**3GPP TSG-CT WG1 Meeting #123-eC1-202147**

**Electronic meeting, 16-24 April 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.301** | **CR** | **3342** | **rev** | **-** | **Current version:** | **16.4.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Clarify UE behaviour for reject cause #9 and #10 received when attached for RLOS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | PARLOS | | | | |  | ***Date:*** | | | 2020-04-08 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | The current text in TS 24.301 for the handling of reject messages when a UE is attempting to access RLOS has a common requirement that if the UE continues to stay on the same PLMN after taking the necessary actions, the UE is expected to do a PLMN search and move to a different PLMN which allows access to RLOS.  Below are the excerpts of the text from the Tracking Area Updating and Service Request procedures:  *5.5.3.2.5B*  *Then if the UE is in the same selected PLMN where the last tracking area updating procedure was attempted and rejected and if timer T3346 is not running, the UE shall:*  *a) detach locally, if not detached already, perform a PLMN selection according to 3GPP TS 23.122 [6] to attempt EPS attach for access to RLOS via another PLMN.*    *5.6.1.5B*  *If the service request for UE attached for access to RLOS cannot be accepted by the network, the UE shall perform the procedures as described in subclause 5.6.1.5. Then if the UE is in the same selected PLMN where the last service request was attempted, the UE shall:*  *a) detach locally, if not detached already, and perform a PLMN selection according to 3GPP TS 23.122 [6] to attempt EPS attach for access to RLOS via another PLMN.*  With regard to the above referenced text, exceptions need to be made for causes #9,#10 and #40. These causes are generally sent when a target node (MME) is unable to fetch the UE context from a previous node or when the context has been deleted. The expectation is for the UE to attach on the same PLMN and if attach is successful, to stay there.  Hence it needs to be clarified that for cause #9,#10 and #40 the UE need not do a PLMN selection.  Additionally also clarify that UE is not to do PLMN selection after a Service Reject if T3346 is running. This is inline with what is present for Attach/TAU procedures. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify that upon receiving cause #9,#10 and #40 when attempting tracking Area Update or Service Request, after doing the reattach as defined in the recovery action, the UE is not required to do a PLMN selection.  Clarify that if T3346 is running, UE will not do a PLMN selection after a Service Reject | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The UE will wrongly end up moving to a new PLMN inspite of the current PLMN being able to provide access to RLOS.  UE will end up doing a PLMN selection when network has rejected Service Request due to congestion. This would be wrong UE behaviour. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.5.3.2.5B, 5.6.1.5B | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\* Begin change \*\*\*\*\*

##### 5.5.3.2.5B Tracking area updating for access to RLOS not accepted by the network

If the tracking area updating request for access to RLOS cannot be accepted by the network, the UE shall perform the procedures as described in subclause 5.5.3.2.5 along with the following conditions:

a) if the action for the reject involves searching for a suitable cell in E-UTRAN radio access technology, the UE shall proceed with the action and shall attempt to perform a tracking area updae procedure or an attach procedure for access to RLOS in the new tracking area, if found, depending on the EMM state.

b) if the action for the reject involves attempting to select GERAN or UTRAN radio access technology or disabling the E-UTRAN capability, the UE shall skip the action for as long as access to RLOS is still needed.

NOTE: How long the UE attempts to access RLOS is up to UE implementation.

Then if:

a) the UE is in the same selected PLMN where the last tracking area updating procedure was attempted and rejected;

b) the tracking area updating procedure was rejected with an EMM cause value other than #9, #10 and #40; and

c) timer T3346 is not running,

the UE shall:

a) detach locally, if not detached already, perform a PLMN selection according to 3GPP TS 23.122 [6] to attempt EPS attach for access to RLOS via another PLMN.

If the tracking area updating request for access to RLOS fails due to abnormal case a) in subclause 5.5.3.2.6, the UE shall perform the actions as described in subclause 5.5.3.2.6 and inform the upper layers of the failure to access the network.

If the tracking area updating request for access to RLOS fails due to abnormal cases b), c) or d) in subclause 5.5.3.2.6, the UE shall perform the procedures as described in subclause 5.5.3.2.6 with the exception that the UE shall skip actions that involve attempting to select GERAN or UTRAN radio access technology and actions that involve disabling of the E-UTRA capability, for as long as access to RLOS is still needed. Then if the UE is in the same selected PLMN where the last tracking area updating request was attempted, the UE shall:

1. detach locally, if not detached already, perform a PLMN selection according to 3GPP TS 23.122 [6] to attempt EPS attach for access to RLOS via another PLMN.

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

#### 5.6.1.5B Service request procedure for UE attached for access to RLOS not accepted by the network

If the service request for UE attached for access to RLOS cannot be accepted by the network, the UE shall perform the procedures as described in subclause 5.6.1.5.

Then if:

a) the UE is in the same selected PLMN where the last service request was attempted and rejected;

b) the service request procedure was rejected with an EMM cause value other than #9, #10 and #40; and

c) timer T3346 is not running,

the UE shall:

a) detach locally, if not detached already, and perform a PLMN selection according to 3GPP TS 23.122 [6] to attempt EPS attach for access to RLOS via another PLMN.

If the service request for UE attached for access to RLOS fails due to abnormal cases a), b), c) or e) in subclause 5.6.1.6, the UE shall perform the procedures as described in subclause 5.6.1.6. Then if the UE is in the same selected PLMN where the last service request was attempted, the UE shall:

a) detach locally, if not detached already, and perform a PLMN selection according to 3GPP TS 23.122 [6] to attempt EPS attach for access to RLOS via another PLMN.

\*\*\*\*\* End change \*\*\*\*\*