etherstack

OFFICIAL SUPPLIER TO ESN Emergency Services Network

www.etherstack.com

The Industry-Leading Deployed IWF

The Interworking Function connects LMR radio networks with next-generation **mission-critical broadband.**

About Etherstack

Every major public safety network in the world is facing the same challenge. Legacy narrowband radio systems - TETRA, P25, DMR - are still operational and critical to the officers, firefighters, and paramedics who rely on them.

Next-generation broadband MCX networks are live and expanding. The organisations that depend on both **cannot afford a gap between them.**

For 30 years, Etherstack has built the technology that keeps mission-critical communications working.

Headquartered in Sydney with R&D operations in the US, UK, and Japan, the portfolio spans TETRA, P25, and DMR protocol stacks alongside 3GPP LMR-LTE Interworking Function solutions for mission-critical push-to-talk. When the stakes are highest, it works.

Keeping Great Britain's Emergency Services Connected During the Transition to ESN

The Emergency Services Network is one of the world's largest public safety cross-government communications programmes - a nationally coordinated shift from the legacy Airwave TETRA network to a new LTE-based platform for police, fire, and ambulance services across England, Wales, and Scotland, delivered by the Home Office in partnership with BT/EE and IBM.

During migration, frontline users operating across both networks must continue to communicate without compromise to security, reliability, or operational effectiveness.

The solution required secure interworking between two fundamentally different technologies - integrated into a highly assured multi-supplier environment and built for national-scale deployment.

Etherstack was selected to deliver the Interworking Function - enabling seamless communications between Airwave and ESN users and maintaining a single operational community throughout the transition.

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The Etherstack IWF Delivers:

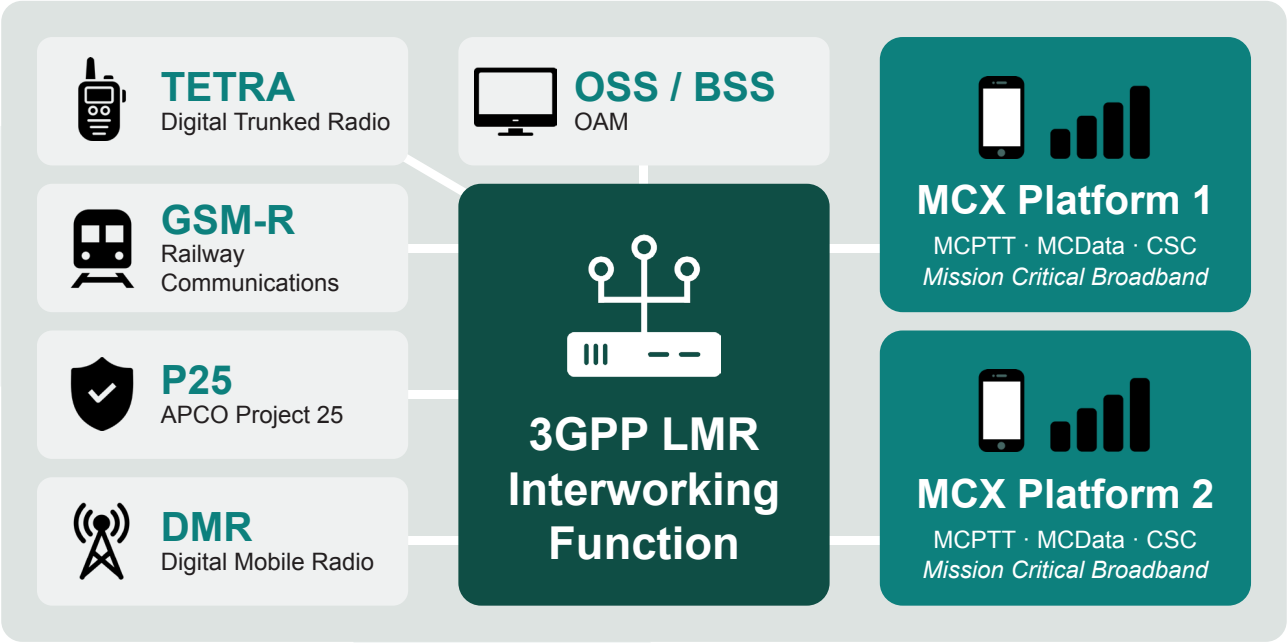
- Real-time voice interoperability across TETRA and ESN
- Secure media and signalling translation
- High-availability architecture for mission-critical operations
- Standards-based integration with the wider ESN ecosystem (incl. control rooms)
- Scalability to support national deployment

The 3GPP LMR Interworking Function

Public safety operators don't get to pause during a network transition. Police, fire, and ambulance services depend on radio communications every hour of every day - and when a country moves from legacy narrowband to next-generation broadband, both networks have to keep working, and **they have to work together.**

The Etherstack IWF is how that happens. Built to 3GPP specifications and live in operational networks, it sits at the integration point between LMR radio systems and MCX broadband - letting voice calls, group communications, emergency calls, and data flow freely across both. Vendor-neutral by design. Proven where it matters most.

How it Works: The Etherstack IWF supports three core integration patterns, covering every scenario from a single radio-to-broadband call through to large-scale multi-network group communications.



	Group Call	Individual Call	Emergency Group Call	Status Codes	Short Data Messages
P25					
ISSI	✓	✓	✓	✓	✓
CSSI	✓	✓	✓	✓	✓
DFSI	✓	✓	✓	✓	✓
TETRA					
Control Interface	✓	✓	✓	✓	✓
ISI	Q1 2027				
DMR					
AIS	✓		✓		
FRMCS					
FRMCS	H2 2027				

Deployed. Operational. Proven.

The Etherstack IWF is operational on AT&T FirstNet in the United States - the world's largest public safety broadband network - and is currently being built and integrated into the UK Emergency Services Network, making it the most field-proven 3GPP LMR Interworking Function available today.

In the United States, the Etherstack IWF supports P25-MCX Interworking across the AT&T FirstNet network.

In Great Britain, Etherstack is a contracted IWF supplier to the Home Office, delivering the interworking capability between legacy Airwave TETRA and the new ESN broadband network.

Etherstack supports both from its global operations across the US, UK, Australia, and Japan - providing the round-the-clock coverage that mission-critical networks require.

For organisations evaluating IWF solutions or working through the challenges of a DMR to a MCX transition, we would welcome the conversation. MCX Transition and/or hybrid operations looking to integrate or partner are invited to engage with us as we are open to collaboration across the ecosystem.

Contact: info-eu@etherstack.com

SaaS or PaaS Options Available

High Availability

Supports Proprietary Integration (if required)

Global Support Model

Supports Standard Based Encryption