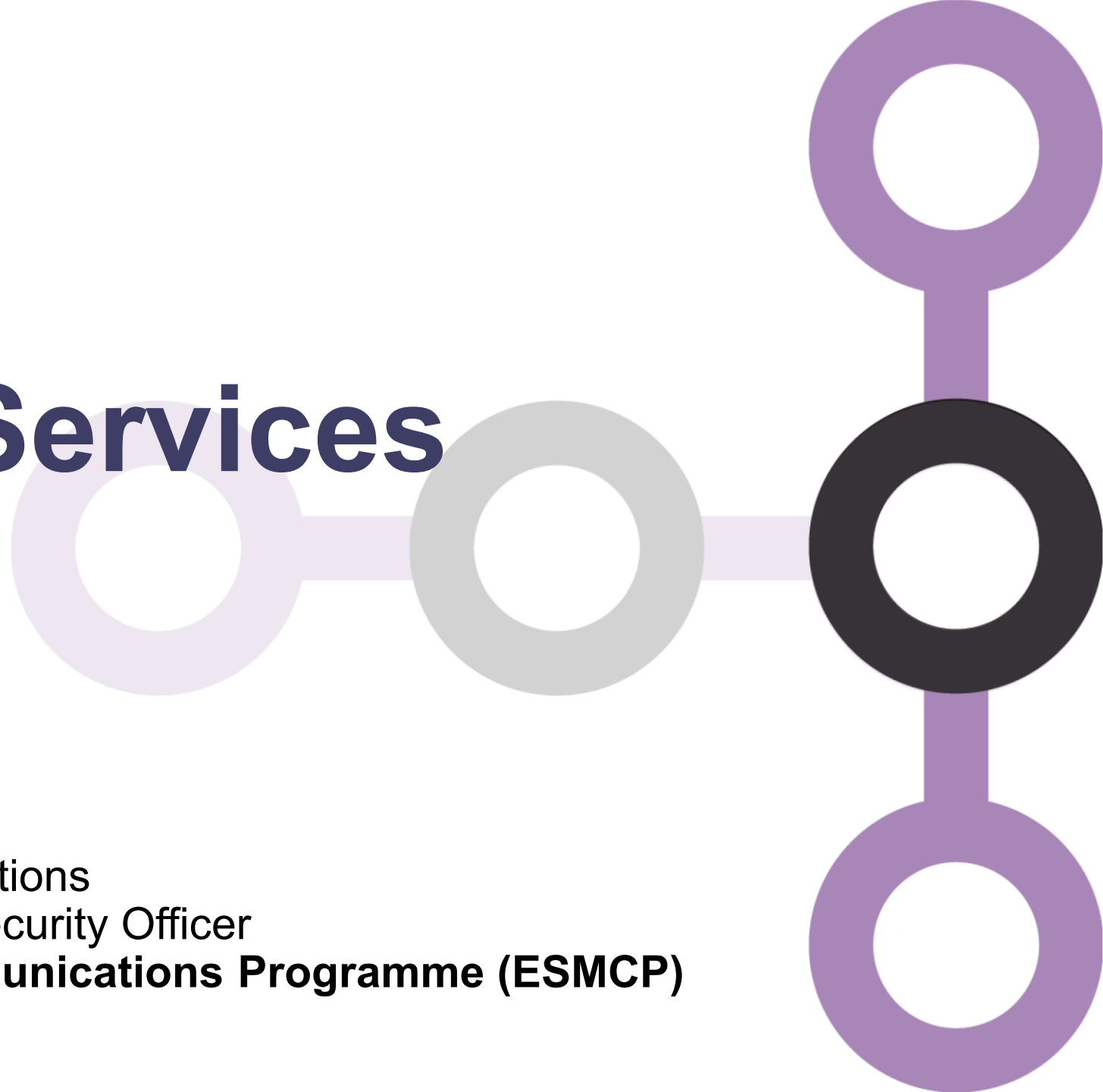


ESN



Emergency Services Network



15 Oct 2025

Niall Stokoe OBE – Director of Operations

Andrew Mould – Chief Information Security Officer

Emergency Services Mobile Communications Programme (ESMCP)

Agenda

- Programme brief - Niall
- Technology brief - Andrew
- Reflections on programme delivery - Niall
- People - Andrew
- Q&A

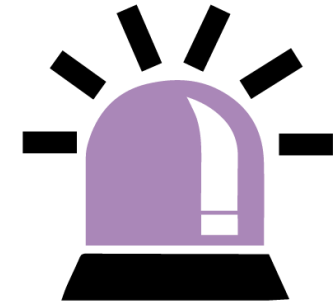
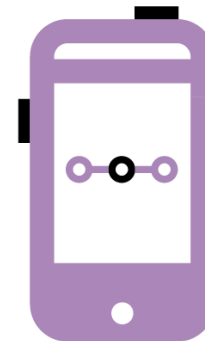


Programme Brief

Niall

ESN will deliver:

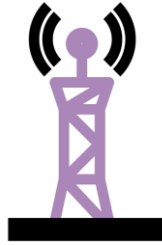
- Secure and resilient mission critical communications the emergency services can trust to keep them safe
- A voice and data platform which will enable the emergency services to improve frontline operations
- A common platform to enable emergency services to work more closely together for data sharing in emergencies



ESN summary



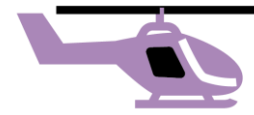
107 emergency services



**20,840 total sites,
with 1,045 new
masts***



**c.200 control
rooms**



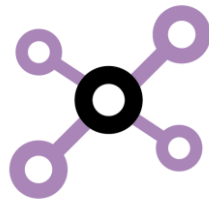
90+ aircraft



**Up to 10,000ft
in the air**



**300,000 service
users**



**32 nationals and
more than 300
sharers**



**45,000
vehicles**



**538,000km of
road**



**Out to 12
nautical miles**

**Figures correct as of January 2025*

Emergency Services Network

Delivering ESN together

ESN



ESN Suppliers



ESN Ecosystem Suppliers



ESN User Services



OFFICIAL SUPPLIER



+

SAMSUNG

MCX

- Delivering the MCX solution, with features enriched for User Organisations across Great Britain.

ERICSSON 

BSS, OSS, Mobile Core

- Enabling connectivity between MCX and Mobile Services solution, delivering Operational and Business Support Services.

FREQUENTIS

Control Room Interface

- Delivering the interface between the MCX and control room solutions.

exponential- 
APPLIED INNOVATION

Infrastructure

- Delivering managed infrastructure service across three data centres.

 **paloalto**
NETWORKS

Security

- Securing ESN with mobile network, cloud assets, and security operations environments, supported by 24/7 response and digital forensic services.

telent

Onboarding

- Leading User Organisation onboarding to ESN.

Other suppliers



Control Room dispatcher
software



Aircraft Communications
Systems

ESN Mobile Services



BETTER FOR BUSINESS

Britain's largest 4G and 5G networks | Best network performance
Trusted critical national infrastructure partner



Coverage

Road, marine, air
Vehicle based
User-led locations

Resilience

5-day power
Satellite backhaul
3- Site Mobile Core

Reliability

Private Network MOCN
Always-on priority access
Scalability

Culture

User first
Mission Critical mindset
Partnership

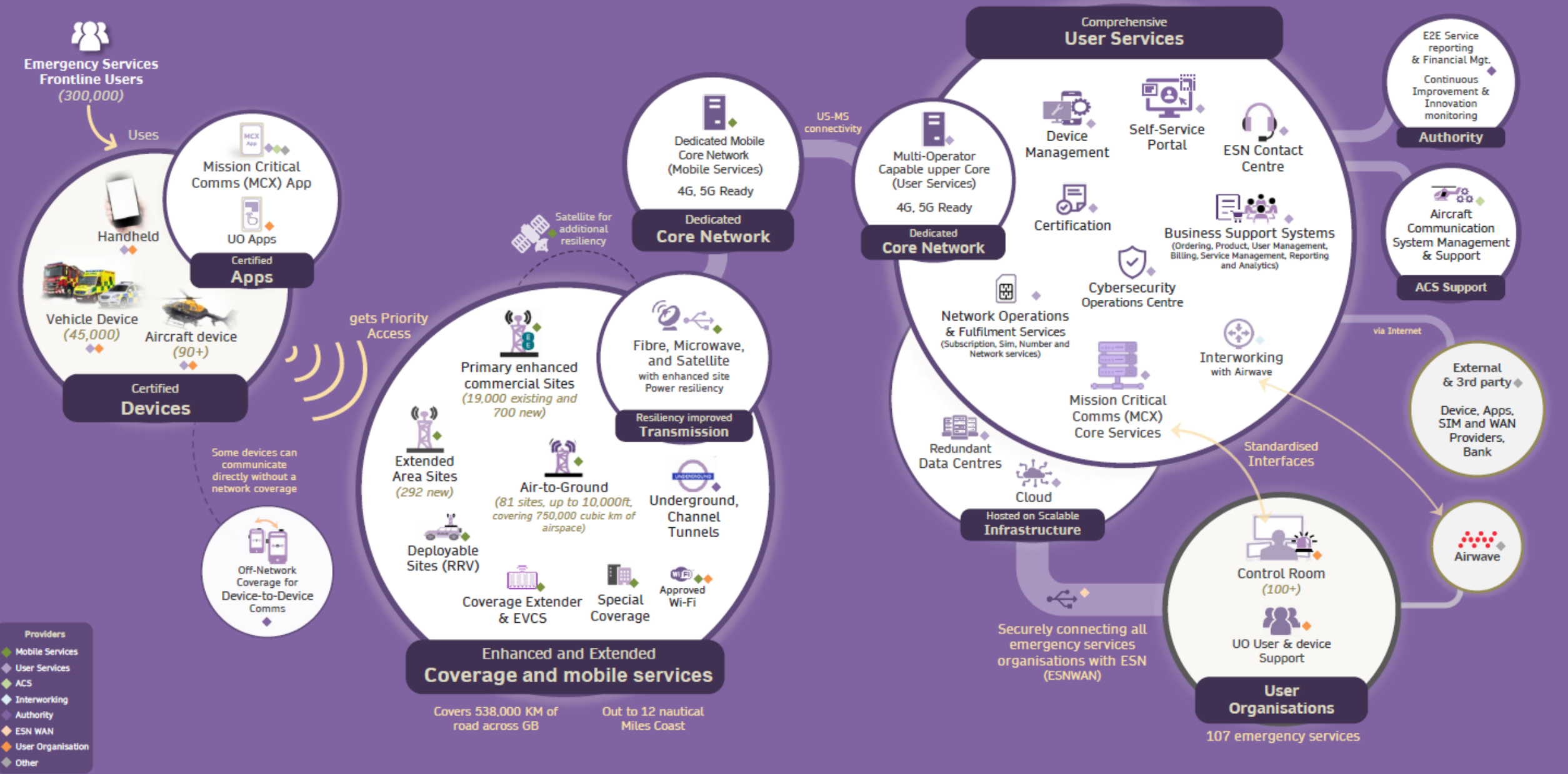
Integration with ESN ecosystem



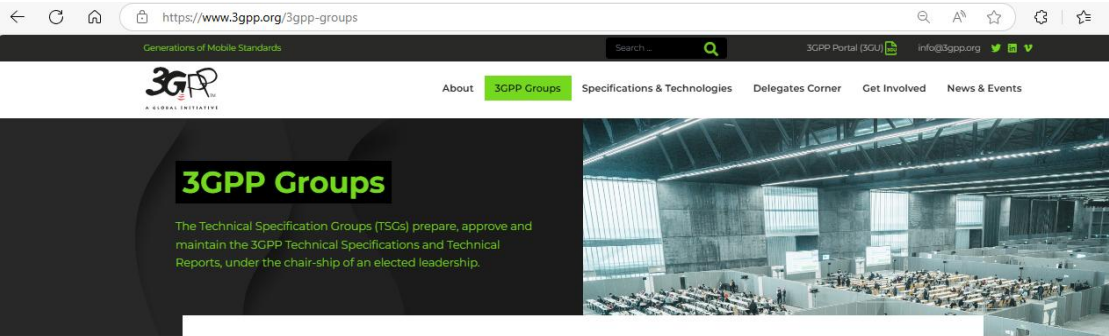
Technology

Andrew

ESN Overview: Target Capabilities for emergency services



Mission Critical Communications (MCX)



Select the group of interest to go to that group's landing page, which contains details about the leadership, meeting schedule, documents, specifications and a link to the Terms of Reference for that group.

Technical Specification Groups (TSGs)

The Working Groups, within the TSGs, meet regularly and come together for their quarterly TSG Plenary meeting, where their work is presented for information, discussion and approval.

TSG RAN Radio Access Network

RAN WG1
Radio Layer 1 (Physical layer)

RAN WG2
Radio layer 2 and Radio layer

TSG SA Service & System Aspects

SA WG1
Services

SA WG2
System Architecture and Services

TSG CT Core Network & Terminals

CT WG1
User Equipment to Core Network protocols

CT WG3
Interworking with External Networks

The 3GPP logo, featuring the letters "3GPP" in a stylized, bold font. Below the logo, the text "A GLOBAL INITIATIVE" is written in a smaller, sans-serif font.

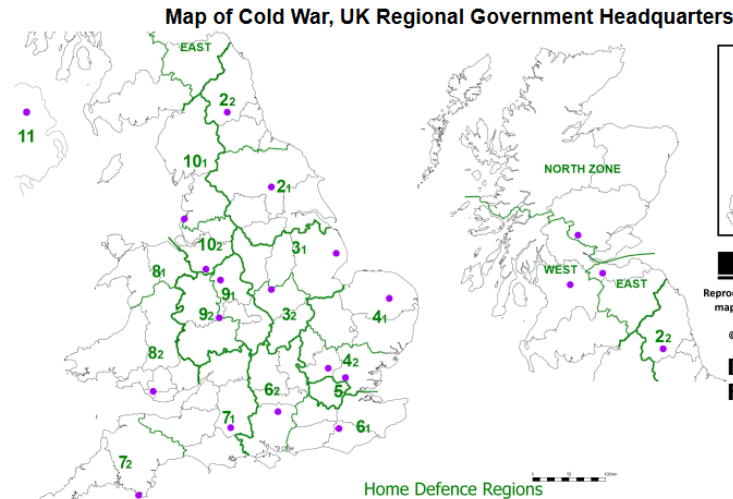
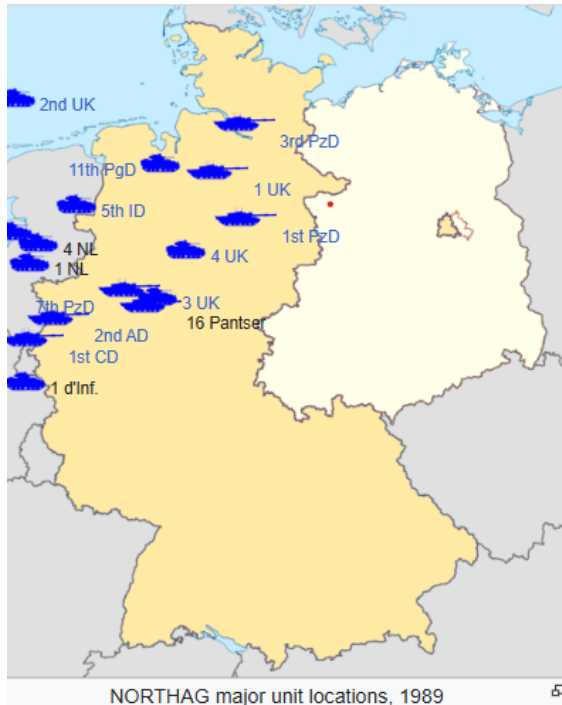
A detailed timeline chart titled "Release Timeline" for 3GPP. The timeline spans from 2025 to 2027, divided into quarters (Q1, Q2, Q3, Q4). It tracks the progress of various Technical Specification Groups (TSGs) and their associated releases. Key milestones include: Rel-19 RAN 2/3a Functional Freeze (Q3 2025), Rel-20 RAN 1 Functional Freeze (Q1 2026), Rel-20 RAN 2/3a Functional Freeze (Q2 2026), Rel-20 RAN 1 & Open API Freeze (Q3 2026), Rel-21 timeline decided no later than June 2026 (Q4 2026), Rel-20 RAN 2/3a Functional Freeze (Q1 2027), Rel-20 RAN 1 & Open API Freeze (Q2 2027), Rel-21 timeline decided no later than June 2026 (Q3 2027), and Rel-20 RAN 2/3a Functional Freeze (Q4 2027). The chart also includes a section for "TSGs RAN, SA, CT 6G Studies" and a "6G Studies" section. A red vertical line indicates the current position, labeled "You are here!".

Emergency Services Network

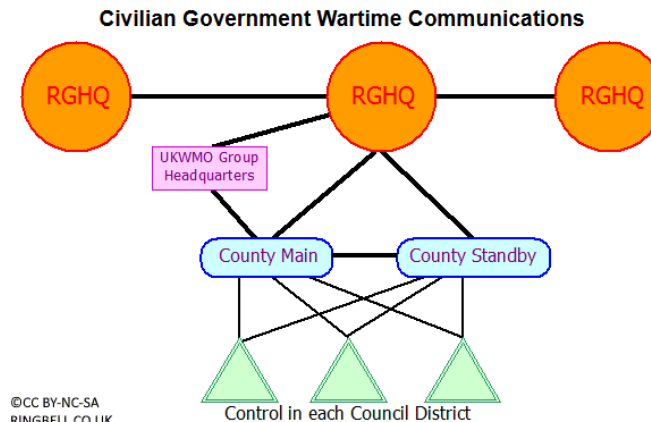
11

A bit of history..... (how did we get here?) .../1

1970s/80s



<https://www.ringbell.co.uk/ukwmo/index.htm>



© CC BY-NC-SA
RINGBELL.CO.UK



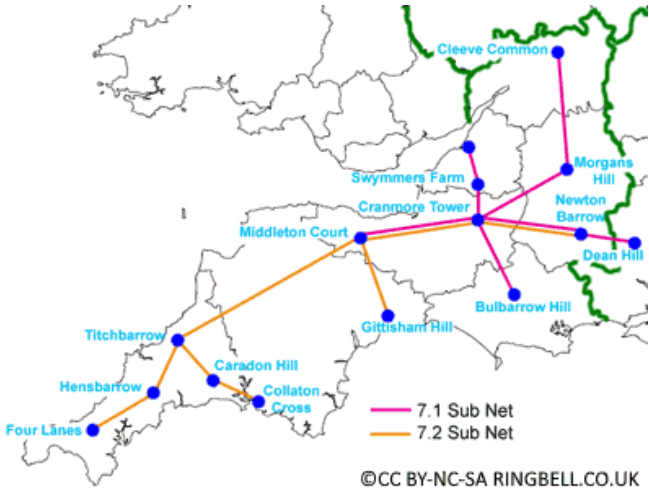
Bedford MK box body fitted with D11/R234 and generator

CONRAD
'Control by Radio'

A bit of history..... (how did we get here?) .../2

1980s/2000s

MOULD

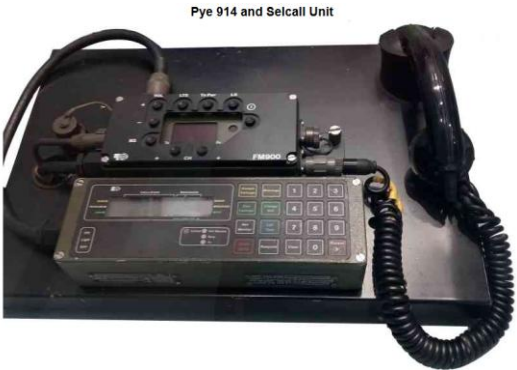


Landrover-Borne MOULD Station

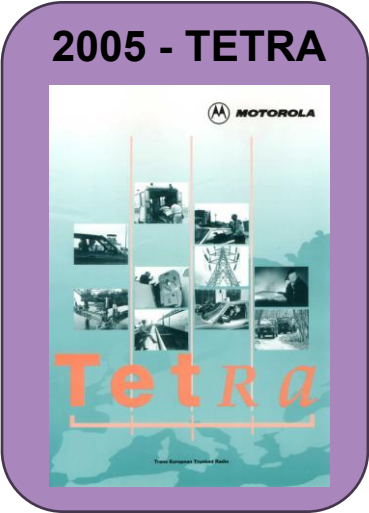
MOULD Vehicles in Civilian Colours



Emergency Services Network



Pye 914 and Selcall Unit





Reflections on the programme

Niall



People

Andrew

Transferable Skills

Security

Quals - CISSP / CISM / CompTIA

Experience – Govt Security Classifications,
Physical Security – Info Sec, Opsec

Digital Comms

Radio, data comms, digital networks
Deployable networks, hand-held SA tools

Technology

Application of technology
Innovation
Resourcefulness

Project Leadership

MPLA / PLP
MSP, APM etc.

Capability Integration

‘Get stuff done’

ESN



Emergency
Services Network

Thank you

