BLUETOOTH: READY FOR AIRWAVE

The Home Office has issued updated guidance to emergency services on the use of Bluetooth wireless devices on the Airwave network - opening up new possibilities to support the evolving needs of tomorrow's connected officers.

SECURE BLUETOOTH CONNECTIONS CAN ALSO ENABLE **REMOTE CONTROL AND INTERACTION** BETWEEN AN OFFICER'S TETRA RADIO AND OTHER DEVICES.

Bluetooth® is the world's most popular standard for cable-free connection between devices over short distances, typically up to a few tens of metres. There are plenty of public safety use cases for Bluetooth. This is evidenced by growing use of the technology for applications ranging from control room operator headsets and wireless remote speaker microphones to sensors used with Conducted Energy Weapons (CEW) that activate a body-worn camera once the CEW is withdrawn.

Until recently, however, the Home Office has not permitted use of this wireless technology with Airwave TETRA radios. This restriction has been due to concerns about earlier versions of the Bluetooth standard that exposed users of the service to potential security vulnerabilities.

This situation has changed with recent iterations of the standard that address security as a foremost concern. Just as importantly from a mission critical communications perspective, Bluetooth 4.2 and subsequent versions offer major enhancements in encryption and authentication to resist various modes of attack by eavesdroppers. These advances are reflected in updated Home Office guidelines that now permit the use of Bluetooth 4.2 and above, with Secure Connections Only mode, on the Airwave network in specific use cases.

It's early to see how this change in regulation will impact blue light users and the wider mission critical communications community. But it opens up exciting possibilities for Airwave – and the forthcoming ESN – to support the evolving needs of tomorrow's connected officers.

Secure Bluetooth connections can also enable remote control and interaction between an officer's TETRA radio and other devices. At its simplest, this could be a wireless earpiece that allows the police officer to hear colleagues' voices with greater clarity in the noisy environment of a public event or at the scene of an emergency. This can be particularly beneficial for hearing-impaired officers who may have difficulties listening to speech through the radio's built-in speaker while wearing a hearing aid.

There's also the potential for interacting with the radio via an app on the officer's Bluetooth connected smartphone. This enables simplified workflows by reducing the need for frontline workers to keep switching their attention between devices. For example, accessing radio controls in dark conditions via their smartphone screen may be easier and more convenient for an officer working at night. As well as improving officers' situational awareness and task performance, accessing radio functions via a smartphone can support discreet operations by reducing interest in the activities of a plain-clothed officer by members of the public.

Enabling the use of Bluetooth on Airwave also raises new possibilities to connect other devices such as body-worn cameras and digital notebooks directly to the network.

MXP600

The MXP600 is the world's first TETRA radio featuring Bluetooth® 5.0 with Secure Connections, complemented by powerful end-to-end encryption to ensure that over-the-air communications cannot be intercepted at any point.