**3GPP TSG-CT WG4 Meeting #105-eC4-214xyz**

**E-Meeting, 17th – 27th Aug 2021 (was C4-214377)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.503** | **CR** | **0697** | **rev** | **1** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Retrieval of RegistrationDataSets containing IP-SM-GW | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SBIProtoc17 | | | | |  | ***Date:*** | | | 2021-08-09 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | As defined in 5.3.2.2.5 and 5.3.2.2.6 SMSF could be registered into UDM for 3GPP access and/or for non-3GPP access to support SMS over NAS. And as defined in 5.3.2.2.7 IP-SM-GW could also be registered into UDM to support SMS over IP.  5.3.2.5.10 defines the operation for a service consumer to retrieve of multiple UE registration Data Sets, which could be used to retrieve all possible MT-SMS targeting nodes via single request, but currently IP-SM-GW data set is not supported by this service operation (see 6.2.6.2.19 Type: RegistrationDataSets). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | It is proposed to add IP\_SM\_GW into RegistrationDataSetName, and if included in the query paameter registration-dataset-names the registered IP-SM-GW registration context is also returned in the RegistrationDataSets if available. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Signaling to retrieve all possible MT-SMS targeting nodes is not optimized as it is not possible to retrieve all possible MT-SMS targeting nodes via a single request. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2.6.2.19, 6.2.6.3.6, A.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 introduces backwards compatible new features, with impacts to the following APIs:  - TS29503\_Nudm\_UECM.yaml | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

##### 6.2.6.2.19 Type: RegistrationDataSets

Table 6.2.6.2.19-1: Definition of type RegistrationDataSets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| amf3Gpp | Amf3GppAccessRegistration | O | 1 | AMF 3GPP Access Registration |
| amfNon3Gpp | AmfNon3GppAccessRegistration | O | 1 | AMF Non 3GPP Access Registration |
| smfRegistration | SmfRegistrationInfo | O | 0..1 | SMF Registration Information |
| smsf3Gpp | SmsfRegistration | O | 0..1 | SMSF 3GPP Access Registration |
| smsfNon3Gpp | SmsfRegistration | O | 0..1 | SMSF Non 3GPP Access Registration |
| ipSmGw | IpSmGwRegistration | O | 0..1 | IP-SM-GW Registration |

\* \* \* Next Change \* \* \* \*

##### 6.2.6.3.6 Enumeration: RegistrationDataSetName

Table 6.2.6.3.6-1: Enumeration RegistrationDataSetName

|  |  |
| --- | --- |
| Enumeration value | Description |
| "AMF\_3GPP" | AMF 3GPP Access Registration |
| "AMF\_NON\_3GPP" | AMF Non 3GPP Access Registration |
| "SMF\_PDU\_SESSIONS" | SMF PDU Session Registration |
| "SMSF\_3GPP" | SMSF 3GPP Access Registration |
| "SMSF\_NON\_3GPP" | SMSF Non 3GPP Access Registration |
| “IP\_SM\_GW” | IP-SM-GW Registration |

\* \* \* Next Change \* \* \* \*

## A.3 Nudm\_UECM API

openapi: 3.0.0

info:

version: '1.2.0-alpha.3'

title: 'Nudm\_UECM'

description: |

Nudm Context Management Service.

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externalDocs:

description: 3GPP TS 29.503 Unified Data Management Services, version 17.3.0

url: 'http://www.3gpp.org/ftp/Specs/archive/29\_series/29.503/'

servers:

- url: '{apiRoot}/nudm-uecm/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause clause 4.4 of 3GPP TS 29.501.

security:

- oAuth2ClientCredentials:

- nudm-uecm

- {}

*(... text not shown for clarity ...)*

RegistrationDataSets:

type: object

properties:

amf3Gpp:

$ref: '#/components/schemas/Amf3GppAccessRegistration'

amfNon3Gpp:

$ref: '#/components/schemas/AmfNon3GppAccessRegistration'

smfRegistration:

$ref: '#/components/schemas/SmfRegistrationInfo'

smsf3Gpp:

$ref: '#/components/schemas/SmsfRegistration'

smsfNon3Gpp:

$ref: '#/components/schemas/SmsfRegistration'

ipSmGw:

$ref: '#/components/schemas/IpSmGwRegistration'

*(... text not shown for clarity ...)*

RegistrationDataSetName:

anyOf:

- type: string

enum:

- AMF\_3GPP

- AMF\_NON\_3GPP

- SMF\_PDU\_SESSIONS

- SMSF\_3GPP

- SMSF\_NON\_3GPP

- IP\_SM\_GW

- type: string

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