

# CITY OF COLOGNE DEPLOYS A **MOTOROLA SOLUTIONS TETRA CONTROL ROOM SOLUTION**

FOR ENHANCED MANAGEMENT, ORGANISATION AND SAFETY OF MOBILE TEAMS



# CITY OF COLOGNE

By number of inhabitants, Cologne is the fourth-largest city in Germany. City of Cologne (Stadt Köln) is the legislative body that governs the city and is responsible for many of Cologne's dayto-day services, from law and order, finances, economics and real estate, to education, youth and sport integration and the environment, urban development, planning and building, art and culture, as well as mobility and traffic infrastructure. City of Cologne's traffic and law and order services have been successfully subscribing to the local RheinEnergie AG Motorola Solutions TETRA network for clear, reliable and independent voice and data applications for nearly 15 years. This RheinEnergie network is the city-wide radio network in Cologne and is based on the advanced DIMETRA™ X Core technology from Motorola Solutions with twenty-two Base Stations providing robust communications over 30 frequencies across approximately 520km<sup>2</sup>. Motorola Solutions also provides technical support for the TETRA network if and when required.

Mobile teams use MTP6000 and MTP3000 Series TETRA portable radios. However, aware of the need to enhance the safety and efficiency of these teams, the City of Cologne has recently introduced a new control room solution, which allows dispatchers to easily deploy and communicate with field workers or track their location in an emergency.

#### **CUSTOMER PROFILE**

#### Organisation: City of Cologne

# Industry:

Government

# Location:

Germany

## Partner:

RheinEnergie AG



#### **Motorola Solutions Products:**

- Existing city-wide TETRA network
- MTP3000 Series TETRA Portable Radios
- MTP6000 Series TETRA Portable Radios
- MCC 7500 IP Dispatch Consoles with Dual Screen **Graphic Cards**



"Our control room is now equipped with the most suitable tools to allow it to communicate better with our onduty field teams and to organise them more effectively; moreover, they are able to locate field workers in real time and make faster, sounder decisions, when incidents happen or when coordinating large events."

Chiara Tawakkol, Lady Mayoress Law Enforcement and Traffic, City of Cologne



## **CHALLENGE**

City of Cologne wanted to further utilise the TETRA network, above and beyond voice transmissions; it wanted to introduce a new control room solution to enable centralised GPS tracking of field teams in emergencies, to increase efficiency and productivity. It also wanted to ensure its control room teams could work across dual dispatch console monitors.

## **SOLUTION**

City of Cologne has deployed MCC 7500 IP Dispatch Consoles with Dual Screen Graphic Cards for the consoles, which allows control teams to study detailed GPS maps on one screen and dispatch data and statistics on their second monitor

The location tracking application enables GPS data to be sent from the TETRA radio to the control room via TETRA short data service (SDS), so controllers can pinpoint the subscriber on the maps shown on screen. City of Cologne has the application configured to update GPS positioning every five minutes, or whenever the radio moves over 300m within that timeframe. Workers can also trigger an alarm at the touch of a button on their TETRA radio; the dispatcher will then try to contact the radio user who has set off the alarm and, if there is no response, they contact the next nearest user to attend the scene, with the option to contact security forces if needed. This location tracking and emergency signalling is especially important during emergencies and large events, such as the Cologne Carnival. The GPS application also allows dispatchers to assign virtual groups based on location and connect calls accordingly.

The GPS application runs on the MCC 7500 IP Dispatch Consoles, but the teams also use the consoles for voice communication with individual calls, group calls and emergency calls being used to boost the efficiency and effectiveness of dispatcher operations. The control room coordinates many of the mobile teams, including traffic services, security staff and speed camera teams. City of Cologne also has a security interface, which allows it to patch the city's Stadtentwässerungsbetriebe Köln AöR (municipal drainage operation) into their control room, in case of high water or incidents.

RheinEnergie, working in collaboration with the Motorola Solutions services team, provides network support and also, in conjunction with City of Cologne's back office, directly supports the City of Cologne end user radios via Motorola Solutions SDS Remote Control feature; this gives experienced technicians access to coverage data and User Assist remote control so they can remotely manage and troubleshoot handsets, to ensure they are working optimally for the City of Cologne's subscribers.

### **BENEFITS**

The Motorola Solutions Control Room Solution enables central coordination of field teams over the robust, city-wide, mission critical TETRA network. Using the existing infrastructure, as well as running applications on the MCC 7500 IP Dispatch Consoles rather than on servers, significantly reduces total cost of ownership, so that City of Cologne can allocate more of its funding to projects benefiting its citizens. Effective location tracking and dispatch is increasing mobile worker safety during incidents and emergencies and improving operational efficiency, especially during large events taking place in the city. Having more real-time information to hand, controllers can reduce unnecessary calls, work more efficiently, make better, well-informed decisions and can keep their teams operational by remote radio troubleshooting.

Mobile teams now feel safer and have an increased level of job satisfaction; as one worker summarises: "I feel much safer now, knowing the control room can see my whereabouts in real time and dispatch the closest colleague in case of an emergency. Any issues with my radio can also be remotely and really quickly resolved. All in all, the solution ensures I stay productive and efficient in the field."

#### Applications:

- Dispatch software
- GPS Tracking application
- (Products provided by RheinEnergie: Existing citywide TETRA network, SDS Remote Control, Motorola Solutions Technical Support Service Contract)

#### Usage:

- Voice calls, Emergency calls, Individual and Group calling and Multi-Group patching
- · Mobile team dispatch
- Location tracking via GPS
- Radio status and troubleshooting

#### Benefits:

- City of Cologne uses
   RheinEnergie AG's existing
   infrastructure, which
   significantly reduces costs
- Applications run on the MCC 7500 IP Dispatch Consoles, again reducing costs as no dedicated server is required
- The Motorola Solutions dispatch console provides robust operations and enables instant, reliable communications between control room and field workers as well as connectivity to PBX for telephone capability
- The network and radios are efficiently and remotely managed by RheinEnergie
- The solution is reducing response times and increasing operational productivity, efficiency and personnel safety

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the stylised M logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under licence. All other trademarks are the property of their respective owners. ©2019 Motorola Solutions Inc. All rights reserved.

