**3GPP TSG-RAN WG2 Meeting #126 *R2-2405558***

**Fukuoka, Japan, 20 – 24 May 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.304** | **CR** | **0399** | **rev** | **2** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network | **x** | Core Network |  |

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| ***Title:*** | MBS operation with eDRX MICO [eMBS\_eDRX\_MICO] | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2024-05-22 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In LS R2-2400006 CT1 informed their agremeent on capturing with CR C1-239659 UE behvaiour on MBS reception during eDRX RAN2 needs to capture corresponding lower layer behaviour:   1. UE receiving multicast should receive paging with TMGI during start/scheduled activation times 2. In order to ensure UE monitors MBS broadcast correctly while configured in upper layers with MBS broadcast start times/scheduled activation times one needs to allow lower layers to receive MBS broadcast during start/scheduled activation times | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | In section 6.2:   1. Capture in specs that UE monitors paging with TMGI during upper layer configured the start time and/or scheduled activation time(s) 2. This is captured as NOTE to allow UE to receive MBS broadcast during upper layer configured start/scheduled activation times | | | | | | | | |
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| ***Consequences if not approved:*** | | MBS operation with eDRX/MICO would not be correctly captured. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

*First Modified Subclause*

# 6 Reception of broadcast information

## 6.1 Reception of system information

The NAS is informed if the cell selection and reselection results in changes in the received NAS system information.

The UE shall monitor the Paging Occasions (POs) as described in clause 7.1 to receive System Information change notifications in RRC\_IDLE and RRC\_INACTIVE. The changes in the system information are notified by the network using a Short Message as specified in TS 38.331 [3]. When the Short Message notifies system information changes, then the UE shall acquire or re-acquire the concerned system information as specified in TS 38.331 [3].

A L2 U2N Remote UE when in RRC\_IDLE or RRC\_INACTIVE may not monitor POs as described in clause 7.1 to receive Short Message when connected with a U2N Relay UE, as specified in TS 38.331 [3].

A L2 U2N Remote UE in RRC\_IDLE or RRC\_INACTIVE does not receive Short Message from a L2 U2N Relay UE. When receiving a Short Message, the L2 U2N Relay UE may forward to the L2 U2N Remote UE only Public Warning System information (e.g., *SIB6*, *SIB7*, and *SIB8*).

When system information changes, the L2 U2N Remote UE, when in RRC\_IDLE or RRC\_INACTIVE, relies on the U2N L2 Relay UE to acquire or re-acquire the concerned system information and forward them. Further, the L2 U2N Remote UE, when in RRC\_CONNECTED, relies on the network to receive concerned system information that has changed.

## 6.2 Reception of MBS

A UE receiving or interested to receive MBS broadcast services shall apply the MCCH information acquisition procedure as specified in TS 38.331 [3] to receive the MCCH information. A UE interested to receive MBS broadcast services identifies if a service that it is interested to receive is started or ongoing by receiving the MCCH information, and then receives a MTCH(s) configured using the Broadcast MRB establishment procedure as specified in TS 38.331 [3] and using the DL-SCH reception and MBS broadcast DRX procedure as specified in TS 38.321 [19].

A UE which has joined multicast session(s) and configured to receive MBS multicast services in RRC\_INACTIVE state shall apply the multicast MCCH information acquisition procedure as specified in TS 38.331 [3] to receive the multicast MCCH information when UE is in RRC\_INACTIVE state and the multicast MCCH is configured in the cell. The UE identifies whether a session is active or not by receiving the indication in *RRCRelease*, multicast MCCH information, or group notification in paging message, and receives the multicast MTCH(s) in RRC\_INACTIVE state using the multicast MRB configuration procedure as specified in TS 38.331 [3] and using the DL-SCH reception and MBS multicast DRX procedure as specified in TS 38.321 [19].

UEs which have joined a multicast session(s) and are in RRC\_IDLE/RRC\_INACTIVE state shall apply the reception of the paging message procedure as specified in TS 38.331 [3] when the UE expects MBS group notification as specified in clause 16.10.5.2 in TS 38.300 [2].

When upper layers provide MBS start time and/or scheduled activation time(s) (as specified in TS23.247 [21]) and the UE has joined an MBS session indicated by TMGI while the UE is in RRC\_IDLE or RRC\_INACTIVE state, the UE monitors paging as defined in this section using the TMGI (as defined in TS 38.331 [3]) during those MBS start time and/or scheduled activation time(s).

NOTE: When the UE is interested to receive MBS broadcast the UE may perform procedures to receive MBS broadcast session(s) as defined in TS 38.331 [3] if upper layer is configured with the MBS start time and/or scheduled activation time(s) (as specified in TS23.247 [21]).

*End of Changes*