**3GPP TSG-SA WG6 Meeting #42-e S6-210532**

**e-meeting, 1st – 9th March 2021 (revision of S6-21xxxx)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.434** | **CR** | **0042** | **rev** | **-** | **Current version:** | **17.0.0** |  |
|  | | | | | | | | |
| *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 to LMS server APIs | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Hisilicon | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eSEAL, eV2XAPP | | | | |  | ***Date:*** | | | 2021-02-23 |
|  |  | | | |  | |  | | |  |
| ***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 information elements for the procedure specified in clause 9.3.10is to be specified. Also the API definition for this procedure is required to be added. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Added the information flows and the API definition | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Stage 3 may not be able to progress. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **N** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **N** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **N** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 9.3.2.x Get UE(s) information request

Table 9.3.2.x-1 describes the information flow for a VAL server to get UE(s) information at the LM server.

Table 9.3.2.x-1: Get UE(s) information request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| Location information | M | Location information around which the UE(s) information is requested. |
| Application defined proximity range information | M | Description of the range information over which the UE(s) information is required. |

#### 9.3.2.y Get UE(s) information response

Table 9.3.2.y-1 describes the information flow for a LM server to respond with UE(s) information to the VAL server.

Table 9.3.2.y-1: Get UE(s) information response

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| Result | M | Result from the VAE server in response to subscription request indicating success or failure |
| List of UEs information (NOTE) | O | The information of the UEs which were detected in the application defined proximity range. The list can be empty. |
| >UE ID | M | The identifier of UE |
| >Location information | M | Location information of UE within the application defined proximity range |
| NOTE: This IE shall be included when the Result indicates success. | | |

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

### 9.4.1 General

Table 9.4.1-1 illustrates the SEAL APIs for location management.

Table 9.4.1-1: List of SEAL APIs for location management

|  |  |  |  |
| --- | --- | --- | --- |
| API Name | API Operations | Known Consumer(s) | Communication Type |
| SS\_LocationReporting | Create\_Trigger\_Location\_Reporting  Update\_Trigger\_Location\_Reporting  Cancel\_Trigger\_Location\_Reporting | VAL server | Request /Response |
| SS\_LocationInfoEvent | Subscribe\_Location\_Info | VAL server | Subscribe/Notify |
| Notifiy\_Location\_Info | VAL server |
| SS\_LocationInfoRetrieval | Obtain\_Location\_Info | VAL server | Request /Response |
| SS\_LocationAreaInfoRetrieval | Obtain\_UEs\_Info | VAL server | Request/Response |

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

### 9.4.x SS\_LocationAreaInfoRetrieval API

#### 9.4.x.1 General

**API description:** This API enables the VAL server to obtain UE(s) information in an application defined proximity range of a location from the location management server over LM-S.

#### 9.4.x.2 Obtain\_UEs\_Info operation

**API operation name:** Obtain\_UEs\_Info

**Description:** Request UEs information in an application defined proximity range of a location.

**Known Consumers:** VAL server.

**Inputs:** Refer subclause 9.3.2.x

**Outputs:** Refer subclause 9.3.2.y

See subclause 9.3.10 for the details of usage of this API operation.

Editor's note: The related security and privacy aspects are to be addressed by SA3.