**3GPP TSG-SA WG6 Meeting #39 BIS-e S6-201935**

**e-meeting, 12th – 20th October 2020 (revision of S6-201867)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.434** | **CR** | **0029** | **rev** | **1** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Clarification on group join notification | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SEAL | | | | |  | ***Date:*** | | | 2020-09-23 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In the procedures described in clause 10.3.8.2 and 10.3.9.2, the identity list notification is expected to be sent only to the entities whose subscription to receive notifications of newly registered VAL UE IDs is successful during subscription, and not to all the members of the group. However the current Stage-3 implementation of these procedures is to send notifications to all the members of the group, which is incorrect. Hence, explicit clarification is necessary to the identity list notification step explaining the entities that should be the target of receive the notification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Proposal is to add clarification in clauses 10.3.8.2 and 10.3.9.2 explaining the entities that the identity list notification is sent only to the entities whose subscription to receive notifications of newly registered VAL UE IDs is successful. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incorrect implementation of the corresponding procedures in stage-3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.3.2.26, 10.3.2.27, 10.3.2.29, 10.3.2.30, 10.3.8.2, 10.3.9.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** | |  | | | | | | | | |

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 1\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 10.3.2.26 Configure VAL group request

Table 10.3.2.26-1 describes the information flow for configure VAL group request from a VAL server to a group management server.

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 or de-registered VAL UE IDs. |
| NOTE: At least one of these IEs shall be present. | | |

#### 10.3.2.27 Configure VAL group response

Table 10.3.2.27-1 describes the information flow for configure VAL group response from group management server to a VAL server.

Table 10.3.2.27-1: Configure VAL group response

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| Result | M | The result of the configure VAL group operation |
| Subscription result | O (NOTE) | Indicates whether subscription to receive notifications of newly registered or de-registered VAL UE IDs is successful or not |
| NOTE: Shall be present only if there is a subscription in the configure VAL group request and successful. | | |

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 10.3.2.29 Group registration request

Table 10.3.2.29-1 describes the information flow for a group management client to register to a VAL group in response to a group announcement from the group management server.

Table 10.3.2.29-1: Group registration request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| VAL UE ID | M | Identity of the VAL UE registering to the VAL group. |
| VAL Group ID | M | The group ID to be registered by the VAL UE for the VAL group. |
| Identity list subscription | M | Indicates interest to receive notifications of newly registered or de-registered VAL UE IDs |

#### 10.3.2.30 Group registration response

Table 10.3.2.30-1 describes the information flow for a group management server to respond for a group registration request from the group management client.

Table 10.3.2.30-1: Group registration response

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| Result | M | Result from the VAL server in response to VAL group registration request indicating success or failure |
| Subscription result | M | Indicates whether subscription to receive notifications of newly registered or de-registered VAL UE IDs is successful or not |

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 10.3.8.2 Procedure

Pre-conditions:

1. The group management client, group management server, VAL server and the VAL clients belong to the same VAL system.

2. The VAL server is aware of the users' identities and is authorized to form a VAL group.



Figure 10.3.8.2-1: Procedure for establishing VAL group communication between the group management server and group management client1.

1. The VAL server determines group information and the identity list to which the group announcement shall be sent. The decision can be based on the list of authorized UEs and other criteria (e.g. user consent, service, or vehicle driving profile).

2. The VAL server configures VAL group for Uu communication defined by VAL Group ID for one or more VAL services with list of VAL Service ID with the group management server.

3. The group management server creates an empty group based on the information provided in the Configure VAL group request.

4. The group management server announces the VAL group to the group management clients.

5. The group management client registers to VAL group communication using the VAL Group ID.

6. The group management server records the users who have registered to be the members of the group.

7. The group management server sends a VAL group registration response to the group management client.

8. The group management server sends a configure VAL group response to the VAL server.

NOTE: Step 8 may occur anytime after Step 4.

9. The group management server sends identity list notification about the newly registered users to the other members of the group and VAL server, whose subscription to receive notifications of newly registered VAL UE IDs is successful in Step-7 and Step-8 respectively.

10. The group management client may inform VAL client about the updated identity list.

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 10.3.9.2 Procedure

Pre-conditions:

1. Group is previously defined on the group management server including the list of registered users and each member of the group and VAL server is aware of it.



Figure 10.3.9.2-1: Procedure for group member leaving the group.

1. The VAL client determines to de-register member from the group and group management client is aware of it.

2. The group management client initiates the group de-registration request towards the group management server.

3. The group management server checks the authorization of group de-registration request and updates the group member list.

4. The group management server sends a group de-registration response to the group management client.

5. The group management server sends identity list notification about the leaving registered user to the other members of the group and the VAL server, whose subscription to receive notifications of de-registered VAL UE IDs is successful in step 7 and step 8 of the procedure in clause 10.3.8.2 respectively.

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