



WEMBLEY STADIUM ENHANCES PUBLIC SAFETY ON MATCH DAYS AND AT EVENTS

WITH HIGHLY RELIABLE, FLEXIBLE AND SCALABLE MOTOTRBO™ CAPACITY PLUS MISSION-CRITICAL COMMUNICATIONS



WEMBLEY NATIONAL STADIUM LTD

Wembley Stadium is a football stadium in Wembley, London. It opened in 2007 on the site of the original Wembley Stadium, which dated back to 1923. The stadium hosts major football matches, including home matches of the England national football team and the FA Cup Final, as well as numerous events and concerts. It also hosted many of the Euro 2020 fixtures. Wembley Stadium is owned by the governing body of English football, the Football Association, whose headquarters are in the stadium, through its subsidiary Wembley National Stadium Ltd (WNSL). With 90,000 seats and a 1km circumference, Wembley is the largest stadium in the UK and the second-largest stadium in Europe.

CUSTOMER PROFILE

Organisation:
Wembley National Stadium Ltd (WNSL)

Partner:
Audiolink Ltd

Industry:
Sports & Leisure

Location:
UK

Motorola Solutions Products:

- 2 x MOTOTRBO Capacity Plus systems comprising:
- 8 repeaters (stadium system)
- 4 SLR 5500 repeaters (crowd safety system)
- A range of portable radios including DP4400e, DP4800e, DP3661e and SL1600 models:
- 250 radios owned by WNSL for day-to-day operations; other radios on a regular hire basis
- 12 DM4600 mobile radios in control room

CASE STUDY

WEMBLEY NATIONAL STADIUM LTD

“Reliability. That’s the key word here. When people are under pressure, they need systems that work; systems they can trust. That’s what MOTOTRBO delivers. Real Wireless has been contracted to WNSL since the stadium opened and we’ve worked closely with WNSL and Audiolink all this time. We’ve watched the Motorola Solutions system grow organically, from a trunked radio analogue system, to a digital system with more capacity on the same number of radio frequencies, on to the dual system we now have in place. This allows the crowd safety and stadium operations teams to have their own independent, dedicated capacity for critical events communications. And the flexibility and scalability of MOTOTRBO systems means we can keep growing and adapting the network to WNSL’s needs.”

Mark Keenan, CEO, Real Wireless Limited (Contractor to WNSL) & Radio & IT Manager, FA Group



CHALLENGE (HISTORY)

Long-term Motorola Solutions platinum partner, Audiolink, has worked with WNSL for many years; and when the new Wembley stadium was opened with a trunked analogue system, Audiolink was soon called in to manage a partial upgrade to a MOTOTRBO digital system with TRBOnet Enterprise. The new system made better use of the radio frequencies available at the stadium, essential for mission-critical communications during events. Indeed, the digital communications proved to be a great success and plans were put in place to move all the users to a digital service during the following years, with the analogue and digital systems running in parallel for a short period, until the stadium became completely digital. Following this point, Audiolink and WNSL have collaborated closely to evolve the system to meet WNSL’s needs in terms of capacity, flexibility and security.

SOLUTION

WNSL now has the 8-repeater stadium and the 4-repeater crowd safety Capacity Plus systems, interconnected via routers and switches, offering 16 and 8 time slots respectively. Voice communications, all group calls, are now conducted over a range of Motorola Solutions radios. WNSL owns 250 radios for day-to-day operations, security and general facilities management and hires in fully preconfigured and prepared radios from Audiolink on an event-by-event basis. Audiolink has a WNSL rental pool of up to 420 radios for the crowd safety team, 235 radios for catering and 650 radios for the National Football League, when it is in residence. The exact number of hire radios depends on the event. However, usually there are between 500 and 1,000 radios on the system at any one time; and WNSL does have over 1,300 available radio licences if needed, with 90 talk groups in standard use or up to 120 groups for NFL games. Spare radio groups and user IDs can be assigned as needed and, although the talk groups are on the two systems, for dispatchers and users, it operates

like a single unified system. And, thanks to the low-power RF over Fibre antenna system, coverage is contained within the stadium, with strategically located antenna providing the necessary coverage to external stewarding and security positions.

The original TRBOnet Enterprise software, meanwhile, has been upgraded to a TRBOnet PLUS IP-based distributed and redundant system, which allows the WNSL control room to log events and record communications, as well as accessing all the standard dispatch functions and features. Event Control also comprises an adjacent room where representatives from the Metropolitan Police, London Fire, London Ambulance and Brent Council monitor the situation in and around the stadium in close cooperation with WNSL. The large control room is equipped with 12 DM4600 mobile radios and controllers can access all 12 repeaters on the newly upgraded Event Control PC screens and can centrally manage the radios, disabling them if needed. And, all the radios, whether owned or hired, as well as the repeaters and combining infrastructure, are supported and maintained by Audiolink to provide peace of mind for WNSL.

BENEFITS

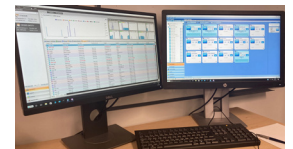
David Hosie, Technical Director of Audiolink, explains why he always recommends a Motorola Solutions system: “I only want to work with radio systems where I know the call is always going to get through and where audio is clear. Communications are key at Wembley, which is why it had to be a Motorola Solutions system. And Motorola Solutions is an innovative company. The system will continue to grow and evolve and we will keep looking at new solutions for example, updated noise-cancelling technology.” Indeed, the clear audio, even in extreme background noise, is key to effective communications for operational efficiency and crowd safety during matches and events. Users know they can always get a channel and rely on the mission-critical system to work, which is crucial in case of any incidents and emergencies.

Motorola Solutions Products:

- Range of accessories including chargers, heavy-duty over-the-head headsets with noise-cancelling boom microphones for use pitch side, and D-shell, 2-wire and 3-wire covert earpieces
- TRBOnet PLUS
- TRBOnet Watch

Benefits:

- Highly reliable, secure system with full resilience for mission-critical communications; noise-cancelling technology also ensures clear audio
- Additional channel capacity without having to add new frequencies
- Complete flexibility and scalability to develop and expand system, or add users and groups, as and when needed to meet WNSL’s needs
- Easy central control in case of an emergency or the need to disable a radio
- Remote network monitoring by Audiolink via TRBOnet Watch, ensuring optimal system availability
- Enhanced traceability and visibility as all calls are recorded and logged, with easy access to play-backs for incident review



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