

Airwave in London Underground - Improving safety: an operational perspective

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Purpose of presentation

- Background
 - Pre Airwave
 - Drivers for Airwave
- ALU – some headline details
- ALU – some headline numbers
- What does it all mean to users
- Benefits to London Underground Ltd
- Some good news stories
- Questions

Background – pre Airwave

- King's Cross Fire and subsequent Fennell Report
 - London Underground provides Fireground 'at incident' communications throughout system for LFB and;
 - BTP channel 2 VHF provided at all Section 12 stations
 - Single channel across all stations
 - BTP need to 'dual carry' radios
 - No capability for other services (except by arrangement with BTP)
- Long history of LUL support for emergency services communications on the system

Background - drivers for Airwave

- 'Surface' Airwave coverage did not extend into deep tube and sub-surface stations (Section 12)
- Therefore no service for Airwave users on 125 stations and in running tunnels
- Contrast this with levels of coverage and users' expectations above ground and the capability gap is clear
- Early realisation of the scale of the challenge; in financial, commercial and engineering terms
- Efforts focused by events of 7/7 and 21/7

ALU – some headline details

- 125 deep tube and sub-surface stations and associated running tunnels in the project scope
- Centrally funded (circa £100m) and service managed by NPIA
- Delivered on time and within budget
- Result of excellent partnership working within a complex supply chain – would not have happened without Connect (shared infrastructure)
- Project's success widely recognised; e.g. National Rail Awards – Sir Robert Horton Safety Award

ALU – some headline numbers

- Usage data from July 2009:
 - 260,000 group calls
 - 7,500 point to point calls
 - 240 emergency calls
 - 64,000 minutes of combined traffic
- These figures do not include any use made of ALU by specialist users (covert etc)

What does it all mean to users?

- Underground communications for Met Police, City of London Police and London Ambulance Service for the first time + real benefits for the covert community
- Seamless communications between the surface and Underground on a common handset for BTP (no more carrying 2 radios)
- Coverage in running tunnels for first time
- Clearer, secure and more reliable and flexible communications
- Potential for using shared talkgroups

How can LUL benefit?

- Quicker restoration of train service following disruption;
- Improved staff safety;
- The Underground is no longer a safe haven for criminals;
- Less crime through higher detections and improved response = better travelling experience for customers;
- 'Public safety' organisations can apply for Airwave Sharer status;
 - For certain roles
 - Capability to interoperate with emergency service in defined circumstances
- Examples = TFL (London Rail), Southeastern + SWT

Some good news stories

- BTP policing football fans on the network; 'we no longer lose communications with the control room when we go into the tunnel, therefore we can keep our colleagues fully informed and warn of potential disorder throughout the journey, which can take 30 minutes plus' = increased safety of officers, customers and fans alike
- LAS attending casualty who had fallen on an escalator at Tottenham Court Road station;
 - On attending the patient they required the ambulance crew to bring various pieces of special kit to the scene. They alerted the Control Room from the scene by using their Airwave radios and arrangements were put in place
 - The time saved in getting to the hospital was estimated to be 15 minutes.

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Any Questions?

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