**3GPP TSG CT WG3 Meeting #142 *C3-253329***

**Goteborg, SE, 25th – 29th August, 2025**

**Source: Huawei, Samsung**

**Title: Pseudo-CR on defining the service description clauses of the SS\_SmSmasRegistration API**

**Spec: 3GPP TS 29.437 (V1.0.0)**

**Agenda item: 19.42 (Metaverse\_App)**

**Document for: Agreement**

**1. Introduction**

The stage 2 requirements for the new SS\_SmSmasRegistration API have been defined in clauses 9.6 and 9.7.7 of TS 23.437.

**2. Reason for Change**

Define the service description clauses of this new API in the corresponding new Metaverse applications Services TS 29.437.

**3. Conclusions**

N/A

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.437 V 1.0.0.

\* \* \* \* Start of Changes \* \* \* \*

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

SAn Spatial Anchor

SM Spatial Map

SMAS SM service capable Application Server

\* \* \* \* Next Changes \* \* \* \*

## 5.1 Introduction

Table 5.1-1 summarizes the corresponding APIs defined for this specification.

Table 5.1-x: API Descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service Name | Clause | Description | OpenAPI Specification File | API Name | Annex |
| <service name> | <ref clause> | <short description as included in the OpenAPI file> | <file name> | <apiName in the URI> | <ref Annex> |
| SS\_SmSmasRegistration | 6.2.5 | SMAS Registration Management | TS29437\_SS\_SmSmasRegistration.yaml | ssm-smasr | A.8 |

NOTE: When 3GPP TS 29.122 [2] is referenced for the common protocol and interface aspects for API definition in the clauses under clause 5, the service producer (i.e., SAn Server, SM Server) takes the role of the SCEF and the service consumer takes the role of the SCS/AS.

\* \* \* \* Next Changes \* \* \* \*

## 5.3.5 SS\_SmSmasRegistration

### 5.3.5.1 Service Description

The SS\_SmSmasRegistration service exposed by the SM Server enables a service consumer to:

- create/update/delete an SMAS Registration.

### 5.3.5.2 Service Operations

#### 5.3.5.2.1 Introduction

The service operations defined for the SS\_SmSmasRegistration service are shown in table 5.3.5.2.1-1.

Table 5.3.5.2.1-1: SS\_SmSmasRegistration Service Operations

|  |  |  |
| --- | --- | --- |
| Service Operation Name | Description | Initiated by |
| SS\_SmSmasRegistration\_Create | This service operation enables a service consumer to request the creation of an SMAS Registration. | e.g., VAL Server |
| SS\_SmSmasRegistration\_Update | This service operation enables a service consumer to request the update of an existing SMAS Registration. | e.g., VAL Server |
| SS\_SmSmasRegistration\_Delete | This service operation enables a service consumer to request the deletion of an existing SMAS Registration. | e.g., VAL Server |

#### 5.3.5.2.2 SS\_SmSmasRegistration\_Create

##### 5.3.5.2.2.1 General

This service operation is used by a service consumer to request the creation of an SMAS Registration at the SM Server.

The following procedures are supported by the "SS\_SmSmasRegistration\_Create" service operation:

- SMAS Registration Creation.

##### 5.3.5.2.2.2 SMAS Registration Creation

Figure 5.3.5.2.2.2-1 depicts a scenario where a service consumer sends a request to the SM Server to request the creation of an SMAS Registration (see also clause 9.6 of 3GPP°TS°23.437°[13]).



Figure 5.3.5.2.2.2-1: Procedure for SMAS Registration Creation

1. In order to create a new SMAS Registration, the service consumer shall send an HTTP POST request to the SM Server targeting the URI of the "SMAS Registrations" collection resource, with the request body including the SMASReg data structure.

2a. Upon success, the SM Server shall respond with an HTTP "201 Created" status code with the response body containing a representation of the created "Individual SMAS Registration" resource within the SMASReg data structure, and an HTTP "Location" header field containing the URI of the created resource.

2b. 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, as specified in clause 6.2.5.7.

#### 5.3.5.2.3 SS\_SmSmasRegistration\_Update

##### 5.3.5.2.3.1 General

This service operation is used by a service consumer to request the update of an existing SMAS Registration at the SM Server.

The following procedures are supported by the "SS\_SmSmasRegistration\_Update" service operation:

- SMAS Registration Update.

##### 5.3.5.2.3.2 SMAS Registration Update

Figure 5.3.5.2.3.2-1 depicts a scenario where a service consumer sends a request to the SM Server to request the update of an existing SMAS Registration (see also clause 9.6 of 3GPP°TS°23.437°[13]).



Figure 5.3.5.2.3.2-1: Procedure for SMAS Registration Update

1. In order to update an existing SMAS Registration, the service consumer shall send an HTTP PUT/PATCH request to the SM Server, targeting the URI of the corresponding "Individual SMAS Registration" resource, with the request body including either:

- the updated representation of the resource within the SMASReg data structure, in case the HTTP PUT method is used; or

- the requested modifications to the resource within the SMASRegPatch data structure, in case the HTTP PATCH method is used.

2a. Upon success, the SM Server shall update the targeted "Individual SMAS Registration" resource accordingly and respond with either:

- an HTTP "200 OK" status code with the response body containing a representation of the updated "Individual SMAS Registration" resource within the SMASReg data structure; or

- an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP PUT/PATCH response body, as specified in clause 6.2.5.7.

#### 5.3.5.2.4 SS\_SmSmasRegistration\_Delete

##### 5.3.5.2.4.1 General

This service operation is used by a service consumer to request the deletion of an existing SMAS Registration at the SM Server.

The following procedures are supported by the "SS\_SmSmasRegistration\_Delete" service operation:

- SMAS Registration Deletion.

##### 5.3.5.2.4.2 SMAS Deregistration

Figure 5.3.5.2.4.2-1 depicts a scenario where a service consumer sends a request to the SM Server to request the deletion of an existing SMAS Registration (see also clause 9.6 of 3GPP°TS°23.437°[13]).



Figure 5.3.5.2.4.2-1: Procedure for SMAS Registration Deletion

1. In order to request the SMAS deegistration, the service consumer shall send an HTTP DELETE request to the SM Server targeting the URI of the corresponding "Individual SMAS Registration" resource.

2a. Upon success, the SM Server shall respond with an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP DELETE response body, as specified in clause 6.2.5.7.

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