**3GPP TSG-CT WG1 Meeting #141eC1-23xxxx**

**Online 17– 21 April 2023 *was C1-232404***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.501** | **CR** | **5288** | **rev** | **1** | **Current version:** | **18.2.1** |  |
|  | | | | | | | | |
| *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 | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Clarification on handling of received T3502 in registration accept message | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc18 | | | | |  | ***Date:*** | | | 2023-03-30 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | About how to apply the T3502 in the registration accept message, following issues need to be clarified:  **Issue 1**: whether the network shall include the T3502 in every registration accept message if the network wants to apply this T3502, because the following is contradicted.  The value of timer T3502 can be sent by the network to the UE in the REGISTRATION ACCEPT message. The UE shall apply this value in all tracking areas of the registration area assigned to the UE, until a new value is received. (text 1, solution 1)  The default value of this timer is also used by the UE in the following cases:  a) REGISTRATION ACCEPT message is received without a value specified; (text 2, solution 2)  As specified, the received T3502 in the registration accept message is applicable in the registration area, see below:  The value of timer T3502 can be sent by the network to the UE in the REGISTRATION ACCEPT message. The UE shall apply this value in all tracking areas of the registration area assigned to the UE, until a new value is received.  but never specified the following issues:  **Issue 2**: if the UE moves out the registration area, can the UE apply the last recevied T3502?  **Issue 3**: if the UE receives the updated registration area through CUC procedure, can the UE apply the last recevied T3502?  **Issue 4**: if the UE recevied the registration accept messge with periodic registration message type without T3502, can the UE apply the last received T3502?  About issue 1, to make it clear that the network shall include the T3502 in every registration accept message if the network wants to apply this T3502, it is proposed to remove “until a new value is received”.  About issue 2, because the T3502 received in the registration accept message is applicable in the registration area, it is proposed that when the UE moves out of the registration area, the UE shall apply the default value;  About issue 3, because the T3502 received in the registration accept message is applicable in the registration area, when the registration area is changed, the UE shall remove the received T3502;  About issue 4, considering periodic registration procedure is not used for updating parameters, it is propose the same. | | | | | | | | |
| ***a)*** | |  | | | | | | | | |
| ***Summary of change:*** | | It is proposed:   1. The network shall include the T3502 in every registration accept message if the network wants to apply this T3502; 2. when the UE moves out of the registration area, the UE shall apply the default value; 3. when the registration area is changed, the UE shall remove the received T3502; 4. if there is no specific value in the periodic registration accept message, the UE shall apply the stored timer. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | 1. the UE may keep using the stored T3502 if no value is included in the registration accept message; 2. the UE may keep using the stored T3502 received in the registration accept message when moving out the registration area; 3. the UE may keep using the stored T3502 is the network updates the registration area; 4. The UE may use default value if there is no specific value in the periodic registration accept message. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.3.8 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\*First change \*\*\*\*\*

### 5.3.8 Handling of timer T3502

The value of timer T3502 can be sent by the network to the UE in the REGISTRATION ACCEPT message. The UE shall apply this value in all tracking areas of the registration area assigned to the UE. The UE shall delete the stored timer T3502 if any, if the UE receives a new TAI list in the CONFIGURATION UPDATE COMMAND message.

The value of timer T3502 can be sent by the network to the UE in the REGISTRATION REJECT message during the initial registration. If a REGISTRATION REJECT message including timer T3502 value was received integrity protected, the UE shall apply this value until a new value is received with integrity protection or a new PLMN or SNPN is selected. Otherwise, the default value of this timer is used.

The default value of this timer is also used by the UE in the following cases:

a) REGISTRATION ACCEPT message is received without a value specified, and the 5GS registration type IE in the REGISTRATION REQUEST message is not set to "periodic registration updating”;

b) the UE does not have a stored value for this timer;

c) a new PLMN which is not in the list of equivalent PLMNs or a new SNPN has been entered, the initial registration procedure fails, the registration attempt counter is equal to 5 and no REGISTRATION REJECT message was received from the new PLMN or SNPN;

d) the network indicates that the timer is "deactivated";

e) a new PLMN which is not in the list of equivalent PLMNs or a new SNPN has been entered, the registration procedure for mobility and periodic registration update fails and the registration attempt counter is equal to 5; or

x) when the UE detects that the current TAI is not in the current TAI list, the registration procedure for mobility and periodic registration update fails and the registration attempt counter is equal to 5.

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