



### Delivering excellence in mission-critical radio design and installation

New airports need state-of-the-art radio systems to drive operational excellence. Coverage has to be reliable and secure, and it needs to be provided to all public and operational areas. Rollout needs to be delivered on time and budget and meet strict quality standards. This is particularly challenging when building work is frequently ongoing.

#### BACKGROUND

##### Secure airport coverage

Airport operations need reliable SITA Professional Mobile Radio (PMR) systems, including devices and indoor coverage.

The environments are often difficult for radio – characterized by features such as metal structures and numerous small interior rooms.

##### System complexity

Radio systems require up-to-date skills and expertise to manage their complexity.

This can range from regulatory aspects to radio design and process integration.

#### SOLUTION

SITA provides state-of-the-art PMR systems with up to 99.9% reliability. The solutions are delivered through new, improved radio terminals and best-in-class distributed antenna systems (DAS).

SITA's systems ensure minimal impact on building infrastructure, with installation completion and sign-off aligned to airport inaugurations.

We deploy our systems with future considerations in mind. The SITA PMR systems are IP-based and allow for the integration of future applications. The distributed antenna systems allow additional frequencies to be added without modification. We can complement solutions with unified communications platforms.

#### BENEFITS

- Minimal impact on infrastructure
- Exceptional coverage and performance – past systems have delivered above customer expectations
- Fast and accurate deployment with our experience in airport installations
- Fully managed systems – we combine our technical solution with local SITA support
- Flexibility – our systems can be evolved to meet the demands of the airport and its future tenants

#### RESULTS

**Up to 99.9%  
system  
availability**

**Complete  
secure and  
reliable  
coverage**

## How does it work?



## SOLUTION COMPONENTS

### 1. Core network SITA PMR solution

SITA delivers state-of-the-art IP SITA PMR solutions which provide up to 99.9% reliability and integration capabilities. This ensures the solution can grow and adapt to the changing requirements of an airport's users.

### 2. Reliable SITA PMR devices

SITA selects highly reliable devices from a range of suppliers. We also tailor device type to the specific airport conditions.

### 3. Distributed Antenna System

SITA's indoor coverage solution uses an Active Wideband Distributed Antenna System. This has less impact on buildings during installation and provides better coverage and performance. It also has the advantage of being scalable and future-proof.

### 4. Unified communications platform

SITA can complement the SITA PMR solution with a Unified Communications Platform (UCP) to combine other technologies (smartphones etc.) with the SITA PMR groups.

### 5. Next-generation systems

SITA has extensive expertise in future 4G and LTE solutions, enabling airports to develop from voice-centric SITA PMR to data-centric IP-based systems.

## CASE STUDY

A large Middle Eastern airport needed a mission-critical PMR solution with extensive indoor coverage. They engaged SITA, and we designed and installed a complete SITA PMR system, including a distributed antenna system.

The solution was implemented alongside the airport construction, and the customer relied on SITA's expertise to guide them through the design phase. Particular attention needed to be paid to overcoming the difficult radio environment. We also had to consider the fact that the new airport was nearing completion of construction work.

The successful delivery demonstrates that SITA has the knowledge to design, install and integrate SITA PMR solutions, alongside other airport projects.

The system is fully operational, with local onsite support. It has the potential to grow in capacity and expand as needed.

For more information please contact us at [info@sita.aero](mailto:info@sita.aero)