



**NFON**  
Cloud Telephone System

# Preparing for the ISDN Switch Off

Everything you need to know

The new freedom in business communications

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As we move closer to 2025, you're probably starting to come across mentions of the ISDN Switch Off.

Trade publications and the business press may be talking about the impending switch off date, but there's not a great deal of information as to what these changes mean for businesses, and what you should do in order to prepare.

That's why we've put this eGuide together, to explore everything you need to know about the impending ISDN Switch Off, including...

- What it means
- Key dates and deadlines.
- How it will affect you
- How you can effectively prepare for the future of communications.



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# What? When? Why? The key need-to-knows about the ISDN Switch Off

We thought we'd start by giving you a quick, top-line rundown of the key things you need to know about the impending ISDN Switch Off.

## What is the ISDN Switch Off?

In the simplest terms possible, it's a case of out with the old, in with the new.

BT Openreach (who introduced ISDN back in 1986) have announced the switch off of the existing telecommunications network. Businesses will have to move their landline phone systems to a fully internet-based protocol.

## When is the ISDN Switch Off happening?

With 15 million phone lines affected across the UK, the process is being carried out in phases.

As of December 1st 2020, the 'stop sell' phase of the ISDN Switch Off has already begun. This process is scheduled for completion by September 2023, from which point Openreach will not be accepting any more ISDN orders.

The ISDN network will be fully switched off (and so be unusable) in 2025.

## Why is the ISDN Switch Off happening?

Our current network infrastructure is no longer fit for purpose. And the drawbacks are now outweighing the benefits.

The world of communications technology has evolved dramatically since the installation of ISDN, and while this network has seen some improvements and attempts to keep it up to date, we have now approached a tipping point.

The broader progress of internet-driven communications has outpaced the ability of business landlines to adapt and evolve.

### Internet Protocol has overtaken ISDN

The investment in superfast internet products and the nationwide rollout of its infrastructure has presented a very viable alternative to ISDN.

Figures also show that the number of IP circuits surged ahead of ISDN connections in 2015, and has remained in front ever since.

### Internet Protocol makes better business sense

While there has been consistent effort to update the ISDN as communications technologies have evolved, internet-based phone systems are now simply the better option overall.

While there were initial concerns about such things as voice quality during the early days of Skype, the connection, consistency and quality of IP telephone systems is better than ever before.

IP telephony is enabling businesses to significantly enhance their digital communications capabilities and gain a real competitive advantage (more on the benefits of IP telephony later).



## Digging Deeper: defining key terms.

So, now you are aware of the key need-to-knows of the situation, let's dig a little bit deeper. What do initialisms like ISDN and PSTN actually mean? Why do we need something new? How will internet-driven phone systems work? Are there a range of solutions? Which one is best?

First, let's define some key communications terms businesses should know

### PSTN

Public Switched Telephone Network

The PSTN refers to the traditional physical phone lines we all know.

Originally a network of fixed-line analogue telephone systems, the PSTN is now almost entirely digital in its core network, with the analogue line connecting the 'last mile' of communication.

PSTN refers to the combined telephone networks around the world, including mobile networks.

### ISDN

Integrated Services Digital Network

The ISDN was implemented to allow more types of data from different systems to be transmitted over the same network.

Rather than replacing PSTN, ISDN has built upon it, allowing for everything from voice and SMS texts, to pictures and video to be transmitted through the UK's phone lines.

### IP

Internet Protocol

Internet Protocol is the term used to describe the exchange of phone calls and other forms of data-driven communications carried out over the internet.

Today, all communication carriers are using an IP infrastructure for at least a part of their voice services.

For those still using an ISDN service, the PSTN connects the 'last mile' of their communications, while for those who switched already, ALL communications data is transferred exclusively via the internet.

# Timeline: A brief history of telecoms.

**1876**

An improvement in telegraphy enables voice to be transmitted over wire.

**1960's - 1980's**

The telecoms industry begins plans to digitise.

The term Integrated Services Digital Network is coined in 1971.

End-to-end circuit-switched services, known as the Broadband Integrated Services Digital Network (B-ISDN) are devised in the early 1980s.

The B-ISDN vision is overtaken by the disruptive technology of the Internet.

In 1986, the Integrated Services Digital Network is fully rolled out across the UK.

**1946**

Mobile telephone services are introduced in the US.

Mobile transmitters and receivers are connected to the PSTN.

**2015**

BT Openreach states its intentions to switch off the PSTN and ISDN.

**2017**

BT Openreach officially announces its plans to **retire the Integrated Services Digital Network**, with an aim to do so completely by 2025.

**2020**

The Stop Sell process of the ISDN Switch Off begins in December 2020.

**2025**

ISDN lines are switched off for good.

**2023**

The Stop Sell rollout completes. ISDN lines are no longer available for purchase or renewal.



## How the Switch Off will roll out.

The ISDN is operated by hundreds of different regional exchanges spread across the country.

Openreach's switch plan is to gradually introduce a 'stop sell' date for each exchange, after which no new ISDN services will be available from that exchange. This includes updates or extensions of existing services.

The first region to be phased out was Salisbury in December 2020.

For a list of all regions and their 'Stop Sell' dates, [click here](#)

September 2023 has been identified as the date by which this 'stop sell' process will have been rolled out nationwide. From then on, it will not be possible to be issued an ISDN service.

The switch off itself is scheduled for completion in 2025. From then on, it's IP or nothing!



## What will the impact of the ISDN Switch Off be?

The Switch Off rollout will impact every single Openreach service that uses copper lines.

As well as PSTN and ISDN services, this will also affect all other services that makes use of this infrastructure, including:-

- Analogue voice telephone services
- Dial-up devices
- Fax machines
- Alarm systems
- Modems
- Building management systems
- Lift lines
- PDQ machines
- Broadband services that run over an analogue telephone line such as ADSL and Fibre to the Cabinet (FTTC) broadband.





## Internet Protocol: what comes next

The ISDN Switch Off may not be complete until 2025, but the time to upgrade your business phone system is NOW.

It's an opportunity to move your business landline into the future.

With the huge benefits that can be realised in cost savings, performance, productivity, flexibility and security, a delay in switching phone systems is a delay in maximising the potential of your business.

Start planning and researching now, to give yourself the time needed to weigh up the options and make the best choice for you and your business.



## What are the different options for businesses switching to an IP?

Broadly speaking, the two leading Internet Protocols available to businesses are SIP Trunking and Hosted VoIP.

### SIP Trunking

SIP stands for Session Initiation Protocol. A SIP trunk is an in-house, hardware-based system that integrates with your existing phone lines to connect them to the internet.

SIP Trunking is a direct replacement for ISDN, rather than a migration to a new system.

This makes SIP Trunking the best option if you wish to retain on-premise phone hardware, and for businesses that wish to directly manage and have complete ownership of their telephony systems.

However, connecting to SIP requires a relatively modern phone system. Without one, you are looking at a hefty capital expense.

### Hosted VoIP

VoIP stands for Voice over Internet Protocol. Unlike SIP Trunking, VoIP is a software-based system. Put simply, it moves your phone system from your company premises to the cloud.

While your office could still have desk phones if required, the service itself is managed and provided by a third-party service provider, paid for on a monthly subscription basis, and hosted at an off-site data centre (or multiple data centres in different locations).

The true power of Hosted VoIP or 'cloud telephony', is that it can be accessed from all devices across your organisation.

This means your entire team can access the same phone capabilities wherever they are in the world, and using any device – all they need is an internet connection.



## The benefits of Hosted VoIP

A cloud-hosted telephone solution is the clear next step, if you:

- Have an old phone system in place
- Have little capital expenditure available
- Have limited space for physical hardware
- Want to avoid the complexities that come with owning and managing an in-house telephony system

As well as helping you survive the ISDN Switch Off and keep your communications up and running after the year 2025, hosted telephony also brings a number of additional benefits...

### Cost savings

Pay for what you use at a fixed and manageable monthly rate. No upfront or 'hidden' costs. Plus, save 90% on international calls, 75% on operational costs, and 30% on phone bills<sup>1</sup>.

### Make hybrid working a reality

The 'anytime, anywhere' flexibility of cloud telephony is perfect for businesses looking to embrace more hybrid working models. Whether an employee is in the office or out on the go, they can access the same communications capabilities as they would on their desk phone, from any device.

### Boost productivity and collaboration

Struggling with communication bottlenecks? Cloud telephony makes your whole team more contactable, so you can make the right decisions faster. Managing a contact centre team? Cloud telephony will support quality assurance initiatives and ongoing training for your agents.

### Stress-free setup

Cloud migrations can be completed in a matter of weeks. Implementation, setup and maintenance are all handled by your service provider, free of charge, all while retaining your original number.

### Scale up instantly

Adding new users is limitless, and only takes a few clicks, meaning you can quickly expand your team and have them up and running in no time. Onboarding is easier than ever.

### Stay futureproof, forever

Just like other cloud-based software, cloud telephony systems are updated automatically and instantaneously, so you are always running on the best technology with the latest features.

Put simply, cloud telephony makes teams work better.

<sup>1</sup> <https://financesonline.com/voip-statistics/>

## ISDN Switch Off: Takeaway points

The ISDN Switch Off might not be complete until 2025, but the phasing out process has already begun, and the far-reaching impact of this development means a systems upgrade is unavoidable.

Communications technology has come a long way since the 1980s, and the ISDN is no longer fit for purpose. Don't treat the Switch Off as a deadline, but as an opportunity to take your communications to the next level. The time to act is NOW.

Cloud telephony provides a wide range of operational benefits for businesses

- Cost savings and efficiencies
- The flexibility to make hybrid working a reality
- Greater productivity and collaboration
- Rapid and limitless scalability
- Automated updates, keeping you on the best technology at all times.

**Ready to plan your move from ISDN?**  
**Arrange a chat with one of the NFON team today.**

# About NFON AG

**Headquartered in Munich**, NFON AG is the only pan-European cloud PBX provider – counting more than 45,000 organisations across 15 European countries as customers.

With Cloudya, NFON offers an easy-to-use, independent and reliable solution for advanced cloud business communications. Further premium and industry solutions complete the portfolio in the field of cloud communications.

With our intuitive communications solutions, we enable European companies to improve their work a little, every single day. NFON is the new freedom in business communication.

## Want more? Get more!

For more information on equipping your business with high-performance communications, contact us:

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Call: **020 3740 6740**

The NFON Cloud Telephone service and access to Emergency Services (999,112) will not be available during any power cuts and network outages affecting the Customer.

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