**3GPP TSG RAN4 Meeting #116bis R4-2514336  
Prague, Czech Republic, 13th – 18th October, 2025**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** |  | **Current version:** | 19.1.0 |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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| ***Title:*** | DraftCR to 38.133 on applicability of test cases for less than 5 MHz operation in NTN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_IoT\_NTN\_req\_test\_enh-Perf | | | | |  | ***Date:*** | | | 2025-08-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Make clear which test cases are applicable for UEs that support less than 5 MHz and indicate that UEs that do not support the feature do not need to pass such tests. | | | | | | | | |
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| ***Summary of change:*** | | Clarify the applicability of test cases for UEs that support less than 5 MHz | | | | | | | | |
| ***T*** | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Ambiguity and lack of clarity in the applicability of the test cases for different UEs | | | | | | | | |
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| ***Clauses affected:*** | | A.3.36.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

***<Start of change 1>***

### A.3.36.2 Principle of testing different RRM requirements

In annex A, RRM test cases related to satellite access are defined for all applicable RRM requirements. The testing principle for these test cases is as follows:

- A UE capable of NTN only is required to pass all the test cases defined in clause A.14.

- A UE capable of both TN and NTN is required to pass the test cases for NTN specific requirements in table A.3.36.2-1.

Table A.3.36.2-1: Test cases for NTN specific requirements

|  |  |
| --- | --- |
| Clause | Test case slogan |
| A.14.1.2 | Cell reselection to FR1 intra-frequency NR cell for UE configured with [capability for enhanced requirements] |
| A.14.1.3 | Time-based cell reselection to FR1 intra-frequency NR cell |
| A.14.1.4 | Location-based cell reselection to FR1 intra-frequency NR cell |
| A.14.1.7 | Cell reselection to FR1 inter-frequency NR cell for UE configured with [capability for enhanced requirements] |
| A.14.1.8 | Time-based Cell reselection to FR1 inter-frequency NR satellite access case |
| A.14.1.9 | Location-based Cell reselection to FR1 inter-frequency NR satellite access case |
| A.14.2.1.3 | Intra-frequency SAN time-based conditional Handover from FR1 to FR1 |
| A.14.2.1.4 | Inter-frequency SAN time-based conditional Handover from FR1 to FR1 |
| A.14.2.1.5 | Intra-frequency SAN distance-based conditional Handover from FR1 to FR1 |
| A.14.2.1.6 | Inter-frequency SAN distance-based conditional Handover from FR1 to FR1 |
| A.14.3.1.1 | NR UE Transmit Timing Test for FR1 |
| A.14.5.1.1 | SA event triggered reporting tests without gap under non-DRX |
| A.14.5.1.2 | SA event triggered reporting tests without gap under DRX |
| A.14.5.1.3 | SA event triggered reporting tests without gap under non-DRX with SSB index reading |
| A.14.5.1.4 | SA event triggered reporting tests with single measurement gap under non-DRX for satellite access |
| A.14.5.1.5 | SA event triggered reporting tests with FNO concurrent gaps under DRX for satellite access |
| A.14.5.1.6 | SA event triggered reporting tests with PPO concurrent gaps under non-DRX with SSB index reading for satellite access |
| A.14.5.2.1 | Event triggered reporting test without gap under non-DRX |
| A.14.5.2.2 | Event triggered reporting tests without gap under DRX |
| A.14.6.3.1 | SA intra-frequency measurement accuracy with FR1 serving cell and FR1 target cell |
| A.14.6.3.2 | SA Inter-frequency measurement accuracy with FR1 serving cell and FR1 target cell |
| A.14.6.4.1 | SSB based L1-RSRP measurement |
| A.14.6.4.2 | CSI-RS based L1-RSRP measurement on resource set with repetition off |

For UEs that declare capabilities to support channel bandwidth of 3 MHz (clause 4.2.7.2 in TS 38.306 [14]), the UE shall also pass the following test cases indicated in Table A.3.36.2-2.

Table A.3.36.2-2: Test cases for NTN UEs supporting operation with 3 MHz channel bandwith

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| Clause | Test case slogan |
| TBD | Intra-frequency SAN time-based conditional Handover from FR1 to FR1 for UE operating on a cell with less than 5 MHz BW |
| TBD | RACH-based hard Satellite switching with re-synchronization from FR1 to FR1 for less than 5MHz with NTN |
| TBD | Radio Link Monitoring Out-of-sync Test for FR1 SAN PCell configured with SSB-based RLM RS in non-DRX mode |
| TBD | Beam Failure Detection and Link Recovery Test for FR1 PCell for satellite access configured with SSB-based BFD and LR in non-DRX mode for a UE operating on a cell with less than 5 MHz BW |
| TBD | Location-based Cell reselection to FR1 inter-frequency NR satellite access case |
| TBD | SA event triggered reporting tests for FR1 with SSB time index detection when DRX is used with single gap for 3 MHz channel bandwidth in satellite access |
| TBD | Cell reselection to FR1 intra-frequency NR case for UE operating on a cell with less than 5 MHz BW |