Around the world, most telecom companies have now set the retirement date on the landlines and obsolete ISDN 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 **2024**.

British Telecom in the UK has set their date for the retirement of ISDN and analogue lines to **December 2025.**   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.   FAX, franking machines, monitoring and alarm connections will need to be digitally upgraded or adapters installed before December 2025 and WILL REQUIRE CONNECTIVITY VIA THE INTERNET AND/OR COMPANY NETWORKS.

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 end of 2024** most systems will be migrated.

==WHAT DOES THIS MEAN For business users== – you will need to connect using VoIP 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 and tied to specific manufacturers}
- 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 vrirtual 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

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.

Call us for an unbiased chat without obligation

<mark>WHAT DOES THE PSTN SWITCH-OFF MEAN For home users</mark> – you will need to connect any telephones and landline devices using VoIP by connecting your existing telephones to an analogue to VoIP adapter (ATA) or replace the analogue telephones with VoIP telephones {VoIP deskphones, DECT VoIP telephones, smart phone, softphones etc.}.   You are NOT TIED TO YOUR LOCAL TELECOMS PROVIDER – you can shop around for the best deal. You can port {move} your existing telephone number to an alternate provider very easily and without much cost and stop paying for the landline and any aDSL services etc.

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 {most now do support VoIP}.   Some Internet providers will also be able to supply VoIP services, so you will need to verify their charges and compare alternatives a separate ITSP {such as Callcentric, SIPGate, Telnyx etc.} . AGAIN – shop around and get the best deal for your location and requirements.

If you want to keep the same telephone number, you will need to plan and pay for the porting of the number to your ITSP {Internet Telephony Service Provider}. You can also add new numbers to the same service at installation or at any time in the future at very little cost.

If you have an aDSL Internet provided via a landline, this may also becoming obsolete soon. You need to plan your Internet provision using fibre, 4g/5g or satellite. It is well worth comparing the providers for your area and compare the technologies on offer and the speeds they provide.   Your new Internet provision(s) will need to provide the connectivity for all the data, voice and video.

EXAMPLE 1 -   BT customer paying £ 21 per month for land line rental plus £14 per month for ADSL Internet service -   installing an alternate Internet service such as a 4G router and pay as you go data subscription for an initial outlay of £ 60 for the router plus £ 17 per month for 100GB data service and porting the landline number from BT to the new provider with a one-off cost of £30 ;

- **Original subscription payments = £ 45 per month = £ 540 per year**
- Implementation and equipment costs etc. one-off payment = £ 90
- Replacement for landline telephone for new VoIP DECT handsets from £130 – or using softphone on PC and smartphones £ zero cost
- **New subscription payments = £ 17 per month   =   £ 204 per year**
- **i.e.   the moves pays for itself in the first   7 months**

EXAMPLE 2 -   BT customer paying £ 21 per month for land line rental plus and has separate fibre Internet from Virgin -   porting the landline number from BT to the new provider with a one-off cost of £30, new   ;

- **Original subscription payments = £ 21 per month = £ 252 per year**
- Implementation and equipment costs etc. one-off payment = £ 10
- Replacement for landline telephone for new VoIP DECT handsets from £130 – or using softphone on PC and smartphones £ zero cost
- Subscription continues with Vigin + any subsciptions for new ITSP
- **i.e.   the moves pays for itself in the first   2 months**

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 {often local 'on-net' calls are free and calls to national numbers should be less than 1 penny per minute} Call bundles and deals are available, but it is worth comparing and costing out the alternatives to suit your requirements and volume of calls made/received

- **VoIP PBX and telephony equipment or cloud services** are usually much cheaper than the legacy PBX systems you are replacing

- **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 via smart phone, call messaging and voicemails can be sent to your email so you can listen and respond from anywhere in the world…. {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** - Using 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. Businesses may prefer to spread the rick by using several providers, if one is out of service, the system automatically uses an alternate route to make your call.

- **Clear sound** - Enjoy excellent voice quality thanks to HD voice technology

- **Video calls** – are supported on many provider networks with no extra cost

- **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.   Prices can be very low – shop around for the best solution for your location and requirements

- **Work effectively** VoIP provides for optimal communication among all employees, even from abroad or from the home office. Video conferencing, unified voicemail {delivered to you via email}, 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 and some allow free conference calling – calls into you house can be routed direct to the office or direct to the teenager = no more engaged lines
- **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 from the smart phone, hotel, café, pub, aeroplane and car etc.
- **Calls from VoIP to VoIP are often free of charge** – even international calls and internal company calls between business offices nationally and internationally
- **Make your office truly mobile**. Use your smartphone to make calls from your office number while you are on the go
- **Use VoIP** features to improve the business image with auto-attendants, welcome messages for incoming calls and virtual call center functionality

BUT 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.: Fibre, 4G/5G, SDSL or dual ISP) reduces the risk of intermittent crashes and interrupted conversations.   Consider backup provisions and load balancing options.
- **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) or have a plan to relocate or use smart phones during local power outages

- **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. You can use an ATA {analogue telephone adapter} to connect legacy analogue devices to the digital voip networks.

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 - variation in delay can make the telephone audio quality choppy and unusable due to poor Internet or overloaded networks
QoS	Quality of Service – protocols used by VoIP and Video networks to ensure voice and video streams take priority over general Internet and data packets during any congestion and/or overloaded networks
Softphone	Software providing the telephone functionality on your PC, laptop, tablet or smart phone
Deskphone	Usually a hardwired telephone device design just for making and receiving calls
Analogue Phone	A telephone that connects using analogue (landline) signalling and media for making and receiving calls
Digital Phone	A telephone that uses digital conversion of analogue signalling and media for making and receiving calls {note – this can also mean proprietary telephones that will only work on specific manufacturers equipment and/or networks – such as some business phones form Avaya, Mitel, NEC, Panasonic etc.}
SIP	"Session Initiation Protocol" voip call setup and control protocol
VoIP Phone	A telephone that uses VoIP protocols and digital conversion of analogue signalling and media for making and receiving calls – {usually SIP, but can also be IAX, SCCP, H323 etc..}
ATA	Analogue Telephone Adapter {converts an analogue phone to a voip phone etc}
SIP-Trunking	SIP trunking allows one or more simultaneous calls between systems
PBX	"Private Branch eXchange" = the legacy business telephone system
VoIP PBX	The modern telephone business telephone system that connects via IP via the Internet, business networks and/or trunks {SIP trunks, IAX, MGCP, H323 etc.}
PSTN	"Public Switched Telephone Network" legacy telecom provider landline network
SIP-Trunking	SIP trunking allows one or more simultaneous calls between systems
ITSP	Internet Telephony Service Provider {the provider of the Internet connectivity and the DID telephone numbers you use to communicate
Cloud System	Using the services of a provider rather than having equipment on-site {on-premises system}
DID	Direct Inward Dial {call DDI in the UK} basically a telephone number that allows your calls to be routed through an ITSP

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

See also ;   document extract showing options for home and business and
document extract showing low cost solutions and price guide for VoIP