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**5G;
LTE;
5GS;**

**User Equipment (UE) conformance specification;
Part 2: Applicability of protocol test cases
(3GPP TS 38.523-2 version 16.12.0 Release 16)**



Reference

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Keywords

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Contents

| | |
|--|-----------|
| Intellectual Property Rights | 2 |
| Legal Notice | 2 |
| Modal verbs terminology..... | 2 |
| Foreword..... | 4 |
| 1 Scope | 5 |
| 2 References | 5 |
| 3 Definitions, symbols and abbreviations | 6 |
| 3.1 Definitions | 6 |
| 3.2 Symbols..... | 6 |
| 3.3 Abbreviations | 6 |
| 4 Recommended Test Case Applicability | 7 |
| 4.0 Introduction | 7 |
| 4.1 Protocol conformance test cases applicability..... | 8 |
| 4.2 Protocol conformance test cases Applicability Condition..... | 44 |
| Annex A (informative): Change history | 52 |
| History | 56 |

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

The present document is part 2 of a multi-part deliverable covering the 5G System (5GS) User Equipment (UE) protocol conformance specification, as identified below:

- 3GPP TS 38.523-1 [2]: "5GS; User Equipment (UE) conformance specification; Part 1: Protocol".
- **3GPP TS 38.523-2: "5GS; User Equipment (UE) conformance specification; Part 2: Applicability of protocol test cases" (the present document).**
- 3GPP TS 38.523-3 [3]: "5GS; User Equipment (UE) conformance specification; Part 3: Protocol Test Suites".

1 Scope

The present document provides the applicability of protocol test cases proforma for 5G New Radio (NR) User Equipment (UE), in compliance with the relevant requirements.

The present document specifies the recommended applicability statement for the test cases included in 3GPP TS 38.523-1 [2] and 3GPP TS 38.523-3 [3]. These applicability statements are based on the features implemented in the UE.

Special conformance testing functions can be found in 3GPP TS 38.509 [5] and 3GPP TS 36.509 [7] and the common test environments are included in 3GPP TS 38.508-1 [4] and 3GPP TS 36.508 [6].

The present document is valid for UE implemented according to 3GPP Releases starting from Release 15 up to the Release indicated on the cover page of the present document.

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 38.523-1: "5GS; User Equipment (UE) conformance specification; Part 1: Protocol".
- [3] 3GPP TS 38.523-3: "5GS; User Equipment (UE) conformance specification; Part 3: Protocol Test Suites".
- [4] 3GPP TS 38.508-1: "5GS; User Equipment (UE) conformance specification; Part 1: Common test environment".
- [5] 3GPP TS 38.508-2: "5GS; User Equipment (UE) conformance specification; Part 2: Common Implementation Conformance Statement (ICS) proforma".
- [6] 3GPP TS 38.509: "5GS; Special conformance testing functions for User Equipment (UE)".
- [7] 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRAN); Common Test Environments for User Equipment (UE) Conformance Testing".
- [8] 3GPP TS 36.509: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Special conformance testing functions for User Equipment (UE)".
- [9] 3GPP TS 34.229-2: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) specification".
- [10] 3GPP TS 36.523-2: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRAN); User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".
- [11] 3GPP TS 34.123-2: "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [5] 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 [5].

Implementation Conformance Statement (ICS): statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented

ICS proforma: document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

Implementation extra Information for Testing (IXIT): A statement made by a supplier or implementer of an UEUT which contains or references all of the information (in addition to that given in the ICS) related to the UEUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the UEUT

IXIT proforma: A document, in the form of a questionnaire, which when completed for an UEUT becomes an IXIT

Protocol Implementation Conformance Statement (PICS): An ICS for an implementation or system claimed to conform to a given protocol specification

Protocol Implementation extra Information for Testing (PIXIT): An IXIT related to testing for conformance to a given protocol specification

Static conformance review: A review of the extent to which the static conformance requirements are claimed to be supported by the UEUT, by comparing the answers in the ICS(s) with the static conformance requirements expressed in the relevant specification(s)

3.2 Symbols

For the purposes of the present document, the following symbols apply:

<symbol> <Explanation>

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP 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 3GPP TR 21.905 [1].

For the purposes of the present document, the following abbreviations apply:

| | |
|-------|---|
| FFS | For Further Study |
| ICS | Implementation Conformance Statement |
| IXIT | Implementation extra Information for Testing |
| PICS | Protocol Implementation Conformance Statement |
| PIXIT | Protocol Implementation extra Information for Testing |
| SCS | System Conformance Statement |
| TC | Test Case |
| UEUT | User Equipment Under Test |

4 Recommended Test Case Applicability

4.0 Introduction

The applicability of each individual test is identified in subclause 4.1. This is just a recommendation based on the purpose for which the test case was written.

The applicability of every test is formally expressed by the use of Boolean expressions that are based on parameters (ICS). The parameters (ICS) included in TS 38.508-2 [5] are used in the test case applicability condition without reference. Parameters (ICS) specified in 3GPP TS 36.523-2 [10] and 3GPP TS 34.229-2 [9] shall be referred with proper reference.

Additional information related to the Test Case (TC), e.g. affecting its dynamic behaviour or its execution may be provided as well

The columns in subclause 4.1 have the following meaning:

Clause

The clause column indicates the clause number in TS 38.523-1 [2] that contains the test body.

Title

The title column describes the name of the test and contains the clause title of the clause in TS 38.523-1 [2] that contains the test body.

Release

The release column indicates the earliest release from which the test case is applicable. In some specific cases it may indicate the release(s) for which the TC is **only** applicable.

Note: Some exceptions to this interpretation may be indicated in Notes in column 'Number of TC Executions'.

Applicability - Condition

The following notations are used for the applicability column:

| | |
|----------------|--|
| R | recommended - the test case is recommended |
| O | optional – the test case is optional |
| N/A | not applicable - in the given context, the test case is not recommended. |
| C _i | conditional - the test is recommended ("R") or not ("N/A") depending on the support of other items. "i" is an integer identifying a unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." is used to avoid ambiguities. |

NOTE: The conditions are defined in subclause 4.2.

Applicability - Comments

This column contains a verbal description of the condition.

Additional Information - Specific ICS

This column contains the mnemonics of ICS(s) affecting the dynamic behaviour of the TC.

Additional Information - Specific IXIT

This column contains the mnemonics of IXIT(s) affecting the dynamic behaviour of the TC.

Additional Information - Number of TC Executions

This column contains, wherever applicable, the recommended for certification purposes number of TC executions. It may contain also other information e.g. exceptions to the release applicable to the test. Clarifying notes are listed at the end of the same Table.

Additional Information - Release other RAT

In regard to a particular test case, this column provides information on the release which is used by the simulated network in the other (i.e. non 5GS) RAT(s) where applicable. For each applicable RAT the release shall be indicated in the format 'Rel-X RAT'. When multiple RATs are applicable the entries per RAT shall be separated by a comma. When a value for a 3GPP RAT is not provided but the RAT is in the scope of the test case then for this RAT the release indicated in the Release column applies (per default).

4.1 Protocol conformance test cases applicability

Table 4.1-1a: Applicability of Protocol conformance Idle mode test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|--------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 6 | Idle mode operations | | | |
| 6.1 | NR idle mode operations | | | |
| 6.1.1 | NG-RAN Only PLMN Selection | | | |
| 6.1.1.1 | PLMN selection of RPLMN, HPLMN/EHPLMN, UPLMN and OPLMN / Automatic mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.1.2 | PLMN selection of "Other PLMN/access technology combinations" / Automatic mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.1.3 | Cell reselection of ePLMN in manual mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.1.4 | PLMN selection in shared network environment / Automatic mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.1.5 | PLMN selection of RPLMN, HPLMN/EHPLMN, UPLMN and OPLMN / Automatic mode / User reselection | Rel-15 | C36 | UEs supporting 5G Core and user initiated PLMN reselection in automatic mode on NR |
| 6.1.1.6 | PLMN selection / Periodic reselection / MinimumPeriodicSearchTimer | Rel-15 | C34 | UEs supporting 5G Core and MinimumPeriodicSearchTimer |
| 6.1.1.7 | PLMN selection of RPLMN or (E)HPLMN; Automatic mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.1.8 | PLMN selection of RPLMN or (E)HPLMN; Manual mode | Rel-15 | C91 | UEs supporting 5G Core and ManualModeNetworkSelectionException |
| 6.1.2 | NG-RAN Only Cell Selection | | | |
| 6.1.2.1 | Cell selection / Qrxlevmin & Cell reselection (Intra NR) | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.2 | Cell selection / Qqualmin / Intra NR / Serving cell becomes non-suitable (Srxlev > 0, Squal < 0) | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.3 | Cell selection / Intra NR / Serving cell becomes non-suitable (S<0, MIB Indicated barred) | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.4 | Cell reselection for interband operation | Rel-15 | C37 | UEs supporting 5G Core and more than 1 FDD or TDD NR band |
| 6.1.2.5 | Cell reselection for interband operation using Pcompensation / Between FDD and TDD | Rel-15 | C38 | UEs supporting 5G Core and NR FDD and NR TDD |
| 6.1.2.7 | Cell reselection / Equivalent PLMN | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.8 | Cell reselection / Equivalent PLMN / Single Frequency operation | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.9 | Cell reselection using Qhyst, Qoffset and Treselection | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.11 | Area Specific SIBs using systemInformationAreaID | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.12 | Cell reselection using cell status and cell reservations / cellReservedForOtherUse | Rel-15 | C21 | UEs supporting 5G Core. |
| 6.1.2.13 | Cell reselection using cell status and cell reservations / Access Identity 0, 1, 2 and 12 to 14 - cellReservedForOperatorUse | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.14 | Cell reselection using cell status and cell reservations / Access Identity 11 or 15 - cellReservedForOperatorUse | Rel-15 | C21 | UEs supporting 5G Core. |
| 6.1.2.15 | Cell reselection in shared network environment | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.16 | Inter-frequency cell reselection (equal priority) | Rel-15 | C21 | UEs supporting 5G Core |

| Clause | TC Title | Release | Applicability | |
|--------------|---|---------|---------------|-----------------------------------|
| | | | Condition | Comment |
| 6.1.2.17 | Cell reselection / Cell-specific reselection parameters provided by the network in a neighbouring cell list | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.18 | Cell reselection, Sintrasearch, Snonintrasearch | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.19 | Speed dependent cell reselection | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.20 | Inter-frequency cell reselection according to cell reselection priority provided by SIBs | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.21 | Cell reselection, SintraSearchQ and SnonIntraSearchQ | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.22 | Inter-frequency cell reselection based on common priority information with parameters ThreshX, HighQ, ThreshX, LowQ and ThreshServing, LowQ | Rel-15 | C21 | UEs supporting 5G Core |
| 6.1.2.23 | Cell reselection / MFBI | Rel-15 | C21 | UEs supporting 5G Core |
| 6.2 | Multi-mode environment | | | |
| 6.2.1 | Inter-RAT PLMN selection | | | |
| 6.2.1.1 | Inter-RAT PLMN Selection / Selection of correct RAT for OPLMN / Automatic mode | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.1.2 | Inter-RAT PLMN Selection / Selection of correct RAT for UPLMN / Automatic mode | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.1.3 | Inter-RAT PLMN Selection / Selection of correct PLMN and RAT in shared network environment / Automatic mode | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.1.4 | Inter-RAT PLMN Selection / Selection of correct RAT from the OPLMN list / Manual mode | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.1.5 | Inter-RAT Background HPLMN Search / Search for correct RAT for HPLMN / Automatic mode | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.2 | Inter-RAT Cell Selection | | | |
| 6.2.2.1 | Inter-RAT cell selection / From NR RRC_IDLE to EUTRA_Idle / Serving cell becomes non-suitable | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.2.2 | Inter-RAT cell selection / From E-UTRA_Idle to NR RRC_IDLE / Serving cell becomes non-suitable | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3 | Inter-RAT Cell Reselection | | | |
| 6.2.3.1 | Inter-RAT cell reselection / From E-UTRA_IDLE to NR RRC_IDLE (lower priority & higher priority, Srxlev based) | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.2 | Inter-RAT cell reselection / From E-UTRA_IDLE to NR RRC_IDLE (lower priority & higher priority, Squal based) | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.3 | Inter-RAT cell reselection / From NR RRC_IDLE to E-UTRA_IDLE (lower priority & higher priority, Srxlev based) | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.4 | Inter-RAT cell reselection / From NR RRC_IDLE to E-UTRA_IDLE (lower priority & higher priority, Squal based) | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.5 | Inter-RAT cell reselection / From NR RRC_IDLE to E-UTRA_IDLE according to RAT priority provided by dedicated signalling (RRCRelease) | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.6 | Inter-RAT cell reselection / From E-UTRA_IDLE to NR RRC_IDLE according to RAT priority provided by dedicated signalling (RRCConnRelease) | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.7 | Inter-RAT cell reselection / From NR RRC_IDLE to E-UTRA RRC_IDLE, Snonintrasearch | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.8 | Inter-RAT cell reselection / From E-UTRA RRC_IDLE to NR RRC_Idle, Snonintrasearch | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.9 | Void | | | |
| 6.2.3.10 | Inter-RAT cell reselection / From E-UTRA_IDLE to NR RRC_IDLE / schedulingInfoList-v12j0 | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.2.3.11 | Inter-RAT cell reselection / From E-UTRA_IDLE to NR RRC_IDLE / schedulingInfoListExt-r12 | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 6.3 | 5GS Steering of Roaming | | | |
| 6.3.1 | Steering of Roaming | | | |

| Clause | TC Title | Release | Applicability | |
|--------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 6.3.1.1 | Steering of UE in roaming during registration/security check successful using List Type 1 | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.2 | Steering of UE in roaming during registration/security check successful but SOR Transparent container indicates ACK has been NOT been requested | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.3 | Steering of UE in roaming during registration/security check unsuccessful/Automatic mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.4 | Steering of UE in roaming during registration/security check unsuccessful/Manual mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.5 | Steering of UE in roaming during registration/UE configured to receive Steering of Roaming information but does not receive Steering of Roaming from Network | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.7 | Steering of UE in roaming during registration/security check unsuccessful but emergency service pending to be activated | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 6.3.1.8 | Steering of UE in roaming after registration/Automatic PLMN selection mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.9 | Steering of UE in roaming after registration/Manual PLMN selection mode | Rel-15 | C21 | UEs supporting 5G Core |
| 6.3.1.10 | Steering of UE in roaming during mobility update registration | Rel-15 | C21 | UEs supporting 5G Core |
| 6.4 | UE Procedures in RRC_INACTIVE state | | | |
| 6.4.1 | NG-RAN Only PLMN Selection in RRC_INACTIVE state | | | |
| 6.4.1.1 | PLMN Selection / Higher priority/HPLMN in Automatic PLMN Selection mode | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 6.4.1.2 | Cell reselection of ePLMN in manual mode | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 6.4.2 | Cell Selection / Qrxlevmin & Cell Reselection (Intra NR in RRC_INACTIVE state) | | | |
| 6.4.2.1 | Cell Selection / Qrxlevmin & Cell Reselection (Intra NR in RRC_INACTIVE state) | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 6.4.2.2 | Inter-frequency cell reselection according to cell reselection priority provided by SIBs in RRC_INACTIVE state | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 6.4.3 | Inter-RAT Cell Reselection | | | |
| 6.4.3.1 | Inter-RAT cell reselection From NR RRC_INACTIVE to E-UTRA RRC_IDLE (lower priority & higher priority, Srxlev based) | Rel-15 | C110 | UEs supporting 5G Core and E-UTRA and RRC_INACTIVE |
| 6.5 | SNPN and CAG Selection | | | |
| 6.5.1 | SNPN Only Selection | | | |
| 6.5.1.1 | SNPN Selection in Manual Mode | Rel-16 | C131 | UEs supporting 5G Core and SNPN |
| 6.5.1.2 | SNPN Selection in Automatic Mode | Rel-16 | C131 | UEs supporting 5G Core and SNPN |
| 6.5.1.3 | SNPN / User Reselection in Automatic Mode | Rel-16 | C167 | UEs supporting 5G Core and SNPN and user initiated SNPN reselection in automatic mode on NR |
| 6.5.2 | CAG (Closed Access Group) | | | |
| 6.5.2.1 | CAG Selection in Manual Mode | Rel-16 | C132 | UEs supporting 5G Core and CAG |
| 6.5.2.2 | CAG Selection in Automatic Mode | Rel-16 | C132 | UEs supporting 5G Core and CAG |
| 6.5.2.4 | CAG / cell reselection / Within allowed CAG/ non-CAG cell to CAG cell | Rel-16 | C168 | UEs supporting 5G Core and CAG and Autonomous search function on NR |

Table 4.1-1b: Additional Information of Applicability of Protocol conformance Idle mode test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|--------------|------------------------------------|--|--|-------------------|
| 6 | | | | |
| 6.1 | | | | |
| 6.1.2.8 | | | If test case 6.1.2.7 has been executed then test case 6.1.2.8 needs not to be executed | |
| 6.1.2.23 | | px_NR_OverlappingNotSupportedBand_MFBI | | |
| 6.2 | | | | |
| 6.2.1 | | | | |
| 6.2.1.1 | | | | Rel-15 E-UTRA |
| 6.2.1.2 | | | | Rel-15 E-UTRA |
| 6.2.1.3 | | | | Rel-15 E-UTRA |
| 6.2.1.4 | [10] pc_Available_PLMNs_AcT_Ind | | | Rel-15 E-UTRA |
| 6.2.1.5 | | | | Rel-15 E-UTRA |
| 6.2.2 | | | | |
| 6.2.3 | | | | |
| 6.2.3.1 | | | | Rel-15 E-UTRA |
| 6.2.3.2 | | | | Rel-15 E-UTRA |
| 6.2.3.3 | | | | Rel-15 E-UTRA |
| 6.2.3.4 | | | | Rel-15 E-UTRA |
| 6.2.3.5 | | | | Rel-15 E-UTRA |
| 6.2.3.6 | | | | Rel-15 E-UTRA |
| 6.2.3.7 | | | | Rel-15 E-UTRA |
| 6.2.3.8 | | | | Rel-15 E-UTRA |
| 6.3 | | | | |
| 6.3.1 | | | | |
| 6.3.1.2 | pc_SOR_ACKNotReqLocalRel | | | |
| 6.4 | | | | |
| 6.4.1 | | | | |
| 6.4.2 | | | | |
| 6.4.3 | | | | |
| 6.4.3.1 | | | | Rel-15 E-UTRA |

Table 4.1-2a: Applicability of Protocol conformance Layer 2 test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|----------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 7 | Layer 2 | | | |
| 7.1 | NR Layer 2 | | | |
| 7.1.1 | MAC | | | |
| 7.1.1.1 | Random Access Procedures | | | |
| 7.1.1.1.1 | Correct selection of RACH parameters / Random access preamble and PRACH resource explicitly signalled to the UE by RRC / contention free random access procedure | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.1.1a | Correct selection of RACH parameters / Random access preamble and PRACH resource explicitly signalled to the UE by PDCCH Order / contention free random access procedure | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.1.2 | Random access procedure / Successful / C-RNTI Based / Preamble selected by MAC itself | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.1.3 | Random access procedure / Successful / SI request | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.1.4 | Random access procedure / Successful / Beam Failure / Preamble selected by MAC itself / non-Contention Free RACH procedure | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.1.5 | Random access procedure / Successful / Supplementary Uplink | Rel-15 | C28 | UEs supporting 5GS and supplemental uplink with dynamic switch |
| 7.1.1.1.6 | Random access procedure / Successful / Temporary C-RNTI Based / Preamble selected by MAC itself | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.1.7 | Random access procedure / 2-step RACH / RA_TYPE selection | Rel-16 | C135 | UEs Supporting 2-Step RACH |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 7.1.1.1.8 | Correct selection of RACH parameters / 2-step RACH/MSG4 and PRACH resource explicitly signalled to the UE by RRC / contention free random access procedure | Rel-16 | C135 | UEs Supporting 2-Step RACH |
| 7.1.1.1.9 | Random access procedure / Successful / 2-step RACH/C-RNTI Based / Preamble selected by MAC itself | Rel-16 | C135 | UEs Supporting 2-Step RACH |
| 7.1.1.1.10 | Random access procedure / 2-step RACH/not complete/ RA_TYPE to 4-stepRA | Rel-16 | C135 | UEs Supporting 2-Step RACH |
| 7.1.1.2 | Downlink Data Transfer | | | |
| 7.1.1.2.1 | Correct Handling of DL MAC PDU / Assignment / HARQ process | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.2.2 | Correct Handling of DL HARQ process PDSCH Aggregation | Rel-15 | C20 | UEs supporting 5GS and PDSCH aggregation |
| 7.1.1.2.3 | Correct HARQ process handling / CCCH | Rel-15 | R | UEs supporting 5GS |
| 67.1.1.2.4 | Correct HARQ process handling / BCCH | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.2.5 | Correct HARQ process handling / DL grant prioritization | Rel-16 | C179 | UEs supporting DCI DL Priority Indicator |
| 7.1.1.3 | Uplink Data Transfer | | | |
| 7.1.1.3.1 | Correct Handling of UL MAC PDU / Assignment / HARQ process | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.3.2 | Logical channel prioritization handling | Rel-15 | C02 | UEs supporting 5GS and RLC UM Mode |
| 7.1.1.3.2b | Logical channel prioritization handling with Mapping restrictions | Rel-15 | C175 | UEs supporting 5GS and selection of logical channels for each UL grant based on RRC configured restriction |
| 7.1.1.3.3 | Correct handling of MAC control information / Scheduling requests | Rel-15 | C53 | UEs supporting 5GS and Logical Channel SR-Delay Timer |
| 7.1.1.3.4 | Correct handling of MAC control information / Buffer status / UL data arrive in the UE Tx buffer / Regular BSR | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.3.5 | Correct handling of MAC control information / Buffer Status / UL resources are allocated / Padding BSR | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.3.6 | Correct handling of MAC control information / Buffer status / Periodic BSR timer expires | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.3.7 | UE power headroom reporting / Periodic reporting / DL pathloss change reporting | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.3.8 | UE power headroom reporting / SCell activation / DL pathloss change reporting | | | |
| 7.1.1.3.8.1 | UE power headroom reporting / SCell activation / DL pathloss change reporting / Intra-band Contiguous CA | Rel-15 | C81 | UEs supporting 5GS and intra-band contiguous CA and UL NR CA with 2 carriers |
| 7.1.1.3.8.2 | UE power headroom reporting / SCell activation / DL pathloss change reporting / Inter-band CA | Rel-15 | C82 | UEs supporting 5GS and inter-band CA and UL NR CA with 2 carriers |
| 7.1.1.3.8.3 | UE power headroom reporting / SCell activation / DL pathloss change reporting / Intra-band non Contiguous CA | Rel-15 | C83 | UEs supporting 5GS and intra-band non-contiguous CA and UL NR CA with 2 carriers |
| 7.1.1.3.9 | Correct Handling of UL HARQ process / PUSCH Aggregation | Rel-15 | C51 | UEs supporting 5GS and PUSCH aggregation |
| 7.1.1.3.10 | Correct Handling of HARQ process / Multiple CORESETPoolIndex | Rel-16 | C107 | UEs supporting 5GS and multi-DCI based Multi-TRP |
| 7.1.1.3.11 | Correct handling of UL grant prioritization | Rel-16 | C114 | UEs supporting 5GS and LCH-based UL grant prioritization |
| 7.1.1.3.12 | Correct Handling of UL HARQ process / PUSCH Repetition Type B | Rel-16 | C134 | UEs supporting PUSCH repetition type B |
| 7.1.1.3.13 | Logical channel prioritization handling with Mapping restrictions / physical layer priority | Rel-16 | C180 | UEs supporting DCI UL Priority Indicator and LCH grant prioritisation |
| 7.1.1.4 | Transport Size Selection | | | |
| 7.1.1.4.1 | DL-SCH Transport Block Size Selection | | | |
| 7.1.1.4.1.1 | DL-SCH Transport Block Size selection / DCI format 1_0 | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.4.1.2 | Void | | | |
| 7.1.1.4.1.3 | DL-SCH transport block size selection / DCI format 1_1 / RA type 0/RA Type 1 / 2 Codewords enabled | Rel-15 | C64 | UEs supporting 5GS and The maximum number of spatial multiplexing layer(s) supported by the UE for DL reception. For single CC standalone NR, it is mandatory with capability signalling to support at least 4 MIMO layers in the bands where 4Rx is specified as mandatory for the given UE and at least 2 MIMO layers in FR2. If absent, the UE doesn't support MIMO on this carrier |

| Clause | TC Title | Release | Applicability | |
|------------------|---|---------|---------------|---|
| | | | Condition | Comment |
| 7.1.1.4.1.4 | DL-SCH transport block size selection / DCI format 1_1 / RA type 0/RA Type 1 / 2 Codewords enabled / 256QAM | Rel-15 | C65 | UEs supporting 5GS and The maximum number of spatial multiplexing layer(s) supported by the UE for DL reception. For single CC standalone NR, it is mandatory with capability signalling to support at least 4 MIMO layers in the bands where 4Rx is specified as mandatory for the given UE and at least 2 MIMO layers in FR2. If absent, the UE doesn't support MIMO on this carrier and 256QAM for PUSCH |
| 7.1.1.4.1.5 | DL-SCH transport block size selection / DCI format 1_2 | Rel-16 | C146 | Ues supporting monitoring DCI format 1_2 for DL scheduling and monitoring DCI format 0_2 for UL scheduling |
| 7.1.1.4.2 | UL-SCH Transport Block Size Selection | | | |
| 7.1.1.4.2.1 | UL-SCH Transport Block Size selection / DCI format 0_0 / Transform precoding disabled | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.4.2.2 | Void | | | |
| 7.1.1.4.2.3 | UL-SCH transport block size selection / DCI format 0_1 / RA type 0/RA Type 1 / Transform precoding disabled | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.4.2.4 | UL-SCH transport block size selection / DCI format 0_1 / RA type 0/RA Type 1 / 256QAM / Transform precoding disabled | Rel-15 | C11 | UEs supporting 5GS and 256QAM for PDSCH for FR1/FR2 |
| 7.1.1.4.2.5 | UL-SCH Transport Block Size selection / DCI format 0_0 / Transform precoding and 64QAM | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.4.2.6 | UL-SCH Transport Block Size selection / DCI format 0_2 | Rel-16 | C146 | Ues supporting monitoring DCI format 1_2 for DL scheduling and monitoring DCI format 0_2 for UL scheduling |
| 7.1.1.5 | Discontinuous reception | | | |
| 7.1.1.5.1 | DRX operation / Short cycle not configured / Parameters configured by RRC | Rel-15 | C03 | UEs supporting 5GS and long DRX cycle |
| 7.1.1.5.2 | DRX operation / Short cycle not configured / Long DRX command MAC control element reception | Rel-15 | C03 | UEs supporting 5GS and long DRX cycle |
| 7.1.1.5.3 | DRX operation / Short cycle configured / Parameters configured by RRC | Rel-15 | C04 | UEs supporting 5GS and short DRX cycle |
| 7.1.1.5.4 | DRX operation / Short cycle configured / DRX command MAC control element reception | Rel-15 | C04 | UEs supporting 5GS and short DRX cycle |
| 7.1.1.5.5 | DRX operation / Short cycle configured / Long DRX command MAC control element reception | Rel-15 | C70 | UEs supporting 5GS and long DRX cycle and short DRX cycle |
| 7.1.1.6 | Semi-Persistent Scheduling | | | |
| 7.1.1.6.1 | Correct handling of DL assignment / Semi-persistent case | Rel-15 | C17 | UEs supporting 5GS and PDSCH reception based on semi-persistent scheduling |
| 7.1.1.6.2 | Correct handling of UL grant / configured grant Type 1 | Rel-15 | C18 | UEs supporting 5GS and Type 1 PUSCH transmissions with configured grant |
| 7.1.1.6.3 | Correct handling of UL grant / configured grant Type 2 | Rel-15 | C19 | UEs supporting 5GS and Type 2 PUSCH transmissions with configured grant |
| 7.1.1.6.4 | Correct handling of DL assignment / Multi Semi-persistent configuration | Rel-16 | C113 | UEs supporting 5GS and PDSCH reception based on multiple semi-persistent scheduling |
| 7.1.1.6.5 | Correct handling of UL grant / Multi configured uplink grants | Rel-16 | C142 | UEs supporting 5GS and PUSCH transmissions on multiple configured uplink grants |
| 7.1.1.7 | Activation/Deactivation of SCells | | | |
| 7.1.1.7.1 | Activation/Deactivation of SCells / Activation/Deactivation MAC control element reception / sCellDeactivationTimer | | | |
| 7.1.1.7.1.1 | Activation/Deactivation of SCells / Activation/Deactivation MAC control element reception / sCellDeactivationTimer / Intra-band Contiguous CA | Rel-15 | C44 | UEs supporting 5GS and intra-band contiguous CA |
| 7.1.1.7.1.2 | Activation/Deactivation of SCells / Activation/Deactivation MAC control element reception / sCellDeactivationTimer / Inter-band CA | Rel-15 | C45 | UEs supporting 5GS and inter-band CA |
| 7.1.1.7.1.3 | Activation/Deactivation of SCells / Activation/Deactivation MAC control element reception / sCellDeactivationTimer / Intra-band non-Contiguous CA | Rel-15 | C46 | UEs supporting 5GS and intra-band non-contiguous CA |
| 7.1.1.8 | Bandwidth Part (BWP) operation | | | |
| 7.1.1.8.1 | Bandwidth Part (BWP) operation UL/DL | Rel-15 | C66 | UEs supporting 5GS and (DCI and timer based active BWP switching delay type1 or type2) and (Support of BWP adaptation upto2 or up to 4) |
| 7.1.1.9 | MAC Reconfiguration and Reset | | | |
| 7.1.1.9.1 | MAC Reset | Rel-15 | R | UEs supporting 5GS |
| 7.1.1.10 | Other Procedures | | | |

| Clause | TC Title | Release | Applicability | |
|-----------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 7.1.1.10.1 | DataInactivityTimer expiry | Rel-15 | C21 | UEs supporting 5G Core |
| 7.1.1.10.2 | Recommended Bit Rate | Rel-15 | C100 | UEs supporting 5G Core and MTSI speech and bit rate recommendation query message |
| 7.1.1.11 | NR Dual Connectivity | | | |
| 7.1.1.11.1 | DC power headroom reporting / PSCell activation and DL pathloss change reporting | Rel-15 | C80 | UEs supporting NR-DC |
| 7.1.1.12 | UE Power Saving | | | |
| 7.1.1.12.1 | Void | | | |
| 7.1.1.12.3 | DRX adaptation / UE wakeup indication | Rel-16 | C103 | UEs supporting 5GS and Long DRX Cycle and DRX adaptation |
| 7.1.1.12.4.1 | DRX adaptation / SCell dormancy indication / Intra-band Contiguous CA | Rel-16 | C118 | UEs supporting 5GS and Long DRX Cycle and DRX adaptation and SCell Dormancy indication outside active time and intra-band contiguous CA |
| 7.1.1.12.4.2 | DRX adaptation / SCell dormancy indication / Intra-band non Contiguous CA | Rel-16 | C119 | UEs supporting 5GS and Long DRX Cycle and DRX adaptation and SCell Dormancy indication outside active time and intra-band non-contiguous CA |
| 7.1.1.12.4.3 | DRX adaptation / SCell dormancy indication / Inter-band CA | Rel-16 | C120 | UEs supporting 5GS and Long DRX Cycle and DRX adaptation and SCell Dormancy indication outside active time and inter-band CA |
| 7.1.2 | RLC | | | |
| 7.1.2.2 | RLC Unacknowledged Mode | | | |
| 7.1.2.2.1 | UM RLC / Segmentation and reassembly / 6-bit SN / Segmentation Info (SI) field | Rel-15 | C05 | UEs supporting 5GS and RLC UM with 6-bit length of RLC sequence number |
| 7.1.2.2.2 | UM RLC / Segmentation and reassembly / 12-bit SN / Segmentation Info (SI) field | Rel-15 | C06 | UEs supporting 5GS and RLC UM with 12-bit length of RLC sequence number |
| 7.1.2.2.3 | UM RLC / 6-bit SN / Correct use of sequence numbering | Rel-15 | C05 | UEs supporting 5GS and RLC UM with 6-bit length of RLC sequence number |
| 7.1.2.2.4 | UM RLC / 12-bit SN / Correct use of sequence numbering | Rel-15 | C06 | UEs supporting 5GS and RLC UM with 12-bit length of RLC sequence number |
| 7.1.2.2.5 | UM RLC / Receive Window operation and t-Reassembly expiry | Rel-15 | C02 | UEs supporting 5GS and RLC UM Mode |
| 7.1.2.2.6 | UM RLC / RLC re-establishment procedure | Rel-15 | C02 | UEs supporting 5GS and RLC UM Mode |
| 7.1.2.3 | RLC Acknowledged Mode | | | |
| 7.1.2.3.1 | AM RLC / 12-bit SN / Segmentation and reassembly / Segmentation Info (SI) field | Rel-15 | C07 | UEs supporting 5GS and RLC AM with 12-bit length of RLC sequence number |
| 7.1.2.3.2 | AM RLC / 18-bit SN / Segmentation and reassembly / Segmentation Info (SI) field | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.3 | AM RLC / 12-bit SN / Correct use of sequence numbering | Rel-15 | C07 | UEs supporting 5GS and RLC AM with 12-bit length of RLC sequence number |
| 7.1.2.3.4 | AM RLC / 18-bit SN / Correct use of sequence numbering | Rel-15 | R | UEs supporting 5GS and RLC |
| 7.1.2.3.5 | AM RLC / 12-bit SN / Control of transmit window / Control of receive window | Rel-15 | C07 | UEs supporting 5GS and RLC AM with 12-bit length of RLC sequence number |
| 7.1.2.3.5a | AM RLC / 18-bit SN / Control of transmit window / Control of receive window | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.6 | AM RLC / Polling for status | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.7 | AM RLC / Receiver status triggers | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.8 | AM RLC / Reconfiguration of RLC parameters by upper layers | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.9 | AM RLC / Reassembling of AMD PDUs | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.10 | AM RLC / Re-transmission of RLC PDU with and without re-segmentation | Rel-15 | R | UEs supporting 5GS |
| 7.1.2.3.11 | AM RLC / RLC re-establishment procedure | Rel-15 | R | UEs supporting 5GS |
| 7.1.3 | PDCP | | | |
| 7.1.3.1 | Maintenance of PDCP sequence numbers for radio bearers | | | |
| 7.1.3.1.1 | Maintenance of PDCP sequence numbers / User plane / 12-bit SN | Rel-15 | C08 | UEs supporting 5GS and 12-bit length of PDCP sequence number |
| 7.1.3.1.2 | Maintenance of PDCP sequence numbers / User plane / 18-bit SN | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.2 | PDCP Integrity protection | | | |
| 7.1.3.2.1 | Integrity protection / Correct functionality of integrity algorithm SNOW3G / SRB / DRB | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.2.2 | Integrity protection / Correct functionality of integrity algorithm AES / SRB / DRB | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.2.3 | Integrity protection / Correct functionality of integrity algorithm ZUC / SRB / DRB | Rel-15 | C09 | UEs supporting 5GS and ZUC algorithm |
| 7.1.3.3 | PDCP Ciphering and deciphering | | | |
| 7.1.3.3.1 | Ciphering and deciphering / Correct functionality of encryption algorithm SNOW3G / SRB / DRB | Rel-15 | R | UEs supporting 5GS |

| Clause | TC Title | Release | Applicability | |
|----------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 7.1.3.3.2 | Ciphering and deciphering / Correct functionality of encryption algorithm AES / SRB / DRB | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.3.3 | Ciphering and deciphering / Correct functionality of encryption algorithm ZUC / SRB / DRB | Rel-15 | C09 | UEs supporting 5GS and ZUC algorithm |
| 7.1.3.4 | PDCP Handover | | | |
| 7.1.3.4.1 | PDCP handover / Lossless handover / PDCP sequence number maintenance / PDCP status report to convey the information on missing or acknowledged PDCP SDUs at handover / In-order delivery and duplicate elimination in the downlink | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.4.2 | PDCP handover / Non-lossless handover / PDCP sequence number maintenance | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.4.3 | PDCP handover / DAPS handover / Status reporting / Intra-frequency | Rel-16 | C101 | UEs supporting 5G Core and intra-frequency DAPS handover |
| 7.1.3.4.4 | PDCP handover / DAPS handover / Status reporting / Inter-frequency | Rel-16 | C130 | UEs supporting 5G Core and inter-frequency DAPS handover |
| 7.1.3.5 | PDCP other | | | |
| 7.1.3.5.1 | PDCP Discard | Rel-15 | C02 | UEs supporting 5GS and RLC UM Mode |
| 7.1.3.5.2 | PDCP Uplink Routing / Split DRB | Rel-15 | C10 | UEs supporting EN-DC and UL transmission via both MCG path and SCG path for the split DRB |
| | | | C97 | UEs supporting NR-DC and UL transmission via both MCG path and SCG path for the split DRB |
| | | | C194 | UEs supporting NE-DC and UL transmission via both MCG path and SCG path for the split DRB |
| 7.1.3.5.3 | PDCP Data Recovery | Rel-15 | C01 | UEs supporting EN-DC |
| | | | C80 | UEs supporting NR-DC |
| 7.1.3.5.4 | PDCP reordering / Maximum re-ordering delay below t-Reordering / t-Reordering timer operations | Rel-15 | R | UEs supporting 5GS |
| 7.1.3.5.5 | PDCP Duplication | Rel-15 | C62 | UEs supporting EN-DC and PDCP duplication over split DRB |
| | | | C98 | UEs supporting NR-DC and PDCP duplication over split DRB |
| 7.1.3.5.6.1 | PDCP Duplication / 3 RLC entities / Intra-band Contiguous CA | Rel-16 | C104 | UEs supporting 5GC and Intra-band contiguous CA and DL and UL NR CA with 3 carriers and PDCP duplication with more than two RLC entities |
| 7.1.3.5.6.2 | PDCP Duplication / 3 RLC entities / Intra-band non-Contiguous CA | Rel-16 | C181 | UEs supporting 5GC and Intra-band non-contiguous CA and DL and UL NR CA with 3 carriers and PDCP duplication with more than two RLC entities |
| 7.1.3.5.7 | Ethernet header compression and decompression / Correct functionality of ethernet header compression and decompression | Rel-16 | C105 | UEs supporting 5GS and RLC UM Mode and PDCP ethernet header compression |
| 7.1.4 | SDAP | | | |
| 7.1.4.1 | SDAP Data Transfer and PDU Header Handling UL/DL | Rel-15 | C21A | UEs supporting 5G Core and reflective QoS |
| 7.1.4.2 | SDAP Data Transfer handling without Header UL/DL | Rel-15 | C21 | UEs supporting 5G Core |

Table 4.1-2b: Additional Information of Applicability of Protocol conformance Layer 2 test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|------------------|----------------------------------|---------------|-------------------------|-------------------|
| 7 | | | | |
| 7.1 | | | | |
| 7.1.1 | | | | |
| 7.1.1.1.1 | | | | |
| 7.1.1.1.4 | pc_csi_RS_CFRA_ForHO | | | |
| 7.1.1.3 | | | | |
| 7.1.1.3.2b | pc_configuredUL_GrantType1 | | | |
| 7.1.1.4 | | | | |
| 7.1.1.4.1 | | | | |
| 7.1.1.4.1.3 | pc_dynamicSwitchRA_Type0_1_PDSCH | | | |
| 7.1.1.4.1.4 | pc_dynamicSwitchRA_Type0_1_PDSCH | | | |
| 7.1.1.4.2 | | | | |
| 7.1.1.4.2.3 | pc_dynamicSwitchRA_Type0_1_PUSCH | | | |
| 7.1.1.4.2.4 | pc_dynamicSwitchRA_Type0_1_PUSCH | | | |
| 7.1.1.6 | | | | |
| 7.1.1.6.4 | pc_um_WithShortSN | | | |
| 7.1.1.7 | | | | |
| 7.1.1.7.1 | | | | |
| 7.1.1.7.1.1 | pc_UL_NR_CA_2CC | | | |
| 7.1.1.7.1.2 | pc_UL_NR_CA_2CC | | | |
| 7.1.1.7.1.3 | pc_UL_NR_CA_2CC | | | |
| 7.1.2 | | | | |
| 7.1.2.2 | | | | |
| 7.1.2.2.5 | pc_um_WithShortSN | | | |
| 7.1.2.2.6 | pc_um_WithShortSN | | | |
| 7.1.3 | | | | |
| 7.1.3.2.1 | pc_srb3 | | | |

Table 4.1-3a: Applicability of Protocol conformance RRC test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|----------------|---|-------------|---------------|--|
| | | | Condition | Comment |
| 8 | RRC | | | |
| 8.1 | NR RRC | | | |
| 8.1.1 | RRC connection management procedures | | | |
| 8.1.1.1 | Paging | | | |
| 8.1.1.1.1 | RRC / Paging for connection / Multiple paging records | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.1.1.2 | RRC / Paging for connection / Shared network environment | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.1.2 | RRC connection establishment | | | |
| 8.1.1.2.1 | RRC connection establishment / Return to idle state after T300 expiry | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.1.2.2 | Void | | | |
| 8.1.1.2.3 | RRC connection establishment / RRC Reject with wait time | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.1.2.4 | RRC connection establishment / Extended and spare fields in SI | Rel-15 only | C21 | UEs supporting 5G Core |
| 8.1.1.3 | RRC release | | | |
| 8.1.1.3.1 | RRC connection release / Redirection to another NR frequency | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.1.3.2 | RRC connection release / Redirection from NR to E-UTRA | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 8.1.1.3.3 | RRC connection release / Success / With priority information | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.1.3.4 | RRC connection release / Success / With priority information / E-UTRA | Rel-15 | C26 | UEs supporting 5GS and E-UTRA |
| 8.1.1.3.5 | Void | | | |
| 8.1.1.3.6 | Void | | | |
| 8.1.1.3.7 | RRC connection release / Success / Deprioritisation / Frequency / T325 expiry | Rel-15 | C133 | UEs supporting 5G Core and RRC connection release with Deprioritisation |
| 8.1.1.3.7a | RRC connection release / Success / Deprioritisation / NR / T325 expiry | Rel-15 | C148 | UEs supporting 5G Core and E-UTRA and RRC connection release with Deprioritisation |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 8.1.1.3.7b | RRC connection release / Success / Deprioritisation / Deletion of Stored deprioritisation request | Rel-15 | C161 | UEs supporting 5G Core and RRC connection release with Deprioritisation and ManualModeNetworkSelectionException |
| 8.1.1.4 | RRC resume | | | |
| 8.1.1.4.1 | RRC resume / Suspend-Resume / RNA update / Success | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 8.1.1.4.2 | RRC resume / Suspend-Resume / RRC setup / T319 expiry | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 8.1.1.4.3 | Void | | | |
| 8.1.1.4.4 | RRC resume / Suspend-Resume / RRC reconfiguration / Active MCG SCell addition / Intra-band Contiguous CA | Rel-16 | C154 | UEs supporting 5G Core and intra-band contiguous CA and RRC_INACTIVE |
| 8.1.1.4.5 | RRC resume / Suspend-Resume / RRC reconfiguration / Active MCG SCell addition / Intra-band non-Contiguous CA | Rel-16 | C155 | UEs supporting 5G Core and intra-band non-contiguous CA and RRC_INACTIVE |
| 8.1.1.4.6 | RRC resume / Suspend-Resume / RRC reconfiguration / Active MCG SCell addition / Inter-band CA | Rel-16 | C156 | UEs supporting 5G Core and inter-band CA and RRC_INACTIVE |
| 8.1.1.4.7 | RRC resume / Suspend-Resume / RRC setup / Active SCG SCell addition / Intra-band Contiguous CA | Rel-16 | C154 | UEs supporting 5G Core and intra-band contiguous CA and RRC_INACTIVE |
| 8.1.1.4.8 | RRC resume / Suspend-Resume / RRC setup / Active SCG SCell addition / Intra-band non-Contiguous CA | Rel-16 | C155 | UEs supporting 5G Core and intra-band non-contiguous CA and RRC_INACTIVE |
| 8.1.1.4.9 | RRC resume / Suspend-Resume / RRC setup / Active SCG SCell addition / Inter-band CA | Rel-16 | C156 | UEs supporting 5G Core and inter-band CA and RRC_INACTIVE |
| 8.1.2 | RRC reconfiguration | | | |
| 8.1.2.1 | Radio bearer establishment / reconfiguration / release | | | |
| 8.1.2.1.1 | RRC reconfiguration / DRB / SRB / Establishment / Modification / Release / Success | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.2.1.2 | RRC reconfiguration / RRC bearer establishment / uplinkTxDirectCurrentList | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.2.1.3 | Void | | | |
| 8.1.2.1.4 | RRC reconfiguration / Dedicated RLF timer | Rel-15 | R | UEs supporting 5GS |
| 8.1.2.1.5 | NR CA / RRC reconfiguration / SCell addition / modification / release / Success | | | |
| 8.1.2.1.5.1 | NR CA / RRC reconfiguration / SCell addition / modification / release / Success / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.2.1.5.2 | NR CA / RRC reconfiguration / SCell addition / modification / release / Success / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.2.1.5.3 | NR CA / RRC reconfiguration / SCell addition / modification / release / Success / Intra-band non-contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.3 | Measurement configuration control and reporting | | | |
| 8.1.3.1 | Intra NR measurements | | | |
| 8.1.3.1.1 | Measurement configuration control and reporting / Intra NR measurements / Event A1 / Event A2 | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.2 | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cell / Intra-frequency measurements | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.3 | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cell / Inter-frequency measurements | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.4 | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cell / Inter-band measurements | Rel-15 | C94 | UEs supporting 5G Core and multiple NR bands |
| 8.1.3.1.5 | Measurement configuration control and reporting / Event A4 / Measurement of Neighbour NR cell / Intra-frequency measurements | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.6 | Measurement configuration control and reporting / Event A4 / Measurement of Neighbour NR cell / Inter-frequency measurements | Rel-15 | C21 | UEs supporting 5G Core |

| Clause | TC Title | Release | Applicability | |
|-------------------|---|---------|---------------|---|
| | | | Condition | Comment |
| 8.1.3.1.7 | Measurement configuration control and reporting / Event A4 / Measurement of Neighbour NR cell / Inter-band measurements | Rel-15 | C94 | UEs supporting 5G Core and multiple NR bands |
| 8.1.3.1.8 | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell / Intra-frequency measurements | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.9 | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell / Inter-frequency measurements | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.10 | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell / Inter-band measurements | Rel-15 | C94 | UEs supporting 5G Core and multiple NR bands |
| 8.1.3.1.11 | Measurement configuration control and reporting / Intra NR measurements / Two simultaneous events A3 (intra and inter-frequency measurements) / RSRQ based measurements | Rel-15 | C21 | UEs supporting 5GCore |
| 8.1.3.1.12 | Measurement configuration control and reporting / Intra NR measurements / Two simultaneous events A5 (intra and inter-frequency measurements) / SINR based measurements | Rel-15 | C40 | UEs supporting 5G Core and SS-SINR measurements |
| 8.1.3.1.13 | Measurement configuration control and reporting / SS/PBCH block based / CSI-RS based intra-frequency measurements / Measurement of Neighbour NR cell | Rel-15 | C52 | UEs supporting 5G Core and NR measurements and Event A triggered reporting and (NR Intra-frequency and Inter frequency measurements and at least periodical reporting) and CSI-RSRP and CSI-RSRQmeasurement |
| 8.1.3.1.14 | Void | | | |
| 8.1.3.1.14A | Measurement configuration control and reporting / SS/PBCH block based / CSI-RS based inter-frequency measurements / Measurement of Neighbour NR cell | Rel-15 | C52 | UEs supporting 5G Core and NR measurements and Event A triggered reporting and (NR Intra-frequency and Inter frequency measurements and at least periodical reporting) and CSI-RSRP and CSI-RSRQmeasurement |
| 8.1.3.1.15 | Void | | | |
| 8.1.3.1.15A | Measurement configuration control and reporting / Intra NR measurements / Blacklisting | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.16 | Measurement configuration control and reporting / Intra NR measurements / Whitelisting | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.1.17 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Event A6 | | | |
| 8.1.3.1.17.1 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Event A6 / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.3.1.17.2 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Event A6 / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.3.1.17.3 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Event A6 / Intra-band non-Contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.3.1.18 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Additional measurement reporting | | | |
| 8.1.3.1.18.1 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Additional measurement reporting / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.3.1.18.2 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Additional measurement reporting / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.3.1.18.3 | NR CA / Measurement configuration control and reporting / Intra NR measurements / Additional measurement reporting / Intra-band non-Contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.3.1.19 | Measurement configuration control and reporting / Inter-frequency measurements/ SFTD | Rel-15 | C150 | UEs supporting 5G Core and SFTD measurements between NR PCell and NR neighbour cell |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 8.1.3.1.20 | Measurement configuration control and reporting / Measurement Gaps / gapFR1 | Rel-15 | C49 | UE supporting 5G Core and two independent measurement gap configurations for FR1 and FR2 |
| 8.1.3.1.21 | Measurement configuration control and reporting / Measurement Gaps / gapFR2 | Rel-15 | C49 | UE supporting 5G Core and two independent measurement gap configurations for FR1 and FR2 |
| 8.1.3.1.23 | Measurement configuration control and reporting / Intra NR measurements / Periodic reporting / Continuation of the measurements after RRC Resume | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.3.2 | Inter-RAT measurements | | | |
| 8.1.3.2.1 | Measurement configuration control and reporting / Inter-RAT measurements / Event B1 / Measurement of E-UTRA cells | Rel-15 | C31 | UEs supporting 5G Core and Inter-RAT E-UTRA measurements and Event B triggered reporting |
| 8.1.3.2.2 | Measurement configuration control and reporting / Inter-RAT measurements / Event B2 / Measurement of E-UTRA cells | Rel-15 | C31 | UEs supporting 5G Core and Inter-RAT E-UTRA measurements and Event B triggered reporting |
| 8.1.3.2.3 | Measurement configuration control and reporting / Inter-RAT measurements / Event B2 / Measurement of E-UTRA cells / RSRQ based measurements | Rel-15 | C31 | UEs supporting 5G Core and Inter-RAT E-UTRA measurements and Event B triggered reporting |
| 8.1.3.2.4 | Measurement configuration control and reporting / Inter-RAT measurements / Event B2 / Measurement of E-UTRA cells / SINR based measurements | Rel-15 | C50 | UEs supporting 5G Core and Inter-RAT E-UTRA measurements and Event B triggered reporting and E-UTRA RS-SINR measurements |
| 8.1.3.2.5 | Void | | | |
| 8.1.3.2.6 | Measurement configuration control and reporting / Inter-RAT measurements / Event B1 / NR to UTRA | Rel-16 | C127 | UEs supporting 5G Core and UTRA and NR to UTRA-FDD CELL_DCH CS handover |
| 8.1.3.2.7 | Measurement configuration control and reporting / Inter-RAT measurements / Event B2 / NR to UTRA | Rel-16 | C127 | UEs supporting 5G Core and UTRA and NR to UTRA-FDD CELL_DCH CS handover |
| 8.1.3.2.8 | Measurement configuration control and reporting / Inter-RAT measurements / Periodic reporting / NR to UTRA | Rel-16 | C127 | UEs supporting 5G Core and UTRA and NR to UTRA-FDD CELL_DCH CS handover |
| 8.1.3.3 | Measurement for self-optimized networks | | | |
| 8.1.3.3.1 | Measurement configuration control and reporting / CGI reporting of NR cell | Rel-15 | C59 | UEs supporting 5G Core and Support acquisition of relevant information from a neighbouring intra-frequency or inter-frequency NR cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 38.331 [9] when EN-DC is not configured. |
| 8.1.3.3.2 | Measurement configuration control and reporting / CGI reporting of E-UTRA cell | Rel-15 | C60 | UEs supporting 5G Core and Support acquisition of relevant information from a neighbouring E-UTRA cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 38.331 [9] when the EN-DC is not configured. |
| 8.1.4 | Handover | | | |
| 8.1.4.1 | Intra NR handover | | | |
| 8.1.4.1.1 | Void | | | |
| 8.1.4.1.2 | Intra NR handover / Success / Inter-frequency | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.4.1.3 | Void | | | |
| 8.1.4.1.4 | Void | | | |
| 8.1.4.1.5 | Intra NR handover / Failure / Re-establishment successful | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.4.1.6 | Intra NR handover / Failure / Re-establishment failure | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.4.1.7 | NR CA / Intra NR handover / Success / PCell Change and SCell addition / SCell release | | | |
| 8.1.4.1.7.1 | NR CA / Intra NR handover / Success / PCell Change and SCell addition / SCell release / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.4.1.7.2 | NR CA / Intra NR handover / Success / PCell Change and SCell addition / SCell release / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.4.1.7.3 | NR CA / Intra NR handover / Success / PCell Change and SCell addition / SCell release / Intra-band non-contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.4.1.8 | NR CA / Intra NR handover / Success / PCell Change / SCell no Change | | | |

| Clause | TC Title | Release | Applicability | |
|------------------|---|---------|---------------|--|
| | | | Condition | Comment |
| 8.1.4.1.8.1 | NR CA / Intra NR handover / Success / PCell Change / SCell no Change / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.4.1.8.2 | NR CA / Intra NR handover / Success / PCell Change / SCell no Change / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.4.1.8.3 | NR CA / Intra NR handover / Success / PCell Change / SCell no Change / Intra-band non-contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.4.1.9 | NR CA / Intra NR handover / Failure / Re-establishment successful | | | |
| 8.1.4.1.9.1 | NR CA / Intra NR handover / Failure / Re-establishment successful / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.4.1.9.2 | NR CA / Intra NR handover / Failure / Re-establishment successful / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.4.1.9.3 | NR CA / Intra NR handover / Failure / Re-establishment successful / Intra-band non-contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.4.1.10 | eCall Only mode / Intra NR handover / Success / Inter-frequency | Rel-16 | C184 | UEs supporting 5G Core and IMS eCall Only type of emergency services over 5GS and Automatic type of eCall initiation |
| 8.1.4.2 | Inter-RAT handover | | | |
| 8.1.4.2.1 | Inter-RAT handover from NR | | | |
| 8.1.4.2.1.1 | Inter-RAT handover / From NR to E-UTRA / Success | Rel-15 | C32 | UEs supporting 5G Core and E-UTRA |
| 8.1.4.2.1.2 | Inter-RAT handover / From NR to EN-DC / Success | Rel-16 | C96 | UEs supporting 5G Core and EN-DC and inter-RAT Handover from NR to EN-DC |
| 8.1.4.2.2 | Inter-RAT handover to NR | | | |
| 8.1.4.2.2.1 | Inter-RAT handover / From E-UTRA to NR / Success | Rel-15 | C99 | UEs supporting 5GS and E-UTRA and (inter-RAT Handover to NR FR1 TDD from EUTRA connected to EPC or inter-RAT Handover to NR FR1 FDD from EUTRA connected to EPC or inter-RAT Handover to NR FR2 TDD from EUTRA connected to EPC) |
| 8.1.4.3 | DAPS handover | | | |
| 8.1.4.3.1 | DAPS handover with key change / Success / Intra-frequency | Rel-16 | C101 | UEs supporting 5G Core and intra-frequency DAPS handover |
| 8.1.4.3.2 | DAPS handover / HO Failure and source link available / HO Success and RLF in source / Intra-frequency | Rel-16 | C101 | UEs supporting 5G Core and intra-frequency DAPS handover |
| 8.1.4.3.4 | DAPS handover with key change / Success / Inter-frequency | Rel-16 | C130 | UEs supporting 5G Core and inter-frequency DAPS handover |
| 8.1.4.3.5 | DAPS handover / HO Failure and source link available / HO Success and RLF in source / Inter-frequency | Rel-16 | C130 | UEs supporting 5G Core and inter-frequency DAPS handover |
| 8.1.4.4 | Conditional handover | | | |
| 8.1.4.4.1 | Conditional handover / Success / A3 / A5 / A3+A5 | Rel-16 | C116 | UEs supporting 5G Core and conditional handover and supporting 2 trigger events for same execution condition |
| 8.1.4.4.2 | Conditional handover / modify conditional handover configuration | Rel-16 | C115 | UEs supporting 5G Core and conditional handover |
| 8.1.4.4.3 | Conditional handover / Failure | Rel-16 | C117 | UEs supporting 5G Core and conditional handover and conditional handover during re-establishment procedure when the selected cell is configured as candidate cell for condition handover |
| 8.1.4.4.4 | Conditional handover / legacy Handover / legacy Handover Failure | Rel-16 | C115 | UEs supporting 5G Core and conditional handover |
| 8.1.5 | RRC others | | | |
| 8.1.5.1 | UE capability transfer | | | |
| 8.1.5.1.1 | UE Capability transfer / Success | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.5.2 | SI change / On-demand SIB | | | |
| 8.1.5.2.1 | Void | | | |
| 8.1.5.2.2 | SI change / Notification of BCCH modification / Short message for SI update in NR RRC_CONNECTED state | Rel-15 | R | UEs supporting 5GS |
| 8.1.5.3 | PWS notification | | | |
| 8.1.5.3.1 | PWS notification / PWS reception in NR RRC_IDLE state | Rel-15 | C35 | UEs supporting 5G Core and (ETWS reception or CMAS reception) |
| 8.1.5.3.2 | PWS notification / PWS reception in NR RRC_INACTIVE state | Rel-15 | C111 | UEs supporting 5G Core and (ETWS reception or CMAS reception) and RRC_INACTIVE |
| 8.1.5.3.3 | PWS notification / PWS reception in NR RRC_CONNECTED state | Rel-15 | C35 | UEs supporting 5G Core and (ETWS reception or CMAS reception) |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 8.1.5.3.4 | PWS notification / PWS reception using dedicatedSystemInformationDelivery | Rel-15 | C35 | UEs supporting 5G Core and (ETWS reception or CMAS reception) |
| 8.1.5.4 | Counter check | | | |
| 8.1.5.4.1 | Counter check / Reception of CounterCheck message by the UE | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.5.5 | Redirection to NR | | | |
| 8.1.5.5.1 | Redirection to NR / From E-UTRA / Success | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.5.6 | Radio link failure | | | |
| 8.1.5.6.1 | Radio link failure / RRC connection re-establishment success | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.5.6.2 | Void | | | |
| 8.1.5.6.3 | Radio link failure / T311 expiry | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.5.6.4 | Void | | | |
| 8.1.5.6.5 | NR CA / No Radio Link Failure on SCell / RRC Connection Continues on Pcell | | | |
| 8.1.5.6.5.1 | NR CA / No Radio Link Failure on SCell / RRC Connection Continues on PCell / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.5.6.5.2 | NR CA / No Radio Link Failure on SCell / RRC Connection Continues on PCell / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.5.6.5.3 | NR CA / No Radio Link Failure on SCell / RRC Connection Continues on PCell / Intra-band non-Contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.5.7 | Failure information | | | |
| 8.1.5.7.1 | Failure information / RLC failure / MCG | | | |
| 8.1.5.7.1.1 | Failure information / RLC failure / MCG / Intra-band Contiguous CA | Rel-15 | C72 | UEs supporting 5G Core and intra-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.1.5.7.1.2 | Failure information / RLC failure / MCG / Inter-band CA | Rel-15 | C73 | UEs supporting 5G Core and inter-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.1.5.7.1.3 | Failure information / RLC failure / MCG / Intra-band non Contiguous CA | Rel-15 | C74 | UEs supporting 5G Core and intra-band non-contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.1.5.8 | Processing delay | | | |
| 8.1.5.8.1 | Processing delay / RRC_Idle to RRC_Connected / RRC_Inactive to RRC_Connected / Success / Latency check | Rel-15 | C21 | UEs supporting 5G Core |
| 8.1.5.8.2 | Processing delay / RRC_Inactive to RRC_Connected / Success / Latency check / SCell addition | | | |
| 8.1.5.8.2.1 | Processing delay / RRC_Inactive to RRC_Connected / Success / Latency check / SCell addition / Intra-band Contiguous CA | Rel-15 | C41 | UEs supporting 5G Core and intra-band contiguous CA |
| 8.1.5.8.2.2 | Processing delay / RRC_Inactive to RRC_Connected / Success / Latency check / SCell addition / Inter-band CA | Rel-15 | C42 | UEs supporting 5G Core and inter-band CA |
| 8.1.5.8.2.3 | Processing delay / RRC_Inactive to RRC_Connected / Success / Latency check / SCell addition / Intra-band non-Contiguous CA | Rel-15 | C43 | UEs supporting 5G Core and intra-band non-contiguous CA |
| 8.1.5.9 | RACS / UL Message Segment transfer | | | |
| 8.1.5.9.1 | RACS / UL Message Segment transfer / UECapabilityInformation | Rel-16 | C129 | UEs supporting 5G Core and RRC message Segmentation in the UL and support of test function for using a preconfigured UE capability container over NR |
| 8.1.5.10 | UE Assistance Information | | | |
| 8.1.5.10.1 | UE Assistance Information/ Release Preference | Rel-16 | C145 | UEs supporting 5G Core and release preference assistance information |
| 8.1.5.11 | Idle/Inactive Measurements | | | |
| 8.1.5.11.1 | Idle/Inactive Measurements / Idle mode / SIB11 configuration / Measurement of NR cells | Rel-16 | C190 | UEs supporting 5G Core and Idle/Inactive Measurements |
| 8.1.5.11.2 | Idle/Inactive Measurements / Idle mode / RRCRelease configuration / Measurement of NR cells | Rel-16 | C190 | UEs supporting 5G Core and Idle/Inactive Measurements |
| 8.1.5.11.3 | Idle/Inactive measurements / Inactive mode / SIB11 configuration / Measurement of NR cells | Rel-16 | C192 | UEs supporting 5GC Core, RRC_INACTIVE and Idle/Inactive Measurements |
| 8.1.5.11.4 | Idle/Inactive measurements / Inactive mode / RRCRelease configuration / Measurement of NR cells | Rel-16 | C192 | UEs supporting 5GC Core, RRC_INACTIVE and Idle/Inactive Measurements |
| 8.1.6 | SON and MDT support for NR | | | |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 8.1.6.1 | Intra NR MDT | | | |
| 8.1.6.1.1 | Immediate MDT | | | |
| 8.1.6.1.1.1 | Immediate MDT / Measurement reporting / Location information | Rel-16 | C126 | UEs supporting 5G Core and equipped with a GNSS or A-GNSS receiver to provide detailed location information |
| 8.1.6.1.1.2 | Immediate MDT / Measurement / Latency metrics for UL PDCP Packet Delay per DRB | Rel-16 | C122 | UEs supporting 5G Core and UL PDCP Packet Delay per DRB |
| 8.1.6.1.2 | Logged MDT | | | |
| 8.1.6.1.2.1 | Logged MDT / RRC_IDLE / Logging and reporting / Intra-frequency measurement | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.2 | Logged MDT / RRC_INACTIVE / Logging and reporting / Inter-frequency measurement | Rel-16 | C125 | UEs supporting 5G core and RRC_INACTIVE and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.3 | Logged MDT / RRC_IDLE / Logging and reporting / Limiting area scope | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.4 | logged MDT/ RRC_IDLE / Logging and reporting / periodic measurement trigger | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.5 | logged MDT/ RRC_IDLE / Logging and reporting / event-based trigger | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.6 | logged MDT/ RRC_IDLE / Logging and reporting / event-based trigger / out-of-coverage | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.7 | Logged MDT / RRC_IDLE / Logging and reporting / Reporting at NR re-establishment | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.8 | Logged MDT / Logging and reporting / Reporting at RRC reconfiguration | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.9 | Logged MDT / Location information | Rel-16 | C124 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE and equipped with a GNSS receiver to provide detailed location information. |
| 8.1.6.1.2.10 | Logged MDT / Maintaining logged measurement configuration / UE mobility | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.11 | Logged MDT / Maintaining logged measurement configuration / UE state transitions | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.12 | Logged MDT / Release of logged MDT measurement configuration / Expire of duration timer | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.2.13 | Logged MDT / Release of logged MDT measurement configuration / Reception of new logged measurement configuration | Rel-16 | C123 | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.1.3 | Radio Link Failure report | | | |
| 8.1.6.1.3.1 | Radio Link Failure / Reporting of Intra-frequency measurements | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.3.2 | Radio Link Failure / Reporting of Inter-frequency measurements | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.3.3 | Radio Link Failure / Reporting at RRC connection establishment and reestablishment | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.3.4 | Radio Link Failure / Reporting at NR handover | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.3.5 | Radio Link Failure / Location information | Rel-16 | C126 | UEs supporting 5G Core and equipped with a GNSS or A-GNSS receiver to provide detailed location information |
| 8.1.6.1.3.6 | Radio Link Failure / RACH failure report | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.3.7 | Radio Link Failure / Logging and reporting / Reporting at intra NR handover / PLMN list | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.4 | Connection Establishment Failure | | | |
| 8.1.6.1.4.1 | Connection Establishment Failure / Logging and reporting / T300 expiry | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.4.2 | Connection Establishment Failure / Logging and reporting / RRC Resume | Rel-16 | C109 | UEs supporting 5G Core and RRC_INACTIVE. |
| 8.1.6.1.4.3 | Connection Establishment Failure / Logging and reporting / Reporting at intra-NR handover | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.4.4 | Connection Establishment Failure / Logging and reporting / Reporting at RRC connection re-establishment | Rel-16 | C21 | UEs supporting 5G Core |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 8.1.6.1.4.5 | Connection Establishment Failure / Logging and reporting / Location Information | Rel-16 | C126 | UEs supporting 5G Core and equipped with a GNSS or A-GNSS receiver to provide detailed location information. |
| 8.1.6.1.4.6 | Connection Establishment Failure / Logging and reporting / Reporting of Intra-frequency measurements | Rel-16 | C21 | UEs supporting 5G Core. |
| 8.1.6.1.4.7 | Connection Establishment Failure / Logging and reporting / Reporting of Inter-frequency measurements | Rel-16 | C21 | UEs supporting 5G Core |
| 8.1.6.1.4.8 | Connection Establishment Failure / Logging and reporting / RACH failure report | Rel-16 | C136 | UEs supporting 5G Core and delivery of rachReport upon request from the network |
| 8.1.6.2 | Inter-RAT MDT | | | |
| 8.1.6.2.1 | Inter-RAT MDT / Immediate MDT / Periodic reporting of E-UTRAN/ Location information | Rel-16 | C143 | UEs supporting 5G Core and E-UTRA and standalone GNSS receiver to provide detailed location information |
| 8.1.6.2.2 | Inter-RAT MDT / Logged MDT / E-UTRA Inter-RAT measurement, logging and reporting | Rel-16 | C144 | UEs supporting 5G Core and E-UTRA and logged measurements in RRC_IDLE and RRC_INACTIVE |
| 8.1.6.2.3 | Inter-RAT MDT / Radio Link Failure / Reporting at E-UTRA Inter-RAT handover | Rel-16 | C32 | UEs supporting 5G Core and E-UTRA |
| 8.1.6.2.4 | Inter-RAT MDT / Connection Establishment Failure / Logging and reporting / Reporting of E-UTRA measurement | Rel-16 | C32 | UEs supporting 5G Core and E-UTRA |
| 8.1.6.3 | Inter-System MDT | | | |
| 8.1.6.3.1 | Inter-System MDT / Immediate MDT | | | |
| 8.1.6.3.1.1 | Inter-System MDT / Immediate MDT / Measurement reporting / Bluetooth measurement collection | Rel-16 | C140 | UEs supporting 5G core and Bluetooth Measurement Collection in Immediate MDT |
| 8.1.6.3.1.2 | Inter-System MDT / Immediate MDT / Measurement reporting / WLAN measurement collection | Rel-16 | C141 | UEs supporting 5G core and WLAN Measurement Collection in Immediate MDT |
| 8.1.6.3.1.3 | Inter-System MDT / Immediate MDT / Measurement reporting / Sensor measurement collection | Rel-16 | C139 | UEs supporting 5G Core and collection of sensor information such as Barometric pressure, UE speed, and UE orientation information as defined in TS 37.355. |
| 8.1.6.3.2 | Inter-System MDT / Logged MDT | | | |
| 8.1.6.3.2.1 | Inter-System MDT / Logged MDT / Logging and reporting / Bluetooth measurement collection | Rel-16 | C137 | UEs supporting 5G Core and Bluetooth measurements in RRC_IDLE and RRC_INACTIVE state |
| 8.1.6.3.2.2 | Inter-System MDT / Logged MDT / Logging and reporting / WLAN measurement collection | Rel-16 | C138 | UEs supporting 5G Core and WLAN measurements in RRC_IDLE and RRC_INACTIVE state |
| 8.1.6.3.2.3 | Inter-System MDT / Logged MDT / Logging and reporting / Sensor measurement collection | Rel-16 | C139 | UEs supporting 5G Core and collection of sensor information such as Barometric pressure, UE speed, and UE orientation information as defined in TS 37.355. |
| 8.1.6.3.3 | Inter-System MDT / Radio Link Failure | | | |
| 8.1.6.3.3.1 | Inter-System MDT / Radio Link Failure / Logging and reporting / Bluetooth measurement collection | Rel-16 | C137 | UEs supporting 5G Core and Bluetooth measurements in RRC_IDLE and RRC_INACTIVE state |
| 8.1.6.3.3.2 | Inter-System MDT / Radio Link Failure / Logging and reporting / WLAN measurement collection | Rel-16 | C138 | UEs supporting 5G Core and WLAN measurements in RRC_IDLE and RRC_INACTIVE state |
| 8.1.6.3.3.3 | Inter-System MDT / Radio Link Failure / Logging and reporting / Sensor measurement collection | Rel-16 | C139 | UEs supporting 5G Core and collection of sensor information such as Barometric pressure, UE speed, and UE orientation information as defined in TS 37.355. |
| 8.1.6.3.4 | Inter-System MDT / Connection Establishment Failure | | | |
| 8.1.6.3.4.1 | Inter-System MDT / Connection Establishment Failure / Logging and reporting / Bluetooth measurement collection | Rel-16 | C137 | UEs supporting 5G Core and Bluetooth measurements in RRC_IDLE and RRC_INACTIVE state |
| 8.1.6.3.4.2 | Inter-System MDT / Connection Establishment Failure / Logging and reporting / WLAN measurement collection | Rel-16 | C138 | UEs supporting 5G Core and WLAN measurements in RRC_IDLE and RRC_INACTIVE state |
| 8.1.6.3.4.3 | Inter-System MDT / Connection Establishment Failure / Logging and reporting / Sensor measurement collection | Rel-16 | C139 | UEs supporting 5G Core and collection of sensor information such as Barometric pressure, UE speed, and UE orientation information as defined in TS 37.355. |
| 8.1.7 | Non-public networks | | | |
| 8.1.7.1 | Measurement for self-optimized networks | | | |

| Clause | TC Title | Release | Applicability | |
|----------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 8.1.7.1.1 | Measurement configuration control and reporting / CGI reporting of NR NPN cell | Rel-16 | C169 | UEs supporting 5G Core and CAG and acquisition of CGI information from neighbour NR NPN cell |
| 8.1.6.4 | SON / RACH Optimisation | | | |
| 8.1.6.4.1 | SON / RACH logging and reporting | Rel-16 | C136 | UEs supporting 5G Core and delivery of rachReport upon request from the network. |
| 8.2 | MR-DC RRC | | | |
| 8.2.1 | UE Capability | | | |
| 8.2.1.1 | UE capability transfer / Success | | | |
| 8.2.1.1.1 | UE capability transfer / Success / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.1.1.2 | UE capability transfer / Success / NE-DC | Rel-15 | C160 | UEs supporting NE-DC |
| 8.2.1.2 | Void | | | |
| 8.2.2 | Radio Bearer Addition, Modification and Release | | | |
| 8.2.2.1 | Radio Bearer Addition, Modification and Release / SRB | | | |
| 8.2.2.1.1 | SRB3 Establishment, Reconfiguration and Release / NR addition, modification and release / EN-DC | Rel-15 | C22 | UEs supporting EN-DC and SRB3 |
| 8.2.2.1.2 | SRB3 Establishment, Reconfiguration and Release / NR addition, modification and release / NR-DC | Rel-15 | C86 | UEs supporting NR-DC and SRB3 |
| 8.2.2.2 | Split SRB Establishment and Release | | | |
| 8.2.2.2.1 | Split SRB Establishment and Release / EN-DC | Rel-15 | C61 | UEs supporting EN-DC and PDCP duplication over split SRB1/2 |
| 8.2.2.3 | Simultaneous SRB3 and Split SRB / Sequential message flow on SRB3 and Split SRB | | | |
| 8.2.2.3.1 | Simultaneous SRB3 and Split SRB / Sequential message flow on SRB3 and Split SRB with one UL path / EN-DC | Rel-15 | C23 | UEs supporting EN-DC and SRB3 and (UL transmission via either MCG path or SCG path for the split SRB) |
| 8.2.2.3.2 | Simultaneous SRB3 and Split SRB / Sequential message flow on SRB3 and Split SRB with one UL path / NR-DC | Rel-15 | C157 | UEs supporting NR-DC and SRB3 and (UL transmission via either MCG path or SCG path for the split SRB) |
| 8.2.2.4 | PSCell Addition, Modification and Release / SCG DRB | | | |
| 8.2.2.4.1 | PSCell addition, modification and release / SCG DRB / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.2.4.2 | PSCell addition, modification and release / SCG DRB / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.2.4.3 | PSCell addition, modification and release / SCG DRB / NE-DC | Rel-15 | C160 | UEs supporting NE-DC |
| 8.2.2.5 | PSCell Addition, Modification and Release / Split DRB | | | |
| 8.2.2.5.1 | PSCell addition, modification and release / Split DRB / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.2.5.2 | PSCell addition, modification and release / Split DRB / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.2.5.3 | PSCell addition, modification and release / Split DRB / NE-DC | Rel-15 | C160 | UEs supporting NE-DC |
| 8.2.2.6 | Bearer Modification / MCG DRB | | | |
| 8.2.2.6.1 | Bearer Modification / MCG DRB / SRB / PDCP version change / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.2.7 | Bearer Modification / Handling for bearer type change without security key change | | | |
| 8.2.2.7.1 | Bearer Modification / Handling for bearer type change without security key change / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.2.7.2 | Bearer Modification / Handling for bearer type change without security key change / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.2.8 | Bearer Modification / Handling for bearer type change with security key change | | | |
| 8.2.2.8.1 | Bearer Modification / Handling for bearer type change with security key change / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.2.8.2 | Bearer Modification / Handling for bearer type change with security key change / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.2.9 | Bearer Modification / Uplink data path / Split DRB Reconfiguration | | | |
| 8.2.2.9.1 | Bearer Modification / Uplink data path / Split DRB Reconfiguration / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.2.9.2 | Bearer Modification / Uplink data path / Split DRB Reconfiguration / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.3 | Measurement Configuration Control and Reporting / Handovers | | | |

| Clause | TC Title | Release | Applicability | |
|-----------|--|---------|---------------|----------------------|
| | | | Condition | Comment |
| 8.2.3.1 | Measurement configuration control and reporting / Inter-RAT measurements / Event B1 / Measurement of NR cells | | | |
| 8.2.3.1.1 | Measurement configuration control and reporting / Inter-RAT measurements / Event B1 / Measurement of NR cells / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.3.2 | Measurement configuration control and reporting / Inter-RAT measurements / Event B1 / Measurement of NR cells / RSRQ based measurements | | | |

| Clause | TC Title | Release | Applicability | |
|----------------|---|---------|---------------|--|
| | | | Condition | Comment |
| 8.2.3.2.1 | Measurement configuration control and reporting / Inter-RAT measurements / Event B1 / Measurement of NR cells / RSRQ based measurements / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.3.3 | Measurement configuration control and reporting / Inter-RAT measurements / Periodic reporting / Measurement of NR cells | | | |
| 8.2.3.3.1 | Measurement configuration control and reporting / Inter-RAT measurements / Periodic reporting / Measurement of NR cells / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.3.4 | Measurement configuration control and reporting / Event A1 / Measurement of NR PSCell | | | |
| 8.2.3.4.1 | Measurement configuration control and reporting / Event A1 / Measurement of NR PSCell / EN-DC | Rel-15 | C13 | UEs supporting EN-DC and NR measurements and Event A triggered reporting |
| 8.2.3.5 | Measurement configuration control and reporting / Event A2 / Measurement of NR PSCell | | | |
| 8.2.3.5.1 | Measurement configuration control and reporting / Event A2 / Measurement of NR PSCell / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) |
| 8.2.3.6 | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cells | | | |
| 8.2.3.6.1 | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cells / Intra-frequency measurements / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) |
| 8.2.3.6.1a | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cell / Inter-frequency measurements / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) |
| 8.2.3.6.1b | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour NR cell / Inter-band measurements / EN-DC | Rel-15 | C93 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) and multiple NR bands. |
| 8.2.3.6.2 | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour E-UTRA and NR cells / Intra-frequency measurements / NE-DC | Rel-15 | C182 | UEs supporting NE-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting). |
| 8.2.3.6.2a | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour E-UTRA and NR cell / Inter-frequency measurements / NE-DC | Rel-15 | C182 | UEs supporting NE-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and multiple NR bands. |
| 8.2.3.6.2b | Measurement configuration control and reporting / Event A3 / Measurement of Neighbour E-UTRA and NR cell / Inter-band measurements / NE-DC | Rel-15 | C183 | UEs supporting NE-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and multiple NR bands. |
| 8.2.3.7 | Measurement configuration control and reporting / Event A4 (intra-frequency, inter-frequency and inter-band measurements) / Measurement of Neighbour NR cell | | | |
| 8.2.3.7.1 | Measurement configuration control and reporting / Event A4 / Measurement of Neighbour NR cell / Intra-frequency measurements / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) |
| 8.2.3.7.1a | Measurement configuration control and reporting / Event A4 / Measurement of Neighbour NR cell / Inter-frequency measurements / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) |
| 8.2.3.7.1b | Measurement configuration control and reporting / Event A4 / Measurement of Neighbour NR cell / Inter-band measurements / EN-DC | Rel-15 | C93 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) and multiple NR bands. |
| 8.2.3.8 | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell | | | |

| Clause | TC Title | Release | Applicability | |
|-----------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 8.2.3.8.1 | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell / Intra-frequency measurements / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) |
| 8.2.3.8.1a | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell / Inter-frequency measurements / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) |
| 8.2.3.8.1b | Measurement configuration control and reporting / Event A5 / Measurement of Neighbour NR cell / Inter-band measurements / EN-DC | Rel-15 | C93 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) and multiple NR bands. |
| 8.2.3.9 | Measurement configuration control and reporting / SS/PBCH block based / CSI-RS based intra-frequency measurements / Measurement of Neighbour NR cell | | | |
| 8.2.3.9.1 | Measurement configuration control and reporting / SS/PBCH block based / CSI-RS based intra-frequency measurements / Measurement of Neighbour NR Cell / EN-DC | Rel-15 | C15 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and Inter frequency measurements and at least periodical reporting) and CSI-RSRP and CSI-RSRQ measurement |
| 8.2.3.10 | Measurement configuration control and reporting / SS/PBCH block based / CSI-RS based inter-frequency measurements / Measurement of Neighbour NR cell | | | |
| 8.2.3.10.1 | Measurement configuration control and reporting / SS/PBCH block based / CSI-RS based inter-frequency measurements / Measurement of Neighbour NR Cell / EN-DC | Rel-15 | C15 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and Inter frequency measurements) and CSI-RSRP and CSI-RSRQ measurement |
| 8.2.3.11 | Measurement configuration control and reporting / Measurement Gaps | | | |
| 8.2.3.11.1 | Measurement configuration control and reporting / Measurement Gaps / NR FR1 / EN-DC | Rel-15 | C24 | UEs supporting EN-DC and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and (two independent measurement gap configurations for FR1 and FR2) and Inter-Band EN-DC within FR1 |
| 8.2.3.11.2 | Measurement configuration control and reporting / Measurement Gaps / NR FR2 / EN-DC | Rel-15 | C25 | UEs supporting EN-DC and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and (two independent measurement gap configurations for FR1 and FR2) and Inter-Band EN-DC including FR2 |
| 8.2.3.11.3 | Measurement configuration control and reporting / Measurement Gaps / NR-DC | Rel-15 | C149 | UEs supporting NR-DC and two independent measurement gap configurations for FR1 and FR2 |
| 8.2.3.12 | Measurement configuration control and reporting / Inter-RAT measurements / Event B2 / Measurement of NR cells | | | |
| 8.2.3.12.1 | Measurement configuration control and reporting / Inter-RAT measurements / Event B2 / Measurement of NR cells / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.3.13 | PCell Handover with SCG change / Reconfiguration with sync / SCG DRB | | | |
| 8.2.3.13.1 | PCell Handover with SCG change / Reconfiguration with sync / SCG DRB / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.3.14 | SCG change / Reconfiguration with sync / Split DRB | | | |
| 8.2.3.14.1 | SCG change / Reconfiguration with sync / Split DRB / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.3.14.2 | SCG change / Reconfiguration with sync / Split DRB / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.3.15 | Measurement configuration control and reporting / Two simultaneous events A2 and A3 (intra-frequency measurements) / Measurement of Neighbour NR cells | | | |
| 8.2.3.15.1 | Measurement configuration control and reporting / Two simultaneous events A2 and A3 (intra-frequency measurements) / Measurement of Neighbour NR cells / EN-DC | Rel-15 | C14 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) |
| 8.2.3.16 | Measurement configuration control and reporting / SRB3 | | | |
| 8.2.3.16.1 | Measurement configuration control and reporting / SRB3 / Intra NR measurements / EN-DC | Rel-15 | C71 | UEs supporting EN-DC and SRB3 and NR intra-frequency and inter-frequency measurements and at least periodical reporting |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 8.2.3.16.2 | Measurement configuration control and reporting / SRB3 / Intra NR measurements / NR-DC | Rel-15 | C87 | UEs supporting NR-DC and SRB3 and NR intra-frequency and inter-frequency measurements and at least periodical reporting |
| 8.2.3.17 | Measurement configuration control and reporting / SFTD | | | |
| 8.2.3.17.1 | Measurement configuration control and reporting / SFTD / EN-DC | Rel-15 | C151 | UEs supporting EN-DC and SFTD measurement between E-UTRA PCell and an NR neighbour cell, and SFTD measurement between E-UTRA PCell and NR PSCell |
| 8.2.3.17.2 | Measurement configuration control and reporting / SFTD / NR-DC | Rel-15 | C152 | UEs supporting NR-DC and SFTD measurement between NR PCell and an NR neighbour cell, and SFTD measurement between NR PCell and NR PSCell |
| 8.2.3.18 | Conditional PSCell change | | | |
| 8.2.3.18.1 | Conditional PSCell change / Success / EN-DC | Rel-16 | C153 | UEs supporting EN-DC and Conditional PSCell change |
| 8.2.3.18.2 | Conditional PSCell change / Failure / EN-DC | Rel-16 | C153 | UEs supporting EN-DC and Conditional PSCell change |
| 8.2.3.18.3 | Conditional PSCell change / PCell change / PSCell change / EN-DC | Rel-16 | C153 | UEs supporting EN-DC and Conditional PSCell change |
| 8.2.4 | Carrier Aggregation | | | |
| 8.2.4.1 | NR CA / NR SCell addition / modification / release / Success | | | |
| 8.2.4.1.1 | NR CA / NR SCell addition / modification / release / Success / EN-DC | | | |
| 8.2.4.1.1.1 | NR CA / NR SCell addition / modification / release / Success / EN-DC / Intra-band Contiguous CA | Rel-15 | C67 | UEs supporting EN-DC and Intra-Band Contiguous CA |
| 8.2.4.1.1.2 | NR CA / NR SCell addition / modification / release / Success / EN-DC / Intra-band non-Contiguous CA | Rel-15 | C68 | UEs supporting EN-DC and Intra-Band Non-Contiguous CA |
| 8.2.4.1.1.3 | NR CA / NR SCell addition / modification / release / Success / EN-DC / Inter-band CA | Rel-15 | C69 | UEs supporting EN-DC and Inter-Band CA |
| 8.2.4.2 | NR CA / Simultaneous PSCell and SCell addition / PSCell and SCell change / CA Release | | | |
| 8.2.4.2.1 | NR CA / Simultaneous PSCell and SCell addition / PSCell and SCell change / CA Release / EN-DC | | | |
| 8.2.4.2.1.1 | NR CA / Simultaneous PSCell and SCell addition / PSCell and SCell change / CA Release / EN-DC / Intra-band Contiguous CA | Rel-15 | C67 | UEs supporting EN-DC and Intra-Band Contiguous CA |
| 8.2.4.2.1.2 | NR CA / Simultaneous PSCell and SCell addition / PSCell and SCell change / CA Release / EN-DC / Intra-band non-Contiguous CA | Rel-15 | C68 | UEs supporting EN-DC and Intra-Band Non-Contiguous CA |
| 8.2.4.2.1.3 | NR CA / Simultaneous PSCell and SCell addition / PSCell and SCell change / CA Release / EN-DC / Inter-band CA | Rel-15 | C69 | UEs supporting EN-DC and Inter-Band CA |
| 8.2.4.3 | NR CA / SCell change / Intra-NR measurement event A6 / SRB3 | | | |
| 8.2.4.3.1 | NR CA / SCell change / Intra-NR measurement event A6 / SRB3 / EN-DC | | | |
| 8.2.4.3.1.1 | NR CA / SCell change / Intra-NR measurement event A6 / SRB3 / EN-DC / Intra-band Contiguous CA | Rel-15 | C55 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and intra-band contiguous CA |
| 8.2.4.3.1.2 | NR CA / SCell change / Intra-NR measurement event A6 / SRB3 / EN-DC / Intra-band non-Contiguous CA | Rel-15 | C57 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and intra-band non-contiguous CA |
| 8.2.4.3.1.3 | NR CA / SCell change / Intra-NR measurement event A6 / SRB3 / EN-DC / Inter-band CA | Rel-15 | C56 | UEs supporting EN-DC and NR measurements and Event A triggered reporting and inter-band CA |
| 8.2.5 | Reconfiguration Failure / Radio link failure | | | |
| 8.2.5.1 | Radio link failure / PSCell addition failure | | | |
| 8.2.5.1.1 | Radio link failure / Random access problem / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.5.1.2 | Radio link failure / Random access problem / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.5.2 | Radio link failure / PSCell out of sync indication | | | |
| 8.2.5.2.1 | Radio link failure / PSCell out of sync indication / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |

| Clause | TC Title | Release | Applicability | |
|------------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 8.2.5.2.2 | Radio link failure / PSCell out of sync indication / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.5.3 | Radio link failure / rlc-MaxNumRetx failure | | | |
| 8.2.5.3.1 | Radio link failure / rlc-MaxNumRetx failure / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.5.3.2 | Radio link failure / rlc-MaxNumRetx failure / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.5.3.3 | Radio link failure / rlc-MaxNumRetx failure / NE-DC | Rel-15 | C160 | UEs supporting NE-DC |
| 8.2.5.4 | Reconfiguration failure / SCG change failure | | | |
| 8.2.5.4.1 | Reconfiguration failure / SCG change failure / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.5.4.2 | Reconfiguration failure / SCG change failure / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.5.5 | Reconfiguration failure / SCG Reconfiguration failure / SRB3 | | | |
| 8.2.5.5.1 | Void | | | |
| 8.2.5.6 | Reconfiguration failure / SCG Reconfiguration failure / SRB1 | | | |
| 8.2.5.6.1 | Void | | | |
| 8.2.6 | MR-DC RRC others | | | |
| 8.2.6.1 | Failure information / RLC failure / SCG | | | |
| 8.2.6.1.1 | Failure information / RLC failure / SCG / EN-DC | | | |
| 8.2.6.1.1.1 | Failure information / RLC failure / SCG / EN-DC / Intra-band Contiguous CA | Rel-15 | C75 | UEs supporting EN-DC and SRB3 and intra-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.2.6.1.1.2 | Failure information / RLC failure / SCG / EN-DC / Inter-band CA | Rel-15 | C76 | UEs supporting EN-DC and SRB3 and inter-band CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.2.6.1.1.3 | Failure information / RLC failure / SCG / EN-DC / Intra-band non Contiguous CA | Rel-15 | C77 | UEs supporting EN-DC and SRB3 and intra-band non-contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.2.6.1.2 | Failure information / RLC failure / SCG / NR-DC | | | |
| 8.2.6.1.2.1 | Failure information / RLC failure / SCG / NR-DC / Intra-band Contiguous CA | Rel-15 | C88 | UEs supporting NR-DC and SRB3 and intra-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.2.6.1.2.2 | Failure information / RLC failure / SCG / NR-DC / Inter-band CA | Rel-15 | C89 | UEs supporting NR-DC and SRB3 and inter-band CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.2.6.1.2.3 | Failure information / RLC failure / SCG / NR-DC / Intra-band non Contiguous CA | Rel-15 | C90 | UEs supporting NR-DC and SRB3 and intra-band non-contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| 8.2.6.2 | Processing delay | | | |
| 8.2.6.2.1 | Processing delay / PSCell addition / SCG DRB / Success / Latency check / EN-DC | Rel-15 | C01 | UEs supporting EN-DC |
| 8.2.6.2.2 | Processing delay / Latency check / NR-DC | Rel-15 | C80 | UEs supporting NR-DC |
| 8.2.6.3 | Idle/Inactive measurements | | | |
| 8.2.6.3.3 | Idle/Inactive measurements / Inactive mode / NE-DC / SIB11 configuration | Rel-16 | C193 | UEs supporting 5GC Core, E-UTRA, RRC_INACTIVE and Idle/Inactive Measurements |
| 8.2.6.3.4 | Idle/Inactive measurements / Inactive mode / NE-DC / RRCRelease configuration | Rel-16 | C193 | UEs supporting 5GC Core, E-UTRA, RRC_INACTIVE and Idle/Inactive Measurements |
| 8.2.6.3.5 | Idle/Inactive Measurements / Idle mode / NE-DC / SIB11 configuration | Rel-16 | C191 | UEs supporting 5G Core, E-UTRA and Idle/Inactive Measurements |
| 8.2.6.3.6 | Idle/Inactive Measurements / Idle mode / NE-DC / RRCRelease configuration | Rel-16 | C191 | UEs supporting 5GC Core, E-UTRA and Idle/Inactive Measurements |
| 8.2.7.2 | RRC resume / NR-DC | | | |
| 8.2.7.2.1 | RRC Resume / NR-DC | Rel-15 | C158 | UEs supporting 5G Core and NR-DC and RRC_INACTIVE |

Table 4.1-3b: Additional Information of Applicability of Protocol conformance RRC test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|------------------|------------------|--|--|-------------------|
| 8.1.1 | | | | |
| 8.1.1.1 | | | | |
| 8.1.1.1.1 | pc_inactiveState | | | |
| 8.1.1.1.2 | pc_inactiveState | | | |
| 8.1.1.3 | | | | |
| 8.1.1.3.2 | | | | Rel-15 E-UTRA |
| 8.1.1.3.4 | | | | Rel-15 E-UTRA |
| 8.1.1.3.7a | | | | Rel-15 E-UTRA |
| 8.1.3 | | | | |
| 8.1.3.1 | | | | |
| 8.1.3.1.2 | | | | |
| 8.1.3.1.3 | | | If 8.1.3.1.2 is executed this test case is optional (Note 2) | |
| 8.1.3.1.4 | | | If 8.1.3.1.2 or 8.1.3.1.3 is executed this test case is optional (Note 2) | |
| 8.1.3.1.5 | | | If 8.1.3.1.6 is executed this test case is optional (Note 2) | |
| 8.1.3.1.6 | | | | |
| 8.1.3.1.7 | | | If 8.1.3.1.5 or 8.1.3.1.6 is executed this test case is optional (Note 2) | |
| 8.1.3.1.8 | | | If 8.1.3.1.9 or 8.1.3.1.10 is executed this test case is optional (Note 2) | |
| 8.1.3.1.9 | | | If 8.1.3.1.10 is executed this test case is optional (Note 2) | |
| 8.1.3.1.10 | | | | |
| 8.1.3.1.23 | pc_inactiveState | | | |
| 8.1.3.2 | | | | |
| 8.1.3.2.6 | | | | Rel-16 UTRA |
| 8.1.3.2.7 | | | | Rel-16 UTRA |
| 8.1.4 | | | | |
| 8.1.4.1 | | | | |
| 8.1.4.1.2 | | px_NAS_5GC_CipheringAlgorithm px_NAS_5GC_IntegrityAlgorithm | | |
| 8.1.4.1.10 | | | Note 4 | |
| 8.1.4.2 | | | | |
| 8.1.4.2.1 | | | | |
| 8.1.4.2.1.1 | | | | Rel-15 E-UTRA |
| 8.1.4.2.1.2 | | | | Rel-16 EN-DC |
| 8.1.4.2.2 | | | | |
| 8.1.4.2.2.1 | | | | Rel-15 E-UTRA |
| 8.1.5 | | | | |
| 8.1.5.1 | | | | |
| 8.1.5.1.1 | | | If 8.2.1.1.2 is executed this test case is optional | |
| 8.1.5.7 | | | | |
| 8.1.5.7.1 | | | | |
| 8.1.5.7.1.1 | | | If 8.1.5.7.1.2 or 8.1.5.7.1.3 is executed this test case is optional | |
| 8.1.5.7.1.2 | | | If 8.1.5.7.1.1 or 8.1.5.7.1.3 is executed this test case is optional | |
| 8.1.5.7.1.3 | | | If 8.1.5.7.1.1 or 8.1.5.7.1.2 is executed this test case is optional | |
| 8.1.5.8 | | | | |
| 8.1.5.8.1 | pc_inactiveState | | | |
| 8.1.5.8.2 | | | | |
| 8.1.5.8.2.1 | pc_inactiveState | | If 8.1.5.8.2.2 or 8.1.5.8.2.3 is executed this test case is optional | |
| 8.1.5.8.2.2 | pc_inactiveState | | If 8.1.5.8.2.1 or 8.1.5.8.2.3 is executed this test case is optional | |

| | | | | |
|------------------|----------------------------|--|--|--|
| 8.1.5.8.2.3 | pc_inactiveState | | If 8.1.5.8.2.1 or 8.1.5.8.2.2 is executed this test case is optional | |
| 8.1.5.9 | | | | |
| 8.1.5.9.1 | [10] pc_Set_UE_Cap_Info_NR | | | |
| 8.1.6 | | | | |
| 8.1.6.1 | | | | |
| 8.1.6.1.3 | | | | |
| 8.1.6.1.3.1 | | | If 8.1.6.1.3.5 is executed this test case is optional. | |
| 8.2.1 | | | | |
| 8.2.2 | | | | |
| 8.2.2.1 | | | | |
| 8.2.2.1.1 | | | Only executed if test case 8.2.2.3.1 is not applicable (Note 1) | |
| 8.2.2.1.2 | | | Only executed if test case 8.2.2.3.2 is not applicable (Note 1) | |
| 8.2.3 | | | | |
| 8.2.3.6 | | | | |
| 8.2.3.6.1 | | | | |
| 8.2.3.6.1a | | | If 8.2.3.6.1 is executed this test case is optional (Note 3) | |
| 8.2.3.6.1b | | | If 8.2.3.6.1 or 8.2.3.6.1a is executed this test case is optional (Note 3) | |
| 8.2.3.7 | | | | |
| 8.2.3.7.1 | | | | |
| 8.2.3.7.1a | | | If 8.2.3.7.1 is executed this test case is optional (Note 3) | |
| 8.2.3.7.1b | | | If 8.2.3.7.1 or 8.2.3.7.1a is executed this test case is optional (Note 3) | |
| 8.2.3.8 | | | | |
| 8.2.3.8.1 | | | | |
| 8.2.3.8.1a | | | If 8.2.3.8.1 is executed this test case is optional (Note 3) | |
| 8.2.3.8.1b | | | If 8.2.3.8.1 or 8.2.3.8.1a is executed this test case is optional (Note 3) | |
| 8.2.6 | | | | |
| 8.2.6.1 | | | | |
| 8.2.6.1.1 | | | | |
| 8.2.6.1.1.1 | | | If 8.2.6.1.1.2 or 8.2.6.1.1.3 is executed this test case is optional | |
| 8.2.6.1.1.2 | | | If 8.2.6.1.1.1 or 8.2.6.1.1.3 is executed this test case is optional | |
| 8.2.6.1.1.3 | | | If 8.2.6.1.1.1 or 8.2.6.1.1.2 is executed this test case is optional | |
| 8.2.6.1.2 | | | | |
| 8.2.6.1.2.1 | | | If 8.2.6.1.2.2 or 8.2.6.1.2.3 is executed this test case is optional | |
| 8.2.6.1.2.2 | | | If 8.2.6.1.2.1 or 8.2.6.1.2.3 is executed this test case is optional | |
| 8.2.6.1.2.3 | | | If 8.2.6.1.2.1 or 8.2.6.1.2.2 is executed this test case is optional | |
| 8.2.6.2 | | | | |
| 8.2.6.2.2 | pc_inactiveState | | | |

| | |
|---------|--|
| Note 1: | Test cases 8.2.2.3.1 also verifies the core requirements covered by test case 8.2.2.1.1 but it is not applicable to all UE. Test case 8.2.2.3.2 and 8.2.2.1.2 are also in the same situation. |
| Note 2: | Only one among the three intra-frequency, inter-frequency and inter-band variants is required to be executed making sure all three variants are tested at least once across measurement events A3/A4/A5. |
| Note 3: | Only intra frequency among the three (intra-frequency, inter-frequency and inter-band) variants is required to be executed for measurement events A3/A4/A5 based on initial market requirements. May change in future similar to Note 2. |
| Note 4: | This test case can optionally be executed from Release 15 onwards. |

Table 4.1-4a: Applicability of Protocol conformance Mobility and Session management test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|----------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 9 | Mobility management | | | |
| 9.1 | 5GS mobility management | | | |
| 9.1.1 | Primary authentication and key agreement | | | |
| 9.1.1.1 | EAP based primary authentication and key agreement / EAP-AKA' related procedures | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.1.2 | EAP based primary authentication and key agreement / Reject | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.1.3 | EAP based primary authentication and key agreement / EAP message transport / Abnormal | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.1.4 | 5G AKA based primary authentication and key agreement / 5G-AKA related procedures | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.1.5 | 5G AKA based primary authentication and key agreement / Reject | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.1.6 | 5G AKA based primary authentication and key agreement / Abnormal | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2 | Security mode control | | | |
| 9.1.2.1 | NAS security mode command | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2.2 | Protection of initial NAS signalling messages | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2.3 | Integrity protection / Correct functionality of 5G NAS integrity algorithm / SNOW3G | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2.4 | Integrity protection / Correct functionality of 5G NAS integrity algorithm / AES | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2.5 | Integrity protection / Correct functionality of 5G NAS integrity algorithm / ZUC | Rel-15 | C84 | UEs supporting 5G Core and ZUC algorithm |
| 9.1.2.6 | Ciphering and deciphering / Correct functionality of 5G NAS encryption algorithm / SNOW3G | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2.7 | Ciphering and deciphering / Correct functionality of 5G NAS encryption algorithm / AES | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.2.8 | Ciphering and deciphering / Correct functionality of 5G NAS encryption algorithm / ZUC | Rel-15 | C84 | UEs supporting 5G Core and ZUC algorithm |
| 9.1.3 | Identification | | | |
| 9.1.3.1 | Identification procedure | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.4 | Generic UE configuration update | | | |
| 9.1.4.1 | Generic UE configuration update / New 5G-GUTI, NITZ, registration requested, network slicing indication, new allowed NSSAI / Acknowledgement from the UE | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5 | Registration | | | |
| 9.1.5.1 | Initial registration | | | |
| 9.1.5.1.1 | Initial registration / Success / 5G-GUTI reallocation, last visited TAI | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.2 | Initial registration / 5GS services / Equivalent PLMN list handling | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.3 | Initial registration / 5GS services / NSSAI handling | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.3a | Initial registration / 5GS services / NSSAI handling / NSSAI storage | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.4 | Initial registration / 5GS services / MICO mode / TAI list handling | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.5 | Initial registration / Abnormal / Failure after 5 attempts | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.6 | Initial registration / Rejected / Illegal UE | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.7 | Void | | | |

| Clause | TC Title | Release | Applicability | |
|----------------|--|-------------|---------------|---|
| | | | Condition | Comment |
| 9.1.5.1.8 | Initial registration / Rejected / Serving network not authorized | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.9 | Initial registration / Abnormal / Change of cell into a new tracking area | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.10 | Initial registration / Rejected / PLMN not allowed | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.11 | Initial registration / Rejected / Tracking area not allowed | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.12 | Initial registration / Rejected / Roaming not allowed in this tracking area | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.13 | Initial registration / Rejected / No suitable cells in tracking area | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.14 | Initial registration / Rejected / Congestion / Abnormal cases / T3346 | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.1.15 | Initial registration / Success / Extended and spare fields in CAG information list | Rel-15 only | C21 | UEs supporting 5G Core |
| 9.1.5.2 | Mobility and periodic registration update | | | |
| 9.1.5.2.1 | Mobility registration update / TAI list handling | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.2.2 | Periodic registration update / Accepted | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.2.4 | Mobility registration update / The lower layer requests NAS signalling connection recovery | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.2.5 | Void | | | |
| 9.1.5.2.7 | Mobility and periodic registration update / Rejected / UE identity cannot be derived by the network | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.2.8 | Mobility and periodic registration update / Rejected / Implicitly de-registered | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.5.2.9 | Void | | | |
| 9.1.6 | De-registration | | | |
| 9.1.6.1 | UE-initiated de-registration | | | |
| 9.1.6.1.1 | UE-initiated de-registration / Switch off / Abnormal / De-registration and 5GMM common procedure collision | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.6.1.2 | UE-initiated de-registration / Normal de-registration / Abnormal / Transmission failure without TAI change from lower layers, de-registration and 5GMM common procedure collision, T3521 timeout | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.6.1.3 | UE-initiated de-registration / Abnormal / Change of cell into a new tracking area | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.6.1.4 | Void | | | |
| 9.1.6.2 | Network-initiated de-registration | | | |
| 9.1.6.2.1 | Network-initiated de-registration / De-registration for 3GPP access / Re-registration required | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.6.2.2 | Network-initiated de-registration / De-registration for 3GPP access / Re-registration not required | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.7 | Service request | | | |
| 9.1.7.1 | Service request / Idle mode uplink user data transport / Rejected / Restricted service area, abnormal / T3517, T3525 | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.7.2 | Service request / Connected mode user data transport / Abnormal / T3517 | Rel-15 | C21 | UEs supporting 5G Core |
| 9.1.8 | SMS over NAS | | | |
| 9.1.8.1 | SMS over NAS / MO and MT SMS over NAS / Idle mode | Rel-15 | C33 | UEs supporting 5G Core and SMS over NAS and UE configured to not use SMSoIP |
| 9.1.8.2 | SMS over NAS / Multiple MO and MT SMS over NAS / Connected mode | Rel-15 | C33 | UEs supporting 5G Core and SMS over NAS and UE configured to not use SMSoIP |
| 9.1.9 | RACS | | | |
| 9.1.9.1 | RACS / Network assigned UE radio capability ID | Rel-16 | C108 | UEs supporting 5G Core and RACS |
| 9.1.9.2 | RACS / UE configuration update / UE radio capability ID | Rel-16 | C108 | UEs supporting 5G Core and RACS |
| 9.1.9.3 | RACS / PLMN change within registration area / From NW assigned to Manufacturer assigned UE Radio Capability ID | Rel-16 | C177 | UEs supporting 5G Core and RACS and Manufacturer assigned Radio Capability ID |
| 9.1.9.4 | RACS / USIM change / Handling of URCID | Rel-16 | C108 | UEs supporting 5G Core and RACS |
| 9.1.9.5 | RACS / Handling of delete indication for NW assigned UE radio capability ID | Rel-16 | C108 | UEs supporting 5G Core and RACS |
| 9.1.9.6 | RACS / Change in radio capability / NW assigned URCID | Rel-16 | C108 | UEs supporting 5G Core and RACS |

| Clause | TC Title | Release | Applicability | |
|---------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 9.1.9.7 | RACS / Inter-system mobility registration update / Handling of UE radio capability ID | Rel-16 | C178 | UEs supporting 5G Core and E-UTRA and RACS |
| 9.1.10 | Network slice-specific authentication and authorization | | | |
| 9.1.10.1 | NSSAA / EAP message transport / Success | Rel-16 | C147 | UEs supporting 5G Core and NSSAA and EAP-AKA' for NSSAA |
| 9.1.10.2 | Network slice-specific authentication and authorization / EAP message transport / Abnormal | Rel-16 | C147 | UEs supporting 5G Core and NSSAA and EAP-AKA' for NSSAA |
| 9.1.10.3 | NSSAA / Initial registration / Rejected NSSAI, pending NSSAI | Rel-16 | C147 | UEs supporting 5G Core and NSSAA and EAP-AKA' for NSSAA |
| 9.1.10.4 | NSSAA / Initial registration / Reject | Rel-16 | C147 | UEs supporting 5G Core and NSSAA and EAP-AKA' for NSSAA |
| 9.1.10.6 | NSSAA / UE configuration update / Rejected NSSAI | Rel-16 | C147 | UEs supporting 5G Core and NSSAA and EAP-AKA' for NSSAA |
| 9.1.11 | SNPN / Mobility management aspects | | | |
| 9.1.11.1 | SNPN / Initial registration / Rejected / Temporarily not authorized for this SNPN | Rel-16 | C131 | UEs supporting 5G Core and SNPN |
| 9.1.11.2 | SNPN / Initial registration / Rejected / Permanently not authorized for this SNPN | Rel-16 | C131 | UEs supporting 5G Core and SNPN |

| Clause | TC Title | Release | Applicability | |
|----------------|---|---------|---------------|---|
| | | | Condition | Comment |
| 9.1.11.3 | SNPN / EAP based primary authentication and key agreement / EAP-AKA' related procedures | Rel-16 | C131 | UEs supporting 5G Core and SNPN |
| 9.2 | 5GS Non-3GPP Access Mobility Management | | | |
| 9.2.1 | Primary authentication and key agreement procedure | | | |
| 9.2.1.1 | EAP based primary authentication and key agreement | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.1.2 | 5G AKA based primary authentication and key agreement | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.2 | Security Mode Control | | | |
| 9.2.2.1 | NAS security mode command | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.2.2 | Protection of initial NAS signalling messages | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.3 | Void | | | |
| 9.2.4 | Generic UE configuration | | | |
| 9.2.4.1 | Generic UE configuration update | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.5 | Registration | | | |
| 9.2.5.1 | Initial Registration | | | |
| 9.2.5.1.1 | Initial registration / Success / 5G-GUTI reallocation, Last visited TAI | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.5.1.2 | Initial registration / 5GS services / NSSAI handling | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.5.1.3 | Void | | | |
| 9.2.5.1.4 | Initial registration / Rejected / Congestion / Abnormal cases / T3346 | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.5.2 | Mobility Registration | | | |
| 9.2.5.2.1 | Void | | | |
| 9.2.5.2.2 | Mobility registration update/Change of SMS over NAS capability | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.6 | De-registration | | | |
| 9.2.6.1 | UE-initiated de-registration | | | |
| 9.2.6.1.1 | UE-initiated de-registration / switch off | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.6.2 | Network-initiated de-registration | | | |
| 9.2.6.2.1 | Network-initiated de-registration / De-registration for Non-3GPP access / Re-registration required | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.6.2.2 | Network-initiated de-registration / De-registration for Non 3GPP access / Re-registration not required | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.7 | Service request | | | |
| 9.2.7.1 | Service request / IDLE mode uplink user data transport / Rejected / Restricted service area, Abnormal / T3517 | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 9.2.7.2 | Service request / CMM CONNECTED mode/uplink user data transport / Abnormal / T3517 | Rel-15 | C58 | UEs supporting 5G core over non-3GPP Access Network, WLAN and (ICMP or ICMP IPv6) |
| 9.2.8 | SMS over NAS | | | |
| 9.2.8.1 | SMS over NAS / MO SMS over NAS - 5GMM-Idle mode | Rel-15 | C30 | UEs supporting 5G core over non-3GPP Access Network and SMS over NAS and WLAN |
| 9.3 | Inter-system mobility | | | |
| 9.3.1 | 5GS-EPC Inter-system mobility | | | |
| 9.3.1.1 | Inter-system mobility registration update / Single-registration mode with N26 / 5GMM-IDLE / 5GC to EPC | Rel-15 | C26 | UEs supporting 5GS and E-UTRA |
| 9.3.1.2 | Inter-system mobility registration update / Single-registration mode with N26 / 5GMM-IDLE / EPC to 5GC | Rel-15 | C26 | UEs supporting 5GS and E-UTRA |
| 9.3.1.3 | Inter-system mobility and periodic registration update / Rejected / Single-registration mode with N26 / Handling of EPC relevant parameters | Rel-15 | C26 | UEs supporting 5GS and E-UTRA |
| 10 | Session management | | | |
| 10.1 | 5GS session management | | | |
| 10.1.1 | PDU session authentication and authorization | | | |
| 10.1.1.1 | PDU session authentication and authorization / During the UE-requested PDU session procedure | Rel-15 | C39 | UEs supporting 5G Core and additional UE-requested PDU establishment |

| Clause | TC Title | Release | Applicability | |
|---------------|--|---------|---------------|--|
| | | | Condition | Comment |
| 10.1.1.2 | PDU session authentication and authorization / After the UE-requested PDU session procedure | Rel-15 | C39 | UEs supporting 5G Core and additional UE-requested PDU establishment |
| 10.1.2 | Network-requested PDU session modification | | | |
| 10.1.2.1 | Network-requested PDU session modification / Accepted | Rel-15 | C21 | UEs supporting 5G Core |
| 10.1.2.2 | Network-requested PDU session modification / Abnormal / PDU session in state PDU SESSION INACTIVE | Rel-15 | C39 | UEs supporting 5G Core and additional UE-requested PDU establishment |
| 10.1.3 | Network-requested PDU session release | | | |
| 10.1.3.1 | Void | | | |
| 10.1.3.2 | Network-requested PDU session release / Insufficient resources, insufficient resources for specific slice and DNN, abnormal / Invalid PDU session identity | Rel-15 | C39 | UEs supporting 5G Core and additional UE-requested PDU establishment |
| 10.1.4 | UE-requested PDU session establishment | | | |
| 10.1.4.1 | UE-requested PDU session establishment / Abnormal / T3580 | Rel-15 | C39 | UEs supporting 5G Core and additional UE-requested PDU establishment |
| 10.1.5 | UE-requested PDU session modification | | | |
| 10.1.5.1 | UE-requested PDU session modification | Rel-15 | C63 | UEs supporting 5G Core and UE requested PDU session modification procedure |
| 10.1.6 | UE-requested PDU session release | | | |
| 10.1.6.1 | UE-requested PDU session release / Abnormal / Collision with network-requested PDU session modification procedure | Rel-15 | C21 | UEs supporting 5G Core |
| 10.1.6.2 | UE-requested PDU session release / Abnormal / Collision with network-requested PDU session release procedure | Rel-15 | C21 | UEs supporting 5G Core |
| 10.1.7 | Network-requested PDU session release | | | |
| 10.1.7.1 | SNPN / Network-requested PDU session release / Accepted / Insufficient resources / T3396, Accepted / Insufficient resources for specific slice and DNN / T3584 | Rel-16 | C131 | UEs supporting 5G Core and SNPN |
| 10.2 | EN-DC session management | | | |
| 10.2.1 | Network initiated procedures | | | |
| 10.2.1.1 | Default EPS bearer context activation | Rel-15 | C01 | UEs supporting EN-DC |
| 10.2.1.2 | Dedicated EPS bearer context activation | Rel-15 | C01 | UEs supporting EN-DC |
| 10.2.2 | UE initiated procedures | | | |
| 10.2.2.1 | EPS bearer resource allocation / modification | Rel-15 | C16 | UEs supporting EN-DC and UE requested bearer resource allocation and modification procedures |
| 10.3 | 5GS Non-3GPP Access Session Management | | | |
| 10.3.1 | PDU session authentication and authorization | | | |
| 10.3.1.1 | PDU session authentication and authorization / during the UE-requested PDU session procedure | Rel-15 | C159 | UEs supporting 5G core over non-3GPP Access Network and WLAN and additional UE-requested PDU establishment |
| 10.3.2 | Network-requested PDU session modification | | | |
| 10.3.2.1 | Network-requested PDU session modification /Accepted/Rejected | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 10.3.3 | Network-requested PDU session Release | | | |
| 10.3.3.1 | Network-requested PDU session release / accepted/ with and without reactivation | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 10.3.4 | UE-requested PDU session establishment | | | |
| 10.3.4.1 | UE-requested PDU session establishment / Abnormal / T3580 | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 10.3.5 | UE-requested PDU session modification | | | |
| 10.3.5.1 | UE-requested PDU session modification/Success | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| 10.3.6 | UE-requested PDU session release | | | |
| 10.3.6.1 | UE-requested PDU session release / Abnormal / Collision with network-requested PDU session modification procedure | Rel-15 | C29 | UEs supporting 5G core over non-3GPP Access Network and WLAN |

Table 4.1-4b: Additional Information of Applicability of Protocol conformance Mobility and Session Management test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|----------------|------------------------------|---------------|-------------------------|-------------------|
| 9 | | | | |
| 9.1 | | | | |
| 9.1.6 | | | | |
| 9.1.6.1 | | | | |
| 9.1.6.1.1 | [10] pc_USIM_Removal | | | |
| 9.2 | | | | |
| 9.2.6 | | | | |
| 9.2.6.1 | | | | |
| 9.2.6.1.1 | [10] pc_USIM_Removal | | | |
| 9.2.7 | | | | |
| 9.2.7.2 | [10] pc_IPv4 [10] pc_IPv6 | | | |
| 9.3 | | | | |
| 9.3.1 | | | | |
| 9.3.1.1 | | | | Rel-15 E-UTRA |
| 9.3.1.2 | | | | Rel-15 E-UTRA |
| 9.3.1.3 | | | | Rel-15 E-UTRA |
| 10 | | | | |
| 10.1 | | | | |

Table 4.1-5a: Applicability of Protocol conformance Multi-layer test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|-------------|---|---------|---------------|---|
| | | | Condition | Comment |
| 11 | Multi-layer and Services | | | |
| 11.1 | 5GS / EPS Fallback | | | |
| 11.1.1 | MO MMTEL voice call setup from NR RRC_IDLE / EPS Fallback with redirection / Single registration mode with N26 interface / Success | Rel-15 | C54 | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback |
| 11.1.1a | MO MMTEL enhanced voice service call setup from NR RRC_IDLE / EPS Fallback with redirection / Single registration mode with N26 interface / Success | Rel-15 | C173 | UEs supporting 5G Core and E-UTRA and NG.114 v2.0 |
| 11.1.2 | MO MMTEL voice call setup from NR RRC_IDLE / EPS Fallback with redirection / Single registration mode without N26 interface / Success | Rel-15 | C54 | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback |
| 11.1.3 | MO MMTEL voice call setup from NR RRC_CONNECTED / EPS Fallback with handover / Single registration mode with N26 interface / Success | Rel-15 | C54 | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback |
| 11.1.3a | MO MMTEL enhanced voice service call setup from NR RRC_CONNECTED / EPS Fallback with handover / Single registration mode with N26 interface / Success | Rel-15 | C173 | UEs supporting 5G Core and E-UTRA and NG.114 v2.0 |
| 11.1.4 | MO MMTEL voice call setup from NR RRC_CONNECTED / EPS Fallback with redirection / Single registration mode with N26 interface / E-UTRAN cell selection using cell status barred / Success | Rel-15 | C54 | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback |
| 11.1.5 | MO MMTEL voice call setup from NR RRC_CONNECTED / EPS Fallback with redirection / Single registration mode without N26 interface / E-UTRAN cell selection using cell status reservation / Success | Rel-15 | C54 | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback |
| 11.1.6 | MT MMTEL voice call setup from NR RRC_IDLE / EPS Fallback with redirection / Single registration mode without N26 interface / Success | Rel-15 | C54 | UEs supporting 5G Core and E-UTRA and EPS IMS (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") Voice and EPS fallback |
| 11.1.7 | Emergency call setup from NR RRC_IDLE / Emergency Services Fallback to EPS with redirection / Single registration mode with N26 interface / Success | Rel-15 | C47 | UEs supporting 5G Core and E-UTRA and EPS IMS emergency call (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and Emergency Services Fallback in NR connected to 5GCN |
| 11.1.8 | MO MMTEL voice call setup from NR RRC_CONNECTED / EPS Fallback with | Rel-16 | C95 | UEs supporting 5G Core and E-UTRA and EPS IMS (VoLTE in GSMA PRD IR.92: "IMS Profile |

| | | | | |
|-------------|---|--------|------|---|
| | handover / Single registration mode with N26 interface / voiceFallbackIndication | | | for Voice and SMS") Voice and EPS fallback and voiceFallbackIndication |
| 11.1.9 | MO MMTEL voice call setup from NR RRC_IDLE / EPS Fallback with redirection / Single registration mode with N26 interface / voiceFallbackIndication | Rel-16 | C95 | UEs supporting 5G Core and E-UTRA and EPS IMS (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") Voice and EPS fallback and voiceFallbackIndication |
| 11.2 | 5G-SRVCC | | | |
| 11.2.1 | 5G-SRVCC from NG-RAN to 3GPP UTRAN | Rel-16 | C127 | UEs supporting 5G Core and UTRA and NR to UTRA-FDD CELL_DCH CS handover |
| 11.3 | Unified Access Control (UAC) | | | |
| 11.3.1 | UAC / Access Identity 0 / 0% access probability / MTSI MO speech call / SMSoIP | Rel-15 | C78 | UEs supporting 5G Core and Initiating session and MTSI speech and SMS over IP |
| 11.3.1a | UAC / Access Identity 0 / 0% access probability / Uplink User data transfer / RRC_INACTIVE | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 11.3.2 | UAC / Access Identity 0 / 0% access probability / Paging for MT Access/Emergency Call | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.3.3 | UAC / Access Identity 0 / AC8 / RRC_INACTIVE / RNAUpdate/RRC Resume | Rel-15 | C109 | UEs supporting 5G Core and RRC_INACTIVE |
| 11.3.4 | UAC / Access Identity 0 / Registration procedure for mobility and periodic registration update / BarringPerPLMN/Implicit AC Barring List | Rel-15 | C21 | UEs supporting 5G Core |
| 11.3.5 | UAC / Access Identity 1 / New cell not in the country of its HPLMN/EHPLMN 0% access probability/MPS indicator / HPLMN/0%/100% accessibility AC5/MMTEL-Video call | Rel-15 | C79 | UEs supporting 5G Core and Initiating session and MTSI video |
| 11.3.6 | UAC / Access Identity 2 / New cell not in the country of its HPLMN/EHPLMN 0% access probability/MCS indicator / HPLMN/0%/100% accessibility AC7/RRC_INACTIVE | Rel-15 | C21 | UEs supporting 5G Core |
| 11.3.7 | UAC / Access Identity 11..15 / High Priority Access / HPLMN/0% accessibility AC2/Emergency call | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.3.8 | UAC / Access Identity 0 / NR RRC_IDLE / Cell re-selection while T390 is running | Rel-15 | C21 | UEs supporting 5G Core |
| 11.3.9 | UAC / Access Identity 0 / ODAC / PLMN / RPLMN / not EPLMN | Rel-15 | C21 | UEs supporting 5G Core |
| 11.4 | Emergency Services | | | |
| 11.4.1 | 5GMM-REGISTERED.NORMAL-SERVICE / 5GMM-IDLE / Emergency call / Utilising emergency number stored on the USIM / New emergency PDU session / Network failing the authentication check (5G AKA) | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.2 | 5GMM-DEREGISTERED.LIMITED-SERVICE / Emergency call / Utilisation of emergency numbers stored on the ME / Initial registration for emergency services / Handling of forbidden PLMNs | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.3 | 5GMM-DEREGISTERED.NO-SUPI / Emergency call / Utilisation of emergency numbers stored on the ME / Initial registration for emergency services | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.4 | 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE T3346 running / Emergency call establishment / 5GMM-REGISTERED.NORMAL-SERVICE / Emergency call establishment before T3396 expiry | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.5 | 5GMM-REGISTERED.LIMITED-SERVICE / 5GMM-IDLE / Emergency call establishment and release / Handling of 5GS forbidden tracking areas for roaming | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.6 | 5GMM-REGISTERED.NON-ALLOWED-SERVICE / Emergency call establishment and release / Handling of non-allowed tracking areas | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.7 | Handling of Local and Extended emergency numbers / Mobility | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |

| | | | | |
|-------------|--|--------|-------|--|
| 11.4.8 | Handling of Local and extended emergency numbers / Switch-off and maximum local numbers storage | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.9 | 5GMM-DEREGISTERED.LIMITED-SERVICE No suitable cells in tracking area / Emergency call establishment and release | Rel-15 | C92 | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| 11.4.10 | Void | | | |
| 11.4.11 | 5GMM-REGISTERED.NORMAL-SERVICE / N26 interface not supported / S1 mode to N1 mode transfer of an existing emergency PDN connection | Rel-15 | C85A | UEs supporting 5G core and Emergency PDN connection transfer from S1 mode to N1 mode when network does not support N26 interface, and, E-UTRA and EPS IMS emergency call (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and emergency services in NR connected to 5GCN |
| 11.4.12 | 5GMM-REGISTERED.NORMAL-SERVICE / 5GMM-IDLE / Emergency call / Disabling N1 mode / Emergency call establishment over EPS / Success | Rel-15 | C176 | UEs supporting 5G Core and E-UTRA and EPS IMS emergency call (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") |
| 11.5 | eCall over IMS | | | |
| 11.5.1 | eCall Only mode / T3444 / eCall inactivity procedure / Removal of eCall only restriction after an eCall over IMS / 5GS to EPS | Rel-16 | C170 | UEs supporting 5G Core and E-UTRA and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation |
| 11.5.2 | eCall Only mode / T3445 / eCall inactivity procedure / Removal of eCall only restriction after a call to URI for test service / 5GS to EPS | Rel-16 | C171 | UEs supporting 5G Core and E-UTRA and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation and capable of triggering a Test eCall |
| 11.5.5 | eCall Only mode / Limited service state / Call to URI for test service should not be attempted / eCall over IMS should be attempted / 5GS | Rel-16 | C174 | UEs supporting 5G Core and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation and capable of triggering a Test eCall |
| 11.5.6 | eCall capable / 5GS supports IMS voice over PS session / 5GS supports emergency service / eCall over IMS is not supported / eCall using the CS domain / emergency call over IMS if eCall using the CS domain is not available / UTRA | Rel-16 | C185 | UEs supporting 5G Core and IMS eCall type of emergency services over 5GS and Automatic type of eCall initiation and emergency services in NR connected to 5GCN |
| 11.5.7 | eCall Only mode / SRVCC Handover to CS domain / UTRAN / MSD Update / Success / 5GS | Rel-16 | C186 | UEs supporting 5G Core and UTRA and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation and NR to UTRA-FDD CELL_DCH CS handover |
| 11.5.9 | eCall only mode / Manual initiation / Emergency registration / Abnormal case / IM CN sends a 486 (Busy Here) / UE performs eCall in CS domain / UTRAN or GERAN / 5GS | Rel-16 | C187 | UEs supporting 5G Core and (UTRA OR GERAN) and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation |
| 11.5.10 | eCall only mode / Automatic initiation / Emergency registration / Abnormal case / IM CN sends a 600 (Busy Everywhere) / UE performs eCall in CS domain / UTRAN or GERAN / 5GS | Rel-16 | C188 | UEs supporting 5G Core and (UTRA OR GERAN) and IMS eCall Only type of emergency services over 5GS and Automatic type of eCall initiation |
| 11.5.11 | eCall only mode / Automatic initiation / Emergency registration / Abnormal case / IM CN sends a 603 (Decline) / UE performs eCall in CS domain / UTRAN or GERAN / 5GS | Rel-16 | C188 | UEs supporting 5G Core and (UTRA OR GERAN) and IMS eCall Only type of emergency services over 5GS and Automatic type of eCall initiation |
| 11.5.13 | eCall over IMS / Manual initiation / MSD transfer Failure / UE performs eCall in CS domain after Timer expiry / UTRAN or GERAN / 5GS | Rel-16 | C189 | UEs supporting 5G Core and (UTRA OR GERAN) and eCall type of emergency services over 5GS and Manual type of eCall initiation |
| 11.6 | 3GPP PS Data Off | | | |
| 11.6.1 | Data Off / MO Voice Call | Rel-15 | C162 | UEs supporting 5G Core and NG.114 v1.0 default configuration voice exempt and 3GPP PS data off and Initiating session and MTSI speech |
| 11.6.2 | Data Off / MO Video Call | Rel-15 | C172 | UEs supporting 5G Core and NG.114 v2.0 default configuration video exempt and 3GPP PS data off and Initiating session and MTSI video |
| 11.6.3 | Data Off / SMSoIP | Rel-15 | C162A | UEs supporting 5G Core and NG.114 v2.0 and 3GPP PS data off and Initiating session and SMS over IP |

Table 4.1-5b: Additional Information of Applicability of Protocol conformance Multi-layer test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|--|------------------|---------------|-------------------------|-------------------|
| 11 | | | | |
| 11.1 | | | | |
| 11.1.1 | | | | Rel-15 E-UTRA |
| 11.1.2 | | | | Rel-15 E-UTRA |
| 11.1.3 | | | | Rel-15 E-UTRA |
| 11.1.4 | | | | Rel-15 E-UTRA |
| 11.1.5 | | | | Rel-15 E-UTRA |
| 11.1.6 | | | | Rel-15 E-UTRA |
| 11.1.7 | | | | Rel-15 E-UTRA |
| 11.1.8 | | | | Rel-16 E-UTRA |
| 11.1.9 | | | | Rel-16 E-UTRA |
| 11.2 | | | | |
| 11.2.1 | | | | Rel-16 UTRA |
| 11.3 | | | | |
| 11.3.1 | pc_inactiveState | | | |
| 11.3.6 | pc_inactiveState | | | |
| 11.4 | | | | |
| 11.4.10 | | | | Rel-15 E-UTRA |
| 11.4.11 | | | | Rel-15 E-UTRA |
| 11.5 | | | | |
| 11.5.1 | | | Note 1 | Rel-15 E-UTRA |
| 11.5.2 | | | Note 1 | Rel-15 E-UTRA |
| 11.5.5 | | | Note 1 | |
| 11.5.6 | | | Note 1 | |
| 11.5.7 | | | | Rel-16 UTRA |
| 11.5.9 | | | Note 1 | |
| 11.5.10 | | | Note 1 | |
| 11.5.11 | | | Note 1 | |
| 11.5.13 | | | Note 1 | |
| Note 1: This test case can optionally be executed from Release 15 onwards. | | | | |

Table 4.1-6a: Applicability of Protocol conformance NR sidelink test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|---------------|--|---------|---------------|---|
| | | | Condition | Comment |
| 12 | NR sidelink | | | |
| 12.1 | PC5-only operation | | | |
| 12.1.1 | PC5-only operation / Sidelink communication | | | |
| 12.1.1.2 | PC5-only operation / Sidelink communication / Reception | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.3 | PC5-only operation / Measurement configuration and reporting via PC5 RRC | | | |
| 12.1.3.1 | PC5-only operation / Measurement configuration and reporting via PC5 RRC / PSBCH-RSRP measurement configuration | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.3.2 | PC5-only operation / Measurement configuration and reporting via PC5 RRC / PSBCH-RSRP measurement reporting / Event S1 and S2 | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.3.3 | PC5-only operation / Measurement configuration and reporting via PC5 RRC / PSBCH-RSRP measurement reporting / Periodical reporting | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.4 | PC5-only operation / Sidelink Reconfiguration via PC5 RRC | | | |
| 12.1.4.1 | PC5-only operation / Sidelink Reconfiguration via PC5 RRC / SL DRB management / initiating UE side | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.4.2 | PC5-only operation / Sidelink Reconfiguration via PC5 RRC / SL DRB management / Peer UE side | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.5 | PC5-only operation / Sidelink CSI reporting | | | |
| 12.1.5.1 | PC5-only operation / Sidelink CSI reporting / Configuration | Rel-16 | C163 | UE supporting 5G core and NR sidelink and Sidelink CSI report |
| 12.1.5.2 | PC5-only operation / Sidelink CSI reporting / Reporting | Rel-16 | C163 | UE supporting 5G core and NR sidelink and Sidelink CSI report |

| | | | | |
|---------------|--|--------|------|---|
| 12.1.6 | PC5-only operation / Sidelink failure | | | |
| 12.1.6.1 | PC5-only operation / Sidelink failure / PC5 RRC reconfiguration failure / Initiating UE side | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.6.2 | PC5-only operation / Sidelink failure / PC5 RRC reconfiguration failure / Peer UE side | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.6.3 | PC5-only operation / Sidelink failure / Sidelink radio link failure / Transmission side | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.6.4 | PC5-only operation / Sidelink failure / Sidelink radio link failure / Reception side | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.1.7 | PC5-only operation / Sidelink UE capability transfer via PC5 RRC | | | |
| 12.1.7.1 | PC5-only operation / Sidelink UE capability transfer via PC5 RRC / One-way and two-way transfer | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 12.2 | Inter-carrier concurrent operation | | | |
| 12.2.1 | Inter-carrier concurrent operation / Sidelink communication | | | |
| 12.2.1.2 | Inter-carrier concurrent operation / Sidelink communication / RRC_IDLE / Reception | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.1.3 | Inter-carrier concurrent operation / Sidelink communication / RRC_CONNECTED / Transmission / Network scheduling | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.1.6 | Inter-carrier concurrent operation / Sidelink communication / RRC_CONNECTED / Reception | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.2 | Inter-carrier concurrent operation / Sidelink synchronization related procedure | | | |
| 12.2.3 | Inter-carrier concurrent operation / Measurement configuration and reporting via Uu RRC | | | |
| 12.2.3.1 | Inter-carrier concurrent operation / Measurement configuration and reporting via Uu RRC / CBR measurement reporting / Event C1 and C2 | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.3.2 | Inter-carrier concurrent operation / Measurement configuration and reporting via Uu RRC / CBR measurement reporting / Periodical reporting | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.4 | Inter-carrier concurrent operation / Sidelink Reconfiguration via Uu RRC | | | |
| 12.2.4.1 | Inter-carrier concurrent operation / Sidelink Reconfiguration via Uu RRC / SL DRB management / transmission side | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.5 | Inter-carrier concurrent operation / Measurement configuration and reporting via PC5 RRC | | | |
| 12.2.5.3 | Inter-carrier concurrent operation / Measurement configuration and reporting via PC5 RRC / PSBCH-RSRP measurement reporting / Periodical reporting | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.6 | Inter-carrier concurrent operation / Sidelink Reconfiguration via PC5 RRC | | | |
| 12.2.6.1 | Inter-carrier concurrent operation / Sidelink Reconfiguration via PC5 RRC / SL DRB management / Initiating UE side | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |
| 12.2.7 | Inter-carrier concurrent operation / Sidelink CSI reporting | | | |
| 12.2.7.1 | Inter-carrier concurrent operation / Sidelink CSI reporting / Configuration | Rel-16 | C164 | UE supporting 5G core and NR sidelink mode 1 transmission and Sidelink CSI report |
| 12.2.8 | Inter-carrier concurrent operation / Sidelink failure | | | |
| 12.2.8.2 | Inter-carrier concurrent operation / Sidelink failure / PC5 RRC Reconfiguration Failure / Peer UE side | Rel-16 | C106 | UE supporting 5G core and NR sidelink mode 1 transmission |

Table 4.1-6b: Additional Information of Applicability of Protocol conformance NR sidelink test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|--------|--------------|---------------|-------------------------|-------------------|
| TBD | | | | |

Table 4.1-7a: Applicability of Protocol conformance NR V2X NAS layer test cases, ref. TS 38.523-1 [2]

| Clause | TC Title | Release | Applicability | |
|-------------|---|---------|---------------|---|
| | | | Condition | Comment |
| 13 | V2X NAS layer | | | |
| 13.1 | V2X policy provisioning | | | |
| 13.1.1 | V2X policy provisioning / Precedence / Validity timer expires / geographical area changes | Rel-16 | C166 | UE supporting 5G Core and V2X communication over NR-PC5 |
| 13.2 | PC5 unicast | | | |
| 13.2.1 | PC5 unicast / link establishment / Reject / Conflict Layer 2 ID | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 13.2.2 | PC5 unicast / link Security Mode | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 13.2.3 | PC5 unicast / link modification | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 13.2.4 | PC5 unicast / link Release / Reestablish PC5 unicast link to same UE | Rel-16 | C128 | UE supporting 5G core and NR sidelink |
| 13.2.5 | PC5 unicast / link identifier update | Rel-16 | C128 | UE supporting 5G core and NR sidelink transmission mode 2 |
| 13.2.6 | PC5 unicast / link keep alive | Rel-16 | C128 | UE supporting 5G core and NR sidelink |

Table 4.1-7b: Additional Information of Applicability of Protocol conformance NR V2X NAS layer test cases, ref. TS 38.523-1 [2]

| Clause | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
|--------|--------------|---------------|-------------------------|-------------------|
| TBD | | | | |

4.2 Protocol conformance test cases Applicability Condition

Table 4.2-1: Applicability of Protocol conformance test cases Conditions

| Condition | Test case Selection Expression | Comment |
|-----------|--|--|
| C01 | IF A.4.1-3/2 THEN R ELSE N/A | UEs supporting EN-DC |
| C02 | IF (A.4.3.4-1/2 OR A.4.3.4-1/3) THEN R ELSE N/A | UEs supporting 5GS and RLC UM Mode |
| C03 | IF A.4.3.5-1/1 THEN R ELSE N/A | UEs supporting 5GS and Long DRX Cycle |
| C04 | IF A.4.3.5-1/2 THEN R ELSE N/A | UEs supporting 5GS and short DRX cycle |
| C05 | IF A.4.3.4-1/3 THEN R ELSE N/A | UEs supporting 5GS and RLC UM with 6-bit length of RLC sequence number |
| C06 | IF A.4.3.4-1/2 THEN R ELSE N/A | UEs supporting 5GS and RLC UM with 12-bit length of RLC sequence number |
| C07 | IF A.4.3.4-1/1 THEN R ELSE N/A | UEs supporting 5GS and RLC AM with 12-bit length of RLC sequence number |
| C08 | IF A.4.3.3-1/1 THEN R ELSE N/A | UEs supporting 5GS and 12-bit length of PDCP sequence number |
| C09 | IF [10] A.4.4-1/99 THEN R ELSE N/A | UEs supporting 5GS and ZUC Algorithm |
| C10 | IF A.4.1-3/2 AND A.4.3.7-1/2 THEN R ELSE N/A | UEs supporting EN-DC and UL transmission via both MCG path and SCG path for the split DRB |
| C11 | IF (A.4.3.2-1/2 OR A.4.3.2-1/3) THEN R ELSE N/A | UEs supporting 5GS and 256QAM for PDSCH for FR1/FR2 |
| C12 | IF (A.4.3.2-1/4) THEN R ELSE N/A | UEs supporting 5GS and 256QAM for PUSCH |
| C13 | IF A.4.1-3/2 AND A.4.3.6-1/1 THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting |
| C14 | IF A.4.1-3/2 AND A.4.3.6-1/1 AND A.4.3.6-1/3 THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) |
| C15 | IF A.4.1-3/2 AND A.4.3.6-1/1 AND A.4.3.6-1/3 AND (A.4.3.6-1/4 OR A.4.3.6-1/40) THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and Inter frequency measurements and at least periodical reporting) and CSI-RSRP and CSI-RSRQ measurement |
| C16 | IF A.4.1-3/2 AND [10] A.4.4-1/18 AND [10] A.4.4-1/19 THEN R ELSE N/A | UEs supporting EN-DC and UE requested bearer resource allocation and modification procedures |
| C17 | IF A.4.3.2-1/1 THEN R ELSE N/A | UEs supporting 5GS and PDSCH reception based on semi-persistent scheduling |
| C18 | IF A.4.3.2-1/10 THEN R ELSE N/A | UEs supporting 5GS and Type 1 PUSCH transmissions with configured grant |
| C19 | IF A.4.3.2-1/11 THEN R ELSE N/A | UEs supporting 5GS and Type 2 PUSCH transmissions with configured grant |
| C20 | IF A.4.3.2-1/12 THEN R ELSE N/A | UEs supporting 5GS and PDSCH aggregation |
| C21 | IF A.4.1-5/1 THEN R ELSE N/A | UEs supporting 5G Core |
| C21A | IF A.4.1-5/1 AND A.4.3.7-1/4 THEN R ELSE N/A | UEs supporting 5G Core and reflective QoS |
| C22 | IF A.4.1-3/2 AND A.4.3.7-1/3 THEN R ELSE N/A | UEs supporting EN-DC and SRB3 |
| C23 | IF A.4.1-3/2 AND A.4.3.7-1/3 AND A.4.3.7-1/1 THEN R ELSE N/A | UEs supporting EN-DC and SRB3 and (UL transmission via either MCG path or SCG path for the split SRB) |
| C24 | IF A.4.1-3/2 AND A.4.3.6-1/3 AND A.4.3.6-1/2 AND A.4.1-4/3 THEN R ELSE N/A | UEs supporting EN-DC and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and (two independent measurement gap configurations for FR1 and FR2) and Inter-Band EN-DC within FR1 |
| C25 | IF A.4.1-3/2 AND A.4.3.6-1/3 AND A.4.3.6-1/2 AND A.4.1-4/4 THEN R ELSE N/A | UEs supporting EN-DC and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and (two independent measurement gap configurations for FR1 and FR2) and Inter-Band EN-DC including FR2 |
| C26 | IF ([10] A.4.1-1/1 OR [10] A.4.1-1/2) THEN R ELSE N/A | UEs supporting 5GS and E-UTRA |
| C27 | IF A.4.1-5/1 AND A.4.3.6-1/1 THEN R ELSE N/A | UEs supporting 5G Core and NR measurements and Event A triggered reporting |
| C28 | IF A.4.3.2-1/13 THEN R ELSE N/A | UEs supporting 5GS and supplemental uplink with dynamic switch |
| C29 | IF A.4.1-5/2 AND [10] A.4.1-1/5 THEN R ELSE N/A | UEs supporting 5G core over non-3GPP Access Network and WLAN |
| C30 | IF A.4.1-5/2 AND A.4.3.7-1/6 AND [10] A.4.1-1/5 THEN R ELSE N/A | UEs supporting 5G core over non-3GPP Access Network and SMS over NAS and WLAN |
| C31 | IF A.4.1-5/1 AND A.4.3.6-1/5 THEN R ELSE N/A | UEs supporting 5G Core and Inter-RAT E-UTRA measurements and Event B triggered reporting |
| C32 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA |
| C33 | IF A.4.1-5/1 AND A.4.3.7-1/6 AND NOT [10] A.4.4-2/32 THEN R ELSE N/A | UEs supporting 5G Core and SMS over NAS and UE configured to not use SMSolP |
| C34 | IF A.4.1-5/1 AND [10] A.4.4-1/84 THEN R ELSE N/A | UEs supporting 5G Core and MinimumPeriodicSearchTimer |
| C35 | IF A.4.1-5/1 AND (A.4.3.7-1/8 OR A.4.3.7-1/7) THEN R ELSE N/A | UEs supporting 5G Core and (ETWS reception or CMAS reception) |
| C36 | IF A.4.1-5/1 AND [10] A.4.4-1/69 THEN R ELSE N/A | UEs supporting 5G Core and user initiated PLMN reselection in automatic mode on NR |
| C37 | IF A.4.1-5/1 AND (A.4.1-2/1 OR A.4.1-2/2) THEN R ELSE N/A | UEs supporting 5G Core and more than 1 FDD or TDD NR band |
| C38 | IF A.4.1-5/1 AND A.4.1-1/1 AND A.4.1-1/2 THEN R ELSE N/A | UEs supporting 5G Core and NR FDD and NR TDD |
| C39 | IF A.4.1-5/1 AND A.4.3.7-1/9 THEN R ELSE N/A | UEs supporting 5G Core and additional UE-requested PDU establishment |
| C40 | IF A.4.1-5/1 AND A.4.3.6-1/6 THEN R ELSE N/A | UEs supporting 5G Core and SS-SINR measurements |

| Condition | Test case Selection Expression | Comment |
|-----------|---|--|
| C41 | IF A.4.1-5/1 AND (A.4.1-4A/1 OR A.4.1-4A/3) THEN R ELSE N/A | UEs supporting 5G Core and intra-band contiguous CA |
| C42 | IF A.4.1-5/1 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) THEN R ELSE N/A | UEs supporting 5G Core and inter-band CA |
| C43 | IF A.4.1-5/1 AND (A.4.1-4A/2 OR A.4.1-4A/4) THEN R ELSE N/A | UEs supporting 5G Core and intra-band non-contiguous CA |
| C44 | IF (A.4.1-4A/1 OR A.4.1-4A/3) THEN R ELSE N/A | UEs supporting 5GS and intra-band contiguous CA |
| C45 | IF (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) THEN R ELSE N/A | UEs supporting 5GS and inter-band CA |
| C46 | IF (A.4.1-4A/2 OR A.4.1-4A/4) THEN R ELSE N/A | UEs supporting 5GS and intra-band non-contiguous CA |
| C47 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND [10] A.4.2.1.1-1/4 AND A.4.3.7-1/11 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and EPS IMS emergency call (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and Emergency Services Fallback in NR connected to 5GCN |
| C48 | Void | |
| C49 | IF A.4.1-5/1 AND A.4.3.6-1/2 THEN R ELSE N/A | UE supporting 5G Core and two independent measurement gap configurations for FR1 and FR2 |
| C50 | IF A.4.1-5/1 AND A.4.3.6-1/5 AND A.4.3.6-1/42 THEN R ELSE N/A | UEs supporting 5G Core and Inter-RAT E-UTRA measurements and Event B triggered reporting and E-UTRA RS-SINR measurements |
| C51 | IF A.4.3.2-1/21 THEN R ELSE N/A | UEs supporting 5GS and PUSCH aggregation |
| C52 | IF A.4.1-5/1 AND A.4.3.6-1/1 AND A.4.3.6-1/3 AND (A.4.3.6-1/4 OR A.4.3.6-1/40) THEN R ELSE N/A | UEs supporting 5G Core and NR measurements and Event A triggered reporting and (NR Intra-frequency and Inter frequency measurements and at least periodical reporting) and CSI-RSRP and CSI-RSRQ measurement |
| C53 | IF A.4.3.5-1/4 THEN R ELSE N/A | UEs supporting 5GS and Logical Channel SR-Delay Timer |
| C54 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND [10] A.4.4-1/33 AND A.4.3.7-1/12 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback |
| C55 | IF A.4.1-3/2 AND A.4.3.6-1/1 AND (A.4.1-4A/1 OR A.4.1-4A/3) THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting and intra-band contiguous CA |
| C56 | IF A.4.1-3/2 AND A.4.3.6-1/1 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting and inter-band CA |
| C57 | IF A.4.1-3/2 AND A.4.3.6-1/1 AND (A.4.1-4A/2 OR A.4.1-4A/4) THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting and intra-band non-contiguous CA |
| C58 | IF A.4.1-5/2 AND [10] A.4.1-1/5 AND A.4.4-1/1 | UEs supporting 5G core over non-3GPP Access Network, WLAN and (ICMP or ICMP IPv6) |
| C59 | IF A.4.1-5/1 AND A.4.3.6-1/8 THEN R ELSE N/A | UEs supporting 5G Core and Support acquisition of relevant information from a neighbouring intra-frequency or inter-frequency NR cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 38.331 [9] when EN-DC is not configured. |
| C60 | IF A.4.1-5/1 AND A.4.3.6-1/7 THEN R ELSE N/A | UEs supporting 5G Core and Support acquisition of relevant information from a neighbouring E-UTRA cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 38.331 [9] when the EN-DC is not configured. |
| C61 | IF A.4.1-3/2 AND A.4.3.3-1/6 THEN R ELSE N/A | UEs supporting EN-DC and PDCP duplication over split SRB1/2 |
| C62 | IF A.4.1-3/2 AND A.4.3.3-1/4 THEN R ELSE N/A | UEs supporting EN-DC and PDCP duplication over split DRB |
| C63 | IF A.4.1-5/1 AND A.4.3.7-1/13 THEN R ELSE N/A | UEs supporting 5G Core and UE requested PDU session modification procedure |
| C64 | IF A.4.3.2-1/23 THEN R ELSE N/A | UEs supporting 5GS and The maximum number of spatial multiplexing layer(s) supported by the UE for DL reception. For single CC standalone NR, it is mandatory with capability signalling to support at least 4 MIMO layers in the bands where 4Rx is specified as mandatory for the given UE and at least 2 MIMO layers in FR2. If absent, the UE doesn't support MIMO on this carrier |
| C65 | IF A.4.3.2-1/23 AND (A.4.3.2-1/4) THEN R ELSE N/A | UEs supporting 5GS and The maximum number of spatial multiplexing layer(s) supported by the UE for DL reception. For single CC standalone NR, it is mandatory with capability signalling to support at least 4 MIMO layers in the bands where 4Rx is specified as mandatory for the given UE and at least 2 MIMO layers in FR2. If absent, the UE doesn't support MIMO on this carrier |
| C66 | IF (A.4.3.2-1/24 OR A.4.3.2-1/24A) AND (A.4.3.2-1/24 OR A.4.3.2-1/24A) THEN R ELSE N/A | UEs supporting 5GS and (DCI and timer based active BWP switching delay type1 or type2) and (Support of BWP adaptation up to 2 or up to 4) |
| C67 | IF A.4.1-3/2 AND (A.4.1-4A/1 OR A.4.1-4A/3) THEN R ELSE N/A | UEs supporting EN-DC and Intra-Band Contiguous CA |
| C68 | IF A.4.1-3/2 AND (A.4.1-4A/2 OR A.4.1-4A/4) THEN R ELSE N/A | UEs supporting EN-DC and Intra-Band Non-Contiguous CA |
| C69 | IF A.4.1-3/2 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) THEN R ELSE N/A | UEs supporting EN-DC and Inter-Band CA |

| Condition | Test case Selection Expression | Comment |
|-----------|--|--|
| C70 | IF A.4.3.5-1/1 AND A.4.3.5-1/2 THEN R ELSE N/A | UEs supporting 5GS and Long DRX Cycle and Short DRX Cycle |
| C71 | IF A.4.1-3/2 AND A.4.3.7-1/3 AND A.4.3.6-1/3 THEN R ELSE N/A | UEs supporting EN-DC and SRB3 and NR intra-frequency and inter-frequency measurements and at least periodical reporting |
| C72 | IF A.4.1-5/1 AND (A.4.1-4A/1 OR A.4.1-4A/3) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting 5G Core and intra-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C73 | IF A.4.1-5/1 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting 5G Core and inter-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C74 | IF A.4.1-5/1 AND (A.4.1-4A/2 OR A.4.1-4A/4) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting 5G Core and intra-band non-contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C75 | IF A.4.1-3/2 AND A.4.3.7-1/3 AND (A.4.1-4A/1 OR A.4.1-4A/3) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting EN-DC and SRB3 and intra-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C76 | IF A.4.1-3/2 AND A.4.3.7-1/3 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting EN-DC and SRB3 and inter-band CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C77 | IF A.4.1-3/2 AND A.4.3.7-1/3 AND (A.4.1-4A/2 OR A.4.1-4A/4) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting EN-DC and SRB3 and intra-band non-contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C78 | IF A.4.1-5/1 AND [9] A.3A/50 AND [9] A.4/2B AND [9] A.15/1 AND [9] A.3A/61 THEN R ELSE N/A | UEs supporting 5G Core and Initiating session and MTSI speech and SMS over IP |
| C79 | IF A.4.1-5/1 AND [9] A.3A/50 AND [9] A.4/2B AND [9] A.15/3 THEN R ELSE N/A | UEs supporting 5G Core and Initiating session and MTSI video |
| C80 | IF A.4.1-4/6 THEN R ELSE N/A | UEs supporting NR-DC |
| C81 | IF (A.4.1-4A/1 OR A.4.1.4A/3) AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting 5GS and intra-band contiguous CA and UL NR CA with 2 carriers |
| C82 | IF (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting 5GS and inter-band CA and UL NR CA with 2 carriers |
| C83 | IF (A.4.1-4A/2 OR A.4.1.4A/4) AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting 5GS and intra-band non-contiguous CA and UL NR CA with 2 carriers |
| C84 | IF A.4.1-5/1 AND [10] A.4.4-1/99 THEN R ELSE N/A | UEs supporting 5G Core and ZUC algorithm |
| C85 | Void | |
| C85A | IF (A.4.1-5/1 AND A.4.4-2/9) AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND [10] A.4.2.1.1-1/4 AND A.4.3.7-1/14 THEN R ELSE N/A | UEs supporting 5G core and Emergency PDN connection transfer from S1 mode to N1 mode when network does not support N26 interface, and, E-UTRA and EPS IMS emergency call (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and emergency services in NR connected to 5GCN |
| C86 | IF A.4.1-4/6 AND A.4.3.7-1/3 THEN R ELSE N/A | UEs supporting NR-DC and SRB3 |
| C87 | IF A.4.1-4/6 AND A.4.3.7-1/3 AND A.4.3.6-1/3 THEN R ELSE N/A | UEs supporting NR-DC and SRB3 and NR intra-frequency and inter-frequency measurements and at least periodical reporting |
| C88 | IF A.4.1-4/6 AND A.4.3.7-1/3 AND (A.4.1-4A/1 OR A.4.1-4A/3) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting NR-DC and SRB3 and intra-band contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C89 | IF A.4.1-4/6 AND A.4.3.7-1/3 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting NR-DC and SRB3 and inter-band CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C90 | IF A.4.1-4/6 AND A.4.3.7-1/3 AND (A.4.1-4A/2 OR A.4.1-4A/4) AND A.4.3.3-1/3 AND A.4.3.2A.1-2/1 THEN R ELSE N/A | UEs supporting NR-DC and SRB3 and intra-band non-contiguous CA and CA-based PDCP duplication over MCG or SCG DRB and UL NR CA with 2 carriers |
| C91 | IF A.4.1-5/1 AND [10] A.4.4-1/98 THEN R ELSE N/A | UEs supporting 5G Core and ManualModeNetworkSelectionException |
| C92 | IF A.4.1-5/1 AND A.4.3.7-1/14 THEN R ELSE N/A | UEs supporting 5G Core and emergency services in NR connected to 5GCN |
| C93 | IF A.4.1-3/2 AND A.4.3.6-1/1 AND A.4.3.6-1/3 AND (A.4.1-2/1 OR A.4.1-2/2 OR (A.4.1-1/1 AND A.4.1-1/2)) THEN R ELSE N/A | UEs supporting EN-DC and NR measurements and Event A triggered reporting and (NR Intra-frequency and NR-Inter frequency measurements and at least periodical reporting) and multiple NR bands. |
| C94 | IF A.4.1-5/1 AND (A.4.1-2/1 OR A.4.1-2/2 OR (A.4.1-1/1 AND A.4.1-1/2)) THEN R ELSE N/A | UEs supporting 5G Core and multiple NR bands |
| C95 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND [10] A.4.4-1/33 AND A.4.3.7-1/12 AND A.4.3.7-1/15 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and EPS IMS Voice (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") and EPS fallback and voiceFallbackIndication |
| C96 | IF A.4.1-5/1 AND A.4.1-3/2 AND A.4.3.8-1/10 THEN R ELSE N/A | UEs supporting 5G Core and EN-DC and inter-RAT Handover from NR to EN-DC |
| C97 | IF A.4.1-4/6 AND A.4.3.7-1/2 THEN R ELSE N/A | UEs supporting NR-DC and UL transmission via both MCG path and SCG path for the split DRB |
| C98 | IF A.4.1-4/6 AND A.4.3.3-1/4 THEN R ELSE N/A | UEs supporting NR-DC and PDCP duplication over split DRB |

| Condition | Test case Selection Expression | Comment |
|-----------|---|--|
| C99 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND (A.4.3.8-1/6 OR A.4.3.8-1/7 OR A.4.3.8-1/8) THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and (inter-RAT Handover to NR FR1 TDD from EUTRA connected to EPC or inter-RAT Handover to NR FR1 FDD from EUTRA connected to EPC or inter-RAT Handover to NR FR2 TDD from EUTRA connected to EPC) |
| C100 | IF A.4.1-5/1 AND [9] A.15/1 AND A.4.3.5-1/9 THEN R ELSE N/A | UEs supporting 5G Core and MTSI speech and bit rate recommendation query message |
| C101 | IF A.4.1-5/1 AND A.4.3.8-1/9 THEN R ELSE N/A | UEs supporting 5G Core and intra-frequency DAPS handover |
| C102 | IF A.4.3.2-1/30 THEN R ELSE N/A | UEs supporting 5GS and cross slot scheduling |
| C103 | IF A.4.3.5-1/1 AND A.4.3.5-1/5 THEN R ELSE N/A | UEs supporting 5GS and Long DRX Cycle and DRX adaptation |
| C104 | IF (A.4.1-4A/1 OR A.4.1-4A/3) AND A.4.3.2A.1-1/2 AND A.4.3.2A.1-2/2 AND A.4.3.3-1/5 THEN R ELSE N/A | UEs supporting 5GC and Intra-band contiguous CA and DL and UL NR CA with 3 carriers and PDCP duplication with more than two RLC entities |
| C105 | IF (A.4.3.4-1/2 OR A.4.3.4-1/3) AND A.4.3.3-1/7 THEN R ELSE N/A | UEs supporting 5GS and RLC UM mode and PDCP ethernet header compression |
| C106 | IF A.4.1-5/1 AND A.4.3.10-1/1 THEN R ELSE N/A | UE supporting 5G core and NR sidelink mode 1 transmission |
| C107 | IF A.4.3.2-1/32 THEN R ELSE N/A | UE's supporting multi-DCI based multi-TRP |
| C108 | IF A.4.1-5/1 AND A.4.3.7-1/17 THEN R ELSE N/A | UEs supporting 5G Core and RACS |
| C109 | IF A.4.1-5/1 AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and RRC_INACTIVE |
| C110 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and RRC_INACTIVE |
| C111 | IF A.4.1-5/1 AND (A.4.3.7-1/8 OR A.4.3.7-1/7) AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and (ETWS reception or CMAS reception) and RRC_INACTIVE |
| C112 | Void | |
| C113 | IF A.4.1-5/1 AND A.4.3.2/1 THEN R ELSE N/A | UEs 5GS and PDSCH reception based on multiple semi-persistent scheduling |
| C114 | IF A.4.1-5/1 AND A.4.3.5-1/6 THEN R ELSE N/A | UEs supporting 5GS and LCH-based UL grant prioritization |
| C115 | IF A.4.1-5/1 AND A.4.3.8-1/11 THEN R ELSE N/A | UEs supporting 5G Core and conditional handover |
| C116 | IF A.4.1-5/1 AND A.4.3.8-1/11 AND A.4.3.8-1/13 THEN R ELSE N/A | UEs supporting 5G Core and conditional handover and supporting 2 trigger events for same execution condition |
| C117 | IF A.4.1-5/1 AND A.4.3.8-1/11 AND A.4.3.8-1/12 THEN R ELSE N/A | UEs supporting 5G Core and conditional handover and conditional handover during re-establishment procedure when the selected cell is configured as candidate cell for condition handover |
| C118 | IF A.4.3.5-1/1 AND A.4.3.5-1/5 AND A.4.3.2-1/35 AND (A.4.1-4A/1 OR A.4.1-4A/3) THEN R ELSE N/A | UEs supporting 5GS and Long DRX Cycle and DRX adaptation and SCell Dormancy indication outside active time and intra-band contiguous CA |
| C119 | IF A.4.3.5-1/1 AND A.4.3.5-1/5 AND A.4.3.2-1/35 AND (A.4.1-4A/2 OR A.4.1-4A/4) THEN R ELSE N/A | UEs supporting 5GS and Long DRX Cycle and DRX adaptation and SCell Dormancy indication outside active time and intra-band non-contiguous CA |
| C120 | IF A.4.3.5-1/1 AND A.4.3.5-1/5 AND A.4.3.2-1/35 AND (A.4.1-4A/5 OR A.4.1-4A/6 OR A.4.1-4A/7) THEN R ELSE N/A | UEs supporting 5GS and Long DRX Cycle and DRX adaptation and SCell Dormancy indication outside active time and inter-band CA |
| C121 | Void | |
| C122 | IF A.4.1-5/1 AND A.4.4-1/5 THEN R ELSE N/A | UEs supporting 5G Core and UL PDCP Packet Delay per DRB |
| C123 | IF A.4.1-5/1 AND A.4.4-1/6 THEN R ELSE N/A | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE. |
| C124 | IF A.4.1-5/1 AND A.4.4-1/4 AND A.4.4-1/6 THEN R ELSE N/A | UEs supporting 5G core and logged measurements in RRC_IDLE and RRC_INACTIVE and equipped with a GNSS receiver to provide detailed location information |
| C125 | IF A.4.1-5/1 AND A.4.4-1/6 AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G core and RRC_INACTIVE and logged measurements in RRC_IDLE and RRC_INACTIVE. |
| C126 | IF A.4.1-5/1 AND A.4.4-1/4 THEN R ELSE N/A | UEs supporting 5G Core and equipped with a GNSS or A-GNSS receiver to provide detailed location information. |

| Condition | Test case Selection Expression | Comment |
|-----------|--|--|
| C127 | IF A.4.1-5/1 AND [10] A.4.1-1/6 AND A.4.3.8-1/11 THEN R ELSE N/A | UEs supporting 5G Core and UTRA and NR to UTRA-FDD CELL_DCH CS handover |
| C128 | IF A.4.1-5/1 AND A.4.1-1/3 THEN R ELSE N/A | UE supporting 5G core and NR sidelink |
| C129 | IF A.4.1-5/1 AND A.4.3.7-1/18 AND A.4.3.7-1/25 THEN R ELSE N/A | UEs supporting 5G Core and RRC message Segmentation in the UL and Support of test function for using a preconfigured UE capability container over NR |
| C130 | IF A.4.1-5/1 AND A.4.3.8-1/15 THEN R ELSE N/A | UEs supporting 5G Core and inter-frequency DAPS handover |
| C131 | IF A.4.1-5/1 AND A.4.3.7-1/24 THEN R ELSE N/A | UEs supporting 5G Core and SNPN |
| C132 | IF A.4.1-5/1 AND A.4.3.7-1/23 THEN R ELSE N/A | UEs supporting 5G Core and CAG |
| C133 | IF A.4.1-5/1 AND A.4.3.7-1/21 THEN R ELSE N/A | UEs supporting 5G Core and RRC connection release with Deprioritisation |
| C134 | IF A.4.3.2-1/45 THEN R ELSE N/A | UEs supporting PUSCH repetition type B |
| C135 | IF A.4.3.2-1/46 THEN R ELSE N/A | UEs supporting 2-Step RACH |
| C136 | IF A.4.1-5/1 AND A.4.4-1/3 THEN R ELSE N/A | UEs supporting 5G Core and delivery of rachReport upon request from the network. |
| C137 | IF A.4.1-5/1 AND A.4.4-1/12 THEN R ELSE N/A | UEs supporting 5G core and Bluetooth measurements in RRC_IDLE and RRC_INACTIVE state |
| C138 | IF A.4.1-5/1 AND A.4.4-1/13 THEN R ELSE N/A | UEs supporting 5G core and WLAN measurements in RRC_IDLE and RRC_INACTIVE state |
| C139 | IF A.4.1-5/1 AND (A.4.4-1/7 OR A.4.4-1/8 OR A.4.4-1/9) THEN R ELSE N/A | UEs supporting 5G Core and collection of sensor information such as Barometric pressure, UE speed, and UE orientation information as defined in TS 37.355. |
| C140 | IF A.4.1-5/1 AND A.4.4-1/10 THEN R ELSE N/A | UEs supporting 5G core and Bluetooth Measurement Collection in Immediate MDT |
| C141 | IF A.4.1-5/1 AND A.4.4-1/11 THEN R ELSE N/A | UEs supporting 5G core and WLAN Measurement Collection in Immediate MDT |
| C142 | IF A.4.1-5/1 AND A.4.3.5-1/10 THEN R ELSE N/A | UEs supporting 5GS and PUSCH transmissions on multiple configured uplink grants |
| C143 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND A.4.4-1/4 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and standalone GNSS receiver to provide detailed location information |
| C144 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND A.4.4-1/6 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and logged measurements in RRC_IDLE and RRC_INACTIVE |
| C145 | IF A.4.1-5/1 AND A.4.3.7-1/29 THEN R ELSE N/A | UEs supporting 5G Core and release preference assistance information |
| C146 | IF A.4.3.2-1/52 THEN R ELSE N/A | UEs supporting monitoring DCI format 1_2 for DL scheduling and monitoring DCI format 0_2 for UL scheduling |
| C147 | IF A.4.1-5/1 AND A.4.3.7-1/26 AND A.4.3.7-1/27 THEN R ELSE N/A | UEs supporting 5G Core and NSSAA and EAP-AKA' for NSSAA |
| C148 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND A.4.3.7-1/21 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and RRC connection release with Deprioritisation |
| C149 | IF A.4.1-4/6 AND A.4.3.6-1/2 THEN R ELSE N/A | UEs supporting NR-DC and two independent measurement gap configurations for FR1 and FR2 |
| C150 | IF A.4.1-5/1 AND (A.4.3.6-1/48 OR A.4.3.6-1/49) THEN R ELSE N/A | UEs supporting 5G Core and SFTD measurements between NR PCell and NR neighbour cell |
| C151 | IF A.4.1-3/2 AND (A.4.3.6-1/43 OR A.4.3.6-1/44) AND (A.4.3.6-1/46 OR A.4.3.6-1/47) THEN R ELSE N/A | UEs supporting EN-DC and SFTD measurement between E-UTRA PCell and an NR neighbour cell, and SFTD measurement between E-UTRA PCell and NR PSCell |
| C152 | IF A.4.1-4/6 AND (A.4.3.6-1/48 OR A.4.3.6-1/49) AND (A.4.3.6-1/50 OR A.4.3.6-1/51) THEN R ELSE N/A | UEs supporting NR-DC and SFTD measurement between NR PCell and an NR neighbour cell, and SFTD measurement between NR PCell and NR PSCell |
| C153 | IF A.4.1-3/2 AND A.4.3.8-1/19 THEN R ELSE N/A | UEs supporting EN-DC and conditional PSCell change |
| C154 | IF A.4.1-5/1 AND (A.4.1-4A/1 OR A.4.1-4A/3) AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and intra-band contiguous CA and RRC_INACTIVE |
| C155 | IF A.4.1-5/1 AND (A.4.1-4A/2 OR A.4.1-4A/4) AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and intra-band non-contiguous CA and RRC_INACTIVE |

| Condition | Test case Selection Expression | Comment |
|-----------|--|---|
| C156 | IF A.4.1-5/1 AND (A.4.1-4A/5 OR A.4.1-4A/6) AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and inter-band CA and RRC_INACTIVE |
| C157 | IF A.4.1-4/6 AND A.4.3.7-1/3 AND A.4.3.7-1/1 THEN R ELSE N/A | UEs supporting NR-DC and SRB3 and (UL transmission via either MCG path or SCG path for the split SRB) |
| C158 | IF A.4.1-5/1 AND A.4.1-4/6 AND A.4.3.7-1/19 THEN R ELSE N/A | UEs supporting 5G Core and NR-DC and RRC_INACTIVE |
| C159 | IF A.4.1-5/2 AND [10] A.4.1-1/5 THEN R ELSE N/A | UEs supporting 5G core over non-3GPP Access Network and WLAN and additional UE-requested PDU establishment |
| C160 | IF A.4.1-3/3 THEN R ELSE N/A | UEs supporting NE-DC |
| C161 | IF A.4.1-5/1 AND A.4.3.7-1/21 AND [10] A.4.4-1/98 THEN R ELSE N/A | UEs supporting 5G Core and RRC connection release with Deprioritisation and ManualModeNetworkSelectionException |
| C162 | IF A.4.1-5/1 AND [9] A.22/8 AND A.4.3.7-1/36 AND [9] A.3A/50 AND [9] A.15/1 THEN R ELSE N/A | UEs supporting 5G Core and NG.114 v1.0 default configuration voice exempt and 3GPP PS data off and Initiating session and MTSI speech |
| C162A | IF A.4.1-5/1 AND [9] A.22/8 AND A.4.3.7-1/36 AND [9] A.3A/50 AND [9] A.3A/61 THEN R ELSE N/A | UEs supporting 5G Core and NG.114 v1.0 default configuration voice exempt and 3GPP PS data off and Initiating session and SMS over IP |
| C163 | IF A.4.1-5/1 AND A.4.1-1/3 AND A.4.3.10-1/3 THEN R ELSE N/A | UE supporting 5G core and NR sidelink and Sidelink CSI report |
| C164 | IF A.4.1-5/1 AND A.4.3.10-1/1 AND A.4.3.10-1/3 THEN R ELSE N/A | UE supporting 5G core and NR sidelink mode 1 transmission and Sidelink CSI report |
| C165 | IF A.4.1-5/1 AND A.4.3.7-1/33 THEN R ELSE N/A | UE supporting 5G Core and V2X communication |
| C166 | IF A.4.1-5/1 AND A.4.3.7-1/34 THEN R ELSE N/A | UE supporting 5G Core and V2X communication over NR-PC5 |
| C167 | IF A.4.1-5/1 AND A.4.3.7-1/24 AND A.4.3.7-1/30 THEN R ELSE N/A | UEs supporting 5G Core and SNPN and user initiated SNPN reselection in automatic mode on NR |
| C168 | IF A.4.1-5/1 AND A.4.3.7-1/23 AND A.4.3.7-1/31 THEN R ELSE N/A | UEs supporting 5G Core and CAG and Autonomous search function on NR |
| C169 | IF A.4.1-5/1 AND A.4.3.7-1/23 AND A.4.3.7-1/52 THEN R ELSE N/A | UEs supporting 5G Core and CAG and acquisition of CGI information from neighbour NR NPN cell |
| C170 | IF A.4.1-5/1 AND [10](A.4.1-1/1 OR A.4.1-1/2) AND [9]A.12/64 AND [11]A.10/16 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation |
| C171 | IF A.4.1-5/1 AND [10](A.4.1-1/1 OR A.4.1-1/2) AND [9]A.12/64 AND [11]A.10/16 AND [11]A.10/19 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation and capable of triggering a Test eCall |
| C172 | IF A.4.1-5/1 AND [9] A.22/9 AND A.4.3.7-1/36 AND [9] A.3A/50 AND [9] A.15/3 THEN R ELSE N/A | UEs supporting 5G Core and NG.114 v2.0 default configuration video exempt and 3GPP PS data off and Initiating session and MTSI video |
| C173 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND [9] A.21/2 | UEs supporting 5G Core and E-UTRA and NG.114 v2.0 |
| C174 | IF A.4.1-5/1 AND [9]A.12/64 AND [11]A.10/16 AND [11]A.10/19 THEN R ELSE N/A | UEs supporting 5G Core and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation and capable of triggering a Test eCall |
| C175 | IF A.4.3.5-1/37 THEN R ELSE N/A | UEs supporting 5GS and selection of logical channels for each UL grant based on RRC configured restriction |
| C176 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND [10] A.4.2.1.1-1/4 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and EPS IMS emergency call (VoLTE in GSMA PRD IR.92: "IMS Profile for Voice and SMS") |
| C177 | IF A.4.1-5/1 AND A.4.3.7-1/17 AND A.4.3.7-1/35 THEN R ELSE N/A | UEs supporting 5G Core and RACS and Manufacturer assigned Radio Capability ID |
| C178 | IF A.4.1-5/1 AND [10](A.4.1-1/1 OR A.4.1-1/2) AND A.4.3.7-1/17 AND [10]A.4.4-1/215 THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and RACS |

| Condition | Test case Selection Expression | Comment |
|-----------|--|---|
| C179 | IF A.4.3.2-1/80 THEN R ELSE N/A | UEs supporting DCI DL Priority Indicator |
| C180 | IF A.4.3.2-1/81 AND A.4.3.2-1/82 THEN R ELSE N/A | UEs supporting DCI UL Priority Indicator and LCH grant prioritisation |
| C181 | IF (A.4.1-4A/2 OR A.4.1-4A/4) AND A.4.3.2A.1-1/2 AND A.4.3.2A.1-2/2 AND A.4.3.3-1/5 THEN R ELSE N/A | UEs supporting 5GC and Intra-band non-contiguous CA and DL and UL NR CA with 3 carriers and PDCP duplication with more than two RLC entities |
| C182 | IF A.4.1-3/3 AND A.4.3.6-1/1 AND A.4.3.6-1/3 THEN R ELSE N/A | UEs supporting NE-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting). |
| C183 | IF A.4.1-3/3 AND A.4.3.6-1/1 AND A.4.3.6-1/3 AND (A.4.1-2/1 OR A.4.1-2/2 OR (A.4.1-1/1 AND A.4.1-1/2)) THEN R ELSE N/A | UEs supporting NE-DC and NR measurements and Event A triggered reporting and (NR intra-frequency and inter-frequency measurements and at least periodical reporting) and multiple NR bands. |
| C184 | IF A.4.1-5/1 AND [9]A.12/64 AND [11]A.10/17 THEN R ELSE N/A | UEs supporting 5G Core and IMS eCall Only type of emergency services over 5GS and Automatic type of eCall initiation |
| C185 | IF A.4.1-5/1 AND [9]A.12/63 AND [11]A.10/17 AND A.4.3.7-1/14 THEN R ELSE N/A | UEs supporting 5G Core and IMS eCall type of emergency services over 5GS and Automatic type of eCall initiation and emergency services in NR connected to 5GCN |
| C186 | IF A.4.1-5/1 AND [10]A.4.1-1/6 AND [9]A.12/64 AND [11]A.10/16 AND A.4.3.8-1/14 THEN R ELSE N/A | UEs supporting 5G Core and UTRA and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation and NR to UTRA-FDD CELL_DCH CS handover |
| C187 | IF A.4.1-5/1 AND ([10]A.4.1-1/6 OR [10]A.4.1-1/7) AND [9]A.12/64 AND [11]A.10/16 THEN R ELSE N/A | UEs supporting 5G Core and (UTRA OR GERAN) and IMS eCall Only type of emergency services over 5GS and Manual type of eCall initiation |
| C188 | IF A.4.1-5/1 AND ([10]A.4.1-1/6 OR [10]A.4.1-1/7) AND [9]A.12/64 AND [11]A.10/17 THEN R ELSE N/A | UEs supporting 5G Core and (UTRA OR GERAN) and IMS eCall Only type of emergency services over 5GS and Automatic type of eCall initiation |
| C189 | IF A.4.1-5/1 AND ([10]A.4.1-1/6 OR [10]A.4.1-1/7) AND [9]A.12/63 AND [11]A.10/16 THEN R ELSE N/A | UEs supporting 5G Core and (UTRA OR GERAN) and eCall type of emergency services over 5GS and Manual type of eCall initiation |
| C190 | IF A.4.1-5/1 AND A.4.3.6-1/aa THEN R ELSE N/A | UEs supporting 5G Core and Idle/Inactive Measurements |
| C191 | IF A.4.1-5/1 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND A.4.3.6-1/bb THEN R ELSE N/A | UEs supporting 5G Core and E-UTRA and Idle/Inactive Measurements |
| C192 | IF A.4.1-5/1 AND A.4.3.7-1/19 AND A.4.3.6-1/aa THEN R ELSE N/A | UEs supporting 5G Core and RRC_INACTIVE and Idle/Inactive Measurements |
| C193 | IF A.4.1-5/1 AND A.4.3.7-1/19 AND ([10] A.4.1-1/1 OR [10] A.4.1-1/2) AND A.4.3.6-1/bb THEN R ELSE N/A | UEs supporting 5G Core and RRC_INACTIVE and E-UTRA and Idle/Inactive Measurements |
| C194 | IF A.4.1-3/3 AND A.4.3.7-1/2 THEN R ELSE N/A | UEs supporting NE-DC and UL transmission via both MCG path and SCG path for the split DRB |

Annex A (informative): Change history

| Change history | | | | | | | |
|----------------|----------------------------|-----------|------|-----|-----|---|-------------|
| Date | Meeting | TDoc | CR | Rev | Cat | Subject/Comment | New version |
| 2017-08 | RAN5#76 | R5-174402 | - | - | - | Introduction of TS 38.523-2 | 0.0.1 |
| 2018-03 | RAN5##2 -5G-NR Adhoc | R5-181762 | - | - | - | Draft TS 38.523-2 v0.1.0 | 0.1.0 |
| 2018-04 | RAN5##2 -5G-NR Adhoc | R5-181837 | - | - | - | Draft TS 38.523-2 v0.2.0 | 0.2.0 |
| 2018-04 | RAN5##2 -5G-NR Adhoc | R5-181838 | - | - | - | Addition of applicability for new 5GS test cases | 0.2.0 |
| 2018-04 | RAN5##2 -5G-NR Adhoc | R5-181210 | - | - | - | Add applicability for new NR testcases | 0.2.0 |
| 2018-04 | RAN5##2 -5G-NR Adhoc | R5-180922 | - | - | - | Addition of applicability of new NR test cases 7.1.3.2 and 7.3.4.2 | 0.2.0 |
| 2018-04 | RAN5##2 -5G-NR Adhoc | R5-180974 | - | - | - | Addition of New Layer 2 NR Test Case Applicability | 0.2.0 |
| 2018-05 | RAN5#79 | R5-182897 | - | - | - | Update to NR test cases applicability | 1.0.0 |
| 2018-05 | RAN5#79 | R5-183158 | - | - | - | Update to NR Test case applicability | 1.0.0 |
| 2018-05 | RAN5#79 | R5-183159 | - | - | - | Addition of Layer 2 test case applicabilities and selection expressions | 1.0.0 |
| 2018-05 | RAN5#79 | R5-183235 | - | - | - | Correction to applicability of NR testcases | 1.0.0 |
| 2018-05 | RAN5#79 | R5-183236 | - | - | - | Updates to applicability for session management TCs | 1.0.0 |
| 2018-06 | RAN#80 | RP-181211 | - | - | - | put under revision control as v15.0.0 with small editorial changes | 15.0.0 |
| 2018-09 | RAN#81 | R5-184682 | 0004 | - | F | Update of test case title for TC 8.2.5.1.1 | 15.1.0 |
| 2018-09 | RAN#81 | R5-185157 | 0005 | 1 | F | Update of NR test cases title and applicability | 15.1.0 |
| 2018-09 | RAN#81 | R5-185162 | 0003 | 1 | F | Addition of missing and new test cases applicabilities | 15.1.0 |
| 2018-12 | RAN#82 | R5-186875 | 0021 | - | F | Removal of applicability for RRC SCG failure tests | 15.2.0 |
| 2018-12 | RAN#82 | R5-188196 | 0027 | 1 | F | Addition of test applicabilities for 5GC testcases | 15.2.0 |
| 2018-12 | RAN#82 | R5-187499 | 0029 | - | F | Adding applicability of test cases 8.2.2.1.1 and 8.2.2.3.1 | 15.2.0 |
| 2018-12 | RAN#82 | R5-187799 | 0022 | 1 | F | Adding applicability for 5G TC TA registration update | 15.2.0 |
| 2018-12 | RAN#82 | R5-188103 | 0033 | - | F | Update of applicability and selection expressions | 15.2.0 |
| 2018-12 | RAN#82 | R5-188104 | 0030 | 1 | F | Adding new test case applicability | 15.2.0 |
| 2018-12 | RAN#82 | R5-188197 | 0031 | 3 | F | Update of 5G-NR test cases applicability | 15.2.0 |
| 2019-03 | RAN#83 | R5-192033 | 0043 | - | F | Addition of applicability of new 5GC test case 9.1.2.2 | 15.3.0 |
| 2019-03 | RAN#83 | R5-192707 | 0044 | 1 | F | Introduction of Non 3GPP Access over WLAN test case applicabilities | 15.3.0 |
| 2019-03 | RAN#83 | R5-192809 | 0040 | 1 | F | Addition of applicability for Inter-RAT measurement and handover | 15.3.0 |
| 2019-03 | RAN#83 | R5-192856 | 0039 | 2 | F | Addition of applicability for NR test case | 15.3.0 |
| 2019-03 | RAN#83 | R5-192857 | 0042 | 3 | F | Update of 5G-NR test cases applicability | 15.3.0 |
| 2019-06 | RAN#84 | R5-194891 | 0054 | 1 | F | Introduction of Non 3GPP Access over WLAN test case applicabilities | 15.4.0 |
| 2019-06 | RAN#84 | R5-195371 | 0046 | 2 | F | Addition of Applicability for test cases | 15.4.0 |
| 2019-06 | RAN#84 | R5-195372 | 0051 | 2 | F | Update of 5G-NR test cases applicability | 15.4.0 |
| 2019-06 | RAN#84 | - | - | - | - | Administrative release upgrade to match the release of 3GPP TS 38.508-1 which was upgraded at RAN#84 to Rel-16 due to Rel-16 relevant CR(s) | 16.0.0 |
| 2019-09 | RAN#85 | R5-197228 | 0057 | 1 | F | Non 3GPP Access over WLAN test case applicabilities | 16.1.0 |
| 2019-09 | RAN#85 | R5-197291 | 0062 | 1 | F | Removal of applicability of Radio Link Failure test cases | 16.1.0 |
| 2019-09 | RAN#85 | R5-197667 | 0055 | 2 | F | Addition of applicability for RRC test cases | 16.1.0 |
| 2019-09 | RAN#85 | R5-197668 | 0056 | 2 | F | Update of 5G-NR test cases applicability | 16.1.0 |
| 2019-12 | RAN#86 | R5-198496 | 0074 | - | F | Non 3GPP Access over WLAN test cases applicability | 16.2.0 |
| 2019-12 | RAN#86 | R5-199040 | 0070 | 1 | F | Addition of applicability for test cases | 16.2.0 |
| 2019-12 | RAN#86 | R5-199060 | 0072 | 1 | F | Update of 5G-NR test cases applicability | 16.2.0 |
| 2020-03 | RAN#87 | R5-200235 | 0077 | - | F | Adding and modifying test applicability IMS Emergency Services | 16.3.0 |
| 2020-03 | RAN#87 | R5-201147 | 0076 | 1 | F | Correction to NR TC applicability-Split SRB | 16.3.0 |
| 2020-03 | RAN#87 | R5-201233 | 0080 | 3 | F | Update of 5G-NR test cases applicability | 16.3.0 |
| 2020-06 | RAN#88 | R5-201381 | 0081 | - | F | Addition of applicability for NR Idle TCs | 16.4.0 |
| 2020-06 | RAN#88 | R5-202141 | 0086 | - | F | Addition of new test applicability for DRX TC 7.1.1.5.5 | 16.4.0 |
| 2020-06 | RAN#88 | R5-202673 | 0082 | 1 | F | Addition of applicability for NR RRC TCs | 16.4.0 |
| 2020-06 | RAN#88 | R5-202674 | 0083 | 1 | F | Addition of applicability for NR Multi Layer TCs | 16.4.0 |
| 2020-06 | RAN#88 | R5-202675 | 0084 | 1 | F | Update of 5G-NR test cases applicability | 16.4.0 |
| 2020-06 | RAN#88 | R5-203120 | 0085 | 2 | F | Introduction of applicability for new 5G IMS emergency test cases and corrections | 16.4.0 |
| 2020-09 | RAN#89 | R5-203542 | 0092 | - | F | Splitting and updates to applicability of NR RLC test case 7.1.2.3.5 | 16.5.0 |
| 2020-09 | RAN#89 | R5-204469 | 0088 | 1 | F | Addition of applicability for NR TCs | 16.5.0 |
| 2020-09 | RAN#89 | R5-204470 | 0089 | 1 | F | Correction to applicability of NR TCs | 16.5.0 |
| 2020-09 | RAN#89 | R5-204471 | 0090 | 1 | F | Update of 5G-NR test cases applicability | 16.5.0 |

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|---------|--------|-----------|------|---|---|--|--------|
| 2020-09 | RAN#89 | R5-204472 | 0094 | 1 | F | Addition of new RRC TC for checking extended / spare field handling in SI | 16.5.0 |
| 2020-09 | RAN#89 | R5-204473 | 0095 | 1 | F | Removal of void test case and correction of condition for Inter-band measurements test cases | 16.5.0 |
| 2020-09 | RAN#89 | R5-204519 | 0091 | 1 | F | Addition of test applicabilities of test cases for voice fallback indication | 16.5.0 |
| 2020-09 | RAN#89 | R5-204520 | 0093 | 1 | F | Update applicability of Inter-RAT handover from NR to EN-DC test case | 16.5.0 |
| 2020-12 | RAN#90 | R5-205287 | 0099 | - | F | Addition of test applicabilities of test cases for UE power saving in NR | 16.6.0 |
| 2020-12 | RAN#90 | R5-205389 | 0101 | - | F | Correction to NR TC applicability | 16.6.0 |
| 2020-12 | RAN#90 | R5-206367 | 0098 | 1 | F | Update of 5G-NR test cases applicability | 16.6.0 |
| 2020-12 | RAN#90 | R5-206368 | 0103 | 1 | F | Addition of applicability for NR TCs | 16.6.0 |
| 2020-12 | RAN#90 | R5-206399 | 0104 | 1 | F | Applicability statement for new test case for PDCP Duplication for Rel-16 | 16.6.0 |
| 2020-12 | RAN#90 | R5-206400 | 0108 | 1 | F | Applicability for ethernet header compression and decompression for NR | 16.6.0 |
| 2020-12 | RAN#90 | R5-206406 | 0106 | 1 | F | Add applicability for NR MobEnc TCs | 16.6.0 |
| 2020-12 | RAN#90 | R5-206413 | 0105 | 1 | F | Add applicability for NR V2X TCs | 16.6.0 |
| 2020-12 | RAN#90 | R5-206416 | 0107 | 1 | F | Addition of applicability for eMIMO Test Cases | 16.6.0 |
| 2020-12 | RAN#90 | R5-206432 | 0100 | 1 | F | Update applicability of Inter-RAT handover from NR to EN-DC test case 8.1.4.2.1.2 | 16.6.0 |
| 2021-03 | RAN#91 | R5-210161 | 0111 | - | F | Aligning content of 38.523-2 with 38.523-1 | 16.7.0 |
| 2021-03 | RAN#91 | R5-210513 | 0120 | - | F | Addition of applicability for new NAS Test case 9.1.9.2 | 16.7.0 |
| 2021-03 | RAN#91 | R5-210801 | 0128 | - | F | Adding applicability for new MDT test cases | 16.7.0 |
| 2021-03 | RAN#91 | R5-210998 | 0129 | - | F | Correction to applicability conditions of test cases 8.1.4.2.1.2 and 11.1.9 | 16.7.0 |
| 2021-03 | RAN#91 | R5-211327 | 0130 | - | F | Remove applicability of 5GS Non-3GPP Access Test Case 9.2.5.2.1 | 16.7.0 |
| 2021-03 | RAN#91 | R5-211412 | 0109 | 1 | F | Update release applicability of RRC TC 8.1.1.2.4 | 16.7.0 |
| 2021-03 | RAN#91 | R5-211413 | 0112 | 1 | F | Adding missing applicability for TC 6.1.2.7 and 8.1.5.2.2 | 16.7.0 |
| 2021-03 | RAN#91 | R5-211414 | 0113 | 1 | F | Adding applicability for new IMS emergency TC 11.4.11 | 16.7.0 |
| 2021-03 | RAN#91 | R5-211415 | 0115 | 1 | F | Update of 5G-NR test cases applicability | 16.7.0 |
| 2021-03 | RAN#91 | R5-211416 | 0123 | 1 | F | Correction to NR TC applicability for 5GS | 16.7.0 |
| 2021-03 | RAN#91 | R5-211455 | 0124 | 1 | F | Correction to NR TC applicability for IIoT | 16.7.0 |
| 2021-03 | RAN#91 | R5-211461 | 0127 | 1 | F | Correction to applicability for NR MobEnc | 16.7.0 |
| 2021-03 | RAN#91 | R5-211464 | 0117 | 1 | F | Addition of test applicabilities for UE power saving in NR | 16.7.0 |
| 2021-03 | RAN#91 | R5-211487 | 0110 | 1 | F | Applicability statement for new test cases for NR Immediate MDT | 16.7.0 |
| 2021-03 | RAN#91 | R5-211488 | 0116 | 1 | F | Adding applicability for new logged MDT test cases | 16.7.0 |
| 2021-03 | RAN#91 | R5-211489 | 0125 | 1 | F | Correction to NR TC applicability for MDT | 16.7.0 |
| 2021-03 | RAN#91 | R5-211496 | 0121 | 1 | F | Introduction of applicability for SRVCC from NG-RAN to 3GPP UTRAN | 16.7.0 |
| 2021-03 | RAN#91 | R5-211504 | 0118 | 1 | F | Update to applicabilities for the EPS fallback test cases | 16.7.0 |
| 2021-06 | RAN#92 | R5-212040 | 0131 | - | F | Applicability statement for new test cases for Connection Establishment Failure in NR MDT | 16.8.0 |
| 2021-06 | RAN#92 | R5-212041 | 0132 | - | F | Applicability statement for new test cases for Inter-System Immediate MDT | 16.8.0 |
| 2021-06 | RAN#92 | R5-212380 | 0137 | - | F | Correcting applicability condition for C36 used in TS 38.523 TC 6.1.1.5 | 16.8.0 |
| 2021-06 | RAN#92 | R5-212386 | 0138 | - | F | Update to applicability of TC 11.4.10 and 11.4.11 | 16.8.0 |
| 2021-06 | RAN#92 | R5-212438 | 0139 | - | F | Correction to applicability for Multi-Layer TCs | 16.8.0 |
| 2021-06 | RAN#92 | R5-212539 | 0143 | - | F | Remove cross slot scheduling test case applicability | 16.8.0 |
| 2021-06 | RAN#92 | R5-212549 | 0144 | - | F | Addition of applicability for new 5G SRVCC test case | 16.8.0 |
| 2021-06 | RAN#92 | R5-212808 | 0147 | - | F | Addition of applicability for NPN test cases | 16.8.0 |
| 2021-06 | RAN#92 | R5-213375 | 0153 | - | F | Adding applicability for new 2-Step RACH test cases | 16.8.0 |
| 2021-06 | RAN#92 | R5-213385 | 0154 | - | F | Correction of test applicability for TC 9.1.5.1.15 | 16.8.0 |
| 2021-06 | RAN#92 | R5-213513 | 0134 | 1 | F | Update of 5G-NR test cases applicability | 16.8.0 |
| 2021-06 | RAN#92 | R5-213514 | 0149 | 1 | F | Update of test case titles of 5GC in applicability table | 16.8.0 |
| 2021-06 | RAN#92 | R5-213515 | 0151 | 1 | F | Addition of applicability for NR5G RRC TC 8.1.1.3.7 | 16.8.0 |
| 2021-06 | RAN#92 | R5-213556 | 0140 | 1 | F | Correction to applicability for NR MobEnc | 16.8.0 |
| 2021-06 | RAN#92 | R5-213572 | 0155 | 1 | F | Applicability of NR V2X test cases 12.1.7.1 and 12.1.7.2 | 16.8.0 |
| 2021-06 | RAN#92 | R5-213586 | 0146 | 1 | F | Addition of applicability for RACS test cases | 16.8.0 |
| 2021-06 | RAN#92 | R5-213634 | 0133 | 1 | F | Addition of applicability for new MDT TC 8.1.6.1.3.x | 16.8.0 |
| 2021-06 | RAN#92 | R5-213635 | 0142 | 1 | F | Applicability for NR MDT inter-system TCs | 16.8.0 |
| 2021-06 | RAN#92 | R5-213636 | 0150 | 1 | F | Correction to NR MDT Applicability-C126 | 16.8.0 |
| 2021-06 | RAN#92 | R5-213672 | 0152 | 1 | F | Adding applicability for new NR URLLC test cases | 16.8.0 |
| 2021-09 | RAN#93 | R5-214209 | 0156 | - | F | Applicability statement for new test case for Multi configured uplink grants in NR IIoT | 16.9.0 |
| 2021-09 | RAN#93 | R5-214214 | 0157 | - | F | Applicability statement for new test cases for Inter-RAT MDT | 16.9.0 |
| 2021-09 | RAN#93 | R5-214758 | 0165 | - | F | Addition of applicability NR5G Power saving TC 8.1.5.10.1 | 16.9.0 |
| 2021-09 | RAN#93 | R5-214831 | 0168 | - | F | Correction to NR MDT Applicability | 16.9.0 |
| 2021-09 | RAN#93 | R5-214873 | 0169 | - | F | Addition of applicability for new NR 2-step RACH test cases | 16.9.0 |
| 2021-09 | RAN#93 | R5-214931 | 0170 | - | F | Adding applicability for new NR URLLC test cases | 16.9.0 |

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|---------|--------|-----------|------|---|---|--|---------|
| 2021-09 | RAN#93 | R5-215160 | 0171 | - | F | Correction to applicability for MDT Test cases | 16.9.0 |
| 2021-09 | RAN#93 | R5-215242 | 0172 | - | F | Addition of applicability for eNS test case 9.1.10.1 and 9.1.10.6 | 16.9.0 |
| 2021-09 | RAN#93 | R5-216204 | 0158 | 1 | F | Update of 5G-NR test cases applicability | 16.9.0 |
| 2021-09 | RAN#93 | R5-216205 | 0166 | 1 | F | Addition of Applicability for SFTD TCs | 16.9.0 |
| 2021-09 | RAN#93 | R5-216262 | 0167 | 1 | F | Correction to applicability for NR MobEnh | 16.9.0 |
| 2021-09 | RAN#93 | R5-216274 | 0164 | 1 | F | Addition of applicability for NPN test cases | 16.9.0 |
| 2021-09 | RAN#93 | R5-216315 | 0160 | 1 | F | Update of applicability statement and conditions for the test cases in NR MDT | 16.9.0 |
| 2021-09 | RAN#93 | R5-216333 | 0161 | 1 | F | Add applicabilities for test cases 8.1.1.4.4, 8.1.1.4.5 and 8.1.1.4.6 | 16.9.0 |
| 2021-09 | RAN#93 | R5-216334 | 0162 | 1 | F | Add applicabilities for test cases 8.1.1.4.7, 8.1.1.4.8 and 8.1.1.4.9 | 16.9.0 |
| 2021-12 | RAN#94 | R5-216614 | 0176 | - | F | Applicability statement for new test case for RACH logging and reporting | 16.10.0 |
| 2021-12 | RAN#94 | R5-216999 | 0182 | - | F | Addition of applicability for NR-DC TCs | 16.10.0 |
| 2021-12 | RAN#94 | R5-217018 | 0183 | - | F | Correction to applicability for NR MobEnh | 16.10.0 |
| 2021-12 | RAN#94 | R5-217082 | 0185 | - | F | Update of title for TC 9.1.5.1.15 | 16.10.0 |
| 2021-12 | RAN#94 | R5-217083 | 0186 | - | F | Update of applicability for TC 8.1.5.7.1.x, 8.2.6.1.1.x and 8.2.6.1.2.x | 16.10.0 |
| 2021-12 | RAN#94 | R5-217459 | 0190 | - | F | Addition of applicability for new Enhanced Network Slicing test cases | 16.10.0 |
| 2021-12 | RAN#94 | R5-217774 | 0174 | 1 | F | Add applicability for NR MobEnc Inter-frequency DAPS handover TC | 16.10.0 |
| 2021-12 | RAN#94 | R5-217826 | 0175 | 1 | F | Update of 5G-NR test cases applicability | 16.10.0 |
| 2021-12 | RAN#94 | R5-217827 | 0178 | 1 | F | Applicability statement for new test cases for NE-DC RRC | 16.10.0 |
| 2021-12 | RAN#94 | R5-217828 | 0187 | 1 | F | Addition of applicability for NR5G RRC TC 8.1.1.3.7b | 16.10.0 |
| 2021-12 | RAN#94 | R5-217829 | 0189 | 1 | F | Addition of applicability for new Data Off test cases | 16.10.0 |
| 2021-12 | RAN#94 | R5-217895 | 0184 | 1 | F | Addition of NR V2X TC applicability | 16.10.0 |
| 2021-12 | RAN#94 | R5-217900 | 0188 | 1 | F | Addition of Applicability for NPN TCs | 16.10.0 |
| 2021-12 | RAN#94 | R5-217932 | 0177 | 1 | F | Update of TC Title of NR SON/MDT for matching TC content in TC 8.1.6.2.4 | 16.10.0 |
| 2021-12 | RAN#94 | R5-217947 | 0192 | 1 | F | Addition of applicability for NR EIEI test cases | 16.10.0 |
| 2021-12 | RAN#94 | R5-217953 | 0193 | 1 | F | Applicability clauses for the Idle/Inactive measurement testcases for RRC_IDLE state | 16.10.0 |
| 2021-12 | RAN#94 | R5-218009 | 0191 | 1 | F | Addition of test applicability for new eNS test cases | 16.10.0 |
| 2022-03 | RAN#95 | R5-220057 | 0195 | - | F | Addition of applicability for Rel-16 NR Mobility Enhancement test case | 16.11.0 |
| 2022-03 | RAN#95 | R5-220242 | 0198 | - | F | Updating applicability statements of Data Off test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-220267 | 0200 | - | F | Add applicability for test case 11.1.1a | 16.11.0 |
| 2022-03 | RAN#95 | R5-220607 | 0204 | - | F | Correction to applicability for NR MobEnh | 16.11.0 |
| 2022-03 | RAN#95 | R5-221040 | 0207 | - | F | Applicability updates for NR EIEI test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-221045 | 0208 | - | F | Updates to titles of Inter-System MDT sensor test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-221241 | 0214 | - | F | Addition of applicability for new test case 11.6.3 | 16.11.0 |
| 2022-03 | RAN#95 | R5-221462 | 0199 | 1 | F | Update of 5G-NR test cases applicability | 16.11.0 |
| 2022-03 | RAN#95 | R5-221463 | 0202 | 1 | F | Addition of applicability for emergency call establishment over EPS with disabling N1 mode | 16.11.0 |
| 2022-03 | RAN#95 | R5-221464 | 0205 | 1 | F | Correction the condition of 38.523-1 TC11.3.2 and TC11.3.8 and Test case Selection Expression of C61 | 16.11.0 |
| 2022-03 | RAN#95 | R5-221465 | 0206 | 1 | F | Correct of conditions for Uplink Data Transfer and Unified Access Control | 16.11.0 |
| 2022-03 | RAN#95 | R5-221466 | 0215 | 1 | F | Updates to emergency applicabilities and conditions | 16.11.0 |
| 2022-03 | RAN#95 | R5-221527 | 0203 | 1 | F | Addition of NR V2X TC applicability | 16.11.0 |
| 2022-03 | RAN#95 | R5-221528 | 0212 | 1 | F | Addition of applicability for new V2X test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-221535 | 0211 | 1 | F | Addition of applicability for new SNPN test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-221541 | 0213 | 1 | F | Applicability updates for NR RACS test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-221590 | 0209 | 1 | F | Addition of new NR URLLC MAC Test Case applicabilities | 16.11.0 |
| 2022-03 | RAN#95 | R5-222002 | 0216 | 1 | F | Applicability clauses for Idle Inactive measurement test cases | 16.11.0 |
| 2022-03 | RAN#95 | R5-222034 | 0194 | 1 | F | Applicability statement for new test cases for PDCP Duplication 3 RLC entities in NR IIoT | 16.11.0 |
| 2022-03 | RAN#95 | R5-222038 | 0196 | 1 | F | Applicability statement for new test cases for NE-DC RRC | 16.11.0 |
| 2022-06 | RAN#96 | R5-222859 | 0221 | - | F | Add applicability for test case 11.1.3a | 16.12.0 |
| 2022-06 | RAN#96 | R5-223255 | 0227 | - | F | Applicability updates to NR EIEI test cases | 16.12.0 |
| 2022-06 | RAN#96 | R5-223348 | 0219 | 1 | F | Update of applicability statement for test cases for NE-DC RRC | 16.12.0 |
| 2022-06 | RAN#96 | R5-223377 | 0223 | 1 | F | Addition of applicability of new NR V2X test cases | 16.12.0 |
| 2022-06 | RAN#96 | R5-223383 | 0224 | 1 | F | Addition of Applicability of new SNPN test case | 16.12.0 |
| 2022-06 | RAN#96 | R5-223409 | 0228 | 1 | F | Modification of idle/inactive testcase applicabilities | 16.12.0 |
| 2022-06 | RAN#96 | R5-223442 | 0217 | 1 | F | Update of 5G-NR test cases applicability | 16.12.0 |

History

| Document history | | |
|-------------------------|----------------|-------------|
| V16.4.0 | July 2020 | Publication |
| V16.5.0 | November 2020 | Publication |
| V16.6.0 | January 2021 | Publication |
| V16.7.0 | May 2021 | Publication |
| V16.8.0 | September 2021 | Publication |
| V16.9.0 | October 2021 | Publication |
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