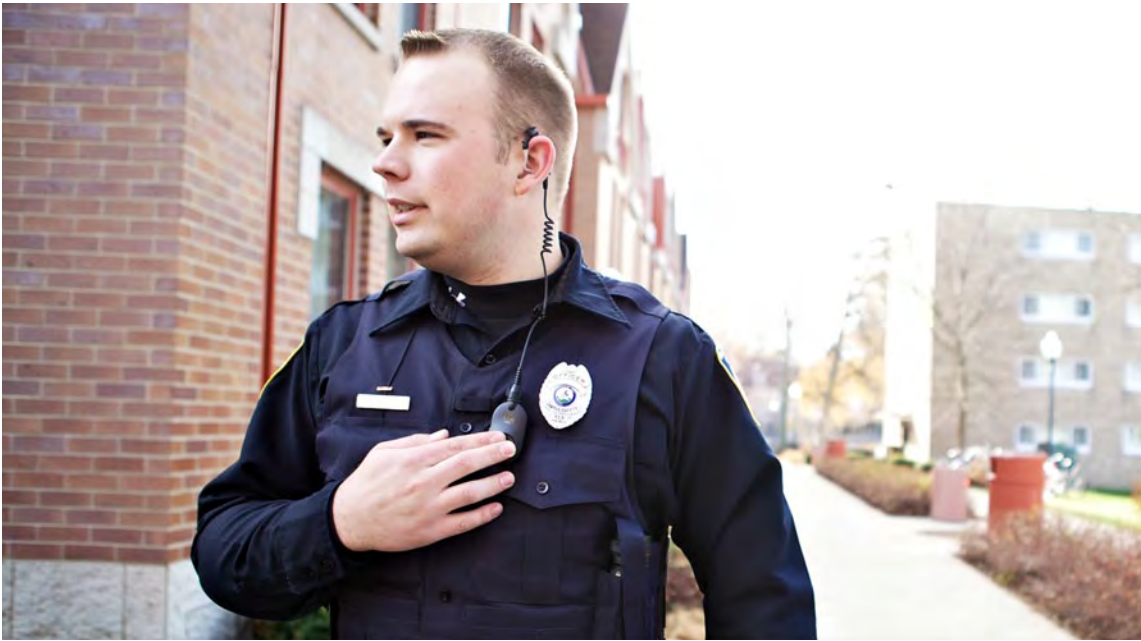


**POSITION PAPER**

INTEGRATED BLUETOOTH® AUDIO & DATA  
PROFESSIONAL RADIO COMMUNICATIONS



**WE HELP YOUR BUSINESS WORK SMARTER**

# **MOTOTRBO™ BLUETOOTH® AUDIO & DATA**

Every day, you rely on your radio. It's your communications lifeline. It keeps you productive, connected and safe. With integrated Bluetooth, it can change the way you work, no matter where that work takes you.

## POSITION PAPER

INTEGRATED BLUETOOTH® AUDIO & DATA  
PROFESSIONAL RADIO COMMUNICATIONS



### KEEPING STUDENTS SAFE

Armed with a wireless Bluetooth RFID scanner, school administrators efficiently identify students boarding buses for a field trip by scanning the RFID tag on their IDs. The data is seamlessly sent back to the main office computer via their Bluetooth-enabled digital portable radios, compiling a real-time attendance list so the school and bus company can track those students – and ensure their safety – until they return to school.

### DELIGHTING HOTEL GUESTS

As the head of hotel guest services, your job is to delight guests, a job made easier with a MOTOTRBO SL Series portable radio with integrated Bluetooth technology and a Motorola Operations-Critical Bluetooth wireless earpiece. Leaving the radio on your desk, you can walk up to 10 metres away, push a button on your earpiece, and instantly get a status update from employees in the ballroom setting up for today's event. No wires. You're free to move comfortably throughout the day, connecting with staff discreetly and efficiently.

### RESTORING POWER

Your utility repair crew braves a severe thunderstorm to reconnect a power line downed by a tree. Their status reports sent through their Bluetooth earpiece while suspended high above the road still can be heard clearly, despite the driving rain and howling wind. No wires or hands required.

Bluetooth technology has transformed the way we communicate and transfer information in both familiar and new ways – via our mobile devices and computers, cars and wireless earpieces and accessories. For business-critical operations, integrating Bluetooth data and audio capabilities into a two-way radio creates a perfect match of advanced technology, customer insights and engineering. When paired with our new MOTOTRBO digital radios, it allows you to cost-effectively track remote assets and extend your business reach – all while saving time, money and resources. Integrated Bluetooth audio and data make hands-free, intelligent wireless communications possible in industries from manufacturing to hospitality.

# HOW IT WORKS

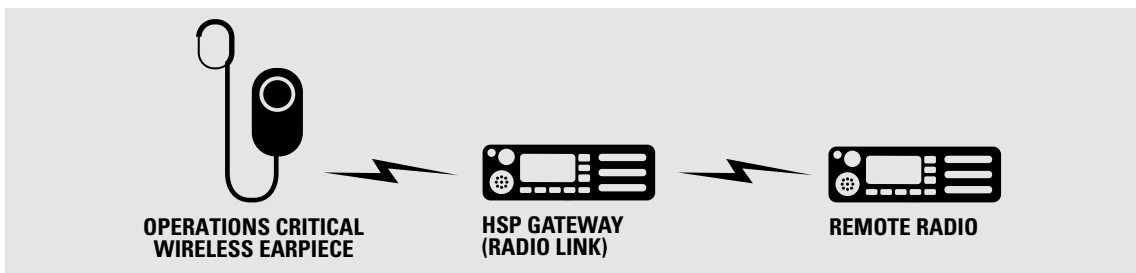
Bluetooth technology relies on short-range radio frequencies to deliver wireless, hands-free connectivity. When integrated into a single device, it eliminates the cost and need for an external dongle. Our solutions support an open standard, including the latest Bluetooth protocol\*. This makes it easy to deploy off-the-shelf Bluetooth devices.

Our next generation MOTOTRBO radios function as an “access point” between a Bluetooth-enabled enterprise device and a specific application, such as printer software or an inventory database. This allows a wireless barcode scanner, mobile computing device or printer to use our radio

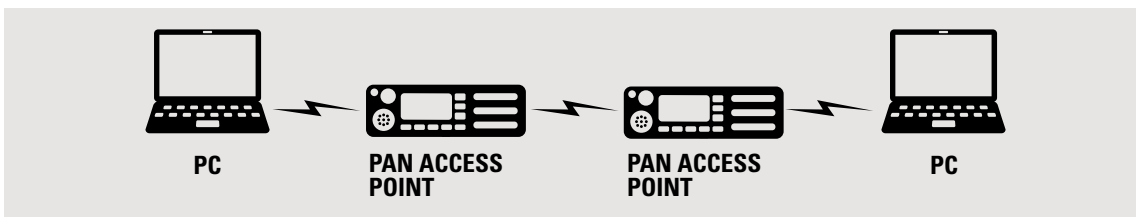
to send real-time data back to a PC or central operations centre so a delivery driver can confirm receipt of a package and a public works crew can track assets in the field. And unlike other Bluetooth data devices that have only an LED indicator to confirm transmission, data notifications from our system are easy to confirm with alerts and notifications clearly received on the MOTOTRBO radio display – even at night with our innovative day/night colour display modes.

The latest MOTOTRBO SL Series portables, DP4000 Series portables and DM4000 Series mobiles support four unique Bluetooth profiles:

**HEADSET PROFILE (HSP)** – The most common profile allows a Commercial-Off-The-Shelf (COTS) headset or one of Motorola’s Operations-Critical Wireless earpieces to wirelessly connect to the radio acting as the device’s audio input and output mechanism. In the scenario below, a PTT press of the Bluetooth Operations-Critical Wireless Earpiece sends audio to the Bluetooth-connected radio over the radio link to a remote mobile radio:



**PERSONAL AREA NETWORK (PAN) PROFILE** – Supporting a PAN access point, MOTOTRBO provides IPv4-based networking capabilities for connected Bluetooth devices (e.g. PC). In the scenario below, the MOTOTRBO radios deliver standard IP networking data communication over the Bluetooth PAN connection between two PCs:



**SERIAL PORT PROFILE (SPP)** – The radio provides pass-through serial data transport for connected Bluetooth devices (e.g. scanner, PC, etc.) to a remote IP destination or locally connected radio peripherals (e.g. option board).

**MOTOROLA SERIAL PORT PROFILE** – Our proprietary protocol over SPP supports fast PTT press/release detection over Bluetooth SPP for transmitting microphone (e.g. headset or radio microphone) audio.

## HOW RADIOS HELP MAINTAIN CITY LIGHTS

Have you ever wondered who maintains the large lights that line our city streets? Changes a bulb when it goes out? More than likely, your city public works department or Department of Transportation keeps the roads you travel well lit, as many now own and maintain them directly.

Keeping the lights on takes smart infrastructure and a large inventory of parts, most of which are housed in mobile assets such as service trucks. Without the hassle of wires, next generation MOTOTRBO radios with integrated Bluetooth make it more convenient to track both fixed assets (lamp posts, service cabinets, metres) and service dates, as well as mobile assets, so that any out-of-stock items can be immediately ordered and replenished. Other Bluetooth-enabled devices, such as tablets, can also connect wirelessly with our Bluetooth-enabled radios, using the radio as a backhaul link to send data in rural locations where mobile phone coverage is unreliable or not available. This keeps workers connected safely and effectively with their dispatch centre.

\* Bluetooth version 2.1 + EDR Specification, class 2, 10-metre range

## POSITION PAPER

INTEGRATED BLUETOOTH® AUDIO & DATA  
PROFESSIONAL RADIO COMMUNICATIONS

### A PERFECT MATCH

Drive operational efficiencies, keep field workers more productive and eliminate paperwork. The integrated Bluetooth data capabilities of our MOTOTRBO radio system will help your existing communications system do more for less. How? By leveraging the wide area network for data transmission, you avoid incurring the additional charges associated with using a cellular network for data. With data charges on the rise, this adds up to significant savings to your company's bottom line.

When connected to wireless peripherals, MOTOTRBO allows workers to work smarter. Paired with a wireless RFID scanner, a public works crew can use their radio to easily track mobile assets housed on service trucks or inventory stock in the warehouse, immediately alerting the main office when supplies are low and need to be reordered. That same technology ensures an airport ramp worker can quickly send time/date stamp information on baggage status via Bluetooth to his radio and then send that data back to the office to verify its delivery location. Integrated Bluetooth turns your radio into a more powerful, productive communications tool.

### AUDIO AND DATA WITH INTELLIGENCE

More flexibility. Greater freedom. Industry-leading audio. You get them all when you pair a MOTOTRBO radio with our Operations-Critical Bluetooth accessories. With Bluetooth capabilities integrated into the radios themselves, you no longer need any additional devices, such as a dongle, for pairing a Bluetooth headset or accessory to a radio. In a few simple steps, the radio can find and connect a Bluetooth-enabled device, and is operational within seconds.

MOTOTRBO radios support a wide variety of Bluetooth accessories, but are significantly enhanced with the addition of our Operations-Critical Earpieces. Ruggedly reliable and Bluetooth-certified, our portfolio offers a variety of earbud and earpiece options, along with a wireless push-to-talk (PTT) pod you can put in a pocket or under your coat and link to any earpiece. Our earpiece uses Bluetooth 2.1 Secure Simple Pairing, so it automatically pairs when you power the radio and earpiece on. Lightweight, comfortable and durable enough to support your busy work day, it provides exceptional audio in loud environments and an extended battery life for long work shifts.



### MORE THAN JUST A RADIO PLATFORM

You rely on radio communications every day to keep your workers connected, safe and productive – no matter where they are or how loud the environment is around them. We've built our business around the development of innovative two-way radio technology that helps customers like you accomplish your business goals. MOTOTRBO digital radios deliver a robust, future-ready, standards-based platform that is so flexible and versatile it can be customized to fit your unique business, coverage and application needs – and now, cost-effective data communications.

We've remastered digital two-way communications and redefined everything you expect a radio to be. Integrated Bluetooth technology will change the way you work, increasing collaboration from the harrowing heights of utility poles and organized chaos of school grounds to noisy, fast-paced hotel operations. It will help you hear and communicate better, and ultimately work smarter.

For more information about Motorola MOTOTRBO Bluetooth-enabled SL Series and DP4000 Series portables, DM4000 Series mobiles and related accessories, please visit [www.motorolasolutions.com/mototrbo](http://www.motorolasolutions.com/mototrbo).

### AN OPEN PLATFORM FUELS DATA INNOVATION

We built an open platform, so that MOTOTRBO innovation could extend beyond the feature-rich capabilities of our radios and accessories. Today, we offer the industry's largest third-party application developer program for customized applications that will help you with location tracking, work order ticket management, dispatch, email gateways, network monitoring, emergency man-down alarms and telephony.

Motorola Solutions Ltd, Jays Close, Viabes Industrial Estate, Basingstoke, Hampshire RG22 4PD, UK

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2013 Motorola Solutions, Inc. All rights reserved. RO-4-2075

EMEA version 1 (08/2013)



**MOTOTRBO**  
DIGITAL  
REMASTERED.