**3GPP TSG-RAN3 Meeting #127 R3-250835**

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

Title: Reply LS on Support of Location Service Involving WAB-Nodes

Response to: S2-2412625/ R3-250016

Release: Rel-19

Work Item: VMR\_Ph2, NR\_WAB\_5GFemto-Core

Source: RAN3

To: SA2

Cc: RAN2

**Contact Person:**

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Attachments: R3-250828, R3-250831, R3-250832

**1. Overall Description:**

RAN3 thanks SA2 for the LS on Location service of UEs served by MWAB and would like to inform SA2 as below:

SA2’s question on Location services

SA2 noted that such aspect may need the associating work in RAN3.

The potential impacts on RAN3 includes the following aspects as defined in clause 6.1.5 of TS 23.273:

- TRP Information Exchange supported by MWAB-gNB in TS 38.455: "*When the MWAB-gNB is integrated to the 5GS, the OAM triggers the LMF to perform TRP Information Exchange procedure. The LMF learns that a new integrated TRP at a MWAB-gNB is mobile and its UE ID (GPSI) of the MWAB-UE via a TRP information exchange towards the MWAB-gNB with the Cell ID of the TRP.*"

- Additional ULI sent by the MWAB-gNB to the AMF in TS 38.413: when AMF is aware that the target UE is served by a MWAB based on the additional ULI, then "*the AMF serving the target UE may indicate to the LMF that the serving cell is an MWAB (if applicable)*".

- Location and velocity information in TS 38.455: "*If Network Assisted procedure is used, the MWAB-gNB may provide the MWAB-UE updated location and velocity information and the time obtained them to the LMF via NRPPa message as defined in TS 38.455.*"

RAN3’s answer:

RAN3 discussed how to update the specifications for supporting the location services of UEs served by the MWAB, and concluded that several IEs introduced for mobile IAB can be reused. For WAB, the new changes needed to align the SA2’s conclusion were agreed in the attached TP for WAB BL CR for TS 38.305 in R3-250831 and TP for WAB BL CR for TS 38.455 in R3-250832.

SA2’s question on updating of additional ULI

And the following aspect as in the agreed CR 5687 of TS 23.501:

 - Additional ULI sent by the MWAB-gNB to the AMF in TS 38.413: "*If serving cell change report is required by AMF, the MWAB-gNB shall report Additional ULI (and ULI) for the UE even when only serving cell of the MWAB-UE changes.*"

RAN3’s answer:

RAN3 discussed this issue and agreed that “**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**.” In addition, the corresponding TP for WAB BL CR for TS 38.401 in R3-250828 was agreed.

**2. Actions:**

**To SA2:**

**ACTION:** RAN3 kindly asks SA2 to take the above feedback into account.

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

RAN3#127bis 7th Apr – 11th Apr, 2025 Wuhan, CN

RAN3#128 19th May – 23rd May, 2025 Malta, MT