



LEIPZIG/HALLE AIRPORT: FIRST TO USE A MOTOROLA SOLUTIONS DIMETRA™ X CORE TETRA SYSTEM IN CENTRAL EUROPE

FOR FUTURE-PROOF, FAIL-SAFE, MISSION-CRITICAL COMMUNICATIONS



Source: Leipzig/Halle Airport

LEIPZIG/HALLE AIRPORT

Leipzig/Halle airport is located in the state of Sachsen, lying between the two large cities from which its name derives. The airport was opened on 25th April 1927 and is now one of Europe's most modern airports. Leipzig/Halle Airport Ltd is a subsidiary of Mitteldeutsche Flughafen AG. Leipzig/Halle registered approximately 2.36 million passengers and 1.14 million tons of airfreight in 2017, making the airport the second-largest freight airport in Germany and the fifth-largest in Europe. DHL's presence has particularly contributed to the airport's growth; it established its largest hub within its global network at Leipzig/Halle in 2008, investing €655 million into its construction. Other logistics companies have also rapidly developed the chartered freight side of their business, with the freight network now covering more than 270 airports worldwide, served by over 50 cargo airlines.

Leipzig/Halle airport first deployed a Motorola Solutions' SMARTNET® analogue radio system in 1998. This system was replaced by a DIMETRA IP Compact TETRA system in 2007. And now the airport has upgraded to a new DIMETRA X Core system.

The DIMETRA X Core system will enhance and prolong the life of the TETRA radio network at Leipzig/Halle, whilst preparing for future mobile broadband capabilities. Moreover, the system installed at the airport has multiple levels of resiliency with geographic redundancy to ensure communications will always keep working, even in the case of emergencies or natural disasters.

CUSTOMER PROFILE

Organisation:

Leipzig/Halle Airport

Industry:

Aviation

Location:

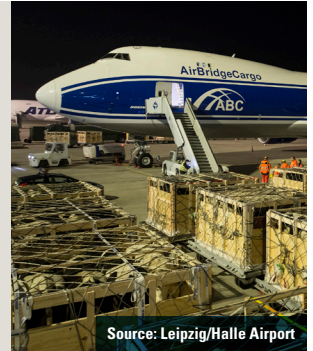
Germany

Motorola Solutions Products:

- DIMETRA X Core
- DIMETRA MTS4 TETRA base stations
- 2 Geographically Redundant Switches
- 14 DIMETRA MCC 7500C IP Dispatch Consoles
- 1,800 Motorola Solutions radios – ongoing upgrade of MTP850 TETRA portable terminals with MTP3550 TETRA portable terminals with standard Motorola Solutions batteries and single and multi-chargers
- Bespoke Motorola Solutions Service Contract

“We have been successfully using Motorola Solutions’ TETRA digital radio solutions since 2007. Due to the reliability and performance of the technology, we decided to update the centrepiece of our TETRA system, in collaboration with our long-standing partner Motorola Solutions. Implementing the new DIMETRA X Core system was a logical step for us, as it provides the capacity and capabilities we need to successfully ensure mission-critical communications for our users.”

Eric Schmidt, Team Lead, IT Operations, Mitteldeutsche Flughafen AG



CHALLENGE

Leipzig/Halle airport wanted to refresh its 11-year-old TETRA DIMETRA IP Compact system, to benefit from the latest TETRA hardware and software. A further key requirement was to introduce geographic redundancy into the system, to ensure absolutely fail-safe communications irrespective of blackouts, disasters and failures at the airport. Motorola Solutions recommended its latest TETRA technology: a DIMETRA X Core system. The Motorola Solutions team from Berlin quickly built, delivered and installed the new system with zero downtime and minimal training required.

SOLUTION

Motorola Solutions’ DIMETRA X Core system connects more than 2,000 users at Leipzig/Halle Airport and enables independent and reliable mission-critical communications across the entire site. The new TETRA network is principally used by ramp agents, baggage handlers and service personnel for Push-to-Talk calls. With approximately 320 talk groups, across 40 teams for DHL, Aerologic, European Air Transport and airport staff, the system supports more than 450,000 calls every month or 2,400 calls every hour during peak times, just for DHL. The average call time is usually nine to twelve seconds. Although the system is predominantly used for voice communications, there is also some data transfer.

The two Mobile Switching Offices (MSOs) that manage the communications between the users and the base stations are located in different facilities within the perimeter of the airport. This provides geographical redundancy of the MSOs, so, should one fail or become inoperative, the other takes over to maintain service to the users. The 14 DIMETRA MCC 7500C IP Dispatch Consoles are also key components of the radio system; their intuitive, easy-to-use interface enables radio traffic and group call management.

The airport uses Motorola Solutions radios and batteries exclusively, as the robust, high performance devices deliver crisp, clear communications. The radios have a long operating life, but the current MTP850 portable terminals are gradually being refreshed to the latest generation MTP3550 devices.

Leipzig/Halle has its own radio workshop on site, for simple repairs and technical queries. However, thanks to the bespoke service contract with Motorola Solutions, users and the

network team can also access remote technical support and resources for troubleshooting and maintenance. If need be, radios and components can also be sent to the Motorola Solutions repair centre in Berlin.

BENEFIT

The key features of the DIMETRA X Core system for Leipzig/Halle are the geographic redundancy and the increased availability and stability, which ensure fail-safe, reliable, mission-critical communications.

In addition, the system is totally scalable and built for the long term. It is currently a stand-alone system, with no connection to the internet, in order to minimise potential external cyber attacks. However the system’s advanced capabilities will allow the airport to easily move to mobile broadband communications in the future and the DIMETRA X Core architecture would deliver the enhanced security required. If necessary, users would also have the option to utilise WAVE™ Push-to-Talk solutions and intelligent middleware interfaces that extend voice communications and applications across TETRA and mobile broadband technologies. By choosing DIMETRA X Core, Leipzig/Halle has ensured it has invested in a long-term, future-proof system.

Applications:

- Voice communications – group and private calls
- Data transfer

Benefits:

- Fail-safe system with geographical redundancy
- Latest hardware and software – a future-proof solution (with the capability of moving to mobile broadband)
- Reliable, mission-critical communications – optimal call set-up and availability on the new, stable system
- Independent, internal communications platform
- Seamless migration without loss of service



For more information on [DIMETRA X Core](http://www.motorolasolutions.com/DIMETRAxcore), visit www.motorolasolutions.com/DIMETRAxcore.

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