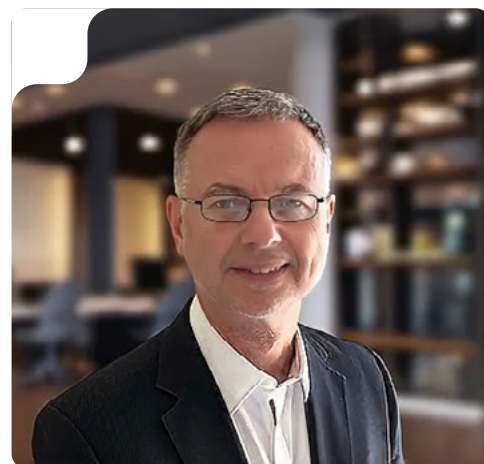


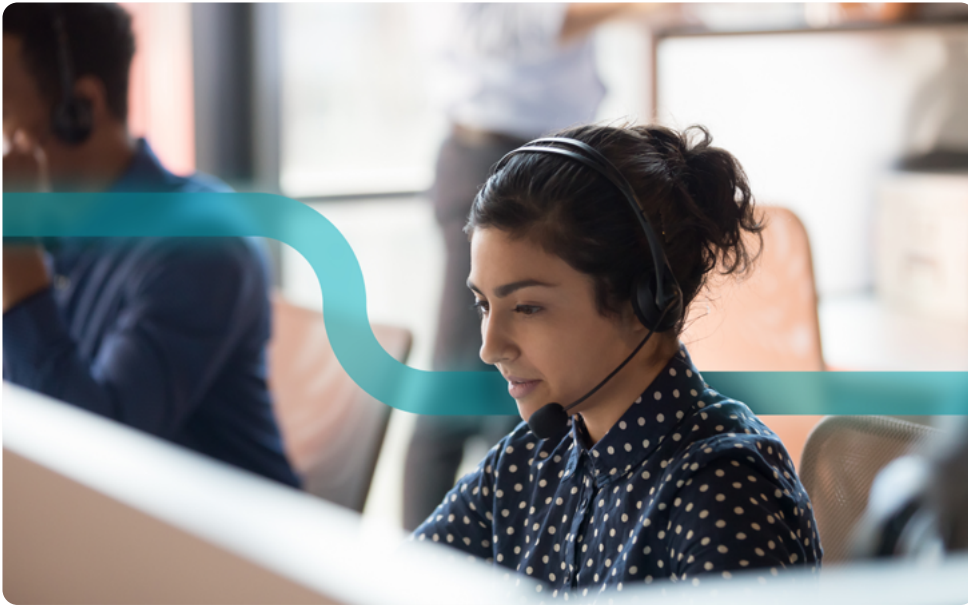


PSTN Switch Off Guide

Written by a Telecom Expert



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‘PSTN Switch off’, what’s that?

Maybe you’ve heard about the PSTN switch off, and maybe you haven’t, but this guide will tell you what it is, why it’s important to you/your clients and what needs to be done about it and when.

For those responsible for lift emergency communication systems, this change has direct implications for safety, compliance and system reliability in your lifts.

Like other industries, the Telecoms sector is awash with acronyms. PSTN stands for ‘Public Switched Telephone Network’, and essentially is the systems and components that make up the brains of the telephone network – the interconnected mesh of telephone exchanges – that allows calls to be set up between users with no human intervention, replacing the operators of yesteryear.

When introduced in the early 1980s, the new digital equipment was considered futuristic and to be the platform on which all future developments would be built. This was true for a number of years, but broadband and the internet changed things. It does not provide the products and services sought in today’s world. Plus, the equipment is also now over 40 years old and creaking at the seams.



What's replacing the PSTN?

Traditional copper phone lines are being replaced by digital communication networks that use broadband fibre and mobile connectivity. Today, most people already use these types of digital services every day through platforms such as Teams, Zoom, WhatsApp and Digital Voice.

This matters because analogue and digital systems do not behave in the same way.

The PSTN was built around copper-based analogue telephone lines designed specifically for voice calls.

Many older devices and systems still rely on those analogue characteristics to operate correctly. But as communication systems become fully digital, some legacy equipment may no longer perform as expected.

In many cases, legacy equipment is now being adapted to work over digital networks using signal conversion technology. While this may allow systems to function, it can also introduce inconsistencies, compatibility issues and unpredictable performance.

For lift emergency communication systems, reliability is critical. Solutions that depend on converting analogue signals over digital networks may not always provide the level of performance needed during an emergency.

As a result, selecting a solution designed specifically for lift emergency communication built for digital networks, rather than adapting legacy systems, becomes an important consideration.



Why should I care?

You should care if the lifts you own, manage or are responsible for still use PSTN for their emergency lift lines, because they will stop working on 31st January 2027.

For many years, PSTN lines have been used to support emergency lift communication systems and help meet the requirements of BS EN 81-28. In many buildings, people may not even realise how their lift emergency lines are connected, they simply expect the service to work reliably.

One of the key benefits of PSTN is that it continues to operate during a local power failure. This is because power is supplied from the telephone exchange through the copper telephone line itself. Telephone exchanges also use backup batteries and generators, making service interruptions extremely uncommon.

FM leaders and lift consultants need to investigate to understand how their emergency lift lines are connected today.

This can be done by:

- checking whether copper telephone lines are connected to the lift communication device
- reviewing telephone bills
- speaking with the lift maintenance provider
- contacting the telecommunications provider

If a lift emergency communication system is already connected using a fibre broadband or GSM solution, no immediate action may be required. However, if it still relies on PSTN, action will need to be taken before the 2027 deadline.

It is estimated that a significant proportion of the UK's lift estate still relies on PSTN connections, meaning a large number of systems will require migration before the 2027 deadline.

Fibre. Will it be available?

The simple answer is maybe!

Fibre networks are primarily being built to meet the needs of residential consumers – to enable them to surf the internet, game and watch video content. Businesses needs have not really been considered, although some network builders have looked to fix this in specific geographies, or where a specific contract has been let.

Part-fibre networks were built some time ago with fibre connectivity at streetside green cabinets, and whilst the performance of the services these can provide is not as great as that of a full fibre network, they have met a certain need to date. These products have the benefit of having a copper tail from the streetside cabinet to the building, meaning access into and within the building is more straightforward.

Lastly, full fibre may have been built to the building, but it's not guaranteed that it's available to service the needs of the emergency lift line – in terms of capacity being available, or being pre-built to a suitable connection point in a lift room.

In lift environments, this is a key consideration, as connectivity often needs to reach specific machine rooms or control panels, which are not always included in standard fibre installations.

Your Communication Provider should know the answer to this question, but if there's not a definitive 'Yes' (in being available to a lift room and ready to take an order), then count on long delays and increased provision costs to get service.

You may have heard about clever devices that enable existing equipment to be used over a fibre connection. These use Analogue Telephony Adapters (ATAs) or

Analogue to Digital converters to carry legacy signalling (called DTMF) over the connection.

Testing in independent labs has shown some success with these devices, but none have worked consistently across different Communication Providers networks. Accordingly, these are not recommended for use with emergency lift lines, or any other critical use case for that matter.

For lift emergency communication, reliability is critical. Solutions that depend on signal conversion or building infrastructure introduce additional points of failure and should be carefully assessed before being considered.



Cellular. Is that really an option?

Yes, cellular – it's a viable alternative to PSTN today.

Whilst transformation is also happening in the mobile world, with the closure of 3G, to be followed by 2G services, the platforms themselves have operated well. Options also exist for increased peace of mind with dual SIM operation and eSIMs available too.

This makes cellular a practical and scalable option for lift emergency communication, particularly where fixed infrastructure is limited or inconsistent.

Any mobile coverage? Tests will be carried out at locations to check for signal strength to the emergency lift line device, and booster aerials can be utilised to increase signal strength if necessary.

Back up power matters

Unlike the PSTN, digital communication services delivered over fibre broadband require local power to operate. For a full fibre solution, the network provider's equipment will need power (c. 6W), as they use laser transmitters & receivers to operate. The Communication Provider also installs a gateway, which will similarly need powering (c. 12W).

With full fibre solutions, both the network provider's equipment and the communication provider's gateway or router require power. During a local power cut, these devices will stop working unless they are connected to a standby battery or uninterrupted power supply (UPS).

Part-fibre solutions reduce some of these requirements, but still rely on powered street cabinets within the network infrastructure. These cabinets use backup batteries, but this introduces additional points of dependency outside the building owner's control.

Cellular communication solutions typically have lower power requirements and use fewer hardware components. In many cases, backup power can be supported through an internal battery, making resilience simpler to achieve.

For lift emergency communication systems, simpler power requirements can help improve reliability and make backup power planning easier to manage.





Migrating from PSTN

So, you've established that migration is required. You now need to decide what comms. solution you're going to choose from those available.

You should select a solution that can be deployed across all the lifts you are responsible for allowing you to work with a single migration approach and, ideally, a single supplier

The benefit of working with a single supplier is that you can hand over day to day project management, scheduling and migration process to them – that will make things easier for you.

The work should be scheduled to tie in with any quiet times in the day/week. Once the new solution has been installed and tested, the PSTN service can be ceased.

It is also important to ensure the chosen solution is designed specifically for lift emergency communication and will remain reliable as network technologies continue to evolve.



Do I need to take action now?

In the time that PSTN lines have been connected in lifts, around **25 years, c.300,000** have been installed. That's **12,000** per year on average. Now, of those **300,000**, some have already migrated to a cellular solution, leaving in round numbers **c.200,000**. At an average installation rate of **12,000** per year that means it'll take **16 years** to complete the work!

Clearly that's not tenable, and the average installation rate will have to increase substantially. Also, given that this guide is written part way into 2026, we don't have a full year left. Let's think first about 9 months to shut down day and then 6.

To achieve migration in 9 months means c.22,000 per month. For 6 months, that rate increases to c.33,000 per month. These are staggering rate increases from the average.

Given the trained resource available to do the work, c.3,000 engineers nationally, that means each engineer will need to 7 to 11 migrations per month, every month without a break until the end of January 2027. And this is on top of any other work they're required to perform.

Hence, yes action needs to be taken now, and work with a supplier who'll help take the headache away from you.



I get it, but want independent advice.

Come and talk to us at AVIRE

We support building owners, FM providers and lift companies in assessing their lift emergency communication systems and planning a practical migration approach.

We've been working on this programme since its inception and bring experience in supporting PSTN migration specifically within lift environments, helping ensure systems remain operational and compliant as networks transition.

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