

[Introduction]

Embracing the future of UK telephony

In 2025, telephony in the UK changes forever, thanks to the most fundamental upgrade to the way we make and take calls since the 1980s.

The ISDN telephone network was introduced in 1986, and in three years time it is being switched off. The underlying PSTN network is being phased out, too. From that date on, all telephony will be internet-based.

In this guide, we'll take you through everything you need to know about the ISDN switch off, in simple, straightforward terms. We'll talk about why it's happening, when it's happening and, most importantly, what it means for you.

Let's start with a couple of definitions:

- ISDN stands for Integrated Services Digital Network. ISDN uses the traditional copper telephone network
 for both voice and data. In 1986, this was revolutionary. You could make phone calls over your telephone
 line, and also transmit digital information. It paved the way for the first wave of internet adoption a few
 years later.
- PSTN stands for Public Switched Telephone Network. It's basically the telephone system that's been in use since the 1880s. You might know it as the 'landline'. People talk about the ISDN and PSTN switch-offs somewhat interchangeably, because the end result is the same.



[Why fix what ain't broke?]

The question many people ask at this point is why it's happening at all. Your phones might work perfectly well. Your internet connection seems OK. Why fix what ain't broken?

The answer is that, while ISDN isn't quite broken, it is beginning to creak. The arrival of modern, digital communications has stretched the ISDN network to the limit.

At the same time, broadband internet connections have become much faster than ISDN can handle. Quite simply, it can't keep up.

But it's not just that ISDN is becoming obsolete. It's also that a better, more cost-effective alternative is now widely available. BT has decided to switch off ISDN to speed up the widespread adoption of more advanced and efficient communication technologies. We'll take a look at what those are later in this guide.



A timeline to the big switch-off

2025 is a way off yet, so there's no need to panic. But you should start thinking about the ISDN switch off if you're currently using a traditional on-premise PBX-based phone system, or even just a single landline phone.

According to one study, less than one in ten businesses is prepared for what will be the biggest shake up to telecommunications for more than 30 years.

That's important, because while the network isn't being switched off until December 2025, the countdown to that date has already begun.

For example, BT has now stopped selling new ISDN lines (through its Wholesale Line Rental product, or WSR) in a number of trial areas.

That means if businesses in those places want to add seats or services, they have to switch to an internet-based voice service.

The number of areas with these "stop sells" in place is growing all the time, and a national WLR stop sell rollout begins in little more than a year, in September 2023.

You'll still be able to use your old ISDN-based phone system right up until the switch off date in 2025, but stop sell means you won't be able to expand or upgrade it. After that date, if you haven't sorted an alternative for yourself, you'll be forced onto basic internet-based telephony services that might not be ideal for your needs.

Our advice is to start researching the right ISDN replacements now, so you can find the best fit for your business. If you leave it too late, you may find yourself with an inappropriate phone system and at the back of a very long queue.



2025 sees the traditional BT 'landline' network switched off for good



[What does it all mean for your internet connection?]

ISDN and PSTN services run along the old copper telephone network, so what happens to copper-based internet service when the phones get switched off? Will ADSL and FTTC services be switched off, too?

The short answer is that they will be eventually, but on a slightly longer timeline to ISDN.

Openreach has committed to rolling out ultrafast full fibre broadband to 25 million homes and businesses by December 2026. Full fibre is the replacement for copper services.

Openreach says that when 75% of the homes and businesses connected to a particular exchange can get full fibre, you won't be able to buy copper products like ADSL and FTTC if full fibre is available at your premises.

It's all a bit confusing, but basically it means that your new digital phone service may run across an ADSL or FTTC connection in the short-term. But in the next half decade or so, most of the country will be switched to full fibre.

Things are already starting to change. When ordering new broadband, you may already be offered a SOGEA service, which stands for Single Order Generic Ethernet Access, though suppliers may label it differently. SOGEA is an FTTC-grade internet connection without the phone line. After the ISDN switch off, existing FTTC services will be migrated to SOGEA.



What is internet based telephony?

So what does all this mean for you? Well, most importantly, it means that if you're reliant on ISDN for telephony, you'll have to move to an internet-based service before the 2025 switch-off date.

In other words, you'll have to switch to some flavour of VoIP (Voice over Internet Protocol).

What's VoIP? The very word may bring a shudder to those who remember the early noughties and the first incarnations of Skype and other internet telephony services.

Back in those dark days, VoIP promised much but often delivered frozen calls and drop outs. It was too unreliable for everyday business use.

But that has changed. As connectivity has improved, from ADSLI and ADSL2 to FTTC and now full fibre, VoIP has become more reliable. Today, it's a highly efficient and cost-effective way of making and taking calls.

And the latest iterations of VoIP do much more than that. They can combine voice and video, and at the same time provide integrated conferencing, chat, instant messaging and collaboration services. They can come with a host of call management features. They can be used to share screens and pool ideas.

VoIP is also ideal for equipping new remote and semi-remote employees. Because they're internet based, VoIP services can be accessed from anywhere, via handsets or softphone apps on laptops, tablets and smartphones. That means they're perfect for today's highly mobile workforce.



What are the alternatives to ISDN?



VoIP is an umbrella term for a range of services that channel voice data over the internet, but they all come with a different range of features, costs and benefits. The two main ones are SIP and hosted voice (aka hosted PBX). The right one for you will depend on your needs. We'll provide a brief overview of the alternatives available on the next page...

SIP

SIP is something of a halfway house between traditional telephony and cloud communications. It's a way of adopting IP-calling without ditching your PBX investment or reinventing the wheel.

SIP Trunking is an on-premise system that modifies your existing PBX to combine a full VoIP phone system with multimedia communications in one package. SIP Trunking effectively allows companies to divide bandwidth between voice and data, leading to cost savings and easier scalability. It's not as flexible as cloud, but it does offer many of the benefits of internet voice.

Cloud Communications

Many companies looking to replace ISDN now make the leap straight to cloud communications and Software as a Service (SaaS) solutions. That means the service is hosted in the cloud rather than on-premise, and of course all calls are routed through the internet. A third party does the hosting. There are various flavours of cloud-based telephony services but they can be boiled down into two main types:

- Basic IP Services: Basic Skype-like services offer full VoIP capabilities, basic call management (like voicemail) and mobile integration, so employees can make and take work calls from a smartphone. Many also offer chat and video calls.
- Unified Communications (UC): UC services are complete cloud-based communications solutions in one package. They tend to include a full suite of multichannel options, like video, chat, IM and conferencing, along with collaboration tools like screenshare and presence. A softphone app means employees can take the service anywhere and make and take calls via handset, smartphone, computer or laptop.

Different solutions offer different things, but UC will often include powerful call handling features like auto-attendant, IVR (Interactive Voice Response), hunt groups and wallboards, making them suitable for small contact centres. Full-featured solutions also offer analytics and reporting to help businesses get the most from their contact teams.

So what's the right one for you? Very small offices might be happy with simple VoIP services combining voice and basic call management. Larger offices will want video conferencing and perhaps collaboration tools for remote teams. SIP might be the best solution for businesses that still want to squeeze value from an on-site PBX.

[The takeaway]

VoIP-based services offer a range of benefits over ISDN equivalents, so to some extent the sooner you switch the better.

But if you're happy with your current setup, or want to drive full value from an ISDN-based PBX system, there's no need to do anything right now.

Just be aware of the ISDN switch-off, and the need to act before the deadline. When you have a spare moment, start thinking about the alternatives on offer and the VoIP service that might make the best fit for your business. If you need to talk it through, the Vaioni team is always happy to help.

Finally, remember that it's not just about telephony. When you start making and taking calls through your internet connection, you need that connection to be up to the task.

You may need to upgrade your connectivity, especially if you want to make use of all the

benefits of unified communications. Again, if you're in any doubt, we'll be happy to audit your internet connection and make sure you have the speed and capacity for the post-ISDN world.

In conclusion, the ISDN switch-off is on its way, but there's nothing to be overly concerned about. If you act in plenty of time, the switch to VoIP services can be painless, and at the same time make your business more productive and efficient. Think of it as an opportunity as much as a challenge. The ISDN switch-off is a chance to revolutionise your business communications.

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