**3GPP SA4 119-E meeting** ***S4-220660***

**E-meeting, May 11th – 20th, 2022**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **TS 26.502** | **CR** | **0003** | **rev** | **–** | **Current version:** | **1.0.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | CR to TS 26.502 support of Group Communication Service | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBUSA | | | | |  | ***Date:*** | | | 2022-05-04 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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)*. | | | | | | | |  | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In the SA2 LS S4-220XXX/S2-2203051, the Group Communication is only applicable to LTE/EPC and is referenced in TS 23.247 in Rel-17 only in the context of interworking with LTE eMBMS. To make use of MBS, the MCX server can act as an AF to interact with 5GS via Nmb13/Nmb10. Alignment for support of the group communication/MCX services is needed from SA4 aspects. | | | | | | | | |
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| ***Summary of change:*** | | Add support of Group Communication and Mission Critical Services in the Annex. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Support of group communication services is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, A.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

First change

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 23.501: "System architecture for the 5G System (5GS)".

[3] 3GPP TS 23.502: "Procedures for the 5G System (5GS)".

[4] 3GPP TS 23.503: "Policy and charging control framework for the 5G System (5GS); Stage 2".

[5] 3GPP TS 23.247: "Architectural enhancements for 5G multicast-broadcast services; Stage 2".

[6] 3GPP TS 26.348: "Northbound Application Programming Interface (API) for Multimedia Broadcast/Multicast Service (MBMS) at the xMB reference point".

[7] 3GPP TS 26.501: "5G Media Streaming (5GMS); General description and architecture".

[8] IETF RFC 3500: "RTP: A Transport Protocol for Real-Time Applications".

[9] IETF RFC 2250: "RTP Payload Format for MPEG1/MPEG2 Video".

[10] 3GPP TS 26.247: "Transparent end-to-end Packet-switched Streaming Service (PSS); Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH)".

[X] 3GPP TS 23.468: "Group Communication System Enablers for LTE (GCSE\_LTE)".

SECOND change

# A.1 Group Communication

The Group Communication (GC) Service defined in TS 23.468 [X] is only applicable to LTE/EPC. In order to allow the MBS System to interwork with an LTE-based eMBMS System, the MBSF also supports reference point MB2‑C and the MBSTF also supports reference point MB2‑U, as defined in clause 5.2 of TS 23.247 [5]. The MBSF and MBSTF here jointly play the role of a BM‑SC for LTE-based eMBMS. In this case, the GCS AS integrates with theMBS System as specified in annex C of [5].- The AL‑FEC protection may be requested by the GCS AS in the MBMS bearer allocation request via MB2-C.

- The MBSF shall configure this feature in the MBSTF by supplying the optional *FEC configuration* information (see table 4.5.6‑1) at reference point Nmb2. In return, the MBSTF provides the listening IP address and UDP port via the MBSF to the GCS AS as “*BM-SC address”* and *“BM-SC port”* so that it can establish the UDP/IP tunnel with the MBSTF and start sending tunnelled IP packets via MB2-U.

- Based on the *FEC configuration*, the MBSTF may provide forward error protection to downlink IP packets ingested from GCS-AS and then send the FEC packets to the MBMS GW at reference point SGi-mb.



Figure A.1‑1: User Plane protocol stack for Group Communication services

End of CHANGEs