**3GPP TSG-CT WG4 Meeting #122C4-241493**

**Changsha, P.R.China; 15th – 19th April 2024 was C4-241112**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **518** | **CR** | **1054** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | MBS service area in the EnableGroupReachabilityReqData | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBS | | | | |  | ***Date:*** | | | 2024-04-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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 agreed CR [S2-2403174](https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_161_Athens_2024-02/Docs/S2-2403174.zip) has updated TS 23.247 as:  *The SMF invokes Namf\_MT\_EnableGroupReachability Request (List of UEs, [PDU Session ID of the associated PDU Sessions], TMGI, [UE reachability Notification Address], [most demanding ARP, 5QI of all MBS QoS Flow within MBS session], [MBS service area]))) to AMF(s). When later UE is reachable, the UE reachability Notification Address is used by the AMF to identify and notify the related SMF.*  In the current Namf\_MT\_EnableGroupReachability request, the data contains the mbsServiceAreaInfoList for the location dependent MBS sessions. The local MBS session service area is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add the missing mbs service area for the local MBS session. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Enable group reach ability for a local MBS session may not be supported properly due to lacking of supporting service area which lead a wrong paging area. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.3.6.1, 6.3.6.2.7, A.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 a backwards compatible correction on OpenAPI Namf\_MT. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1: delete extra wording (typo) in the Reason for Change. | | | | | | | | |

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

#### 6.3.6.1 General

This clause specifies the application data model supported by the API.

Table 6.3.6.3-1 specifies the data types defined for the Namf\_MT service based interface protocol.

Table 6.3.6.3-1: Namf\_MT specific Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Clause defined | Description |
| EnableUeReachabilityReqData | 6.3.6.2.2 | Data within the Enable UE Reachability Request |
| EnableUeReachabilityRspData | 6.3.6.2.3 | Data within the Enable UE Reachability Response |
| UeContextInfo | 6.3.6.2.4 | Contains the UE Context Information |
| ProblemDetailsEnableUeReachability | 6.3.6.2.5 | Enable UE Reachability Error Detail |
| AdditionInfoEnableUeReachability | 6.3.6.2.6 | Additional information to be returned in EnableUeReachability error response. |
| EnableGroupReachabilityReqData | 6.3.6.2.7 | Data within the Enable Group Reachability Request |
| EnableGroupReachabilityRspData | 6.3.6.2.8 | Data within the Enable Group Reachability Response |
| UeInfo | 6.3.6.2.9 | list of UEs requested to be made reachable for the MBS Session |
| ReachabilityNotificationData | 6.3.6.2.10 | Data within the UE Reachability Info Notify |
| ReachableUeInfo | 6.3.6.2.11 | Contains the reachable UE Information |
| UeContextInfoClass | 6.3.6.3.3 | Indicates the UE Context information class |

Table 6.3.6.3-2 specifies data types re-used by the Namf\_MT service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Namf\_MT service based interface.

Table 6.3.6.3-2: Namf\_MT re-used Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Reference | Comments |
| ProblemDetails | 3GPP TS 29.571 [6] | Common data type used in response bodies |
| supportedFeatures | 3GPP TS 29.571 [6] | Supported Features |
| AccessType | 3GPP TS 29.571 [6] | Access Type |
| RatType | 3GPP TS 29.571 [6] | RAT Type |
| DurationSec | 3GPP TS 29.571 [6] |  |
| RedirectResponse | 3GPP TS 29.571 [6] | Response body of the redirect response message. |
| Supi | 3GPP TS 29.571 [6] | SUPI |
| Tmgi | 3GPP TS 29.571 [6] | TMGI |
| PduSessionId | 3GPP TS 29.571 [6] | PDU Session Id |
| Uri | 3GPP TS 29.571 [6] | URI |
| UserLocation | 3GPP TS 29.571 [6] | User Location Information |
| MbsServiceArea | 3GPP TS 29.571 [6] | MBS Service Area Information. |
| MbsServiceAreaInfo | 3GPP TS 29.571 [6] | MBS Service Area Information for a Location dependent MBS session |
| UeReachability | 6.2.6.3.7 | Describes the reachability of the UE |

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

##### 6.3.6.2.7 Type: EnableGroupReachabilityReqData

Table 6.3.6.2.7-1: Definition of type EnableGroupReachabilityReqData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| ueInfoList | array(UeInfo) | M | 1..N | This IE shall indicate the list of UEs requested to be made reachable for the MBS Session and may indicate the PDU Session Id of the associated PDU Session for the UE(s). |
| tmgi | Tmgi | M | 1 | This IE shall Indicate the TMGI of the MBS session. |
| reachabilityNotifyUri | Uri | O | 0..1 | The callback URI on which UEReachabilityInfoNotify is reported. |
| mbsServiceArea | MbsServiceArea | O | 0..1 | MBS Service Area for a local MBS session |
| mbsServiceAreaInfoList | array(MbsServiceAreaInfo) | O | 1..N | List of MBS Service Area and related Area Session ID for location dependent content. |
| arp | Arp | O | 0..1 | This IE when present shall indicate the most demanding Allocation and Retention Priority of all MBS QoS Flow within the MBS session.  The AMF may use this IE for paging differentiation (see clause 6.12 of 3GPP TS 23.247 [55]). |
| 5qi | 5Qi | O | 0..1 | This IE when present shall indicate the most demanding 5QI of all MBS QoS Flow within the MBS session.  The AMF may use this IE for paging differentiation (see clause 6.12 of 3GPP TS 23.247 [55]). |
| supportedFeatures | SupportedFeatures | C | 0..1 | This IE shall be present if at least one optional feature defined in clause 6.3.8 is supported. |

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

# A.4 Namf\_MT

openapi: 3.0.0

info:

version: 1.3.0-alpha.5

title: Namf\_MT

description: |

AMF Mobile Terminated Service.

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security:

- {}

- oAuth2ClientCredentials:

- namf-mt

externalDocs:

description: 3GPP TS 29.518 V18.5.0; 5G System; Access and Mobility Management Services

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.518/'

---------skip for clarity---------

EnableGroupReachabilityReqData:

description: Data within the Enable Group Reachability Request

type: object

properties:

ueInfoList:

type: array

items:

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

minItems: 1

tmgi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Tmgi'

reachabilityNotifyUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

mbsServiceArea:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MbsServiceArea'

mbsServiceAreaInfoList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MbsServiceAreaInfo'

minItems: 1

arp:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Arp'

5qi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/5Qi'

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

required:

- ueInfoList

- tmgi

---------skip for clarity---------

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