**3GPP TSG-CT WG3 Meeting #137 *C3-245126***

**Hefei, CN, 14 – 18 October, 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.522** | **CR** | **1366** | **rev** | **1** | **Current version:** | **18.7.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Clarification for the URSP rule usage in the HPLMN and VPLMN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eUEPO | | | | |  | ***Date:*** | | | 2024-10-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19) Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | According to the clause 4.11.0a.2a.6 of TS 23.502, it clearly states while AF from VPLMN providing service parameters, these service parameters are not used by the H-PCF as generations of the URSP rules. Therefore, the urspGuidance is not used while AF interacting with NEF in the VPLMN. Such clarification is missing in stage 3 specification. | | | | | | | | |
| ***d*** | |  | | | | | | | | |
| ***Summary of change:*** | | Add the note in the data table for ServiceParameterData to clarify the relation between “roamUeNetDescs“ and “urspGuidance“. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Unclear statements for urspGuidance usage and can lead to implementation errors. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.11.2.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not have any impact in the Open API specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

##### 5.11.2.3.2 Type: ServiceParameterData

Table 5.11.2.3.2-1: Definition of type ServiceParameterData

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Attribute name | | Data type | | P | | Cardinality | | Description | | Applicability | |
| self | | Link | | C | | 0..1 | | Identifies the individual service parameter subscription resource URI.  Shall be present by the NEF in HTTP responses that include an object of ServiceParameterData type. | |  | |
| dnn | | Dnn | | O | | 0..1 | | Identifies a DNN. (NOTE 2) (NOTE 3) | |  | |
| snssai | | Snssai | | O | | 0..1 | | Identifies an S-NSSAI. (NOTE 2) (NOTE 3) | |  | |
| afServiceId | | string | | O | | 0..1 | | Identifies a service on behalf of which the AF is issuing the request. (NOTE 2) (NOTE 3) | |  | |
| appId | | string | | O | | 0..1 | | Identifies an application identifier. (NOTE 2) | |  | |
| gpsi | | Gpsi | | O | | 0..1 | | Identifies GPSI. (NOTE 1) | |  | |
| ueIpv4 | | Ipv4Addr | | O | | 0..1 | | The IPv4 address of the served UE. (NOTE 1) | |  | |
| ueIpv6 | | Ipv6Addr | | O | | 0..1 | | The IPv6 address of the served UE. (NOTE 1) | |  | |
| ueMac | | MacAddr48 | | O | | 0..1 | | The MAC address of the served UE. (NOTE 1) | |  | |
| externalGroupId | | ExternalGroupId | | O | | 0..1 | | Represents a group of users. (NOTE 1) | |  | |
| anyUeInd | | boolean | | O | | 0..1 | | Identifies whether the service parameters apply to any non-roaming UE.  - "true": the service parameters are applicable to any non-roaming UE.  - "false": the service parameters are not applicable to any non-roaming UE.  - Default value is "false" if omitted.  (NOTE 1) (NOTE 3) | |  | |
| roamUeNetDescs | | array(NetworkDescription) | | O | | 1..N | | Each element identifies one (e.g., combination of MCC and MNC) or more (e.g. a MCC only) PLMN ID(s). It indicates the PLMN(s) of inbound roamers to which the provided AF guidance on VPLMN-specific URSP rules apply. (NOTE 1) (NOTE 4) | | VPLMNSpecificURSP | |
| subNotifEvents | | array(Event) | | C | | 1..N | | Identifies the AF subscribed event(s) notifications related to AF provisioned service parameters. | | AfNotifications | |
| notificationDestination | | Uri | | C | | 0..1 | | Contains the callback URI to receive the notifications from the NEF. Shall be present If "subNotifEvents" attribute is included. | | AfNotifications | |
| requestTestNotification | | boolean | | O | | 0..1 | | Set to true by the AF to request the NEF to send a test notification as defined in clause 5.2.5.3 of 3GPP TS 29.122 [4]. The default value is "false" if omitted. | | Notification\_test\_event | |
| websockNotifConfig | | WebsockNotifConfig | | O | | 0..1 | | Configuration parameters to set up notification delivery over Websocket protocol. | | Notification\_websocket | |
| paramOverPc5 | | ParameterOverPc5 | | O | | 0..1 | | Contains the V2X service parameters used over PC5 | |  | |
| paramOverUu | | ParameterOverUu | | O | | 0..1 | | Contains the V2X service parameters used over Uu | |  | |
| paramForProSeDd | | ParamForProSeDd | | O | | 0..1 | | Contains the service parameters for 5G ProSe direct discovery. | | ProSe | |
| paramForProSeDc | | ParamForProSeDc | | O | | 0..1 | | Contains the service parameters for 5G ProSe direct communications. | | ProSe | |
| paramForProSeU2NRelUe | | ParamForProSeU2NRelUe | | O | | 0..1 | | Contains the service parameters for 5G ProSe UE-to-network relay UE. | | ProSe | |
| paramForProSeRemUe | | ParamForProSeRemUe | | O | | 0..1 | | Contains the service parameters for 5G ProSe remote UE. | | ProSe | |
| paramForProSeU2URelUe | | ParamForProSeU2URelUe | | O | | 0..1 | | Contains the service parameters for 5G ProSe UE-to-UE relay UE. | | ProSe\_Ph2 | |
| paramForProSeEndUe | | ParamForProSeEndUe | | O | | 0..1 | | Contains the service parameters for 5G ProSe end UE. | | ProSe\_Ph2 | |
| paramForRangingSlPos | | ParamForRangingSlPos | | O | | 0..1 | | Contains the service parameters for ranging and sidelink positioning. | | Ranging\_SL | |
| urspGuidance | | array(UrspRuleRequest) | | O | | 1..N | | Contains the service parameters used to guide the URSP rule(s).  (NOTE 4) | | AfGuideURSP | |
| vpsUrspGuidance | | array(UrspRuleRequest) | | O | | 1..N | | Contains the service parameters provided by an AF to guide the VPLMN-specific URSP rule(s). | | VPLMNSpecificURSP | |
| a2xParamsPc5 | | A2xParamsPc5 | | O | | 0..1 | | Contains the A2X service parameters used over PC5 reference point. | | A2X | |
| a2xParamsUu | | A2xParamsUu | | O | | 0..1 | | Contains the A2X service parameters used over Uu reference point. | | A2X | |
| tnaps | | array(TnapId) | | O | | 1..N | | Contains the TNAP ID(s) collocated with the 5G-RG(s) of a specific user. | | AfGuideTNAPs | |
| mtcProviderId | | MtcProviderInformation | | O | | 0..1 | | Indicates MTC provider information. | |  | |
| suppFeat | | SupportedFeatures | | C | | 0..1 | | Indicates the list of Supported features used as described in clause 5.11.3.  This attribute shall be provided in the POST request and in the response of successful resource creation. | |  | |
| NOTE 1: One of individual UE identifier (i.e. "gpsi", "ueIpv4", "ueIpv6" or "ueMac" attribute), External Group Identifier (i.e. "externalGroupId" attribute) or any UE indication (i.e. "anyUeInd" attribute), and when the feature "VPLMNSpecificURSP" is supported, or any inbound roaming UE from the indicated PLMN(s) (i.e., "roamUeNetDescs" attribute) shall be included. For V2X, Prose (when the "ProSe" and/or "ProSe\_Ph2" feature is supported), A2X (when the "A2X" feature is supported) and URSP service parameter provisioning (see clause 4.4.20), only "anyUeInd", "gpsi" and "externalGroupId" attributes are applicable. When the "VPLMNSpecificURSP" feature is supported, the "roamUeNetDescs" attribute only applies to URSP service parameter provisioning and may be included when the "vpsUrspGuidance" attribute is provided. When the "AfGuideTNAPs" feature is supported, when TNAP ID(s) is provisioned within the "tnaps" attribute, only "gpsi" shall be provided.  NOTE 2: Either the "afServiceId" attribute, "appId" attribute or the combination of "snssai" and "dnn" attributes shall be provided. When the feature "AfGuideURSP" is supported, only the "afServiceId" attribute shall be provided for providing guidance for URSP determination. When the feature "AfGuideTNAPs" is supported, when TNAP ID(s) is provisioned within the "tnaps" attribute, only the "afServiceId" attribute shall be provided.  NOTE 3: When "anyUeInd" attribute is present, "appId" attribute, "afServiceId" attribute or the combination of "snssai" attribute and "dnn" attribute shall be provided. When the feature "AfGuideURSP" is supported, only the "afServiceId" attribute shall be provided for providing guidance for URSP determination.  NOTE 4: When the "roamUeNetDescs" attribute is included, the "vpsUrspGuidance" attribute shall be included and the "urspGuidance" attribute shall be omitted. | | | | | | | | | | | |

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