**3GPP TSG-CT WG3 Meeting #134 *C3-242290***

**Changsha, China, 15 - 19 April, 2024 *(Revision of C3-242xxx)***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.525** | **CR** | **0330** | **rev** | **-** | **Current version:** | **18.5.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **x** |

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|  | | | | | | | | | | |
| ***Title:*** | Corrections on the trigger description | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SBIProtoc18 | | | | |  | ***Date:*** | | | 2024-03-30 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | Some of the descriptions for triggers in the current specification contain too many details that are not feasible for subsequent extensions (in clauses 5.6.2.2 and 5.6.2.5) and should be simply and clarify for the explict subscription.  Hence, it is proposed to simply the description of "trigger" description to avoid misalignment.  In addition, add the missing NOTE in clause 5.6.3.3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update the descriptions of "tigger" attribute. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Unclear specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.6.2.2, 5.6.2.5, 5.6.3.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact on the OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

#### 5.6.2.2 Type PolicyAssociation

Table 5.6.2.2-1: Definition of type PolicyAssociation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| request | PolicyAssociationRequest | O | 0..1 | The information provided by the NF service consumer when requesting the creation of a policy association |  |
| uePolicy | UePolicy | O | 0..1 | The UE policy as determined by the H-PCF (for the H-PCF as NF service producer). |  |
| n2Pc5Pol | N2InfoContent | O | 0..1 | The N2 PC5 policy for V2X communications as determined by the H-PCF. | V2X |
| n2Pc5PolA2x | N2InfoContent | O | 0..1 | The N2 PC5 policy for A2X communications as determined by the H-PCF. | A2X |
| n2Pc5ProSePol | N2InfoContent | O | 0..1 | The N2 PC5 policy for 5G ProSe as determined by the PCF. | ProSe |
| triggers | array(RequestTrigger) | O | 1..N | Request Triggers to which the PCF subscribes.  (NOTE) |  |
| pras | map(PresenceInfo) | C | 1..N | If the Request Trigger "PRA\_CH" is provided, the presence reporting area(s) for which reporting is requested shall be provided. The "praId" attribute within the PresenceInfo data type shall also be the key of the map. The "presenceState" and the "additionalPraId" attributes within the PresenceInfo data type shall not be supplied. The "praId" attribute within the PresenceInfo data type shall include the identifier of either a presence reporting area or a presence reporting area set. |  |
| andspDelInd | PolicyStatus | O | 0..1 | Information about whether the updated ANDSP/WLANSP has been successfully delivered to the UE. | SliceAwareANDSP |
| andspInd | boolean | O | 0..1 | Indication of UE support of ANDSP.  True: The UE supports ANDSP;  False: The UE does not support ANDSP. | UECapabilityIndication |
| pduSessions | array(PduSessionInfo) | O | 1..N | Contains the DNNs and S-NSSAIs for which LBO information is being requested. It may be provided when the "LBO\_INFO\_CH" request trigger is provided. | VPLMNSpecificURSP |
| suppFeat | SupportedFeatures | M | 1 | Indicates the negotiated supported features. |  |
| n2Pc5RsppPol | N2InfoContent | O | 0..1 | The N2 PC5 policy for Ranging/SL as determined by the H-PCF. | Ranging\_SL |
| NOTE: The "triggers" attribute shall only contain the RequestTrigger values that require explicit subscription as described in clause 5.6.3.3. | | | | | |

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

#### 5.6.2.5 Type PolicyUpdate

Table 5.6.2.5-1: Definition of type PolicyUpdate

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Attribute name | | Data type | | P | | Cardinality | | Description | | Applicability | |
| resourceUri | | Uri | | M | | 1 | | The resource URI of the individual UE policy association related to the notification.  (NOTE 2) | |  | |
| uePolicy | | UePolicy | | O | | 0..1 | | The UE policy as determined by the H-PCF. | |  | |
| n2Pc5Pol | | N2InfoContent | | O | | 0..1 | | The N2 PC5 policy for V2X communications as determined by the H-PCF. | | V2X | |
| n2Pc5PolA2x | | N2InfoContent | | O | | 0..1 | | The N2 PC5 policy for A2X communications as determined by the H-PCF. | | A2X | |
| n2Pc5ProSePol | | N2InfoContent | | O | | 0..1 | | The N2 PC5 policy for 5G ProSe as determined by the PCF. | | ProSe | |
| triggers | | array(RequestTrigger) | | O | | 1..N | | Request Triggers that the PCF subscribes.  (NOTE 1) | |  | |
| pras | | map(PresenceInfoRm) | | C | | 1..N | | If the Trigger "PRA\_CH" is provided or if that trigger was already set but the requested presence reporting areas need to be changed, the presence reporting area(s) for which reporting is requested shall be provided. The "praId" attribute within the PresenceInfoRm data type shall also be the key of the map. The "presenceState" attribute within the PresenceInfo data type shall not be supplied. The "praId" attribute within the PresenceInfo data type shall include the identifier of either a presence reporting area or a presence reporting area set. | | PresenceInfo | |
| andspDelInd | | PolicyStatus | | O | | 0..1 | | Information about whether the updated ANDSP/WLANSP has been successfully delivered to the UE. | | SliceAwareANDSP | |
| delivReport | | map(UePolicyNotification) | | O | | 1..N | | Contains the delivery outcome of VPLMN-Specific URSP rules. It may be included if the V-PCF indicated the subscription to delivery outcome events as described in clause 4.2.2.2.3.2.  The key of the map represents the AF request of the corresponding subscription, i.e. its value shall match the key that was previously provided by the V-PCF in the “vpsUePolGuidance“ attribute. | | VPLMNSpecificURSP | |
| pduSessions | | array(PduSessionInfo) | | O | | 1..N | | Contains the list of the DNN and SNSSAI pairs for which LBO information is being requested. It may be provided when the "LBO\_INFO\_CH" request trigger is provided. | | VPLMNSpecificURSP | |
| suppFeat | | SupportedFeatures | | C | | 0..1 | | Indicates the negotiated supported features. It shall be included in the HTTP POST response when the NF service consumer provided the supported features in the HTTP POST request. | | FeatureRenegotiation | |
| n2Pc5RsppPol | | N2InfoContent | | O | | 0..1 | | The N2 PC5 policy for Ranging/SL as determined by the H-PCF. | | Ranging\_SL | |
| NOTE 1: The "triggers" attribute shall only contain the RequestTrigger values that require explicit subscription as described in clause 5.6.3.3.  NOTE 2: When the PolicyUpdate data type is used in a policy update notify service operation, either the complete resource URI included in the "resourceUri" attribute or the "apiSpecificResourceUriPart" component (see clause 5.1) of the resource URI included in the "resourceUri" attribute may be used by the NF service consumer (e.g. AMF) for the identification of the Individual UE Policy Association resource related to the notification. | | | | | | | | | | | |

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

5.6.3.3 Enumeration: RequestTrigger

The enumeration RequestTrigger represents the possible Policy Control Request Triggers.. It shall comply with the provisions defined in table 5.6.3.3-1.

**Table 5.6.3.3-1: Enumeration RequestTrigger**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Enumeration value** | | **Description** | **Applicability** | |
| LOC\_CH | | Location change (tracking area): the tracking area of the UE has changed. (NOTE) |  | |
| PRA\_CH | | Change of UE presence in PRA: the AMF reports the current presence status of the UE in a Presence Reporting Area, and notifies that the UE enters/leaves the Presence Reporting Area. (NOTE) |  | |
| UE\_POLICY | | A "MANAGE UE POLICY COMPLETE" message, a "MANAGE UE POLICY COMMAND REJECT" message, as defined in Annex D.5 of 3GPP TS 24.501 [15] has been received by the V-PCF and is being forwarded to the H-PCF, or has been received by a PCF for a PDU session and is being forwarded to the (V-)PCF (and then from the V-PCF to the H-PCF) when the "EpsUrsp" feature is supported. A Namf\_Communication\_N1N2MessageTransfer failure response as defined in clause 5.2.2.3.1.2 of 3GPP TS 29.518 [14], an N1N2 Transfer Failure Notification as defined in clause 5.2.2.3.2 of 3GPP TS 29.518 [14], a UE Policy transfer failure is notifying to the H-PCF, or a UE Policy transfer failure is notifying to the (V-)PCF when the "EpsUrsp" feature is supported.  When the "ProSe" feature is supported it indicates that a "UE POLICY PROVISIONING REQUEST" message, as defined in clause 10.4 of 3GPP TS 24.554 [28] has been received by the V-PCF and is being forwarded to the H-PCF.  When the "V2X" feature is supported it indicates that a "UE POLICY PROVISIONING REQUEST" message, as defined in clause 7.2 of 3GPP TS 24.587 [24] has been received by the V-PCF and is being forwarded to the H-PCF.  When the "A2X" feature is supported it indicates that a "UE POLICY PROVISIONING REQUEST" message, as defined in 3GPP TS 24.577 [32] has been received by the V-PCF and is being forwarded to the H-PCF.  When the "Ranging\_SL" feature is supported it indicates that a "UE POLICY PROVISIONING REQUEST" message, as defined in 3GPP TS 24.514 [42] has been received by the V-PCF and is being forwarded to the H-PCF.  This event does not require a subscription and is only applicable for the V‑PCF as NF service consumer and the H‑PCF as NF service producer or a PCF for a PDU session as NF service consumer and the (V-)PCF as NF service producer when the “EpsUrsp” feature is supported. |  | |
| PLMN\_CH | | PLMN change: the serving network (a PLMN or an SNPN) of UE has changed. (NOTE) | PlmnChange | |
| CON\_STATE\_CH | | Connectivity state change: the connectivity state of UE has changed. (NOTE) | ConnectivityStateChange | |
| GROUP\_ID\_LIST\_CHG | | UE Internal Group Identifier(s) has changed: the AMF reports that UDM provided list of group Ids has changed. This policy control request trigger does not require a subscription. | GroupIdListChange | |
| UE\_CAP\_CH | | UE Capabilities change: the UE provided 5G ProSe capabilities have changed. This policy control request trigger does not require subscription. | ProSe | |
| SAT\_CATEGORY\_CHG | | Satellite Backhaul Category change: the AMF has detected a change between different satellite backhaul category, or a change between satellite and non-satellite backhaul. (NOTE) | | | EnSatBackhaulCategoryChg | |
| CONF\_NSSAI\_CH | | Configured NSSAI change: the configured NSSAI has changed. This policy control request trigger only applies in roaming scenarios when the NF service consumer is the AMF.  (NOTE) | | | NssaiChange | |
| NON\_3GPP\_NODE\_RESELECTION | | Wrong TNGF or N3IWF: the UE has connected to a wrong non-3GPP access node that does not match its subscribed S-NSSAI(s). This policy control request trigger does not require a subscription. | | | SliceAwareANDSP | |
| FEAT\_RENEG | | The target AMF determines feature re-negotiation is required. This policy control request trigger does not require subscription. | | | FeatureRenegotiation | |
| URSP\_ENF\_INFO | | The V-PCF has received URSP rule enforcement information for one or more URSP rules. This trigger only applies in roaming scenarios and to the V-PCF.  (NOTE) | | | URSPEnforcement | |
| LBO\_INFO\_CH | | LBO information change: The AMF reports LBO roaming allowed or not allowed for the requested DNN(s) and S-NSSAI(s). This policy control request trigger only applies in roaming scenarios when the NF service consumer is the AMF.  (NOTE) | | | VPLMNSpecificURSP | |
| ACCESS\_TYPE\_CH | | Access Type change: The registered access type and RAT type has changed, an access type and RAT type is added or removed.  (NOTE) | | | AccessChange | |
| NOTE: The report of this trigger includes reporting the current value at the time the trigger is provisioned during the update or update notification of the policy association. | | | | | | |

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