**3GPP TSG-WG SA4 Meeting #123-e *S4-230503***

**E-meeting, April 17 – 21, 2023 (revision of S4-230xxx)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.517** | **CR** | **0008** | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  | | | | | | | | |
| *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:*** | Correctino on length of FSA ID | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | SA4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBP3 | | | | |  | ***Date:*** | | | 2023-04-11 |
|  |  | | | |  | |  | | |  |
| ***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)*  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:*** | | In the LS exchanges between SA2 and RAN2 (S4-220457 and S4-220450), the length of MBS FSA ID is determined as 3 bytes long instead of using 2 bytes to align with MBMS SAI for better scalability. Alignements are needed regarding the length of MBS FSA ID. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Correct the length of FSA ID. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Misalignment with SA2/RAN WGs | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 5.2.4, A.1.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 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 26.502: "5G multicast–broadcast services; User Service architecture".

[7] 3GPP TS 26.346: “MBMS; Protocols and Codecs".

[8] IETF RFC 8866: "Session Description Protocol".

[9] W3C: "XML Schema Part 2: Datatypes".

[10] 3GPP TS 23.003: "Numbering, addressing and identification".

[11] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3".

[12] IETF RFC 3926: "FLUTE - File Delivery over Unidirectional Transport".

[13] IETF RFC 2616: "Hypertext Transfer Protocol -- HTTP/1.1".

[X] 3GPP TS 38.331: "NR; Radio Resource Control (RRC); Protocol Specification".

\* \* \* \* Second change \* \* \* \*

### 5.2.4 MBS Distribution Session Description metadata unit

Each MBS User Service Description metadata unit shall reference at least one MBS Distribution Session Description.

ThedistributionSessionDescription element shall contain a @conformanceProfileattribute indicating the set of features that the MBS Distribution Session conforms to and which the MBS Client needs to support in order to fully receive the MBS Distribution Session. The value of this attribute shall be a fully-qualified term identifier URI from the controlled vocabulary defined in annex C.

The distributionSessionDescription element shall contain a @sessionDescriptionURI attribute which references a Session Description document. The element may also contain an @objectRepairParametersURIattribute referencing an Object Repair Parameters document.

ThedistributionSessionDescription element may contain a @dataNetworkNameattribute indicating a Data Network Name (DNN) as defined in TS 23.003 [10]. When this attribute is present, the MBS Client shall use the given DNN for interactions with the MBSF at reference point MBS‑5 and with the MBS AS at reference point MBS‑4‑UC. If this attribute is not present, the MBS UE shall use a default PDU Session for these network interactions.

The userServiceDescription element may include an availabilityInfo child element providing additional information pertaining to the availability of the MBS Distribution Session within the 5G Network. If present, the availabilityInfo element shall include one or more infoBinding child elements. The infoBinding element shall contain the child elements serviceArea, mbsFSAId and radiofrequency:

- The serviceArea element declares the one or more service areas in which the MBS Session corresponding to this MBS Distribution Session is currently available.

- In the case of a broadcast MBS Session corresponding to this MBS Distribution Session, the mbsFSAId element identifies a preconfigured area within which, and in proximity to, the cell(s) announce the MBS FSA ID and its associated frequency.

NOTE: This is used to guide frequency selection by the UE for a broadcast MBS Session with a length of 3 bytes [X].

- The radioFrequencyelement indicates the one or more radio frequencies in the NG-RAN downlink which transmit the MBS Session corresponding to this MBS Distribution Session in the service area(s) identified by the serviceArea element.

\* \* \* \* Third change \* \* \* \*

## A.1.1 MBS User Service Description schema

The following schema shall have the filename "mbs\_user\_service\_description.xml".

|  |
| --- |
| <?xml version="1.0" encoding="UTF-8"?>  <xs:schema xmlns="urn:3GPP:metadata:2022:MBS:userServiceDescription" xmlns:xs="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:3GPP:metadata:2022:MBS:userServiceDescription" elementFormDefault="qualified">  <xs:element name="bundleDescription" type="BundleDescriptionType"/>  <xs:complexType name="BundleDescriptionType">  <xs:sequence>  <xs:element name="userServiceDescription" type="UserServiceDescriptionType" maxOccurs="unbounded"/>  <xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded" processContents="lax"/>  </xs:sequence>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  <xs:complexType name="UserServiceDescriptionType">  <xs:sequence>  <xs:element name="name" type="NameType" minOccurs="0" maxOccurs="unbounded"/>  <xs:element name="serviceLanguage" type="xs:language" minOccurs="0" maxOccurs="unbounded"/>  <xs:element name="distributionSessionDescription" type="DistributionSessionDescriptionType" maxOccurs="unbounded"/>  <xs:element name="appService" type="ApplicationServiceDescriptionType" minOccurs="0" maxOccurs="unbounded"/>  <xs:element name="scheduleDescriptionURI" type="xs:anyURI" minOccurs="0"/>  <xs:element name="availabilityInfo" type="AvailabilityInformationType" minOccurs="0"/>  <xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded" processContents="lax"/>  </xs:sequence>  <xs:attribute name="serviceId" type="xs:anyURI" use="required"/>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  <xs:complexType name="DistributionSessionDescriptionType">  <xs:sequence>  <xs:element name="mbsAppService" type="MbsApplicationServiceType" minOccurs="0" maxOccurs="unbounded"/>  <xs:element name="unicastAppService" type="UnicastApplicationServiceType" minOccurs="0"/>  <xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded" processContents="lax"/>  </xs:sequence>  <xs:attribute name="conformanceProfile" type="xs:anyURI" use="required"/>  <xs:attribute name="sessionDescriptionURI" type="xs:anyURI" use="required"/>  <xs:attribute name="objectRepairParametersURI" type="xs:anyURI" use="optional"/>  <xs:attribute name="dataNetworkName" type="xs:anyURI" use="optional" />  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  <xs:complexType name="NameType">  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="lang" type="xs:language" use="optional"/>  </xs:extension>  </xs:simpleContent>  </xs:complexType>  <xs:complexType name="ApplicationServiceDescriptionType">  <xs:sequence>  <xs:element name="identicalContent" minOccurs="0" maxOccurs="unbounded">  <xs:complexType>  <xs:sequence>  <xs:element name="basePattern" type="xs:anyURI" minOccurs="2" maxOccurs="unbounded"/>  <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>  </xs:sequence>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  </xs:element>  <xs:element name="alternativeContent" minOccurs="0" maxOccurs="unbounded">  <xs:complexType>  <xs:sequence>  <xs:element name="basePattern" type="xs:anyURI" minOccurs="2" maxOccurs="unbounded"/>  <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>  </xs:sequence>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  </xs:element>  <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>  </xs:sequence>  <xs:attribute name="mediaManifestDescriptionURI" type="xs:anyURI" use="required"/>  <xs:attribute name="mimeType" type="xs:string" use="required"/>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  <xs:complexType name="MbsApplicationServiceType">  <xs:sequence>  <xs:element name="basePattern" type="xs:anyURI" maxOccurs="unbounded"/>  <xs:element name="serviceArea" type="xs:unsignedShort" minOccurs="0" maxOccurs="unbounded"/>  <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>  </xs:sequence>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  <xs:complexType name="UnicastApplicationServiceType">  <xs:sequence>  <xs:element name="basePattern" type="xs:anyURI" maxOccurs="unbounded"/>  <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>  </xs:sequence>  <xs:anyAttribute processContents="skip"/>  </xs:complexType>  <xs:complexType name="AvailabilityInformationType">  <xs:sequence>  <xs:element name="infoBinding" maxOccurs="unbounded">  <xs:complexType>  <xs:sequence>  <xs:element name="mbsServiceArea" type="MbsServiceAreaType" minOccurs="0" maxOccurs="unbounded"/>  <xs:element name="mbsFSAId" type="xs:string" minOccurs="0"/>  <xs:element name="radioFrequency" type="xs:unsignedInt" maxOccurs="unbounded"/>  </xs:sequence>  </xs:complexType>  </xs:element>  </xs:sequence>  </xs:complexType>  <xs:complexType name="MbsServiceAreaType">  <xs:sequence>  <xs:element name="taiList" minOccurs="0" maxOccurs="unbounded">  <xs:complexType>  <xs:sequence>  <xs:element name="tai" type="TrackingAreaIdentityType" maxOccurs="unbounded"/>  </xs:sequence>  </xs:complexType>  </xs:element>  <xs:element name="ncgiList" minOccurs="0" maxOccurs="unbounded">  <xs:complexType>  <xs:sequence>  <xs:element name="ncgiTai" type="NrCellGlobalIdentityType" maxOccurs="unbounded"/>  </xs:sequence>  </xs:complexType>  </xs:element>  </xs:sequence>  </xs:complexType>  <xs:complexType name="TrackingAreaIdentityType">  <xs:sequence>  <xs:element name="plmnId">  <xs:complexType>  <xs:sequence>  <xs:element name="mcc" type="xs:string"/>  <xs:element name="mnc" type="xs:string"/>  </xs:sequence>  </xs:complexType>  </xs:element>  <xs:element name="tac" type="xs:string"/>  <xs:element name="nid" type="xs:string" minOccurs="0"/>  </xs:sequence>  </xs:complexType>  <xs:complexType name="ncgiTai">  <xs:sequence>  <xs:element name="tai" type="TrackingAreaIdentityType"/>  <xs:element name="ncgi" type="NrCellGlobalIdentityType"/>  </xs:sequence>  </xs:complexType>  <xs:complexType name="NrCellGlobalIdentityType">  <xs:sequence>  <xs:element name="plmnId">  <xs:complexType>  <xs:sequence>  <xs:element name="mcc" type="xs:string"/>  <xs:element name="mnc" type="xs:string"/>  </xs:sequence>  </xs:complexType>  </xs:element>  <xs:element name="nrCellId" type="xs:string"/>  <xs:element name="nid" type="xs:string" minOccurs="0"/>  </xs:sequence>  </xs:complexType>  </xs:schema> |

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