**3GPP TSG-RAN WG1 Meeting #110bis-eR1-220xxxx**

**e-Meeting, October 10th – 19th, 2022**

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| *CR-Form-v12.2* |
| **DRAFT CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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| *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 | **X** | Core Network |  |

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| ***Title:***  | Correction on UE Tx TEG association information reporting |
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| ***Source to WG:*** | Moderator (CATT), CATT |
| ***Source to TSG:*** | TSG RAN WG1 |
|  |  |
| ***Work item code:*** | NR\_pos\_enh-Core |  | ***Date:*** | 2022-10-18 |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *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 canbe 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:*** | At RAN1#107-e meeting, the following agreement was achieved for updating of UE Tx TEGs in Rel-17 positioning enhancements: **Agreement*** For UL-TDOA, supporting the following for the serving gNB to request a UE to report the Tx TEG association information between UE Tx TEG IDs and SRS resources for positioning, subject to UE capability of supporting UE Tx TEG:
	+ Based on a configured periodicity, a UE may report the UE Tx TEG association for the SRS resources for positioning that have already been transmitted during the configured period
		- It is up to RAN2 to decide how to indicate the change of the Tx TEG association during the configured period (e.g., using the timestamps)
		- It is up to RAN4 to decide when the Tx TEG association is changed
	+ The values of the configurable periodicities are up to RAN2
	+ Note: Tx TEG association information reporting by single request/response mode is assumed already supported with the previous agreement.
* Send an LS to RAN2/RAN4 (cc: RAN3)
	+ to RAN2, including the following RAN1’s agreement related to the reporting of the UE Tx TEG, for RAN2 to work on the signaling
	+ to RAN4 for checking the agreement and work on how to decide when the Tx TEG association is changed

According to the above agreement, for UL-TDOA, subject to UE capability, based on a configured periodicity, a UE may report the UE Tx TEG association for the SRS resources for positioning that have already been transmitted during the configured period. However, the key characteristic of UE periodic reporting is not reflected in the current TS38.214. This key characteristic should be specified in TS 38.214 for a clear description on UE periodic reporting of UE Tx TEG association information. |
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| ***Summary of change:*** | Clarify that for UL-TDOA, subject to UE capability, based on a configured periodicity, a UE may report the UE Tx TEG association for the SRS resources for positioning that have already been transmitted during the configured period. |
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| ***Consequences if not approved:*** | The UE reporting of UE Tx TEG association information is not clear and and incomplete specifications. |
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| ***Clauses affected:*** | 6.2.1.4 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **N** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **N** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **N** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** | No inter-operability issue is identified. |
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| ***This CR's revision history:*** |  |

#### 6.2.1.4 UE sounding procedure for positioning purposes

< Unchanged parts are omitted >

The UE may be configured to report, via high layer parameter nr-UE-RxTxTEG-Request or ue-TxTEG-RequestUL-TDOA-Config, subject to UE capability, association information of the already transmitted SRS resource(s) configured by the higher layer parameter *SRS-PosResource* with UE Tx TEG(s) via higher layer parameter *nr-SRS-TxTEG-Set* or *ue-TxTEG-AssociationList*.

< Unchanged parts are omitted >