

Local Emergency Numbers List

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Feature Description

Local Emergency Numbers List contains a list of emergency numbers that a caller uses to contact emergency services for assistance. Local Emergency Numbers List might differ from one country to another. The emergency numbers are usually configured as a three digit number for quick dialing.

The Local Emergency Numbers List contains additional emergency numbers used by the serving network. This list can be downloaded by the network to the User Equipment (UE) at successful registration as well as subsequent registration updates.

Important The UE uses the stored Local Emergency Numbers List received from the network in addition to the emergency numbers stored on the USIM or UE to detect if the number dialed is an emergency number.

A valid license key is required to enable this feature. Contact your Cisco Account or Support representative for information on how to obtain a license. This license was not enforced in earlier releases.

How It Works

When a User Equipment is activated, the network sends a Local Emergency Numbers List to the UE through the ATTACH ACCEPT or the TRACKING AREA UPDATE ACCEPT messages. The user equipment stores the Local Emergency Numbers List provided by the network. The Local Emergency Numbers List, stored in the user equipment, is replaced on each receipt of the Emergency Number List IE.

The emergency number(s) received in the Emergency Number List IE, which is stored in the UE are valid only in the networks that belong to the same country. If the user equipment registers to a PLMN in a country different from that of the PLMN that sent the list, then the new network replaces the existing Local Emergency Numbers List IE list in the UE.

If the ATTACH ACCEPT or the TRACKING AREA UPDATE ACCEPT message does not contain the Local Emergency Numbers List, then the existing Local Emergency Numbers List in the UE is retained.

The Local Emergency Numbers List is deleted when the UE or USIM is switched off. The user equipment stores up to ten local emergency numbers received from the network. The operator can view the Attach Accept message and the TAU message by running the monitor protocol in the CLI command prompt.

Limitations

The UE can download and store a maximum of only ten local emergency numbers from the network. Therefore, the MME supports the configuration of only ten local emergency numbers for a single UE.

Standards Compliance

The Local Emergency Number List IE feature complies with the following standards:

- 3gpp TS 24.301, Version 11.10.0, Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS)
- 3gpp TS 24.008, Version 11.10.0, Mobile radio interface Layer 3 specification Core network protocols

Configuring Local Emergency Number List IE

This section documents configuration of Local Emergency Numbers List IE and configuration for related functionality.

Configuring Local Emergency Numbers

The Local Emergency Number List is configured under the lte-emergency-profile in the MME Service Configuration mode.

The following CLI commands are used to configure the Local Emergency Numbers in a particular network. By default, the emergency number list is sent through ATTACH ACCEPT messages.

The configuration given below allows the operator to send the Local Emergency Numbers through Attach or TAU messages.

```
config
  lte-policy
    lte-emergency-profile profile_name
      local-emergency-num emergency_number { ambulance | custom custom_name
| fire | marine-gaurd | mountain-rescue | police }
      end
```

The configuration given below allows the operator to send the Local Emergency Numbers through TAU Accept messages during Inter-MME-TAU messages or all TAU messages.

```
config
  lte-policy
    lte-emergency-profile profile_name
      local-emergency-num-ie
      end
```

Notes:

- The **local-emergency-num** keyword configures the Local Emergency Numbers to be sent in Attach or TAU responses.
- *emergency_number* is a number assigned to a type of emergency number (ambulance, marine, and so on) with a string of size 1 to 10.
- *custom_number* is specific to the **custom** local emergency number . *custom_number* is an hexadecimal number from 0x1 to 0xFF
- The **no** command prefix removes the specified Local Emergency Numbers from the list. The **no** keyword also removes its following options in the **local-emergency-num-ie** configuration.
- The **local-emergency-num-ie** keyword with the **inter-mme-tau** option allows the configured local emergency number list to be sent in a TAU Accept during Inter-MME-TAUs, that is, when the UE switches from a 2G network to 3G network, from a 3G network to 4G network or from a 4G network to 4G network handover (for both idle and connected mode).
- The **local-emergency-num-ie** keyword with the **tau** option allows the configured local emergency number list to be sent in a TAU Accept message during all TAUs (for example, periodic TAUs and so on).

Verifying the Local Emergency Numbers List IE Configuration

The following sections describe commands available to verify Local Emergency Numbers List IE on the MME.

show lte-policy lte-emergency-profile summary

On executing this command the following fields are displayed for this feature:

```
Lte Emergency Profile emergency-prof1
Lte Emergency Profile emergency-prof2
show lte-policy lte-emergency-profile name <profile_name>
```

show lte-policy lte-emergency-profile name

On executing this command the following fields are displayed for this feature:

```
local-emergency-num  123  fire
local-emergency-num  112  police
local-emergency-num  110  ambulance
local-emergency-num  118  custom 0x1f
local-emergency-num-ie inter-mme-tau
```