3GPP TSG-RAN WG2 Meeting #115-e R2-210xxxx

**e-Meeting, 16th - 27th August, 2021**

**Title: [Draft]** LS on MBS broadcast service continuity and MBS session identification

**Response to:**

**Release:** Release 17

**Work Item:** NR\_MBS-Core

**Source:** To be RAN2

**To:** RAN3, SA2, SA4

**Cc:** -

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**Attachments:** -

**1. Overall Description:**

In RAN2#112-e, RAN2 agreed to support delivery mode 1 (which is used only for multicast sessions) and delivery mode 2 (which is used for broadcast sessions and may be used for multicast sessions with low QOS requirement in Rel-17).

In RAN2#115-e, RAN2 discussed the service continuity for delivery mode 2 to allow the RRC\_IDLE/INACTIVE UE to prioritize the frequency which provides the UE’s interested MBS session(s) and to allow the RRC\_CONNECTED UE to report MBS interest information to the network.

For RRC\_IDLE/INACTIVE UE, RAN2 agreed that the mapping between frequency and “MBS service ID” (e.g. same or similar to MBMS SAI) is indicated in a new SIB. RAN2 also made the working assumption that the mapping between frequency and MBS service ID can be provided in upper layer signalling (e.g. USD). From the RAN2 perspective, MBS Service ID in the mapping can be SAI or similar ID just the SAI in LTE. If MBS service ID is TMGI, too much signalling overhead is introduced in the associated SIB and the associated upper signalling. Furthermore, there exists the scenario that the associated SIB is limited in length if the mapping needs many TMGIs to be carried on the associated SIB.

To support the MBS service continuity, RAN2 would like to ask SA2, RAN3 and SA4 the following questions:

Question 1: Can an “MBS service ID” (e.g. SAI) be defined for NR MBS for use in the associated SIB to avoid too many TMGIs to be carried in the associated SIB?

Question 2: Can the mapping between frequency and MBS service ID (e.g. SAI) be provided in the upper layer signalling (e.g. USD), as in LTE SC-PTM?

Another issue discussed during RAN2#115-e meeting was the identification of an MBS session in 5G/NR system. RAN2 noted that an MBMS session is identified by TMGI and an optional session ID in LTE. The related content is extracted from 3GPP TS36.331 and shown as below:

|  |
| --- |
| ***sessionId***  Indicates the optional MBMS Session Identity, which together with TMGI identifies a transmission or a possible retransmission of a specific MBMS session: see TS 29.061 [51], clauses 20.5, 17.7.11, and 17.7.15. The field is included whenever upper layers have assigned a session identity i.e. one is available for the MBMS session in E-UTRAN. |

RAN2 would like seek a guidance from SA2:

**Question 3: For both broadcast and multicast sessions, is session ID or alike ID required in NR or is TMGI sufficient to identify the MBS session?**

**2. Actions:**

**To RAN3 group.**

**ACTION:** RAN2 respectfully asks RAN3 to answer Question 1.

**To SA2 group.**

**ACTION:** RAN2 respectfully asks SA2 to answer Question 1, Question 2 and Question 3.

**To SA4 group.**

**ACTION:** RAN2 respectfully asks SA4 to answer Question 1 and Question 2.

**3. Date of Next TSG-RAN WG2 Meetings:**

3GPP RAN2#116-e from 2021-11-01 to 2021-11-12 Electronic Meeting