VOICE AND ANALOGUE VOICE ON THE NATIONAL BROADBAND NETWORK

Support your existing and future customers with our voice solutions on the National Broadband Network

As Australia transitions to the National Broadband Network (NBN), it's important you feel confident managing services supplied over the existing copper network and the new NBN in parallel. Our extensive national coverage means we can get you to where you need to be so you'll have peace of mind for your future NBN voice needs.

Overview

Our Voice and Analogue Voice products are designed to meet your current and future voice communication requirements. Most standard telephony features are supported, including Call Forward (all, busy or no answer), Voicemail and Call Waiting.

Our Voice service is delivered over the analogue phone port on the Telstra supplied Home Network Gateway (HNG). It connects to the UNI-D port on the NBN connection box in areas serviced by the NBN fibre and wireless networks.

Our Analogue Voice service is delivered over the UNI-V port on the NBN connection box in areas serviced by the NBN fibre network. It enables your end users to plug their existing telephone directly into the UNI-V port. Alternatively, they can continue using their current analogue telephone equipment over existing home wiring plugged into the UNI-V port.

Our Analogue Voice service doesn't need a Telstra supplied HNG

A Telstra supplied Home Network Gateway (HNG) must be used with our Voice service to ensure the security of Session Initiation Protocol (SIP) credentials necessary for a Voice service. We'll deploy software upgrades remotely to the HNG so your end users continue to enjoy the most up-to-date capability available from our network.

The analogue phone port on the HNG delivers a voice service suitable for analogue phone equipment. The built-in DECT base station can also be used with a compatible DECT handset (not supplied) to deliver a cordless telephone service.

- DECT connectivity is subject to the interoperability between the HNG and your end user's DECT handset.
- The voice quality delivered via a DECT cordless phone base station is subject to the capability of your end user's DECT handsets.

A telephone number is provided with the voice service in line with Telstra's implementation of the Australian Numbering Plan. Pre-selection and override to other carriers aren't supported.

You have the option to leverage the Telstra supplied HNG and use this device as a cordless phone base station, or as a wireless router when bundled with our Broadband product.

Analogue Voice is suitable for analogue Customer Premises Equipment (CPE) only and can't be used with IP Phones or other IP/SIP capable devices.



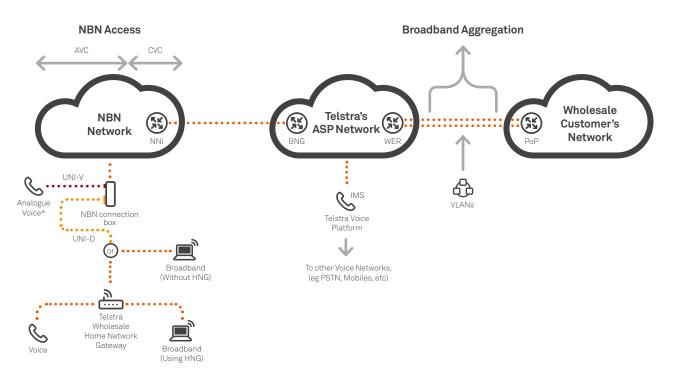
Features of our voice solutions

Features	Voice	Analogue voice
Device requirements	Telstra supplied Home Network Gateway must be used to enable a Voice service.	Telstra supplied Home Network Gateway isn't required but may be used as a cordless phone base station or as a wireless router when the service is bundled with Broadband.
Voice quality	High Definition voice (with DECT telephony equipment and in conjunction with a compatible cordless phone) may be possible and will be limited to Telstra's HD calling compatible networks. Standard Definition (with analogue telephone equipment).	Standard Definition (SD)

Feature	Description	Voice	Analogue voice
Battery backup	Only available to UNI-V port of the NBN connection box.	×	If supplied
Calling Number Display	Available as an optional feature, allows the calling party's number to be displayed when it's available. Calling Number Display CPE is required to receive and display the calling party number.	\checkmark	\checkmark
Call Waiting	Allows an end user who is on a call to be alerted to a new incoming call to the same service.	\checkmark	\checkmark
Call Waiting Display	Allows Calling Number Display enabled customers to view screen the calling number of a second caller on hearing the Call Waiting beeps.	\checkmark	\checkmark
Call Forward – Busy	Allows incoming calls to a busy service to be diverted to a chosen number.	\checkmark	\checkmark
Call Forward – All Calls	Forwards all incoming calls to a chosen number immediately, regardless of whether the service is busy or free.	~	\checkmark
Call Forward – No Answer	Forwards all incoming calls to a chosen number only if the call is not answered within a pre-specified delay time. The maximum delay is 55 seconds.	\checkmark	\checkmark
Voicemail	Available as an optional feature, includes a personalised greeting and the ability to remotely interrogate messages.	\checkmark	\checkmark
Instant Hot Line	Available as an optional feature, when an end-user lifts the handset, a call will be immediately established to a pre-configured destination number.	×	\checkmark
Voice Conference Call	Allows a conference between 3 – 5 parties, including the calling party.	\checkmark	×
Silent Line	Available as an optional feature, the Silent Number Calling Line Identification feature will use the Line ID Block with Override feature.	\checkmark	\checkmark
Fixed SMS (Talking Text)	When an SMS is sent to a fixed service, it will be received as Talking Text if the CPE isn't capable of supporting text messages.	~	\checkmark
Fixed SMS	Where the CPE is capable of receiving Talking Text messages, SMS messages received will be displayed as text on the CPE. If the service is busy there will be an audible call waiting indicator. If the end user switches between calls, the SMS will be delivered as Talking Text.	\checkmark	~

Feature	Description	Voice	Analogue voice
Line ID Block with Override	A service configured for Line ID Block with Override won't show the identity of the Calling Line to called parties. However, the end user can dial 1832 followed by the destination phone number to override and show identity only for the current call. This is the default setting for silent line services.	~	~
Line ID Present with Override	A service configured for Line ID Present with Override will show the identity of the Calling Line to called parties. However, the end user can dial 1831 followed by the destination phone number to override and block presentation of identity only for the current call. This is the default setting for all standard services.	\checkmark	~
Line ID Block Only	The Calling Line identity won't be shown and can't be overridden by the end user.	\checkmark	~
Network Activated Call Barring	Available as an optional feature, a barring setting established by Telstra Wholesale if requested by our customers. End users can't override this setting except to establish a lower barring level through Call Control (end user activated call barring). Telstra Wholesale customers typically use this feature in the credit management of end users.	~	~
Call Control (end user activated call barring)	Available as an optional feature. When supplied it can be activated by end users from their telephone keypad. This feature can't override an existing barring level set by the Network Activated Call Barring feature.	~	\checkmark
Flexible Call Distribution (Planned for release in Q4 2014)	Allows an incoming call to be distributed across a list of designated phone and mobile phone services either in serial mode (sequential ringing) or parallel mode (simultaneous ringing). Can be managed through our online ordering system, LinxOnline™ ordering (LOLO), configurable work type order requests.	~	\checkmark
Malicious Call Trace	Allows an end user to initiate a call trace at the completion of the call.	\checkmark	\checkmark
White Pages Listing	The standard for all new services. It provides a single line entry in the White Pages directory, including the service address details.	~	~
Suppressed Address Listing	Provides a White Pages directory entry without the service address details.	~	\checkmark

END TO END NETWORK CONNECTIVITY FOR BROADBAND AND VOICE SERVICES



* Analogue Voice not available in areas serviced by the NBN fixed wireless network.

Flexible installation options to suit your business

When a Home Network Gateway (HNG) is provided as part of your voice service, you can choose between professional or self installation of the Telstra supplied HNG depending on what best suits your business model.

With the **professional installation** option for our Voice service, we:

- connect the WAN port on the Telstra supplied HNG to the assigned UNI-D port on the NBN connection box and to the end user's power outlet
- ensure correct Voice service operation by connecting a working analogue telephone to the analogue phone port on the HNG and checking for dial tone and performing ring back tests.

With the **professional installation** option for our Analogue Voice service we:

- ensure correct Analogue Voice service operation provided by NBN Co equipment and the Telstra network by connecting a working analogue telephone to the UNI-V port of the NBN connection box and checking for dial tone and performing ring back tests.
- connect the Telstra HNG to the assigned UNI-V phone port on the NBN connection box and to the end user's power outlet.

The Telstra supplied HNG will function as a DECT cordless base station (we don't supply cordless phones).

The benefits of our professional installation are:

- we professionally install the Telstra supplied HNG and ensure your end user has a working voice service (and where applicable, broadband service) at the end of the installation process
- if in-home wiring changes are needed at your end user's premises, the Telstra Wholesale technician will provide this on a fee for service basis. In-home wiring must be requested and pre-approved by you (not the end user) in advance.

With the **self installation** option for Voice service and Analogue Voice service (HNG is optional) we:

- send your end user a Self Installation Kit which includes the Telstra supplied HNG, its accessories, and full instructions on how to install it
- let your end user know when the NBN Co appointment is scheduled
- make sure network access is enabled for a working service.

For customers who order a Broadband only service or an Analogue Voice only service, we simply activate the service if an HNG isn't requested.

Home Network Gateway Specifications

- WAN Port connects to UNI-D port on the NBN connection box.
- 1 x Gigabit Ethernet and 3 x Fast Ethernet LAN ports.
- Wireless working on board 802.11n (2.4GHz).
- 1 x analogue phone port for phone or facsimile support.
- Integrated DECT multiline base station (CAT-IQ 2.0 ready). **Note:** DECT handset is not provided.
- USB port for Hard Disk (HDD File system FAT 32).
- Printer support.
- Media Sharing UPnP A/V and DLNA.
- Built in firewall and parental control.

When you are transitioning to a new platform or employing a new solution we understand the need for reassurance and certainty.

Our experienced people

Telstra Wholesale offers an **experienced and skilled team of dedicated specialists** to help identify the Voice or Analogue Voice solution that best suits your needs. You'll also receive ongoing technical and operational support during and following the service delivery.

Our network

We're in the places that you need us, with **national coverage across the new NBN network**. We pride ourselves on the consistency, service assurance and operational support we offer you as a customer.

Our systems and B2B support

Our **proven, integrated systems** capabilities and B2B support help you manage your business needs with a range of online tools for quoting, ordering support and network performance. Our flexible and installation options, will enhance the delivery experience for you and your customers.

Getting connected

We will work closely with you through our pre-requisite onboarding activities including establishing your chosen Broadband Aggregation option, your billing interfaces and the ordering interfaces that will allow you to raise end-user service orders through LinxOnline[™] Ordering (LOLO) and/or LinxOnline[™] Interactive Gateway (LOLIG). End user service activation lead times depend on the details of your order and the availability of an NBN Co appointment. You'll find an overview of the activations process and indicative lead times in our Broadband and Voice Operations Manual available on Telstra Wholesale Customer Portal (TWCP) or from your Service Manager.

http://portal.telstrawholesale.com.au

Operations and maintenance

Our existing support facilities provide the support you need. You can report service difficulties 24 hours a day, 7 days a week through our LinxOnline™ Service (LOLS) systems or by calling the Telstra fault reporting centre.

More information

To find out more, contact your Telstra Wholesale Account Manager or visit our website **telstrawholesale.com.au**

\sim

About Telstra Wholesale

Telstra Wholesale is committed to helping you connect to your full potential. We are delivering new capabilities in all our portfolios – data, mobiles, service and fixed access. We're continually investing in our business so that we can confidently deliver world-class solutions to your business, enabling you to create a competitive advantage.

You benefit from our superior capabilities and scale when you connect to our high performing networks and platforms. These are fully integrated with our operational capability to deliver value to your business. Our knowledgeable and responsive specialists are dedicated to delivering outstanding service to help your business succeed.

WHOLESALE

telstrawholesale.com.au

"NBN" is a brand owned by NBN Co and used by Telstra under licence.