3GPP TSG-RAN2 Meeting #126 draft R2-2405942

**Fukuoka, Japan, May 20th – 26th, 2024**

**Title:** Reply LS on Support of UE move between CAG cell of 5G Femto and CSG cell

**Response to:** R2-2404141 (S2-2405813)

**Release:** Rel-19

**Work Item:** FS\_5G\_Femto, FS\_WAB\_5GFemto\_NR

**Source:** RAN2

**To:** SA2

**Cc:** RAN3

**Contact Person:**

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

**Attachments**:

**1. Overall Description:**

RAN2 thanks SA2 for the LS on support of UE move between CAG cell of 5G Femto and CSG cell.

RAN2 discussed RAN2 impact of the two solutions provided in the LS:

* **Solution1)** The UE partitions CSG-CAG ID and constructs mapped CSG/CAG ID, and reports to the NG-RAN or E-UTRAN (depending on the considered mobility direction) as described in pCR (S2-2405814).
* **Solution2)** RAN recognizes the target CSG cell (or the target CAG cell) as an open cell during the handover (e.g., via local configuration) and the core network performs access control as described in pCR (S2-2405789).

RAN2 didn’t have time to discuss the technical aspects in detail, but the current RAN2 understanding is given as follows.

RAN2 assumes that solution1 has RAN impact from RAN2 perspective, including enhancement of E-UTRA cell CGI reporting procedure in NR specification, enhancement of NR cell CGI reporting procedure in LTE specification, and mapping functionality at UE between CSG ID and CAG ID to be introduced for the enhanced CGI reporting.

The majority of companies assume that solution2 is NW-based solution with no UE impact, from RAN2 perspective.  However, some companies raised concerns about handover failures, and UE or RAN3 impact may be introduced to avoid such failures, but RAN2 did not have a detailed technical discussion.

**2. Actions:**

**To SA2**

**ACTION:** RAN2 kindly asks SA2 to take the RAN2 feedback into account.

**3. Date of Next TSG-RAN2 Meetings:**

TSG RAN2 Meeting #127 19 - 23 August 2024 Maastricht, The Netherlands

TSG RAN2 Meeting #127-bis 14 – 18 October 2024 TBD, China