

TSA Virtual Surgeries 2021



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Committed to Making a Difference / Inspiring Trust and Confidence / Stronger Together





The voice of technology
enabled care



2021-22 TSA Business Plan The New Roadmap for Technology Enabled Care

TSA PRIORITIES

1 THE VOICE OF AUTHORITY IN TEC

Our voice in Health, Housing and Care sectors to enhance the understanding, development and adoption of technology in care. We will serve as trusted, authoritative representative of the TEC community and ensure members and sector are more broadly represented with decision makers in government and beyond.

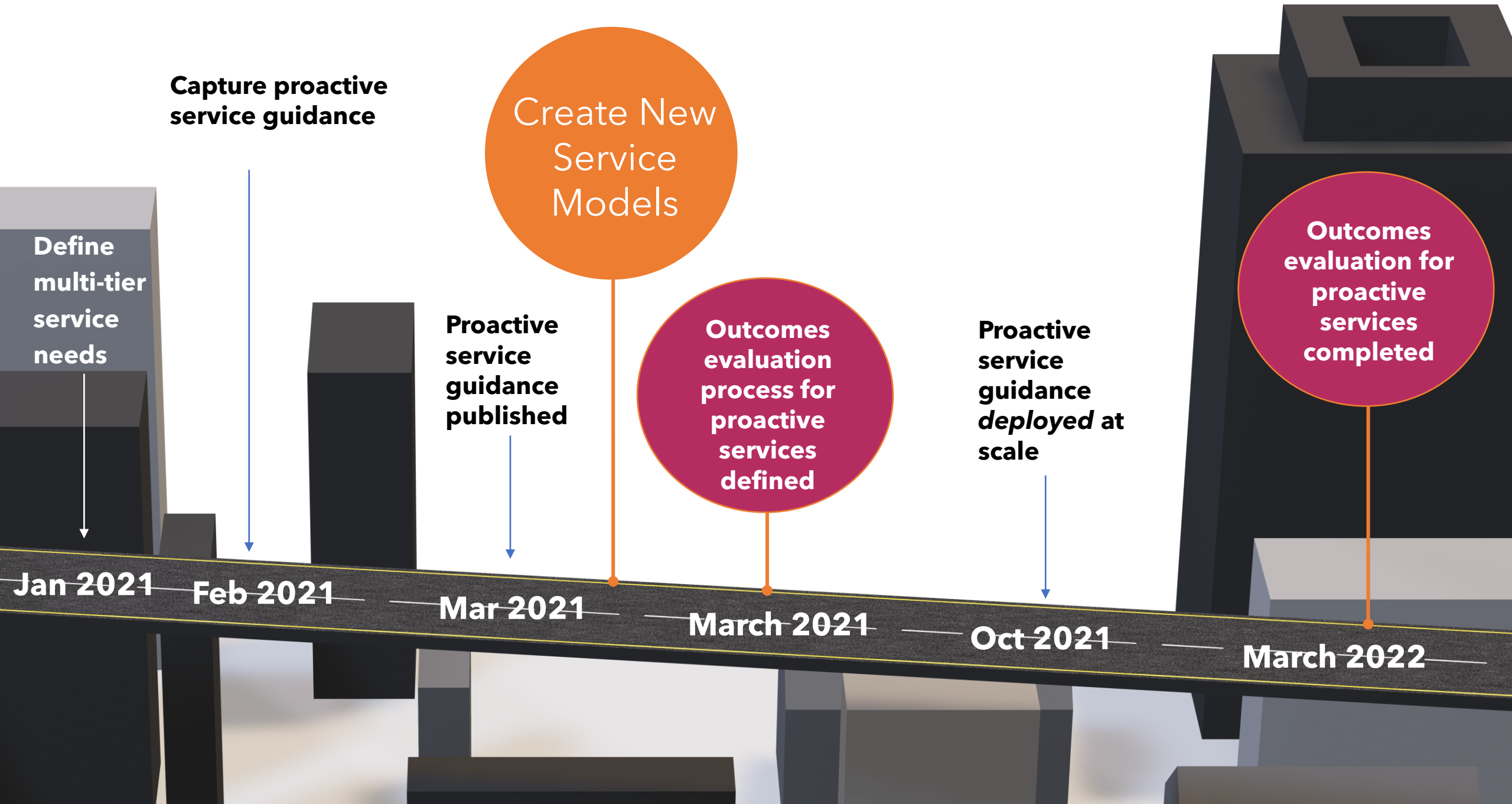
2 THE TEC KNOWLEDGE HUB

We will be the trusted source of knowledge for those working in the broad Health, Housing and Care sector and our memberships. We will establish a knowledge-based community of practice and an information-rich hub for novel connections that match needs and opportunities.

3 THE TEC PROFESSIONAL BODY

We will set and maintain professional standards in Technology Enabled Care through the development of the QSF. We will develop and implement quality standards that drive the practical delivery of technology solutions, improving outcomes for people. We will build skills and enhance the standing of organisations and people working in the care sector.





Capture proactive service guidance

Define multi-tier service needs

Create New Service Models

Proactive service guidance published

Outcomes evaluation process for proactive services defined

Proactive service guidance *deployed at scale*

Outcomes evaluation for proactive services completed

Jan 2021

Feb 2021

Mar 2021

March 2021

Oct 2021

March 2022



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The Quality Standards Framework (QSF) Update

Development of the QSF

Proactive service content mapped to QSF structure



Proactive service modules specified

Telehealth & Virtual Ward service modules specified

New proactive content implemented & relaunched

UK Regulatory endorsement of QSF

Telehealth & virtual ward service modules implemented

Mar 2021

May 2021

May 2021

Oct 2021

Dec 2021

Jan 2022



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Workforce Development

Create Learning Menu & 'the TSA Way'



Develop new e-learning Platform



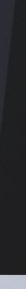
Launch e-learning Platform



Create & Deliver TSA Workforce Strategy



Monthly build of new e-learning products



Sustainably increase client numbers & revenue
Dec 2020-22

Develop workforce partnerships



New online resources



E-Learning Accreditation:
business case & business model to
Sept Board



Jan 2021

Apr 2021

Apr 2021 onwards

May 2021

Sept 2021

Sept 2022





ACADEMY

Developing your people to
deliver exceptional care

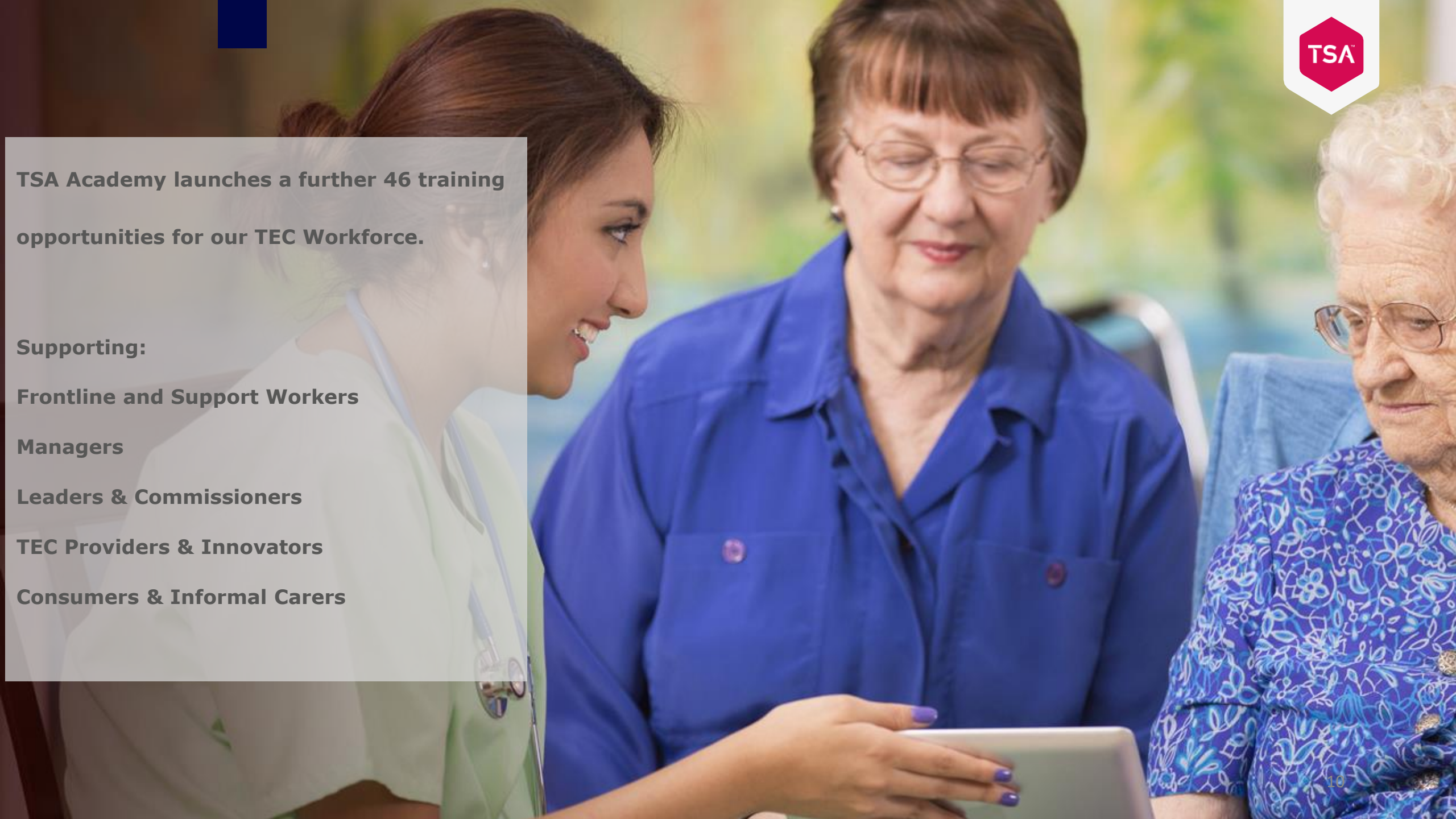


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TSA Academy launches a further 46 training opportunities for our TEC Workforce.

- Supporting:**
- Frontline and Support Workers**
- Managers**
- Leaders & Commissioners**
- TEC Providers & Innovators**
- Consumers & Informal Carers**



Expanding the services we offer

Digital Champion & Ambassador Programmes

Service User Led Training

Tech-Buddies

Digital Mentoring

Change & Transformation Consultancy

Workforce Research & Analysis

Learning Needs Analysis





Tailored to suit your needs

In-house Face to Face Training

Virtual Classroom & Webinars

'TECBites'

Coaching

Mentoring & Peer Learning

Blended Learning

Tools & Guides





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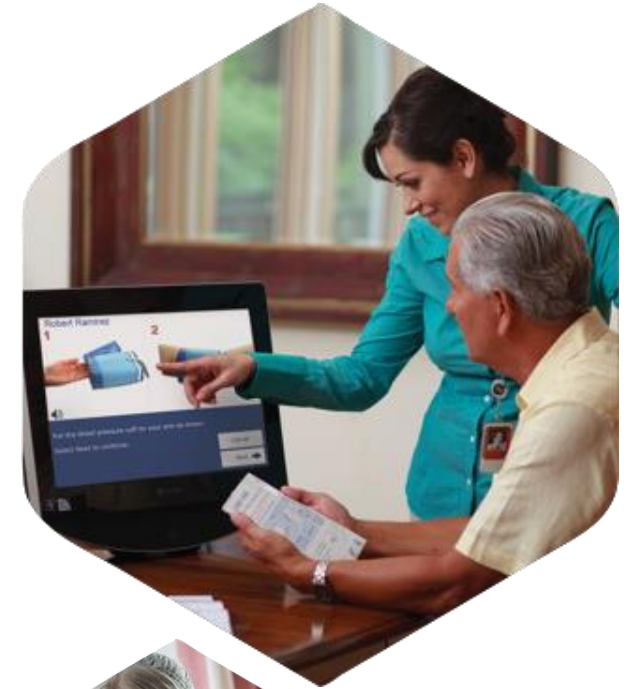
Digital Transition

All IP – The story so far.....

TSA is assisting its members with the journey from Analogue to Digital:

- Publications
- Webinars
- Special Interest Groups
- Guidance

We aim to push standards, influence the commissioning landscape, simplify the jargon, offer advice around 'Analogue on Digital' and share best practice.



All IP – Publications

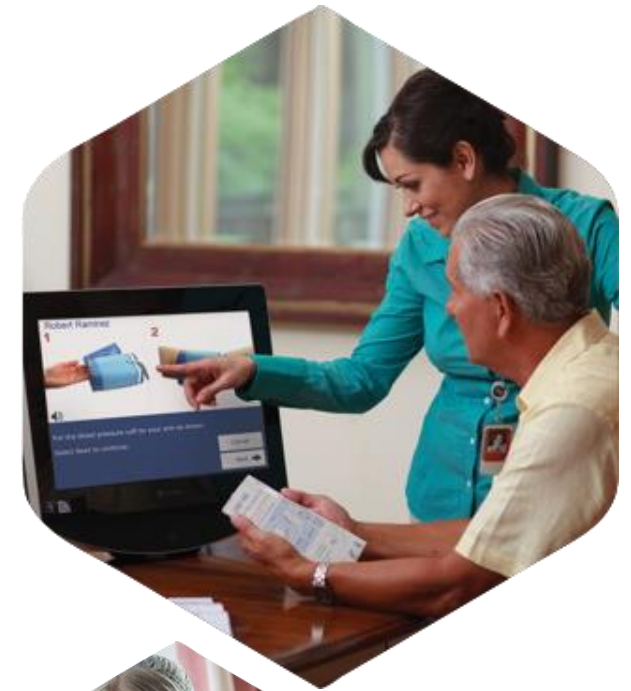
Openreach Exchange Migration Spreadsheet

https://www.tsa-voice.org.uk/downloads/excel_sheets/list_of_fttp_exchanges_jan20.xlsx

- Exchange Name
- Location
- Migration Date
- Region
- Post Code

Telephone Number lookup

https://availability.samknows.com/broadband/exchange_search



All IP – Publications

Analogue to Digital migration considerations

https://www.tsa-voice.org.uk/downloads/pdfs/all-ip_migration_and_reliability_assurance_final.pdf

- Funding
- Communication to the vulnerable
- Digital skills
- Power Failure protection
- Peripherals
- SIM networks
- Resilience
- Testing
- Interoperability



All IP – Webinars

<https://www.tsa-voice.org.uk/events/webinars/>

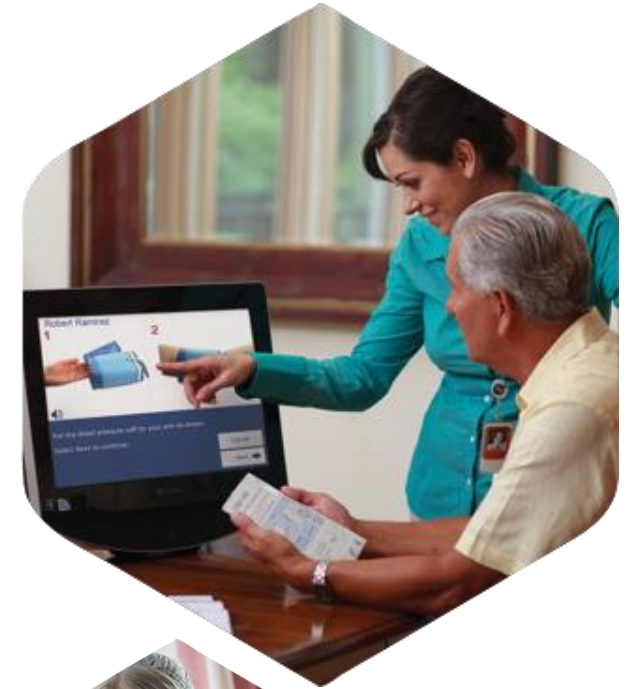
ALL IP: The burning platform of PSTN & ISDN

Presenters

- Openreach
- OFCOM
- BT
- Talk Talk

Topics

- Roll-out of Digital
- Protection of the vulnerable
- Power failure mitigation
- Testing of Analogue on Digital
- Live Q&A



All IP – Webinars

<https://www.tsa-voice.org.uk/events/webinars/>

ALL IP Digital Alarm Devices: Getting up to Speed

Presenters

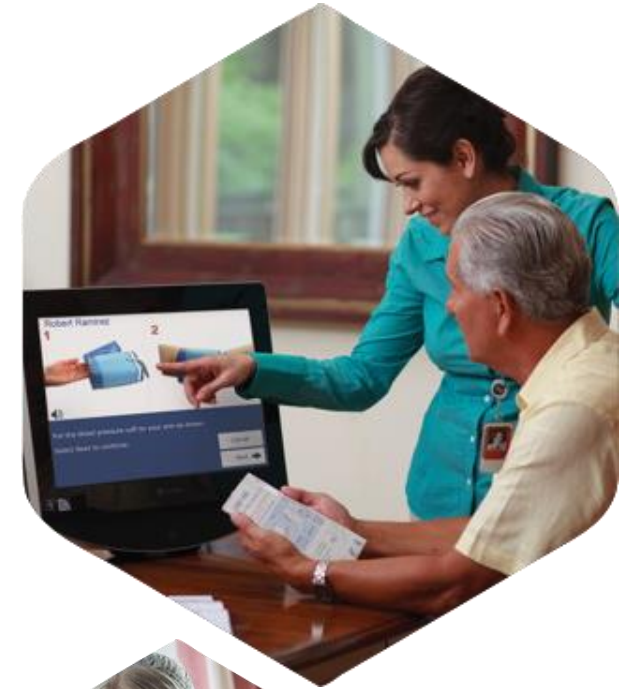
- Alcuris
- Appello
- Chiptech
- Chubb
- Doro
- Everon
- Tynetec
- Possum
- Telealarm
- Tunstall

Topics

- Digital Protocols
- Testing
- Deployment
- Stock
- Protocols
- Interoperability
- Proactivity
- Live Q&A

Commissioner Panel

- Rachel Falconer, NHSx
- Kevin McSorley, Radius Housing
- Aaron Edwards, Cardiff Council
- Chris Barton, Glasgow City Council
- Ann Williams, Liverpool City Council



All IP – Webinars

<https://www.tsa-voice.org.uk/events/webinars/>

ALL IP ARC Platform: The foundation to end to end digital

Presenters

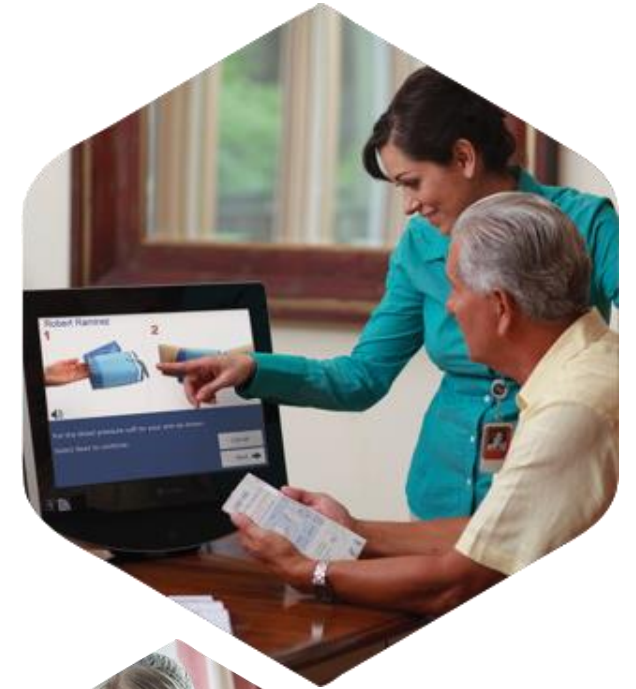
- Tunstall
- Skyresponse
- Jontek
- Enovation
- Doro
- Chubb
- Appello

Topics

- Digital
- Deployment
- Protocols
- Interoperability
- Flexibility
- Proactivity
- Live Q&A

Commissioner Panel

- Penny Hobson, Health and Social Care Northern Ireland
- Aaron Edwards, Cardiff Council
- Gillian Bland, East Renfrewshire Council
- Antony Dixon, Nottingham City Homes

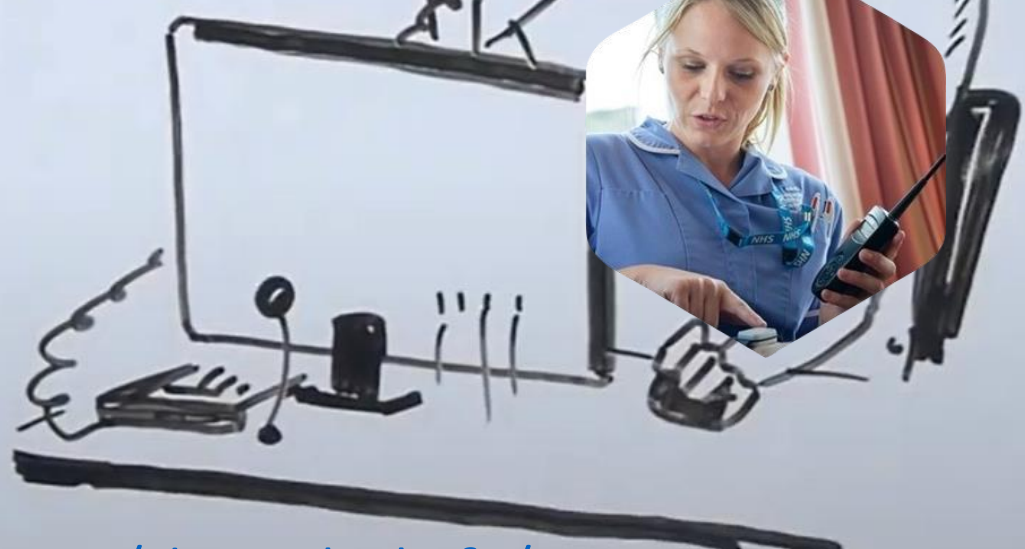
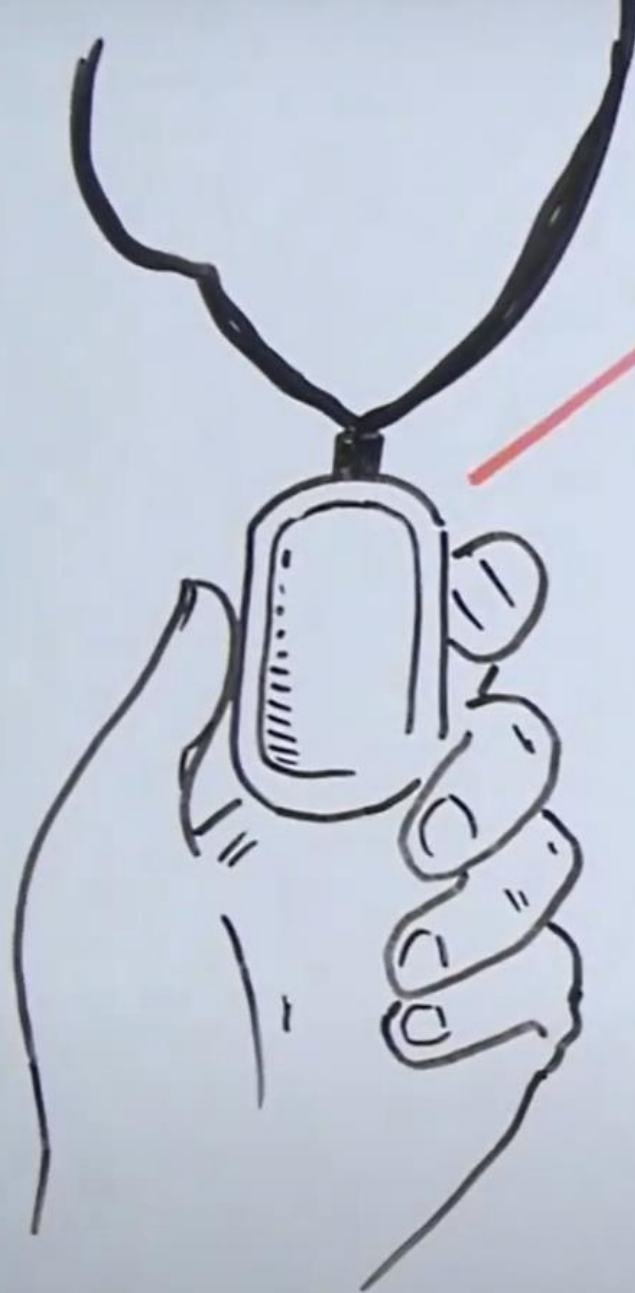


All IP – Special Interest Groups



- **SIG01** Collation of test and real world data for the use of analogue TEC devices on digital networks (TM)
- **SIG04** Not currently live but under review as European stands evolve and require TSA support for development (PF)
- **SIG06** Update of guidance relevant to Digital devices and their interaction with ARCs using mobile and fixed networks (TM)
- **SIG07** Collation of case studies and guidance for the use of IoT devices within the TEC sector and how that use will evolve for critical TEC alerting (ND)
- **SIG08** Focused on the production of standards and guidance for the service availability and reliability of Alarm Receiving Platforms. Consideration to widening the scope to non-ARC platforms and digital TEC devices (SS)
- **SIG11** Guidance on the use of data and standards for driving proactive and preventative care models from within the TEC sector

TEC Explainer A2D Video



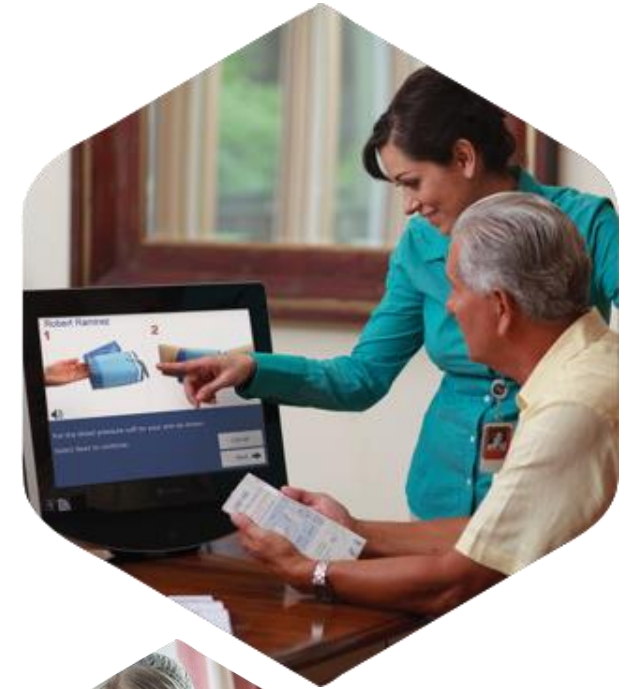
SIG01 Analogue over Digital testing example

Site	Impairment	Jontek (BS8521)		PNC8 (TT92)		UMO (CPC)	
		Audio	Exchange	Audio	Exchange	Audio	Exchange
BT	0	Poor	OK	Poor	OK	Poor	OK
BT	1	Good	OK	Good	OK	Good	OK
BT	2	Good	OK	Good	OK	Good	OK
BT	3	Poor	OK	Poor	OK	Poor	OK
BT	4	Very Poor	OK	Very Poor	OK	Very Poor	OK
VM	0	Poor #1	OK	Poor	OK	Poor #1	OK
VM	1	Poor #1	OK	Good	OK	Poor #1	OK
VM	2	Good	OK	Good	OK	Good	OK
VM	3	Good	OK	No Audio	OK	Poor #1	OK
VM	4	Very Poor #1	OK	Very Poor	OK	Very Poor #1	OK



SIG01 Initial Testing Narrative

- Audio quality testing may indicate that the default setting should be centred around level 1- 2
- ARCs handling calls in Simplex seem to more flexible/tolerant to the slight distortion/audio clipping being experienced on some of the calls.
- Some ARCs will not allow IP calls to be placed to the ARCs via an end users router due to the VPN requirements. Certification encryption needs to be tested
- No handshake failures were experienced from the PSTN/GSM units using various protocols/ARC combinations when selecting any of the line impedance settings available.
- There is a scenario whereby if a call is answered using the pendant and incorrectly hung up by the caller, the unit goes on to emit the “Hang up now/siren” tones. This can be hung up using the pendant however should be automatically sensed to prevent service user distress.

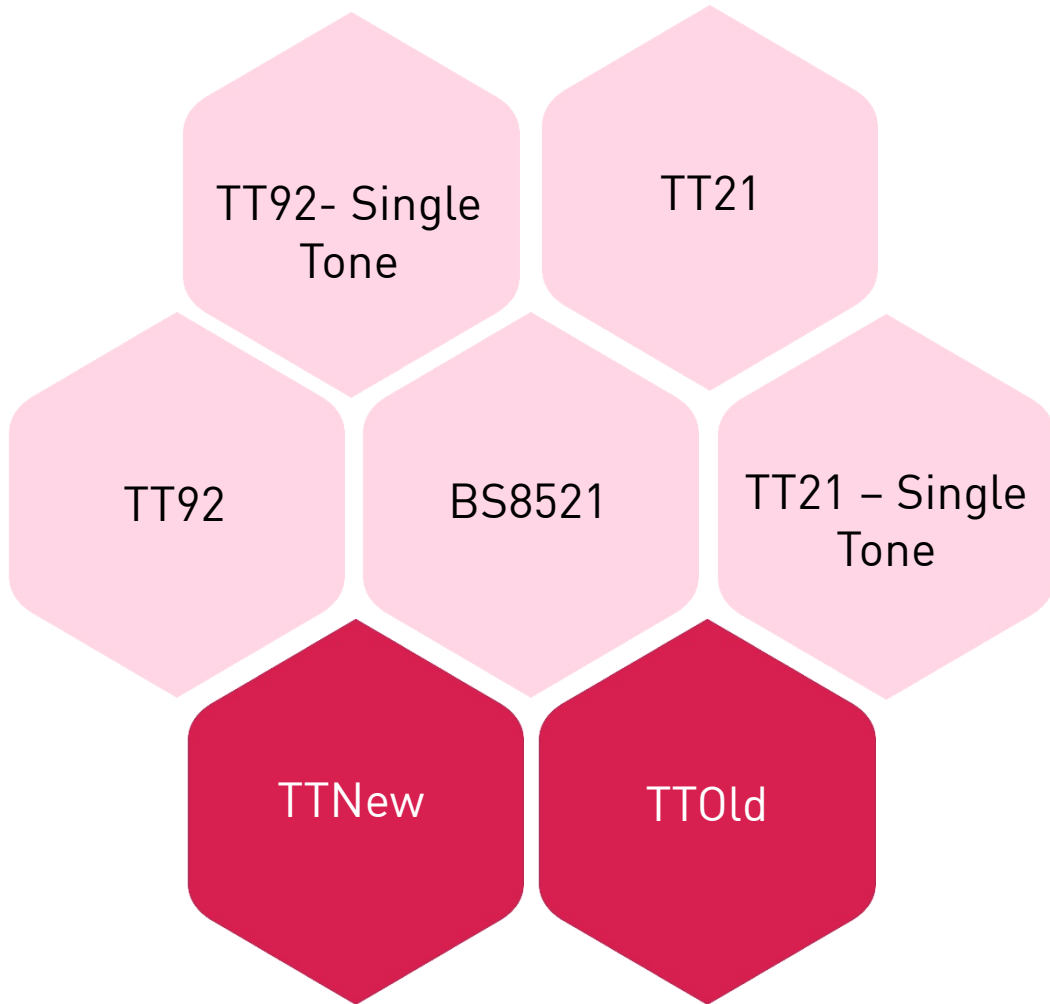


SIG01 Analogue over Digital test devices

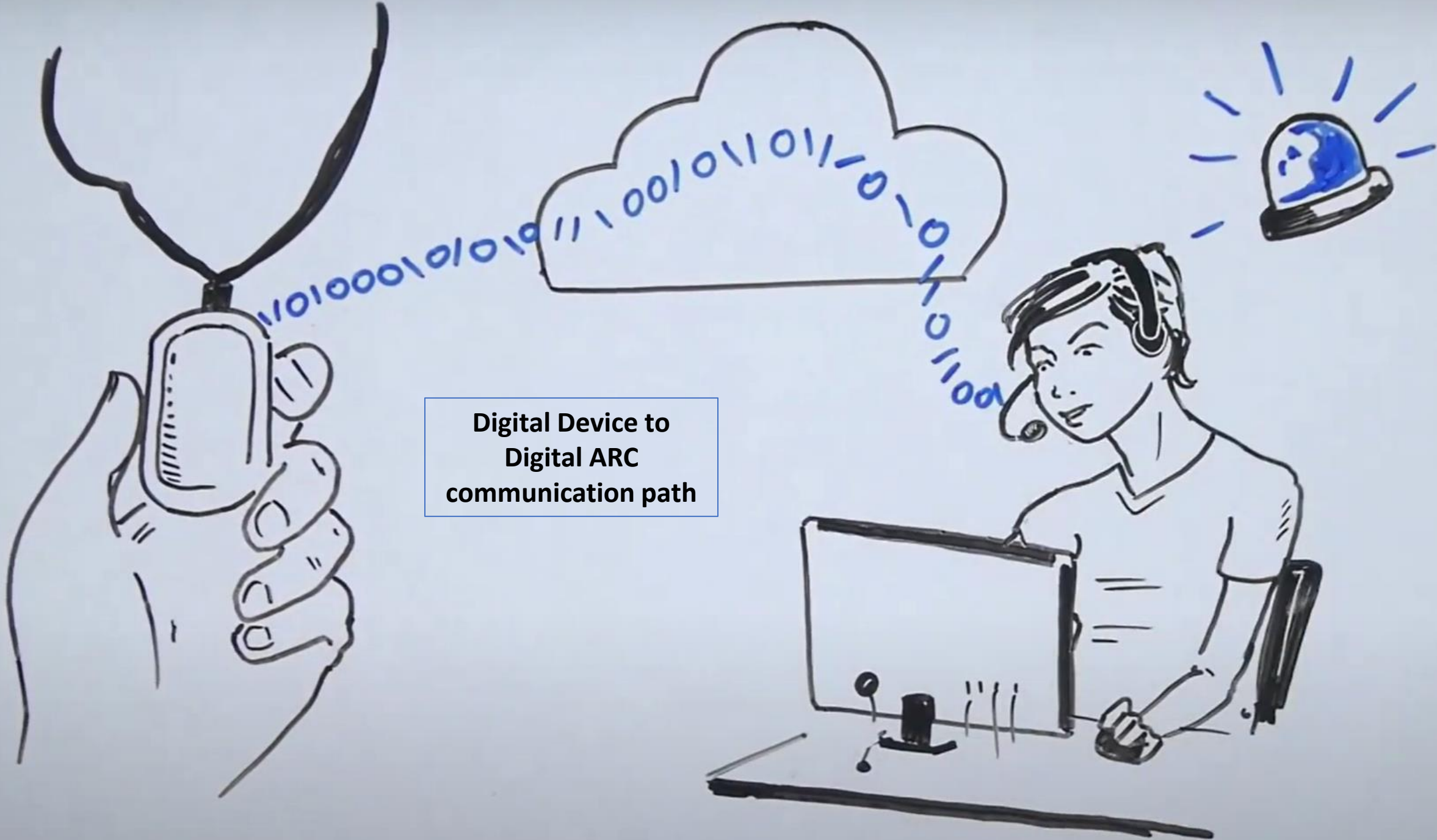
Manufacturer	Analogue Product
Tunstall	Lifeline Vi+
Tunstall	Lifeline Vi
Tunstall	Lifeline GSM
Tunstall	Lifeline Connect+
Tunstall	Lifeline Connect (post 2012)
Tunstall	Lifeline Connect (pre 2012)
Tunstall	Lifeline 4000
Tunstall	Lifeline 1000
Tunstall	Lifeline 400
Tunstall	Care Assist
Tynetec	Reach
Tynetec	Sayphone2
Chubb	Careunity
Chubb	Intellilink
Novo	PSTN/GSM



All IP – Guidance: Common Analogue Protocols

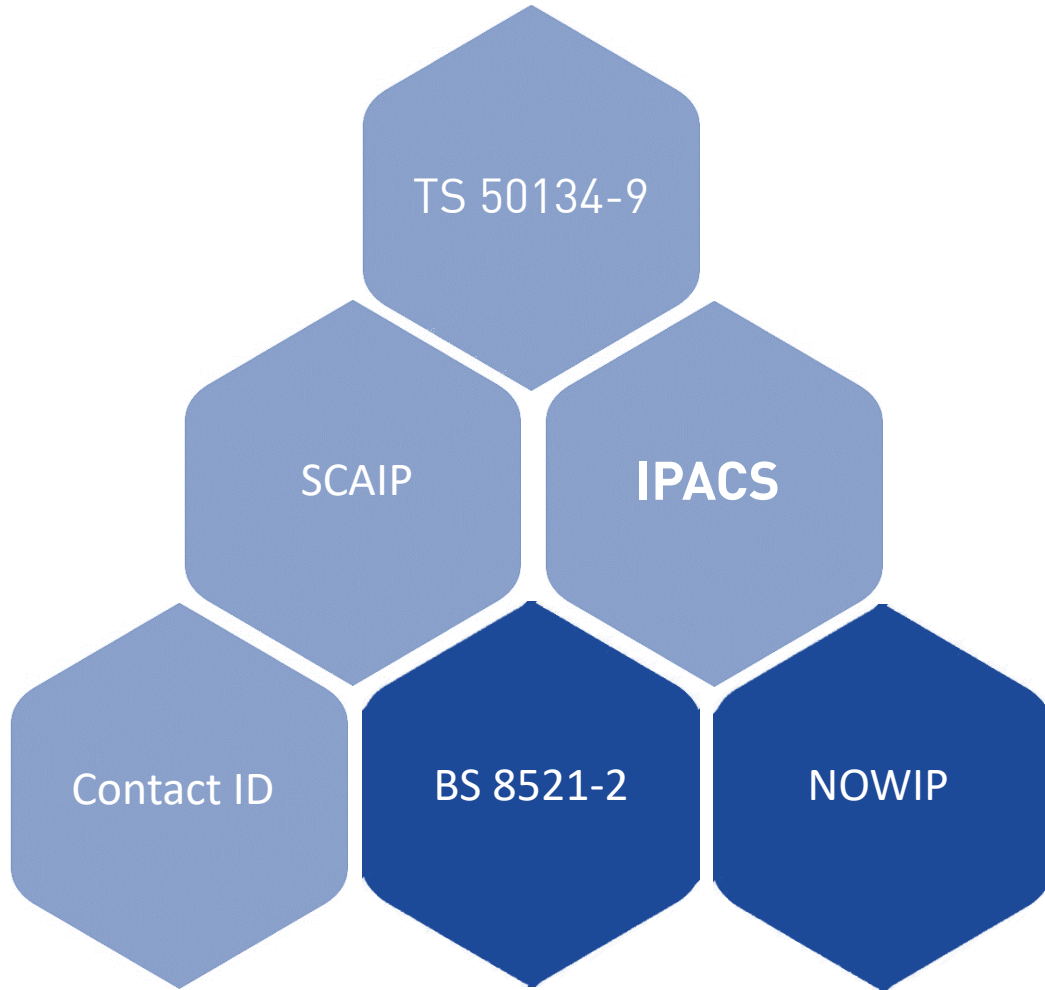


- **BS8521** British Standards certified (DTMF) multi-platform alarm protocol
- **TT21** DTMF protocol
- **TT21 – Single Tone** STMF protocol used in Tunstall device to Tunstall ARC only, more resilient protocol than DTMF commonly used in GSM based (mobile) units
- **TT92** DTMF protocol
- **TT92 – Single Tone** STMF protocol used in Tunstall device to Tunstall ARC only
- **TTNew** typically In operation in grouped living
- **TTOld** Still in operation in some grouped accommodation, **unlikely to work with digital**



Digital Device to
Digital ARC
communication path

All IP – Guidance: Common Digital Protocols



- **TS 50134-9** CENELEC ratified interoperable digital protocol, derived from SCAIP, certified and published by British Standards
- **SCAIP** Original digital interoperable protocol developed in Sweden
- **IPACS** Tunstall proprietary digital protocol, Tunstall state is a stronger digital protocol than either SCAIP or TS50134-9
- **Contact ID** Digital protocol developed within the security industry, commonly used in for digital social alarm communications in Australasia
- **BS 8521-2** Interoperable digital protocol used in grouped accommodation, based on NOWIP, certified and published by British Standards
- **NOWIP** Original digital protocol developed for grouped accommodation, superseded by BS 8521-2

The TS50134-9 Digital Interoperable protocol data fields

TS 50134-9

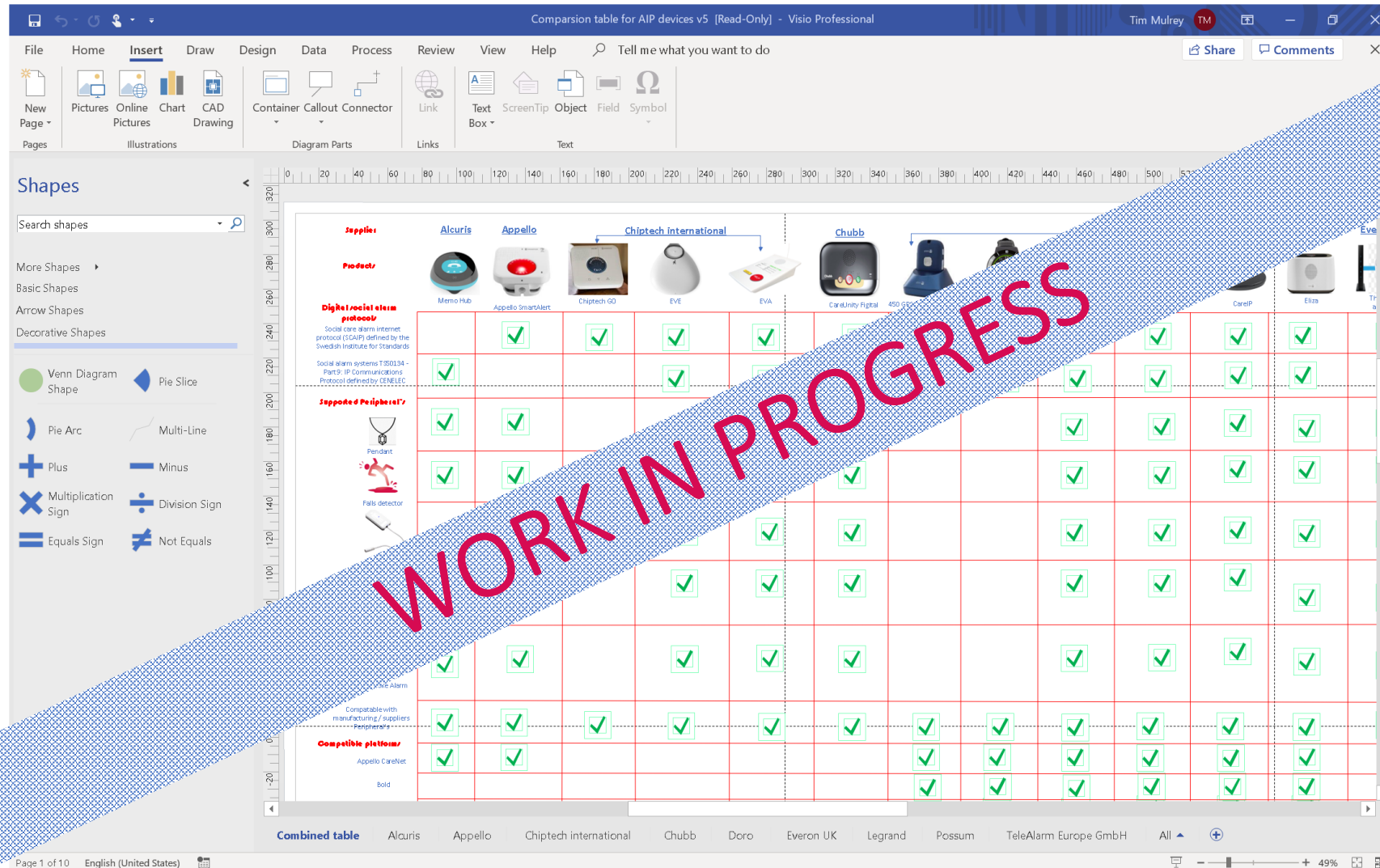
Code	Device Type
0	Reserved for future use
1	Reserved for future use
2	Local unit & controller
3	Personal trigger/pendant
4	Fixed trigger
5	Fall trigger/detector
6	Personal attack pendant
7	Panic alarm button
8	Duty switch remote
9	Duty switch local
10	Activity detector
11	Pill dispenser
12	Bed monitor
13	Mat sensor
14	Door sensor
15	Wandering sensor
16	Enuresis detector
17	Epilepsy detector
18	Occupancy detector
19	Heart rate monitor
20	Environmental monitor
21	(Natural) gas detector
22	Lighting circuit monitor
23	Smoke detector
24	Heating system monitor
25	Heat detector
26	Carbon monoxide gas detector
27	Bogus caller switch
28	Intruder detector
29	Boundary detector
30	Automatic) man down detector
31	System monitor
32	Communication link monitor
33	Flood detector
34	Bath sensor

Code	Device Status
0	Reserved for future use
1	Reserved for future use
2	Reserved for future use
3	Absent/away
4	Reserved for future use
5	Reserved for future use
6	Reserved for future use
7	Reserved for future use
8	Reserved for future use
9	Alarm (automatic)
10	Alarm (manual)
11	Reserved for future use
12	Armed
13	Reserved for future use
14	Battery failure
15	Battery high/full/recharged
16	Battery low
17	Reserved for future use
18	Bypass
19	Reserved for future use
20	Reserved for future use
21	Closed
22	Closed too long
23	Communication link, IP, failure
24	Communication link, mobile network, failure
25	Communication link, POTS, failure
26	Communication link, primary, failure
27	Communication link, redundant, failure
28	Reserved for future use
29	Reserved for future use
30	Disarmed
31	Reserved for future use
32	Error, code
33	Reserved for future use
34	Reserved for future use

Code	Device Location
0	Reserved for future use
1	Reserved for future use
2	Home
3	Away
4	Reserved for future use
5	Reserved for future use
6	Inside
7	Outside
8	Area
9	Zone
10	Basement
11	Bath room / WC
12	Bed room
13	Dining room
14	Floor
15	Garage
16	Garden
17	Garden, back
18	Garden, front
19	Geo fence
20	Gym
21	Kitchen
22	Laundry
23	Relax
24	Sauna
25	Stairs
26	Study room
27	Work shop
28	Loft
29	Shed
30	Temporary address
31	Summer house
32	Winter cottage
33	Mobile w/o fixed location
34	Reserved for future use



SIG06 – Guidance: Digital Comparison Chart



ALARM RECEIVING PLATFORMS



DIGITAL ALARM DEVICES

	Appello Carenet	Bold	Chubb	Communicare 247 Archangel	Doro Victrix	Enovation Umo	Legrand Jontek Answerlink	Skyresponse	Tunstall PNC		LEGEND
Alcuris Memo	Supplier					Supplier	Customer	Supplier			Not Tested
Appello Essence	Customer					Customer	Customer Customer				Supplier / Customer Tested
Chiptech	Supplier		Supplier			Customer	Customer Customer Customer	Supplier	Supplier		Customer Deployed
Chubb Careunity			Customer Customer Customer				Supplier				
Doro	Supplier	Customer	Customer		Supplier	Customer	Customer Customer	Supplier	Supplier		
Everon						Supplier					
Legrand Tynetec Reach IP			Supplier			Supplier	Customer Customer				
Possum	Supplier				Supplier	Customer Customer	Customer	Supplier	Supplier		
Tunstall Smarthub						Customer	Customer Customer	Supplier	Customer		
Telealarm	Supplier	Customer	Customer		Supplier	Supplier	Customer Customer				



**Digital Shift:
Test & Risk
Management
Guidance
published**

**Digital Shift:
A2D plans
reviewed &
supported**

**Guidance on
performance & reliability
of TEC systems (inc.
proactive services)**

**Integration &
Interoperability:
Requirements
defined with NHSX**

**Impact of
Technology
Developments**

**Guidance on the
performance & reliability
of TEC systems over
digital & mobile
networks**

**Digital TEC
systems, good
practice captured
& communicated**

**Integration &
Interoperability:
Guidance on system
integration
& interoperability**

TSA

Jan 2021

Mar 2021

March 2021

Jun 2021

Aug 2021

Q&A



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TSA Virtual ITEC Conference 22 – 25 March 2021

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22-25 March 2021

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