**3GPP TSG- WG3 Meeting #30 *4419\_r1***

**Xiamen, China, 9 - 13 October, 2023**  *(revision of C3-234419)*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **49** | **CR** | **184** | **rev** | **-** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | VAL service area feature name update | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SEAL\_Ph3 | | | | |  | ***Date:*** | | | 2023-09-29 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | During previous meetings it was agreed to remove “SEAL3” from the feature name. The same has to be removed from SEAL3\_ValSrvArea feature name. The definition and name of VAL sevice area feature name is not consistent. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Replace SEAL3\_ValSrvArea with ValSrvArea and update the feature description to keep it consistent. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Inconsistent feature name convention and description. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.1.1.4.1, 7.1.1.4.2.2, 7.1.1.4.2.3, 7.1.1.6, 7.2.1.4.2.2, 7.2.1.4.2.3, 7.2.1.6, 7.5.1.4.2.14, 7.5.1.4.2.18, 7.5.1.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 Open API file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

##### 7.1.1.4.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 6.2 apply to this API.

Table 7.1.1.4.1-1 specifies the data types defined specifically for the SS\_LocationReporting API service.

Table 7.1.1.4.1-1: SS\_LocationReporting API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| LocationReportConfiguration | 7.1.1.4.2.2 | Represents the location reporting configuration information. |  |
| LocationReportConfigurationPatch | 7.1.1.4.2.3 | Represents the requested modifications to the location reporting configuration information.  Used to partially update Individual SEAL Location Reporting Configuration resource. | PatchUpdate |
| ValServAreaTriggCriteria | 7.1.1.4.2.4 | Represents the location reporting triggering criteria for the given VAL service area ID. | ValSrvArea |

Table 7.1.1.4.1-2 specifies data types re-used by the SS\_LocationReporting API service.

Table 7.1.1.4.1-2: SS\_LocationReporting API Re-used Data Types

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Data type | | Reference | | Comments | | Applicability | |
| Accuracy | | 3GPP TS 29.122 [3] | | Used to represent the desired level of accuracy of the requested location information. | |  | |
| DateTime | | 3GPP TS 29.571 [21] | | Used to represent the subscription duration. | |  | |
| DurationSec | | 3GPP TS 29.571 [21] | | Used to represent the time interval between successive location reports. | |  | |
| SupportedFeatures | | 3GPP TS 29.571 [21] | | Used to negotiate the applicability of optional features defined in table 7.1.1.6-1. | |  | |
| ValTargetUe | | Clause 7.3.1.4.2.3 | | Used to indicate either VAL User ID or VAL UE ID, to which location reporting applies. | |  | |

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

###### 7.1.1.4.2.2 Type: LocationReportConfiguration

Table 7.1.1.4.2.2-1: Definition of type LocationReportConfiguration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| valServerId | string | M | 1 | Represents the VAL server identifier. |  |
| valTgtUe | ValTargetUe | M | 1 | Represents the VAL User ID or VAL UE ID to which the location reporting applies. |  |
| immRep | boolean | O | 0..1 | Indication of immediate reporting. If included, when it is set to true it indicates immediate reporting of the subscribed events, if available. Otherwise, reporting will occur when the event is met. |  |
| monDur | DateTime | O | 0..1 | Represents the time at which the subscription ceases to exist (i.e the reporting trigger becomes invalid). If omitted, there is no time limit. |  |
| repPeriod | DurationSec | O | 0..1 | Indicates the time interval between successive location reports. |  |
| accuracy | Accuracy | O | 0..1 | Represents the desired level of accuracy of the requested location information. |  |
| valSrvAreaTrig | ValServAreaTriggCriteria | O | 0..1 | Represents the location report triggering criteria based on the VAL service area information. | ValSrvArea |
| suppFeat | SupportedFeatures | O | 0..1 | Used to negotiate the supported features of the API as defined in clause 7.1.1.6.  This attribute shall be provided in the HTTP POST request and in the response of successful resource creation. |  |

Ediror's Note: The definition and encoding of the "valSrvAreaTrig" attribute is FFS and pending feedback from stage 2.

Ediror's Note: The applicability and presence conditions of the "repPeriod" and "accuracy" attributes when the "valSrvAreaTrig" attribute is present is FFS and pending feedback from stage 2.

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

###### 7.1.1.4.2.3 Type: LocationReportConfigurationPatch

Table 7.1.1.4.2.3-1: Definition of type LocationReportConfigurationPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| valTgtUe | ValTargetUe | O | 1 | Represents the VAL User ID or VAL UE ID to which the location reporting applies. |  |
| monDur | DateTime | O | 0..1 | Represents the time at which the subscription ceases to exist (i.e the reporting trigger becomes invalid). If omitted, there is no time limit. |  |
| repPeriod | DurationSec | O | 0..1 | Indicates the time interval between successive location reports. |  |
| accuracy | Accuracy | O | 0..1 | Represents the desired level of accuracy of the requested location information. |  |
| valSrvAreaTrig | ValServAreaTriggCriteria | O | 0..1 | Represents the location report triggering criteria based on the VAL service area information. | ValSrvArea |

Editor's Note: The definition and encoding of the "valSrvAreaTrig" attribute is FFS and pending feedback from stage 2.

Editor's Note: The applicability and presence conditions of the "repPeriod" and "accuracy" attributes when the "valSrvAreaTrig" attribute is present is FFS and pending feedback from stage 2.

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

#### 7.1.1.6 Feature negotiation

General feature negotiation procedures are defined in clause 6.8.

Table 7.1.1.6-1: Supported Features

|  |  |  |
| --- | --- | --- |
| **Feature number** | **Feature Name** | **Description** |
| 1 | PatchUpdate | Indicates the support of the PATCH method for updating an Individual SEAL Location Reporting Configuration resource. |
| 2 | ValSrvArea | This feature indicates the support of VAL service area ID functionality as part of phase-3 of the enhancements to the SEAL framework.  The following functionalities are supported:  - Support the usage of the VAL service area identifier to identify a VAL service area. |

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

###### 7.2.1.4.2.2 Type: VALGroupDocument

Table 7.2.1.4.2.2-1: Definition of type VALGroupDocument

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| valGroupId | string | M | 1 | This is VAL group identity (VAL group ID) as per TS 23.434 [2], which is a unique identifier within the VAL service that represents a VAL group, set of VAL users or VAL UEs according to the VAL service. |  |
| grpDesc | string | O | 0..1 | Text description of the VAL group. |  |
| members | array(ValTargetUe) | O | 1..N | List of VAL User IDs or VAL UE IDs, which are members of the VAL group. |  |
| valGrpConf | string | O | 0..1 | Configuration data for the VAL group.  Shall be present in HTTP POST request message from VAL server to Group Management server. |  |
| valServiceIds | array(string) | O | 1..N | List of VAL services whose communications enabled on the group. |  |
| suppFeat | SupportedFeatures | O | 0..1 | Used to negotiate the supported optional features of the API as described in clause 6.8.  This attribute shall be provided in the HTTP POST request and in the response of successful resource creation. |  |
| resUri | Uri | O | 0..1 | The URI for individual VAL group document resource. (NOTE 1) |  |
| locInfo | LocationInfo | O | 0..1 | The location information related to the VAL group. This information is used to determine the members of the group. |  |
| addLocInfo | LocationArea5G | O | 0..1 | The additional location information related to the VAL group. This information is used to determing the members of the group. |  |
| valSvcAreaId | string | O | 0..1 | Identifier of the VAL service area. | ValSrvArea |
| extGrpId | ExternalGroupId | O | 0..1 | The external group identifier, identifying the member UEs of the VAL group at the 3GPP core network. |  |
| com5GLanType | PduSessionType | O | 0..1 | Identifies the 5G LAN-Type communication. (NOTE 2) |  |
| valSvcInf | string | O | 0..1 | VAL service specific information that may be present during group membership update and in the notification of the events "GM\_GROUP\_INFO\_CHANGE" and "GM\_GROUP\_CREATE". |  |
| NOTE 1: The "resUri" attribute is not modifiable by the VAL server.  NOTE 2: The enumeration value "UNSTRUCTURED" in data type "PduSessionType" is not applicable. | | | | | |

Editor's note: The cardinality and the presence condition of the "valSvcAreaId" attribute is FFS and to be aligned based on stage-2 requirements.

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

###### 7.2.1.4.2.3 Type: VALGroupDocumentPatch

Table 7.2.1.4.2.3-1: Definition of type VALGroupDocumentPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| grpDesc | string | O | 0..1 | Text description of the VAL group. |  |
| members | array(ValTargetUe) | O | 1..N | List of VAL User IDs or VAL UE IDs, which are members of the VAL group. |  |
| valGrpConf | string | O | 0..1 | Configuration data for the VAL group. |  |
| valServiceIds | array(string) | O | 1..N | List of VAL services whose communications enabled on the group. |  |
| locInfo | LocationInfo | O | 0..1 | The location information related to the VAL group. This information is used to determine the members of the group. |  |
| addLocInfo | LocationArea5G | O | 0..1 | The additional location information related to the VAL group. This information is used to determining the members of the group. |  |
| valSvcAreaId | string | O | 0..1 | Identifier of the VAL service area. | ValSrvArea |
| extGrpId | ExternalGroupId | O | 0..1 | The external group identifier, identifying the member UEs of the VAL group at the 3GPP core network. |  |
| com5GLanType | PduSessionType | O | 0..1 | Identifies the 5G LAN-Type communication. (NOTE 1) |  |
| NOTE 1: The enumeration value "UNSTRUCTURED" in data type "PduSessionType" is not applicable. | | | | | |

Editor's note: The cardinality and the presence condition of the "valSvcAreaId" attribute is FFS and to be aligned based on stage-2 requirements.

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

#### 7.2.1.6 Feature negotiation

General feature negotiation procedures are defined in clause 6.8.

Table 7.2.1.6-1: Supported Features

|  |  |  |
| --- | --- | --- |
| **Feature number** | **Feature Name** | **Description** |
| 1 | PatchUpdate | Indicates the support of the PATCH method for updating an Individual VAL Group Document resource. |
| 2 | enNB1 | This feature indicates the support of enhancements to this application layer API in Rel-18. |
| 3 | ValSrvArea | This feature indicates the support of VAL service area ID functionality as part of the phase-3 of the enhancements to the SEAL framework.  The following functionalities are supported:  - Support the usage of the VAL service area identifier to identify a VAL service area. |

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

###### 7.5.1.4.2.14 MonitorLocationInterestFilter

Table 7.5.1.4.2.14-1: Definition of type MonitorLocationInterestFilter

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| tgtUes | array(ValTargetUe) | M | 1..N | List of VAL User(s) or UE ID(s) for which location monitoring is requested for the given location information. |  |
| locInt | LocationInfo | C | 0..1 | Location information where the VAL server wishes to monitor the target VAL UE(s) location deviation.  (NOTE) |  |
| valSvcId | string | C | 0..1 | Identifier of the VAL service area where the VAL server wishes to monitor the target VAL UE(s) location deviation.  (NOTE) | ValSrvArea |
| notInt | DurationSec | M | 1 | Periodic time interval in which the LM server needs to notify the VAL UE's location information. |  |
| NOTE: If the "ValSrvArea" feature is supported, then one of "locInt" or "valSvcId" attributes shall be provided; otherwise the "locInt" attribute shall be provided. | | | | | |

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

###### 7.5.1.4.2.18 LocationInfoCriteria

Table 7.5.1.4.2.18-1: Definition of type LocationInfoCriteria

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| geoArea | GeographicArea | C | 0..1 | Geographic location information where the VAL server wishes to monitor the VAL UE(s) moving in or moving out. |  |
| valSvcAreaId | string | C | 0..1 | Identifier of the VAL service area. | ValSrvArea |
| refUe | ReferenceUEDetail | C | 0..1 | Reference UE details with proximity range where the VAL server wishes to monitor the VAL UE(s) moving in or moving out. |  |
| NOTE: Either "geoArea" or "refUe" shall be provided. | | | | | |

Editor's note: The definition and presence condition of "valSvcAreaId" attribute and its update in OpenAPI file is FFS.

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

#### 7.5.1.6 Feature Negotiation

General feature negotiation procedures are defined in clause 6.8. Table 7.5.1.6-1 lists the supported features for SS\_Events API.

Table 7.5.1.6-1: Supported Features

|  |  |  |
| --- | --- | --- |
| Feature number | Feature Name | Description |
| 1 | Notification\_test\_event | Testing of notification connection is supported according to clause 6.6. |
| 2 | Notification\_websocket | The delivery of notifications over Websocket is supported according to clause 6.6. This feature requires that the Notification\_test\_event feature is also supported. |
| 3 | LM\_LocationInfoChange | This feature supports the location information change event. |
| 4 | GM\_GroupInfoChange | This feature supports the group information change event. |
| 5 | CM\_UserProfileChange | This feature supports the user profile change event. |
| 6 | GM\_GroupCreate | This feature supports the group creation event. |
| 7 | GM\_MessageFilter | This feature supports the message filter information in group information change event. |
| 8 | NRM\_EventMonitor | This feature supports the monitoring of events related to VAL UEs or Users. |
| 9 | LM\_LocationDeviation | This feature supports the monitoring of VAL UE / User's deviation from a given area of interest. |
| 10 | GM\_TempGroup | This feature supports the functionality of temporary VAL group formation within a VAL system. |
| 11 | LM\_LocationAreaMonitor | This feature supports the monitoring of VAL UEs which are moving in or moving out from a given area of interest. |
| 12 | SubscUpdate | Indicates the support for updating an SEAL event subscription resource. |
| 13 | LM\_SuppLoc | Indicates the support of supplementary location information. |
| 14 | enNB1 | This feature indicates the support of enhancements to this application layer API in Rel-18. |
| 15 | PartialFailureSupport | Indicates the support of the partial failure cases during a SEAL event subscription creation/update. |
| 16 | ValSrvArea | This feature indicates the support of VAL service area ID functionality as part of the phase-3 of the enhancements to the SEAL framework.  The following functionalities are supported:  - Support the usage of the VAL service area identifier to identify a VAL service area. |
| 17 | FFS | FFS. This feature requires that the LM\_LocationInfoChange feature is also supported. |

Editor's Note: The feature name and feature description for feature number 17 are FFS.

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