ROHILL

Düsseldorf Airport

Benefits

- Optimized operations through Role Oriented Communication System
- Better speech quality than previously used digital radio system
- Higher availability of the radio communications network

Client overview

SITA
Airport IT GmbH

SITA Airport IT GmbH specializes in communication and IT solutions for the air traffic industry; an industry which places particular emphasis on customized and high availability solutions at Düsseldorf International Airport, Germany.

Our customer base includes authorities, airports and airlines, as well as over 250 different international companies who benefit from SITA's know-how every day. SITA develops and implements many solutions of which TETRA radio communication at Düsseldorf Airport is one.

With 69 different airlines Düsseldorf Airport handles over 20 million passengers annually travelling to or from nearly 200 destinations.

Claus Bellen, Team Manager Professional Mobile Radio Systems, SITA Airport IT GmbH:
"Rohill's TETRA system brings us many benefits, from enhanced security to increased productivity and greater capabilities to handle our mission-critical needs. In addition, Rohill's flexibility and focus on customer-oriented solutions suit our needs perfectly."

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Project challenge

The TetraNode trunking network is the central system for communication and control of all operational handling processes at the airport and of its customers: airlines, ground services, safety guards and authorities.

Patrolling airport safety guards have to check in at specific locations on the premises. If the guard does not check-in on time, or if the check-in point is out of sequence, the control room is warned and can take immediate action.

The operation of all ground services, such as baggage handling, cleaning, fuelling, catering, etc. has been facilitated with an application that allows functional flight-oriented calls for easy communication about all flight-related matters. There is no need to know the person performing the task or his/her radio number because the other party is reached through the flight number and role. The application creates dynamically up to 50.000 different TETRA identities in the TETRA network.

TetraNode offers various custom applications, such as the passenger emergency call for the unmanned Sky Train that interconnects the airport railway station with the airport's terminal and stops at several parking lots on its way. Sky Train emergency calls make direct connections with the fire brigade. Several announcements can be made over TETRA using multilingual pre-recorded messages.

Solution

The TetraNode network is built around a geo-redundant TetraNode High End that serves six TETRA sites with 17 TETRA carriers, provide excellent coverage on and around the airport premises. TETRA is also propagated in-house.

Various conventional and air traffic channels have been directly integrated into the TETRA network. Part of these channels is monitored at the Airport Control Centre where 18 TETRA dispatchers are positioned; an additional number of TETRA dispatchers is positioned elsewhere.

The network is monitored with NodeView and CoverageGuard, the latter of which monitors the in-house network pro-actively.