3GPP TSG-RAN WG3 Meeting #112e R3-213745

**Online, 16 - 27 August 2021**

**Agenda item: 22.2.2**

**Source:**  **Lenovo, Motorola Mobility, Huawei**

**Title:** (**TP to TS 38.423 BL CR) Group paging for Multicast Session Activation Notification**

**Document for: Other**

# **1 Introduction**

In this contribution, the text proposal are provided for the XnAP BL CR according to the proposal in [1]；

1. A new class 2 XnAP RAN MBS Grouping Paging procedure is introduced, of which the contents include a list of UE Identity Index values and paging DRX (optional) of the UEs in the MBS group, RAN paging area, and multicast session ID.

[1] R3-213743. Discussion on Group paging for Multicast Session Activation Notification. Lenovo, Motorola Mobility.

# **2 Text Proposal**

----------------------------------------------------------Change Start --------------------------------------------------------------

Table 8.1-2: Class 2 Elementary Procedures

| Elementary Procedure | Initiating Message |
| --- | --- |
| Handover Cancel | HANDOVER CANCEL |
| SN Status Transfer | SN STATUS TRANSFER |
| RAN Paging | RAN PAGING |
| Xn-U Address Indication | XN-U ADDRESS INDICATION |
| S-NG-RAN node Reconfiguration Completion | S-NODE RECONFIGURATION COMPLETE |
| S-NG-RAN node Counter Check | S-NODE COUNTER CHECK REQUEST |
| UE Context Release | UE CONTEXT RELEASE |
| RRC Transfer | RRC TRANSFER |
| Error Indication | ERROR INDICATION |
| Notification Control Indication | NOTIFICATION CONTROL INDICATION |
| Activity Notification | ACTIVITY NOTIFICATION |
| Secondary RAT Data Usage Report | SECONDARY RAT DATA USAGE REPORT |
| Trace Start | TRACE START |
| Deactivate Trace | DEACTIVATE TRACE |
| Handover Success | HANDOVER SUCCESS |
| Conditional Handover Cancel | CONDITIONAL HANDOVER CANCEL |
| Early Status Transfer | EARLY STATUS TRANSFER |
| Failure Indication | FAILURE INDICATION |
| Handover Report | HANDOVER REPORT |
| Resource Status Reporting | RESOURCE STATUS UPDATE |
| Access And Mobility Indication | ACCESS AND MOBILITY INDICATION |
| RAN MBS Group Paging | RAN MBS GROUP PAGING |

----------------------------------------------------------Next Change--------------------------------------------------------------

### X.X.X RAN MBS Group Paging

#### X.X.X.1 General

The purpose of the RAN MBS Group Paging procedure is to enable the NG-RAN node1 to request paging of UEs that have joined a MBS Session in the NG-RAN node2.

The procedure uses non UE-associated signalling.

#### X.X.X.2 Successful operation



Figure 8.2.5.2-1: RAN MBS Group Paging: successful operation

The RAN MBS Group Paging procedure is triggered by the NG-RAN node1 by sending the RAN MBS GROUP PAGING message to the NG-RAN node2,in which the necessary information e.g. the *MBS Session Identity* IE and the *UE Identity Index* *List* IE associated with the MBS session should be provided.

When available, the NG-RAN node1 shall include the *UE Specific DRX* IE in the RAN MBS GROUP PAGING message towards the NG-RAN node2. If *UE specific DRX* IE is included in the RAN PAGING message, the NG-RAN node2 shall, if supported, use it according to TS 36.304 [34].

----------------------------------------------------------Next Change --------------------------------------------------------------

#### X.X.X.X RAN MBS GROUP PAGING

This message is sent by the NG-RAN node1 to NG-RAN node2 to page UEs for an MBS session.

Direction: NG-RAN node1 → NG-RAN node2.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| MBS Session ID | M |  | FFS |  | YES | reject |
| **UE Identity Index List** |  |  |  | [FFS pending to RAN2] |  |  |
| **>UE Identity Index Item** | M | 0 .. <maxnoofUEsofMBSPaging> |  |  | YES | reject |
| >> CHOICE *UE Identity Index Value* |  |  |  |  |  |  |
| *>>>Length-10* |  |  |  |  |  |  |
| >>>>Index Length-10 | M |  | BIT STRING (SIZE(10)) | Coded as specified in TS 38.304 [33]. | – |  |
| >>UE specific DRX | O |  | 9.2.3.143 | Includes the UE specific paging cycle as defined in TS 38.304 [33]. | YES | ignore |
| RAN Paging Area | M |  | 9.2.3.38 |  | YES | reject |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofUEsofMBSPaging | Maximum no. UEs that should be paged regarding a MBS Session. Value is FFS. |