3GPP TSG RAN WG2 Meeting #113bis-e R2-210xxxx

Electronic, 12th Apr – 20th Apr 2021

**Title:** **[Draft]** LS on multiple TACs per PLMN

**Response to:**

**Release:** Release 17

**Work Item:** NR\_NTN\_solutions-Core

**Source: Huawei [to be** RAN2**]**

**To:** CT1, SA2

**Cc:** RAN3

**Contact person:** Xun TANG

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**Send any reply LS to:** 3GPP Liaisons Coordinator, <mailto:3GPPLiaison@etsi.org>

**Attachments:** None

# 1 Overall description

RAN2 has discussed the tracking area update procedure aiming to support Earth fixed TAC, and has made the following agreements:

* The network may broadcast more than one TACs per PLMN in a cell
* When the network stops broadcasting a TAC, the UE needs to know it
* RAN2 assume UE does not do TAU if one of the currently broadcasted TAC belongs to UE’s registration area
* RAN2 confirm that in NTN when TAC change in SI happens is up to network implementation, i.e. it may not exactly sync up with real-time illumination on ground

To follow the principle “the AS shall report tracking area information to the NAS” specified in TS 38.304, RAN2 has discussed the following two options:

* Option 1: AS still reports only one TAC for one PLMN even if more than one TACs per PLMN are broadcasted in an NTN cell.
* Option 2: AS indicates all received TAC(s) for one PLMN to NAS layer.

RAN2 would like to inform CT1 and SA2 that majority of companies think option 1 has larger RAN2 impact, as AS layer has to select one TAC from the broadcast ones to report to NAS layer, thus RAN2 has preference for option 2. .

RAN2 would also like to ask the following question to CT1:

* Is option 2, i.e. “AS indicates all received TAC(s) for one PLMN to NAS layer”, feasible from a NAS layer perspective?

# 2 Actions

**To CT1:**

**ACTION:** CT1 is kindly requested to take the above information into account and respond to RAN2’s question.

**To SA2:**

**ACTION:** SA2 is kindly requested to take the above information into account and provide feedback, if any.

# 3 Dates of next TSG RAN WG2 meetings

TSG RAN WG2 Meeting #114-e 19 May – 27 May 2021, Electronic