**3GPP TSG-RAN WG2 Meeting #112e *R2-2010959***

**Electronic Meeting, 2nd – 13th November, 2020**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** |  | **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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **X** | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  |  |
|  |  |
| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | According to the RAN2#112-E discussion, cell selection, intra- and iner-frequency cell reselection are all valid use cases of non-serving frequency measurement for NR-V2X. |
|  |  |
| ***Summary of change:*** | Clarify in 11.4 and 11.4.1 that for NR-V2X, the non-serving frequency measurement is not limited to intra-frequency cell reselection, i.e., also applicable to inter-frequency cell reselection. |
|  |  |
| ***Consequences if not approved:*** | Misunderstanding that the non-serving frequency measurement is limited to intra-frequency cell reselection. |
|  |  |
| ***Clauses affected:*** | 11.4, 11.4.1 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS/TR 38.306 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:*** |  |

*Start Change*

11.4 Cell selection and reselection for sidelink

The requirements defined in this clause for sidelink operation apply for UEs in RRC\_IDLE and in RRC\_CONNECTED.

When UE is interested to perform sidelink communication or sidelink discovery announcement on non-serving frequency, it shall perform measurements on that frequency for cell selection and intra-frequency reselection purpose in accordance with TS 36.133 [10]. 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 36.133 [10]. When UE is interested to perform NR sidelink communication 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 36.133[10].

If the UE detects at least one cell on the frequency which UE is configured to perform sidelink operation on fulfilling the S criterion in accordance with clause 11.4.1, it shall consider itself to be in-coverage for sidelink operation 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 sidelink operation on that frequency.

If the UE detects at least one cell on the frequency which UE is configured to perform NR sidelink communication on fulfilling the S criterion in accordance with clause 11.4.1, it shall consider itself to be in-coverage for NR 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 NR sidelink communication on that frequency.

If the UE has selected a cell on a non-serving frequency for sidelink communication or V2X sidelink communication or sidelink discovery announcement, it shall perform additional intra-frequency reselection process to select a better cell for sidelink operation on that frequency in accordance with clause 11.4.1.

If the UE has selected a cell on a non-serving frequency for NR sidelink communication, it shall perform additional reselection process to select a better cell for sidelink operation in accordance with clause 11.4.1.

NOTE 1: The UE may consider the carrier pre-configured for sidelink communication or V2X sidelink communication, or the frequencies pre-configured for providing inter-carrier V2X sidelink configuration to have the highest cell reselection priority in accordance with clause 5.2.4.1.

NOTE 2: If the frequency the UE is configured to perform sidelink communication on is a serving frequency, the UE uses the serving cell on that frequency for the sidelink operation.

11.4.1 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 sidelink communication or V2X sidelink communication or sidelink discovery announcement or NR sidelink communication on a non-serving frequency, UE shall perform the evaluation as follows:

- if the UE intends to perform sidelink discovery announcement and it is configured with *discCellSelectionInfo* applicable for that frequency as specified in TS 36.331 [3], the UE shall use cell selection/reselection parameters included in the *discCellSelectionInfo* for the evaluation, and for a parameter used in the evaluation but not included in the *discCellSelectionInfo* applicable for thatfrequency, UE shall apply zero value.

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

*End of Change*