

RADIO COMMUNICATION SOLUTION

FOR FIREFIGHTERS AND EMERGENCY SERVICES



Is the emergency response time fast enough for saving as many lives as possible?

Do the firefighters have trouble reaching one another and other agencies during emergencies?

How to ensure safety for the firefighters in hazardous work areas?

THE SOLUTION IS INSIDE



SmartPTT for Firefighters and Emergency services

Fire Station Alerting

In the days of analog radios, fire departments would be notified by the dispatcher of a call by sending a 2-tone sequence to the fire station, which would then be used to activate sirens, lights and open the fire station doors. Nowadays, using the telemetry functions of MOTOTRBO radios, the SmartPTT dispatcher can change the telemetry outputs of MOTOTRBO radios at the fire station to activate the sirens, lights and doors of the fire station.





Search & Rescue

Using SmartPTT software, dispatchers can obtain GPS information from smartphones of people in need of rescue. Using the GPS location of the person(s) in distress, the SmartPTT dispatcher can guide rescuers using the GPS information from GPS-equipped MOTOTRBO radios. Patching between different groups or channels helps to enhance fleet communication capabilities.

Firefighter Safety

When a firefighter is in distress, an emergency can be initiated using the radio's orange emergency button, a Man Down option board or the Lone Worker features of SmartPTT. SmartPTT can then automatically identify the firefighter and the firefighter's location to the dispatcher for a faster response.

Interoperability

SmartPTT's Radio Network Bridging function enables fire departments to interoperate their MOTOTRBO radio network with other Public Safety agencies on different radio networks such as analog, P25 or Tetra. Access to the MOTOTRBO radio system can also be accomplished by using the telephone interconnect option or the mobile application option for smartphones or tablets.



Audit trail

The voice and event log records voice traffic and radio events (i.e. GPS, ARS, telemetry). After an incident, supervisors can reconstruct details of the incident using the SmartPTT records to determine causality and future prevention efforts.

Multi-level dispatching

SmartPTT architecture presumes building the systems conforming to organizational structure of public safety authorities like firefighters or disaster management. Dispatch screens can be installed at any level of the organization hierarchy – regional, district or state level.

Daejeon Fire Department in South Korea

SmartPTT helps to save lives in fire

System description

- MOTOTRBO IP Site Connect
- 5 sites, 332 subscribers

Solutions







SmartPTT Monitoring



Radio Network
Bridging

Challenges

- Insufficient coverage
- Shortage of frequency resources
- Bad voice quality
- Analog and digital mixed environment
- The need of interoperability with legacy (local made) system and dispatching solution

Benefits

- High quality voice connection over a large area
- Optimized usage of frequency resources
- Interoperability with legacy analog system
- Better coordination of fighter's activities and conversations due to Bridging and Cross Patch features
- Increased firefighter's responsiveness and productivity during emergencies
- Facilitation of the system usage, analysis and control due to SmartPTT Monitoring

Russian Emergencies Ministry of Sakhalin region

SmartPTT increases the efficiency and safety of rescue activities on the Pacific coast

System description

- MOTOTRBO IP Site Connect and Capacity Plus
- 19 sites, 800 subscribers

Solutions



SmartPTT Enterprise



SmartPTT Monitoring



Tracking

Challenges

- Limited zone and bad quality radio signal coverage
- Unauthorized data transmission, industrial interference and channel disturbance
- Absence of permanent supervision over all conversations of rescue and fire departments, as well as GPS monitoring of subscribers

Benefits

- Improved operational communication, management and control of employees during rescue activities due to SmartPTT functions of bridging, voice call recording and GPS tracking
- Increase in the efficiency and safety of employees by 50%
- Expenses reduction due to optimized RF plan
- Connection through the departmental telephone network with the employees without subscriber stations due to SmartPTT Telephone Interconnect feature
- SmartPTT's whitelist feature resulted in a reduction of unauthorized data transmissions and channel disturbances by 80%

Ministry of Natural Resources and Environment of Samoa

SmartPTT helps guard against tsunamis and save lives

System description

- MOTOTRBO IP Site Connect
- 12 sites, 23 subscribers

Solutions







SmartPTT Monitoring

Challenges

- Insufficient coverage (15-20% of the country only)
- Communication challenges in the coordination of search and rescue
- Severe communications limitations entailing significant loss of lives during emergencies
- The need of reliable communications system/emergency response network (ERN) for emergency services in Samoa



Benefits

- Coverage of 95% of the country and seamless communication across the two islands of Samoa
- Faster emergency responses save more lives
- Interoperability between agencies (the hospital, the Red Cross, police, fire) as multiple radio users
- Rapid system diagnosis by SmartPTT Monitoring as well as snapshot view of siren status and manual activation of sirens if necessary
- Cost reduction: not necessary to invest in separate agency systems anymore and exchange information by going to distant locations



- Two-way radio systems integrator and software developer
- Motorola professional radio application partner
- 21 years in the market
- More than 200 qualified employees
- Customers in over 65 countries worldwide

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