**Public Safety Recommends LTE Network Identifier Details to FCC (11/15/11)**

*By Sandra Wendelken*

The discussion surrounding public land mobile network identifiers (PLMN IDs) for a nationwide public-safety broadband network continues, with Texas officials providing recommendations to the FCC based on input from other 700 MHz public-safety broadband waiver recipients, the Public Safety Communications Research (PSCR) staff and other industry and public-safety experts. The PLMN ID is the specific LTE network identifier that works similar to system IDs in digital mobile radio networks.

Texas officials suggested establishing a nationwide coordination framework for network identifiers and a database to administer and maintain the multiple network identifiers that must be coordinated for a Long Term Evolution (LTE) network to operate. Texas is pushing the issue because Harris County, Texas, is building a public-safety LTE network with plans to go live next year. However, the system — or any other public-safety LTE network — can't begin service until a PLMN ID is administered, said Mike Simpson, chief, Interoperable Communications Program Office for the Texas Department of Public Safety (DPS).

"Even if the PLMN ID was issued, the network identifiers have to be precisely coordinated among all the networks using that particular PLMN ID," said Cynthia Wenzel Cole, a Texas DPS contractor. "Deployments can't begin until a network identifier coordination plan is completed."

PLMN IDs are a finite resource and used in all Third Generation Partnership Project (3GPP) systems. LTE is a 3GPP global standard. Within each PLMN ID, mobile country codes (MCCs) drive country uniqueness, and mobile network codes (MNCs) drive uniqueness within U.S. MCCs. There are many identifiers with a single PLMN ID that must be unique.

For example, one identifier, the international mobile subscriber identity (IMSI), tracks the subscription on the network and is used to identify all universal subscriber identity modules (USIMs) used on the network. A USIM is embedded in an LTE device and determines the terminal's home network and allows charging and billing, among other features.

The Texas recommendations, which include input from the broad public-safety community, included the following objectives:

- The PLMN ID plan should be based on a numerical methodology that is neutral, logical and fair.

- Lay out state-by-state allocations in a logical and advantageous manner.

- The plan should create a stable and effective framework for 10 – 20 years.

For flexibility for the identifiers, the public-safety officials suggested creating buffer zones and an "other" category for each identifier. The manager should also establish a "public-safety reserve" and use reuse allocation techniques and simplify where possible.

"Many more identifiers than what we've given as examples need to be managed, and some details about these primary identifiers still need to be resolved," Cole said.

In October, the FCC sent a list of six groups of questions about the issue to the state of Texas. State officials plan to file updated responses to the questions based on follow-on conversations with FCC staff, along with an updated version of its interoperability showing, which must be approved before the state of Texas is authorized to offer public-safety LTE services.