3GPP TSG RAN3 Meeting#123 R3-241197

**Athens, Greece, 26 February - 1 March, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0122** | **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 |  |

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| ***Title:*** | Support of NR Positioning Enhancements | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung, Huawei, CATT, Ericsson, Nokia, Nokia Shanghai Bell, ZTE, Xiaomi | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 4 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***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 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:*** | | The CR introduces functionality for support of NR positioning enhancements. | | | | | | | | |
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| ***Summary of change:*** | | * Add positioning function for LPHAP | | | | | | | | |
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| ***Consequences if not approved:*** | | Missing Positioning function for support of NR positioning enhancements. | | | | | | | | |
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| ***Clauses affected:*** | | 5.2.11 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Rev0:   * Capture the agreed TP in R3-235934.   Rev1:   * Resubmission in RAN3#122.   Rev2:   * Resubmission in RAN3#123.   Rev2:   * Capture the agreed TP in R3-240904. | | | | | | | | |

*Start of change*

### 5.2.11 Positioning function

This function allows to transfer location management messages between gNB-CU and gNB-DU. With this function, gNB-CU request TRP information from gNB-DU, and gNB-DU response to gNB-CU with the TRP information. With this function, gNB-CU request positioning measurements from gNB-DU, and gNB-DU response to gNB-CU with the positioning measurements.

The function allows the gNB-CU to

- transfer the positioning assistance data to gNB-DU. The gNB-DU is responsible for broadcasting the positioning assistance data according to the scheduling parameters available.

- request the gNB-DU to configure SRS transmissions for UE.

- request the gNB-DU to configure PRS transmissions.

- request the gNB-DU to configure measurement gap or PRS processing window.

- request the gNB-DU to activate or deactivate preconfigured measurement gap or PRS processing window.

- request the gNB-DU to broadcast positioning system information.

- request the gNB-DU to reserve or release the SRS resources for area-specific SRS transmissions.

*End of change*