**3GPP TSG-CT WG4 Meeting #111-eC4-224398\_v2**

**E-Meeting, 18th – 26th August 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.571** | **CR** | **0377** | **rev** | **-** | **Current version:** | **17.6.0** |  |
|  | | | | | | | | |
| *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:*** | Updates and corrections to the common MBS data model | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBS | | | | |  | ***Date:*** | | | 2022-08-11 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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)*  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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The MBS data model needs to be further updated and corrected to meet stage 2 requirements. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This CR proposes to:   * Define the "Indication that the PCF has to be contacted" as per S2-2207408. * Apply various corrections to the definition of the MBSSession data type.   This CR is also aimed to be a placeholder for any potential updated to the MBS common data model based on the progress of the discussions in SA2. | | | | | | | | |
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| ***Consequences if not approved:*** | | * MBS common data model is not complete. | | | | | | | | |
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| ***Clauses affected:*** | | 5.9.4.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact the OpenAPI description of the CommonData API defined in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* Start of changes \* \* \* \*

#### 5.9.4.6 Type: MbsSession

Table 5.9.4.6-1: Definition of type MbsSession

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| mbsSessionId | MbsSessionId | C | 0..1 | MBS session identifier (TMGI and/or SSM, and NID for an SNPN)  (NOTE 1) |
| tmgiAllocReq | boolean | C | 0..1 | TMGI allocation request indication.  This IE shall be present if the mbsSessionId IE is absent. This IE may also be present if the mbsSessionId IE is present and it does not contain a TMGI.  When present, it shall be set as follows:  - true: a TMGI is requested to be allocated.  - false (default): no TMGI is requested to be allocated.  Write-Only: true  (NOTE 1) |
| tmgi | Tmgi | C | 0..1 | This IE shall be present in an MBS session creation response if the tmgiAllocReq IE was present and set to "true" in the MBS session creation request.  When present, it shall indicate the TMGI allocated to the MBS session.  Read-Only: true |
| expirationTime | DateTime | C | 0..1 | This IE shall be present in an MBS session creation response if the tmgiAllocReq IE was present and set to "true" in the in the MBS session creation request.  When present, it shall indicate the expiration time for the TMGI allocated to the MBS session.  Read-Only: true |
| serviceType | MbsServiceType | M | 1 | Service Type (either multicast or broadcast service)  Write-Only: true |
| locationDependent | boolean | C | 0..1 | Location dependent MBS session indication.  This IE shall be present and set to true for a Location dependent MBS session. It may be present otherwise.  When present, it shall be set as follows:  - true: this is a Location dependent MBS session.  - false (default): this is not a Location dependent MBS session. |
| areaSessionId | AreaSessionId | C | 0..1 | This IE shall be present in a successful response to a request to create an instance of a Location dependent MBS session, i.e. when the "locationDependent" attribute is present and set to "true" in the MBS session creation request.  When present, it shall contain the Area Session ID assigned by the MB-SMF to the location dependent MBS session instance in the MBS Service Area.  Read-Only: true |
| ingressTunAddrReq | boolean | O | 0..1 | Ingress transport address request indication (for unicast transport over N6mb/Nmb9).  When present, it shall be set as follows:  - true: an ingress transport address is requested.  - false (default): no request.  Write-Only: true |
| ingressTunAddr | array(TunnelAddress) | C | 1..N | Ingress tunnel address (UDP/IP tunnel).  This IE shall be present in an MBS session creation response if the ingressTunAddrReq IE was present and set to "true" in the corresponding MBS session creation request.  When present, it shall indicate the allocated ingress tunnel address(es).  Read-Only: true  (NOTE 2) |
| ssm | Ssm | C | 0..1 | Source specific IP multicast address  This IE shall be present if multicast transport applies over N6mb/Nmb9 and the MBS session is not identified by the SSM, e.g. for a location-dependent MBS session with multicast transport over N6mb/Nmb9.  Write-Only: true |
| mbsServiceArea | MbsServiceArea | O | 0..1 | Contains the MBS Service Area.  This attribute shall be present only for a location dependent MBS session or a local MBS session.  Write-Only: true |
| extMbsServiceArea | ExternalMbsServiceArea | O | 0..1 | Contains the MBS service area.  This attribute shall be present only for a location dependent MBS session or a local MBS session.  This IE may be present only over the N33 and Nmb10 interfaces; it shall not be present over other interfaces.  When present, it shall indicate the MBS Service Area information which shall either be geographical area information or civic address information.  Write-Only: true |
| dnn | Dnn | O | 0..1 | Represents the DNN.  Write-Only: true |
| snssai | Snssai | O | 0..1 | Represents the S-NSSAI.  Write-Only: true |
| activationTime | DateTime | O | 0..1 | Represents the MBS session activation time. |
| terminationTime | DateTime | O | 0..1 | Represents the MBS session termination time. |
| qosInformation | FFS | O | 0..1 | QoS information |
| mbsSessionSubsc | MbsSessionSubscription | O | 0..1 | Contains the parameters to request the creation of a subscription to one or more MBS session status event(s). |
| activityStatus | MbsSessionActivityStatus | O | 0..1 | Contains the session activity status (active or inactive).  This IE may be provided if the "serviceType" attribute indicates a multicast MBS session. |
| anyUeInd | Boolean | O | 0..1 | Indication that any UE may join the MBS session.  This IE may be provided if the "serviceType" attribute indicates a multicast MBS session.  When present, it shall be set as follows:  - true: any UE may join the MBS session.  - false (default): the MBS session is not open to any UE.  Write-Only: true |
| mbsFsaIdList | array(MbsFsaId) | O | 1..N | List of MBS Frequency Selection Area Identifiers, for a broadcast MBS session.  This attribute may be present if the "serviceType" attribute indicates a broadcast MBS session. |
| contactPcfInd | boolean | O | 0..1 | Indicates whether the PCF shall be contacted or not, i.e.:   * "true" means that the PCF shall be contacted; and * "false" means that the PCF shall not be contacted.   When this attribute is not present, the default value is "false".  This attribute may only be present over the N29mb interface in MBS Session Update/Modification requests. It shall not be present over the other interfaces. |
| NOTE 1: At least one of the mbsSessionId IE and tmgiAllocReq IE shall be present. Both may be present if the mbsSessionId IE does not contain a TMGI (i.e. if it only contains a SSM).  NOTE 2: In a scenario where an MB-UPF covers a small service area (i.e. a list of TAIs that is a subset of the MBS service area), the MB-SMF needs to find other MB-UPF(s) to cover the whole MBS service area for the MBS session. In such scenarios, multiple ingress addresses of all MB-UPFs need to be allocated for an MBS session. These multiple ingress tunnel addresses are used to receive the same copy of the MBS session data from the AF/MBSTF. In such scenarios, the MBS service area served by an MB-UPF shall be larger than the MBS service area served by an AMF (set), i.e. an AMF in an AMF set shall receive only one MBS Session Information Request Transfer for an MBS session in the MBS Session Context Create/Update Request message. | | | | |

Editor's Note: the definition of the qosInformationattribute is FFS.

\* \* \* \* End of changes \* \* \* \*