

EBOOK

The ISDN & PSTN Switch Off

What the WLR withdrawal is all about, and why it's time to start talking.



The ISDN & PSTN Switch Off

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Another digital switchover

Another switchover

As was the case for television in and around 2010, the time for the 'digital switchover' of telephony has been announced and the plans are already underway.

Though the impact of losing your TV signal would have been an issue, imagine the impact of losing the ability to make or take calls for your business?

Wavenet are an industry-leading voice and data provider, and in this guide we'll tell you everything you need to know about the impending WLR switch off, and some helpful steps you can take now to ensure you and your organisation are prepared, whatever your voice requirement or setup.

If you're familiar with the WLR and what it means, skip to page 8 and we'll show you the ways we can help unify your communications and futureproof your solution, and the partners we work with to deliver what you need.

16 million analogue connections and ISDN services won't work in the UK anymore after 2025.....



We've included a helpful glossary of terms at the back of this guide, if you aren't familiar with some of our industry speak.requirement or setup.

Setting the scene

Setting the scene

In as far back as 2017, BT announced its intention to close the PSTN (Public Switched Telephone Network) in 2025. The PSTN has been in general use since the late 1800s, and is comprised, in part, by the underground network of copper wires that has provided homes and organisations with a reliable means of telephone communications throughout that time.

This technology is becoming more and more expensive and time-consuming to maintain, and with better, newer Internet-based voice technology now more comprehensively and affordably available, the decision has been made by BT and Openreach to start scaling it back.



Timeline of WLR product withdrawal



Source: <https://www.openreach.co.uk/cpportal/products/product-withdrawal/wlr-withdrawal>

Take a look at a recent bill...

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The switch off will affect businesses and organisations in many ways. We recommend you take a look at a recent phone bill to see if any of the following items are listed:

- Analogue line
- Business line
- PSTN line
- ISDN30
- ISDN30e
- ISDN2

These could be used within your business for:

- Alarms
- lift lines
- PDQ machines
- Fax machines
- Modems

If you have on premise PBX/Telephony Solution you may be affected.

The WLR withdrawal may affect you or your organisation in more ways than you might have initially thought. Have you considered the following?

ISDN Lines generally connect to a telephone system, installed within a building. The lines can be replaced with an IP based alternative, SIP Trunks, which can then be connected to the existing telephone system. Businesses may also want to consider moving away from a traditional telephone system to a Cloud based telephony solution.

Single Business Lines. If you're still limited by a single line for your business, this is a great opportunity to make efficiencies and savings. As according to TechCo, small businesses that switched to VoIP saved 40% on local calls and 90% on international calls.

Lines with 3rd party equipment are used for many 3rd party products, such as alarms, emergency lines, fax machines, PDQ terminals. Understanding these products will allow Wavenet to guide your business to the most suitable alternative.

Lines for Broadband. If you use an analogue line for your broadband connectivity you will need a new solution to be able to get online. With an ever-increasing number of organisations moving their workload to the Cloud, it's important your future connectivity is able to meet the requirements of increased traffic.





What next?

Essentially you have 3 options:

1. Do nothing, and risk the consequences to your business of the WLR withdrawal.
2. Start the process of assessing your estate to alleviate any future panic by sharing your findings and allowing the Wavenet team to assist in your digital transformation
3. Engage with an industry professional in Wavenet, and put together a staged plan that will result in a new, future-proofed phone system in advance of the switch off in 2025.

We think options 2 and 3 are the best options, and Wavenet are here to help you on that journey. Over the next few pages, we'll detail the products and services we can deliver.

Wavenet at a glance

We are a Managed Service Provider of industry-leading cyber security, communications and technology solutions.



450+

trained engineers



900

passionate employees



20+

years operation



Service

excellence



Crown
Commercial
Service
Supplier

Our solutions...

Our solutions...

Over the next few pages we'll detail some of the products and services we can offer as part of your solution to the WLR switch off. Consider all the things you like about your current set up, alongside perhaps some new features that would be welcome additions.

- Internet connectivity
- SoGEA
- SoADSL
- FTTP
- Ethernet circuits
- On-Premise / Cloud telephony
- UCaaS
- SIP Trunks
- Contact Centre / CCaaS
- Microsoft Teams
- 4G/5G Mobile

We will work with you to make sure any new phone system, upgrade or migration of analogue lines will be an improvement, scalable, and fit-for-purpose.



On Premise / Cloud Telephony

According to a 2019 Nemertes report, 67% of organisations are already deploying part of their UC solution in the Cloud.

With technological advances over the last decade, business have been able to move from just emails and phone calls, to video conferencing, instant messaging and more.

Accordingly, there are a plethora of options for VoIP & Cloud telephony that all promise increased flexibility, higher productivity and cost reductions.

Key benefits include:

- Scalable to all business sizes
- Typically cheaper call charges
- No big onsite hardware to manage and maintain
- Mobile app integrations
- Full reporting and usage / billing analytics

SIP Trunks

SIP trunks offer a direct replacement for traditional ISDN lines. They can be connected directly to a telephone system or can be supplied with a gateway which will allow them to be connected to almost all legacy telephone systems.

SIP trunks have been designed to be monitored proactively, so our core network knows when a SIP trunk is not connected to the local telephone system. This proactive monitoring enables the configuration of automatic diverts, ensuring that incoming calls can be answered effectively during major outages such as power cuts.

Key benefits include:

- Proactive monitoring
- Business Continuity enabler
- Any UK STD codes can be added
- Individual Diverts can be applied at DDI level



Microsoft Teams Voice

Microsoft Teams Voice is a simple and cost-effective solution, allowing organisations of any size or industry to make and receive calls to external landlines and mobile phones from the Microsoft Teams application.



This gives you the power to manage all your collaboration and communication through one easy-to-use interface.

This service allows those already using Teams for collaboration, to add voice functions and a variety of additional call control features for its users, enhancing Teams into a comprehensive cloud UC solution to include enterprise grade telephony.

Key benefits include:

- Turn Teams into a feature rich solution for internal and external channels
- Unify your communications and collaboration tools into one industry leading platform
- Smooth and low-risk transitions with no new hardware or complex considerations
- No expensive Capex for new hardware investments
- Typically reduced telephony bills
- Optimise existing Microsoft 365 licenses

Contact Centre

For businesses or organisations receiving and making large numbers of calls, contact centre functionality is a must. Many may think you need to be a large enterprise to have a contact centre, but this is not the case. With today's technology, smaller and medium sized technology can quickly implement one with out the need for Lots pf space, big budgets or so much time and resource.

A good contact centre helps with delivering exceptional customer experiences which in turn helps foster long-lasting customer loyalty. Get it wrong, and the impact on your organisation could be disastrous.

Key benefits include:

- Timely feedback, intelligent
- Coaching and collaboration tools
- New ways of working and flexible workspace
- AI-powered recommendations for agents, supervisors and contact centre leaders
- Business continuity and security as standard
- Manage productivity and power insight with live monitoring and analytics



Small, Medium Business Broadband

Currently, it's commonplace to have broadband as an add on to a telephone line, meaning you may only be paying for an existing fixed line in order to facilitate a broadband connection that runs over it. The need for a line on it's own for an actual phone, is somewhat reduced, due to the rise of mobile and Internet-based comms.

In response, Openreach has two main products, FTTP (Fibre to the Premise) and now SoGEA, which will allow for the provision of broadband without having to rely on the separate maintenance of a fixed line to the premises. Essentially it flips the current arrangement, by making a phone number the discretionary "add on" to a broadband connection, rather than the other way around.

Key benefits include:

- Enjoy broadband at home or office without the need to keep paying for a phone line
- Ability to add a competitive phone solution to your FTTP or SoGEA connection
- Option to retain existing telephone handsets with options to retain your telephone number

Enterprise, High Capacity Broadband

Wavenet can offer a range of secure connectivity services for businesses or organisations of any size or set up. What you require, will of course depends on your situation.

Wavenet can offer everything from Fibre to the Premises (FTTP) to high capacity ethernet services with fixed SLAs.

Bear in mind the SLA that you will require, and whether you require a dedicated or contended connection.

Through our own dedicated Cloud, and with integrations such as Virgin Media Business, Talk Talk and BT, we can provide the best connectivity based on your area.

Key benefits include:

- Robust internet connectivity
- Optimum speeds for locations
- Network of carrier class T1 providers
- Tailored SLAs
- Option to retain existing telephone handsets with options to retain your telephone number





Mobile

We provide a totally independent and impartial service ensuring you receive the best product for your business, we are not driven by commissions and targets and have industry and technology expertise to help you with your choice.

We have direct mobile and tablet plans across all major networks with the widest and latest range of devices. As specialists within the data and cloud sectors you can be assured that your mobile solution isn't just a tariff to suit you, but a well-developed mobile strategy aimed to increase flexibility at the lowest costs.

Key benefits include:

- 4G/5G
- Partner agnostic
- Mobile solutions as part of your wider communications strategy
- Bespoke tariffs
- Added flexibility

Who we work with

Enterprises: Large corporations in sectors such as finance, technology, manufacturing and retail

Helping to protect their sensitive data, networks and systems.



Small and Medium-sized Businesses (SMBs)

Working to provide cost-effective solutions tailored to their specific needs.

Healthcare Providers: Hospitals, clinics and healthcare organisations

Helping to secure patient information, comply with data protection regulations and ensure the continuity of critical healthcare services.



Educational Institutions: Schools, universities and educational institutions

Helping to protect student data, research and intellectual property, as well as secure their network infrastructure.

Customer quotes



The proof of concept went as well as it possibly could have, the process of integrating new systems and protocols was managed seamlessly.

Birmingham Community Healthcare NHS Foundation Trust



The cybersecurity services provided have given us, as a business and as individual users, the confidence to resume normal working practices after the 2019 cyber-attack.

Balfours



The stable infrastructure and support they provide for us allow us to keep doing what we do with new and exciting ways to enhance the patient experience that we feel sets us apart in our industry.

MYA Clinics Ltd



We can always rely on Wavenet to be ahead of the curve in providing new and innovative technologies to the marketplace and by doing so they have helped keep our business ahead of the competition.

Berry Palmer and Lyle Global

Glossary of terms

WLR

Wholesale Line Rental (WLR) allows alternative suppliers to rent access lines on wholesale terms from Openreach, and resell the lines to customers, providing a single bill that covers both line rental and telephone calls.

PSTN

The Public Switch Telephone Network, was introduced in the 1800 and is a circuit-switched analogue telephone system that enables the transmission of voice and data (broadband) through a network of copper wires. This system is also referred to as landlines, Plain Old Telephone Service (POTS) or fixed-line.

ISDN

Integrated Services Digital Network (ISDN) allows for simultaneous digital transmission of voice, video and data services over the traditional PSTN copper network. This is mainly used by businesses to support multiple users to make & receive calls at the same time, over the same link, using different channels to keep the traffic separate.

ISDN2

Mainly used by small businesses. With ISDN2e you can connect up to 60 channels. Channels are sold in pairs and can be bonded to increase bandwidth for things like video conferencing.

ISDN30

This is designed for businesses that need high-quality video conferencing, consistent transfer of large data files, or that operate call centres. Each connection provides 8-30 independent 64k channels. You can combine these for bandwidth intensive applications such as high-quality video conferencing or large data file transfers.

ISDN30e

This is the same as ISDN30 but with some additional features like Customer controlled Call Forwarding and Call Deflection.

FTTP

Fibre to the Premises, is when a contended fibre circuit connects straight to your premises, rather than shared across multiple locations when split off from a hub. FTTP connections are typically offer stronger and faster Internet speeds.

FTTC

Fibre to the Cabinet, is when a fibre connection arrives at a cabinet, and then is split amongst local homes and businesses. Although faster than basic broadband speeds, it is shared, so the strength and speed of the connection will be depending on local Internet traffic and usage.

SOGEA

SOGEA offers Internet connectivity without the need for an existing fixed line or voice service. A voice service can be provided on top of the SOGEA service, if required, usually at extra cost.

WAVENET.CO.UK

0333 234 0011

Wavenet Limited
One Central Boulevard
Blythe Valley Park
Solihull, West Midlands
B90 8BG
contact@wavenet.co.uk

 **wavenet**



Networking
& Connectivity



Unified
Communications
& Voice



Contact Centres



Mobile Solutions
& IoT



IT, Cloud
& Technology



Network
Intelligence



Cyberguard