**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 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:*** | | 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 \*\*\*