**3GPP TSG-CT WG1 Meeting #124-eC1-203671**

**Electronic meeting, 2-10 June 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.501** | **CR** | **2375** | **rev** | **-** | **Current version:** | **16.4.1** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | NAS message transmission failure indication with delayed TAI change | | | | | | | | | |
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| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc16 | | | | |  | ***Date:*** | | | 2020-05-26 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
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| ***Reason for change:*** | | In the UE, it will take some time for the lower layers to read the system information and determine if the current TAI is changed or not. Hence in the real implementation of the UE, the information of TAI change may be sent to the NAS layer later than the NAS message transmission failure indication.  When the NAS layer receives the transmission failure of NAS message indication from lower layers, the NAS layer couldn’t immediately determine it is the NAS message transmission failure indication without TAI change, or it is the NAS message transmission failure indication with delayed TAI change. The NAS layer may need to wait for a while for the possible delayed TAI change in implementation. However it is not a FASMO issue, hence just propose to clarify that how to handle the NAS message transmission failure indication with possible delayed TAI change is up to implementation, will not specified in this release. | | | | | | | | |
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| ***Summary of change:*** | | Clarify that how to handle the NAS message transmission failure indication with possible delayed TAI change is up to implementation | | | | | | | | |
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| ***Consequences if not approved:*** | | NAS layer can not immediately determine which case is applicable | | | | | | | | |
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| ***Clauses affected:*** | | 5.3.15 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\* Strart of Change \*\*\*\*\*

### 5.3.15 Transmission failure abnormal case in the UE

The abnormal case 5GMM uplink message transmission failure indication by lower layers can be identified for 5GMM procedures:

When it is specified in the relevant procedure that it is up to the UE implementation to re-run the ongoing procedure that triggered that procedure, the procedure can typically be re-initiated using a retransmission mechanism of the uplink message (i.e. the one that has previously failed to be transmitted) with new sequence number and message authentication code information thus avoiding to re-start the whole procedure.

Note: The transmission failure can happen due to TAI change. The lower layer might take some time to read the system information and determine if the current TAI is changed. Therefore, the information of TAI change can be sent to the NAS layer a little after receiving the transmission failure indication from the lower layer. How to handle the retransmission procedure caused by the possible delayed TAI change information is up to UE implementation.

\*\*\*\*\* End of Change \*\*\*\*\*