**3GPP TSG-SA WG6 Meeting #42-bis-e S6-211066**

**e-meeting, 12th – 20th April 2021 (revision of S6-210861)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.434** | **CR** | **0055** | **rev** | **1** | **Current version:** | **17.1.0** |  |
|  | | | | | | | | |
| *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:*** | Group management enhancements | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eSEAL | | | | |  | ***Date:*** | | | 2021-04-05 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | The solution#4 of TR 23.700-24 provides group enhancements to management service :  1) to control notification rate  - UE may be constrained UE and may need to limit the number of transmission and reception of the messages.  2) to control group communication messages  - To add minimum interval between two consecutive notifications  - The UE may not want to receive all group communication messages in which it is member. So, the solution allows to filter group communication messages based on different criteria  Further, it has been concluded to use solution#4 as baseline solution for technical specification:  …  *10) The solution 4 addressing the Group Management aspects will be used as the baseline solution for technical specification with necessary enhancements.* | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1) Added “Minimum time between consecutive notifications” in subscription request  2) Added “Message filters” in group registration request  3) Added “Message filters list” in identify list notification towards VAL server. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Notifications and Group communication messages cannot be controlled for constrained devices. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.3.2.22, 10.3.2.29, 10.3.2.31 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\* \* \* First Change \* \* \* \*

#### 10.3.2.22 Subscribe group configuration request

Table 10.3.2.22-1 describes the information flow subscribe group configuration request from the group management client to the group management server.

Table 10.3.2.22-1: Subscribe group configuration request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| Requester Identity | M | The identity of the group management client performing the request. |
| VAL group ID | M | VAL group ID of the group |
| VAL services requested  (see NOTE) | O | Service(s) for which group configuration is requested |
| Minimum time between consecutive notifications | O | Defaults to 0 if not provided, otherwise indicates the minimum time interval between consecutive notifications |
| NOTE: If 'VAL services requested' is not present, group configuration is requested for all services defined for the VAL group | | |

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

#### 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. Message filters for throttling messages and notifications is included in this request e.g. for limiting message exchange on a constrained UE, for receiving only improtant group communication.

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 |
| Message filters | O | Group message communication will be sent to the VAL UE after applying message filters as described in Table 10.3.2.29-2. |

Table 10.3.2.29-2: Message filters

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| *Identities* | *O* | *List of VAL UE identities whose messages will be send to the VAL UE being registered* |
| *Max number of messages (NOTE 1)* | *O* | *Total number of messages allowed to be sent to the VAL UE in a given time frame as defiend by the VAL service.* |
| *Time frame* | *O* | *Time frame associated to Max number of messages IE* |
| *Message Types (NOTE 2)* | *O* | *List of message types which will be sent to the VAL UE being registered (e.g. high priority messages, or group configuration messages, etc.).* |
| *NOTE 1: Specifying value for max number of messages is outside the scope of SEAL and up to the implementation of a particular Vertical requirement.*  *NOTE 2: Message types are as decided by the specific Vertical.* | | |

Editor's note: Handling of updates to the “message filters” over the life of the group communication is FFS.

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

#### 10.3.2.31 Identity list notification

Table 10.3.2.31-1 describes the information flow identity list notification from the group management server to the group management client.

Table 10.3.2.31-1: Identity list notification

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| VAL group ID | M | Identity of the VAL group |
| Identity list | M | List of VAL UE IDs who are newly registered or de-registered members of the group |

Table 10.3.2.31-2 describes the information flow identity list notification from the group management server to the VAL server.

Table 10.3.2.31-2: Identity list notification

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| VAL group ID | M | Identity of the VAL group |
| Identity list | M | List of VAL UE IDs who are newly registered or de-registered members of the group |
| Message filters list | O | List of Message filters per VAL UE ID who are newly registered. |

\* \* \* End Change \* \* \* \*