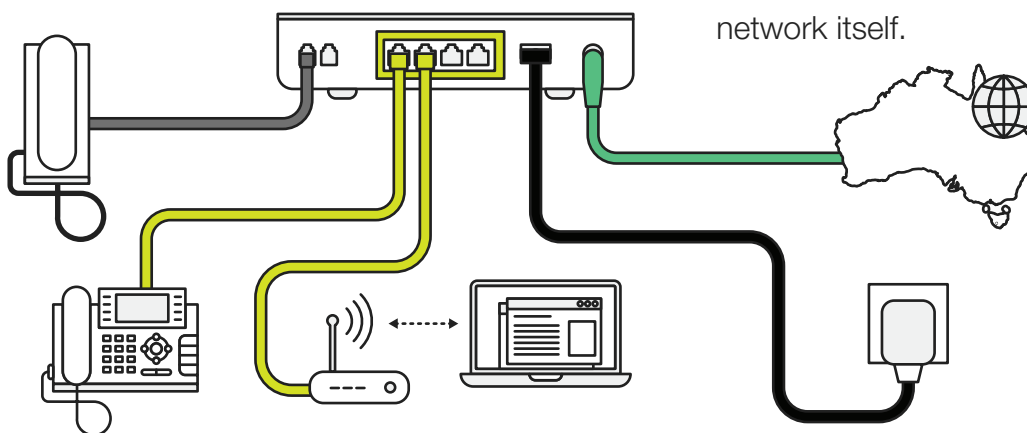
If your premises will have Fibre to the Premises, a Network Termination Device (NTD) will connect your business to the NBN wiring on your premises. It is one of three (Yes - three!) devices that NBN Co. will most likely install.

The NTD depicted below is only relevant to FTTP Users

Fixed Wireless and Satellite users will not have grey Voice (UNI-V) Ports.
FTTN and FTTB users will not have an NTD installed at all.

The **Grey Voice (UNI-V)** are two voice ports for connection of traditional single-line telephone services

The **Green Fibre Optic cable** is the connection to the NBN network itself.



The **Yellow Data (Uni-D) Ports** can be used to connect your NBN services or for an IP telephone service. For more information, see [page 18](#)).

The **Black Power cable** is for exactly that - Power.

The Battery Backup Unit

When your NTD is installed, there will also be a Battery Backup Unit installed beside it. With this unit, if you experience a loss of mains power, your NTD will continue to work for approximately 5 hours.

The VDSL Router for FTTN and FTTB Users

If you are having Fibre to the Node or Fibre to the Building installed in your premises, you will not have an NTD installed. Instead, you will connect to your NBN connection by using a VDSL router.

No - you won't be able to use your old ADSL router, because it cannot carry an NBN connection.

When you have FTTN installed, you will be able to plug your approved VDSL router into the existing wall socket in your office, however, you can't use a splitter in order to connect a phone (like you may have done with your ADSL connection). This means that you will need to consider your options for phone lines on the NBN. You can skip forward to [page 17](#) to find out more **about your VOIP options**.



In what ways will the NBN affect my business?



For a small business, making the switch to the NBN can be a daunting prospect, especially considering that it affects so many areas of your business.

It's also not as easy as it should be for small business owners to find the information they need to ensure they make the switch properly. The main reason we created this document is so that small businesses don't end up losing time and money because they weren't aware of the changes that need to be made.

How will it affect my business?

Based on our experience and that of the small businesses we have worked with, we've found that the main aspects that will be affected by the NBN are:

- Your [Phone Lines & Calls](#)
- Your [Office Phone System](#)
- Your [Fax Machine](#)
- Your [EFTPOS Terminal](#)
- Your [HICAPS Terminal](#)
- Your [Security Systems and](#)
- Your [Internet Connection](#)

Yes, the NBN will affect everything about your business communications and the implications are no small matter.

Why will this affect my business?

As we mentioned earlier, the mandatory NBN rollout is replacing all of the existing telecommunications infrastructure across the country. In essence, this means that a lot of **your existing services and technology will not work over the NBN network** without proper planning.

In many cases, the cables that currently run your office phone lines and internet connection are essentially being ripped out and replaced. That means that everything that is connected to them, such as your phone system, EFTPOS terminals and fax machines, will no longer work as they currently do.

Just like the introduction of the GST, the NBN isn't a choice.

Given the NBN rollout is happening and that making the switch is mandatory (whether you like it or not), sticking your head in the sand and trying to ignore it will not make it go away. In fact, it may very well do the opposite - **you could end up with a huge problem on your hands if you do not prepare correctly.**



Can your business live without your phone, internet, fax, or EFTPOS terminal for a day? A week? A month?

Don't take the risk that comes with being unprepared - call your account manager today on 1300 882 896 to run through your company's unique NBN needs



Phone Calls and the NBN?

As you may well have noticed, most of the talk around the NBN has been to do with internet speeds and faster downloads. But what you may not know is that for the average Australian small business, the biggest win of the NBN **will be a reduced phone bill!**

As mentioned earlier, the NBN Fibre rollout is replacing the majority of traditional copper wires in the ground that provide the current phone lines and services across the country. This means **you will be forced to replace your current phone lines with an NBN compatible voice-service.**

What's staying and what's going?

ISDN will stay live & active

Your business may currently utilise Integrated Services Digital Network (ISDN) to run your PBX or EFTPOS terminal, and these networks will stay live and active after the NBN is rolled out. But don't breathe a sigh of relief just yet, because the NBN rollout changes all the time, and it will not be long before NBN Co. decides that ISDN line will go, too. The issue will be whether or not you find out about it in time.

Being 100% certain about the technology you have in your office, and how it will be affected when you switch to the NBN, is crucial in making sure that the migration of your services runs smoothly.

REMEMBER - you don't have a choice but to find an NBN-ready solution for your business.

PSTN lines are being cancelled

With the rollout of Fibre NBN, the vast majority of the Public Switch Telephone Networks (PSTN) will be switched off or made redundant. These are the traditional, copper landline phone lines that we have all used for a very long time, the same lines you've been using for your internet, phone, fax, EFTPOS, security system, and HICAPS terminal. That's a huge chunk of the vital organs of your business at risk if you don't prepare well ahead of time.

The NBN rollout will take no prisoners if you aren't ready by the time they decide to switch off existing infrastructure. You will get a notice from your provider, and one from NBN Co, but there's no guaranteeing just how much notice that will be. If you aren't ready well ahead of time, **you could find yourself without your existing services** before you've had your NBN service installed.

The only way to be certain is to act sensibly and act now - **call your Comsource Account Manager today to discuss your business' NBN needs.** The cost is miniscule compared to the potential loss your business will experience if you aren't ready to make the switch.

Here's a brief look at how phone services will work with the NBN, but you can read on for more details.

	Coverage	Phone Solution
FOTP	25 %	<ul style="list-style-type: none">• Network Termination Device supplied and installed by NBN Co.• Existing phone plugs into NTD• Maximum two phones/devices
FTTN	29%	<ul style="list-style-type: none">• VDSL router supplied by your provider• ATA between existing phones and router to access VoIP and SIP services
FTTB	11%	<ul style="list-style-type: none">• VDSL router supplied by your provider• ATA between existing phones and router to access VoIP and SIP services
HFC	27 %	<ul style="list-style-type: none">• Unknown

Fixed Wireless	5%	<ul style="list-style-type: none"> • VDSL router supplied by your provider • ATA between existing phones and router to access VoIP and SIP services • Existing copper services will continue to work
Satellite	3%	<ul style="list-style-type: none"> • VDSL router supplied by your provider • ATA between existing phones and router to access VOIP and SIP services • Existing copper services will continue to work

Option 1: The Voice (UNI-V) Port (only available for FTTP users)

If you go back and take a look at the NTD diagram, you will see the two grey ports on the left hand side of the image. If you're going to get Fibre to the Premises at your business, you will have an NTD that looks exactly like this one installed inside your office. The two grey Voice (UNI-V) Ports are where you can simply plug in your old analogue telephone and start making and receiving phone calls as usual. But before you can do this, **you will need to have your UNI-V Port enabled via your preferred supplier**

For households, this is the simple and sensible solution to making calls once you've made the switch to the NBN. For businesses, however, it's usually a little more complicated. Which brings us to options 2 and 3.

For The More Technically Minded:

The UNI-V ATA is designed to support G.729 common signalling protocols and supports features including:

- Calls to Local, STD, Australian Mobiles, 000 Emergency, 13, 1300 & 18 Numbers + Directory + Operator Assisted Numbers.
- Calling line identification and restriction
- Calling number display
- Call Barring, Call Waiting & Call Forward.
- Ring cadences and dial tones
- TTY (teletypewriter) & national relay service
- DTMF tones
- Fax and modems

*Please note that NBN co technically state that Back-to-Base Alarms, VoIP Based Fax, EFTPOS machines are available over the UNI-V Ports, but are not fully supported.

*Services not available over the NBN co Uni-V Ports include Medical Services, Priority Assistance, Line Hunt and Calls to 19, 19900 or 0500 numbers.

Option 2: VoIP/SIP for IP-enabled Devices

Before we give you the details about this option, it's important that you have a general understanding of what VoIP and SIP mean.

What is VoIP?

VoIP stands for Voice over Internet Protocol and is a broad term that covers any phone call that is made using an internet connection. VoIP calls use the internet to digitally transit a voice signal to another telephone. Skype, WhatsApp and IP enabled PBX phone systems all utilise VoIP technology.

What are SIP and SIP trunks?

SIP stands for Session Initiation Protocol and is perfectly designed for office phone systems. SIP trunks are packets of information that are "sent out" over your internet connection. SIP trunks are best viewed as digital phone lines that transport your conversations by converting your words to VOIP messages (zeros and ones).

What we will tell you is that, with the high speeds of NBN broadband, **SIP trunks are a viable and reliable phone solution for businesses who are connected to the NBN.** Not only do they allow you to do away with expensive phone line rental (whether you have a choice in the matter or not), they will also reduce your phone bill with far cheaper equivalent line rental.

What is an IP-enabled Phone?

Any IP-enabled device (phone, fax, EFTPOS, etc.) is simply any device that can send and receive information over the internet, rather than using a traditional landline phone line. The terms IP-enabled, SIP-enabled and VoIP-enabled generally refer to the same kinds of technology.

It's important to note that a license is required in order for you to access and use SIP trunks in your office, so it's important that you talk to your Comsource Account Manager about the compatibility of your existing phone system to work with SIP trunks.

So how do I make calls using an IP-enabled Phone?

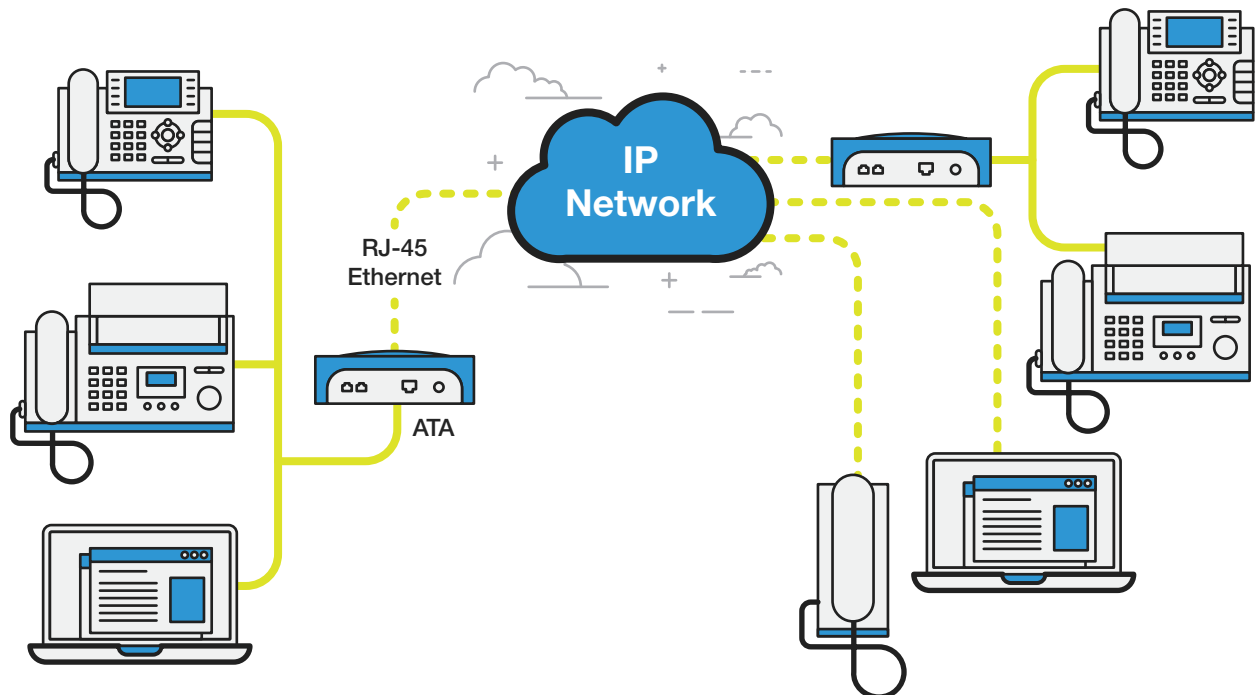
Your IP-enabled phone simply connects by plugging into one of the 4 Yellow Data (UNI-D) Ports that you'll find either on your NTD or your VDSL router. Easy.

Option 3: VoIP/SIP using an ATA (most common for SMBs)

If you don't have IP-enabled phones, you don't have to purchase new ones (despite what many telco salesmen are telling people). Here's where the much cheaper ATA comes in to breathe life into your old hardware.

What is an ATA?

ATA stands for Analog Telephone Adapter and is a box that connects to a Data (UNI-D) Port on your NTD or VDSL router on one side and your existing telephone hardware on the other. It will translate the analogue data into digital data that can be sent over your broad-band connection*.





Phone Systems and the NBN?



As mentioned above, when it comes to small business phone systems, SIP Trunks are the way forward. You will make calls over the NBN while saving money on high line rental charges.

Phone systems connect to SIP in the same way as a single phone does;

- Directly using your SIP-enabled phone system (if you already have one) or
- Via an ATA, which will breathe new life into your older phone system.

SIP and your existing Phone System

While your current phone system can be made to work with SIP trunks using your NBN connection, there may be some additional steps involved, depending on the type of phone system you are currently using.

The best thing to do is contact our team on 1300 882 896 to discuss your existing setup and find out what steps would be involved to make the switch to SIP. Better still, let us organise a comprehensive NBN audit and have a technician visit your office assess the compatibility of your existing hardware.

Best Practice Advice

As mentioned above, the calls your business will make over the NBN SIP trunks are “sent” out over your broadband internet connection. As a result, the quality and clarity of your voice calls depends on your connection having consistent and reliable bandwidth.

In order to ensure this is the case for your business, we strongly recommend that you get a second connection that is dedicated purely to your voice traffic.



Fax and the NBN?

There aren't a lot of businesses that don't have at least one fax machine in the office. Before we go on, we will just remind you that **Fixed Wireless and Satellite areas will not have the existing infrastructure removed.** This means that, if you want to, you can continue using your FAX as you currently do.

Again, we will focus here on FTTP, FTTN and FTTB NBN connections.

Option 1: Using the Voice (UNI-V) Ports (available to FTTP users only)

If you have FTTP installed, you can easily connect your fax machine to one of the grey Voice (UNI-V) Ports on the NTD that will be installed inside your premises. Because there are only two ports, however, you may need to consider alternatives to ensure that all devices in your office will work properly once you've made the switch. See page 11 for your NBN phone line options.

Option 2: Using VoIP/SIP for IP-enabled fax machines

If you currently use an IP-enabled fax machine, you can continue to send and receive faxes using your broadband connection. Whether you have an NTD installed in your office or are using a VDSL router, you will simply connect your fax machine cable to one of the 4 Yellow Data (UNI-D) Ports.

If you don't have an IP-enabled fax machine, you don't have to rush out and purchase one! Read on...

Option 3: VoIP/SIP using an ATA

When you switch to the NBN, you won't have to send existing analogue fax machine into retirement. Although it isn't IP-enabled, you can get an Analogue Telephone Adapter (ATA) that will convert the information into digital data that can be sent and received using your broadband connection.

Option 4: Comsource Fax-to-Email solution

It may be time to ditch the fax machine completely - but not the fax number. Many businesses now find it simpler to have their advertised fax number changed from a traditional PSTN line to a virtual Fax number where incoming faxes are received as PDF attachments in their email Inbox.

Speak to your Comsource Account Manager today about 'porting' your fax number to a cloud based fax service.



EFTPOS and the NBN?



Not only is the type of EFTPOS terminal you use an important consideration when switching to the NBN, so too is the type of NBN your business will be receiving.

But before we get into that, let's take a look at the types of EFTPOS terminals. At the moment, there are three main ways in which businesses use EFTPOS:

- Mobile - uses mobile data and is transportable
- Countertop Wireless - uses mobile data and wifi and stays in a single location
- Fixed Line - uses a phone line to make transactions and stays in a single location

Mobile EFTPOS

Mobile EFTPOS takes advantage of Wireless GPRS or 4G mobile communication and does not require a landline phone line in order to complete transactions between your business and the bank. They operate using a sim card that communicates with the mobile network used by your EFTPOS service provider.

Mobile EFTPOS terminals will still function as normal, with or without a switch to the NBN.

Countertop EFTPOS

Like Mobile EFTPOS, Countertop EFTPOS can utilise GPRS communication. However, because these terminals are used in a fixed premises, most businesses also utilise their wireless internet connection to make transactions.

Countertop Wireless EFTPOS terminals do not require a phone line to send transactions. Your main concern with these terminals is to ensure that they connect and function properly with your broadband connection. We always recommend that you test this out BEFORE you disconnect your old service, just in case it doesn't work immediately.

Fixed Line EFTPOS

Old School, Fixed Line EFTPOS terminals require a phone line in order to complete transactions. This means that, when you switch to the NBN, you need to ensure that your terminal will still function properly.

This is the type of EFTPOS terminal that needs your careful consideration.

So, what are your options for Fixed Line EFTPOS terminals?

Option 1: Using the Voice (UNI-V) Ports (available to FTTP users only).

If you have an NTD with Voice (UNI-V) Ports, you have the option of plugging your EFTPOS terminal into one of them. It sounds easy enough, but remember - there are only two! That's why this option may not be practical for your business.

If you do want to use these Voice (UNI-V) Ports, make sure you have them activated by your chosen provider. They do not function as a default.

Option 2: Using VoIP/SIP for IP-enabled EFTPOS Terminals

If you currently use VoIP/IP services to make transactions with your EFTPOS terminal, it means that it is IP-enabled and will continue to work once you switch to an NBN connection. Your EFTPOS terminal will simply plug into one of the Yellow Data (UNI-D) Ports on your NTD or VDSL router.

We urge you to talk to your EFTPOS provider to find out if your terminal is IP-enabled.

Option 3: VoIP/SIP using an ATA

Most fixed line EFTPOS terminals are analogue devices, which means that they can't send and receive information using an internet connection. The good news is, you can purchase an ATA that will convert the analogue signals into digital data that can be sent using your NBN connection.

BUT...

Many EFTPOS providers actually offer to upgrade your Fixed Line EFTPOS terminal to an VoIP/IP-enabled terminal free of charge when you switch to the NBN. **You MUST talk to your EFTPOS provider** to find out if they are one of them.



HICAPS and the NBN?

HICAPS terminals process medical claims and submit refunds by communicating with medicare, private health funds and banks. The options for your HICAPS terminal are similar to those for EFTPOS.

Types of HICAPS Terminal

- The most common HICAPS terminal dials a 1800-number to make transactions and requires a landline phone line in order to process claims.
- More recently, HICAPS have released a VoIP/IP-enabled terminal that uses your internet to process claims.
- Another recent release is the Mobile HICAPS terminal but, unfortunately, it only supports a limited number of funds.

The type of HICAPS terminal your business uses will influence your options for connecting with the NBN.

Option 1: Using the Voice (UNI-V) Ports (available to FTTP users only)

You can (technically) use one of your Voice (UNI-V) Ports for your HICAPS terminal. We say “technically” because there are only two ports and it may not be practical in a business that needs phone lines, EFTPOS, fax and HICAPS.

So, while you may use the Voice (UNI-V) Port for your HICAPS terminal, you will probably need to find another solution to run all of the additional devices your business needs. Remember that the Voice (UNI-V) ports are not automatically connected and you need to request to have them activated by your service provider.

Option 2: Using VoIP/SIP for IP-enabled HICAPS Terminals

If you currently use VoIP/IP services to make transactions with your HICAPS terminal, it means that it is already an IP-enabled terminal. It will continue to work once you switch to an NBN connection, by simply plugging into one of the Yellow Data (UNI-D) Ports on your NTD or VDSL router.

It's crucial that you contact HICAPS to find out if your terminal is IP-enabled and find out if you need an upgrade.

Option 3: VoIP/SIP using an ATA

If you have an analogue HICAPS terminal that relies on a landline phone line to make claims, the only way you can connect it to your broadband connection is through an ATA. The ATA will convert the analogue data into digital data that can be transferred using the internet.

Be sure to contact HICAPS to talk about upgrading to an IP-enabled terminal.



Security and the NBN?



If you have a security alarm system installed in your business, there's a good chance that it uses a landline phone line to communicate with a security monitoring centre when the alarm is triggered.

Again, there are three main options for switching your security system to the NBN and the type of system you have will determine which option is best for your business.

Option 1: Using the Voice (UNI-V) Ports (available to FTTP users only)

If you will be connected to FTTP NBN, you will be able to connect your existing security system to your broadband connection using the Voice (UNI-V) Port on your NTD.

However, not all security panels will be compatible with the Voice (UNI-V) Port, so it is important to check with the provider of your security system first. It's also important to remember that the Voice (UNI-V) Port is not activated by default and you will need to talk to your chosen provider.

Option 2: Using VoIP/SIP for IP-enabled Security Systems

If your security system currently uses an internet connection to communicate with the control centre, it is IP-enabled and you will be able to run it using your NBN connection. You will simply connect your security panel to one of the Yellow Data (UNI-D) Ports, either on either your NTD or your VDSL router.

Option 3: VoIP/SIP using an ATA

You don't have to spend thousands of dollars on a new security system if your existing

security system will be able to send data over the internet.

If you do want to upgrade, most security system providers now offer wireless alarm and security systems, which simply use your internet connection wirelessly and do not need a phone line to communicate with the security monitoring centre.



The Internet and the NBN?

We've saved the easiest bit until last !

The heart of the NBN is broadband internet. It will carry all of our communications in the future, when the old infrastructure has been removed. Here's a look at how the internet will work with each of the different types of NBN:

	Coverage	Phone Solution
FTTP	25 %	<ul style="list-style-type: none">• Network Termination Device supplied and installed by NBN Co.• Router supplied by your provider
FTTN	29%	<ul style="list-style-type: none">• Router supplied by your provider
FTTB	11%	<ul style="list-style-type: none">• Router supplied by your provider
HFC	27 %	<ul style="list-style-type: none">• Network Termination Device supplied and installed by NBN Co.• Router supplied by your provider
Fixed Wireless	5%	<ul style="list-style-type: none">• Network Termination Device supplied and installed by NBN Co.• Router supplied by your provider
Satellite	3%	<ul style="list-style-type: none">• Network Termination Device supplied and installed by NBN Co.• Router supplied by your provider

Data Speeds

NBN internet services are divided into tiers, each tier being defined by different download and upload speeds (bandwidth). This way, you have the flexibility to choose that best suits the needs of your business.

The five tiers are as follows:

	Download	Upload
Tier 1	12mbps	1mbps
Tier 2	25mbps	5mbps
Tier 3	25mbps	10mbps
Tier 4	50mbps	20mbps
Tier 5	100mbps	40mbps

Not all service providers can offer all speed tiers, so it is important you check before signing up. Before making the decision about which NBN data service you'll have in your office, it's important to think about how you currently use your internet, and how you'd like to use it in the future.

Being prepared for the NBN

As you've probably figured out by now, the NBN isn't simple, and it's not a one-size-fits-all technology. There are a lot of factors that will determine how YOUR business will be affect-ed when you make the switch. From the cabling in your office and the type of router you have, to the way you make your phone calls - there's a lot of changes in store. It's not over-the-top to be a little apprehensive about how it will all work out in your case, nor is it foolish to take every step possible well in advance. After all - there's a lot to lose if your services aren't functioning for even the smallest amount of time.

Call us on 1300 882 896 to find out how you can get prepared for the NBN.

Having a dedicated Voice-Data service

If you are going to use a VoIP/SIP service when you switch to the NBN, you will need to think seriously about making sure your data service can carry both your general internet use, and your phone calls. If you haven't used SIP to run your PBX system in the past, it's vital that you get the balance right.

In some cases, a single data service will be adequate in managing both your general internet use and your phone system. However, the only way to guarantee that your SIP calls will NEVER be interrupted by a large file download or streaming video is to have two data services - one for your internet use, and one for your SIP service.



**Time
to get
Ready!**

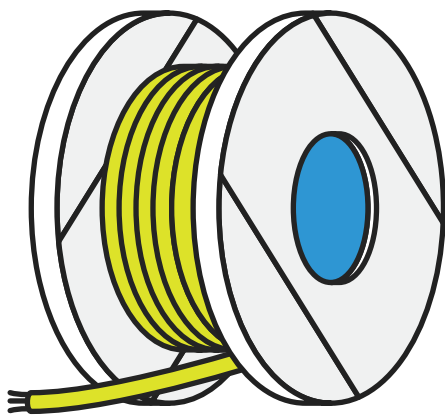
When is the NBN active for my business?

We can't give specific advice about individual businesses, but we can try find out about your suburb for you.

If the NBN is ready in your area, you need to move fast to ensure your existing services aren't disconnected before you've made the switch. But you need to make the switch properly!

NBN Installation Process

We keep saying that timing is CRUCIAL when it comes to the NBN - because it is! Here's a timeline that explains how your switch to the NBN will work.



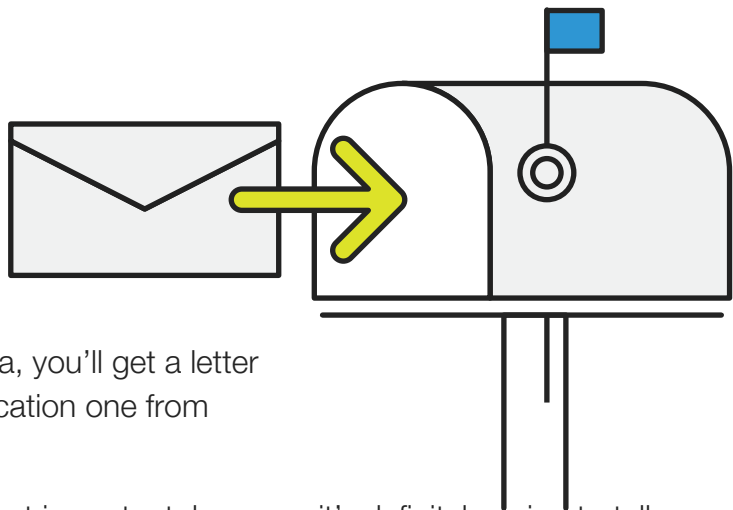
Step One - The Rollout

When NBN Co. is installing technology in your area, you probably won't even notice. It will all be going on as you go about your daily life, and the first thing you'll hear about it will be...

Step Two - The Letter

When the NBN is available in your area, you'll get a letter from NBN Co, and also get communication one from Comsource.

The NBN Co. letter is probably the most important, because it's definitely going to tell you when your existing services will be switched off. But here's the deal - they have up to 18 months to let you know, BUT they don't have to let you know as soon as possible. **You might have over a year to prepare, or you might find a letter in your mailbox with a two month deadline.**

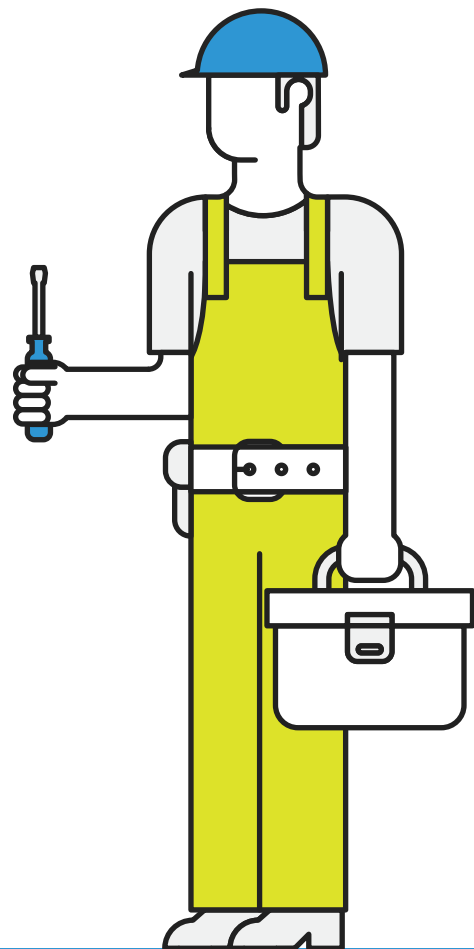


Step Three - Installation

Now the ball is in your court, and you have to contact Comsource to order an NBN installation at your business. We do not choose the date of installation. We contact NBN co, place your order, and then we will inform you of the date and time that a technician will come to your premises. The wait for installation is generally between 10 days and 30 days. Obviously, you'd be cutting a fine line if you were to wait until one month before switch-off to call your provider. But here's why you should DEFINITELY not do that...

We have heard of an individual who had a date set for one month after the order was placed, but that date was cancelled due to poor weather conditions. The person had to contact their service provider again, who had to contact NBN Co again, and because there was such a backlog due to poor weather, it was an additional 6 week wait for installation. That's a total of around TEN WEEKS from the original order to actual installation.

If you wait until the last minute to switch your service, you run the risk of having your existing phone, internet, EFTPOS, and everything else switched off before the NBN is installed.



*CALL NOW
TO BEGIN YOUR
NBN APPRAISAL*

COMSOURCE

t: 1300 882 896, option 3
e: info@comsource.com.au
w: www.comsource.com.au
a: 1/184 Barkly St
St Kilda VIC 3182

