Optimise Enhance Extend
Improving seamless connectivity at Heathrow

Roberto Segala, Head of Commercial Telecoms

Heathrow

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Commercial Telecoms - Update

4G cellular connectivity

Wi-Fi On The Move

WAMD

Fast Public Wi-Fi

Beacons

End of Job Surveys

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Coming Soon …

New Help Desk	WLAN Upgrades Ph.2	TETRA Migration	Detailed Invoices

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Radio upgrade project

Heathrow TETRA radio platform

Martin Stone MIET
Technical Architect – Radio and Cellular Systems

Heathrow
Making every journey better

Radio Upgrade Objectives

Radio is critical for the operations:

- ✓ Heathrow's **licence to operate** is dependent on having a resilient radio system in place
- ✓ Heathrow's **Command & Control** depends on radio communication
- ✓ **HAL, Airline partners and suppliers** rely on a stable radio platform

The radio upgrade project will:

- ✓ Convert from **Analogue to Digital** technology to align to international TETRA standard
- ✓ **Replace infrastructure, technology and devices** which are out of production and support
- ✓ Improve operating **capacity** and reduce call queuing
- ✓ Improve **resilience** and remove risk of failure during high usage periods
- ✓ Deliver improved **end-user experience** including coverage enhancements

Heathrow has chosen the TETRA standard because:

- ✓ It is **used by mission critical organisations** around the globe to support Command & Control
- ✓ It is a **fully over the air encrypted** and secure system with remote monitoring
- ✓ Fully **scalable solution** to allow system to grow with demand
- ✓ Offers a host of additional features for future needs

The Product

- ✓ Sepura **handheld**, **desktop** and **vehicle** radios with three core services
  - **Group calling** via talk groups
  - **One-to-one calling**
  - **Emergency calling** direct to Airport Control
- ✓ Full **Contact List** for ease of use
- ✓ **Simple functionality** to simplify training and transition
- ✓ **Flexible fleet map** to reflect how the airport needs to communicate
- ✓ Introducing **Heathrow Fire** onto the system

The Future

- ✓ **Scalable**
  - **14 external** and **30 in-building** traffic channels **today** (existing trunk total 15 channels)
  - Licensed for further **7 external** and **108 in-building** channels; design can support up to **508 traffic channels** with additional hardware (subject to spectrum availability)
- ✓ **Roadmap** features/functions:
  - **External GPS** and **in-building geolocation** using iBeacons and/or Wi-Fi
  - **Dynamic Group Assignment** based on role/location
  - **SDS Short messaging/status messaging** reduce need for voice
  - **AppSPACE** custom apps to enhance your processes
  - Future **high bandwidth technology** TETRA uses same language as LTE advanced/5G for inter-working – e.g. live video
  - **Full-duplex telephony-capable** and more….
- ✓ **Common LHR radio platform** securely communicate with multiple partners on one system

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