**3GPP TSG RAN WG3#122R3-237856**

Chicago, IL, USA, November 13 – 17,2023

**Title: [Draft]** Reply LS on UE RACH-less handover for mobile IAB

**Response to:** LS in R3-233713 (R2-2306817) on UE RACH-less handover for mobile IAB

**Release:** Rel-18

**Work Item:** NR\_mobile\_IAB-Core

**Source:** Qualcomm [**to be: RAN3**]

**To:** RAN2

Cc:

**Contact person:**

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

Attachments: None

**1. Overall Description:**

RAN3 would like to thank RAN2 for their LS on UE RACH-less handover for mobile IAB (R3-233713/R2-2306817).

RAN3 has discussed RACH-less handover for UEs served by a mobile IAB during DU migration. RAN3 identified the following issues:

(1) During DU migration, UE handovers may not only occur from the source logical DU’s cell but also from other cells to the co-located target logical DU’s cell. RAN3 assumes that RACH-less handover can only be applied to those UEs that are handed over from the source logical DU’s cell. The co-located target logical DU therefore needs to be able to derive from the information it receives during UE handover preparation, whether the UE is presently connected to the source logical DU.

(2) When the target logical DU configures the UE’s beam to be used in the target cell for RACH-less handover based on network-implementation-specific knowledge (i.e., without measurement report), it needs to identify the beam configuration this UE presently uses in the source logical DU’s cell. For this purpose, the target logical DU needs to know a UE ID the logical source DU uses for this UE in order to identify the UE in the source logical DU during the UE handover preparation procedure.

(3) When the target logical DU configures the UE’s beam to be used in the target cell for RACH-less handover based on legacy measurements, it needs to be able to obtain the beam information the UE reported to the source logical DU’s CU in the measurement report.

RAN3 asks RAN2 to take the above feedback into account, and to verify that the existing RRC container (i.e., *HandoverPreparationInformation*) contains sufficient information to address the above issues.

**2. Actions:**

**To RAN2 group.**

**ACTION:** RAN3 asks RAN2 to take the above feedback into account, and to verify that the existing RRC container (i.e., *HandoverPreparationInformation)* contains sufficient information to address the above issues.

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

TSG-RAN3 Meeting #123, Feb 26 to March 1, 2024 Athens, Greece

TSG-RAN3 Meeting #123bis, April 15 to 19, 2024 PRC