



# HUNGARIAN ROAD NETWORK OPERATOR EQUIPS ITS MOBILE TEAMS WITH MOTOROLA SOLUTIONS TETRA RADIOS

FOR EXTENDED RANGE, ENHANCED FUNCTIONALITY, GROUP COMMUNICATIONS AND DIRECT COMMUNICATIONS WITH EMERGENCY SERVICES



## HUNGARIAN PUBLIC ROAD NONPROFIT PTE LTD CO.

Hungarian Public Road Nonprofit Pte Ltd Co. was established in 2005 and is responsible for the maintenance and operation of nearly 32,000 km of public roads and motorways in Budapest and the 19 counties across Hungary. Headquartered in the capital, it operates 94 maintenance centres across the country. Its mission is to ensure smooth traffic flow thanks to high performance routing and efficient operational management, including road and pavement inspections, repairs and maintenance, traffic control, road markings and snow clearing during the winter months. Hungarian Public Road Nonprofit Pte is also responsible for issuing route permits for oversized vehicles, the inspection of trucks at weight control stations, the training of professionals within the entire road sector and the operation of Traffic Advisory, the National Road Databank and the Road Museum in Kiskőrös.

### CUSTOMER PROFILE

**Organisation:**  
Hungarian Public Road Nonprofit Pte Ltd Co.

**Partner:**  
Fercom Systems Ltd.

**Industry:**  
Transport

**Location:**  
Hungary

### Motorola Solutions Products:

- 1280 x MTP6650 TETRA portable radios
- 24 x ST7000 small TETRA radios
- 19 x MTM5400 TETRA mobile radios
- 1146 x PLMN6431 vehicular radio cradles
- 1146 x PMMN4024 remote speaker microphones (RSM)
- Motorola Solutions 3-year extended Service package

## CASE STUDY

HUNGARIAN PUBLIC ROAD NONPROFIT PTE LTD CO.

**“There is no compromise when it comes to the safety of the public on our roads and our own teams. Thanks to the Motorola Solutions TETRA solution we have recently deployed, our teams can now work more safely and we can manage our teams more efficiently. Our mobile workers have accurate, real-time information at their fingertips and can respond quickly and effectively to any incidents. We have increased coordination and coverage. The Motorola Solutions radios are robust, reliable, high performance and easy to use, ideal for our sector.”**

Mr Róbert Giba, IT and Technical Developments Team Leader, Hungarian Public Road Nonprofit Pte Ltd Co.



## CHALLENGE

Hungarian Public Road Nonprofit Pte had previously been using analogue radios and then GSM mobile phones, but it wanted to upgrade to a digital radio solution for increased functionality, such as group communications, location services and data communications, as well as improved nationwide coverage and connectivity, even in extreme conditions. It wanted to equip its mobile workforce with the tools to be able to focus on their jobs and work efficiently, armed with accurate, up-to-date information, rather than worrying about reliable communications. Improving worker safety was also a key requirement.

Hungarian Public Road Nonprofit Pte selected a Motorola TETRA solution, which is delivered and supported by Motorola Solutions Platinum Partner, Fercom Systems Ltd. Fercom Systems specialises in providing wireless communication solutions, but also offers specialist security, military and law enforcement products to different governmental and civil organisations, having been a partner to the Hungarian government for over twenty years. Within the private sector, meanwhile, Fercom Systems works with companies throughout Hungary, from airports to utility, manufacturing and transportation companies. The challenge for Fercom Systems was to provide the latest, world-class solution to meet Hungarian Public Road Nonprofit Pte's complex customer needs.

## SOLUTION

Fercom Systems presented a comprehensive portfolio of solutions to Hungarian Public Road Nonprofit Pte to show the extensive capabilities of TETRA; it has now deployed 1,280 Motorola Solutions MTP6650 TETRA portable radios for the mobile teams. The radios have been deployed with Motorola Solutions remote speaker microphones, to enable hands-free use, and in-vehicle radio cradles, for mobile charging. The radios are IP68 rated, which means they are water and dust resistant, ideally suited to the potentially extreme weather and working conditions in Hungary. They also come equipped with 2W audio output and advanced noise suppression technology, which means the mobile workers can still hear and transmit communications clearly, even over the sound of snowplough engines or road repair machinery. Managers, meanwhile, have been equipped with ST7000 small TETRA radios, which fit comfortably in their suit jacket pockets whilst maintaining the same high performance. Both radios have various emergency and priority call options.

Twenty MTM5400 TETRA mobile radios have been deployed in dispatch centres in Budapest and around the country. Dispatcher controllers can contact individual workers, establish group-wide communications or emergency calls and utilise the radios' integrated Global Navigation Satellite System (GNSS) to accurately track and display the position of working groups and rescue teams on their screens and to deploy the workers closest to any incident. Hungarian Public Road Nonprofit Pte has also taken out Motorola Solutions Service coverage, to ensure it can always keep its operations running smoothly, with expedited replacements and repairs, in case of any damage or issues.

## BENEFITS

Migrating to Motorola Solutions TETRA digital technology has delivered numerous benefits for the Hungarian Public Road Nonprofit Pte. Most importantly, the extended range the radios offer, with their best-in-class receiver sensitivity and class 3 transmit power technology, enables a stable connection and clear communications between the crews and the dispatch centres, even in remote marginal areas, beyond reliable network range. The MTP6650's new open standard SMA connector also gives mobile teams the flexibility to use different antennas, based on the environment and location they are working in, and the Bluetooth® 4.1 wireless technology allows future capability for Hungarian Public Road Nonprofit Pte to connect additional devices to their radios.

With regard to communications, Hungarian Public Road Nonprofit Pte can now establish simultaneous group or emergency calls between colleagues, to allow more effective, flexible coordination of working groups; and teams can rely on more reliable voice communication and text messaging, even in extreme, rapidly changing weather conditions, when vehicles and jobs can be rescheduled and re-prioritized in real-time. Moreover, the solution enables direct communication and cooperation between Hungarian Public Road Nonprofit Pte's mobile teams and national law enforcement agencies and rescue organisations, in the event of an emergency, such as heavy snowfall, avalanches or flooding. In this way Hungarian Public Road Nonprofit Pte can respond quicker to incidents and deliver an improved level of service.

### Benefits:

- The extended range the radios offer with their best-in-class receiver sensitivity and class 3 transmit power technology enables a stable connection and clear communications between the crews and the dispatch centres, even in remote marginal areas
- The radios and accessories are tough and reliable and continue operating efficiently in the extreme conditions faced by the mobile teams
- Users are enjoying the enhanced functionality, with features such as integrated audio and data transmission, and crystal-clear communications, irrespective of background noise, thanks to the radios' integrated 2W audio output and advanced noise suppression technology
- It is now possible for dispatchers to establish work groups and group communications for the more effective, flexible coordination of working groups, locally or nationally; vehicles and jobs can be dynamically rescheduled or re-prioritized in real-time, in case of rapidly changing weather conditions, for example
- The solution enables easy cooperation with emergency services during incidents and consequently reduces response times
- Mobile teams are better informed, with real-time information at their fingertips, so they can work more effectively, safely and productively and deliver outstanding service
- The service support package ensures radios and the solution remains fully operational at all times, with any damaged handsets being immediately replaced

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