**3GPP TSG-RAN2 Meeting #121-bis-eR2-230xxxx**

**Online 17th – 26th April, 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.305** | **CR** | 0124 | **rev** | **1** | **Current version:** | 17.4.0 |  |
|  | | | | | | | | |
| *For* [***HELP***](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 | **X** | Core Network |  |

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| ***Title:*** | Correction to UEPositioningAssistanceInformation | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | RAN2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_pos\_enh-Core | | | | |  | ***Date:*** | | | 2023-04-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | Apart from the associate between the UL-SRS resources for positioning and the UE Tx TEG ID, the margin values can also be reported via Positioning Assitance Information message. This information should be added to clause 7.4.11.2 of TS 38.305.  The reason is that the margin value for UE Tx TEG may affect the reporting of Positioning Assitance Information message. Since each message can only report a single margin value, multiple Positioning Assistance Information messages may be required for each reporting when there are different margin values for the UE Tx TEGs. | | | | | | | | |
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| ***Summary of change:*** | | Add in the UE Positioning Assistance Information procedure that the margin values for UE Tx TEGs can be reported, and each message can only report a single margin value. | | | | | | | | |
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| ***Consequences if not approved:*** | | The description for UEPositioningAssistanceInformation is incomplete.  **Impact analysis**  **Impacted 5G architecture options:**  SA, NE-DC, NR-DC  **Impacted functionality:**  UE Positioning Assitance Information  **Inter-operability:**  If the UE is implemented according to the CR while the network is not, or if the network is implemented according to the CR while the UE is not, there is no inter-operability issues. | | | | | | | | |
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| ***Clauses affected:*** | | 7.4.1.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Ver0 in RAN2#121bis: R2-2302993 | | | | | | | | |

===============================CHANGE BEGINS=======================================

7.4.1.2 UE Positioning Assistance Information

The UE Positioning Assistance Information procedure is used by UE to report the UE Positioning Assistance Information for UL-TDOA. The UE reports the association between UL-SRS resources for positioning and the UE Tx TEG ID, and the margin value for UE Tx TEGs.

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**Figure 7.4.1.2-1: RRC procedure for UE TxTEG**

**Precondition:** The serving gNB of a UE has received a NRPPa message from an LMF requesting the TxTEG of the UE for NR UL-TDOA positioning.

1. The serving gNB may send a RRC Reconfiguration message to the UE, requesting the UE to provide the association information of UL SRS resources for positioning with Tx TEGs to the serving gNB if the UE supports UE Tx TEG reporting. Based on the request from the LMF, the RRC Reconfiguration message from the serving gNB to the UE indicates the UE should provide either a single report or a periodic report of UE TxTEG association to the serving gNB.

2. When the UE receives the request via RRC Reconfiguration message, the UE sends a UE Positioning Assistance Info message to the serving gNB to report the UE TxTEG information, including all the changes of the UE TxTEG during the report period if the UE is required to report UE Tx TEG periodically. The UE will report all the UE TxTEG at the time when the RRC Reconfiguration message is received if the UE is only required to report the one-shot UE TxTEG information. For each UE Positioning Assistance Info message, only a single margin value can be reported.============================= END OF CHANGES =================================