**3GPP TSG-SA WG6 Meeting #68S6-253454**

**Gothenburg, Sweden 25th – 29th August 2025 (revision of S6-253291)**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **23.280** | **CR** | **0685** | **rev** | **1** | **Current version:** | **20.0.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](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 |  | Core Network | **X** |

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| ***Title:*** | Resolve the EN in clause 10.7.3.6.2 | | | | | | | | | |
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| ***Source to WG:*** | Huawei, Hisilicon, China BroadNet | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | **enh4MCPTT** | | | | |  | ***Date:*** | | | 2025-08-12 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***Release:*** | | | Rel-20 |
|  | *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)* | |
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| ***Reason for change:*** | | There is an EN in clause 10.7.3.6.2:  *“*Editor's note: The set of MBMS reception quality levels and the mapping of the determined MBMS bearer quality to those levels are FFS.*”*  Similar EN in TS 23.289 was resolved and converted to a NOTE:  “NOTE 2: The set of MBS reception quality levels and the mapping of the determined broadcast reception quality to those levels are implementation.”  So it is proposed to change such EN into a similar NOTE. | | | | | | | | |
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| ***Summary of change:*** | | Change the EN to a NOTE | | | | | | | | |
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| ***Consequences if not approved:*** | | Keeping editor’s note in a frozen release TS make no sense. | | | | | | | | |
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| ***Clauses affected:*** | | 10.7.3.6.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

##### 10.7.3.6.2 Procedure

The MC service client shall indicate the ability of the MC service client to receive the MBMS bearer.

Pre-conditions:

- There is an MBMS bearer activated and the MBMS bearer information is announced to the MC service client

- The MC service client is located in the MBMS broadcasting area

- The MC service UE monitors SIB-13 (or SIB-20) and (SC-)MCCH to receive the modulation and coding scheme

- The MC service UE monitors the cell specific reference signal and when MBSFN transmission is used, the MBSFN specific reference signals



Figure 10.7.3.6.2-1: MBMS bearer quality detection

1. The MC service client determines that the MBMS bearer quality shall be reported to the MC service server. The MC service client may determine the MBMS bearer quality by using the BLER of the received data. When no data is received, the quality estimation can consider the reference signals and the modulation and coding scheme (MCS). The UE may also use predictive methods to estimate the expected MBMS bearer quality (e.g. speed and direction) to proactively inform the MBMS service server of an expected loss of the MBMS bearer quality. The MC service client may also map the determined MBMS bearer quality to a MBMS reception quality level. The MBMS reception quality level indicates at which specific MBMS bearer quality level the MC service media has been received. Based on the MBMS reception quality level, the MC service server may efficiently decide to switch to another bearer or to take measures to prepare such a switch.

NOTE 1: The set of MBS reception quality levels and the mapping of the determined MBMS bearer quality to those levels are left to implementation.

NOTE 2: When MBSFN transmission is used, the MBSFN reference signal needs to be used and when SC-PTM is used the cell specific reference signal needs to be used. With the measured reference signal, the reference signal received quality (RSRQ) can be calculated.

2. If the MBMS bearer quality reaches a certain threshold, the MC service client sends an MBMS listening status report. The threshold is used to define the MBMS listening status, which indicates if the MBMS bearer quality has been acceptable or not to receive a specific MC service media. If the MBMS bearer quality is mapped to a different MBMS reception quality level, the MC service client may send an MBMS listening status report including the MBMS reception quality level.

NOTE 3: Prior sending the MBMS listening status report, it could be beneficial to also include information for different alternatives e.g. another MBMS bearer might have better quality and could be a better option than a transfer of the communication to unicast.

NOTE 4: The threshold used to indicate MBMS bearer quality depends on service type (i.e. MCPTT, MCVideo or MCData) and the metrics used. The metrics used and the associated thresholds are out of scope of this specification.

3. The MC service server may send additional proposal for measurements e.g. information about neighbouring MBMS bearers. This message may be an MBMS bearer announcement message.