

Brochure



# DIMETRA™ Connect

Extend your TETRA network coverage  
for faster response times and safer communities



# DIMETRA Connect maintains your TETRA features over broadband

DIMETRA™ Connect enables users to stay in touch with their team even when outside of TETRA coverage.

A DIMETRA TETRA radio network is designed for excellent coverage, but there are times when users need to go outside the boundaries of their TETRA network. DIMETRA Connect maintains your TETRA features over broadband when your DIMETRA Connect-enabled device is outside of TETRA coverage. The switchover between TETRA and broadband is automatic and requires no user intervention, so end-users can maintain their vital voice and data communications and usual workflows.

## Stay connected via an automated switchover to broadband when outside of TETRA coverage

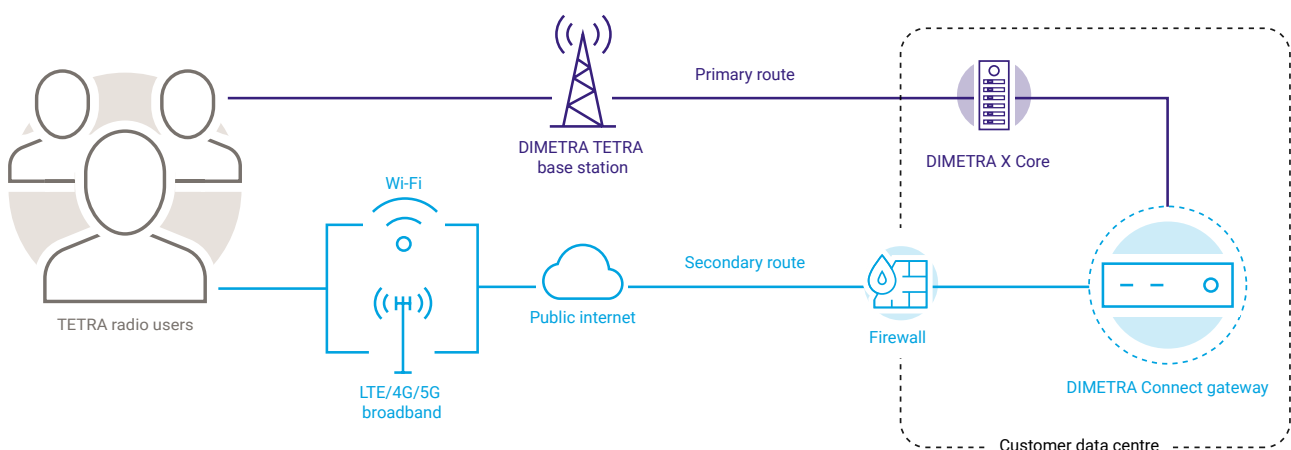
Typically a TETRA device will communicate with the DIMETRA core network via a base station. If there is weak or no TETRA coverage, a DIMETRA Connect-enabled device will automatically switch to an available broadband network. Connectivity is then maintained via broadband, through a firewall and DIMETRA Connect gateway back to the DIMETRA core network. Voice and data information is sent over broadband as encapsulated TETRA Internet Protocol (IP) packets.

DIMETRA Connect maintains your TETRA features and usual workflows over broadband. TETRA remains the preferred bearer for all critical communications and the radio will automatically switch back to TETRA when a stable connection is available.

DIMETRA Connect is a secure solution. Between a TETRA device and a TETRA base station users can take advantage of multiple levels of security, which may include Air Interface Encryption, to protect their mission-critical TETRA voice and data. With DIMETRA connect, your communication continues to be secure – as the communication between devices and the DIMETRA Connect gateway uses 256-bit Advanced Encryption Standard (AES) encryption and certificate based authentication.

As DIMETRA Connect is TETRA over IP, users continue to benefit from any TETRA security features you have enabled such as:

- TETRA authentication
- TETRA end-to-end encryption
- TETRA enable / disable



# Example use cases

With DIMETRA™ Connect users can have their TETRA devices send and receive voice and data over Wi-Fi and LTE/4G broadband connections when they are outside of TETRA coverage.



## Indoor / in-building coverage

DIMETRA Connect users can use available LTE or in-building Wi-Fi to extend coverage into buildings or underground and stay connected to the TETRA network and their colleagues.

### Examples:

- A firefighter in a building
- A police officer working in a police station

## Stay connected beyond the range of LMR coverage

If your radio users go beyond the range of your TETRA network's geographic coverage they can use their DIMETRA Connect-enabled TETRA device to communicate over broadband.

### Examples:

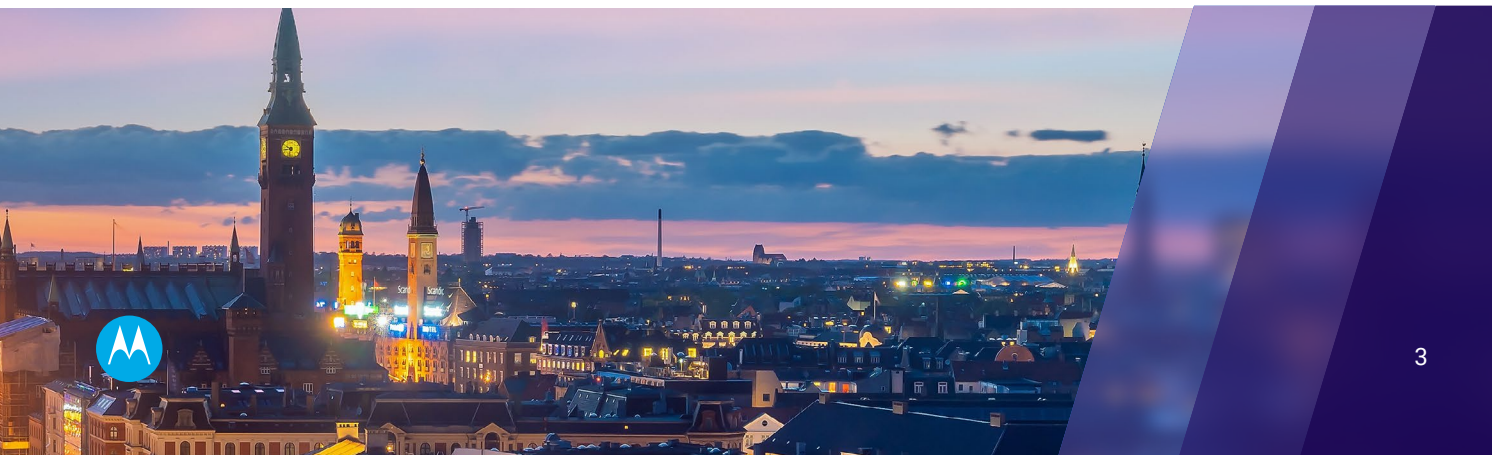
- An airport worker has TETRA coverage around the airfield – but not at remote locations beyond the airport's Land Mobile Radio (LMR) coverage
- Users working beyond their country or state border
- Radio users working in an underground railway should have great coverage underground, but may have limited LMR coverage above ground

## Dead spot mitigation

As with any wireless network, coverage dead spots can occur in areas such as built-up cities, parking garages, or hilly terrain. With DIMETRA Connect a user's enabled device automatically uses available broadband to stay connected.

### Examples:

- A police officer working between tall buildings in a city
- A paramedic dealing with an incident in a valley



## Benefits

- Users stay connected to the TETRA radio network even when they are outside of radio coverage
- Automatic switchover requires no user actions
- TETRA features are supported over broadband
- There is no need to manage a separate set of talkgroups and configurations
- Users can communicate over TETRA LMR and broadband using the same device
- Users can maintain connectivity with their colleagues in areas that they wouldn't have been able to before, leading to safer communities and faster response times

## Security

- 256-bit AES encryption over IP between devices and the DIMETRA™ Connect gateway
- Certificate based authentication between devices and the DIMETRA Connect gateway
- TETRA authentication
- TETRA end-to-end encryption<sup>1</sup>
- TETRA device enable / disable<sup>1</sup>

<sup>1</sup>Optional TETRA features

## Compatibility



**MXP660**

portable TETRA radio



**MXP600**

portable TETRA radio



**MXM600**

mobile TETRA radio



**MXP7000<sup>2</sup>**

portable TETRA radio



**MXM7000<sup>2</sup>**

portable TETRA radio

<sup>2</sup> Future software update

To learn more about DIMETRA Connect, visit:  
[motorolasolutions.com/dimetraconnect](https://motorolasolutions.com/dimetraconnect)



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