



Voice on the NBN Product Fact Sheet

The NBN Co Ethernet Bitstream Service (NEBS/NBN Ethernet) on FTTP has been designed to support delivery of reliable, quality voice services and support many key features of existing voice services. Our product components have been designed and priced to give you flexibility in how you devise and deliver voice services to your customers.

Why deliver voice on the NBN?

Our construct gives you maximum flexibility in how you design, deliver and price your telephony products.

MARKET SIZE

The majority of homes have a fixed line voice service. Of those that don't, a growing number are already using VOIP.

FLEXIBILITY

You can build the right voice product set to best meet your customers' needs. You are in control of traffic class and contention ratios. You can deliver voice products via data or voice ports, or both.

COST EFFECTIVE

The NBN Co price construct allows you to deliver cost effective voice solutions, either stand alone or bundled.

SUPPORT FOR LEGACY HANDSETS

While you can provide your own Analogue Telephony Adapter, the dedicated Voice ports on the FTTP NTD include an ATA (with battery backup), allowing for support of legacy handsets and devices. This could lower the barriers to migration for your customers.



NBNCo
Bringing broadband to life

How does voice work over NBN (FTTP specific)?

NBN Ethernet delivered over FTTP technology has been designed with flexibility in mind. You decide how to package and provide your voice services, knowing that the right components are in place to give you quality telephony and network support when you need it.

If your customer is located in the FTTP footprint, NBN Co will install a Network Termination Device (NTD) in your customer's premises. The NTD has 2 different types of interface ports.

- User Network Interface-Data or UNI-D
- User Network Interface-Voice or UNI-V

The NTD contains 4 UNI-D ports and 2 UNI-V ports. You can deploy voice services over either the UNI-D and/or UNI-V ports.

NBN Co pricing and product construct is designed to allow you to develop retail voice services comparable to legacy voice products in the market today.

Voice Interface (UNI-V)

The UNI-V is designed to support migration via the direct connection of legacy telephony devices such as standard analogue corded telephone and or cordless telephone devices.

Migrating copper based services and devices on the UNI-V is done with a minimum of fuss and cost when taking up

a voice service on the UNI-V. The UNI-V ATA is designed to support G.729 common signalling protocols and key features including;

- Calling line identification and restriction
- Calling number display
- Ring cadences and dial tones
- TTY (teletypewriter) & national relay service
- DTMF tones
- Fax and modems

UNI-V is supported by optional battery backup, which can enhance reliability and provide peace of mind if selected by your customers.

Battery backup means telephony services will continue to work for approximately 5 hours (including the emergency reserve) in the event of a loss of power, retaining one of the key benefits of PSTN solutions today. Battery Backup is selectable in some cases, however there are specific requirements for end user informed consent concerning battery backup that need to be followed. Please see next "FTTP Battery Backup Service" section for details.

Battery backup combined with NBN Co's Service Levels in respect of Priority Assistance, allows you to provide voice services to your customers with the high reliability they require.

Another component designed for optimum voice on NBN is NBN Co's traffic class 1 (TC-1). TC-1 is designed for real time applications, like voice, that require committed capacity to ensure a quality experience. NBN Co offers a credit for 0.15 Mbps of AVC TC-1 on either the UNI-V or UNI-D equipping you with a tool to provide voice quality equitable to PSTN. [Please see the Appendix of the NBN Ethernet Fact Sheet for details on the credit].

The UNI-V provides a simple, cost effective, migration path for plain old telephony services with a minimum of fuss, decent voice quality, and high reliability.

Voice on the Data Interface or UNI-D

Voice through the UNI-D gives you great flexibility in how you put together your NBN voice offers.

Using the UNI-D gives you greater control over quality, with a choice of voice codec. You will need to provide your own ATA to support legacy devices however the UNI-D opens up a whole range of possibilities for IP telephony - new devices, new handsets, desktop voice and the potential to create unique solutions for your customers.

Optional battery backup with informed consent is also available on the UNI-D.

FTTP Battery Backup Service

A battery backup service on the NBN provides peace of mind for your customers that require continued telephone capability for a limited time in the event of a power outage or loss of power.

Key Features:

- Installation of the power supply with battery backup, including the first battery
- During a power outage, telephone capability will continue to operate for a limited period of time (approximately 5 hours including the battery emergency reserve)
- Battery backup capability will be available on all ports of the NBN Co NTD – UNI-D and UNI-V. All telephony devices connected to the ports also require their own battery backup capability except for analogue corded phones that are connected to the UNI-V.
- Audible and visible light 'replace battery or battery missing alarms' within your customer's premises where the power supply with battery backup is installed.
- 'Replace battery' (when battery has reached the end of its useful maintenance life) and 'battery missing' (when battery is missing). Battery alarm notifications and reminders are provided by NBN Co to you for your customers notification.
- Flexible battery replacement and maintenance options for you and your customers who select the battery backup service.

The battery backup feature on FTTP is a selectable option (only with informed consent) for all premises other than for Priority Assistance customers (who are required to have the service). This feature allows you to offer operation during power outages and also enables you to provide value added offerings around battery backup services for your customers.

It is important to describe to your customers the impact that a power outage will have on their voice services.

Pricing

Voice specific pricing is as follows;

- \$7.50 recurring charge applying in respect of the first UNI-V; along with a credit equivalent to the recurring charge for the UNI-V (your first UNI-V only). A UNI-D AVC is a prerequisite to ordering a UNI-V.
- \$10 recurring charge applying in respect of the first AVC TC-1(CIR) data transfer rate; along with a credit equivalent to the recurring charge for the first 0.15 Mbps of TC-1 (CIR) Data Transfer Rate.

Please see the Appendix of the NBN Ethernet Fact Sheet for details on the credit.

The price construct allows you to supply a standard single voice service at little or no additional cost to your NBN FTTP data offers or provide a standalone voice service at prices equitable with today's legacy voice pricing.

Rollout and availability

You can provide Voice and telephony solutions to your customers across the NBN footprint. The UNI-V is only available on the FTTP access technology.

For more information and to order

To provide a voice service you can select the appropriate features on the NBN Service Portal and B2B systems.

The Network and Services Operations Centre (NSOC) provides monitoring of the entire network – 24 hours a day, 365 days a year. The NSOC will provide a single point of contact for you to activate services, manage enquiries and to rectify any customer service disruption due to NBN Faults.

Next steps

If you would like to discuss Voice solutions further or understand how to go about ordering Voice supplied by means of the NBN Ethernet, please contact your NBN Co account manager or email sales@nbnc.com.au

Copyright

This document is subject to copyright and must not be used except as permitted below or under the Copyright Act 1968 (Cth). You must not reproduce or publish this document in whole or in part for commercial gain without the prior written consent of NBN Co. You may reproduce and publish this document in whole or in part for educational or non-commercial purposes as approved by NBN Co in writing.

Copyright © 2014 NBN Co Limited. All rights reserved. Not for general distribution.

Disclaimer

This document is provided for information purposes only. The recipient must not use this document other than with the consent of NBN Co and must make its own inquiries as to the currency, accuracy and completeness of this document and the information contained in it. The contents of this document should not be relied upon as representing NBN Co's final position on the subject matter of this document, except where stated otherwise. Any requirements of NBN Co or views expressed by NBN Co in this document may change as a consequence of NBN Co finalising formal technical specifications, or legislative and regulatory developments.

Environment

NBN Co asks that you consider the environment before printing this document.