**3GPP TSG-RAN WG3 Meeting #127 R3-250834**

**Athens, Greece, February 17th – 21st 2025**

**Title: Reply LS on FS\_VMR\_Ph2 solution impacts to RAN (Additional ULI)**

**Response to: R3-250071/S2-2501324**

**Release: Rel-19**

**Work Item: FS\_VMR\_Ph2, NR\_WAB\_5GFemto-Core**

Source: RAN3

To: SA2

Cc: RAN2

**Contact Person:**

**Name: Ying Huang**

**E-mail Address: huang.ying11@zte.com.cn**

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

**Attachments: TP to 38.413 BL CR (R3-250833)**

**1. Overall Description:**

RAN3 thanks SA2 for the LS reply on FS\_VMR\_Ph2 solution impacts to RAN (Access Control and Additional ULI) in S2-2501324.

With respect to Additional ULI, RAN3 agreed the following:

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| **Include Additional ULI into the User Location Information IE in TS 38.413. Additional ULI contains a CGI and a TAI.**  **In case the additional ULI has changed e.g. due to WAB-node movement, the WAB-gNB derives the new additional ULI and it reports it to the network, if required by the CN via legacy procedures. Add this description into TS38.401**  **In case of WAB-MT connects via NTN, the Additional ULI is determined based on WAB-node geo-location. The latter applies to intra PLMN and inter PLMN cases. SA2 should be informed of the above agreement.** |

The TP to the 38.413 BL CR (R3-250833) capturing the above agreements is provided in the attachment.

Meanwhile, RAN3 notices that clause 5.49.4 of TS 23.501 states the following:

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| 5.49.4 Support of Additional ULI The TAC and cell ID broadcasted by the MWAB-gNB are configured and reconfigured e.g. upon MWAB mobility as specified in TS 38.401 [42]. The MWAB-gNB provides these in the User Location Information (ULI) to the AMF serving the UE’s accessing MWAB-gNB.  The MWAB-gNB shall also provide the Additional User Location Information (Additional ULI) that reflects the location of the MWAB-UE to the AMF when it sends the User Location Information (ULI) over N2 messages. In the Additional ULI, the MWAB-gNB provides the TAI/NR CGI of the MWAB Broadcasted PLMN/SNPN with which the UE is registered as specified in TS 38.401 [42].  NOTE: For the case of MWAB broadcasted PLMN/SNPN being different from the BH PLMN, MWAB-gNB formulates the Additional ULI as specified in TS 38.401 [42] based on MWABs geo-location. The MWAB can determine its geo-location using GNSS or via a MWAB-UE initiated 5GC-MO-LR procedures as specified in TS 23.273 [87]. **If the MWAB broadcasted PLMN/SNPN is the same as the BH PLMN, then the TAI/NR CGI of the cell serving the MWAB-UE is included in the Additional ULI as specified in TS 38.401 [42].** |

In other words:

* RAN3 agreed that, whenever WAB-MT connects via non-terrestrial link, the additional ULI is derived based on WAB-node’s geo-location, regardless of whether the WAB-gNB broadcasted PLMN/SNPN is the same or different from the BH PLMN/SNPN.
* Meanwhile TS 23.501 states that additional ULI is derived based on WAB-node’s geo-location only when the WAB-gNB broadcasted PLMN/SNPN is the same as the BH PLMN/SNPN

**2. Actions:**

**To SA2:**

**ACTION:** RAN3 would like to call for SA2 to take the above RAN3 agreements on additional ULI into account and update their specification(s).

**3. Date of Next RAN3 Meetings:**

RAN3#127bis Apr 7th – 11st 2025 Wuhan, P.R.C.

RAN3#128 May 19th – 23rd 2025 St Julien’s, Malta.