Hytera
Respond & Achieve

# SmartDispatch

## DMR dispatcher system

SmartDispatch is Hytera's dispatcher system, which was developed in accordance with the ETSI DMR radio standard. SmartDispatch is designed for efficient communication, and supports you in managing and directing radio subscribers in the Hytera-DMR radio system.

With its client-server architecture, its modular design and its voice-over-IP support (VoIP), SmartDispatch offers next to all modern dispatching features, in just one software solution.

DMR
DIGITAL MOBILE RADIO ASSOCIATION


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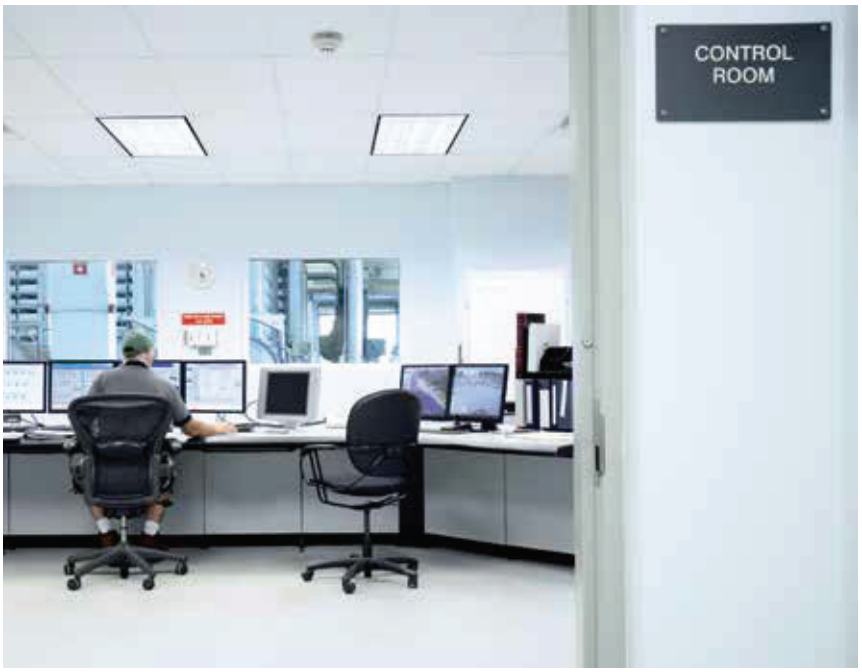
# Dispatcher

# SMART DISPATCH

**DMR dispatcher system**





## Highlights

**Online / Offline status message**
The radios in the DMR system can be configured so that they transmit their status to SmartDispatch – regularly and automatically. This information enables SmartDispatch to monitor the online or offline status of each subscriber in the radio system.
If necessary, the status query can also be performed manually via the SmartDispatch client.

**Support for all call types**
SmartDispatch supports all available call types: individual call, group call and include call. Each SmartDispatch client is capable of coordinating up to 16 voice channels.

**Radio Disable / Enable**
Radios can be disabled and enabled again from the control room using SmartDispatch. For example, if the radio is lost or stolen, it can be remotely disabled so that it can no longer register in the radio network and cannot make or receive any calls or text messages.

**Position detection via GPS**
SmartDispatch is capable of querying the exact location data of all GPS-enabled radios in the DMR radio system. This information can be queried manually when needed, as well as periodically, using a corresponding radio configuration.

**Text messages**
SmartDispatch can send and receive standard DMR text messages. A text message can be sent to a single radio as well as a group of radios. A user-friendly, chat-oriented user interface serves as the display for the text messages. All of the incoming and outgoing text messages are permanently stored in the SmartDispatch database. Text messages sent to offline radios are stored and then forwarded when the radio comes online.

**Voice recording and playback**
All incoming and outgoing calls are logged by the SmartDispatch server. Besides all of the DMR voice calls, this also includes calls made to the public telephone network (PSTN). All calls can be replayed and analysed at a later time.

**Statistics and analysis**
With the help of SmartDispatch, various statistics and analyses can be generated, such as call analyses, status or tracking reports, etc.

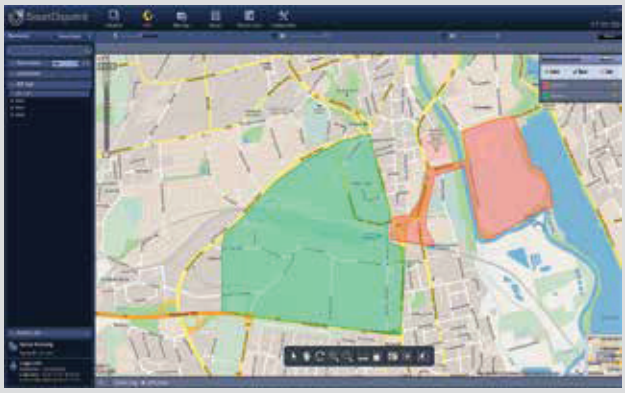
## Features

### Location history for subsequent analysis and representation

All of the received location information of the monitored radios is stored long-term in the SmartDispatch database to be able to analyse it at a later time. Users can browse the stored location information and also subsequently play back the movements on the map.

### Geofencing

With the SmartDispatch you can setup different geofencing areas. These areas are highlighted on the map and contain different rules. These rules define if subscribers or groups are allowed to leave / enter this area. In the case of rule violation, the SmartDispatch will display an alarm, as will the subscribed radio.



### Emergency alarm

If a radio reports an emergency, SmartDispatch triggers an alarm. If the reporting radio is GPS-enabled, its current location information can be directly displayed on the map.

### SIP support

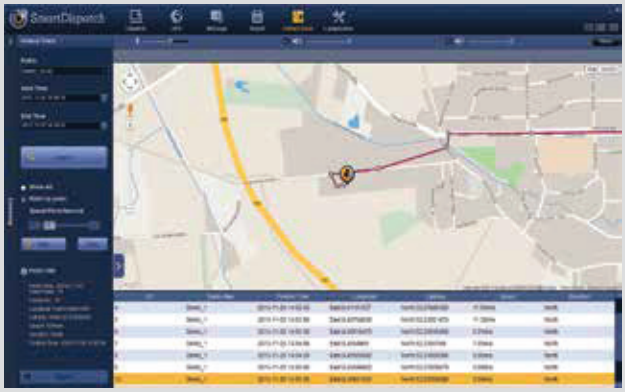
SmartDispatch supports the SIP (Session Initiation Protocol) for communication with IP private automatic branch exchanges, (PABX) in order to provide a gateway between DMR radios and the public telephone network (PSTN). Besides the DMR radios, the SmartDispatch client itself can place calls to the public telephone network using this path.

### AudioLink

This feature allows SmartDispatch users to interconnect voice groups, channels, locations and subnets so that seamless communication becomes possible in the DMR radio system, independent of the frequency of the radios, or whether they operate in analogue or digital mode.

### Dispatcher Intercom

Users can also communicate with other users of the SmartDispatch system. With the dispatcher client, users can communicate directly with each other using individual or include calls.



### E-mail gateway

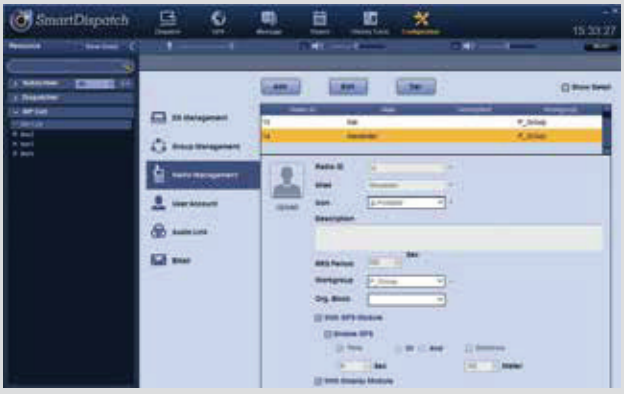
The SmartDispatch server supports the e-mail protocols SMTP and POP3. You can send e-mails from any e-mail client to radios in the DMR radio system. They are forwarded by the SmartDispatch server to the subscriber as text message.

### Remote Monitor

Unmuting the microphone of a radio registered in the DMR radio system allows SmartDispatch to remotely listen in on voice activities, without having to press the PTT button on the radio. This feature is particularly helpful in emergency cases because it allows listening in on events from the control room without having to operate the corresponding radio locally.

### Support of different geodata sources

The dispatcher system SmartDispatch supports different geodata and map sources. This includes the online geo-information from Google Maps and OpenStreetMap, as well as the offline software MapX (separately available). Offline Google Mapping is available via an additional licence option and a map downloading tool.



### Over-the-air programming and telemetry

The latest version of SmartDispatch supports various over-the-air commands. Devices can be reprogrammed remotely (e.g. ID, slot, frequency, contacts).
In addition, the telemetry feature can be used to monitor the status of external devices or to control an external device.

## Intelligent System Construction

### Modularity and flexibility
SmartDispatch is a client-server system consisting of various components. This allows SmartDispatch to support the design of dispatcher systems of different dimensions and topologies – completely tailored to the respective customer requirements. SmartDispatch can be used as a single-station system, or as an extensive dispatcher solution distributed over several locations.

### Demand-oriented access control
Each workplace can be configured with privileges for managing selected radios, entire fleets or selected parts of the DMR radio system.

### IP connectivity
In addition to connecting mobile radios and using the system as a dispatcher, you can use repeater over IP. Thus, an IP dispatching system can be established that enables
network-wide voice recording and direct control of the repeater time slots.

### Support of multiple monitors
The SmartDispatch client supports different display forms and can be distributed onto several monitors so that users have all of the important information in their field of view.

### Language support
SmartDispatch supports several languages. The language of the SmartDispatch client can be changed quickly upon demand, without having to restart the application. The supplied language tool allows administrators to maintain additional languages in the SmartDispatch system.

### No recurring costs for strategic localisation
Compared with GPRS-based solutions for strategic localisation, SmartDispatch relies on the possibilities of the DMR radio system in conjunction with GPS technology. Hence, no recurring costs arise for the use of the GPRS protocol.

## Technical Data

| System requirements | |
|---|---|
| Operating system (clients) | Microsoft® Windows XP SP3+<br>Microsoft® Windows 7, Windows 10<br>(32 & 64 bit OS) |
| Operating system (server) | Microsoft® Windows XP SP3+<br>Microsoft® Windows 7, Windows 10,<br>Microsoft® Windows Server 2008,<br>Microsoft® Windows Server 2012 |
| System memory (RAM) | ≥ 2GB |
| Bandwidth of a voice channel | > 120 kb/s |
| Database | Microsoft® SQL Server 2005 Express<br>Microsoft® SQL Server 2008 R2 Express<br>Microsoft® SQL Server 2012 Express |
| Accessories | Gooseneck Mic with PTT |
| Miscellaneous | Microsoft® .NET Framework 4.0 |

| Language | |
|---|---|
| Available languages | English, French, Spanish, German.<br>Language tool allows support for other languages |

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www.hytera.co.uk

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**Hytera Communications Corporation Limited**
**Address:** Hytera Communications (UK) Co. Ltd.
Hytera House, 939 Yeovil Road, Slough, Berkshire. SL1 4NH, UK.
**Tel:** +44 (0) 1753 826 120 **Fax:** +44 (0) 1753 826 121
**www.hytera.co.uk** **info@hyterauk.co.uk**





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