**3GPP TSG-RAN WG2 Meeting #129R2-2501417**

**Athens, Greece, February 17th– 21st, 2025**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **36.306** | **CR** | **1900** | **rev** | **2** | **Current version:** | **18.4.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Introduction of LTE TN to NR NTN Mobility UE Capability | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | vivo | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LTE\_TN\_NR\_NTN\_mob-Core | | | | |  | ***Date:*** | | | 2025-02-28 |
|  |  | | | |  | |  | | |  |
| ***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 UE capabilities for inter-RAT cell measurement on NR NTN cell and redirection to NR NTN cell. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. A new optional UE capability without siganlling is introduced to allow inter-RAT measurement for cell reselection from an E-UTRA TN cell to an NR NTN cell. 2. A new optional UE capability with siganlling is introduced to allow inter-RAT measurement for redirection from an E-UTRA TN cell to an NR NTN cell. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | LTE TN to NR NTN mobility is not supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 3.3, 4.3.34.x (new), 6.8.x (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 36.331 CR 5065  TS 36.300 CR 1412 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Revision of R2-2500705 | | | | | | | | |

START OF CHANGE

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 36.323: "Evolved Universal Terrestrial Radio Access (E-UTRA) Packet Data Convergence Protocol (PDCP) specification".

[3] 3GPP TS 36.322: "Evolved Universal Terrestrial Radio Access (E-UTRA) Radio Link Control (RLC) specification".

[4] 3GPP TS 36.321: "Evolved Universal Terrestrial Radio Access (E-UTRA) Medium Access Control (MAC) specification".

[5] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA) Radio Resource Control (RRC) specification".

[6] 3GPP TS 36.101: "Evolved Universal Terrestrial Radio Access (E-UTRA) radio transmission and reception".

[7] IETF RFC 5795: "The RObust Header Compression (ROHC) Framework".

[8] IETF RFC 6846: "RObust Header Compression (ROHC): A Profile for TCP/IP (ROHC-TCP)".

[9] IETF RFC 3095: "RObust Header Compression (RoHC): Framework and four profiles: RTP, UDP, ESP and uncompressed".

[10] IETF RFC 3843: "RObust Header Compression (RoHC): A Compression Profile for IP".

[11] IETF RFC 4815: "RObust Header Compression (ROHC): Corrections and Clarifications to RFC 3095".

[12] IETF RFC 5225: "RObust Header Compression (ROHC) Version 2: Profiles for RTP, UDP, IP, ESP and UDP Lite".

[13] 3GPP TS 36.355: "Evolved Universal Terrestrial Radio Access (E-UTRA) LTE Positioning Protocol (LPP)".

[14] 3GPP TS 36.304: "Evolved Universal Terrestrial Radio Access (E-UTRA); UE Procedures in Idle Mode".

[15] 3GPP TS 37.320: "Universal Terrestrial Radio Access (UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRA); Radio measurement collection for Minimization of Drive Tests (MDT); Overall description; Stage 2".

[16] 3GPP TS 36.133: "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management".

[17] 3GPP TS 36.211: "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical Channels and Modulation".

[18] 3GPP TS 23.401: "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access".

[19] 3GPP TS 23.216: "Single Radio Voice Call Continuity (SRVCC)".

[20] 3GPP TS 25.307: "Requirement on User Equipments (UEs) supporting a release-independent frequency band".

[21] 3GPP TS 24.312: "Access Network Discovery and Selection Function (ANDSF) Management Object (MO)".

[22] 3GPP TS 36.213: "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures".

[23] 3GPP TS 36.214: "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer - Measurements".

[24] 3GPP TS 23.303: "Proximity-based services (ProSe); Stage 2".

[25] 3GPP TS 36.314: "Evolved Universal Terrestrial Radio Access (E-UTRA); Layer 2- Measurements".

[26] 3GPP TS 36.212: "Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding".

[27] 3GPP TS 36.307: "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements on User Equipments (UEs) supporting a release-independent frequency band".

[28] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3".

[29] 3GPP TS 23.285: "Technical Specification Group Services and System Aspects; Architecture enhancements for V2X services".

[30] 3GPP TS 36.300: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRAN); Overall description; Stage 2".

[31] 3GPP TS 23.246: "Multimedia Broadcast/Multicast Service (MBMS); Architecture and functional description".

[32] 3GPP TS 38.306 "NR; UE Radio Access Capabilities".

[33] 3GPP TS 38.101-1: "NR User Equipment (UE) radio transmission and reception Part 1: Range 1 Standalone".

[34] 3GPP TS 38.101-2: "NR User Equipment (UE) radio transmission and reception Part 2: Range 2 Standalone".

[35] 3GPP TS 38.331: "NR; Radio Resource Control (RRC) protocol specification".

[36] 3GPP TS 38.215: "NR; Physical layer measurements".

[37] 3GPP TS 38.133: "NR; Requirements for support of radio resource management".

[38] 3GPP TS 37.340: "Evolved Universal Terrestrial Radio Access (E-UTRA) and NR; Multi-connectivity".

[39] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3".

[40] 3GPP TS 38.323: "NR; Packet Data Convergence Protocol (PDCP) specification".

[41] 3GPP TS 38.314: "NR; Layer 2 Measurements".

[42] 3GPP TS 23.287: "Technical Specification Group Services and System Aspects; Architecture enhancements for 5G System (5GS) to support Vehicle-to-Everything (V2X) services".

[43] 3GPP TS 36.102: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception for satellite access".

[44] 3GPP TS 38.101-3: "NR User Equipment (UE) radio transmission and reception Part 3: Range 1 and Range 2 Interworking operation with other radios".

[xx] 3GPP TS 38.101-5: "NR User Equipment (UE) radio transmission and reception Part 5: Satellite access Radio Frequency (RF) and performance requirements".

NEXT CHANGE

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [1].

1xRTT CDMA2000 1x Radio Transmission Technology

ACK Acknowledgement

ACDC Application specific Congestion control for Data Communication

ANDSF Access Network Discovery and Selection Function

ANR Automatic Neighbour Relation

BCCH Broadcast Control Channel

CAS Cell Acquisition Subframes

CFI Control Format Indicator

CG Cell Group

CRS Cell-specific Reference Signal

CSG Closed Subscriber Group

CSI Channel State Information

DC Dual Connectivity

DCI Downlink Control Information

DL-SCH Downlink Shared Channel

EHC Ethernet Header Compression

E-UTRA Evolved Universal Terrestrial Radio Access

E-UTRAN Evolved Universal Terrestrial Radio Access Network

FDD Frequency Division Duplex

GERAN GSM/EDGE Radio Access Network

HARQ Hybrid Automatic Repeat Request

HRPD High Rate Packet Data

HSDN High Speed Dedicated Network

IRC Interference Rejection Combining

MAC Medium Access Control

MMSE Minimum Mean Squared Error

MO-EDT Mobile Originated Early Data Transmission

MRO Mobility Robustness Optimisation

MT-EDT Mobile Terminated Early Data Transmission

MTSI Multimedia Telephony Service for IMS

MUST MultiUser Superposition Transmission

NAICS Network Assisted Interference Cancellation/Suppression

NB-IoT Narrow Band Internet of Things

NTN Non-Terrestrial Network

OS OFDM Symbol

PCell Primary Cell

PDCCH Physical Downlink Control Channel

PDCP Packet Data Convergence Protocol

PDSCH Physical Downlink Shared Channel

PHR Power Headroom Reporting

ProSe Proximity-based Services

PUCCH Physical Uplink Control Channel

PUR Preconfigured Uplink Resource

PUSCH Physical Uplink Shared Channel

QoE Quality of Experience

RACH Random Access CHannel

RAI Release Assistance Indication

RAT Radio Access Technology

RLC Radio Link Control

RLF Radio Link Failure

ROHC RObust Header Compression

RRC Radio Resource Control

SC-PTM Single Cell Point to Multipoint

SCC Secondary Component Carrier

SCell Secondary Cell

SI System Information

SL Sidelink

SL-DCH Sidelink Discovery CHannel

SL-SCH Sidelink Shared CHannel

SON Self Organizing Networks

SPT Short Processing Time

SR Scheduling Request

SSAC Service Specific Access Control

SSTD SFN and Subframe Timing Difference

STTI Short TTI

TDD Time Division Duplex

TTI Transmission Time Interval

UCI Uplink Control Information

UDC Uplink Data Compression

UE User Equipment

UL-SCH Uplink Shared Channel

UMTS Universal Mobile Telecommunications System

UTRA UMTS Terrestrial Radio Access

V2X Vehicle-to-Everything

WLAN Wireless Local Area Network

NEXT CHANGE

### 4.3.34 Inter-RAT Parameters NR

4.3.34.1 *en-DC-r15*

This field indicates whether UE supports E-UTRA NR Dual Connectivity as specified in TS 37.340 [38].

4.3.34.2 *supportedBandListEN-DC-r15*

Only applicable if the UE supports E-UTRA NR Dual Connectivity or NG-RAN E-UTRA-NR Dual Connectivity. This field includes the supported NR bands as defined in TS 38.101-1 [33] and TS 38.101-2 [34]. The presence of this field also indicates that the UE can perform both NR SS-RSRP and SS-RSRQ measurement in the included NR band(s) as specified in TS 38.215 [36].

4.3.34.3 *supportedBandListNR-SA-r15*

This field indicates whether UE supports standalone NR, as specified in TS 38.331 [35], and includes the supported NR bands as defined in TS 38.101-1 [33] and TS 38.101-2 [34]. The presence of this field also indicates that the UE can perform both NR SS-RSRP and SS-RSRQ measurement in the included NR band(s) as specified in TS 38.215 [36].

4.3.34.4 *eutra-5GC-HO-ToNR-FDD-FR1-r15*

This field indicates whether the UE supports handover from E-UTRA/5GC to NR FDD FR1. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs and if the UE supports *eutra-5GC-r15*.

4.3.34.5 *eutra-5GC-HO-ToNR-TDD-FR1-r15*

This field indicates whether the UE supports handover from E-UTRA/5GC to NR TDD FR1. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs and if the UE supports *eutra-5GC-r15*.

4.3.34.6 *eutra-5GC-HO-ToNR-FDD-FR2-r15*

This field indicates whether the UE supports handover from E-UTRA/5GC to NR FDD FR2. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs and if the UE supports *eutra-5GC-r15*.

4.3.34.7 *eutra-5GC-HO-ToNR-TDD-FR2-r15*

This field indicates whether the UE supports handover from E-UTRA/5GC to NR TDD FR2-1. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs and if the UE supports *eutra-5GC-r15*.

4.3.34.8 *eutra-EPC-HO-ToNR-FDD-FR1-r15*

This field indicates whether the UE supports handover from E-UTRA/EPC to NR FDD FR1. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs.

4.3.34.9 *eutra-EPC-HO-ToNR-TDD-FR1-r15*

This field indicates whether the UE supports handover from E-UTRA/EPC to NR TDD FR1. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs.

4.3.34.10 *eutra-EPC-HO-ToNR-FDD-FR2-r15*

This field indicates whether the UE supports handover from E-UTRA/EPC to NR FDD FR2. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs.

4.3.34.11 *eutra-EPC-HO-ToNR-TDD-FR2-r15*

This field indicates whether the UE supports handover from E-UTRA/EPC to NR TDD FR2-1. It is mandatory for UEs of this release of the specification if the UE supports the associated RATs.

4.3.34.12 *sa-NR-r15*

This field indicates whether the UE supports standalone NR as specified in TS 38.331 [35].

4.3.34.13 *ims-VoiceOverNR-FR1-r15*

This field indicates whether the UE supports IMS voice over NR FR1.

4.3.34.14 *ims-VoiceOverNR-FR2-r15*

This field indicates whether the UE supports IMS voice over NR FR2-1.

4.3.34.15 *eventB2-r15*

This field defines whether the UE supports event B2. In this release of specification, it is mandatory for a UE supporting NR SA operation to support *eventB2-r15*.

4.3.34.16 *ss-SINR-Meas-NR-FR1-r15*

This field indicates whether the UE can perform NR FR1 SS-SINR measurement as specified in TS 38.215 [36].

4.3.34.17 *ss-SINR-Meas-NR-FR2-r15*

This field indicates whether the UE can perform NR FR2 SS-SINR measurement as specified in TS 38.215 [36].

4.3.34.18 *ng-EN-DC-r15*

This field indicates whether UE supports NG-RAN E-UTRA-NR Dual Connectivity as specified in TS 37.340 [38].

4.3.34.19 *nr-HO-ToEN-DC-r16*

This field indicates whether the UE supports inter-RAT handover from NR to EN-DC while NR-DC or NE-DC is not configured as defined in TS 37.340 [38]. It is mandatory to support inter-RAT handover from NR to EN-DC if the UE supports E-UTRA NR Dual Connectivity.

4.3.34.20 *ce-EUTRA-5GC-HO-ToNR-FDD-FR1-r16*

This field indicates whether the UE supports handover from E-UTRA/5GC in coverage enhancement mode A or B to NR FDD FR1. A UE indicating support of *ce-EUTRA-5GC-HO-ToNR-FDD-FR1-r16* shall also indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports a UE Category other than Category M1 and M2.

4.3.34.21 *ce-EUTRA-5GC-HO-ToNR-TDD-FR1-r16*

This field indicates whether the UE supports handover from E-UTRA/5GC in coverage enhancement mode A or B to NR TDD FR1. A UE indicating support of *ce-EUTRA-5GC-HO-ToNR-TDD-FR1-r16* shall also indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports a UE Category other than Category M1 and M2.

4.3.34.22 *ce-EUTRA-5GC-HO-ToNR-FDD-FR2-r16*

This field indicates whether the UE supports handover from E-UTRA/5GC in coverage enhancement mode A or B to NR FDD FR2. A UE indicating support of *ce-EUTRA-5GC-HO-ToNR-FDD-FR2-r16* shall also indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports a UE Category other than Category M1 and M2.

4.3.34.23 *ce-EUTRA-5GC-HO-ToNR-TDD-FR2-r16*

This field indicates whether the UE supports handover from E-UTRA/5GC in coverage enhancement mode A or B to NR TDD FR2-1. A UE indicating support of *ce-EUTRA-5GC-HO-ToNR-TDD-FR2-r16* shall also indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports a UE Category other than Category M1 and M2.

4.3.34.24 *extendedBand-n77-r16*

This field is only applicable for UEs that indicate support for band n77. If present, the UE supports the restriction to 3450 - 3550 MHz and 3700 - 3980 MHz ranges of band n77 in the USA as specified in Note 12 of Table 5.2-1 in TS 38.101-1 [33]. If absent, the UE supports only restriction to the 3700 - 3980 MHz range of band n77 in the USA. A UE that indicates this field shall also support NS value 55 as specified in TS 38.101-1 [33]. A UE supporting NS value 55 shall indicate this field.

4.3.34.25 *eutra-5GC-HO-ToNR-TDD-FR2-2-r17*

This field indicates whether the UE supports handover from E-UTRA/5GC to NR TDD FR2-2. A UE that indicates this field also supports *eutra-5GC-r15*. A UE supporting handover from E-UTRA/5GC to NR TDD FR2-2 shall also support the RRM measurements for FR2-2 as specified in TS 36.331 [5].

4.3.34.26 *eutra-EPC-HO-ToNR-TDD-FR2-2-r17*

This field indicates whether the UE supports handover from E-UTRA/EPC to NR TDD FR2-2. A UE supporting handover from E-UTRA/EPC to NR TDD FR2-2 shall also support the RRM measurements for FR2-2 as specified in TS 36.331 [5].

4.3.34.27 *ims-VoiceOverNR-FR2-2-r17*

This field indicates whether the UE supports IMS voice over NR FR2-2.

4.3.34.28 *ce-EUTRA-5GC-HO-ToNR-TDD-FR2-2-r17*

This field indicates whether the UE supports handover from E-UTRA/5GC in coverage enhancement mode A or B to NR TDD FR2-2. A UE indicating support of *ce-EUTRA-5GC-HO-ToNR-TDD-FR2-2-r17* shall also indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports a UE Category other than Category M1 and M2.

4.3.34.29 *extendedBand-n77-2-r17*

This field is only applicable for UEs that indicate support for band n77. If present, the UE supports the restriction to 3450 - 3650 MHz and 3650 - 3980 ranges of band n77 in Canada as specified in Note 12 of Table 5.2-1 in TS 38.101-1 [33]. If absent, the UE supports only restriction to the 3450 - 3650 MHz range of band n77 in Canada. A UE that indicates this field shall also support NS value 57 as specified in TS 38.101-1 [33]. A UE supporting NS value 57 shall indicate this field.

4.3.34.x *ntn-RedirectionNR*

This field indicates whether the UE supports the inter-RAT measurement for cell selection for redirection to a carrier frequency of the supported NR NTN bands as defined in TS 38.101-5 [xx] with using satellite assistance information provided by *RRCConnectionRelease*.

NEXT CHANGE

## 6.8 Other features

### 6.8.1 System Information Block Type 16

It is optional for UE, including UEs of any *ue- Category-NB*, to support the reception of *SystemInformationBlockType16* as specified in TS 36.331 [5].

### 6.8.2 QCI1 indication in Radio Link Failure Report

It is optional for the UE to include *drb-EstablishedWithQCI-1* in *RLF-Report* as specified in TS 36.331 [5].

### 6.8.3 Enhanced random access power control

It is optional for UE to support enhanced random access power control for FDD as specified in TS 36.321 [4] and TS 36.213 [22], clauses 16.2.1.1.1 and 16.3.1. This feature is only applicable if the UE supports any *ue-Category-NB*.

### 6.8.4 MO-EDT for Control Plane CIoT EPS Optimization

It is optional for UE to support MO-EDT for Control Plane CIoT EPS optimizations as specified in TS 24.301 [28]. This feature is only applicable if the UE supports *ce-ModeA-r13*, or for FDD if the UE supports any *ue-Category-NB*.

### 6.8.5 Void

### 6.8.6 Enhanced PHR

It is optional for UE to support enhanced PHR in MSG3 for FDD, as defined in TS 36.321 [4]. This feature is only applicable if the UE supports any *ue-Category-NB*.

### 6.8.7 void

### 6.8.8 Resynchronization Signals

It is optional for UE to support resynchronization signals, as defined in TS 36.211 [17]. This feature is only applicable if the UE supports *ce-ModeA-r13*.

### 6.8.9 Measurement gaps for higher UE velocity

It is optional for UE to support measurement gaps for higher UE velocity, as defined in TS 36.331 [5] and TS 36.133[16]. This feature is only applicable if the UE supports *ce-ModeA-r13*.

### 6.8.10 MT-EDT for Control Plane CIoT EPS Optimisation

It is optional for UE to support MT-EDT for Control Plane CIoT EPS Optimisation, as defined in TS 24.301 [28]. If the UE supports 'MT-EDT for Control Plane CIoT EPS Optimisation' it shall support 'MO-EDT for Control Plane CIoT EPS Optimisation' as described in clause 6.8.4. This feature is only applicable if the UE supports *ce-ModeA-r13,* or for FDD if the UE supports any *ue-Category-NB*.

### 6.8.11 MT-EDT for User Plane CIoT EPS Optimisation

It is optional for UE to support MT-EDT for User Plane CIoT EPS Optimisation, as defined in TS 24.301 [28]. If the UE supports 'MT-EDT for User Plane CIoT EPS Optimisation' it shall support *earlyData-UP-r15* as described in clause 4.3.8.7. This feature is only applicable if the UE supports *ce-ModeA-r13,* or for FDD if the UE supports any *ue-Category-NB*.

### 6.8.12 Void

### 6.8.13 Reduced MIB/SIB1-BR acquisition time

It is optional for UE to support reduced MIB/SIB1-BR acquisition time requirements as specified in TS 36.133 [16]. This feature is only applicable if the UE supports *ce-ModeB-r13.*

### 6.8.14 High speed dedicated network features

It is optional for UE to support HSDN cell reselection handling in RRC\_IDLE and RRC\_INACTIVE (if the UE supports *eutra-5GC-r15*) as specified in TS 36.304 [14] and TS 36.331 [5].

### 6.8.15 Carrier specific NRSRP thresholds for NPRACH resource selection

It is optional for UE to support carrier specific NRSRP thresholds for NPRACH resource selection as specified in TS 36.321 [4]. This feature is only applicable if the UE supports any *ue-Category-NB* and *multiCarrier-NPRACH-r14* or *multiCarrierPagingTDD-r15*.

### 6.8.16 Protection against improper reselection to GERAN/UTRAN

It is optional for UE to support protection against improper reselection to GERAN/UTRAN as specified in TS 36.304 [14].

### 6.8.17 Inter-RAT cell reselection of an NR mobile IAB cell

It is optional for UE to support inter-RAT cell reselection priority handling of an NR mobile IAB cell in RRC\_IDLE and RRC\_INACTIVE (if the UE supports *eutra-5GC-r15*) as specified in TS 36.304 [14] and TS 36.331 [5].

### 6.8.x Inter-RAT measurement on an NR NTN cell

It is optional for UE in RRC\_IDLE, or in RRC\_INACTIVE (if the UE supports *eutra-5GC-r15*) to support inter-RAT measurement for cell reselection from an E-UTRA terrestrial network cell to an NR NTN cell as specified in TS 36.304 [14] and TS 36.331 [5].

END OF CHANGE