MAXIMISE YOUR BUSINESS OPERATIONAL EFFECTIVENESS

To improve workforce productivity and operational effectiveness, you need to communicate with your employees and provide them with relevant information, virtually anywhere and at anytime. Fully integrated MOTOTRBO Control Room Solutions expand the functionality of your radio network with voice dispatch and advanced control and fleet management functionalities so your business becomes more efficient.

Managing an increasing flow of information and voice traffic, control room operators are right at the forefront of the action. They support staff in the field, organise maintenance tasks and are responsible for detecting when something goes wrong and making quick decisions. That’s why it is critical to equip control room staff with premium tools that allow them to organise and deliver routine tasks more efficiently, communicate better with teams in the field and make faster, sounder decisions when incidents happen.

INTEGRATING POWERFUL VOICE AND DATA COMMUNICATIONS WITH ADVANCED CONTROL AND DISPATCH FUNCTIONALITIES, MOTOTRBO CONTROL ROOM SOLUTIONS DRIVE YOUR BUSINESS.
MOTOTRBO CONTROL ROOM SOLUTIONS
SIMPLIFY OPERATIONS AND MAKE BUSINESS SAFER

An effective dispatch management and control solution helps you optimise team communications to deliver greater efficiency and operational results. With voice calls, email and text messaging plus continuous radio status and location tracking, control room tasks are managed efficiently and effectively. Whether sending a text message to teams carrying out road repairs or using the GPS module to manage your fleet of buses and trams, MOTOTRBO makes response times more immediate, customer service more effective and operations more productive, improving business efficiency and personnel safety.

MOTOTRBO digital two-way radios and accessories allow teams to communicate clearly and conveniently. Adding MOTOTRBO Control Room Solutions improves the communication and provides enhanced management and control of workers and assets in the field. In the event of an emergency or accident, you can locate the closest personnel and put in place an immediate response. And if you want to determine if deliveries are on time or have been sent to the correct location, event logging means operators and managers can monitor and analyse all activity and performance.

COMMUNICATION IS IMPROVED
MORE TASKS ARE AUTOMATED
GREATER EFFICIENCY IS ACHIEVED
COST-EFFECTIVE & EASY TO DEPLOY

THE MOTOTRBO NETWORK APPLICATION INTERFACE PROVIDES DIRECT CONNECTIVITY BETWEEN THE CONTROL ROOM SOLUTION AND REPEATERS

MOTOTRBO Control Room Solutions provide integrated fully-featured dispatch control over single and multi-site or channel systems, supporting voice communication and data operations for conventional single site repeater, IP Site Connect, Capacity Plus, Linked Capacity Plus and Connect Plus systems via the MOTOTRBO Network Application Interface.

At the heart of the MOTOTRBO Control Room Solutions is the enhanced wireline Network Application Interface (NAI). This simplified architecture establishes a direct connection between the control room solution and repeaters. With no additional hardware required, system stability, security and reliability are improved for more effective dispatching, monitoring and records management.

Utilising the Network Application Interface, dispatchers can now communicate directly over IP to repeaters without having to go through control stations and associated gateways. This makes liaising with radios and talkgroups so much quicker, easier and more effective – essential when dealing with emergencies or reassigning workers to maximise productivity.

The simplified architecture also ensures MOTOTRBO Control Room Solutions are cost-effective with reduced hardware investment, easier deployment and less maintenance costs.

Redundancy can also be built in to ensure your system is always available. This ensures you never lose operational efficiency or put personnel at risk in the event of a system failure.

KEY BENEFITS
- Less hardware and maintenance costs
- Better reliability due to reduced points of failure
- Full group and individual call recording
- Less complexity for easy deployment
- Easily integrates into existing on-site IT networks
- Redundancy with multiple clients working from server
- Works over multi-site and multi-channel systems

THE MOTOTRBO NETWORK APPLICATION INTERFACE PROVIDES DIRECT CONNECTIVITY BETWEEN THE CONTROL ROOM SOLUTION AND REPEATERS

SYSTEM USING NAI WIRELINE NETWORK ACCESS

APP CLIENT/SERVER
MOTOTRBO NETWORK APPLICATION INTERFACE (NAI)
REPEATER
RADIOS
IP NETWORK

SYSTEM WITHOUT NAI USING DEDICATED CONTROL STATIONS AND ASSOCIATED GATEWAYS

APP CLIENT/SERVER
GATEWAY
CONTROL STATIONS
REPEATER
RADIOS
IP NETWORK

FEATURE-RICH

MOTOTRBO Control Room Solutions include a variety of functional modules for improved fleet management and dispatch. In addition to the comprehensive set of core modules, users can add extra functionality and control with optional modules.

VOICE DISPATCH
Predefine communications between the dispatcher and remote radios. Make broadcast, group, private, remote monitor or emergency calls even quicker using programmable shortcuts.

FLEET ADMINISTRATION
Efficiently manage fleet operations and remotely control radios. Get live status updates and configure the radio to send online/offline reports to the server.

EVENT LOGGING
Log on-system events including voice calls, text messages and status changes. Customise rules, filter and group events in generated reports detailing location and radio status.

ALARM & LONE WORKER
Improve the safety of personnel with automatic alarms and lone worker protection. The alarm can also be sent as an automated message, a call or SMS.

JOB TICKETING
Create, assign and monitor job tickets through the radio network to deliver routine tasks more efficiently. Radio users can accept or decline the job ticket by simply pressing a button.

TEXT MESSAGES & EMAIL
Easily communicate with other devices when voice communication is not possible. Send broadcast, group or private text messages. Radio users can text back to the dispatcher.

TELEMETRY
Monitor and manage remote equipment from the control room. The system supports native MOTOTRBO telemetry with multiple profiles supported for different devices.

RSSI MAPS
Provides a graphical representation of the network coverage area based on RSSI level of the received signals from GPS-enabled MOTOTRBO radios.

VOICE RECORDING
Continuous voice recording of all calls with playback for analysis, reporting or training purposes. Audio files are stored in MP3 format on the Radio Server and Dispatcher.

GPS TRACKING
Follow workers, vehicles and business assets in real-time to ensure maximum safety and productivity. View routes, set up GeoFencing and log radio movements using a configurable set of rules.

IP SYSTEM BRIDGE
Combines voice and data communications with playback for analysis, reporting or training purposes. Audio files are stored in MP3 format on the Radio Server and Dispatcher.

OPTIONAL

ADDITIONAL DISPATCHER

ADDITIONAL RADIO SERVER

PHONE INTERCONNECT
TRBOnet PLUS

Developed in cooperation with Neocom, a leading edge communications company based in St Petersburg, TRBOnet PLUS is a professional PC-based, NAI enabled client-server dispatch software exclusively developed for MOTOTRBO™ digital two-way radio systems.

With TRBOnet PLUS, operators can monitor audio, data and asset location, as well as provide record management and review events that have taken place. It’s easy to track staff and key assets on a live map, send and receive private text messages to personnel in the field and respond quickly and effectively to emergency situations. Dispatchers can also link multiple agencies or departments with a single touch for even greater flexibility.

The software can be operated over the internet by multiple dispatchers located anywhere using the ‘Remote Dispatch’ function. Detailed reports highlight essential information including audio recordings, texts sent, radio status (on/off) and much more.

Two key advantages of TRBOnet PLUS are its scalability and reliability. Administrators can easily increase the number of users on the radio communication network or its geographical coverage at any time to handle increased demand. And with the simplified Network Application Interface, high levels of performance are assured.

**FUNCTIONAL MODULES**

- **CORE**
  - Voice Dispatch
  - Fleet Administration
  - Event Logging
  - Alarm & Lone Worker
  - Job Ticketing
  - Telemetry
  - GPS Tracking
  - Voice Recording
  - RSSI Maps

- **OPTIONAL**
  - IP System Bridge
  - Additional Dispatcher
  - Additional Radio Server
  - Phone Interconnect

**TECHNICAL INFORMATION**

**RADIO SERVER PC SPECIFICATION**
- Intel Core i5 processor or higher
- Windows 7 / 8 / Server2008
- 32 or 64 bits
- 3 GB RAM
- 180 GB Hard drive
- MS SQL Server 2008 Express Edition or higher

**DISPATCHER PC SPECIFICATION**
- Intel Core i3 processor or higher
- Windows 7 / 8 Professional
- 32 or 64 bits
- 3 GB RAM or better
- 180 GB Hard drive
- Sound card
- Microphone and Speakers or regular PC Headset

**IP BANDWIDTH**
- Between Server and Repeater: 64 kbps per repeater
- Between Server and Client: 64 kbps per client per voice channel

**MOTOTRBO HARDWARE**
- Radio Firmware Version: R01.12.02 or higher
- Repeater Firmware Version: R02.30.02 or higher

**LANGUAGES**

English, Spanish, French, Portuguese, Italian, German, Arabic, Czech, Hungarian, Korean, Polish, Russian, Turkish

**ARCHITECTURE**

**KEY**
- ARS: Automatic Registration Service
- DDMS: MOTOTRBO Device Discovery and Mobility Service
- MNIS: MOTOTRBO Network Interface Service
- CSBK: Control Signalling Block
SmartPTT PLUS

Developed in cooperation with Elcomplus, an innovative communications company based in Tomsk, SmartPTT PLUS is a professional dispatch software solution providing integrated fully-featured dispatch control over multi-site and multi-channel systems.

Designed exclusively for MOTOTRBO digital two-way radio systems, this control room solution supports voice communications and data operations in Linked Capacity Plus, Connect Plus Capacity Plus and IP Site Connect using the Network Application Interface.

SmartPTT PLUS provides a flexible range of services to dispatchers, executives and team leaders, helping them manage their fleet and optimise productivity of workers and assets. The customisable user interface with hot keys enables quick and easy control. Monitor audio, data and asset location, access up-to-the-minute records and review events. Track staff and send or receive private text messages to personnel in the field for a quick response to emergencies.

An integrated solution for MOTOTRBO, SmartPTT PLUS bridges different types of networks and manages systems of any size and topology. It’s easy to increase the number of users on the radio communication network or its geographical coverage at any time to handle increased demand. And with the simplified Network Application Interface, reliability is extremely high.

A key strength of SmartPTT PLUS is its distributed architecture allowing users to build reliable communication systems with hot standby servers. One dispatcher can connect to multiple servers at the same time, serving different sites and regions from one dispatcher position. It eases the deployment of two-level dispatch systems with independent regional dispatchers and a main control room dispatch position connecting all regional systems for centralised control.

**FUNCTIONAL MODULES**

**CORE**

- Voice Dispatch
- Fleet Administration
- Event Logging
- Alarm & Lone Worker
- Job Ticketing
- Telemetry
- Voice Recording
- RSSI Maps

**OPTIONAL**

- IP System Bridge
- Additional Dispatcher
- Additional Radio Server
- Phone Interconnect

**TECHNICAL INFORMATION**

<table>
<thead>
<tr>
<th>RADIO SERVER PC SPECIFICATION</th>
<th>DISPATCHER PC SPECIFICATION</th>
<th>IP BANDWIDTH</th>
<th>MOTOTRBO HARDWARE</th>
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<tr>
<td>Intel Core i3 processor or higher 2 GB RAM or more Hard drive Network adapter Windows 7, Windows 8, Windows Server 2008 operating systems</td>
<td>Intel Core i3 processor or higher 2 GB RAM or more Hard drive for database server: at least 12 GB with Microsoft SQL Server 2008 R2 Express. Sound card Network adapter Sound recording and playback devices (e.g. microphone and speakers) Windows 7, Windows 8 operating systems</td>
<td>Between Server and Repeater: 64 kbps per a repeater Between Server and Client: 64 kbps per client per voice channel</td>
<td>Radio Firmware Version: R01.08.32 or higher Repeater Firmware Version: R02.21.09 or higher</td>
</tr>
</tbody>
</table>

**LANGUAGES**

Arabic, Brazilian Portuguese, English, French, German, Italian, Korean, Polish, Russian, Slovak, Spanish, Simplified Chinese and Traditional Chinese

**ARCHITECTURE**

**USER INTERFACE**

**CUSTOM DISPATCHER INTERFACE, FLEET ADMINISTRATION, REPORTING**

**KEY**

ARS: Automatic Registration Service
DDMS: MOTOTRBO Device Discovery and Mobility Service
MNIS: MOTOTRBO Network Interface Service
CSBK: Control Signalling Block
MORE CONTROL, IMPROVED DISPATCHING AND AUTOMATION OF DAILY TASKS. GET MORE FROM YOUR MOTOTRBO RADIO SYSTEM.

1. This brochure is valid for Latin America and Caribbean region only

For more information on how to enhance operational efficiency and improve staff safety with MOTOTRBO Control Room Solutions - TRBOnet PLUS and SmartPTT PLUS, visit www.motorolasolutions.com/mototrbo