**3GPP TSG-CT WG4 Meeting #99eC4-204abc**

**E-Meeting, 18th – 28th June 2020 *was* C4-204321**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.515** | **CR** | **0017** | **rev** | **1** | **Current version:** | **16.1.0** |  |
|  | | | | | | | | |
| *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:*** | Corrections on Application Errors in provide-location response | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_eLCS | | | | |  | ***Date:*** | | | 2020-08-11 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | 403 with DETACHED\_USER, 504 with PEER\_NOT\_RESPONDING should be forwarded by (V)GMLC to (H)GMLC if received from AMF in provide-location response. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Added 403 with DETACHED\_USER, 504 with PEER\_NOT\_RESPONDING in table Table 6.1.3.2.2-2 and Table 6.1.6.3-1. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Current description may lead to different interpretations and implementations which may raise trouble in interoperability between different vendors. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.1.3.2.2, 6.1.6.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 won't introduce any impact on OpenAPI specification files. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1:   1. Improved the description of code 403 with DETACHED\_USER in Table 6.1.6.3-1. 2. Added more detailed scenarios for using code 504 with PEER\_NOT\_RESPONDING in Table 6.1.6.3-1 | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Information\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### 6.1.3.2.2 Operation Definition

The operation shall support the response data structures and response codes specified in tables 6.1.3.2.2-1 and 6.1.3.2.2-2.

Table 6.1.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| InputData | M | 1 | Input parameters to the "Provide-Location" operation |

Table 6.1.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| LocationData | M | 1 | 200 OK | This case represents the successful retrieval of the location of the UE or successful subscription of periodic or triggered location of the UE.  Upon success, a response body is returned containing the different parameters of the location data if obtained, such as:  - Geographic Area  - Civic Location  - Age of Location  - Accuracy of Location  - Positioning methods |
| ProblemDetails | O | 0..1 | 403 Forbidden | The "cause" attribute may be used to indicate one of the following application errors:  - POSITIONING\_DENIED  - UNSPECIFIED  - UNSUPPORTED\_BY\_UE  - DETACHED\_USER  See table 6.1.6.3-1 for the description of these errors. |
| ProblemDetails | O | 0..1 | 500 Internal Server Error | The "cause" attribute may be used to indicate the following application error:  - POSITIONING\_FAILED  See table 6.1.6.3-1 for the description of these errors. |
| ProblemDetails | O | 0..1 | 504 Gateway Timeout | The "cause" attribute may be used to indicate the following application error:  - UNREACHABLE\_USER  - PEER\_NOT\_RESPONDING  See table 6.1.6.3-1 for the description of this error. |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 6.1.6.3 Application Errors

The application errors defined for the Ngmlc\_Location service are listed in Table 6.1.6.3-1.

Table 6.1.6.3-1: Application errors

|  |  |  |
| --- | --- | --- |
| Application Error | HTTP status code | Description |
| POSITIONING\_DENIED | 403 Forbidden | the positioning procedure was denied. |
| UNSPECIFIED | 403 Forbidden | the request is rejected due to unspecified reasons. |
| UNSUPPORTED\_BY\_UE | 403 Forbidden | the position request for periodic or triggered location is not supported by the target UE |
| LOCATION\_SESSION\_UNKNOWN | 403 Forbidden | the location context was not found |
| UNREQUESTED\_BY\_UE | 403 Forbidden | the UE did not request transfer of its location to an LCS Client or AF |
| UNKOWN\_EXTERNAL\_CLIENT\_OR\_AF | 403 Forbidden | the external LCS client or AF is unknown |
| UNREACHABLE\_EXTERNAL\_CLIENT\_OR\_AF | 403 Forbidden | the external LCS client or AF is unreachable |
| DETACHED\_USER | 403 Forbidden | The user is deregistered in the AMF. |
| POSITIONING\_FAILED | 500 Internal Server Error | the positioning procedure failed |
| UNREACHABLE\_USER | 504 Gateway Timeout | the user could not be reached in order to perform positioning procedure |
| PEER\_NOT\_RESPONDING | 504 Gateway Timeout | No response is received from a remote peer, i.e.,  1) The response from the serving AMF wasn't received by (V)GMLC, or;  2) (V)GMLC received HTTP status code 504 with PEER\_NOT\_RESPONDING from AMF. |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*The end of changes\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*