

Challenges & Myth Busting of the Analogue to Digital Switchover

Tim Mulrey, Business Strategy & Transformation, TSA

With thanks to our event sponsors:



Join the conversation @TSAVoice #TECS



Partnership Working across the Nations

Working in conjunction with NHS Transformation Directorate, Digital Health & Care Northern Ireland, TEC Cymru and the Scottish Digital Office to support all stakeholders, across all 4 Nations, through their digital transition journeys



Mobile communications guidance

TSA









TSA Testing & Installation Guidance

Digital Readiness Guidance

Digital

readiness

guidance

TEA

A Digital Future for Technology **Enabled Care?**

Data and Cyber Security



Data and Cyber Security Research for Technology **Enabled** Care

Mobile Communications Guidance



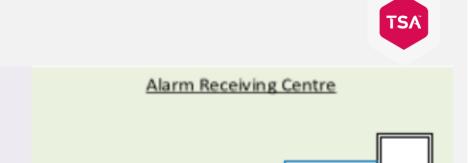
Digital Transition Publications

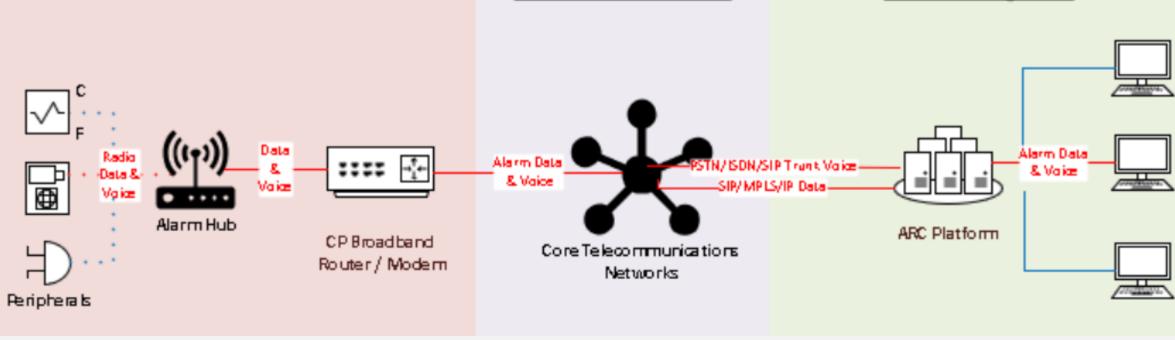


The impact of Analogue to Digital Migration of **Technology Enabled** Care

Telecare via Digital Landlines

Home Network





Communications Networks

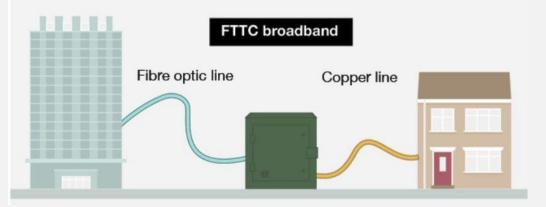
Note:

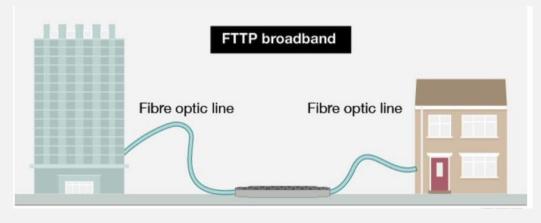
Installing Analogue-only equipment on Digital landlines is not recommended:

- No standard power backup for mains failure
- No power outage notification to ARC if no router/modem backup in place
- Analogue protocol disruption expected to increase as core networks transition to digital

Digital Landlines – Power Outages

- 1. The Comms Provider (CP) router/modem does not have any Battery Back-Up (BBU) provided as standard and therefore the overall solution will fail to connect to the ARC during any mains power outage.
- 2. Some CP's (e.g. BT / Talk Talk) have committed to providing BBU to a cohort of users that they agree are vulnerable
 - Those batteries will provide a maximum of 1 hour of back-up in the event of mains power outage
 - Vodafone are developing a 4-hour BBU for the modem/router
- 3. Street Cabinets that provide non-FTTP services are fitted with 4-hour battery backup units
 - For outages lasting longer than 4 hours, engineers are normally able to swap out batteries from other street cabinets that are still under mains power
- 4. Openreach Exchanges each have a diesel generator that can provide 7 days of power to an exchange in the event of a power outage





Telecare over Digital Landline Testing



- Openreach modem is required (normally wall mounted)
- Both the router and the modem requires power
- Telecare plugs into black 'UK' port on back of router
- Note the fibre connection uses one of the yellow ethernet ports rather than the purple port
- The Openreach router is then connected to the wall socket



TSA

Analogue over Digital Testing – Openreach Test Results

												TES	r re:	SULT	S																				
TESTING COMBINATIONS			Dor Sar	Possum Neo					Possum Novo PSTN							Т	Telealarm TA74			Chubb Unity			Tunstall Vi					Tunstall Vi+							
CP Network		ARC	СРС		BS8521		1	СРС			BS8521			TT92 - DTMF		СРС			BS8521			TT92 - DTMF		BS852		21	TT92 - DTMF			BS8521			TT92 - DTMF		
_	SOGEA	Jontek	GG	G	G	G					3							G	G	G	G	G	G	Α	A	A	G	G	G	G	G	G		G	G
_	FTTP	Jontek	A G	G	G	G				_ (3	_						G	G	G	G	G	G	A	Α	G	G	G	A	G	G	G	G	G	
BT	SOGEA	PNC																									G	G	G				G	А	G
Consumer	FTTP	PNC																									G	G	G	_				G	G
	SOGEA	Umo					_	G		G		_				G		_								G		 '		G	G	G	G]	<u> </u>
	FTTP	Umo						G	A	G						G								G	G	Α				G	G	G	G		
	MPF	Jontek																									G	G	G					G	G
	FTTP	Jontek	GA	A	G	A	G			0	G (G 📗						G	A	G	G	G	G	А	Α	Α	G	G	G	G	G	G	G	G	G
Talk Talk	MPF	PNC																																	
Consumer	FTTP	PNC																									G	G	G					A	G
	MPF	Umo		_								_				_		_							_			<u> </u>		A		G	G		<u> </u>
	FTTP	Umo						G								G	G							G	А	G				G	Α	G	G		
Sky	SOGEA	Jontek	GG			G					3							G		G	G	G	G	A	A	A	G	G	G	G	G	G		G	
	FTTP	Jontek	GG			G	_				3							G	G	G	G		G	A	A	A	G	G	G	G	G	G			
	SOGFAST	Jontek	A G	A	G	Α	G			_ (3	_						G	A	G	G	G	G	A	A	A	G	G	G	G	G	G	A	G G	A
	<u>SOGEA</u> FTTP	PNC PNC		-					_	_		_	-				_	_			-						G G	G G	0 U			\vdash	G	G	G
	SOGFAST	PNC		+						+			-				-	_	_		+						G		G				6	G	G G
_	SOGEA	Umo		+				G		+						G					1			G					0	G	G	G	G		
_	FTTP	Umo						G								G								G	G	G				G	G	G	G		
	SOGFAST	Umo						G								G														G	G	G	G		i
Vodafone	SOGEA	Jontek	GG	G	G					+								G	A	A	G	G	G				G	G	G	G	G	G	G	G	G
	FTTP	Jontek	GG	Ğ	Ğ													Ğ			Ğ	Ğ	Ā	A	A	A	Ğ	G	G	Ğ	Ğ	Ğ	Ğ	G	Ğ
	SOGEA	PNC											G	G													G	G	G				G	G	G
	FTTP	PNC		-						_		_	G	G				_									G	G	G					G	G
	SOGEA	Umo					_	G		_		_	-								_							<u> </u>				\vdash	G		
	FTTP	Umo						G																									G		
Zen	SOGEA	Jontek	R R	R	G	G			_										R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R
	FTTP	Jontek	R R	R	R	R		G	G	_		_					_	R	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R	R
	SOGEA	PNC PNC		-						_	_	_	G	R R			_		_		-						R	R R	R			\vdash	R R	R R	R R
	FTTP SOGEA	Umo	+	-				G	-+		_	-	9	ĸ				_	+		+	-					R	ĸ	ĸ			 	Τ	-K	ĸ
	FTTP	Umo						G	+			+				+		+	+		1							<u> </u>						-	
	SOGEA	Jontek	+	-	G	Δ.	G	9		_		_	-	$\left \right $							+							\vdash				⊢−−			<u> </u>
BT Enterprise	FTTP	Jontek	RR	R.	G	A A	6		+		र र	_	-			+		P	R	P	R	P.	R					<u> </u>				⊢┤			
	SOGEA	PNC				~	0		+			+	-			+							IV					\vdash						_	
	FTTP	PNC							+							+					1														
	SOGEA	Umo						G								R																			
	FTTP	Umo						G	T							R								Α	A	A		1		G	G	G			

 Over 400 test calls made in the Openreach Test Centre to date

TSA

- Red indicates failure to connect / no voice connection / failure to close call
- Amber indicates poor speech quality or need to toggle speech to create two way voice
- Jontek platforms on ISDN30 (v11.1 and v10.6)
- Umo platform was connected via SIP (v3.5)
- PNC Platform

Key A2D Activities in 2023

<u>Q1</u>

- UK Digital Survey
- Digital Device Webinar
- A2D sessions @ TSA Conference

<u>Q2</u>

TS/

- Publication of updated test results
- IoT Device Webinar
- Digital Reliability Guidance

<u>Q3</u>

- 'On the Day' A2D Guidance
- ARC Platform Webinar
- Cloud ARC Platform Guidance

<u>Q4</u>

- Online lead-times for digital devices
- Grouped Living Equipment Webinar
- Grouped Living A2D Guidance

Ongoing Activities

Quarterly Member Surgeries Comms Provider digital roll-out publications 121 A2D Member Support Updates to Existing Guidance Digital Helpdesk A2D Blogs & Interviews



Thank you

tim.mulrey@tsa-voice.org.uk

ALLIP@tsa-voice.org.uk