European MoD and Public Safety Organization secures national event with NetNumber Private LTE network

- Armed Forces and Public Safety personnel providing national security in a high threat environment.

- Challenge
  - Situational Awareness
  - Command & Control
  - Mobility
  - Reliability

- TITAN Applications
  - HSS
  - AuC

- Results
  - Robust, reliable coverage
  - Simplified network on a small footprint for rapid deployments
  - Mission critical connectivity

The Customer's Story

In the wake of a series of terrorist attacks in the European Union, one country faced the daunting task of securing a major national event that was set to be televised worldwide and attended live by more than seven million civilians.

To prepare for and secure this event, the government activated over 90,000 extra military and police covering ten stadiums spread across the country.

This case study examines how a Private LTE network provided security personnel and armed forces access to instantaneous, reliable communications to prevent and respond to potential acts of violence and terror.

Security forces required a reliable, high-bandwidth platform to support data, voice, and Mission Critical Push to Talk (MCPTT) communications between a fixed command center and various tactical communications groups to communicate status, identify potential actors and threats, and convey orders. Coverage would need to exist independently from the Public Switched Telephone Network (PSTN) and commercial cellular networks – as these networks have proven to be unreliable or completely unusable in times of mass crisis.

The security plan also called for interoperability across tactical communications groups, enabling individuals to communicate with and move seamlessly between groups. In addition, the tactical groups needed to support mobility, be lightweight, and run on batteries.

The Solution

NetNumber partnered with leading telecommunications providers to deploy an end-to-end Private LTE solution that met the unique needs of security forces at this widely dispersed, high-stakes event. The tactical edges provided a full LTE network on batteries and included an eNodeB, virtual router and EPC, MCPTT (Mission Critical Push to Talk) applications and ruggedized handsets.

The Private LTE solution featured the NetNumber HSS application, which enabled centralized provisioning and automatic replication of authorized subscriber information between master and edge nodes. This capability greatly simplified network operations, enabling rapid deployment and interoperability, when time was of the essence. Further, NetNumber's ability to deploy on a very small compute platform fit well with the requirement to keep the solution in a small, agile footprint, particularly at the edge nodes.

Given the high stakes of the security requirements, the solution also included active and standby Master nodes to provide High Availability (99.9999%).

The Results

While the event had isolated incidents of rioting and violence, a large-scale terrorist attack was averted. The Private LTE solution deployed by the MoD not only prepared armed forces and public safety workers for the worst-case scenario, it also provided reliable, robust, and instantaneous communications needed to continuously monitor security across a broad range of locations and respond quickly as issues flared.

For a demonstration of the NetNumber Private LTE network solution, visit www.netnumber.com or contact your local account representative via sales@netnumber.com.

About NetNumber

NetNumber, Inc. brings nearly two decades of experience delivering innovative signaling control solutions that enable carriers to accelerate implementation of new services across multiple generations of networks, while dramatically simplifying the core network and reducing operating costs. Today, we are the leading provider of Centralized Signaling and Routing Control (CSRC) solutions to the global communications industry.