

Boots the Chemist Goes Digital with MOTOTRBO™

“MOTOTRBO™ allows us to react to faults effectively in a time-critical, performance-driven environment dependent on lean, efficient working practices. We expect a full return on our investment within 12 months.” - Chris Revill, Logistics Engineering Manager, Store Service Centre, Boots Plc

Leading UK health and beauty retailer Boots has chosen Motorola's ready-to-go **MOTOTRBO™** digital radios to provide real-time one-to-one and group communications for 140 users at its Nottingham distribution centre. Supplied and installed by Motorola Authorised Distributor DCRS, **MOTOTRBO** provides unrivalled audio clarity right across the 800,000 sq ft Stores Service Centre (SSC). The enhanced signal strength of digital extends coverage throughout the entire complex that also houses Boots' manufacturing plants and head office, enabling staff at the SSC to stay in touch wherever their responsibilities take them.

MOTOTRBO was introduced as part of an extensive modernisation programme at the SSC that operates 16 hours a day, six days a week and services Boots' 2,600 outlets in the UK and Ireland. The digital radios replace a number of standalone communications systems used by different groups with a single, integrated on-site communications solution. Choosing digital over analogue has improved channel efficiency by doubling capacity per channel and reduced licensing costs. Hardware costs have also been cut by 50%, while TDMA protocol batteries extend talk time by 40% and enable most users to work two shifts on a single charge. **MOTOTRBO's** ease of programming and comprehensive feature set provide the flexibility to accommodate the different communication needs of Boots' 20 user groups within a single handset.



Group Calling Essential for Fast Response Times

Prior to **MOTOTRBO**, SSC employees were using a number of disparate technologies to communicate with colleagues in their functional group. Engineers, system managers and production line 'jam busters' had all set up one-to-one communications systems based largely on DECT or mobile phones to meet their individual needs. Poor coverage in some areas was impacting on voice quality and the ability to reach key people quickly. Continued expansion of the SSC, that now stocks thousands of product lines and is set to handle Boots' entire range by 2009, meant that one-to-one only communication was unable to provide sufficiently rapid response times. Group calling using two-way radio was becoming essential in order to coordinate teams instantly, resolve issues rapidly and maintain the fast order turnaround times and high service standards that Boots stores around the country depend on.

Future Proofed Functionality in a Single Hand Set

SSC's logistics team considered implementing a trunked analogue two-way radio system to provide both one-to-one and one-to-many communications. DCRS suggested digital for its wider coverage, improved audio clarity, greater capacity and efficient use of spectrum and recommended Motorola's **MOTOTRBO** Professional Digital Two-Way Radio for its ability to combine a broad range of functions into a single device.

"DCRS demonstrated how **MOTOTRBO** could offer unrivalled performance, while maximising value for money," says Chris Revill, logistics engineering manager at the SSC. "**MOTOTRBO's** comprehensive, scalable, next-generation feature set would also support our requirements for a lot longer than older analogue technology and make on-site communication between all functions and work groups simple and efficient."

Digital Doubles Channel Capacity

DCRS conducted a site visit to determine the range required and worked with decision-makers at the SSC to develop a solution that would meet the needs of all its user groups. The slightly higher network costs of digital over analogue were compensated by its lower set-up, hardware and licensing overheads. Digital's ability to provide two slots on a single channel meant that only three **MOTOTRBO** DR3000 repeaters were required to deliver six talk channels and ensure complete coverage in all buildings and outside areas on the Boots head office complex. The SSC purchased 55 **MOTOTRBO** DP3600 hand portables and 18 **MOTOTRBO** DM3600 fixed mobiles for use by its 140 users.

"DCRS pre-programmed the radios to meet the needs of different work groups, which meant that internal set-up at the SSC took just half a day," says Chris Revill. "Our users were already familiar with the cell-phone look and feel of the **MOTOTRBO** handsets, which made training quick and easy. Most of our staff become confident users of the key functions after just 20 minutes training, which helped increase their effectiveness from day one."

Robust and Ready-to-Go

MOTOTRBO DP3600 hand portables come complete with UHF antenna, 1300mAh NiMH battery, belt-clip and Impres® single unit charger, providing an out-of-the-box solution. The long-life battery means that most Boots SSC employees are able to work 16 hours without the need for recharging. Dustproof, water resistant and subject to accelerated life testing to military standards, in common with all Motorola radios, the DP3600s are resilient enough to withstand the everyday wear and tear of a busy warehouse environment. "We accidentally dropped one of the handsets from the top of a 8 metre crane on to the concrete floor below," says Chris Revill. "It sustained a bent knob but continues to work perfectly."

The **MOTOTRBO** DM3600 fixed mobile radios with their plug-and-play functionality are used by desk-based staff such as line managers and function heads. Both hand portable and mobile models benefit from a two-line alphanumeric display, channel scanning, call forwarding, easy-to-use menu keys, and large volume control knob. Channel switching allows supervisory staff to communicate with all user groups. Five programmable buttons allow users to tailor functionality to streamline communications and have been programmed by DCRS to customise the radios to the SSC's needs. Three of the buttons are used to provide one-stop hot lines to the warehouse management system control room, the engineers' help desk and the Engineering Flow controller. A fourth button delivers manual dialling facilities to save users scrolling down the menu list if they know the ID of the radio they are calling. The fifth button is used as a keypad lock to protect against accidental transmission.



Busting Conveyor Belt Jams

The SSC's jam busters, who resolve non-technical faults such as broken pallets and tears in packaging, use the **MOTOTRBO** radios to communicate across the distribution centre and smooth the flow of goods coming in and out of the SSC. Frequent calls are made by the jam busters but transmission usually lasts for only a few seconds. The team of engineers also has its own channel, which is used to alert colleagues instantly to equipment problems and ensure machinery breakdowns are fixed before they impact on delivery schedules to the stores. Engineers only communicate when machinery is malfunctioning, which tends to mean that fewer, longer calls are made. The SSC's information technology managers use the **MOTOTRBO** hand portables to liaise with each other when monitoring performance of the automated warehouse management solution on the factory floor. Other user groups include controllers, production teams, and operations managers.

"**MOTOTRBO** has streamlined communication within and between all our teams and greatly reduced the need for staff to carry more than one communications tool," says Chris Revill. "We have almost eliminated the use of DECT and reduced our mobile phone usage."

60% of Transmissions are Group Calls

DCRS configured the six talk channels to match the calling patterns of the different user groups and ensure maximum availability and continues to monitor call times and adjust channel allocation remotely in response to changes in use. "The average talk time is five seconds and we have a time-out timer after 30 seconds to minimise any wait time," says Chris Revill. "Some 60% of the calls we make using **MOTOTRBO** are group calls. The ability to broadcast to all users in a group simultaneously is making a significant impact on response times."

MOTOTRBO's emergency feature allows employees to alert all network users instantly to an injury or other situation requiring immediate attention. When the emergency button is pushed, an audible signal is emitted from all the radios, informing the user of which radio has summoned assistance. SMS text messaging has also been activated on managers' radios; a feature that the SSC plans to use in the future.

Five Man-Days Saved Per Week

Reworking day-to-day practices and escalation procedures around the functionality of the **MOTOTRBO** two-way radio system is already generating significant efficiency benefits for the SSC. "We estimate that we save five minutes per person per day using the radios," says Chris Revill. "With a fleet of 73 units this adds up to more than 350 minutes - almost six hours per day. Over the six-day working week we can save 36 hours or nearly five man-days. These efficiencies have been achieved within only three months of go-live and we anticipate even greater savings in the future."

DCRS Combines Technical Expertise with Service Excellence

DCRS's expertise in Motorola's digital two-way radio technology, combined with their flexible, pro-active approach and professional 'can-do' attitude made them the preferred supplier for Boots SSC. "I have worked with DCRS for many years and have been extremely satisfied with their knowledge, commitment and high service standards," says Chris Revill. "They are a partner we can rely on completely for our business-critical communications."

Motorola is Gold Standard for Two-Way Radio

Continued growth and modernisation at Nottingham is set to make the SSC one of the largest distribution centres in the Midlands, which is set to increase the number of **MOTOTRBO** radios required by Boots in the future. "Motorola is the gold standard for quality and reliability in two-way radio systems," adds Chris Revill. "I am confident that we will achieve a 100% return on our existing investment within 12 months and I look forward to working closely with DCRS as we increase our **MOTOTRBO** fleet."

About DCRS

Established in 1987, DCRS have become one of the top ten Authorised MOTOROLA Dealers within the UK for the hire, sales and service of two-way radio equipment with one of the largest hire fleets, dedicated sales and manufacturer trained engineering departments no project is too large or too small for DCRS to design install and maintain. Stemming from a family run business they make sure all of our team is trained to maintain the loyalty of their established customer relationship. As a measure of their energy and determination to provide a first class service to all, DCRS comply with ISO9001: 2000 after moving from ISO9002 to enhance the quality of their management system. All DCRS's equipment comes from a professional and efficient company, which believes in quality, value and personalised service. For more information please contact Steve Luscombe or Dan Faulkner on 0800 043 2688 or visit www.dcrs.co.uk