**3GPP TSG-CT WG3 Meeting #118e C3-215390**

**E-Meeting, 11th – 15th October 2021 (Revision of C3-215142)**

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| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **29.522** | **CR** | **0415** | **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)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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|  |
| ***Title:***  | Update AM Policy Authorization service description and API definition |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | TEI17\_DCAMP |  | ***Date:*** | 2021-09-28 |
|  |  |  |  |  |
| ***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 canbe 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:*** | SA2 WI TEI17\_DCAMP now is under maintenance status, SA2 LS reply(S2-2106963) refer to TS 23.503 clause 6.1.2.6.1 definition on the related input parameters, TS 23.502 clause 5.2.6.22 also updated input parameters. And geographical area has been described as e.g. a civic address or shapes.Hence need to implement the related updates in this specification. Upon Q3 in C3-214425 may have impacts to application Id and traffic filter parmeters, so need to update the procedure editor’s notes |
|  |  |
| ***Summary of change:*** | Remove stage 2 impact editor’s note, update data type AppAmContextExpData and AppAmContextExpUpdateData and add new data type GeographicalArea with attributes according to SA2 specificiaitons.Update the input parameter editor’s note and removed other ones. |
|  |  |
| ***Consequences if not approved:*** | Misalignment with stage 2. NEF cannot completely support AF triggered AM Policy Authorization. |
|  |  |
| ***Clauses affected:*** | 5.17.1, 5.17.3.3.2, 5.17.3.3.3, 5.17.3.3.m(new) |
|  |  |
|  | **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 the OpenAPI file. |
|  |  |
| ***This CR's revision history:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

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

5.17.1 Resources

\*\*\* 2nd Change \*\*\*

5.17.3.2 Reused data types

The data types reused by the AMPolicyAuthorization API from other specifications are listed in table 5.17.3.2-1.

**Table 5.17.3.2-1: Re-used Data Types**

|  |  |  |
| --- | --- | --- |
| Data type | Reference | Comments |
| AmEventsNotification | 3GPP TS 29.534 [43] | Describes the notification about the events occurred within an Individual application AM context resource. |
| AmEventsSubscData | 3GPP TS 29.534 [43] | Identifies the AM policy events the application subscribes to.  |
| AmEventsSubscDataRm | 3GPP TS 29.534 [43] | This data type is defined in the same way as the "AmEventsSubscData" data type, but with the OpenAPI "nullable: true" property. |
| AmEventsSubscRespData | 3GPP TS 29.534 [43] | It represents a response to an AM policy events subscription request and contains the created/updated AM Policy Events Subscription resource. It may also include the Notification of the events met at the time of subscription. |
| Gpsi | 3GPP TS 29.571 [8] | Identifies a GPSI. |
| Link | 3GPP TS 29.122 [4] | Identifies a referenced resource. |
| Dnn | 3GPP TS 29.571 [8] | Identifies a DNN. |
| DurationSec | 3GPP TS 29.122 [4] | Indicates the time duration. |
| EthFlowDescription | 3GPP TS 29.514 [7] | Contains the Ethernet data flow information. |
| FlowInfo | 3GPP TS 29.122 [4] | Contains the IP data flow information. |
| GeographicArea | 3GPP TS 29.572 [34] | Identifies the geographical information with shapes. |
| CivicAddress | 3GPP TS 29.572 [34] | Identifies the civic address. |
| Snssai | 3GPP TS 29.571 [8] | Identifies the S-NSSAI. |
| SupportedFeatures | 3GPP TS 29.571 [8] | Used to negotiate the applicability of the optional features defined in table 5.17.4-1. |
| WebsockNotifConfig | 3GPP TS 29.122 [4] | Contains the configuration parameters to set up notification delivery over Websocket protocol. |

\*\*\* 10th Change \*\*\*

##### 5.17.3.3.2 Type: AppAmContextExpData

Table 5.17.3.3.2-1: Definition of type AppAmContextExpData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| self | Link | C | 0..1 | Identifies the individual configuration resource.Shall be present in the HTTP GET response when reading all the configurations for an AF. |  |
| evSubscs | array(AmEventsSubscData) | O | 1..N | Represents the subscription to one or more AM policy events. |  |
| gpsi | Gpsi | M | 1 | Identifies the GPSI. |  |
| afAppIds | array(string) | O | 1..N | Identifies the application(s). (NOTE 2) |  |
| highThruInd | boolean | C | 0..1 | Indicates whether high throughput is desired for the indicated UE traffic. Set to "true" if high throughput is desired; otherwise set to "false". Default value is "false" if omitted. (NOTE 1) |  |
| covReqs | array(GeographicalArea) | C | 1..N | Identifies the allowed geographical areas. (NOTE 1) |  |
| policyDuration | DurationSec | O | 0..1 | Indicates the time duration that the policy shall last. |  |
| trafficFilters | array(FlowInfo) | O | 1..N | Identifies IP packet filters. (NOTE 2) |  |
| ethTrafficFilters | array(EthFlowDescription) | O | 1..N | Identifies Ethernet packet filters. (NOTE 2) |  |
| notificationDestination | Uri | C | 0..1 | Contains the callback URI to receive the notification from the NEF.It shall be present if the "evSubscs" attribute is present. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the negotiated supported features..It shall be supplied by the AF in the POST request that requests a creation of an Individual application AM context resource.It shall be supplied by the NEF in the response to the POST request that requests a creation of an Individual application AM context resource. |  |
| requestTestNotification | boolean | O | 0..1 | Set to true by the AF to request the NEF to send a test notification as defined in subclause 5.2.5.3 of 3GPP TS 29.122 [4]. Set to false or omitted otherwise. | Notification\_test\_event |
| websockNotifConfig | WebsockNotifConfig | O | 0..1 | Configuration parameters to set up notification delivery over Websocket protocol. | Notification\_websocket |
| NOTE 1: Either "highThruInd" attribute or "covReqs" attribute or both shall be included.NOTE 2: One of "afAppIds", "trafficFilters" or "ethTrafficFilters" shall be included. |

Editor's note: Whether may include "afAppIds" attribute, "trafficFilters" attribute or "ethTrafficFilters" attribute or other attribute is FFS.

\*\*\* 11th Change \*\*\*

##### 5.17.3.3.3 Type: AppAmContextExpUpdateData

Table 5.17.3.3.3-1: Definition of type AppAmContextExpUpdateData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| evSubscs | array(AmEventsSubscDataRm) | O | 1..N | Represents the subscription to one or more AM policy events. |  |
| afAppIds | array(string) | O | 1..N | Identifies the application(s). (NOTE) |  |
| highThruInd | boolean | O | 0..1 | Indicates whether high throughput is desired for the indicated UE traffic. Set to "true" if high throughput is desired; otherwise set to "false". Default value is "false" if omitted. |  |
| covReqs | array(GeographicalArea) | O | 1..N | Identifies the allowed geographical areas. |  |
| policyDuration | DurationSec | O | 0..1 | Indicates the time duration that the policy shall last. |  |
| trafficFilters | array(FlowInfo) | O | 1..N | Identifies IP packet filters. (NOTE) |  |
| ethTrafficFilters | array(EthFlowDescription) | O | 1..N | Identifies Ethernet packet filters. (NOTE) |  |
| notificationDestination | Uri | C | 0..1 | Contains the callback URI to receive the notification from the NEF.It shall be present if the "evSubscs" attribute is present. |  |
| NOTE: One of "afAppIds", "trafficFilters" or "ethTrafficFilters" may be included. |

Editor's note: Whether may include "afAppIds" attribute, "trafficFilters" attribute or "ethTrafficFilters" attribute or other attribute is FFS.

\*\*\* 12th Change \*\*\*

##### 5.17.3.3.m(new) Type: GeographicalArea

Table 5.17.3.3.m-1: Definition of type GeographicalArea

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| civicAddress | CivicAddress | C | 0..1 | Identifies a civic address. |  |
| shapes | GeographicArea | C | 0..1 | Identifies a geographic area specified by different shapes. |  |
| NOTE: One of "civicAddress" attribute or "shapes" attribute shall be included. |

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