

# NSI Bulletin - Issue 5:

## Topic: Have you considered the impact on Alarm Systems by changes to Communications Networks?

In response to a growing demand for faster broadband and other digital communications services, telecommunications providers globally are migrating from [the Public Switched Telephone Network \(PSTN\) to the new generation of Internet Protocol based systems \('All IP'\)](#).

The transition to 'All IP' means the existing predominantly copper-based PSTN telephony network, which has provided the foundation for the UK's telephony network for many decades, will be replaced by a faster, 'All IP' fibre network and infrastructure. This will mean that alarm systems transmitting data to an Alarm Receiving Centre (ARC) using a PSTN dial-up service may fail to work. There are an estimated 4 million data over voice systems in the UK that use this method of communication and many of these will fail.

### What is the time frame?

Although 2025 is the stated date for completion of the rollout to new digital 'All IP' communications network, upgrade work is underway with some premises having already started to migrate to 'All IP' from June 2021.

### Are future communication lines supported by a backup power source?

The existing copper-based infrastructure will be removed and be replaced with a fibre optic solution which will support better communications in terms of both speed and capacity.

Openreach roadside connection cabinets are expected to have a one-hour duration for power backup but it is unclear what other communications providers might be planning. Even with limited backup power provided from the roadside cabinet, power failure to the onsite router will result in the failure of the communications line.

### Will existing alarm systems be disconnected from the communications line?

The traditional in-premises telephone connection point for PSTN is a wall-mounted master telephone socket which has the capability to have extension sockets and block terminals installed for the connection of other telephones and devices or alarm systems. However, on migration to 'All IP', this connection will only be capable of supporting a broadband router, and any extension connections or wiring will be redundant. The router will typically include a telephone socket - this connection will be a telephone line emulator - which is expected to work with most voice telephones in use today.

### Will signalling devices installed at premises work on an 'All IP' connection?

A traditional digital communicator or other signalling device designed to communicate over the traditional phone lines may not be compatible with the 'All IP' network and might Fail on migration to 'All IP'. As many digital communicators aren't monitored for transmission path failure at the ARC, the first indication that signalling has failed could be after a break-in where alarm signals were not sent to an ARC and the emergency services were not called to attend site.

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### Impact of the 'All IP' rollout:

- No backup power for the communications line after local mains power failure.
- On migration to 'All IP', the alarm system may be disconnected.
- Current signalling devices may not be compatible with the new 'All IP' network.

### NSI approved companies will be expected to ensure that:

- Customers with equipment installed utilising the PSTN to communicate to an ARC will be informed of the 'All IP' rollout, timeline and the potential impact on their current signalling solution.
- Customers are offered options to future proof their alarm system against the impact of the 'All IP' migration.

**If you have any questions or would like further information on this subject, please contact Matthew Holliday, Director of Approval Schemes, at [matthew.holliday@nsi.org.uk](mailto:matthew.holliday@nsi.org.uk).**

## NSI News

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This section, requested by Insurers, provides relevant curated NSI news, updates and editorials staff may not ordinarily see but which may be of interest.

The Openreach All IP 'stop sell' continues at pace, with more exchanges being added to the list of affected areas:

<https://www.nsi.org.uk/latest-openreach-stop-sell-update-on-migration-to-digital-all-ip-network/>

'Updated British Standard for Detector-Activated Surveillance Strengthens Stadium Security' article in Football and Stadium Management magazine:

<https://www.nsi.org.uk/updated-british-standard-for-detector-activated-surveillance-strengthens-stadium-security/>

'Thoughts on security in 2022 and beyond' in City Security Magazine:

<https://www.nsi.org.uk/thoughts-on-security-in-2022-and-beyond-richard-jenkins-nsi-ceo/>

ECHO announces 200,000 URN milestone:

<https://www.nsi.org.uk/echos-200000-urn-milestone/>

Is a company NSI approved? To check and verify their scope of approvals, visit our Company Finder:

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