



Operationally-critical communications at Bristol Airport have been transformed following an upgrade to a state-of-the-art Motorola digital two-way radio system.

Bristol, one of the UK's fastest growing regional airports, now serves some eight million passengers annually.

Keeping things running smoothly requires some 1,500 of the 3,000-plus workers on site to communicate day and night via two-way radio. These range from airfield workers to baggage handling, catering, customer services and maintenance teams.

"Two-way radio is critical to us. It's absolutely vital not only that we have it, but that it is working efficiently," explains Bristol Airport's Head of Operations Support, Phil Holder.

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### Business Needs

An ageing MPT1327 analogue system needed updating whilst the airport's rapid growth also placed increasing demands on radio communications.

"The old analogue system was becoming unsupportable and we were also short on capacity," confirms Holder.

Whilst happy with the service provided by Avoira – a longstanding supplier - the airport nonetheless put out to tender the contract for the new system and its maintenance and support. Following a thorough procurement process involving a five-way pitch, we won the business.

"There were two key reasons why we chose Avoira. Firstly their solution offered excellent value for money," explains Holder. "But it was also a decision made on reliability. Because the radio system is so critical to us, if it goes down we need to know we can rely on a good support service. We knew from their track record that Avoira could deliver this."

### Our Solution

To resolve the airport's capacity issue we specified Motorola's MOTOTRBO Capacity Plus digital trunking system, doubling the available channels to sixteen.

"Because the airport's grown we've got a lot more radio users and aircraft movements. With the analogue system, at busy times people were finding it harder to find a gap in the radio traffic to send a message," says Holder.

"We needed more open, free channels which the Motorola digital radio system gave us."

The MOTOTRBO Capacity Plus hosts some 300 portable radios with the capability to support up to 1,600 handsets.

Airport staff have been allocated radios to suit their duties. These comprise Motorola's DM4601e, DP3661e, SL4010e and DP4000 models, alongside ATEX compliant DP4801Ex radios for staff working in potentially explosive atmospheres, such as aviation fuellers.

### Business Benefits

All radios feature performance enhancing technologies and with safety a high priority, lone worker functionality alongside GPS capabilities and location tracking. Motorola's TRBOnet control room solution is set to integrate the airport's radio and telephone systems and further enhance operational efficiency.

Making communications easier, the highly resilient system also provides clearer transmissions, with increased signal reach across the airport's estate.

The TRBOnet Watch analytical tool automatically logs and analyses voice and data, providing an excellent overview of system performance. It monitors resource usage across the radio network's infrastructure and confirms whether its components are correctly configured.

"We can get reports and statistical information such as call demand peaks. The main advantage here is we can monitor and manage call flow, especially during busy periods. It gives us a good idea of when and how to man the system," says Holder.

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