



## VoIP | nbn® & Wi-Fi Calling Service

### Description

# VoIP/nbn® fixed line & Wi-Fi: using the internet for phone calls

As technology continues to evolve and Australia gradually upgrades its internet and phone services, you may be wondering what happens to your landline when you switch to nbn®. One solution is using your internet connection to maintain a good-quality, cost-effective voice service.

Through a VoIP (Voice over Internet Protocol) on the nbn® Fixed Line network or Wi-Fi Calling, you can stay connected to your family, friends and work commitments around Australia. Learn more below.

- [Fix an issue](#)
- [Escalate an issue](#)

## Understanding VoIP on nbn® Fixed Line & Wi-Fi phone services

### 01. What is VoIP on nbn® Fixed Line phone services

VoIP, or Voice over Internet Protocol, is a technology that allows you to make phone calls over the internet (nbn®) instead of standard copper phone line connections – A.K.A your old landline phone. So just like your current landline, VoIP allows you to call any landline or mobile number, just via your internet service. You should be able to use your existing handset as long as it's connected to a compatible modem-router or adapter.

You are not required by law to switch over to a VoIP phone service. However, the old copper phone line is being phased out and once your area is nbn®-ready for a fixed-line service, you'll be advised to move to an nbn®-plan with optional VoIP calling (if you haven't already).

Many rural and regional Australians who connect to the nbn® via Sky Muster® Satellite or Fixed Wireless can keep their standard landline service as normal. In fact, we strongly recommend keeping it in case of internet network outages and blackouts.



## Having problems with your VoIP service or set up?

[Let's troubleshoot](#)

### 02. Can I get VoIP?

Anyone with a reliable internet connection can get a VoIP. However, there are some limitations and things to be aware of:

1. It's not a suitable replacement for a landline when managing medical alarms, faxes or priority assistance services.
2. It requires an **active internet connection** to work. If the internet connection goes down (for example, in a power outage or extreme weather/environmental events), your VoIP system will not work and you won't be able to make emergency calls.
3. We do not recommend disconnecting an existing landline service in favour of a VoIP.
4. If your internet connection is provided by Fixed Wireless, mobile broadband, or fibre-optic connections, you're unlikely to notice any difference in quality between a landline call and a VoIP call. If you're on a satellite connection – nbn® Sky Muster® – there will be a noticeable delay on your call, and the quality of the call can vary from “extremely good” to “barely usable”.
5. nbn® Sky Muster® and Fixed Wireless users who do not have access to a mobile service should maintain a basic landline connection as an emergency backup, as recommended.
6. VoIP should only be considered as an additional voice service. For nbn® Sky Muster®, three events WILL cause a temporary loss of service, and your VoIP connection will fail:
  - Power failure, which you can overcome with a backup power source.
  - Rain fade, for which there is no solution.
  - Provider or backhaul transmission failures and nbn® Sky Muster® outages.

\*Both your landline and VoIP line must accept 000 calls.

### 03. VoIP calling costs

In general, calling over VoIP is considerably cheaper than a landline or mobile phone connection, which is why it's such a popular service. As the call is made via the internet, it only uses your internet data, not your phone plan inclusions. However, if you are using a PAYG or BYO plan, calling numbers that start with 13 can cost a fixed rate, and international calls can still be charged.



The data used per call depends on your equipment and service provider. It's likely to range between 25Mb and 80Mb of two-way data for each hour. (Note that there's 1000 Mb in one Gb, and most internet plans have at least 20Gb of data available to you each month, if not considerably more).

## 04. What is Wi-Fi Calling

Wi-Fi calling allows you to make voice calls and send text and picture messages over your Wi-Fi network instead of a traditional cellular network. It is helpful in remote areas or situations where you have a weak or no cellular signal but you have access to a Wi-Fi connection.

Not all phone companies offer this, and not all phones can do it. To make it work, your phone company needs to support something called VoWi-Fi or Wi-Fi calling, and your phone needs to support VoLTE or Voice Over LTE (Voice over Long-Term Evolution). You should ask your mobile provider for help if you want to use this.

**Having trouble with your Wi-Fi Calling? Let's troubleshoot.**

[Take me there](#)

## 05. Devices and providers offering Wi-Fi Calling

Currently, Optus, Telstra and Vodafone networks all support this feature. However, older phone models and some networks may not. If you are looking at purchasing a new mobile, this may be a good thing to check when looking at your options.

There are different ways to enable Wi-Fi Calling on your phone, depending on your phone type and software version. These methods can frequently change with phone updates, so contact your mobile phone network provider if you are having difficulties.

**You can also find support on your mobile provider's website:**

- [Telstra](#)
- [Optus](#)
- [Vodafone](#)

**Things to check:**

- You may need to ensure your mobile device's Wi-Fi capability is 'turned on'.
- Note that some SMS and MMS may not be sent or received using Wi-Fi Calling.
- Make sure you have the latest software and updates active on your mobile.



## 06. Wi-Fi Calling costs

- Calls and SMS/MMS will be charged at your standard mobile rates
- Data usage will be charged at your standard data usage rate as per your chosen home internet plan.
- The cost to purchase a compatible mobile phone if you don't already have one.

## Tips and tricks for VoIP & Wireless Calls

- [Make Calls Online: Wi-Fi Calling, VoIP, Video Conferencing](#)
- [Reliable access to essential services key for rural/regional areas](#)
- [Video Conferencing: The Basics](#)
- [nbn® Fixed Wireless standard vs non-standard setups](#)

[See all the tips](#)

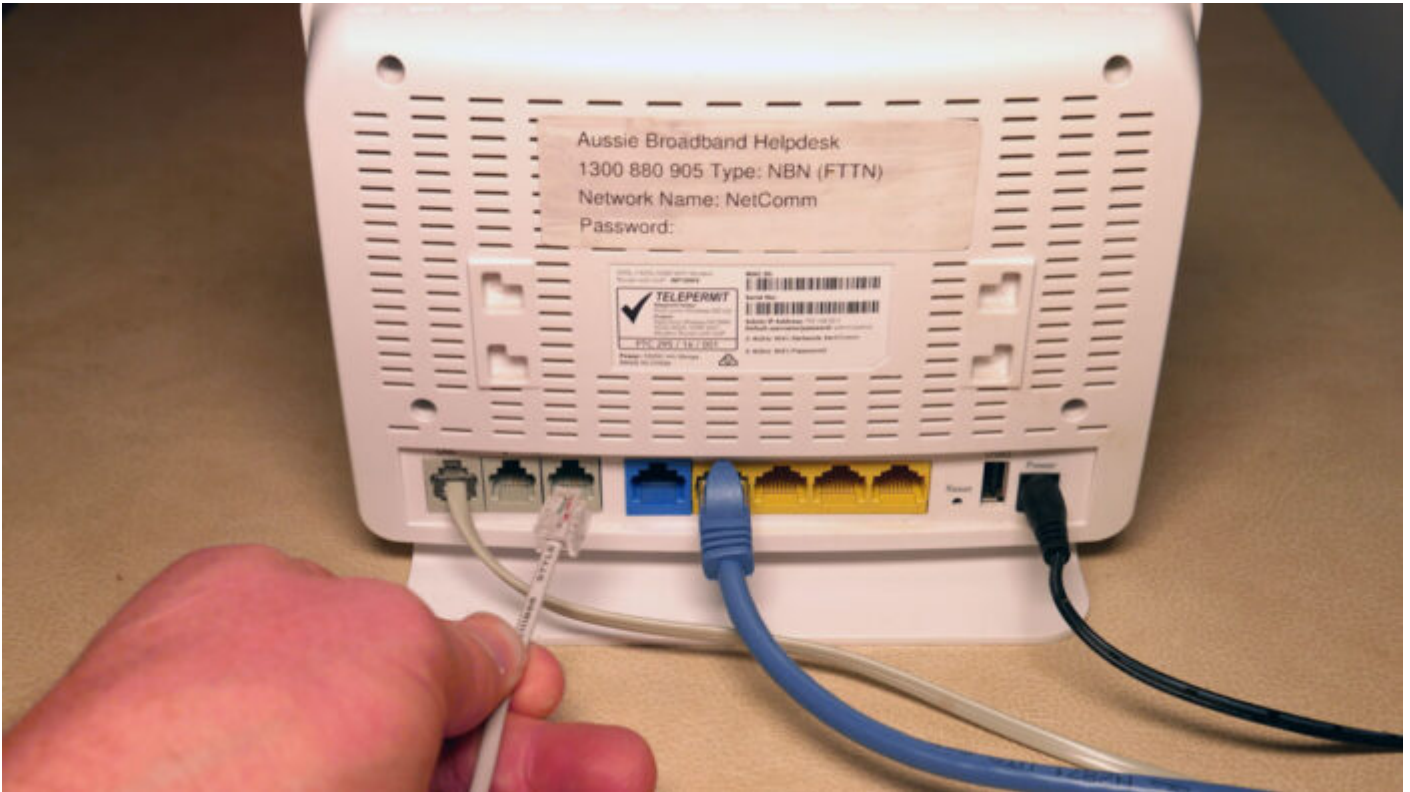
## Setting up a VoIP system

### 01. For an existing landline phone handset

Your equipment will come with specific instructions, however here is a basic guide for setting up a VoIP system for an existing landline phone handset and Analog Telephone Adapter:

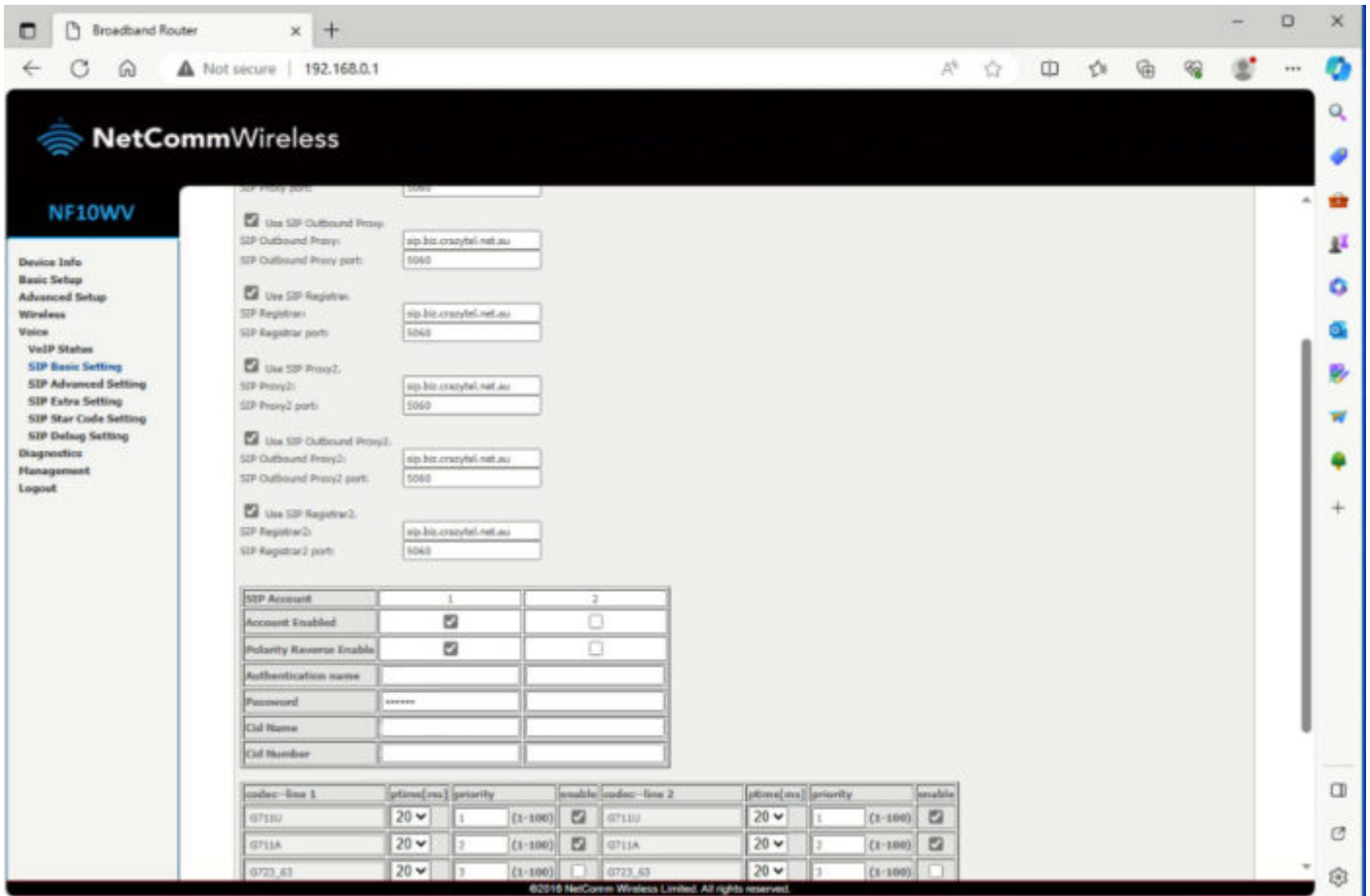
#### 01 Connect

Plug your IP handset into your router via an telephone cable.



## 02 Check settings

Follow any instructions required to set up the phone, via your computer.



### 03 Test your handset

Follow any instructions required to set up the phone, via your computer.

Lift your handset. You should hear a dial tone and can make phone calls as usual.

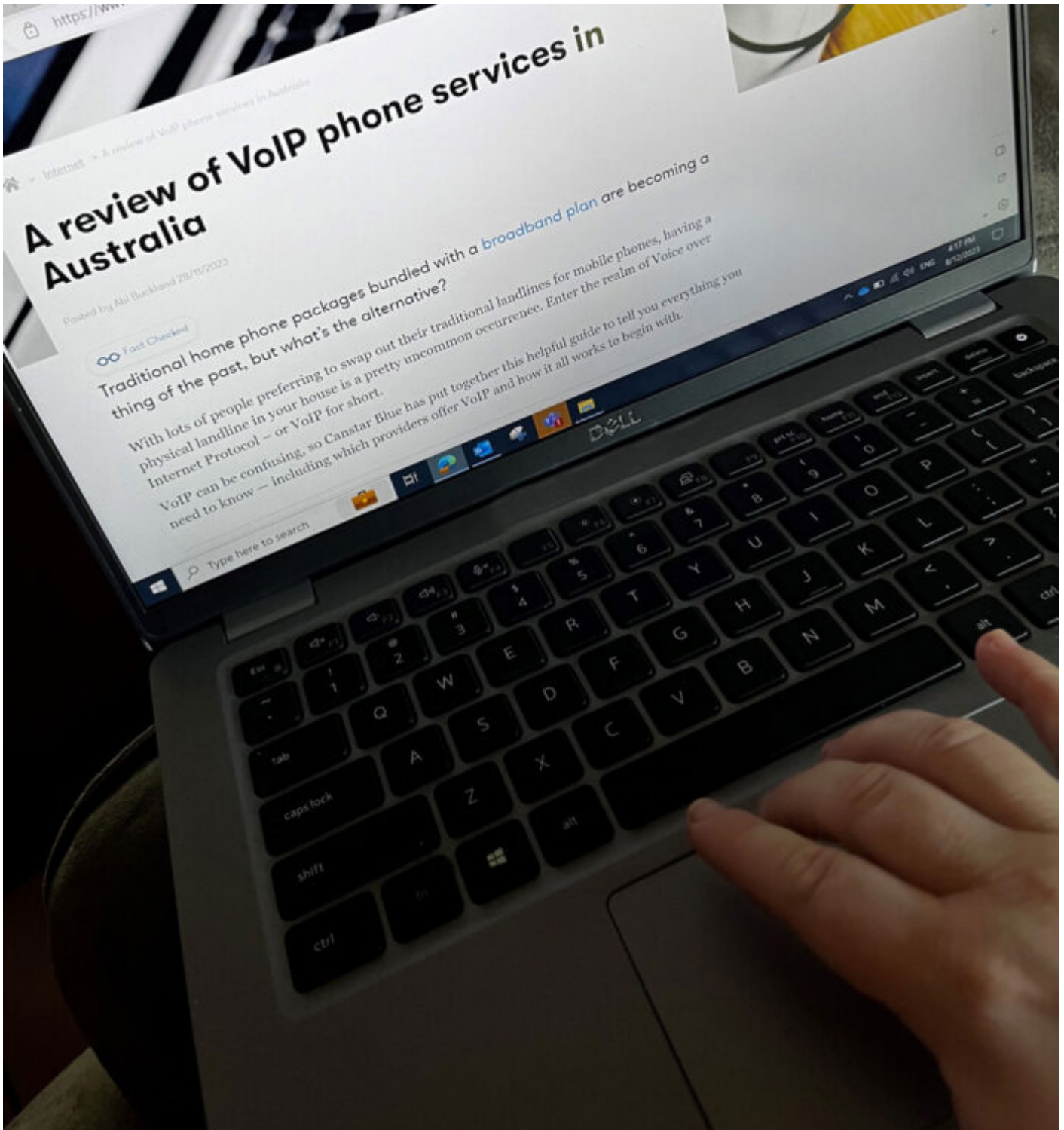


#### 04 Check the fees

Monthly fees ranging from \$0 to \$30 on top of your regular internet expenses, with calls costing anywhere from 1 to 50 cents per call or minute. You may also need to invest in equipment, which can cost between \$100 and \$200.

- **Analog Telephone Adaptor (ATA):** This device takes a standard phone plug and converts it into the digital signal required for internet calls.
- **IP phone handset:** This phone is specifically designed to connect directly to your router via an Ethernet cable, not a standard phone cable.

\*Not all nbn® services have access to the TC1 channel, and not all providers will use the TC1 channel for VoIP services. Talk to your provider first when making a decision about VoIP plans. At time of writing, nbn® Sky Muster Plus plans do not have access to the TC1 channel.





## 02. For an existing internet connection

For an existing internet connection with a router, or combined modem/router, the phone plugs directly into the router.

### 01 Connect your phone

Plug the phone line of your handset into the Analog Telephone Adaptor (ATA) box, or into the “phone” port of your ATA+router. If your phone has its own power, make sure it’s plugged in and turned on.



### 02 Connect your internet

Plug the ATA box into your existing router using an ethernet cable OR plug your ATA+router into your internet modem. Ensure everything is turned on and that your internet connection is working.



### 03 Test your headset

Lift your handset. You should hear a dial tone and can make phone calls as usual.



#### **04 Back up your phone**

It's a good idea to consider buying a UPS (Uninterruptible Power Supply) or another backup power source for your phone when using a VoIP setup. A UPS is a device that provides temporary power during electrical outages. It ensures that your VoIP system stays operational even if electricity is lost. It is vital if you rely on your VoIP phone for critical calls, like emergencies or business communications.



## Your complete guide to setting up VoIP & Wi-Fi Calling

The following guide offers extra information for setting up VoIP, as well as Wi-Fi calling, and video conferencing. You can download this and save it to your computer or print it out for future reference.

[Read Our Guide](#)

## Your options for using VoIP to make a phone call

### Using normal telephone

- Telephone handset connects to the internet router
- Use the handset to dial outgoing calls
- The call is connected via your internet connection



- Don't need an additional landline or mobile service
- No need to learn how to use new programs or equipment

### Using computer software

- Set of headphones with a mic connects to the computer & software (e.g. Skype)
- Use the keypad on your computer to dial outgoing calls
- The call is connected via your internet connection
- Don't need an additional landline or mobile service
- Provides mobility, but slow internet can cause call quality issues

### Using landline & VoIP

- Telephone handset connects to the internet router
- Option to take incoming calls on your landline & make outgoing on the cheaper VoIP service
- The call is connected via your internet connection
- Don't need an additional landline or mobile service
- Transfer your home phone number to your VoIP service or make a separate VoIP number

## All your VoIP & Wi-Fi Calling questions answered

### 01. What equipment do I need to use VoIP?

You can use any of the following to use your internet connection to make phone calls:

1. **Regular Phone:** You can use a regular old-fashioned phone, but you might need an Analogue Telephone Adapter (ATA) to make it work with the internet. This ATA converts your ordinary plug phone's signal for internet use. Your service provider can guide you on how to set up a VoIP service with this.
2. **VoIP Cordless Phone:** a special cordless phone system explicitly made for VoIP.
3. **Computer Software:** If you prefer using your computer, you can use software like Skype. All you need is a headset with a microphone plugged into your computer to make calls over the internet.

Experienced users might explore using a third-party VoIP Service Provider (VSP), usually for more complex VoIP needs or business-related requirements. For most people, the first three options should suffice.

### 02. What are my VoIP handset plan options?

Many Retail Service Providers have VoIP as an optional extra to their plans, possibly with a small additional monthly cost (around \$10-\$20). Like ordinary landline plans, there may be a cost per



call. For example:

- Local & National calls : from 15c/call
- Mobile calls: from 22c/call
- International calls: from 5c/call
- 13/1300 Numbers: from 35c/call

Data used to make a call is prioritised over ordinary internet data. This means VoIP calls will be delivered using the best quality service available to you at that point in time. RSPs offer VoIP services of comparable quality to other voice services.

\*These costs are taken from [Ant Communications' Pay As You Go plan](#), which costs \$5/extra per month. Other plans from other providers may have higher or lower prices. They do not include the cost of the VoIP handset and other hardware, which is likely to be a once-off cost of between \$90 – \$200.

### **03. What VoIP computer software plans are there?**

Software such as Skype is free to download and use when the person you want to call is using the same software. Any other calls may come at a cost, calculated as a one-off connection fee or charged per a specific period (seconds or minutes). Some extra benefits may require a paid subscription. Skype is the best-known and most well-supported of the VoIP packages.

### **04. Can I use my current phone number on the VoIP service?**

Yes, but it will have to be “ported” across, which means it’s no longer associated with your landline. If you plan to keep your landline as well as using VoIP, you’ll need a new phone number for either the VoIP service or the landline. Give us a call if you need further clarification.

### **05. Can I get caller ID, MessageBank and other similar features on my VoIP service?**

It depends on your service provider and your equipment. In most cases, yes, you’ll have all the same services as you’ve had on your landline, except for MessageBank.

MessageBank is owned and provided by Telstra. It works over VoIP, but only on an internet connection (including nbn®) supplied by Telstra. It is unavailable on VoIP services provided by any other provider, including nbn®. **Standard Voicemail is still accessible though.**

### **06. What about satellite lag?**

The dedicated TC1 channel and dedicated VoIP equipment overcome the satellite lag to a certain



extent. You may notice a slight delay when making the initial call, but the software does its best to make the service as quick as possible.

- “Dedicated TC1 channel” refers to a specific, reserved communication channel for a particular purpose.
- “Dedicated VoIP equipment” means specialised equipment designed for making internet-based phone calls.

## 07. How much data does a VoIP call use?

An active VoIP phone call uses between 30Mb and 80Mb of data per hour. It varies depending on your service provider and equipment’s “codec” (coder-decoder). Codecs compress the data sent during VoIP calls, promoting lower latency and higher audio quality.

There are two codecs used in Australia:

- **G.729**. This is the most common and a lower-quality codec. The TC1 channel can support up to four simultaneous calls at the same address using the G.729 codec. Each call uses about 30Mb of data per hour.
- **G.711**. This is a higher-quality codec. The TC1 channel can support one call at a time using this codec. Each call uses about 80 Mb of data per hour.

\*VoIP calls are unmetered on nbn® Sky Muster® Plus plans. Note that the TC1 channel is not available with Plus plans at the time of writing.

## 08. Do I have to use my current service provider’s VoIP service?

No. There are third-party suppliers of VoIP services, generally to support business or complex phone setups. They’re called “Voice Service Providers”, or VSPs.

However, going through your service provider is generally the easiest option. Discuss your requirements with your trusted technical advisor to make the best decision for your needs.

## 09. Can I make emergency calls on my VoIP?

Yes, but check that with your provider before ordering your service.

# We make sure our values are reflected in our work

## Free And Independent Advice

The Regional Tech Hub is funded by the Australian Government, ensuring the advice we provide



to you is free. We also remain independent, so the options and information we put forward are all assessed equally.

### **Regional Support**

We believe all Australians, no matter where they live, should be able to access affordable and reliable internet and voice services. Our team are all regionally-based and understand the challenges regional, rural, and remote residents face.

### **Keeping It Easy**

Regional Tech Hub understands the jargon used around connectivity options and issues can be frustrating and confusing. You can relax knowing our resources and advice are accurate, straightforward and practical.

### **Clear Processes**

We offer various contact options and service levels to suit your needs, ensuring you stay informed and on board throughout every step of your connectivity journey. We strive to make every interaction clear, easy and stress-free.

## **Couldn't find what you were after? Give us a call!**

Chat to us on our hotline with one of our team members and let's get the conversation started. If we don't answer, we'll get back to you in no time at all.

[1300 081 029](tel:1300081029)

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