**3GPP TSG-RAN WG3 Meeting #124 *R3-243895***

**Fukuoka, Japan, 20-24 May 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.401** | **CR** | **0395** | **rev** | **1** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **x** | Core Network |  |

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| ***Title:*** | Rapporteur update for 38.401 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | NEC | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2024-05-20 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **D** |  | | | | | ***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 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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19) Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Rapporteur review of specification and found some editorial correction | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Reference to 38.460 is updated to 37.480  Add abbreviation of NDS.  mpact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has no impact to any functionality | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The spec remains editorial mistake. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 10.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Rev 0: R3-243258  Rev 1:   * Changed title from “Rapporteur update for 38.401-CR”. * Added in cover page the Consequences if not approved. * Added abbreviation of NDS | | | | | | | | |

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| *Start of change part* |

# 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 38.300: "NR; Overall description; Stage-2".

[3] 3GPP TS 23.501: "System Architecture for the 5G System".

[4] 3GPP TS 38.473: "NG-RAN; F1 application protocol (F1AP)".

[5] 3GPP TS 38.414: "NG-RAN; NG data transport".

[6] 3GPP TS 38.424: "NG-RAN; Xn data transport".

[7] 3GPP TS 38.474: "NG-RAN; F1 data transport".

[8] ITU-T Recommendation G.823 (2000-03): "The control of jitter and wander within digital networks which are based on the 2048 kbit/s hierarchy".

[9] ITU-T Recommendation G.824 (2000-03): "The control of jitter and wander within digital networks which are based on the 1544 kbit/s hierarchy".

[10] ITU-T Recommendation G.825 (2001-08): "The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy (SDH)".

[11] ITU-T Recommendation G.8261/Y.1361 (2008-04): "Timing and Synchronization aspects in Packet networks".

[12] 3GPP TS 37.340: "NR; Multi-connectivity; Overall description; Stage-2".

[13] 3GPP TS 33.501: "Security Architecture and Procedures for 5G System".

[14] 3GPP TS 38.410: "NG-RAN; NG general aspect and principles".

[15] 3GPP TS 38.420: "NG-RAN; Xn general aspects and principles"

[16] 3GPP TS 38.470: "NG-RAN; F1 general aspects and principles".

[17] 3GPP TS 37.480: "E1 general aspects and principles"..

[18] 3GPP TS 33.210: "3G security; Network Domain Security (NDS); IP Network Layer Security".

[19] 3GPP TS 36.300: "Evolved Universal Terrestrial Radio Access (E-UTRA), Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2".

[20] 3GPP TS 32.422: "Trace control and configuration management".

[21] 3GPP TS 37.470: "Evolved Universal Terrestrial Radio Access Network (E-UTRAN) and NG-RAN; W1 general aspects and principles; Stage-2".

[22] 3GPP TS 38.340: "NR; Backhaul Adaptation Protocol (BAP) specification".

[23] 3GPP TS 38.331: "NR; Radio Resource Control (RRC) protocol specification".

[24] 3GPP TS 38.425: "NG-RAN; NR user plane Protocol".

[25] 3GPP TS 38.305: "NG Radio Access Network (NG-RAN); Stage 2 functional specification of User Equipment (UE) positioning in NG-RAN".

[26] 3GPP TS 38.472: "NG-RAN; F1 signalling transport".

[27] 3GPP TS 23.247: " Architectural enhancements for 5G multicast-broadcast services; Stage 2".

[28] 3GPP TS 36.401: "Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture Description".

[29] IETF RFC 4555 (2006-06): "RFC IKEv2 Mobility and Multihoming Protocol (MOBIKE)".

[30] 3GPP TS 38.321 " NR; Medium Access Control (MAC) protocol specification ".

[31] 3GPP TS 37.320: "Radio measurement collection for Minimization of Drive Tests (MDT); Overall description; Stage 2".

[32] 3GPP TS 23.502: "Procedures for the 5G System (5GS); Stage 2".

[33] 3GPP TS 28.532: "Management and orchestration; Generic management services".

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## 3.2 Abbreviations

For the purposes of the present document, the terms and definitions given in TR 21.905 [1] and the following apply.   
A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

5GC 5G Core Network

AMF Access and Mobility Management Function

AP Application Protocol

AS Access Stratum

AI Artificial Intelligence

BAP Backhaul Adaptation Protocol

BH Backhaul

BSR Buffer Status Report

CAG Closed Access Group

CHO Conditional Handover

CLI Cross-Link Interference

CM Connection Management

CMAS Commercial Mobile Alert Service

CPA Conditional PSCell Addition

CPC Conditional PSCell Change

DAPS Dual Active Protocol Stack

DU Distributed Unit

EM Element Manager

EN-DC E-UTRA-NR Dual Connectivity

ETWS Earthquake and Tsunami Warning System

F1-U F1 User plane interface

F1-C F1 Control plane interface

F1AP F1 Application Protocol

FDD Frequency Division Duplex

FTEID Fully Qualified TEID

GTP-U GPRS Tunnelling Protocol

IAB Integrated Access and Backhaul

IP Internet Protocol

L2 Layer-2

LTM L1/L2 Triggered Mobility

MBS Multicast Broadcast Service

MCG Master Cell Group

MDT Minimization of Drive Tests

MOCN Multi-Operator Core Network

MN Master Node

MgNB Master gNB

mIAB Mobile IAB

mIAB-DU Mobile IAB Distributed Unit

mIAB-MT Mobile IAB Mobile Termination

MP Multi-Path

MRB MBS Radio Bearer

MRDC Multi-Radio Dual Connectivity

ML Machine Learning

MT-SDT Mobile Terminated Small Data Transmission

N3C Non-3GPP Connection

NAS Non-Access Stratum

NCI NR Cell Identity

NDS Network Domain Security

NID Network identifier

NPN Non-Public Network

NSA Non Standalone

OAM Operation, Administration and Maintenance

PNI-NPN Public Network Integrated Non-Public Network

PTP Point to Point

PTM Point to Multipoint

PWS Public Warning System

QoE Quality of Experience

QoS Quality of Service

RANAC RAN Area Code

RET Remote Electrical Tilting

RIM Remote Interference Management

RIM-RS Remote Interference Management Reference Signal

RLF Radio Link Failure

RNL Radio Network Layer

RRC Radio Resource Control

SA Standalone

SAP Service Access Point

SCG Secondary Cell Group

SCTP Stream Control Transmission Protocol

SDT Small Data Transmission

SFN System Frame Number

SgNB Secondary gNB

SM Session Management

SMF Session Management Function

SN Secondary Node

SNPN Stand-alone Non-Public Network

SRAP Sidelink Relay Adaptation Protocol

TAC Tracking Area Code

TCE Trace Collection Entity

TDD Time Division Duplex

TDM Time Division Multiplexing

TEID Tunnel Endpoint Identifier

TMA Tower Mounted Amplifier

TNL Transport Network Layer

U2N UE-to-Network

UL Uplink

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# 10 NG-RAN interfaces

## 10.1 NG interface

TS 38.410 [14] specifies NG interface general aspects and principles.

## 10.2 Xn interface

TS 38.420 [15] specifies Xn interface general aspects and principles.

## 10.3 F1 interface

TS 38.470 [16] specifies F1 interface general aspects and principles.

## 10.4 E1 interface

TS 37.480 [17] specifies E1 interface general aspects and principles.

## 10.5 Antenna interface - general principles

The Iuant interface for the control of RET antennas or TMAs is a logical part of the NG-RAN.

The support of any standardised antenna interface technique shall not be prevented; e.g. AISG (Antenna interface standards group) specifications may be used.