

calls
fixed line
numbering
ip telephony
business mobile
call management
business broadband
international solutions
fixed-mobile convergence

Buying or upgrading to a new phone system?

There are so many things to consider when buying a new phone system. As you know, at HIGHnet we like to make business communications simple, so we have produced this guide to help you decide which option is right for you.

We'll outline points to consider, features look out for and the benefits for your business. Please consult our glossary page if there are any terms you don't understand, and if you would like to speak to us for further information, please do so on: 0345 450 4502 or info@highnet.com.



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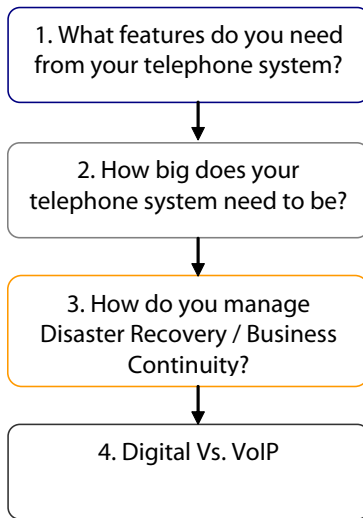
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Introduction

We'll outline points to consider, features look out for and the benefits for your business. Please consult our glossary page if there are any terms you don't understand, and if you would like to speak to us for further information, please do so.

The Simple 4-step Model:



Step 1: What do you need from your system?

-Do you need just a basic system which allows your business to make and receive calls, or are there some specific features you require?

If you just need to make and receive calls, on single lines or through a phone system, you need HIGHnet fixed line rental and calls. We can provide analogue lines, or for a phone system you might prefer to use ISDN lines which are digital. However, most companies now depend on certain system features. So what's available...

Automated attendant - an automated answering system that uses prompts to guide the caller to the correct department or extension, for example, "For the sales department, press 1".

Call logging - records the numbers dialled by individual extensions or departments and levels of incoming and outgoing traffic. It can be used to track down abuse of a system and help you keep track of call costs by person or by department.

Call barring - bars users from dialling out to certain numbers.

Calling Line Identification (CLI) - Showing the caller's number on your handset requires a good handset with an adequate display screen. It lets you see the number of the incoming call before you take it. On your outbound calls you might want to present a 'switchboard' number rather than your own direct dial number.

Central directory - an internal directory listing all company contacts (internal and external) available for users to dial. Each handset will normally have an additional private directory.

Conference calling - most modern systems provide this. It allows several people within and out with your organisation to share in a telephone conversation.

Music on hold - this ensures that you can add your own choice of music. Watch out for copyright problems!

Night services - this allows you to set the system so that calls are automatically routed to particular extensions or to voicemail boxes at particular times of the day or night.

Voicemail - this replaces old analogue answering machines and makes organisations much more efficient. A voice mailbox can be allocated to a person, a department or an organisation. Receptionists can reduce their workload by 80%.

...Other specialist features are also available, and all can be provided on digital systems or on IP Telephony solutions. HIGHnet can provide a very wide range of different systems through our local channel partners, so whatever the requirement, ask away.

Read on for Steps 2, 3 and 4...



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Step 2: How big should my system be?

- When investing in a new telephone system, it is essential that you look ahead and roughly forecast what your telephony needs will be in the next 5 years.

If you expect to see your business expanding, you need your system to be able to expand with you. Digital and IP systems are highly scalable, but be aware of the maximum number of lines and extensions that can be connected, and plan for adequate growth without needing an expensive upgrade. If you are operating a multi-site business, or will be in the future, you should consider a hosted IP Telephony solution.

Step 3: How do we manage Disaster Recovery / Business Continuity?

- What plans do you have in place for emergencies? How resilient is your phone system?

In the event of power failure, fire, flooding, or any other major disaster, you need to know that your business can still operate or can at least recover very quickly. It is no longer necessary to hire disaster recovery premises, as HIGHnet telephony solutions provide many resilient options and can help you to have highly cost-effective and pre-planned alternative call management in place. We can offer enhanced service levels, and back-up connectivity for your phone system and for your data network.

Step 4: The big decision – Digital or VoIP?

- As analogue lines are not so frequently used on phone systems, we have left them out of this debate, however, should you wish to install single or multi-analogue lines, this can of course be arranged.

Digital (ISDN) –

- ISDN comes in two main types; ISDN2e and ISDN30e. The first comes in pairs of lines, so the minimum number of lines you can install is two. The latter comes in a circuit of up to 30 lines, with eight being the minimum number available.
- ISDN has a number of key advantages over analogue lines; it has extra features such as DDI and CLI Presentation, it provides higher quality voice transmission, and it can send data, images and video much faster.

VoIP (Voice over Internet Protocol) –

- First things first: this does not mean sending your calls over the public internet. Business-grade IP Telephony uses data connections (such as broadband) to send and receive calls, and HIGHnet does this across a dedicated network with controls over quality and security. Many modern phone systems are 'IP-Capable' and can connect directly to this network, we do this with [HIGHnet IPDirectConnect](#). Other systems might require an 'IP Gateway' and this is [HIGHnet Converter](#).
- Another option is hosted IP Telephony, which enables you to administer and control a whole array of calling and network features through an online control panel. Our hosted IP Telephony solutions are [HIGHnet Communicator](#) and [HIGHnet Featureplus](#).
- The main benefits of using IP Telephony are significant cost savings, increased flexibility and enhanced resilience. You can also have phone numbers which are no longer linked to the STD code of your local exchange – so if your business moves, or wants to advertise a 'local' number in another area you can do so very easily.

Conclusion

So that's the 4 simple steps you need to take to decide on which type of phone system you require. Before you go, have a look to the future...

In the past, nobody expected much from their telephone system. However in today's "give me more" culture, businesses expect more from business communications. The convergence of computing and telephony has enabled businesses to exploit the new technology to change the way in which they work. Greater convergence between mobile and fixed-line communication is happening very quickly too. It is predicted that by 2010 most major companies will have made the transition to IP telephony systems, and when you consider the following, it's easy to see why:

- greater flexible working opportunities
- easier to set up home working options
- reduced overheads
- increased customer service
- reduced carbon emissions

If you would like any further information or advice,
please contact us on **0345 450 4502** or info@highnet.com.



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GLOSSARY

ADSL – Asymmetric Digital Subscriber Line

A broadband technology that delivers very high data transfer speeds over existing telephone lines. More bandwidth is delivered downstream than upstream; i.e. you can download items faster than you can upload. This is ideal for residential connections, or businesses not running a server.

Analogue Lines

The original telephone lines. They are still the common choice in smaller telephone systems, however the technology around today has resulted in a shift toward more cost-effective options such as ISDN and SIP trunking.

Auto Attendant

An automated answering system that uses prompts to guide the caller to the correct department or extension, for example, "For the sales department, press 1".

Bandwidth

A measurement which gives an indication of the amount of data that can be sent through a connection.

BlackBerry

A handheld device which gives you mobile phone, email and other useful functionality away from the office.

Call forwarding

This feature enables incoming calls to be forwarded automatically to a different number, for example, your mobile or home number.

Channel

This is another word for telephone line, usually in the context of digital lines.

CLI (Calling Line Identification) Presentation

Clever technology which displays the phone number of the caller on the receiver's phone display.

DDI – Direct Dialling Inward

This is the ability to assign individual phone numbers (DDI numbers) to extensions, faxes, computers and departments, enabling callers to dial them directly and automatically through the switchboard without having to go through a receptionist.

DECT – Digital Enhanced Cordless Telephony

DECT cordless handsets provide wireless communications within an office, building or site, and they can be fully integrated into the company telephone system.

DSL – Digital Subscriber Line

This is technology that brings high-bandwidth information to homes and small business over telephone lines. It can carry both data and voice signals. (See ADSL and SDSL)

IP – Internet Protocol

This is the generic term used to describe the way that voice and data signals can be sent between devices connected to a network, including across the internet and local area networks.

IP PBX

IP Telephone System

IP Telephony

IP Telephony is the use of IP signalling methods to send voice traffic across a data network. It can eliminate the need for separate voice and data networks by converging all traffic on one network, and it provides a wide range of other benefits for business phone users.

IP/VoIP Gateway

A gateway for existing telephone systems, converting traditional telephony traffic into IP for transmission over a data network. Using an IP gateway can be considered as a 'migration path' towards IP Telephony, as you can gradually transfer to IP Telephony, whilst adding longevity to your existing telephone system.

ISDN – Integrated Services Digital Network

ISDN is a digital public network for voice and data communications with charges for line rental and calls. ISDN is available as 'ISDN2e', where the lines come in pairs, or as 'ISDN30e' which comes in groups of up to 30 lines, the minimum order being 8.

LAN – Local Area Network

A computer network within a limited area, for example, within a building or a specific floor of a building.

Leased Line

A line provided direct from your premises to another site of your choice, or connecting to the internet. Ideal for data-intensive and larger businesses who want large bandwidth, high reliability (including a Service Level Agreement) and have mission-critical applications to run across it. Also known as a 'private circuit'.

Network

A computer network consists of two or more computers connected to each other so that they can share and exchange resources.

PBX – Private Branch Exchange

A private business telephone system.

Pots vs. Pans

One of our favourite acronyms: Plain Old Telephone Systems versus Pretty Amazing New Systems. We can help with either.

PSTN

The public switched telephone network which was traditionally analogue, but now includes digital (ISDN).

QoS – Quality of Service

This is used to provide acceptable voice quality across IP networks.

SDSL – Symmetric Digital Subscriber Line

A broadband technology that delivers very high data transfer speeds over existing telephone lines. The same bandwidth is delivered downstream and upstream; i.e. you can download items as fast as you can upload. This is more appropriate for businesses running a server.

SIP Trunking

In order for your telephone system to be fully IP enabled, you will need a SIP trunk. A SIP trunk is a pure IP connection between your premises and the national telephone network. SIP Trunks can work on broadband and other types of data connectivity such as leased lines.

Smartphone

A mobile phone which is like a mini-computer and can browse the internet, receive email and let you work on documents and spreadsheets whilst on the move.

Soft PBX – Soft Phone

A software application providing server-based telephony, for example, a soft phone on your laptop allows you to make calls from it.

Telephone Extensions

The number of extensions you will require depends on how many staff you have needing desktop phones.

Trunk

Not to be confused with the front end of an elephant, in telephony a trunk is just another way of saying a 'line' or 'channel' that you need for making a call.

Unified messaging

This system provides one centralised mailbox for all email, voice and fax messages, and all messages can be viewed, replied to, saved or deleted in this one inbox.

Voicemail

Allows callers to leave messages in individual mailboxes. These messages can often be retrieved remotely.

VoIP – Voice over Internet Protocol

VoIP=IP Telephony.

VoIP is the transmission of voice traffic over a wide area network, VPN or the internet.

VPN – Virtual Private Network

Linking phone systems and/or data networks together across the internet. A VPN is a fast and secure way to transfer data between remote sites.

WAN – Wide Area Network

A computer network that covers a larger area rather than being limited to one building or site.

**This glossary is updated regularly,
so if you have any suggestions,
please email:
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