

# Real-Time Motorola Solutions™ MOTOTRBO™ Radio Location and Emergency Alerting Platform

Secure, Scalable Situational Awareness Across All MOTOTRBO Network Types

## Executive Summary

Organizations that rely on Motorola Solutions™ MOTOTRBO™ radios for mission-critical communications require more than voice—they need real-time awareness of personnel location and immediate visibility into emergency events.

CompassCom delivers a proven solution for Motorola LMR radio location and emergency button alerting, providing continuous visibility of field personnel and instant awareness of distress situations. Operating entirely over existing LMR infrastructure, the system improves response times, enhances safety, and maintains operational control without dependence on broadband networks.

## The Need for Real-Time LMR Situational Awareness

Motorola LMR systems provide highly reliable voice communications but do not inherently deliver real-time operational visibility. Command staff often lack immediate insight into personnel location, resource distribution, and emergency situations.

By enabling real-time GPS location and emergency alerting, organizations transform radio systems into a platform for active situational awareness—improving coordination, accountability, and safety.

## CompassCom Solution Overview

CompassCom provides a real-time location and emergency alerting platform that integrates directly with Motorola MOTOTRBO systems, delivering a unified operational view of personnel, assets, and emergency activity.

Field radios transmit GPS location and emergency alerts over the existing LMR network. CompassCom ingests this data and presents it within a secure, Esri-based mapping environment, enabling command staff to monitor operations in real time and respond immediately when needed.

The platform is designed for low-bandwidth and non-broadband environments, making it well suited for utilities, petrochemical, industrial, and commercial operations where reliability and independence from cellular infrastructure are critical.

## System Architecture

Location and emergency alert data are transmitted from field radios across the existing MOTOTRBO™ LMR network and ingested by CompassCom in real time. The system processes and visualizes this data within a secure, Esri-based operational map, enabling command staff to maintain continuous visibility of personnel and rapidly respond to emergency events without introducing additional network dependencies.

## System Architecture



## Proven Across All MOTOTRBO Network Types

CompassCom is fully compatible with all major Motorola MOTOTRBO network configurations, ensuring flexibility regardless of deployment architecture. Whether operating in a localized single-site environment or across a large multi-site trunked network, CompassCom delivers consistent performance for both location and emergency alerting.

Support includes MOTOTRBO Conventional systems, IP Site Connect, Capacity Plus™, and Capacity Max™, allowing organizations to deploy without modifying existing radio infrastructure.

## Proven Global Deployments

CompassCom solutions are actively used in mission-critical environments worldwide.

Notable deployments include the Dominican Republic Navy, supporting maritime and coastal operations, and the Ecuadorian Navy, providing real-time visibility of radio-equipped personnel for fleet coordination. These implementations demonstrate CompassCom's ability to deliver reliable Motorola radio location and emergency awareness in demanding operational environments.

## How It Works and Core Capabilities

GPS-enabled MOTOTRBO™ radios transmit location data and emergency alerts over the existing LMR network. CompassCom ingests and processes this data in real time, visualizing it within a secure, Esri-based map.

Command staff gain continuous visibility of personnel and assets, while emergency button activations generate immediate alerts with precise location—enabling rapid response and informed decision-making without reliance on broadband connectivity.

## Emergency Alert Workflow



## Operational Use Cases

In utilities, petrochemical, and industrial operations, CompassCom provides continuous visibility of field personnel, enabling faster response to incidents and improving safety across remote and distributed environments.

For commercial and enterprise field teams, the platform enhances coordination by delivering real-time insight into personnel location and activity, supporting more efficient deployment of resources and improved operational control.

By extending MOTOTRBO™ systems beyond voice, CompassCom transforms radio communications into a real-time situational awareness platform—delivering immediate visibility into personnel location and emergency events without reliance on broadband infrastructure.

## Why CompassCom

CompassCom is purpose-built for Motorola LMR environments, offering deep integration with MOTOTRBO systems and proven performance across all network types. Its Esri-based architecture delivers accurate geospatial intelligence, while secure deployment options support mission-critical requirements for industrial, commercial, and public safety operations.

## Conclusion

As operational environments become more complex and distributed, organizations can no longer rely on voice communications alone to maintain awareness and control. The ability to understand where personnel and assets are located in real time, combined with immediate visibility into emergency events, has become essential for effective and safe operations.

CompassCom enables this evolution by extending Motorola MOTOTRBO systems beyond traditional communication into a comprehensive location intelligence and situational awareness platform. By leveraging existing LMR infrastructure, organizations can gain real-time visibility without introducing the risks and dependencies associated with broadband or cellular networks.

Ultimately, the integration of real-time location awareness and emergency alerting enhances personnel safety, reduces response times, and strengthens overall operational effectiveness. For organizations seeking to modernize their LMR capabilities, CompassCom provides a proven, scalable path forward delivering measurable impact without requiring changes to existing radio infrastructure.

## Next Steps

Organizations looking to enhance Motorola Solutions™ MOTOTRBO™ systems with real-time GPS location and emergency alerting can review how CompassCom integrates directly into existing LMR environments.

CompassCom provides a focused system overview demonstrating how radio-based location data and emergency alerts are delivered into secure, Esri-based operational maps—enabling live operational visibility within existing workflows and command environments.

To move forward, schedule a session with CompassCom to review your network, discuss integration options, and see real-time radio location and emergency alerting in action.

### **Request a System Overview or Demo**

<https://compasscom.com/request-demo/>

