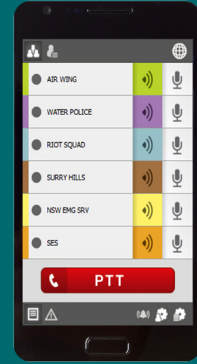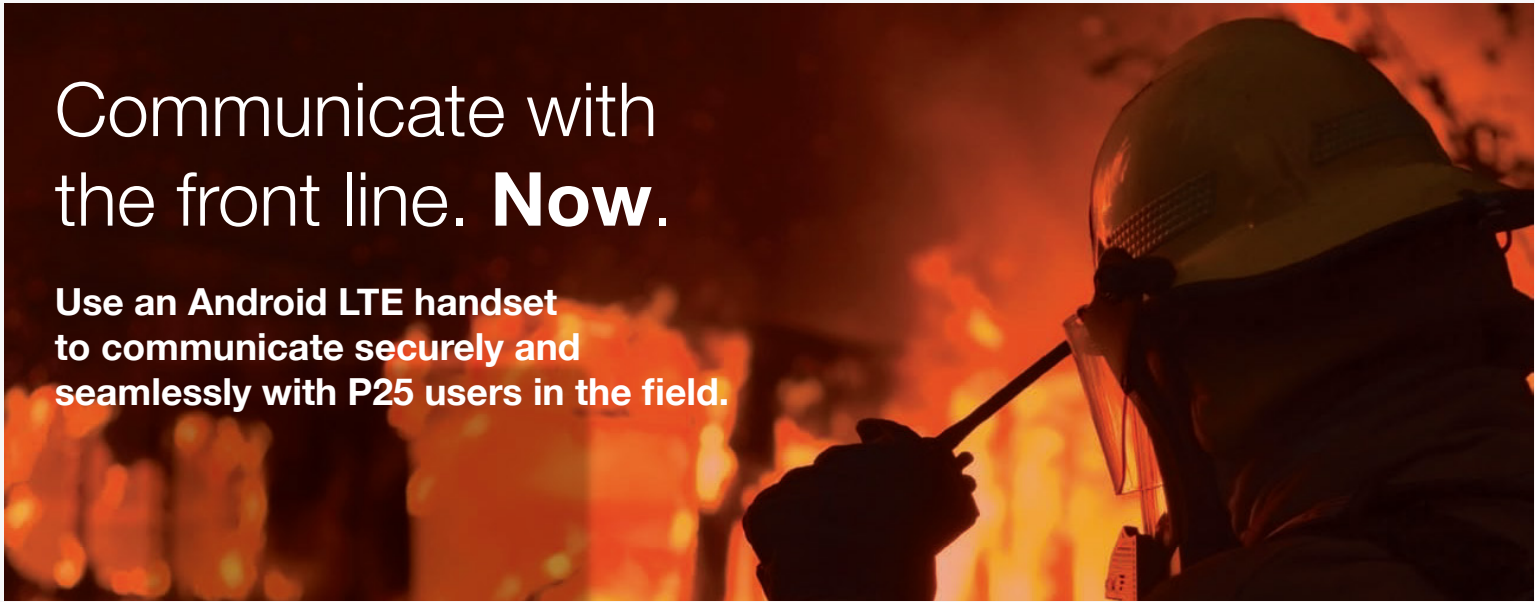# etherstack
## wireless innovation

# LTE25™ Android Client
## Push-to-talk P25 over LTE

# Communicate with the front line. Now.

**Use an Android LTE handset to communicate securely and seamlessly with P25 users in the field.**

## Features

- Listen to multiple talkgroups simultaneously
- PTT group calls within the LTE network
- Talk directly to the dispatch center
- Priority and emergency calls supported
- End to end encryption between LTE & P25
- Location Services allows LTE & P25 units to be tracked
- Over-The-Air-Rekeying (OTAR)
- Multiple profiles and user logins
- Uses native P25 vocoder
- Runs on COTS LTE Android platforms
- Reduced cost of ownership
- Encrypted calls to enterprise PABX

Etherstack's LTE25 Android Client allows you to bridge LTE networks and your existing APCO P25 narrowband network. Group members can exist in both the LTE network and the P25 network, allowing seamless calls between two groups of users.

Etherstack's LTE25 Android Client application runs on COTS Android LTE platforms. The application is based on Etherstack's APCO P25 mobile station protocol stack solution that is licensed by many P25 equipment manufacturers globally.

Uniquely, Etherstack's solution also includes the native P25 vocoder on the Android client, which provides the following three core benefits in this true "P25 over LTE" solution:

a) native vocoder avoids transcoding in the network, improving quality
b) eliminates transcoding latency delay
c) allows end-to-end encryption between traditional P25 handsets and the LTE device

Additionally, by using P25 application and supplementary services within the LTE client, unified P25 and LTE group call types are possible as well as common subscriber management functions (stun/unstun, ambient listening, OTAR) and unified location services ("blue force" tracking).
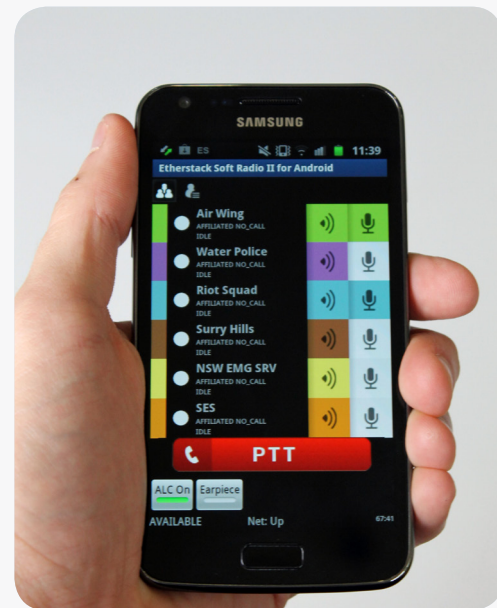
Etherstack's secure application solution decouples the choice of LTE handset, allowing the end user to choose a COTS LTE handset or a specialised LTE handset as meets their needs.

**LTE25** Android Client

Etherstack LTE25 Android Clients can operate independently within the LTE network without connection to an existing P25 or legacy LMR network. Public safety group call capabilities and associated services are all available within the LTE network.

The LTE25 Android Clients communicate with each other via the LTE25 softswitch located within the LTE network. This softswitch provides open standard interfaces to emergency dispatch consoles conforming to the TIA TR.8 CSSI standard, and can interface to P25 digital trunked radio networks and legacy radio networks via the TIA TR.8 ISSI standard and Etherstack provided bridges and gateways.

When the LTE network is connected to an APCO P25 digital radio network, users can have either an LTE25 handset or a traditional APCO P25 radio and be able to interoperate with each other.

The LTE25 softswitch can also communicate with the PSTN network and enterprise based PABXs allowing secure calls between the LTE25 Android Client and the enterprise network.
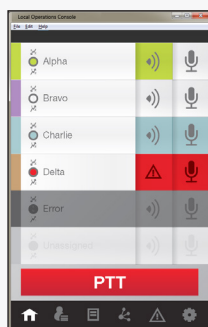


# LTE25 Product Family

## LTE25 Softswitch

Etherstack's LTE25 Softswitch is a Push-To-Talk (PTT) over cellular 4G solution that provides public safety grade features and services within a 4G LTE network environment such as group calls, priority and emergency calls.

At the same time, Etherstack's LTE25 solution can bridge to existing APCO P25 networks via the industry standard ISSI interface, allowing for the first time native APCO P25 calls to be made seamlessly between LTE handsets on the LTE network and traditional P25 handhelds and mobiles.

By using open standards such as the ISSI & CSSI, Etherstack lets you reuse your existing narrowband radio assets and integrate them fully with new LTE networks and handsets. We call it "P25 over LTE". Etherstack's LTE25 Softswitch is a High Availability solution that also is available with a geographically isolated Disaster Recovery (DR) Node – which allows backup Network Operations Centre (NOC) to take over control of the LTE & P25 network in the event that the primary NOC is no longer in service.

## LTE25 Blue Force Tracking

- Integrated P25 & LTE GPS Solution
- Windows based desktop solution integrated with Google Earth application
- Displays location of LTE & P25 subscribers in real time
- One click calling to individuals or groups of users
- Vehicle speed and status information
- Monitor multiple talkgroups simultaneously