**3GPP TSG-RAN WG2 Meeting #131 *R2-250xxxx***

**Bengaluru, India, 25th – 29th August 2025**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **36.306** | **CR** | **1914** | **rev** | **1** | **Current version:** | **18.5.0** |  |
|  | | | | | | | | |
| *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 | **X** | Core Network |  |

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| ***Title:*** | Introduction of capabilities for IoT NTN TDD | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | IOT\_NTN\_TDD-Core | | | | |  | ***Date:*** | | | 2025-09-05 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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:*** | | Introduction of a capabilities for IoT NTN TDD | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Introducing capabilities for IoT NTN TDD:   * Conditionally mandatory feature for IoT NTN TDD mode based on RAN1 feature list in R1-2504676 and features agreed in RAN2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | IoT NTN TDD mode is not supported | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.10.X (New) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS/TR 36.331 CR 5138  TS/TR 36.321 CR 1592  TS/TR 36.304 CR 0883  TS/TR 36.300 CR 1426 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | First version endorsed in R2-2505148 | | | | | | | | |

*NEXT CHANGE*

# 7 Conditionally Mandatory features

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## 7.10 Other features

### 7.10.1 Logged MDT measurement suspension due to IDC interference

It is mandatory to support Logged MDT measurement suspension due to IDC interference for UEs which are supporting logged measurements in RRC\_IDLE upon request from the network and in-device coexistence indication as well as autonomous denial functionality as specified in TS 36.331 [5].

### 7.10.2 Support of extended reporting of WLAN measurements

It is mandatory to support reporting of extended number of measurements of WLAN IDs for UEs which are supporting WLAN measurements as specified in TS 36.331 [5].

### 7.10.3 wlan-ReportAnyWLAN-r14

Indicates whether UE supports reporting of measurements of unknown WLAN as specified in TS 36.331 [5]. It is mandatory to support reporting of measurements of unknown WLAN ID for UEs which are supporting WLAN measurements as specified in TS 36.331 [5].

### 7.10.4 *wlan-PeriodicMeas-r14*

This parameter indicates whether the UE supports periodic reporting of WLAN measurements. It is mandatory to support periodic reporting of WLAN measurements for UEs which are supporting WLAN measurements as specified in TS 36.331 [5].

### 7.10.5TA Reporting during Initial Access for NTN

It is mandatory to support TA report during initial access for UEs which support *ntn-TA-Report-r17* as specified in TS 36.321 [4].

### 7.10.X IoT NTN TDD mode

It is mandatory to support IoT NTN TDD mode for UEs which indicate support of band 249, see TS 36.102 [43]. This feature is only applicable if the UE supports *ntn-Connectivity-EPC-r17* and any *ue-Category-NB*. For the UE supporting IoT NTN TDD mode, the UE shall support the following components:

- IoT NTN TDD Frame Structure as defined in TS 36.211 [17];

- DL subframes of pattern fixed to subframes [3 4 5 6 7 8 9 0] across two consecutive radio frames;

- non-U NB-IoT subframes not being considered by the UE as "NB-IoT UL subframes";

- non-D NB-IoT subframes not being considered by the UE as "NB-IoT DL subframes";

- NPSS/NSSS/NPBCH/SIB1-NB transmissions dropped in non-D NB-IoT subframes;

- postponement of NPRACH, PUR and UL SPS transmissions in non-U NB-IoT subframes until the next U NB-IoT subframe(s);

- postponement of SI-message reception in non-D NB-IoT subframes to the next D NB-IoT subframe(s);

- NPRACH periodicities of 90ms and 180ms;

- extended *k-Mac* (*k-Mac-r19*).