



"Strategies for Seamless Connectivity"

The Other Options...



Agenda

Lessons from the digital mobile "new normal"

• Bringing in additional resilience: The alternatives;

- GSM
- Landline

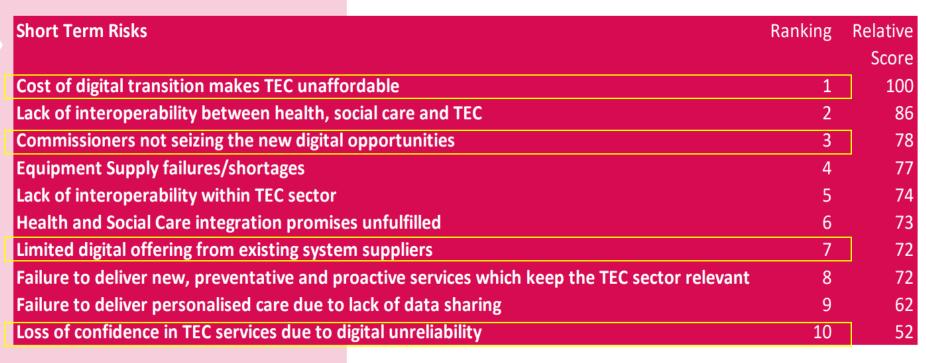
Resilience is all about risk: how do we manage it?



We have to think strategically about our digital roll-out as an industry



1 to 2 years





When we're introducing new technology like SIMs

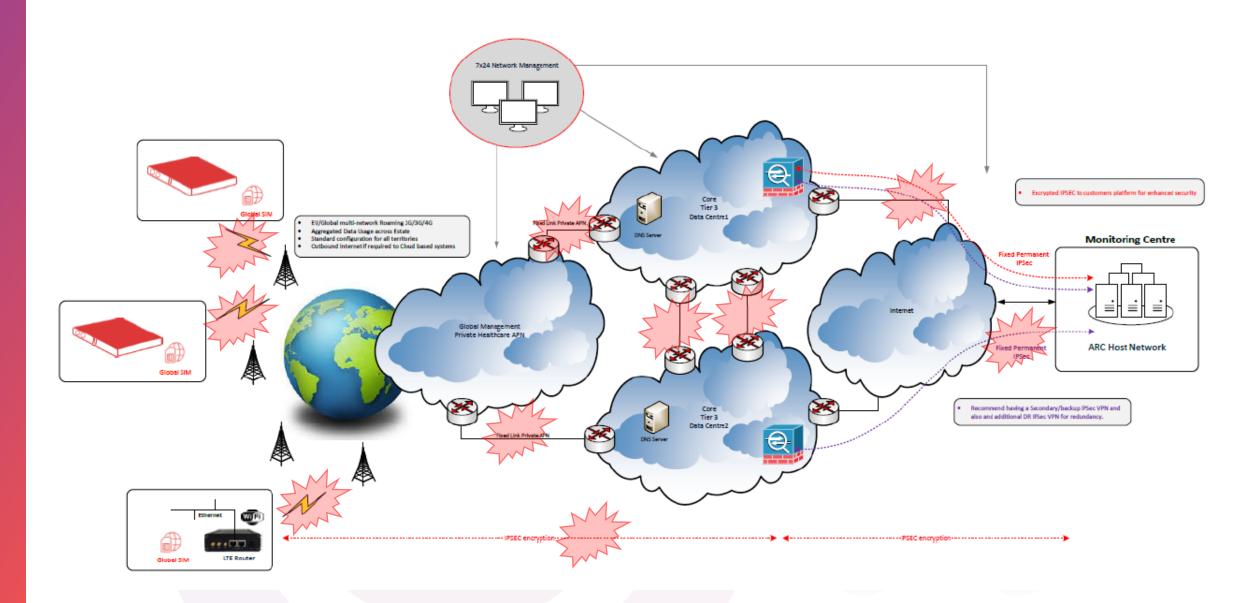


How do we ensure resilience: We are relying on a mobile phone network that was not designed for life-saving services

BCP in advance: Using the mobile phone network introduces new points of failure – work with your SIM provider to understand the disaster recovery plan for each STEP of the data journey



High Level Generic VPN Network Diagram



How do we ensure resilience: We are relying on a mobile phone network that was not designed for life-saving services

BCP in advance: Using the mobile phone network introduces new points of failure – work with your SIM provider need to understand the disaster recovery plan for each STEP of the data journey

opportunities: When
VOLTE is rolled-out across
networks we will have 4G
voice



Alternatives to roaming: If the mobile phone network or SIM provider network goes down then 100% of services are lost – is there an alternative route?

Understand SIM fail-over approach:

Having a dual SIM is not an answer on it's own – we need to understand the architecture of the SIMs provider and how they will failover

Getting security right: New digital security requirements (ie. VPN) require similar BCP review, what is the back-up?





Alarm systems -Social alarm systems

Application Guidance

TS 50134 Part 9: IP Communications Protocol

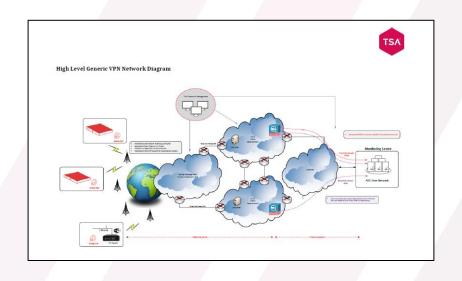
Developed by TSA Special Interest Group 10



The End-to-End Resilience of Technology Enabled Care Solutions

Author: Steve Sadler - Head of Technology Strategy, TSA

New "digital skillsets" will be required for providers of the future



It is recognised here that the end-to-end delivery of TEC services can be complex, and the endto-end understanding of technology platforms, telecommunications, user devices, the associated data processing and skills requirements, is a specialist role. It is proposed that a single Design Authority (person or organisation) should be the identifiable owner of these responsibilities and accountable to the QSF audit process.

So we've got to think about resilience options in an entirely new way...

•GSM

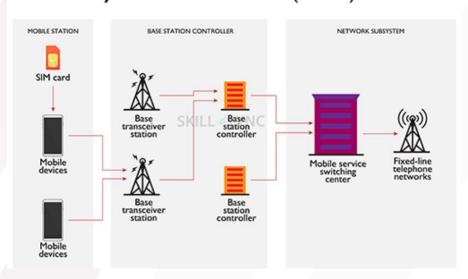
• Benefits:

- A Dispersed Alarm solution
- Delivers ANALOGUE connectivity over mobile networks
- Works if the Mobile network up BUT digital speech paths are down or VPN tunnels are down

Downsides;

- No guarantee that DTMF tones will work over the mobile network – signal degradation
- Not using full digital capability of mobile network
- Only supports DTMF tones, not SCAIP or NowIP

Global system for mobile (GSM) network



So we've got to think about resilience options in an entirely new way...

Landlines

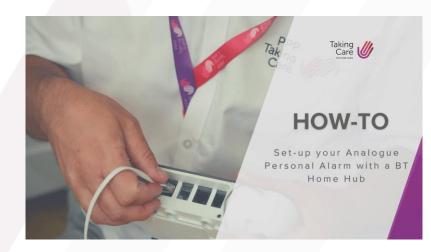
 Plugging alarms into the back of Broadband HomeHub – where there is a telephony port

Benefits;

- Allows analogue personal alarms to be used over digital telephone network
- Allows customers to retain "familiar" alarm
- Not reliant on digital mobile phone network

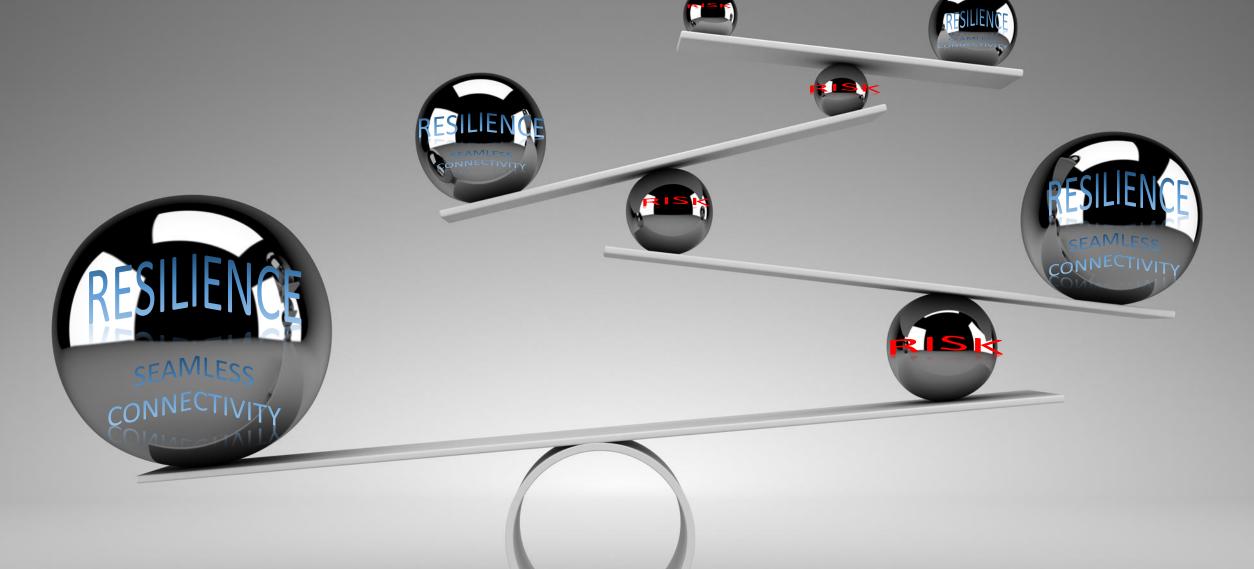
Downsides;

- Survivability of tone signal over digital network designed for data
- At the mercy of changes made by communications provider (ie. changing compression rates) on a month-by-month basis
- Understanding which alarms are likely to be the most resilient
- Not recommended by Openreach



Doing what we can - Alarm testing

Alarm Type	ARC Platform												
Protocol		BS8521		BS8521			TT92 DTMF STMF						
BT Consumer – FTTC (SOGEA)	Jontek								J IIVIF		,	5 I IVIF	
	PNC		ă		-				Ĭ	-			
BT Consumer – FTTP	Jontek	Ĭ	ŏ	Ĭ	ă				ŏ	ŏ			
	PNC		ŏ	Ŏ	ŏ		ŏ		ŏ	ŏ			
BT Enterprise – FTTC (SOGEA)	Jontek		O	Ŏ	Ŏ		Ŏ	Ŏ	Ŏ	Ŏ			
	PNC												
BT Enterprise – FTTP	Jontek	•		•		•	•	•	•				
	PNC				•	•	•	0				•	
Vodafone – FTTC (SOGEA)	Jontek	•				•							
	PNC												
Vodafone – FTTP	Jontek												
	PNC												
Zen – FTTC (SOGEA)	Jontek												
	PNC												
Zen – FTTP	Jontek												
	PNC												
TalkTalk – FTTC (SOGEA/MPF)	Jontek												
	PNC				•	•	•			•			
TalkTalk – FTTP	Jontek												
	PNC												
Sky – FTTC (SOGEA)	Jontek												
	PNC												
Sky – FTTC (SOGFAST)	Jontek												
	PNC												
Sky – FTTP	Jontek												
	PNC												



Risk management tools from the TSA





Risk Management Tools & Templates

Tools & Templates included here:

- 1. Risk Maturity Self Assessment tool
- 2. Sources of Risk Checklist
- 3. TEC Sector Risks 2021 Sector Survey summary
- 4. Risk Likelihood and Severity Evaluation Tool
- 5. Risk Register Template
- 6. Risk Incident Escalation Template

