

Case Study: Multi-National Hyperscaler



Two-Way Radio Communication Upgrade for a Multi- National Hyperscaler



Communication
without compromise.

Introduction

A global technology organisation operating large-scale data centres, corporate offices, and security-sensitive sites across EMEA required a modernised approach to critical communications. With multiple campuses and thousands of employees on-site each day, the organisation prioritises operational continuity, staff safety, and efficient communication. Supporting around 50,000 employees worldwide and an extensive network of facilities, reliable communication is essential to maintaining seamless operations and protecting both people and assets.



The challenge

Limitations of the Previous System

The legacy two-way radio solution in place had begun to show its age. Hardware was outdated, channel capacity was limited, and coverage performance varied across buildings and outdoor areas. Battery life issues and ageing equipment further hindered daily operations. The system struggled to support the communication demands of large, complex campuses.



Operational Risks and Pain Points

Staff experienced interruptions during mission-critical tasks due to reliability challenges. Limited channels and inefficient call handling led to delays during peak usage. As facilities expanded, the existing system could no longer scale, increasing the risk of downtime. These issues created operational inefficiencies and reduced confidence in the communications platform.



The Solution

A fully integrated Motorola Capacity Plus Multi-Site system was deployed, using the organisation's existing distributed antenna system to provide strong indoor coverage, with additional base station antennas added to strengthen outdoor performance. Motorola R7 Full Keypad Premium handsets were introduced across all sites and integrated with the existing Smart PTT platform to ensure seamless compatibility and visibility. This solution was chosen for its proven reliability, resilience, and ability to manage high call volumes without manual channel changes, as the R7 range delivers superior audio quality and future-ready features such as AI-driven noise suppression. Prior to deployment, a full factory acceptance test was completed to validate performance, followed by installation across the designated campuses and detailed testing to confirm all requirements were met. Critico also provides a Europe-wide maintenance and Service Level Agreement (SLA) covering more than 30 sites, offering hardware repair management, software support, routine system checks, and scalable services to support future expansion.

Benefits

Operational Improvements

The new solution delivered significantly improved site efficiency through streamlined call handling. Coverage across large campuses, indoors and outdoors, has been enhanced. The new system eliminates the need for manual channel changes and ensures that communication paths are always available and contribute to smoother operations.

The modernised platform reduces downtime associated with failing legacy equipment and offers a long-term, future-proof foundation for at least the next five years. Ongoing maintenance and repair services have simplified management and reduced administrative overheads.



Measurable Impact

- Stronger, more consistent coverage across EMEA campuses.
- Reduced downtime due to equipment resilience and proactive maintenance.
- Improved clarity and reliability of communications.
- Enhanced operational safety through more predictable and stable performance.
- Future-Proofing and Scalability.

With next-generation handsets and a flexible communications infrastructure in place, the system provides a strong base for integrating new technologies such as Broadband Push-To-Talk, CCTV integration, body-worn camera platforms, access control connectivity, and alarm panel interfaces.

Final Thoughts

This upgrade sets a global standard for data-centre communications, providing operational resilience, streamlined workflows, and a scalable foundation for future technology. Staff benefit from reliable, rapid-response channels, while robust maintenance and SLA support ensure uninterrupted performance in high-security, high-demand environments.

Internal Team Feedback

Jack Whorton - Head of Radio

“Our partnership with this multi-national hyperscaler extends far beyond delivering radio systems. Critico supports their global security operations daily, with continuous engagement across EMEA and direct involvement in managing over 30 sites. From radio repairs to software updates and scaling communication systems, we act as their primary partner for critical communications support. It is a privilege to work so closely with an organisation of this scale and to understand how vital our solutions are to their operations. This long-term collaboration has strengthened both businesses.”



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