**3GPP TSG-CT WG3 Meeting #122-eC3-223150**

**E-Meeting, 12th – 20th May 2022 (was C3-222463)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **22** | **CR** | **0556** | **rev** | **2** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | MBS session QoS information updates | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBS | | | | |  | ***Date:*** | | | 05 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***Release:*** | | |  |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | QoS information in MbsSession is not specified yet. It shall describe the MBS QoS service requirements / media related information from the AF. Stage 2 requirements for MBS QoS flows are specified in clause 6.6 of TS 23.247.  It is proposed to defined MBS application context in Ts 29.571, which indicate AF service requirements, i.e. flow descriptions and requested QoS profile for the MBS session and hence referenced.  See Ts 29.571 CR0345 | | | | | | | | |
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| ***Summary of change:*** | | Clause 4.4.29.3 is updated to include the QoS information for the MBS session. | | | | | | | | |
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| ***Consequences if not approved:*** | | Non compliant to stage 2 requirements. | | | | | | | | |
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| ***Clauses affected:*** | | 4.4.29.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS/TR 29.571 CR 0345 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR does not impact the OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev 2:  Attribute is updated to refer to a new MbsAppContext common data type defined in Ts 29.571. It provides consistency between the MBS service requirements provided by the AF to the NEF and MB-SMF, and by the NEF or MB-SMF to the PCF. | | | | | | | | |

\* \* \* First Change \* \* \* \*

##### 4.4.29.3.2 Procedure for MBS session creation

This procedure is used by an AF to request the creation of a multicast or a broadcast MBS session.

In order to request the creation of an MBS Session, an AF shall send a Nnef\_MBSSession\_Create request to the NEF using the HTTP POST method and targeting the "MBS Sessions" collection resource With the request message body including the MbsSessionCreateReq data structure that shall contain:

- within the "afId" attribute, the identifier of the AF that is sending the request; and

- within the "mbsSession" attribute, the characteristics of the MBS session that is to be created.

The "mbsSession" attribute shall be encoded using the MbsSession data structure that shall contain:

- within the "mbsSessionId" attribute, the identifier of the MBS Session (e.g. SSM, TMGI), if available;

- within the "tmgiAllocReq" attribute, the TMGI allocation request indication, if the "mbsSessionId" attribute is either absent or does not contain a TMGI; and

- within the "serviceType" attribute, the MBS service type (i.e. multicast or broadcast);

And may further contain:

- for a multicast or a broadcast MBS session:

- within the "ingressAddrReq" attribute, the ingress transport address request indication to indicate whether the allocation of an ingress transport address is requested or not;

- within the "extMbsServiceArea" attribute, the MBS service area;

- within the "activationTime" attribute, the MBS session activation time;

- within the "terminationTime" attribute, the MBS session termination time;

- within the "mbsAppContext" attribute, the QoS information defining the service requirements, which may further contain within its data structure:

- the media component information (e.g. media type, maximum and minimum bandwidth bit rates, flow status, codec data, flow information), within the "mediaComps" attribute;

- within the "mbsSessionSubsc" attribute, the subscription to MBS session events;

- for a multicast MBS session:

- within the "activityStatus" attribute, the session activity status (i.e. active or inactive;

- within the "anyUeInd" attribute, the indication of whether any UE may join the MBS session.

Editor's Note: The service requirements (including the QoS requirements) provided by the AF is FFS.

On successful MBS session creation, the NEF shall return a Nnef\_MBSSession\_Create response with an HTTP "201 Created" status code to the NF service consumer, a "Location" header that shall contain the URI of the created resource. The POST response message body shall include the MbsSessionCreateRsp data structure that shall contain:

- within the "mbsSession" attribute, a representation of the created Individual MBS Session resource;

- within the "tmgi" attribute, the allocated TMGI for the MBS session, if the MBS session creation request included a "tmgiAllocReq" attribute requesting TMGI allocation for the MBS session;

and may contain:

- within the "ingressTunAddr" attribute, the ingress MB-UPF tunnel information, if unicast transport is used over N6mb/Nmb9.

Editor's Note: It is FFS whether immediate event reports may be included in the response.

On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body. If the NEF receives an error response from the MB-SMF with the HTTP "500 Internal Server Error" status code and the response body containing a ProblemDetails data structure with the "cause" attribute set to the "TRANS\_RESOURCE\_RES\_FAILURE" application error, then the NEF shall relay this response to the NF Service Consumer (e.g. AF).

\* \* \* End of Changes \* \* \* \*