**3GPP TSG-RAN2 Meeting #125 *R2-240***

**Athens, Greece, 26th Feb. – 1st Mar. 2024**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  | **38.304** | **CR** | TBD | **rev** | **-** | **Current version:** | **18.0.0** |  |
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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 to IDLE mode procedure for R18 positioning |
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| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | R2 |
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| ***Work item code:*** | NR\_pos\_enh2 |  | ***Date:*** | 2024-03-05 |
|  |  |  |  |  |
| ***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 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:*** | During RAN2#125, the following agreement has been reached regarding the IDLE mode procedure for R18 positioning

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| Follow legacy SL communication/discovery for SL positioning: the cell selection/reselection parameters in the concerned cell selected for sidelink operations should be used for evaluation. TP in R2-2400339 is the baseline; CR to be developed in post-meeting discussion.RAN2 will not implement anything to enable SL positioning for a UE in limited service in this release. |

The above agreements have been implemented within this CR |
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| ***Summary of change:*** | Implement the following agreement in RAN2#125 regading the IDLE mode procedure for R18 positioning:* Follow legacy SL communication/discovery for SL positioning: the cell selection/reselection parameters in the concerned cell selected for sidelink operations should be used for evaluation. TP in R2-2400339 is the baseline; CR to be developed in post-meeting discussion.
* RAN2 will not implement anything to enable SL positioning for a UE in limited service in this release.
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| ***Consequences if not approved:*** | The spec will not be complete or correctly reflects the previous agreement if not approved. |
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| ***Clauses affected:*** | 8.2, 8.2.1 |
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|  | **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 ...  |
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| ***Other comments:*** |  |
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| ***This CR's revision history:*** | Ver0: R2-2400334 |

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

## 8.2 Cell selection and reselection for Sidelink

The requirements defined in this clause for sidelink operation (including sidelink relay operations) apply for UEs in RRC\_IDLE, RRC\_INACTIVE and in RRC\_CONNECTED.

When UE is interested to perform NR sidelink communication/discovery and ranging/sidelink positioning on non-serving frequency, it may perform measurements on that frequency or the frequencies which can provide inter carrier NR sidelink configuration for that frequency for cell selection and reselection purpose in accordance with TS 38.133[8]. When UE is interested to perform V2X sidelink communication on non-serving frequency, it may perform measurements on that frequency or the frequencies which can provide inter carrier V2X sidelink configuration for that frequency for cell selection and intra-frequency reselection purpose in accordance with TS 38.133[8].

If the UE detects at least one cell on the frequency which UE is configured to perform NR sidelink communication/discovery and ranging/sidelink positioning on fulfilling the S criterion in accordance with clause 8.2.1, it shall consider itself to be in-coverage for NR sidelink communication/discovery and ranging/sidelink positioning on that frequency. If the UE cannot detect any cell on that frequency meeting the S criterion, it shall consider itself to be out-of-coverage for NR sidelink communication/discovery and ranging/sidelink positioning on that frequency.

If the UE detects at least one cell on the frequency which UE is configured to perform V2X sidelink communication on fulfilling the S criterion in accordance with clause 8.2.1, it shall consider itself to be in-coverage for V2X sidelink communication on that frequency. If the UE cannot detect any cell on that frequency meeting the S criterion, it shall consider itself to be out-of-coverage for V2X sidelink communication on that frequency.

If the UE has selected a cell on a non-serving frequency for V2X sidelink communication, it shall perform additional intra-frequency reselection process to select a better cell for sidelink operation on that frequency in accordance with clause 8.2.1.

If the UE has selected a cell on a non-serving frequency for NR sidelink communication/discovery, it shall perform additional reselection process to select a better cell for sidelink operation in accordance with clause 8.2.1.

If the UE has selected a cell on a non-serving frequency for NR sidelink Positioning, it shall perform additional reselection process to select a better cell for sidelink operation in accordance with clause 8.2.1.

### 8.2.1 Parameters used for cell selection and reselection triggered for sidelink

When evaluating S criterion, R criterion (ranking) or inter-frequency cell reselection criterion, as defined in clause 5.2.3.2, clause 5.2.4.6 and clause 5.2.4.5 respectively, for cell selection/reselection triggered for NR sidelink communication/discovery or V2X sidelink communication or NR sidelink positioning on a non-serving frequency, UE shall perform the evaluation as follows:

- The UE shall use cell selection/reselection parameters broadcast by the concerned cell (i.e. selected cell for the sidelink operation) for the evaluation.

================================CHANGE ENDS================================