



# STUTTGART AIRPORT EXPANDS ITS DIMETRA IP COMPACT SYSTEM TO BADEN-AIRPARK

TO ENABLE RELIABLE, FUTURE-PROOF VOICE AND DATA COMMUNICATIONS FOR BOTH AIRPORTS



## STUTTGART AIRPORT AND BADEN-AIRPARK

Stuttgart Airport in Baden-Württemberg, south-west Germany, is the sixth-largest airport in the country in terms of passenger numbers. Baden-Airpark is a smaller, regional airport serving Karlsruhe and Baden-Baden. Its site covers 700 hectares. Stuttgart Airport is a major shareholder in Baden-Airpark, which also manages an important business park alongside the airport.

Stuttgart Airport wanted to update and extend its Motorola Solutions TETRA digital radio system, first deployed in 2009, and also install a new state-of-the-art Dimetra IP Compact Solution at Baden-Airpark. It worked in close collaboration with Motorola Solutions' long-standing certified channel partner Blickle & Scherer Kommunikationstechnik, who has a wealth of experience in the transport, service, public safety and commerce sectors. Motorola Solutions' Advanced Services team was also involved in specifying the solution.

### CUSTOMER PROFILE

#### Organisations:

- Flughafen Stuttgart GmbH (Stuttgart Airport)
- Baden-Airpark GmbH (Baden-Airpark)

#### Industry:

Aviation

#### Location:

Germany

#### Partner:

Blickle & Scherer Kommunikationstechnik GmbH & Co. KG

#### Motorola Solutions Products:

- DIMETRA IP Compact
- 2 MTS4 TETRA base stations, each with 3 base radios at Stuttgart Airport
- 4 MTS2 TETRA base stations, each with 2 base radios (2 base stations at Baden-Airpark, 2 at Stuttgart Airport)
- At Baden-Airpark:
- 90 MTP850 TETRA portable terminals
- 46 MTM5400 TETRA mobile radios
- MTM800e TETRA mobile radios
- MCC7500 IP Dispatch consoles
- MSI Service contract with Yearly Maintenance and Technical Support 24\*7

**“We always aim to offer our passengers and airlines the best service possible and we are continually striving to optimise our processes, by giving our staff the right tools to get their job done. With Motorola Solutions' TETRA digital system, we have a reliable technology for voice and data communications. We also have the flexibility to be able to expand our services and support to other airports. For this reason, Motorola Solutions and Blickle & Scherer are the perfect partners for our new cooperation with Baden-Airpark.”**

Matthias Kolb, Head of Information and Communication Services, Flughafen Stuttgart GmbH

## CASE STUDY

### GERMAN AIRPORTS TAKE OFF WITH TETRA

**“Motorola Solutions’ TETRA solutions are used and trusted worldwide and there have been many successful deployments in the aviation sector. The TETRA network delivers reliable, secure, clear voice and data communications in the extreme, high-noise environment of our airport. The system delivers an excellent price-performance ratio and we have the flexibility of a common operations and maintenance model with Stuttgart Airport.”**

Markus Mussler, Head of Airport Department, Baden-Airpark GmbH



## CHALLENGE

Baden-Airpark previously used an independent analogue system based on an MPT1327 trunking system for radio communications. However, the system was outdated and communications were sometimes unclear. It wanted a radio system that was highly reliable and secure, quick to install and which could support a wide variety of future-proof communication functionality. Stuttgart Airport won the tender process to update the radio communications system and, working together with Motorola Solutions and Blicke & Scherer Kommunikationstechnik, it conducted full on-site surveys to ensure the proposed system could connect with their existing system at Stuttgart and could offer excellent radio communications across the whole airport site. End users were involved in the testing.

## SOLUTION

Stuttgart Airport has been relying on a Dimetra IP Compact geo-redundant TETRA digital two-way radio solution from Motorola Solutions since 2009. It knew and trusted the technology. The original system allows up to 2,000 users to access the radio network. Airport staff communicate via MTP850 handheld two-way radio terminals and MTM800e mobile radios for in-vehicle use. When it won the Baden-Airpark tender, Stuttgart Airport decided to deploy two further MTS4 TETRA base stations to allow this digital infrastructure to connect via a fast-fibre interface with the newly implemented Dimetra IP Compact solution at Baden-Airpark, about 80 km away as the crow flies. This enables Stuttgart Airport to provide services and support to Baden-Airpark.

A similar Dimetra IP Compact TETRA network has now been deployed at Baden-Airpark. It took one month to install. Two MTS2 TETRA base stations were installed, with approximately 150 subscribers and a full remote in-house system. The two base stations at Baden-Airpark are connected to the Stuttgart Airport TETRA network. At Baden-Airpark the system is currently used as an independent communications platform for various areas of airport operations, such as fleet management, freight and logistics. Teams, such as ramp agents or baggage

handling staff, use the MTP850 handheld two-way radios and the MTM800e mobile radios, mounted in vehicles, to communicate indoors and outdoors. The network offers excellent coverage throughout the whole area of the airport, including the business park and despite potential interference from technical equipment. The airport teams also use the MCC7500 IP Dispatch consoles from Motorola Solutions to manage their fleets and ensure prioritised emergency calls always get through first time. Day-to-day network operations, service and support are managed by the IT departments of Stuttgart Airport and Baden-Airpark.

## BENEFIT

Stuttgart Airport now has a flexible, common communications model for the future, which it can roll out to other airports – as it has done to Baden-Airpark. It has tried and tested the TETRA technology and knows it is the best in its class for system features, service performance and reliability, with an excellent price-performance ratio.

The Dimetra IP Compact network offers highly reliable voice and data communications and the Dimetra IP Compact system provides a comprehensive, scalable communications solution using an enhanced IP architecture to ensure optimum call set-up and availability. Being independent of public telephone networks and with its redundancy features, radio communications will also be possible, even in an extreme emergency, when other systems go down.

The terminals are very robust, suited to the tough working environment on the tarmac or in the baggage handling hall, and support a wide variety of future-proof communication functions. Also, the increased staff efficiency and productivity contributes to the airports’ aim of offering passengers and airlines the best possible level of service. However, in the rare instance of failure of any part of the system or terminals, the Motorola Solutions planned maintenance contract, for both Stuttgart Airport and Baden-Airpark, ensures the system remains fully operational at all times.

## Applications:

- Voice and data communications for airport operations
- Independent communications platform
- Radio system linked between the two airports

## Benefits:

- Interference-free, clear voice calls in a high background noise environment
- Reliable network
- Optimum call set-up and availability
- Increased staff productivity
- Secure communications
- Robust, future-proof radio design
- Excellent price-performance ratio



Motorola MTP850

For more information on Motorola Solutions’ Dimetra TETRA, please visit us on the web at [www.motorolasolutions.com/tetra](http://www.motorolasolutions.com/tetra)

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