**3GPP TSG-RAN WG3 #122 *Draft-*R3-23xxxx**

**Chicago, U.S.A, 13th - 17th November, 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** | **1019** | **rev** | **3** | **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 | **X** | Core Network | **X** |

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| ***Title:*** | Solving Misalignment in UE Context Release procedure | | | | | | | | | |
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| ***Source to WG:*** | Ericsson, China Telecom, ZTE, Verizon Wireless, China Unicom, CATT, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2023-10-27 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
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| ***Reason for change:*** | | There is a misalignment between TS 38.413 and TS 23.502 related to UE context Release.  In TS 38.413, Chapter 8.3.2.2, it states:  **Interactions with UE Context Release procedure:**  The UE Context Release procedure should be initiated upon reception of a UE CONTEXT RELEASE REQUEST message.  In TS 23.502, from later release in Rel-16, it states in chapter 4.2.6:  If N2 Context Release Request cause indicates the release is requested due to user inactivity or AS RAI then the AMF continues with the AN Release procedure unless the AMF is aware of pending MT traffic or signalling.  There is a misalignment between the two specifications: after the NG-RAN node has initiated UE CONTEXT RELEASE REQUEST due to e.g. Inactivity, the NG-RAN node according to TS 38.413 awaits for the UE Context Release, but AMF observes the DL data and signaling and may initiate e.g. PDU session setup procedure or SMS. | | | | | | | | |
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| ***Summary of change:*** | | Update the 8.3.2.2 to specify that the UE Context Release procedure is initiated:   * when the release cause is not user inactive or AS RAI, * when the release cause is user inactive or AS RAI, and there is no pending MT traffic or downlink signaling.   Impact assessment towards the previous version of the specification (same release):  This CR has an isolated impact towards the previous version of the specification (same release).  The CR is backwards compatible. | | | | | | | | |
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| ***Consequences if not approved:*** | | Misalignment remains between TS 38.413 and TS 23.502. | | | | | | | | |
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| ***Clauses affected:*** | | 8.3.2.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

### 8.3.2 UE Context Release Request (NG-RAN node initiated)

#### 8.3.2.1 General

The purpose of the UE Context Release Request procedure is to enable the NG-RAN node to request the AMF to release the UE-associated logical NG-connection due to NG-RAN node generated reasons. The procedure uses UE-associated signalling.

#### 8.3.2.2 Successful Operation



Figure 8.3.2.2-1: UE context release request

The NG-RAN node controlling a UE-associated logical NG-connection initiates the procedure by sending a UE CONTEXT RELEASE REQUEST message towards the affected AMF.

The UE CONTEXT RELEASE REQUEST message shall indicate the appropriate cause value, e.g., "TXnRELOCOverall Expiry", "Redirection", for the requested UE-associated logical NG-connection release.

If the *PDU Session Resource List* IE is included in the UE CONTEXT RELEASE REQUEST message, the AMF shall handle this information as specified in TS 23.502 [10].

**Interactions with UE Context Release procedure:**

The UE Context Release procedure should be initiated upon reception of a UE CONTEXT RELEASE REQUEST message with the release cause different than user inactivity or AS RAI. The UE Context Release procedure should be initiated upon reception of a UE CONTEXT RELEASE REQUEST message with release cause user inactivity or AS RAI and there is no pending MT traffic or downlink signaling, refer to TS 23.502. If the UE was configured with DC radio resources at the time UE Context Release Request procedure was triggered, and the PSCell information was available, the NG-RAN node shall store the PSCell information in the UE context.

#### 8.3.2.3 Abnormal Conditions

Void.