Home Office

Emergency Services Mobile Communications Programme

Ambulance Leadership Forum
8th Feb 17

HM Government

NPCC National Police Chiefs' Council

CFOA Chief Fire Officers Association

Association of Ambulance Chief Executives

Emergency Services Network (ESN)

- Airwave:
  - Is used by all Emergency Services and agencies and is a private network with c3,800 sites
  - National Shutdown is 31 December 2019
- ESN:
  - A new innovative voice and broadband data service based on enhancing a 4G LTE network with c19,000 sites
  - Will deliver integrated critical voice and data with priority
  - Is predominantly for police, fire and ambulance but will also benefit 300+ other organisations
  - Will match Airwave's nationwide coverage
  - Will improve public safety with enhanced functionality
  - Will meet all user, system and commercial requirements but not necessarily in the same way as Airwave

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ASSOCIATION OF AMBULANCE CHIEF EXECUTIVES

Programme Scope

- Emergency Services Users:
  - 44 Police forces
  - 50 FRS
  - 13 Ambulance Trusts
- Other User Organisations:
  - non-Home Office police forces
  - other government departments
  - local authorities
  - Transport agencies and utility companies
- **Control rooms**: c200
- **Vehicles**: c50,000
- **Aircraft**: c115
- **Users**: c300,000

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ASSOCIATION OF AMBULANCE CHIEF EXECUTIVES

Programme governance

- The Home Office is the lead for all funding departments and devolved bodies:
  - Single contract holder
  - Simplify interaction with suppliers
  - Single bill payer for Core services
  - User billing for Non-core services
- Memorandum of Understanding between HO:
  - Department for Health, Scottish and Welsh Governments
  - Other ESN Users

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Main procurement lots

- **Lot 1 (Delivery Partner) - KBR**
  - A Delivery Partner to oversee build out of the network; programme manage transition; provide cross-Lot integration; training support services; vehicle installation design and assurance, and delivery support
- **Lot 2 (User Services) - Motorola**
  - An service provider to provide end-to-end systems integration; public safety functionality; account management; network and IT infrastructure; technical interfaces to all other lots and services user device management; application hosting; customer support; and service management
- **Lot 3 (Mobile Services) - EE**
  - A mobile network operator to provide an enhanced radio access service with highly available full national coverage using the Extended Area Services; and technical interface to Lot 2

Other procurements

- **Related projects:**
  - EAS: Ground and A2G infrastructures, transmission, installations and FM
  - Devices: Handheld, Vehicle, NSS and Aircraft (and their installations)
  - Networks: Control Rooms (ICCS, Interworking and DNSP), LUS, Special Coverage
- **Related activities:**
  - General coverage
  - Special coverage
  - Resilience
  - Testing
  - Security
  - Trials

- **Dependent projects:**
  - Crossrail
  - MIP
  - Network Rail (Telecoms)

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Timetable

Milestone	Date
Contract award	Dec 15
MSI acquires Airwave	Dec 15
Detailed design	May 16
Test & Functional Trials	Aug 16 to Feb 18
Service Ready	Mar 18
Major Operational Trails	Feb 18 to Jun 18
Mobilisation Complete	Jun 18
Transition commencement target	Mid 18
Transition complete target	TBC

AMBULANCE LEADERSHIP FORUM

EE AND ESN

8TH FEBRUARY 2017

OFFICIAL

BUILT ON BRITAIN'S BEST 4G NETWORK

- Dedicated, ultra-reliable core network
- Superior voice and data capabilities
- Service prioritisation for ESN users
- Inherent resilience supported by network hardening and innovative solutions
- Enhanced indoor & rural coverage with new spectrum

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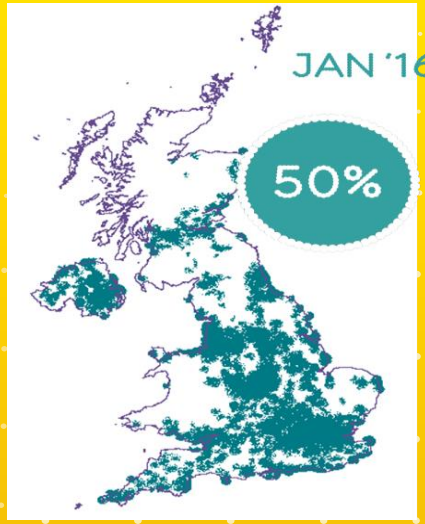
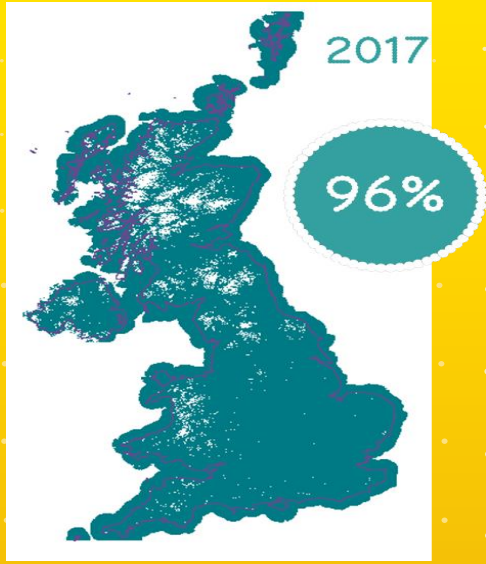
96% GEOGRAPHIC 4G COVERAGE BY 2017



EE 4G outdoor coverage at start of contract

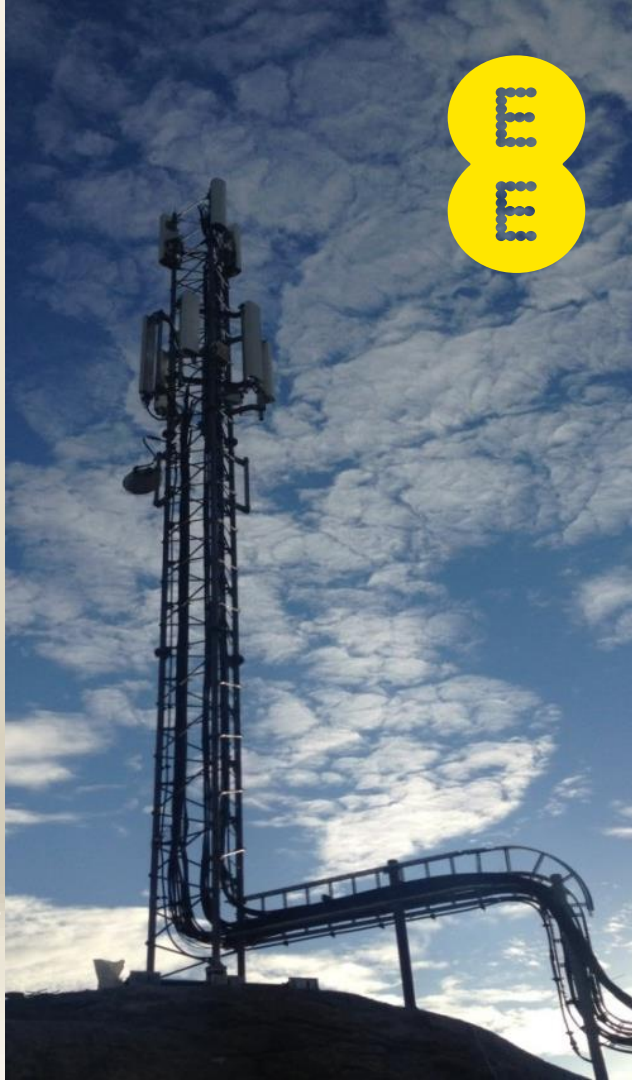
Commercial network switch on is occurring now



EE 4G ESN outdoor coverage Sep 17

EXTENDING OUR 4G COVERAGE

- Upgrading 18,500 sites to 4G
- c.430 new sites to reach remote regions of UK



DELIVERING ULTRA-RESILIENT NETWORK

- Network refresh to deliver enhanced reliability and monitoring
- Improved power resilience through additional generators and batteries
- Transmission resilience for 2000 sites
- Rapid Response Vehicles

OFFICIAL

SERVICE MANAGEMENT & OPERATIONAL READINESS

- Service Management Framework delivered
- Integrated Service Management Tool to be deployed
- Operations proof of concept underway
- User organisation collaboration
- Operational scenario planning

OUR ESN JOURNEY

DECEMBER 2015
We won the ESN contract

FEBRUARY 2016
Initial plans and designs shared with the HO

MAY 2016
Detailed plans and designs shared with the HO

SEPTEMBER 2016
Reference system built

OCTOBER 2016
Network testing and integration

NOVEMBER 2016
System testing complete

User Engagement

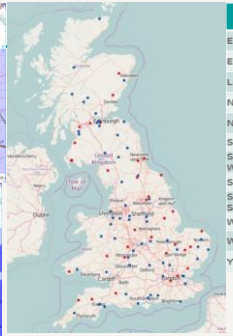
CONFERENCES

BRITISH APCO 2016

THE EMERGENCY SERVICES SHOW

HALL 5 | NEC | BIRMINGHAM | 21-22 SEPTEMBER 2016

ALF2017 Ambulance Leadership Forum



Transition Group	Completed	To Activate	% Complete
East	1,396	377	78.7%
East Midlands	1,102	304	78.4%
London	1,438	67	95.6%
North East	547	100	84.5%
North West	1,646	164	90.9%
Scotland	1,402	644	68.5%
South Central (inc Isle of Wight)	1,050	242	81.3%
South East	1,144	234	83.0%
South West (inc Isle of Scilly)	1,219	293	80.6%
Wales	682	248	73.3%
West Midlands	1,254	239	84.0%
Yorkshire	1,105	194	85.1%

REGIONAL COVERAGE MEETINGS

INFORMING USERS

EE SITE VISITS

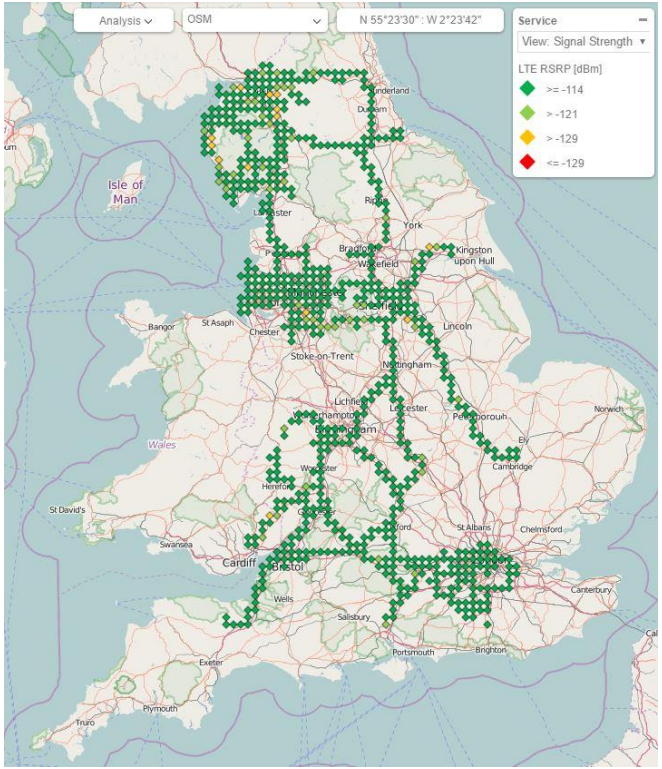
USER VISITS TO TOC

FRONT LINE EXPERIENCES

RRV TOUR

THANK YOU

Coverage Assurance



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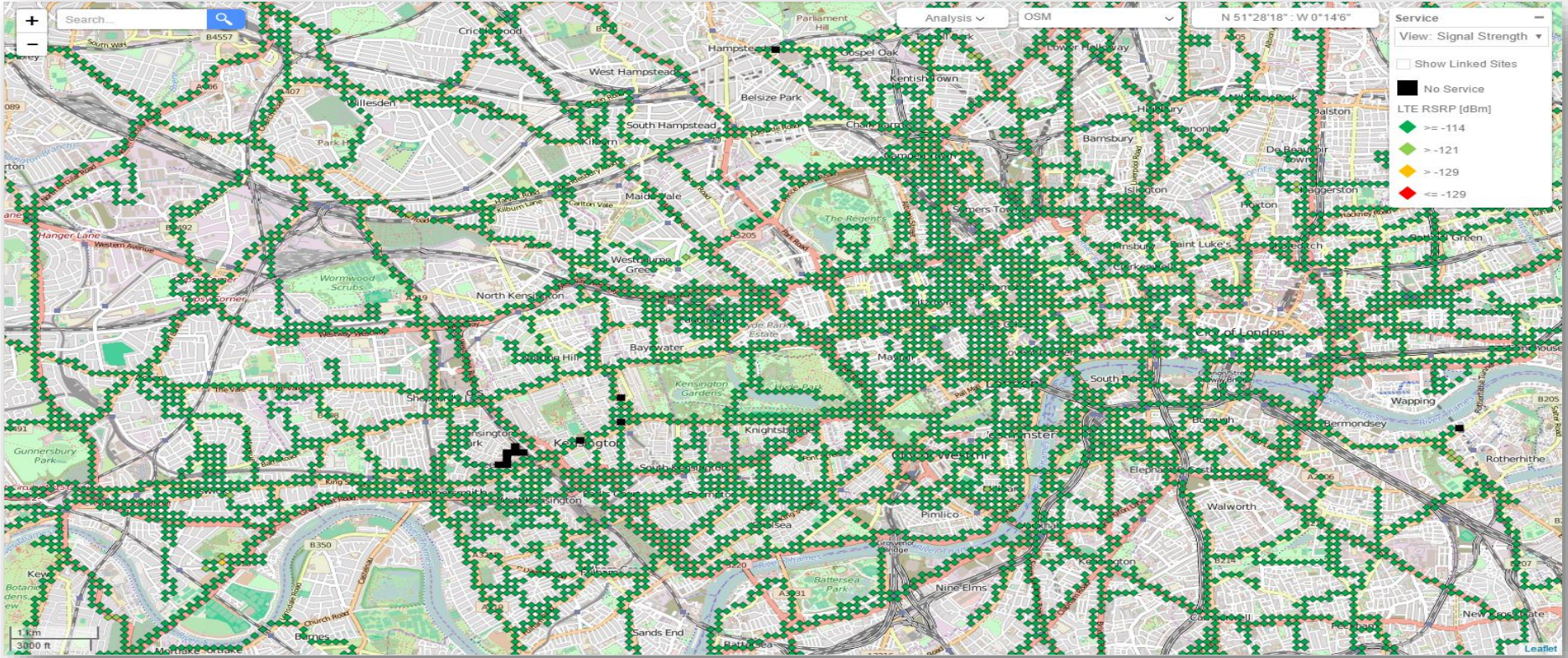

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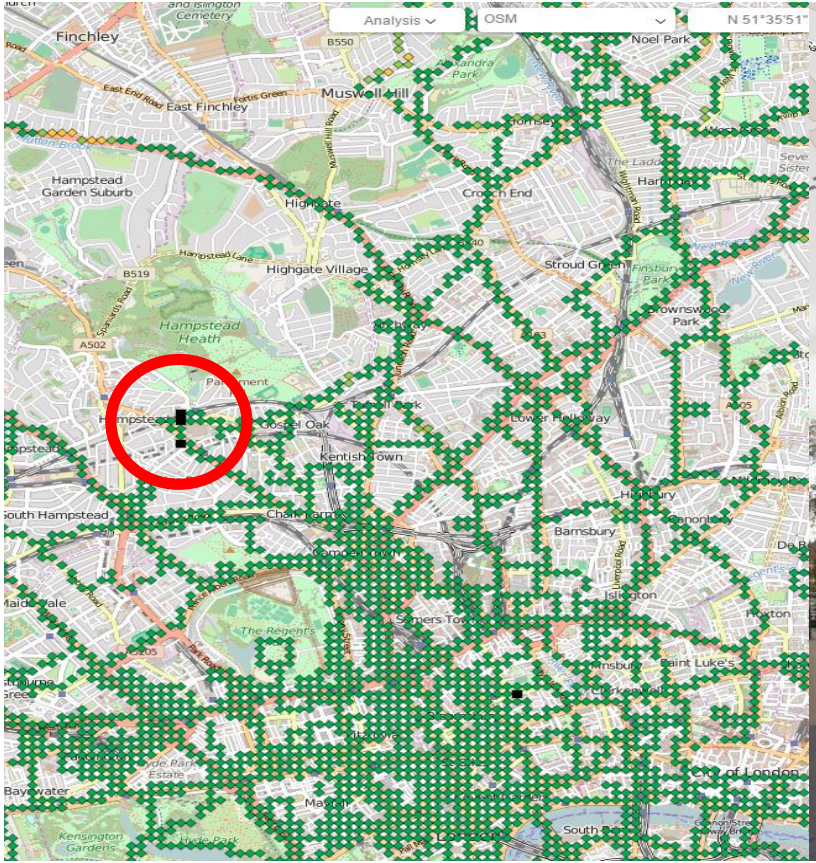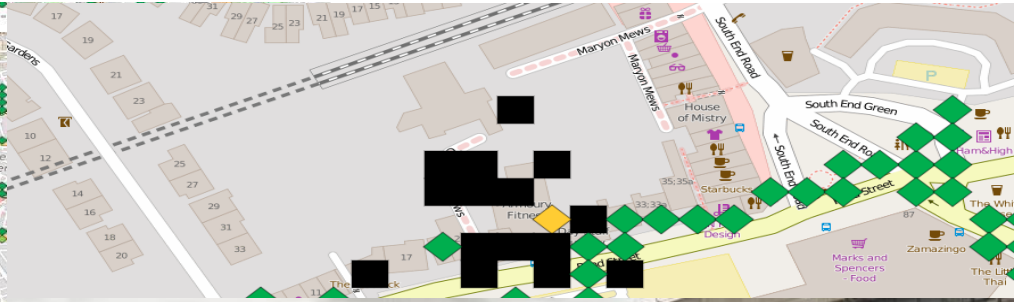
Coverage Assurance