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# CONNECTIVITY FOR RED CROSS COMMAND UNIT

# **CHALLENGE**

Technologies and surveillance systems play an integral, increasing, and evolving role in supporting public health responses to outbreaks or any other urgent public health events and accidents. With the continuous development of technology, we can see a clear trend that most solutions directed towards communication, operational effectiveness, and transparency must evolve to be connected. This becomes a real challenge when it comes to applications in moving vehicles, and this becomes vital when people's health and wellbeing are at stake.

# **PARTNERS**



Capestone BV is a leading specialist and value-added distributor offering cellular and wireless solutions for the enterprise market along with 1st and 2nd line technical support and optional services such as M2M data plans. Capestone, based in the Netherlands, is one of the leading Teltonika Networks distributors supporting businesses and projects across all of Europe.

The Red Cross was born of a desire to bring assistance without discrimination to the wounded on the battlefield. The organization endeavors - in its international and national capacity - to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation, and lasting peace amongst all peoples.

### **SOLUTION**

As presented in the topology above, the solution consists of various computers and communication equipment in a command support unit vehicle of the Red Cross organization. The control unit acts as a command and control point at all large and major incidents. Its communication systems include telephone and fax machines as well as a radio system to be used exclusively at the site of the incident. It is a full mobile office for the mission leader and his supporting staff.



#### **CASE STUDY // TRANSPORTATION**



This vehicle is also equipped with a 6KV power generator and USV Battery System that can work more than 12 hours without external power supply. Therefore cellular technology plays a pivotal role in assuring mission-critical connectivity. Teltonika Network device – RUTX11 had to withstand rigorous tests before it was installed into this unit vehicle designed for the most challenging tasks. Not one, but two RUTX11 4G LTE Cat 6 routers are used and interconnected to be able to switch between 4 mobile operators.

In this solution, the cellular routers are vital by providing secure and reliable communication to the Headquarters of the mission control. They provide connectivity to these onboard systems and devices in the vehicle:

- Voice over IP for Phone / Fax connectivity
- CCTV Cameras
- Drone Connectivity
- Real-time live tracking of rescue staff
- Critical Map server

# **BENEFITS**

- IoT platform monitors and detects any faults on the solution.
- Robust connectivity with HQ of mission control.
- Command support unit vehicle is capable of acting as a command and control point at all large and major incidents.
- The vehicle is capable of operating in remote areas due to cellular Internet connectivity provided by the RUTX11.
- Two RUTX11 devices provide independence to any mobile operator during incidents.
- RUTX11 with LTE CAT 6 cellular module provides speeds up to 300 Mbps.
- Remote Management Systems allows to manage and monitor the whole solution remotely.

### **WHY TELTONIKA?**

The RUTX11 has met the high-security requirements of the Red Cross organization. This rugged industrial router is able to provide fast and reliable connectivity with bandwidth up to 300 Mbps. Besides, with 2 SIM card slots in each device – this solution can leverage the connectivity of four different operators. Dual WiFi allows connecting multiple devices like PDA and drones, while RMS (Remote Management System) allows to set up devices easily and to reach critical hardware behind the router remotely.

