



# ACC Liverpool Augments Event Management with MOTOTRBO



## Leading Digital Technology Chosen for World Class Convention Centre

The award-winning ACC Liverpool – home to Echo Arena and BT Convention Centre - is one of Europe’s foremost event hosting facilities. Situated on the banks of the river Mersey, this impressive venue has played host to a series of major international events such as the MTV Europe Music Awards and Cirque du Soleil. Its stages have been graced by pop greats including Sir Elton John, Bob Dylan and Beyoncé.

Equipped with ultra high-tech telecommunications facilities, BT Convention Centre houses a 1350 seat auditorium, 18 break-out rooms and a 3725m<sup>2</sup> multi-purpose hall. When combined with the 11,000-capacity Echo Arena, the centre offers event organisers a massive 7125m<sup>2</sup> of exhibition space.

Motorola’s MOTOTRBO digital radio solution with Capacity Plus was chosen to provide integrated voice and data communications throughout the arena and convention centre, facilitating the sharing of information between diverse work groups and boosting efficiency.

## Black Spots and Degraded Performance Impede Communication Between Workers

Managing such a vast area competently requires expert co-ordination and with large crowds flocking to its events, the centre has to safeguard visitors in compliance with stringent health and safety laws.

ACC Liverpool was experiencing black spots with its existing analogue radio communication and staff were wasting time running back and forth between the arena and convention centre because of inadequate coverage. There was also no coverage in the loading bay, which hampered the co-ordination of goods moving in and out of the buildings.

Productivity was further affected by unclear transmissions in high interference areas and in locations where the range was reaching its limits. This meant that calls were missed and messages became garbled, which could have serious consequences in an emergency.

To overcome these problems, Motorola distribution partner London Communications recommended the MOTOTRBO digital two-way radio system, which was installed and successfully tested within two working days.

## Digital Radio Brings Advanced Features and Extended Coverage

The decision to shift to MOTOTRBO was due to the technology’s spectral efficiency. The system increases calling capacity and improves voice quality, even at the farthest margins of the RF range, providing more reliable coverage in difficult environments.

MOTOTRBO’s built-in error correction reconstitutes the voice with virtually no loss over a greater area, enabling more consistent audio performance. It also greatly reduces background noise by

## Customer Profile

**Company**  
ACC Liverpool

**Technology Partner**  
London Communications Plc

**Industry**  
Event Management

**Product Name**  
• MOTOTRBO  
• Capacity Plus

**Solution Features**  
• Extended coverage  
• Superior audio quality  
• Integrated voice and data  
• More capacity for multiple talk groups

**Benefits Features**  
• Clearer communication  
• Improved call management  
• Better decision-making  
• Increased productivity and safety

“By extending communication and improving audio quality the MOTOTRBO system has enabled all our different workgroups to share critical information, so people can respond to issues more effectively.”

## Phil Pickett, General Manager of Operations at ACC Liverpool

### Transition to Digital Improves Safety and Performance

Leading event hosting facility Arena and Convention Centre (ACC) Liverpool has deployed a MOTOTRBO digital radio system with Capacity Plus. The benefits of the new system include vastly improved coverage and audio quality as well as enhanced call management that allows multiple work groups to communicate simultaneously. This has contributed towards greater safety and productivity throughout the vast venue.

compressing speech and filtering out anything which is interpreted as not being a human voice.

ACC Liverpool staff wear earpieces designed for optimum discretion and comfort, further enhancing audio clarity so that communication can be heard during loud concerts and near crowds.

Using sophisticated Time Division Multiple Access (TDMA) technology, the MOTOTRBO system divides the existing 12.5KHz channel into two time slots, doubling the call capacity and allowing two voice conversations or a voice and data transmission to occur simultaneously. This is done using the existing licence so users don't incur additional costs and it requires less infrastructure, making MOTOTRBO a highly economical solution for maximising capacity and catering for an increasing number of users.

TDMA also improves operations by placing less drain on the battery. MOTOTRBO radios function up to 40 percent longer on a battery charge than analogue systems, so workers on extended shifts don't have to keep recharging or risk dead batteries. And when batteries do need to be recharged, Motorola's IMPRES rapid multi-unit chargers ensure the job is done quickly and efficiently by automating battery maintenance.

The MOTOTRBO system's functionality is further enhanced when combined with the single-site trunking solution, Capacity Plus. Delivering twice the capacity of a conventional digital system, Capacity Plus offers a scalable and cost-effective means of expanding communications so that diverse work groups can share large amounts of business-critical communication.

“The digital radio network we've deployed for ACC Liverpool comprises 132 radios and four repeaters. Without Capacity Plus, they would be limited to a total of 8 talk groups. The increased call capacity allows up to 255 talk groups, providing the flexibility to cater for multiple group calls,” explained Darren Perrins, Account Manager at London Communications.

ACC Liverpool has 11 different user groups comprising security, catering, cleaning, holding bay, IT, technical, facilities management and clients. The digital network allows them to optimise workgroup communication with call features such as one-to-one, one-to-many and one-to-all. Using group call, groups can share a channel without disrupting other radio users and the late entry function enables a user to join a voice transmission that is already in progress. Channel scan gives priority to certain users or groups, improving the efficiency of call management.

The all-call feature is particularly important in an emergency situation, as it allows system-wide calling and has the ability to override individual or group calls, ensuring critical communication reaches all users simultaneously.

### Quicker Response Times Increases Productivity

“The migration to digital two-way radio was seamless, with minimal staff training required. We now have full site coverage across both the arena and convention centre, which has vastly increased staff performance,” said Phil Pickett, General Manager of Operations at ACC Liverpool.

“By monitoring user groups using the scan function, decision-making has become more effective and team management has improved, while having more reliable communications will help the centre to maximise the safety of staff, guests and visitors,” he added.

ACC Liverpool personnel are also benefitting from MOTOTRBO's text messaging functionality which can be used as an alternative to voice communication in very noisy areas and for sharing information such as deliveries and supply status. Being able to allocate channels to voice or data as needed gives them greater operational flexibility, meeting changing needs as required.

For more information please contact your local Motorola Authorised Dealer or Distributor



MOTOROLA and the Stylised M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2010. All rights reserved.

[www.motorola.com](http://www.motorola.com)

Motorola, Ltd. Jays Close, Viabes Industrial Estate, Basingstoke, Hampshire, RG22 4PD, UK