**3GPP TSG-CT WG1 Meeting #127-eC1-207290**

**Electronic meeting, 13-20 November 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.544** | **CR** | **0012** | **rev** | **-** | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Updates to configure VAL group request | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SEAL | | | | |  | ***Date:*** | | | 2020-11-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | As per clause 10.3.2.26 of TS 23.434 – Geo ID List and Identitfy List subscription is missed in CT1 specification.  Table 10.3.2.26-1: Configure VAL group request   |  |  |  | | --- | --- | --- | | Information element | Status | Description | | Requester Identity | M | The identity of the VAL server performing the request. | | VAL group ID | M | The group ID used for the VAL group. | | VAL group description | M | Information related to the VAL group e.g. group definition including policy, group size, group leader. | | VAL service ID list (see NOTE) | O | List of VAL services whose service communications are to be enabled on the group. | | Geo ID list (see NOTE) | O | List of geographical areas to be addressed by the group. | | Identity list (see NOTE) | O | List of VAL UE IDs who are invited to be member of the group. | | Identity list subscription | O | Indicates interest to receive notifications of newly registered VAL UE IDs. | | NOTE: At least one of these IEs shall be present. | | | | | | | | | | | |
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| ***Summary of change:*** | | Added Geo ID List and identity list subscription | | | | | | | | |
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| ***Consequences if not approved:*** | | Stage#3 specification will not be aligned to stage#2 specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2.2.1, 7.3, 7.4.2, 7.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** | |  | | | | | | | | |

#### 6.2.2.1 Client procedure

Upon receiving a request from the VAL user to create a group document, the SGM-C shall create an XML document as specified in clause 7 and shall send the XML document to the SGM-S according to procedures specified in IETF RFC 4825 [3] "*Create or Replace a Document*". In the HTTP PUT request, the SGM-C:

a) shall set the Request URI to a XCAP URI identifying an XML document to be created. In the Request-URI:

1) the "XCAP Root" is set to the URI of the SGM-S;

2) the "auid" is set to specific VAL service identity; and

3) the document selector is set to a document URI pointing to a group document addressed by a group ID;

b) shall include an Authorization header field with the "Bearer" authentication scheme set to an access token of the "bearer" token type as specified in IETF RFC 6750 [6];

c) shall include a Content-Type header field set to "application/vnd.3gpp.seal-group-doc+xml"; and

d) shall include an application/vnd.3gpp.seal-group-doc+xml MIME body and in the <seal-group-doc> root element:

1) shall set "uri" attribute to the VAL group identity to be created;

2) may include <display-name> element containing a human readable name of the VAL group;

3) if the VAL user has requested to include administrator users, shall include <administrators> element of a <list-service> element with list of administrator users.

4) if the list of users available who are required to give user consent to be member for the group, shall include such list of users into the <explicit-member-list> element of a <list-service> element;

5) if the list of users available who are members of the group, shall include such list of users into the <list> element of a <list-service> element;

6) shall include <common> element of a <list-service> element. The <common> element:

i) may include <seal-subject> element indicating the title or description for the group;

ii) shall include <category> element indicating the category of the group;

iii) shall include one ore more <val-service-id> element(s) indicating list of supported services by the group; and

iv) if the request is to configure VAL group request, shall include one or more <geo-id> element(s), each element indicating list of geographical areas to be addressed by the group; and

7) shall include <val-specific-config> element of a <list-service>. The <val-specific-config> element:

i) may include <group-priority> element to the priority as specified by VAL user.

Upon receiving an HTTP 200 (OK), the SGM-C shall notify the VAL user about successful group registration. Based on VAL user’s request, if group events subscription is not already created, then the SGM-C shall create the group events subscription as specified in clause 6.2.8.1.1 for the event SUBSCRIBE\_GROUP\_MODIFICATION (0x02) as defined in clause A.1.2. If group events subscription already exists then the SGM-C shall modify the subscription as specified in the clause 6.2.8.1.2.

## 7.3 Data structure

The <list-service> element:

a) shall include an "uri" attribute representing the VAL group identity;

b) may include a <display-name> element containing a human readable name of the VAL group;

c) shall include a <common> element. The <common> element:

1) may include a <seal-subject> element indicating group description;

2) shall include a <category> element indicating category of the group;

3) shall include one ore more <val-service-id> element(s) indicating list of services supported by the group; and

4) may include one or more <geo-id> element(s) indicating list of geographical areas to be addressed by the group.

d) may include a <administrators> element containing list of group members who are administrator for the group;

e) may include a <explicit-members-list> element containing list of users who explicitly needs to register to join the group;

f) may include a <list> element containing list of members who are implicitly registered to join the group; and

g) shall include <val-specific-config> element. The <val-specific-config> element:

1) may include <group-priority> element.

### 7.4.2 XML schema for SEAL group document specific extension

<?xml version="1.0" encoding="UTF-8"?>

<xs:schema

xmlns="urn:3gpp:ns:seal:GroupInfo:1.0"

targetNamespace="urn:3gpp:ns:seal:GroupInfo:1.0"

xmlns:xs="http://www.w3.org/2001/XMLSchema"

xmlns:ls="urn:oma:xml:poc:list-service"

xmlns:sealgi="urn:3gpp:ns:seal:GroupInfo:1.0"

elementFormDefault="qualified"

attributeFormDefault="unqualified">

<xs:import namespace="urn:oma:xml:xdm:extensions"/>

<xs:import namespace="urn:ietf:params:xml:ns:resource-lists"/>

<!-- SEAL specific "list-service" child elements -->

<xs:element name="common" type="sealgi:common-type"/>

<xs:element name="administrators" type="ls:list-type" minOccurs="0"/>

<xs:element name="explicit-member-list" type="ls:list-type" minOccurs="0"/>

<xs:element name="val-specific-config" type="sealgi:valSpecificConfigType"/>

<xs:complexType name="common-type">

<xs:sequence>

<xs:element name="seal-subject" type="sealgi:subjectType" minOccurs="0"/>

<xs:element name="category" type="sealgi:groupCategoryType"/>

<xs:element name="val-services" type="sealgi:valServiceListType"/>

<xs:element name="geo-id" type="xs:string" minOccurs="0" maxOccurs=="unbounded"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:any namespace="##other" processContents="lax" minOccurs="0"/>

</xs:complexType>

<xs:complexType name="valSpecificConfigType">

<xs:sequence>

<xs:element name="group-priority" type="sealgi:priorityType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:any namespace="##other" processContents="lax" minOccurs="0"/>

</xs:complexType>

<xs:simpleType name="subjectType">

<xs:restriction base="xs:string">

<xs:minLength value="0"/>

<xs:maxLength value="255"/>

</xs:restriction>

</xs:simpleType>

<xs:simpleType name="groupCategoryType">

<xs:restriction base="xs:string">

<xs:enumeration value="normal"/>

<xs:enumeration value="location-based"/>

<xs:enumeration value="regroup"/>

</xs:restriction>

</xs:simpleType>

<xs:complexType name="valServiceListType">

<xs:sequence minOccurs="0" maxOccurs="unbounded">

<xs:element name="val-service-id" type="sealgi:serviceNameType" minOccurs="0" maxOccurs=="unbounded"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0"/>

</xs:sequence>

</xs:complexType>

<xs:simpleType name="priorityType">

<xs:restriction base="xs:unsignedShort">

<xs:minInclusive value="0"/>

<xs:maxInclusive value="255"/>

</xs:restriction>

</xs:simpleType>

<xs:complexType name="serviceNameType">

<xs:sequence>

<xs:element name="serviceType" minOccurs="0" maxOccurs="unbounded" type="Services"/>

</xs:sequence>

<xs:unique name="uniqueserviceType">

<xs:selector xpath="serviceType"/>

<xs:field xpath="."/>

</xs:unique>

</xs:complexType>

<xs:simpleType name="Services">

<xs:restriction base="xs:string">

<xs:enumeration value="V2X"/>

<xs:enumeration value="Others"/>

</xs:restriction>

</xs:simpleType>

</xs:schema>

## 7.5 Semantics

The <display-name> element of <list-service> element contains a human readable name of the VAL group.

The value of the “uri” attribute in the <list-service> element shall represent a VAL group identity.

The <administrators> element of a <list-service> element shall contain the group members who are administrator of the group and have special authorities as defined by VAL service to manage the group. The administrator user do not require explicit registration to join the group.

The <explicit-member-list> element of a <list-service> element shall contain the group members who are not administrator of the group and require explicit registration to join the group.

The <list> element of a <list-service> element shall contain the group members who are not administrator of the group and also do not require explicit registration to join the group.

The <seal-subject> child element of a <common> element of a <list-service> element shall indicate the title or description for the Group. The length of the value of the <seal-subject> element should not exceed 255 characters.

The <category> child element of a <common> element of a <list-service> element shall indicate the category of the group. The possible values for this element are "normal", "location-based" and "regroup".

The <val-services> child element of a <common> element of a <list-service> element shall indicate list of services supported by the group.

The <geo-id-list> child element of a <common> element of a <list-service> element shall indicate list of geographical areas to be addressed by the group.

The <group-priority> child element of a <val-specific-config> element of a <list-service> element contains a positive number which provides VAL group priority among different VAL groups within VAL service. More than one VAL group can have same priority.

The VAL service may further extend the <val-specific-config> element of a <list-service> element to include VAL service specific configuration.