TSA Member Surgery

The Impact of the Analogue to Digital Transition on Grouped Living Schemes

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From 25 November 2026

45 Working Days

Until Openreach migration deadline
31 January 2027



November 2026
4 days included

Mon	Tue	Wed	Thu	Fri	Sat	Sun
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

December 2026
21 days included

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

January 2027
20 days included

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

<30%

We estimate **less than 30% of grouped living** (independent, extra care, retirement living) **have migrated to digital alarm systems**

The immediate challenge

01

Complete full digital migration where it can be delivered safely in time.

02

Where this is not practical, assess a suitable interim solution.

03

An interim arrangement buys time; it does not remove the need for a planned digital replacement.

The destination remains fully digital

01

TSA's preferred long-term approach is fully digital alarm communications.

02

For grouped schemes, the reference architecture uses BS 8521-2 to communicate with the Alarm Receiving Centre (ARC). SCAIP & TS50134-9 also used by dispersed units in schemes.

03

Interim solutions retain an existing analogue grouped alarm system while an appropriate digital migration is planned.

What do we mean by an interim solution?

01

An arrangement that allows an existing analogue grouped alarm system to remain in service after the external network moves to IP.

02

Interim does not mean inherently unsafe. The suitability of the complete solution depends on its design, testing, resilience, support and the scheme's circumstances.

03

There is no universal TSA removal date for all interim solutions.

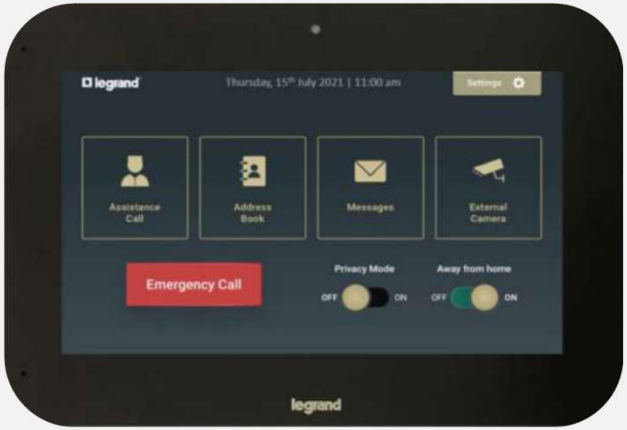
Overview of Scheme Options

Solution	Description
Full Digital Hardwired	Fully digital solutions wired with ethernet cabling, capable of delivering high-bandwidth voice, video and data to the resident, providing grouped living functionality
Hybrid Digital Hardwired	Fully digital solutions wired with existing or new multi-core cabling, predominately delivering voice & data to the resident, providing grouped living functionality
Mesh Digital	Fully digital solutions installed using wired or wireless (mainly wireless) technology, delivering voice & data to the resident, providing grouped living functionality
Dispersed Digital	Fully digital solutions installed using wired or wireless (mainly wireless) technology, delivering voice & data to the resident, providing dispersed alarm functionality
Scheme Converter	An interim solution, either on-premise or cloud-based or a combination of both that translates analogue protocols from the scheme into digital protocols for the ARC
Cloud Communicator	An interim solution, either on-premise or cloud-based or a combination of both that aims to protect analogue protocols from disruption between the scheme and the ARC
PDPL / EVAC	An interim solution, provided by Openreach, that allows existing analogue telephone lines to be digitised from the local exchange rather than from within the scheme

Replace with Full Digital Hardwired Scheme







Benefits may include – digital telecare protocol, end to end IP compatibility, integrated video door entry, full digital capability for the resident (e.g. video calling, repairs portal etc…), broadband with cellular backup, can place multiple emergency alerts to the scheme officer / ARC simultaneously

Considerations – cost, over-specification, point to point ethernet cabling, installation disruption to scheme/residents, space/cooling for server stacks, complexity, interoperability challenges

Replace with Hybrid Digital Hardwired Scheme







Benefits may include – digital telecare protocol, more cost effective than a full digital system, can be installed in existing scheme equipment footprint, simpler functionality, broadband with cellular backup

Considerations – no uplift in functionality for the resident (e.g. no video communication), limited to 1 (in some cases 2) simultaneous calls to scheme officer / ARC

Replace with Mesh Digital Scheme

Benefits may include – digital telecare protocol, more cost effective than hardwired & hybrid digital systems, live dashboard of alerts & triggers, no wiring required, can place multiple emergency alerts to the scheme officer / ARC simultaneously, pendants can trigger alerts from any location within the scheme, can be configured to replicate scheme officer off-site/on-site model

Considerations – reliant entirely on cellular communication, relies on resident power supply, can be disconnected from power by the resident, installation disruption to scheme/residents





Replace with Digital Dispersed Scheme







Benefits may include – digital telecare protocol, more cost effective than hardwired & hybrid digital systems, no wiring required, can place multiple emergency alerts to the scheme officer / ARC simultaneously

Considerations – most solutions are reliant entirely on cellular communication, relies on resident power supply, can be disconnected from power by the resident, can be limited range on pendants within the scheme, installation disruption to scheme/residents, can be challenges with scheme officer working model

Add Scheme Converter (aka Bridge) INTERIM

Benefits may include – digital telecare protocol, more cost effective than scheme equipment replacement, no installation disruption to the resident, broadband with cellular backup, can extend the life of a well-maintained analogue scheme in line with the end-of-life date for that scheme

Considerations – ARC to scheme communication can be unavailable, more complexity for a maintenance contract, relies on the quality of existing scheme equipment & wiring





Add Cloud Communicator INTERIM







Benefits may include – no installation disruption to the resident, broadband with cellular backup, no changes required to the existing analogue scheme

Considerations – maintains analogue tone communication over IP networks, relies on ARCs continuing to be able to receive and respond to analogue protocols, can add complexity for a maintenance contract, relies on the quality of existing scheme equipment & wiring, requires on-site power backup

Replace PSTN with PDPL / EVAC INTERIM

Benefits include – no installation disruption to the resident, no changes required to the existing analogue scheme, mains power from the local exchange

Considerations – maintains analogue tone communication over IP networks, relies on ARCs continuing to be able to receive and respond to analogue protocols, relies on the quality of existing scheme equipment & wiring, time limited solution to the year 2030 (at earliest)



What risks remain with interim solutions?

01 **Ageing equipment:** condition, support and spare parts.

02 **Analogue signalling over VoIP:** sensitivity to network configuration and change.

03 **Power and connectivity:** additional dependencies and possible shared failure points.

04 **Interoperability:** the deployed combination must work with the receiving ARC.

05 **Operational limitations:** capacity, functionality and fault resolution.

Managing the risks

01 Test an alarm from the scheme through to correct receipt and interpretation at the ARC.

02 Understand what monitoring and heartbeats actually demonstrate.

03 Assess primary and backup communications routes, shared dependencies and standby power.

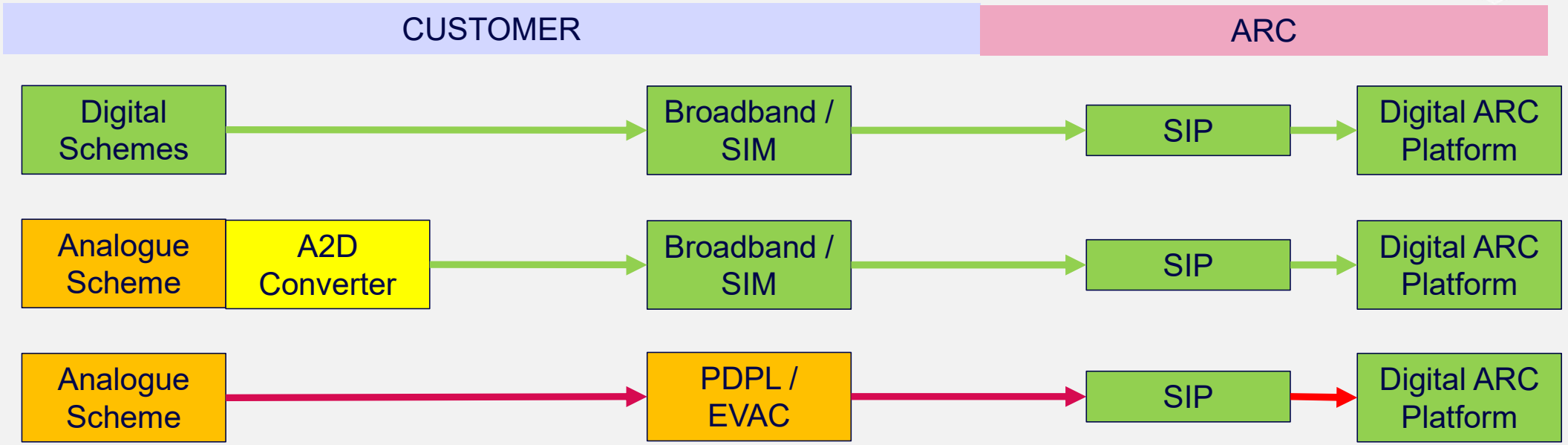
04 Agree support, maintenance, fault escalation and change control.

05 Document the migration roadmap.

Scheme Options Summary

Solution	Protocol to ARC	Cost	Level of Installation Complexity	Level of Communication Resilience	Risk of A2D Failure
Full Digital Hardwired	Digital	Very High	High	High	Low
Hybrid Digital Hardwired	Digital	High	Medium	High	Low
Mesh Digital Wireless	Digital	Medium	Medium	Medium	Low
Dispersed Digital Wireless	Digital	Medium	Medium	Medium	Low
Scheme Converter	Digital	Low	Low	Medium	Medium
Cloud Communicator	Analogue	Low	Low	Low	High
PDPL / EVAC	Analogue	Low	Very Low	Medium	High

Risk of Analogue Protocol Transmission



- For simplification purposes, the digital scheme box in the diagram assumes one of the digital scheme options (e.g. Hardwired, Mesh, Dispersed)
- Green lines indicate Digital Protocols
- Red Lines indicate analogue protocols which indicate higher risk – PDPL & EVAC do not guarantee analogue protocols, they only guarantee an actual phone call, failed protocols means failed calls, redials and delay in connections.
- PDPL/EVAC does not mean there is a cliff edge but we are seeing more and more analogue protocol failures (even over more modern analogue protocols such as BS8521-1) when connecting into SIP

What should you do now?

1. Identify every grouped scheme still dependent on analogue alarm equipment.
2. Confirm whether full/hybrid digital migration is achievable in time.
3. Where an interim solution is needed, assess the actual scheme infrastructure and alarm pathway to scheme officer and ARC.
4. Require end-to-end evidence, resilience and maintenance arrangements.
5. Understand and flag any known reliance on ISDN30 within the ARC infrastructure to the TSA who will liaise with the ARC and Openreach to ensure that reliance is known and documented.
6. Record your decision and complete a digital migration plan.

The voice of technology enabled care

Thank you

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