Around the world, most telecom companies have now set the retirement date on obsolete ISDN and analogue landlines and converted to VoIP.

Most of the telecoms companies in Europe have already converted almost all connections to VoIP and are phasing out landline analogue lines, ISDN PRI and BRI business lines by **2023**.

British Telecom in the UK has moved their date, once again, for the retirement of ISDN and analogue lines to December 2026**.**   By then all landlines will need to be moved to VoIP and all ISDN business lines and dedicated PBX circuits will need to move to VoIP.

In the US, most of the large telecoms companies have already announced the retirement of the ISDN and analogue services and only sell services on VoIP now and **by 2024** most systems will be migrated.

==WHAT DOES THIS MEAN For business users== – you will need to connect using VoIP to the local telecoms provider using one or more of the following;

- connecting your existing telephone system to a VoIP gateway/adapter
- install ip capable hardware to your telephone PBX systems {which can be very expensive}
- install a new VoIP telephony system which will be compatible with your existing telephony system to allow you to migrate gradually from the old PBX telephone system to VoIP as and when it suits your business - keep the original expensive PBX system working until it has reached the end of life and/or end of support contract {no need to buy new telephone handsets}
- Migrate to a cloud based VoIP provider.   There are a vast array of providers that will port numbers to their cloud system and provide a vritual PBX service for your business, but make sure they are providing ALL of the features your business needs AND that their services are cost effective as compared to keeping you own on-site telephony system
  - remember if you use a cloud service and your Internet is down, ALL your telephones will be offline also

==If you are not sure what systems you have still using analogue services give us a call for a no-obligation chat.==

Also the business needs to consider;

- depending upon the nature of the business, you need to consider failover and high availability services to ensure the business is never without the telephony services
- If you have an Internet provision, you will need to check if it will support the VoIP service.   If you do not have an Internet provision, you will need to get one that will support the VoIP service.   Some Internet providers will also be able to supply VoIP services, so you will need to verify their charges and compare alternatives.
- If you want to keep the same telephone number, you will need to plan and pay for the porting of the number to a new VoIP service.

For configurations see our document showing more detailed examples or our document show low cost options

WHAT DOES THIS MEAN For home users – you will need to connect using VoIP to the local telecoms provider by connecting your existing telephones to an analogue to VoIP adapter or replace the analogue telephones with VoIP telephones.

If you have an Internet provision, you will need to check if it will support the VoIP service.   If you do not have an Internet provision, you will need to get one that will support the VoIP service.   Some Internet providers will also be able to supply VoIP services, so you will need to verify their charges and compare alternatives.

If you want to keep the same telephone number, you will need to plan and pay for the porting of the number to a new VoIP service.

Do not just accept the BT move to BT OneVoice – it is usually the most expensive and limiting option !

If you are not sure what equipment you have using analogue services give us a call for a no-obligation chat.

VoIP has many advantages –

- **VoIP calls are usually cheaper** than calls through the old PSTN system because there are more providers competing for your business
- VoIP PBX and telephony equipment or cloud services are usually much cheaper than legacy PBX systems
- **VoIP is rich with features**, normally found in business systems, such as voicemail, call transfer, caller-ID routing of calls, call forwarding, multiple simultaneous calls, multiple telephone numbers {and area codes} can be allocated for inbound and outbound calls to suit your requirements, true mobility { Your connection to the VoIP provider is no longer tied to a landline, so can be access from anywhere in the world where you have Internet connectivity}
- **Lower costs, more options** - Use one provider for services such as telephony, Internet and mobile communications. Having the complete range of all services allows you to reduce costs considerably and, at the same time, enjoy all the possibilities that the new technology offers.
- **Clear sound** - Enjoy excellent voice quality thanks to HD voice technology.
- **Unlimited flexibility** With many VoIP providers, you can take advantage of very short minimum contract periods. Cancellation periods are usually just one month, meaning you are not taking any risks.
- **Work effectively** VoIP provides for optimal communication among all employees, even from abroad or from the home office. Video conferencing, file sharing or instant messaging improve collaboration among employees and with your clients.
- **More parallel calls**   An IP connection allows you to hold a number of phone calls at the same time.
- **Calls – any time, anywhere**   VoIP allows you to make phone calls from anywhere. All you need is access to the Internet, and you will be available for calls on your mobile or office number when you are on the go.
- **Calls from VoIP to VoIP are often free of charge** – even international calls and calls between business offices.
- **Make your office truly mobile**. Use your smartphone to make calls from your office number while you are on the go.

Consider the Risks

- **Internet connection is essential**   - You will need sufficient bandwidth and a stable network for excellent voice transmission via VoIP. A broadband connection with guaranteed availability (e.g.: SDSL or dual ISP) reduces the risk of intermittent crashes and interrupted conversations.

- **Problems in the event of a power failure** - You will not be able to make a phone call if there is no power to the router. Consider using VoIP with a back-up battery (UPS)

- **Consider other equipment** -   Fax machines, credit card machines, entry systems, fire and alarm systems are often connected to the telephone network too. Check with your VoIP provider or the device manufacturer about potential complications when converting to IP telephony

For configurations see [our document showing examples](#)
or [our document show low cost options](#)

Glossary

TERMS	MEANING
VoIP	"Voice over IP" – making phone calls via the Internet and/or private networks
IP	"Internet Protocol" – the protocol used by most business networks and the public Internet
Jitter	variability in latency in the ip packet transmission process
SIP	"Session Initiation Protocol" voip call setup and control protocol
SIP-Trunking	SIP trunking allows one or more simultaneous calls between systems
PBX	"Private Branch eXchange" = the legacy business telephone system
PSTN	"Public Switched Telephone Network" legacy telecom provider network {land lines}
ISDN	Legacy {Integrated Services Digital Network} circuit switched network was used to provide voice and data over a dedicated line to the telephone exchange. BRI = basic rate ISDN provided 2 x 64kbps channels + 16kbps signalling channel used to provide 2 channels, PRI = primary rate ISDN provided multiple 64kbps channels usually with a minimum of 8 channels used to provide data and voice {with 8 simultaneous calls} up to 30 channels per PRI circuit {for 30 simultaneous calls etc…} Expensive rental contracts from the providers and expensive interfaces/equipment on-premises usually required.
aDSL	Asymmetric Digital Subscriber Line {Internet connection over analogue land line – usually to the local telephone exchange DSLAM with speeds up to 18Mbps down and 1.5Mbps up} very limited by distance from user to telephone exchange with speeds falling as distance increases – average speeds of 18Mbps over 1km and only 4Mbps at a distance of 4km
vDSL	Very high speed Digital Subscriber Line {Internet connection over analogue land line – usually to the street cabinet with speeds up to 50Mbps down and 3Mbps up} very limited by distance from street cabinet.
vDSL2	Very high speed Digital Subscriber Line {Internet connection over analogue land line – usually to the street cabinet with speeds up to 200Mbps down and 100Mbps up} very limited by distance from street cabinet
vDSL2+	Very high speed Digital Subscriber Line {Internet connection over analogue land line – usually to the local telephone exchange DSLAM with speeds up to 300Mbps down and 100Mbps up} very limited by distance from street cabinet – average speed 30Mbps at a distance of 1km and only 18Mbps at a distance of 2km
DSLAM	Digital Subscriber Line Access Multiplexer – equipment used to connect the provider to the 'last-mile' copper cabling to the subscriber. The DSLAM connects the provider fibre network trunks to allow multiple subscriber connections into the provider networks.

TERMS	MEANING
FTTC	Fibre To The Cabinet – installed in the street to minimise the distance of the 'last-mile' copper cabling to the subscriber. Providers often refer to this as a 'fibre internet provision' even though it is NOT connecting the subscriber directly to their fibre network.
FTTP	Fibre To The Premises – fibre brings the Internet feed into the property and eliminates the 'last-mile' copper cabling although in many domestic locations the fibre is terminated using the same technology as used in FTTC {vDSL} which limits the speed to vDSL2+ levels. In business connections the fibre is usually terminated directly on the routers within the company network to achieve much higher speeds and remove the delays and single points of failure found in home installations {sometimes called 'Full Fibre' by some providers}
DOCSIS	Data Over Cable Service Interface Specification = used by cable TV providers which permits high speed Internet to be provided over the cable TV network to the subscriber. DOCSIS 4.0 supports speeds up to 10Gbps and downstream speeds of 6Gbps. A viable alternative to the FTTC/FTTP options for those connected to the cable TV network, but can be very expensive.
On-premises systems	Equipment located in the office or home to provide the services rather than using a cloud based solution {no rental costs, but installation and maintenance possible} – for example a VoIP telephone system
Cloud System	Using the services of a provider rather than having equipment on-premises system. {rely on the service provider for dialtone etc. – monthly fees usually apply and flexibility limited to provider contract etc.}

If you are not sure what systems you have still using analogue services give us a call for a no-obligation chat.

For more information and/or unbiased advice https://www.kccvoip.com