







Preparing for the switch to an IP Voice telephony service

Understanding commonly used abbreviations,

acronyms and their meaning



Foreword

The way the world communicates has changed. The UK is now embarking on the transition from 'analogue' telephony to 'digital' IP Voice services.

Whilst this evolution is there for our benefit, the transition itself is causing some confusion as a result of the different terminology and messaging being used by various industry sectors involved in the transition. For the fire and security sector, it is important the end-user fully understands the benefits and impacts of transitioning to these services as the alarm systems they have at their premises may well rely on the telephony service.

It is therefore vitally important that terminology used by the whole supply chain (the regulator, network operators, communication providers, alarm system providers) is used and understood, particularly to ensure the end-user understands what the IP Voice service is and how it impacts on connected services.

Below is a list of commonly used abbreviations and acronyms along with their meaning in the context of the digitisation of the telephony network:

1. Those involved in the transition to IP Voice

Ofcom - Office of Communication

Ofcom is the UK telecommunication regulator and has responsibility to ensure the rights of the consumer (the end-user) are protected.

AP - Access Provider

Access providers provide the core IP Voice network, which is then used by CPs to sell on to their customers. Examples of APs are Openreach, Virgin Media and KCom.

CP - Communication Provider

Telecommunication company providing a range of services to business and consumer customers. Such examples include BT Consumer, Virgin Media, Talk, Talk, Sky.

Note: There are many more CPs in the UK marketplace that may offer similar digital telephony services.

ISP - Internet Service Provider

Telecommunication company providing predominantly internet services to business and consumer customers (e.g. PlusNet, EE etc).

2. Traditional analogue telephony services

DTMF signalling - Dual Tone Multi-frequency signalling

The audio tones you hear on PSTN when dialling the telephone number. A commonly used technology used in alarm signalling transmission (digital communicators) from an end-user premises to an Alarm Receiving Centre. It uses different frequency tones (similar in nature to pressing digits on a phone keypad) to transmit alarm messages from one point to another.

ISDN 2/30 - Integrated Services Digital Network

Traditional digital telephone line sometimes used for alarm/video surveillance system transmission.

Note: Not to be confused with a VoIP service.

PSTN - Public Switched Telephone Network

The current telephony system in use in the UK today providing dial tone, 50 volt and DTMF signalling. Although it includes digital systems, it uses 'fixed line' analogue technology to support older phone systems.

Note 1: The Openreach PSTN system will be retired in the UK in 2025.

Note 2: The PSTN may also be referred to as 'POTS' (Plain Old Telephone Service).

3. Telephony services over the internet

SIP - Service Initiation Protocol

A protocol often used for VOIP service.

FXS/FXO Port

Name for a physical port on router you would plug an analogue phone into. An FXS/FXO port would provide Dial Tone and 50 V like a normal PSTN line.

VRI - Voice Re-Injection

Cabling connection in customers premises that allows a PSTN device to connect to a broadband router and provide an emulated PSTN service.

ATA - Analogue Telephone Adapter

A device for connecting a conventional analogue telephone to a hub or base unit that provides a digital IP Voice service. An ATA would provide Dial Tone and 50V like a normal PSTN line.

VoIP - Voice over Internet Protocol

A technology that allows you to make voice calls over the internet (the Broadband) instead of an analogue phone line. Examples of VoIP services include Skype, MS Teams etc.

Note: Some telephony providers will provide dedicated ATA ports to allow analogue phones to continue to work over a VoIP network.

IP Voice - Internet Protocol Voice

A key term used to describe the overall transition from the analogue telephony service to the new digital voice services being implemented by the Access Providers, Openreach, Virgin Media etc.

Note: The term IP Voice may also be referred to as ALL-IP, NGN (Next Generation Network) or Digital Voice .

ALL IP

A key term used to describe the overall transition from the analogue telephony service to the new digital voice services being implemented. ALL IP is used in the same context as IP Voice (see separate term).

4. Telephone and broadband access networks – technologies used to connect customers to the telephone and broadband networks

MPF - Metallic Path Facility

Basic copper line service provided by Openreach to Communications Providers. The Communication Providers run their own phone and broadband services/equipment in the telephone exchange.

WLR Service - Wholesale Line Rental Service

A service where a Communications Provider (e.g. SKY, Talk Talk etc.) buys a wholesale product from a network Access Provider (e.g. Openreach) then the CP has full control of the relationship (billing, service etc.) direct with the end-user. WLR products include: WLR3 analogue, ISDN 2, ISDN 30, SMPF, SLU SMPF, Narrowband Line Share and Classic products.

SOTAP - Single Order Transitional Access Product

Basic copper line service provided by Openreach to Communications Providers. The Communication Providers run their own phone and broadband services/equipment in the telephone exchange.

Note: Similar to WLR, it provides a better option for migration from MPF for PSTN closure.

GEA FTTP - Generic Ethernet Access Fibre To The Premises

A service where a fibre optic cable provides fast transmission speeds for services such as broadband direct from the Access Provider direct to the end-user premises.

Note: FTTP can also sometimes by referred to as FTTH (Fibre To The Home).

GEA FTTC - Generic Ethernet Access Fibre To The Cabinet

A service where a fibre optic cable provides fast transmission speeds for services such as broadband direct from the provider to the street cabinet, where it is then usually existing copper wire to end-user premises.

SOGEA - Single Order Generic Ethernet Access

Similar to FTTC but without the underlying copper telephone line, so a broadband only service with telephony provided using VoIP. A key element of PSTN switch-off.

SOGfast - Single Order Gfast

Similar to FTTC, but without the underlying copper line, so a broadband only service with telephony provided using VoIP. Provides ultrafast speeds. A key element of PSTN switch-off.

5. General terms used in the IP Voice transition

CPE - Customer Premise Equipment

In the security alarm system, CPE refers to the equipment installed at the end user's premises. Such as examples are digital communicators, dual path systems etc.

Digital Voice

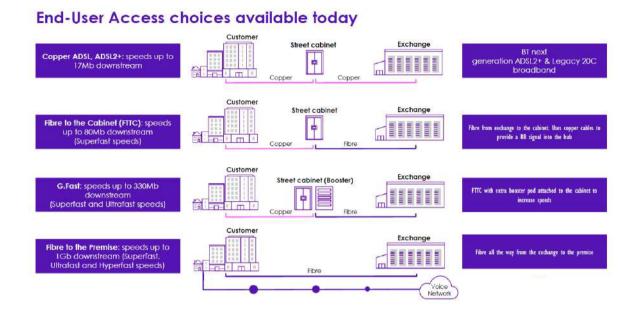
A term specific to the product released by BT Consumer to provide IP Voice services to its customers.

OTT - 'Over The Top' Service Provision

An OTT service provision is a term used to describe the services, such as an alarm system, that is connected to an IP Voice service.

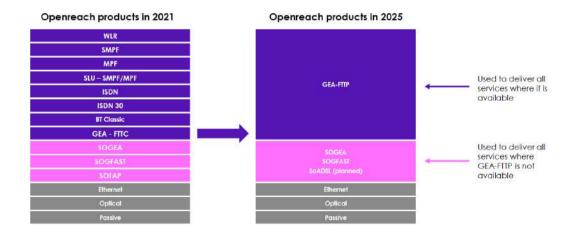
Note: OTT may also be known as 'Special Services'.

A general diagram of today's telephony services



An overview of Openreach products moving forward

Openreach are simplifying their portfolio. They will provide the access products and Communication Providers will provide IP Voice services



About the BSIA

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