**3GPP TSG-CT WG3 Meeting #127-e *C3-231254\_R1***

**E-Meeting, 17th April – 21st April 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **29.549** | **CR** | **0151** | **rev** | **-** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Correction of the error handling in the SS\_GroupManagement API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI18 | | | | |  | ***Date:*** | | | 2023-04-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The clauses 5.3.1.2.2.2, 5.3.1.2.3.2, and 5.3.1.2.5.2 specify the procedures for the Group Management in the SEAL layer. However, the error handling is not defined in the indicated clauses.  Thus, the error handling shall be defined in the SEAL Group Management. | | | | | | | | |
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| ***Summary of change:*** | | This CR introduces the corrections in the error handling for the following service operations:   * Query\_Group\_Info; * Update\_Group\_Info; and * Delete\_Group.   Minor editorial corrections are also implemented. | | | | | | | | |
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| ***Consequences if not approved:*** | | * Absence of the error handling in the SEAL Group Management. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.3.1.2.2.2, 5.3.1.2.3.2, 5.3.1.2.5.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact any OpenAPI file. | | | | | | | | |
| ***()*** | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

###### 5.3.1.2.2.2 VAL server fetching VAL group documents, group membership and configuration information using Query\_Group\_Info service operation

To obtain membership, configuration information of a VAL group, the VAL server shall send a HTTP GET message to the group management server, on VAL group document's resource representation URI as specified in clause 7.2.1.2.3.3.1. The GET message may include the following query parameters: membership list, group configuration. To obtain VAL groups information, the VAL server shall send a HTTP GET message to the group management server, on VAL group documents collection resource representation URI as specified in clause 7.2.1.2.2.3.2. The GET message may include the following query parameters: VAL Group ID, VAL Service ID.

Upon receiving the HTTP GET message as described above, the group management server shall:

1. verify the identity of the VAL server and check if the VAL server is authorized to fetch the VAL group information;

2. if the VAL server is authorized to obtain the group information, the group management server shall;

a. if the request to VAL group document's resource representation URI includes query parameters, then, return in the response message with VAL group information which includes, group membership list information if the request includes membership list query, group configuration information if the request includes group configuration query and VAL group identifier;

b. if the request to VAL group document's resource representation URI does not include query parameter, then, return the VAL group document resource in the response message;

c. in the request to VAL group documents collection resource representation URI, return the VAL group documents matching the query parameters in the response message;

and

3. if the group management server is unable to satisfy the request, the group management server shall respond to the VAL server with an appropriate error status code as specified in clause 7.2.1.5.

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

###### 5.3.1.2.3.2 VAL server modifying group membership and configuration using Update\_Group\_Info service operation

To modify group information of a VAL group, the VAL server shall send HTTP PUT message to the group management server to the Resource URI identifying the VAL group document resource representation, as specified in the clause 7.2.1.2.3.3.2. This request shall not replace valGroupId property in the existing resource. If the "PatchUpdate" feature defined in clause 7.2.1.6 is supported, then the VAL server may send an HTTP PATCH request message to the Individual VAL Group Document resource URI as specified in clause 7.2.1.2.3.3.4, to partially update the VAL group document. The body of the HTTP PATCH request message shall include the requested modifications as specified in clause 7.2.1.2.3.3.4. Upon receiving the HTTP PUT message, the group management server shall:

1. verify the identity of the VAL server and check if the VAL server is authorized to modify VAL group information;

2. for the HTTP PUT request message, verify that valGroupId in the request is same as valGroupId of the VAL group document resource;

3. if the VAL server is authorized to modify/update the group information and the valGroupId matches, then the group management server shall;

a. if the group configuration information in the request is valid, update/modify the resource identified by the Resource URI of the group document with group members list, group configuration information, description, VAL service identifiers, external group identifier and location information received in the request;

b. if the group document information in the request includes 5G LAN-Type communication, invoke the 5GLANParameterProvision API towards the NEF via an HTTP PUT/PATCH message as defined in clause 4.4.15.3 of 3GPP TS 29.522 [28];

c. return a 200 OK status code with the updated VAL group document in the response or a 204 No Content status code;

and

4. if the group management server is unable to satisfy the request, the group management server shall respond to the VAL server with an appropriate error status code as specified in clause 7.2.1.5.

NOTE: The group management server maintains a mapping between DNN and S-NSSAI of the 5GVN group and the VAL server requester identity based on operator policy. How such mapping is configured is implementation specific and out of the scope of this specification.

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

###### 5.3.1.2.5.2 VAL server deleting VAL group using Delete\_Group service operation

To delete a VAL group, the VAL server shall send a HTTP DELETE message to the Group Management server to its resource representation in the Group Management server as specified in clause 7.2.1.2.3.3.3. Upon receiving HTTP DELETE message, the Group Management server shall:

1. verify the identity of the VAL server and check if the VAL server is authorized to delete the VAL group document;

2. if the VAL server is authorized to delete the VAL group document, the Group Management server shall:

a. if the group communication type is 5GLAN communication, invoke the 5GLANParameterProvision API towards the NEF via an HTTP DELETE message as defined in clause 4.4.15.4 of 3GPP TS 29.522 [28];

b. delete the resource representation pointed by the group document resource identifier;

and

3. if the group management server is unable to satisfy the request, the group management server shall respond to the VAL server with an appropriate error status code as specified in clause 7.2.1.5.

\* \* \* End of changes \* \* \* \*