**3GPP TSG-CT WG1 Meeting #138-eC1-226124**

**E-Meeting, 10th – 14th October 2022**

Title: LS on SENSE for home PLMN and disaster roaming PLMN

Response to:

Release: Rel-18

Work Item: SENSE

Source: CT1

To: SA1

Cc:

**Contact Person:**

Name: Carlson Lin

Tel. Number:

E-mail Address: Carlson DOT Lin AT mediatek DOT com

**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

Attachments: none

**1. Overall Description:**

CT1 is working based on the requirements for SENSE feature in TS 22.011 CR#0322 (S1-213329) and would like to clarify the applicability of the SENSE feature for different PLMNs. Considering the "*The signal threshold is specific for a certain Access Technology and shall apply to all PLMNs with the corresponding access technology combinations.*" as specified in CR#0322, the following questions need to be clarified:

**Question 1:** if a UE supports SENSE, the UE can register to a VPLMN (non-HPLMN/EHPLMN) depending on signal quality of this VPLMN compared to HPLMN/EHPLMN at the time of PLMN selection. Up until now when both HPLMN/EHPLMN and VPLMN are available, the UE selects the former not the latter. Can SA1 confirm the UE behavior and usage of the threshold in this case?

**Question 2:** CT1 has identified conflicting requirements for the combination of SENSE and MINT in the Stage-1 specifications. If a UE for which SENSE and MINT are both supported and enabled, detects a disaster condition and during the subsequent PLMN selection(s) finds an allowable PLMN with a signal quality below the SENSE threshold and a forbidden PLMN offering disaster roaming for which the conditions for disaster roaming according to 23.122 are fulfilled with a signal level above the SENSE threshold, shall the UE prioritise and select the forbidden PLMN, even if an allowable PLMN is available? Current definitions in TS 22.011 seems to imply that the forbidden PLMN is chosen in the given example, while TS 22.261 requirement "*The 3GPP system shall be able to provide means to enable a UE to access PLMNs in a forbidden PLMN list if a Disaster condition applies and no other PLMN is available except for PLMNs in the forbidden PLMN list.*" seems to imply that the allowable PLMN is chosen.

**2. Actions:**

**To SA1:**

**ACTION:** CT1 would like to kindly ask SA1 to provide answers for CT1’s questions above.

**3. Date of Next CT1 Meetings:**

CT1#139e 14th - 18th November 2022 Toulouse , FR