**3GPP TSG-S4 Meeting #132*****S4-250756***

**Fukuoka, JP, 19th–23rd May 2025** revision of S4aI250074

|  |  |  |  |  |  |  |  |  |
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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.517** | **CR** | **0025** | **rev** | **2** | **Current version:** | **17.7.0** |  |
|  | | | | | | | | |
| *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:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | BBC | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBP3 | | | | |  | ***Date:*** | | | 2025-05-07 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | A MIME media type associated with the object manifest document format is not yet specified. [*https://github.com/5G-MAG/Standards/issues/167*](https://github.com/5G-MAG/Standards/issues/167) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Update MIME media type registration for User Service Description to add “3gpp-…” prefix and mandatory *version* parameter. 2. Formally register MIME media type “application/3gpp-mbs-object-manifest+json” with IANA, including mandatory *version* parameter. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Barrier to interoperability of MBSTF implementations when ingesting Object Manifests at reference point Nmb8. | | | | | | | | |
| ***Q*** | |  | | | | | | | | |
| ***Clauses affected:*** | | A.2.1, D.1, E.1, E.2.1, E.2.2, E.2.3 (new), E.3 (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | CR0025 [S4-250422]: Submitted for WG agreement.  CR0025r1 [S4aI250074]:   * Added mandatory *version* parameter. * Prefix MIME type for User Service Description with “3gpp-”.   CR0025r2 [S4-250756]: Submitted for WG agreement. | | | | | | | | |

Formal syntax of documents

## A.2.1 MBS User Service Announcement schema

Below is the schema specifying the format of User Service Descriptions instance documents using a JSON-based representation. The schema filename is "TS26517\_MBSUserServiceAnnouncement.yaml".

Documents following this schema shall be identified with the MIME media type application/3gpp-mbs-user-service-descriptions+json as registered in clause E.2.1 including the following parameters.

- The profiles parameter (see clause E.2.2) shall include a fully-qualified term identifier from the controlled vocabulary specified in clause C.2.

- The version parameter (see clause E.2.3) shall be set to the value "TSG105-Rel17".

(Snip – No further changes in this clause.)

# D.1 Object manifest schema

Below is the formal syntax of the JSON-based object manifest for use with the Object Collection or Object Carousel operating mode. The schema shall have the filename "TS26517\_MBSObjectManifest.yaml".

Documents following this schema shall be identified with the MIME media type application/3gpp-mbs-object-manifest+json as registered in clause E.3.1 including the following parameters:

- The version parameter (see clause E.3.2) shall be set to the value "TSG100-Rel17".

(Snip – No further changes in this clause.)

IANA registration

# E.1 General

This annex provides the formal registrations of MIME media types for different resources specified in the present document. It is referenced from the IANA registry at <http://www.iana.org/assignments/media-types>.

# E.2 Registration of MIME media type "application/3gpp-mbs-user-service-descriptions+json"

## E.2.1 General

The MIME media type application/3gpp-mbs-user-service-descriptions+json denotes that the message body is a JSON instance document compliant with the UserServiceDescriptions YAML schema specified in clause A.2.1.

Table E.2.1-1 provides the MIME media type registration for application/3gpp-mbs-user-service-descriptions+json.

Table E.2.1‑1: MIME media type registration for application/3gpp-mbs-user-service-descriptions+json

|  |  |
| --- | --- |
| Parameter | Value |
| MIME media type name | application |
| MIME subtype name | 3gpp-mbs-user-service-descriptions+json |
| Required parameters | version (see clause E.2.3 of 3GPP TS 26.517). |
| Optional parameters | profiles (see clause E.2.2 of TS 26.517). |
| Encoding considerations | This is a JSON document, and the encoding considerations are the same as for media type application/json defined in IETF RFC 8259. |
| Security considerations | This media format is used to configure the receiver on how to participate in one or more MBS User Services. This format is highly susceptible to manipulation or spoofing for attacks desiring to mislead a receiver about a session. Both integrity protection and source authentication are recommended to prevent misleading of the receiver. |
| Interoperability considerations | The specification defines a platform-independent expression of an entry point document, and it is intended that wide interoperability can be achieved. |
| Published specification | 3GPP TS 26.517 |
| Applications which use this media type | 3GPP MBS-based applications and services |
| Additional information | File extension(s): *json*  Intended usage: COMMON |
| Other information/general comment | None |
| Person & email address to contact for further information | Thomas Stockhammer (tsto@qti.qualcomm.com)  3GPP TSG SA WG4 |
| Restrictions on usage | None |
| Author/Change controller | 3GPP TSG SA WG4 |

## E.2.2 Profiles parameter

Table E.2.2-1 specifies the profiles parameter to be used with the MIME media type registered in clause E.2.1.

Table E.2.2‑1: Definition of profiles parameter

|  |  |
| --- | --- |
| Parameter | Value |
| Parameter name | profiles |
| Parameter value | Optional attribute indicating one or more profiles to which the resource representation claims conformance. The contents of this attribute shall conform to either the *pro‑simple* or *pro‑fancy* productions specified in section 4.5 of IETF RFC 6381.  The value is a fully-qualified term identifier URI from a controlled vocabulary.  The set of profile identifiers indicated in this parameter should match the set indicated in the profiles attribute of the corresponding User Service Description. |

EXAMPLE: application/3gpp-mbs-user-service-description+json;‌**profiles="urn:3GPP:26517:17:baseline**;version="TSG105‑Rel17"

## E.2.3 Version parameter

Table E.2.3-1 specifies the version parameter to be used with the MIME media type registered in clause E.2.1.

Table E.2.3‑1: Specification of version parameter

|  |  |
| --- | --- |
| Parameter | Value |
| Parameter name | version |
| Parameter value | The version of the Object Manifest schema to which the document conforms. The value is specified in clause D.1 of 3GPP TS 26.517 and encodes the 3GPP Technical Standards Group meeting number and 3GPP release in which a change to the document schema was approved.  The purpose of the parameter is to allow schema conformance to be assessed by a recipient before attempting to parse the contents of a received document. |

EXAMPLE: application/3gpp-mbs-user-service-description+json;‌profiles="urn:3GPP:26517:17:baseline";‌**version="TSG105‑Rel17"**

# E.3 Registration of MIME media type "application/3gpp-mbs-object-manifest+json"

## E.3.1 General

The MIME media type application/3gpp-mbs-object-manifest+json denotes that the message body is a JSON instance document compliant with the ObjectManifest YAML schema specified in clause D.1.

Table E.3.1-1 provides the MIME media type registration for application/3gpp-mbs-object-manifest+json.

Table E.3.1‑1: MIME media type registration for application/3gpp-mbs-object-manifest+json

|  |  |
| --- | --- |
| Parameter | Value |
| MIME media type name | application |
| MIME subtype name | 3gpp-mbs-object-manifest+json |
| Required parameters | version (see clause E.3.2 of 3GPP TS 26.517). |
| Optional parameters | None. |
| Encoding considerations | This is a JSON document, and the encoding considerations are the same as for media type application/json defined in IETF RFC 8259. |
| Security considerations | This media format is used to describe a set of objects to the MBS Transport Function to be transmitted in an MBS Distribution Session as part of an MBS User Service. This format is highly susceptible to manipulation or spoofing for attacks designed to affect the set of objects ingested by the MBSTF and transmitted to receivers. Both integrity protection and source authentication are recommended to prevent misleading of the receiver. |
| Interoperability considerations | The specification defines a platform-independent manifest document format, and it is intended that wide interoperability can be achieved. |
| Published specification | 3GPP TS 26.517 clause D.1 |
| Applications which use this media type | 3GPP MBS-based applications and services |
| Additional information | File extension(s): *json*  Intended usage: COMMON |
| Other information/general comment | None |
| Person & email address to contact for further information | Richard Bradbury (richard.bradbury@bbc.co.uk)  3GPP TSG SA WG4 |
| Restrictions on usage | None |
| Author/Change controller | 3GPP TSG SA WG4 |

## E.3.2 Version parameter

Table E.3.2-1 specifies the version parameter to be used with the MIME media type registered in clause E.3.1.

Table E.3.2‑1: Specification of version parameter

|  |  |
| --- | --- |
| Parameter | Value |
| Parameter name | version |
| Parameter value | The version of the Object Manifest schema to which the document conforms. The value is specified in clause D.1 of 3GPP TS 26.517 and encodes the 3GPP Technical Standards Group meeting number and 3GPP release in which a change to the document schema was approved.  The purpose of the parameter is to allow schema conformance to be assessed by a recipient before attempting to parse the contents of a received document. |

EXAMPLE: application/3gpp-mbs-object-manifest+json;‌version="TSG100-Rel17"

End of changes