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LTE;

Evolved Universal Terrestrial Radio Access (E-UTRA);
User Equipment (UE) conformance specification;
Radio transmission and reception;
Part 2: Implementation Conformance Statement (ICS)
(3GPP TS 36.521-2 version 12.5.0 Release 12)



Reference RTS/TSGR-0536521-2vc50 Keywords LTE

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Foreword

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Version x.y.z

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 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
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Introduction

The present document is part 2 of a multi-parts TS:

3GPP TS 36.521-1 [1]: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 1: Conformance testing.

3GPP TS 36.521-2: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part :2 Implementation Conformance Statement (ICS).

3GPP TS 36.521-3 [2]: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 3: Radio Resource Management (RRM) Conformance Testing.

1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for 3G Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 [3] and ISO/IEC 9646-7 [4]

The present document specifies the recommended applicability statement for the test cases included in 3GPP TS 36.521-1 [1] and 3GPP TS 36.521-3 [2]. These applicability statements are based on the features implemented in the LIE.

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

The present document is valid for UE implemented according to 3GPP releases starting from Release 8 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 TS 36.521-1: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 1: Conformance testing ".
- [2] 3GPP TS 36.521-3: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 3: Radio Resource Management Conformance Testing ".
- [3] ISO/IEC 9646-1: "Information technology Open systems interconnection Conformance testing methodology and framework Part 1: General concepts".
- [4] ISO/IEC 9646-7: "Information technology Open systems interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".
- [5] 3GPP TS 36.509: " Evolved Universal Terrestrial Radio Access (E-UTRA); Special conformance testing functions for User Equipment ".
- [6] 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA); Common Test Environments for User Equipment (UE) Conformance Testing".
- [8] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [9] 3GPP TS 36.201: "LTE Physical Layer General Description"
- [10] 3GPP TS 36.302: "Evolved Universal Terrestrial Radio Access (E-UTRA); Services provided by the physical layer for E-UTRA".
- [11] 3GPP TS 36.321: "Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification".
- [12] 3GPP TS 36.322: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification".

| [13] | 3GPP TS 36.323: "Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification". |
|------|---|
| [14] | 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) Protocol Specification". |
| [15] | 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3" |
| [16] | 3GPP TS 36.307: "Requirements on User Equipments (UEs) Supporting a release-independent frequency band". |
| [17] | 3GPP TS 36.306: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio access capabilities". |
| [18] | 3GPP TS 36.133: "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management". |

3 Definitions, symbols and abbreviations

For the purposes of the present document, the following terms, definitions, symbols and abbreviations apply:

- such given in TR 21.905 [8]
- such given in ISO/IEC 9646-1 [3] and ISO/IEC 9646-7 [4]

NOTE: Some terms and abbreviations defined in [3] and [4] are explicitly included below with small modification to reflect the terminology used in 3GPP.

3.1 Definitions

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

No specific symbols have been identified so far.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [8].

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

ICSImplementation Conformance StatementIXITImplementation eXtra Information for TestingPICSProtocol Implementation Conformance StatementPIXITProtocol Implementation eXtra Information for Testing

RRM Radio Resource Management SCS System Conformance Statement

TC Test Case

UEUT User Equipment Under Test

4 Recommended test case applicability

The applicability of each individual test is identified in the tables 4.1-1 or 4.2-1. 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 expression that are based on parameters (ICS) included in annex A of the present document.

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 tables 4.1-1/4.2-1 have the following meaning:

Clause

The clause column indicates the clause number in TS 36.521-1 [1] or respectively TS 36.521-3 [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 36.521-1 [1] or TS 36.521-3 [2] that contains the test body.

Release

The release column indicates the earliest release from which each test case is applicable. It may also indicate a range of releases or a single release to which a test case is applicable.

Applicability - Condition

The following notations are used for the applicability column:

R recommended - the test case is recommended to all terminals supporting E-UTRA

O optional – the test case is optional

N/A not applicable - in the given context, the test case is not recommended.

Ci conditional - the test is recommended ("R") or not ("N/A") depending on the support of other

items. "i" is an integer identifying an 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.

Applicability - Comments

This comments column contains a verbal description of the condition included in the applicability column.

Additional Information

This column contains indication if the test case may perform differently depending on the UE capabilities.

NOTE To meet the validation requirements from certification bodies then there is a need to uniquely reference the FDD and TDD branch (i.e. different behaviour within one and the same TC) of common FDD and TDD test cases. The FDD and TDD branches of common FDD and TDD test cases can be referenced by amending a "FDD" or "TDD" suffix to the test case clause number. For example for test case 6.2.2 the FDD and TDD branches can be identified by "6.2.2 FDD" and "6.2.2 TDD".

4.1 RF conformance test cases

Table 4.1-1: Applicability of RF conformance test cases, ref. TS 36.521-1 [1]

| Clause | Title | Release | | Applicability | Additional Information |
|----------------|--|---------|-----------|--|------------------------|
| | | | Condition | Comments | imormation |
| Transmit | ter Characteristics | | | | L |
| 6.2.2 | UE Maximum Output Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.2.2_1 | UE Maximum Output Power | Rel-10 | C39 | UE supporting E-UTRA | FDD |
| 0.2.2_1 | for HPUE | TKOT TO | 000 | Power Class 1 | TDD |
| 6.2.2A. 1 | UE Maximum Output Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | LIE Maximum Output Dawar | | | LIC curporting C LITEA | TDD |
| 6.2.2B | UE Maximum Output Power for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD TDD |
| 0.0.5 | Configured UE transmitted | Dallo | Б | LIC accompanies of LITDA | |
| 6.2.5 | Output Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| | Configured LIC transactite -1 | | | LIC ourporting C LICOA | TDD |
| 6.2.5_1 | Configured UE transmitted Output Power for HPUE | Rel-10 | C39 | UE supporting E-UTRA Power Class 1 | FDD TDD |
| 6.2.5A. 1 | Configured UE transmitted Output Power for CA (intra- band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | Configura d to a service d | | | HE supposition E LIEDA | TDD |
| 6.2.5B | Configured transmitted power for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD TDD |
| 6.3.1 | Void | | | | טטו |
| 6.3.2 | Minimum Output Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.2A. 1 | Minimum Output Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | Minimum Output Days for | | | LIE composition E LITDA | TDD |
| 6.3.2B | Minimum Output Power for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD TDD |
| 6.3.3 | Transmit OFF Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| 0.3.3 | Transmit OFF Fower | Kel-0 | K | OE supporting E-OTKA | TDD |
| 6.3.3A. 1 | Transmit OFF Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.3.3B | UE Transmit OFF power for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |
| 6.3.4.1 | General ON/OFF time mask | Rel-8 | R | UE supporting E-UTRA | FDD TDD |
| 6.3.4.2. 1 | PRACH time mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.4.2. 2 | SRS time mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| | 0-7-7-1-01/055 :: | | | HE | TDD |
| 6.3.4A. 1.1 | General ON/OFF time mask for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | ON/OFF (| | | 115 0 5 1 1 5 1 | TDD |
| 6.3.4B | ON/OFF time mask for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |

| Clause | Title | Release | | Applicability | Additional Information |
|----------------|---|---------|-----------|--|------------------------|
| | | | Condition | Comments | |
| | | | | | TDD |
| 6.3.5.1 | Power Control Absolute Power Tolerance | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.5.2 | Power Control Relative Power Tolerance | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.5.3 | Aggregate Power Control Tolerance | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.5A. 1.1 | Power Control Absolute Power Tolerance for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.3.5A. 2.1 | Power Control Relative Power Tolerance for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.3.5A. 3.1 | Aggregate Power Control Tolerance for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.3.5B. 1 | Power Control Absolute power tolerance for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |
| 6.3.5B. 2 | Power Control Relative power tolerance for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |
| 6.3.5B. 3 | Aggregate power control tolerance for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| 6.5.1 | Fraguency Frag | Rel-8 | R | UE supporting E-UTRA | TDD FDD |
| 0.5.1 | Frequency Error | Kel-o | K | OE Supporting E-OTKA | TDD |
| 6.5.1A. 1 | Frequency Error for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.5.1B | Frequency Error for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | From Vooter Manufact | | | | TDD |
| 6.5.2.1 | Error Vector Magnitude (EVM) | Rel-8 | R | UE supporting E-UTRA | FDD |
| 6 5 0 4 | PUSCH-EVM with exclusion | | | | TDD |
| 6.5.2.1 A | period period | Rel-8 | R | UE supporting E-UTRA | FDD |
| 6.5.2.2 | Carrier leakage | Rel-8 | R | UE supporting E-UTRA | TDD FDD |
| 0.0.2.2 | Carrier leakage | 1/61-0 | | OE Supporting E-UTKA | TDD |
| 6.5.2.3 | In-band emissions for non allocated RB | Rel-8 | R | UE supporting E-UTRA | FDD |
| | anouted ND | | | | TDD |
| 6.5.2.4 | EVM equalizer spectrum flatness | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.5.2A. 1.1 | Error Vector Magnitude (EVM) for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |

| Clause | Title | Release | | Applicability | Additional Information |
|----------------|--|---------|-----------|--|------------------------|
| | | | Condition | Comments | 1 |
| | | | | | TDD |
| 6.5.2A. 2.1 | Carrier leakage for CA (intra- band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD TDD |
| 6.5.2A. 3.1 | In-band emissions for non allocated RB for CA (intraband contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | , | | | | TDD |
| 6.5.2B. 1 | Error Vector Magnitude for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| 0.5.00 | | | | LIE averagetica E LIEDA | TDD |
| 6.5.2B. 2 | Carrier leakage for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD TDD |
| 6.5.2B. | In-band emissions for non | | | UE supporting E-UTRA | |
| 3 | allocated RB for UL-MIMO | Rel-10 | C07 | and UL_MIMO | FDD TDD |
| 6.5.2B. | EVM equalizer spectrum | 5 | | UE supporting E-UTRA | |
| 4 | flatness for UL-MIMO | Rel-10 | C07 | and UL_MIMO | FDD |
| | | | | | TDD |
| 6.6.1 | Occupied bandwidth | Rel-8 | R | UE supporting E-UTRA | FDD |
| | Occupied bandwidth for CA | | | UE supporting E-UTRA | TDD |
| 6.6.1A. 1 | Occupied bandwidth for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | and intra-band contiguous DL CA and UL CA | FDD |
| | 0.1 0.110.0 0 = 0.1 1/1 | | | | TDD |
| 6.6.1B | Occupied bandwidth for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |
| 6.6.2.1 | Spectrum Emission Mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| 6.6.2.1_ | Spectrum Emission Mask for | | | UE supporting E-UTRA | TDD |
| 1 | Multi-cluster PUSCH Spectrum Emission Mask for | Rel-10 | C100 | and Multi-Cluster PUSCH UE supporting E-UTRA | FDD |
| 6.6.2.1 A.1 | CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.6.2.1 B | Spectrum Emission Mask for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | Additional Crossty, as | | | | TDD |
| 6.6.2.2 | Additional Spectrum Emission Mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| 6.6.2.2 | Additional Spectrum | | | UE supporting E-UTRA | TDD |
| 6.6.2.2 B | Emission Mask for UL-MIMO | Rel-10 | C07 | and UL_MIMO | FDD |
| | | | | _ | TDD |
| 6.6.2.3 | Adjacent Channel Leakage power Ratio | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.2.3_ 1 | Adjacent Channel Leakage power Ratio for HPUE | Rel-10 | C39 | UE supporting E-UTRA Power Class 1 | FDD TDD |
| 6.6.2.3_ 2 | Adjacent Channel Leakage power Ratio for Multi-Cluster PUSCH | Rel-10 | C100 | UE supporting E-UTRA and Multi-Cluster PUSCH | FDD |
| 6.6.2.3 A.1 | Adjacent Channel Leakage power Ratio for CA (intraband contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| 1 | '' | | | | TDD |

| Clause | Title | Release | | Applicability | |
|----------------|--|---------|-----------|--|-----|
| | | | Condition | Comments | |
| 6.6.2.3 B | Adjacent Channel Leakage power Ratio for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |
| 6.6.2.4 | Void | | | | |
| 6.6.3.1 | Transmitter Spurious emissions | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.3.1_ 1 | Transmitter Spurious emissions for Multi-Cluster PUSCH | Rel-10 | C100 | UE supporting E-UTRA and Multi-Cluster PUSCH | FDD |
| 6.6.3.1 A.1 | Transmitter Spurious emissions for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | , | | | | TDD |
| 6.6.3.2 | Spurious emission band UE co-existence | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.3.2 A.1 | Spurious emission band UE co-existence for CA (intraband contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | , | | | | TDD |
| 6.6.3.3 | Additional spurious emissions | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.3.3 A.1 | Additional spurious emissions for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | <u> </u> | | | | TDD |
| 6.6.3B. 2 | Spurious emission band UE co-existence for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |

| Clause | Title | Release | | Applicability | Additional Information |
|----------|--|---------|-----------|---|------------------------|
| | | | Condition | Comments | |
| 6.7 | Transmit intermodulation | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.7A.1 | Transmit intermodulation for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 6.7B | Transmit intermodulation for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | Time a clique property beature on | | | | TDD |
| 6.8B | Time alignment between transmitter branches for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| Pacaiyar | Characteristics | | | | TDD |
| 7.3 | Reference sensitivity level | Rel-8 | R | UE supporting E-UTRA | FDD |
| 7.0 | Troibioned conditivity level | 11010 | `` | or supporting 2 of the | TDD |
| 7.3A.1 | Reference sensitivity level for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | , | | | | TDD |
| 7.3A.2 | Reference sensitivity level for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.3A.3 | Reference sensitivity level for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | 5.6 | | | | TDD |
| 7.3A.4 | Reference sensitivity level for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | • | | | | TDD |
| 7.3B | Reference sensitivity level for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| 7.4 | Maximum input level | Rel-8 | R | UE supporting E-UTRA | TDD FDD |
| 7.4 | iviaximum input level | Kero | K | OE supporting E-OTKA | TDD |
| 7.4A.1 | Maximum input level for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | , | | | | TDD |
| 7.4A.2 | Maximum input level for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.4A.3 | Maximum input level for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | | <u></u> | | | TDD |
| 7.4A.4 | Maximum input level for CA (intra band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.4B | Maximum input level for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | Adianant Ohan 10 1 iii | | | | TDD |
| 7.5 | Adjacent Channel Selectivity (ACS) | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | <u> </u> | l | TDD |

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| 7.5A.1 | Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 7.5A.2 | Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | <i>C.</i> 1, | | | | TDD |
| 7.5A.3 | Adjacent Channel Selectivity (ACS) for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | Adia and Channal Calastinity | | | LIE augus antica e E LIEDA | TDD |
| 7.5A.4 | Adjacent Channel Selectivity (ACS) for CA (intra band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | , | | | | TDD |
| 7.5B | Adjacent Channel Selectivity (ACS)for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | _ | | TDD |
| 7.6.1 | In-band blocking | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.6.1A. 1 | In-band blocking for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | · | | | | TDD |
| 7.6.1A. 2 | In-band blocking for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.1A. 3 | In-band blocking for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.1A. 4 | In-band blocking for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.1B | In-band blocking for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD TDD |
| 7.6.2 | Out of-band blocking | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.6.2A. 1 | Out of-band blocking for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | Out of hand blooking for CA | | | LIE aupporting E LITDA | TDD |
| 7.6.2A. 2 | Out of-band blocking for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.2A. 3 | Out of-band blocking for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.2A. 4 | Out of-band blocking for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |

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| 7.6.2B | Out-of-band blocking for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | | | | TDD |
| 7.6.3 | Narrow band blocking | Rel-8 | R | UE supporting E-UTRA | FDD |
| | Name who ad blooking for CA | | | LIE averagetica E LIEDA | TDD |
| 7.6.3A. 1 | Narrow band blocking for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | N | | | | TDD |
| 7.6.3A. 2 | Narrow band blocking for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.3A. 3 | Narrow band blocking for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.3A. 4 | Narrow band blocking for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.6.3B | Narrow band blocking for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| | | D 10 | | | TDD |
| 7.7 | Spurious response | Rel-8 | R | UE supporting E-UTRA | FDD |
| 7.7A.1 | Spurious response for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | FDD |
| | | | | | TDD |
| 7.7A.2 | Spurious response for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.7A.3 | Spurious response for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.7A.4 | Spurious response for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.7B | Spurious response for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |
| - 0. | 110 | D 16 | <u> </u> | | TDD |
| 7.8.1 | Wide band Intermodulation | Rel-8 | R | UE supporting E-UTRA | FDD |
| 7.8.1A. | Wide band Intermodulation | Dol 40 | C10 | UE supporting E-UTRA | TDD |
| 1 | for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | and intra-band contiguous DL CA and UL CA | FDD TDD |
| 7.8.1A. 2 | Wide band Intermodulation for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.8.1A. 3 | Wide band Intermodulation for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA but no UL CA | FDD |
| | | | | | TDD |
| 7.8.1B | Wide band intermodulation for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | FDD |

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| 7.9 | Spurious emissions | Rel-8 | R | UE supporting E-UTRA | TDD FDD |
| | • | 10-0 | | OL Supporting L-OTTA | TDD |
| | nce Requirement | | | | |
| 8.2.1.1. 1 | FDD PDSCH Single Antenna Port Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.1. 1_1 | FDD PDSCH Single Antenna Port Performance (Release 9 and forward) | Rel-9 | C31 | UE supporting E-UTRA FDD (UE categories 1, 2) | |
| 8.2.1.1. | FDD PDSCH Single Antenna | Rel-10 | C102 | UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE categories from 3 to 8) | |
| 1_A.1 | Port Performance for CA (2 DL CA) | Rel-11 | C103 | UE supporting E-UTRA FDD and Downlink Intra- band non-contiguous CA (UE categories from 3 to 8) | |
| 8.2.1.1. 1_A.2 | FDD PDSCH Single Antenna Port Performance for CA (3DL CA) | Rel-12 | TBD | TBD | |
| 8.2.1.1. 2 | FDD PDSCH Single Antenna Port Performance with 1 PRB in presence of MBSFN | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.2. 1 | FDD PDSCH Transmit Diversity 2x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.2. 1_1 | FDD PDSCH Transmit Diversity 2x2 (Release 9 and forward) | Rel-9 | C15 | UE supporting E-UTRA FDD (UE category 1) | |
| 8.2.1.2. 2 | FDD PDSCH Transmit Diversity 4x2 | Rel-8 | C09 | UE supporting E-UTRA FDD and operating bands supporting 1,4 MHz Bandwidth | |
| 8.2.1.2. 2_1 | FDD PDSCH Transmit Diversity 4x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.2. 3_C.1 | FDD PDSCH Transmit diversity 2x2 for elClC (non- MBFSN ABS) | Rel-10 | C29 | UEs supporting E-UTRA FDD and Feature Group Indictor 115 | |
| 8.2.1.2. 3_E.1 | FDD PDSCH Transmit diversity 2x2 for felCIC (non- MBFSN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 8.2.1.2. 4 | FDD PDSCH Transmit Diversity 2x2 with TM3 Interference Model – Enhanced Performance Requirement Type A | Rel-11 | C44 | UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE | |
| 8.2.1.3. 1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.3. 1_1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 (Release 11 and forward) | Rel-11 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.3. 1_A.1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for | Rel-10 | C101 | UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Categories from 2 to 8) | |
| 1_0.1 | CA (2 DL CA) | Rel-11 | C90 | UE supporting E-UTRA FDD and intra-band non- contiguous DL CA (UE category 2 to 8) | |

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| | ! | | Condition | Comments | |
| 8.2.1.3. 1A_A.1 | FDD Soft buffer management test for CA (2 DL CA) | Rel-10 | C104 | UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE category 3 and 4) | |
| 1A_A.1 | lest for CA (2 DE CA) | Rel-11 | C106 | UE supporting E-UTRA FDD and Downlink Intra- band non-contiguous CA (UE categories 3 and 4) | |
| 8.2.1.3. 2 | FDD PDSCH Open Loop Spatial Multiplexing 4x2 | Rel-8 | C13 | UE supporting E-UTRA FDD | (UE categories 2-8) |
| 8.2.1.3. 3_C.1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (non-MBSFN ABS) | Rel-10 | C29 | UEs supporting E-UTRA FDD and Feature Group Indictor 115 | |
| 8.2.1.3. 3_C.2 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (MBSFN ABS) | Rel-10 | C29 | UEs supporting E-UTRA FDD and Feature Group Indictor 115 | |
| 8.2.1.3. 3_E.1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for felCIC (non-MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 8.2.1.4. 1 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 | Rel-8 only | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.4. 1_1 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.4. 1_E.1 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 for felClC (non-MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 8.2.1.4. 2 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2 | Rel-8 only | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.4. 2_1 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.4. 2_A.1 | FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (2 DL | Rel-10 | C101 | UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE categories from 2 to 8) | |
| 2_/\ | CA) | Rel-11 | C90 | UE supporting E-UTRA FDD and intra-band non- contiguous DL CA (UE category 2 to 8) | |
| 8.2.1.4. | FDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x2 with TM4 Interference model - Enhanced Performance Requirement Type A | Rel-11 | C44 | UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE | |
| 8.2.2.1 | Void | | | HE was a SUEDA | |
| 8.2.2.1. 1 | TDD PDSCH Single Antenna Port Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.1. 1_1 | TDD PDSCH Single Antenna Port Performance (Release 9 and forward) | Rel-9 | C54 | UE supporting E-UTRA TDD (UE categories 1, 2) | |

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| 8.2.2.1. 1_A.1 | TDD PDSCH Single Antenna Port Performance for CA (intra-band contiguous DL CA) | Rel-10 | C62 | UE supporting E-UTRA TDD and intra-band contiguous DL CA(UE categories | |
| 8.2.2.1. 1_A.2 | TDD PDSCH Single Antenna Port Performance for CA (inter-band DL CA) | Rel-11 | C82 | UE supporting E-UTRA TDD and inter-band DL CA(UE categories from 5 to 8) | |
| 8.2.2.1. 1_A.3 | TDD PDSCH Single Antenna Port Performance for CA (intra-band non-contiguous DL CA) | Rel-11 | C95 | UE supporting E-UTRA TDD and Downlink Intra- band non-contiguous CA (UE categories from 5 to 8) | |
| 8.2.2.1. 1_A.4 | TDD PDSCH Single Antenna Port Performance for CA (3DL CA) | Rel-12 | TBD | TBD | |
| 8.2.2.1. 2 | TDD PDSCH Single Antenna Port Performance with 1PRB in the presence of MBSFN | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.2 | Void | | | | |
| 8.2.2.2. 1 | TDD PDSCH Transmit Diversity 2x2 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.2. 1_1 | TDD PDSCH Transmit Diversity 2x2 (Release 9 and forward) | Rel-9 | C16 | UE supporting E-UTRA TDD (UE category 1) | |
| 8.2.2.2. 2 | TDD PDSCH Transmit Diversity 4x2 | Rel-8 | C10 | UE supporting E-UTRA TDD and operating bands supporting 1,4 MHz Bandwidth | |
| 8.2.2.2. 2_1 | TDD PDSCH Transmit Diversity 4x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.2. 3_C.1 | TDD PDSCH Transmit diversity 2x2 for elClC (non- MBFSN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 8.2.2.2. 3_E.1 | TDD PDSCH Transmit diversity 2x2 for felCIC (non- MBFSN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 8.2.2.2. 4 | TDD PDSCH Transmit Diversity 2x2 with TM3 Interference Model – Enhanced Performance Requirement Type A | Rel-11 | C45 | UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE | |
| 8.2.2.3 | Void | | | | |
| 8.2.2.3. 1 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.3. 1_1 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 (Release 11 and forward) | Rel-11 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.3. 1_A.1 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (intra-band contiguous DL CA) | Rel-10 | C24 | UE supporting E-UTRA TDD and intra-band contiguous DL CA | |
| 8.2.2.3. 1_A.2 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (Intra-band non- contiguous DL CA) | Rel-11 | C70 | UE supporting E-UTRA TDD and intra-band non- contiguous DL CA (UE category 5 and onwards) | |

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| 8.2.2.3. 1_A.3 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (inter-band DL CA) | Rel-11 | C82 | UE supporting E-UTRA TDD and inter-band DL CA(UE categories from 5 to 8 | |
| 8.2.2.3. 1A A.1 | TDD Soft buffer management for CA (2 DL CA) | Rel-10 | C105 | UE supporting E-UTRA TDD and intra-band contiguous DL CA or inter-band DL CA (UE category 3 and 4) | |
| 1A_A.1 | IOI OA (Z DE OA) | Rel-11 | C72 | UE supporting E-UTRA TDD and intra-band non- contiguous DL CA (UE category 3 and 4) | |
| 8.2.2.3. 2 | TDD PDSCH Open Loop Spatial Multiplexing 4x2 | Rel-8 | C02 | UE supporting E-UTRA TDD (UE of category 2-8) | |
| 8.2.2.3. 3_C.1 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (non-MBSFN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 8.2.2.3. 3_C.2 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (MBSFN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 8.2.2.3. 3_E.1 | TDD PDSCH Open Loop Spatial Multiplexing 2x2 for felCIC (non-MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 8.2.2.4 | Void | | | | |
| 8.2.2.4. 1 | TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 | Rel-8 only | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.4. 1_1 | TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 2x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA | |
| 8.2.2.4. 1_E.1 | TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 for felCIC (non-MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 8.2.2.4. 2 | TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2 | Rel-8 only | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.4. 2_1 | TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA | |
| 8.2.2.4. 2_A.1 | TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (intra-band contiguous DL CA) | Rel-10 | C62 | UE supporting E-UTRA TDD and intra-band contiguous DL CA(UE categories from 5 to 8) | |
| 8.2.2.4. 2_A.2 | TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (inter band DL CA) | Rel-11 | C82 | UE supporting E-UTRA TDD and inter-band DL CA(UE categories from 5 to 8 | |
| 8.2.2.4. 2_A.3 | TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (intra-band non-contiguous DL CA) | Rel-11 | C95 | UE supporting E-UTRA TDD and Downlink Intra- band non-contiguous CA (UE categories from 5 to 8 | |

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| 8.2.2.4. | TDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x2 with TM4 Interference Model – Enhanced Performance Requirement Type A | Rel-11 | C45 | UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE | |
| 8.2.2.7_ A.1 | TDD Carrier aggregation with power imbalance (intra-band contiguous DL CA) | Rel-10 | C24 | UE supporting E-UTRA TDD and intra-band contiguous DL CA | |
| 8.3.1 | Void | | | | |
| 8.3.1.1. 1_D | FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 without a simultaneous transmission for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 8.3.1.1. 2_D | FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with a simultaneous transmission for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 8.3.1.1. 3 | FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A | Rel-11 | C40 | UE supporting E-UTRA FDD and Feature Group Indictor 103 and supporting the enhanced performance requirements type A for LTE | |
| 8.3.1.2. 1_D | FDD PDSCH Dual-layer Spatial Multiplexing for eDL- MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 8.3.1.3. 1_F | FDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and single NZP CSI-RS resource for CoMP | Rel-11 | C50 | UE supporting E-UTRA FDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 8.3.1.3. 2_F | FDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and multiple NZP CSI-RS resources for CoMP | Rel-11 | C52 | UE supporting E-UTRA FDD and maximum of Three OR maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 8.3.1.3. 3_F | FDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Different Cell ID, Colliding CRS and single NZP CSI-RS resource for CoMP | Rel-11 | C50 | UE supporting E-UTRA FDD and maximum of One CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 8.3.2.1. 1 | TDD PDSCH Single-layer Spatial Multiplexing on antenna port 5 (Release 8 and forward) | Rel-8 | C02 | UE supporting E-UTRA | |
| 8.3.2.1. 1_1 | TDD PDSCH Single-layer Spatial Multiplexing on antenna port 5 (Release 9 and forward) | Rel-9 | C16 | UE supporting E-UTRA TDD (UE category 1) | |
| 8.3.2.1. 2 | TDD PDSCH Single-layer Spatial Multiplexing on antenna port 7 or 8 without a simultaneous transmission | Rel-9 only | C34 | UE supporting E-UTRA TDD and supporting enhanced dual layer TDD. | |

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| | | | Condition | Comments | |
| | | Rel-10 | C02 | UE supporting E-UTRA TDD. | |
| 8.3.2.1. 2_D | TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 without a simultaneous transmission for eDL-MIMO | Rel-10 | C26 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | |
| 8.3.2.1. 3 | TDD PDSCH Single-layer Spatial Multiplexing on antenna port 7 or 8 with a simultaneous transmission | Rel-9 only | C34 | UE supporting E-UTRA TDD and supporting enhanced dual layer TDD. | |
| | | Rel-10 | C02 | UE supporting E-UTRA TDD. | |
| 8.3.2.1. 3_D | TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with a simultaneous transmission for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | |
| 8.3.2.1. 4 | TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A | Rel-11 | C41 | UE supporting E-UTRA TDD and Feature Group Indictor 103 and supporting the enhanced performance requirements type A for LTE | |
| 8.3.2.2. 1 | TDD PDSCH Dual-layer Spatial Multiplexing | Rel-9 only | C34 | UE supporting E-UTRA TDD and supporting enhanced dual layer TDD. | |
| | | Rel-10 | C02 | UE supporting E-UTRA TDD. | |
| 8.3.2.2. 1_D | TDD PDSCH Dual-layer Spatial Multiplexing for eDL- MIMO | Rel-10 | C25 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | |
| 8.3.2.4. 1_F | TDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and single NZP CSI-RS resource for CoMP | Rel-11 | C51 | UE supporting E-UTRA TDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 8.3.2.4. 2_F | TDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and multiple NZP CSI-RS resources for CoMP | Rel-11 | C53 | UE supporting E-UTRA TDD and maximum of Three or maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 8.3.2.4. 3_F | TDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Different Cell ID, Colliding CRS and single NZP CSI-RS resource for CoMP | Rel-11 | C51 | UE supporting E-UTRA TDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 8.4.1.1 | FDD PCFICH/PDCCH Single-antenna Port Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.4.1.2 | Void | | | UE supporting E-UTRA | |
| 8.4.1.2. 1 | FDD PCFICH/PDCCH Transmit Diversity 2x2 | Rel-8 only | C09 | FDD and operating bands supporting 1,4 MHz Bandwidth | |

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| | | | Condition | Comments | |
| 8.4.1.2. 1_1 | FDD PCFICH/PDCCH Transmit Diversity 2x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.4.1.2. 2 | FDD PCFICH/PDCCH Transmit Diversity 4x2 | Rel-8 only | C01 | UE supporting E-UTRA FDD | |
| 8.4.1.2. 3_E.1 | FDD PCFICH/PDCCH Transmit Diversity 2x2 for felCIC (non-MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 8.4.1.2. 3_E.2 | FDD PCFICH/PDCCH Transmit Diversity 2x2 for felCIC (MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 8.4.1.2. 2_1 | FDD PCFICH/PDCCH Transmit Diversity 4x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.4.1.2. 3_C.1 | FDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS) | Rel-10 | C29 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | |
| 8.4.1.2. 3_C.2 | FDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (MBSFN ABS) | Rel-10 | C29 | UEs supporting E-UTRA FDD and Feature Group Indictor 115 | |
| 8.4.2.1 | TDD PCFICH/PDCCH Single-antenna Port Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.4.2.2 | Void | | | LIC ourporting C LITPA | |
| 8.4.2.2. 1 | TDD PCFICH/PDCCH Transmit Diversity 2x2 | Rel-8 only | C10 | UE supporting E-UTRA TDD and operating bands supporting 1,4 MHz Bandwidth | |
| 8.4.2.2. 1_1 | TDD PCFICH/PDCCH Transmit Diversity 2x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA TDD | |
| 8.4.2.2. 2 | TDD PCFICH/PDCCH Transmit Diversity 4x2 | Rel-8 only | C02 | UE supporting E-UTRA TDD | |
| 8.4.2.2. 2_1 | TDD PCFICH/PDCCH Transmit Diversity 4x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA TDD | |
| 8.4.2.2. 3_C.1 | TDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 8.4.2.2. 3_C.2 | TDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (MBSFN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 8.4.2.2. 3_E.1 | TDD PCFICH/PDCCH Transmit Diversity 2x2 for felCIC (non-MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 8.4.2.2. 3_E.2 | TDD PCFICH/PDCCH Transmit Diversity 2x2 for felCIC (MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 8.5.1.1 | FDD PHICH Single-antenna Port Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.5.1.2 | Void | | | | |
| 8.5.1.2. 1 | FDD PHICH Transmit Diversity 2x2 | Rel-8 only | C09 | UE supporting E-UTRA FDD and operating bands supporting 1,4 MHz Bandwidth | |

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| | | | Condition | Comments | |
| 8.5.1.2. 1_1 | FDD PHICH Transmit Diversity 2x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.5.1.2. 2 | FDD PHICH Transmit Diversity 4x2 | Rel-8 only | C01 | UE supporting E-UTRA FDD | |
| 8.5.1.2. 2_1 | FDD PHICH Transmit Diversity 4x2 (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |
| 8.5.1.2. 3_C.1 | FDD PHICH Transmit Diversity 2x2 for eICIC (non- MBSFN ABS) | Rel-10 | C29 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | |
| 8.5.1.2. 3_E.1 | FDD PHICH Transmit Diversity 2x2 for felCIC (non- MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 8.5.2.1 | TDD PHICH Single-antenna Port Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.5.2.2 8.5.2.2. 1 | Void TDD PHICH Transmit Diversity 2x2 | Rel-8 only | C10 | UE supporting E-UTRA TDD and operating bands supporting 1,4 MHz Bandwidth | |
| 8.5.2.2. 1_1 | TDD PHICH Transmit Diversity 2x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA | |
| 8.5.2.2. 2 | TDD PHICH Transmit Diversity 4x2 | Rel-8 only | C02 | UE supporting E-UTRA TDD | |
| 8.5.2.2. 2_1 | TDD PHICH Transmit Diversity 4x2 (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA TDD | |
| 8.5.2.2. 3_C.1 | TDD PHICH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 8.5.2.2. 3_E.1 | TDD PHICH Transmit Diversity 2x2 for felCIC (non- MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 8.7.1.1 | FDD sustained data rate performance (Rel-9 and forward) | Rel-9 | C76 | UE supporting E-UTRA FDD(UE categories from1 to 4) | It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.1.1_A.1 or 8.7.3.1 is executed. |
| 8.7.1.1 __ | FDD sustained data rate performance (Rel-10 and forward) | Rel-10 | C42 | UE supporting E-UTRA FDD (UE categories 6, 7) | It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.1.1_A.1 or 8.7.3.1 is executed. |

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| | | | Condition | Comments |] |
| 8.7.1.1_ | FDD Sustained data rate performance for CA (2 DL | Rel-10 | C107 | UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE category 3, 4, 6 and 7) | |
| A.1 | CA) | Rel-11 | C93 | UE supporting E-UTRA FDD and intra-band non- contiguous DL CA (UE category 3, 4, 6 and 7) | |
| 8.7.1.1_ A.2 | FDD Sustained data rate performance for CA (3DL CA) | Rel-12 | TBD | TBD | |
| 8.7.2.1 | TDD sustained data rate performance (Rel-9 and forward) | Rel-9 | C02 | UE supporting E-UTRA TDD | It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.2.1_A.1 or 8.7.4.1 is executed. |
| 8.7.2.1 __ | TDD sustained data rate performance (Rel-10 and forward) | Rel-10 | C73 | UE supporting E-UTRA TDD (UE category 4, 6 and 7) | It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.2.1_A.1 or 8.7.4.1 is executed. |
| 8.7.2.1_ A.1 | TDD sustained data rate performance for CA (intraband contiguous DL CA) | Rel-10 | C74 | UE supporting E-UTRA TDD and intra-band contiguous DL CA (UE category 6 and 7) | |
| 8.7.2.1_ A.2 | TDD sustained data rate performance for CA (Intraband non-contiguous DL CA) | Rel-11 | C75 | UE supporting E-UTRA TDD and intra-band non- contiguous DL CA (UE category 6 and 7) | |
| 8.7.2.1_ A.3 | TDD sustained data rate performance for CA (interband DL CA) | Rel-10 | C83 | UE supporting E-UTRA TDD and inter-band DL CA (UE category 3, 4, 6 and 7) | |
| 8.7.2.1_ A.4 | TDD Sustained data rate performance for CA (3DL CA) | Rel-12 | TBD | TBD | |
| 8.7.3.1 | FDD sustained data rate performance for EPDCCH scheduling | Rel-11 | C55 | UE supporting E-UTRA FDD and EPDCCH | |
| 8.7.4.1 | TDD sustained data rate performance for EPDCCH scheduling | Rel-11 | C56 | UE supporting E-UTRA TDD and EPDCCH | |
| 8.8.1.1 | FDD distributed EPDCCH performance | Rel-11 | C55 | UE supporting E-UTRA FDD and EPDCCH | |
| 8.8.1.2 | TDD distributed EPDCCH performance | Rel-11 | C56 | UE supporting E-UTRA TDD and EPDCCH | |
| 8.8.2.1 | FDD localized EPDCCH performance with TM9 | Rel-11 | C91 | UE supporting E-UTRA FDD and EPDCCH and Feature Group Indicator 103 | |

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| 8.8.2.2 | TDD localized EPDCCH performance with TM9 | Rel-11 | C92 | UE supporting E-UTRA TDD and EPDCCH and Feature Group Indicator 103 | |
| 8.8.3.1 | FDD localized EPDCCH transmission with TM10 Type B quasi co-location type | Rel-11 | C57 | UE supporting E-UTRA FDD and EPDCCH and Multiple CSI processes on a component carrier within a band with PDSCH transmission mode 10 | |
| 8.8.3.2 | TDD localized EPDCCH transmission with TM10 Type B quasi co-location type | Rel-11 | C58 | UE supporting E-UTRA TDD and EPDCCH and Multiple CSI processes on a component carrier within a band with PDSCH transmission mode 10 | |
| Reportin | g of Channel State Information | 1 | | | |
| 9.2.1.1 | FDD CQI Reporting under AWGN conditions - PUCCH 1-0 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.2.1.2 | TDD CQI Reporting under AWGN conditions - PUCCH 1-0 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.2.1.3_ C.1 | FDD CQI Reporting under AWGN conditions – PUCCH 1-0 for eICIC (non-MBSFN ABS) | Rel-10 | C29 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | |
| 9.2.1.4_ C.1 | TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for eICIC (non-MBSFN ABS) | Rel-10 | C30 | UEs supporting E-UTRA TDD and Feature Group Indictor 115 | |
| 9.2.1.5_ E.1 | FDD CQI Reporting under AWGN conditions – PUCCH 1-0 for felCIC (non-MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 9.2.1.6_ E.1 | TDD CQI Reporting under AWGN conditions – PUCCH 1-0 for feICIC (non-MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |
| 9.2.2.1 | FDD CQI Reporting under AWGN conditions - PUCCH 1-1 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.2.2.2 | TDD CQI Reporting under AWGN conditions - PUCCH 1-1 | Rel-8 | C02 | UE supporting E-UTRA | |
| 9.2.3.1_ D | FDD CQI Reporting under AWGN conditions - PUCCH 1-1 for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.2.3.2_ D | TDD CQI Reporting under AWGN conditions - PUCCH 1-1 for eDL-MIMO | Rel-10 | C26 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | |
| 9.2.4.1_ F | FDD CQI Reporting under AWGN conditions - Single CSI Process for CoMP | Rel-11 | C50 | UE supporting E-UTRA FDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |

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| | | | Condition | Comments | |
| 9.2.4.2_ F | TDD CQI Reporting under AWGN conditions - Single CSI Process for CoMP | Rel-11 | C51 | UE supporting E-UTRA TDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.3.1.1. 1 | FDD CQI Reporting under fading conditions - PUSCH 3-0 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.3.1.1. 2 | TDD CQI Reporting under fading conditions - PUSCH 3-0 | Rel-8 | C02 | UE supporting E-UTRA | |
| 9.3.1.2. 1_D | FDD CQI Reporting under fading conditions - PUSCH 3-1 for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.3.1.2. 2_D | TDD CQI Reporting under fading conditions - PUSCH 3-1 for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.3.1.3. 1_E.1 | FDD CQI Reporting under fading conditions – PUSCH 3-0 for felCIC (non-MBSFN ABS) | Rel-11 | C79 | UE supporting E-UTRA FDD and CRS interference handling | |
| 9.3.1.3. 2_E.1 | TDD CQI Reporting under fading conditions – PUSCH 3-0 for felCIC (non-MBSFN ABS) | Rel-11 | C80 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | |
| 9.3.2.1. 1 | FDD CQI Reporting under fading conditions - PUCCH 1-0 | Rel-8 | C13 | UE supporting E-UTRA FDD (UE categories 2-8) | |
| 9.3.2.1. 1_1 | FDD CQI Reporting under fading conditions - PUCCH 1-0 (Release 9 and forward) | Rel-9 | C15 | UE supporting E-UTRA FDD (UE category 1) | |
| 9.3.2.1. 2 | TDD CQI Reporting under fading conditions - PUCCH 1-0 | Rel-8 | C14 | UE supporting E-UTRA TDD (UE categories 2-8) | |
| 9.3.2.1. 2_1 | TDD CQI Reporting under fading conditions - PUCCH 1-0 (Release 9 and forward) | Rel-9 | C16 | UE supporting E-UTRA TDD (UE category 1) | |
| 9.3.2.2. 1_D | FDD CQI Reporting under fading conditions - PUCCH 1-1 for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.3.2.2. 2_D | TDD CQI Reporting under fading conditions - PUCCH 1-1 for eDL-MIMO | Rel-10 | C28 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicators 104 and 110 | |
| 9.3.3.1. 1 | FDD CQI Reporting under fading conditions and frequency-selective interference - PUSCH 3-0 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.3.3.1. | TDD CQI Reporting under fading conditions and frequency-selective interference - PUSCH 3-0 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.3.4.1. 1 | FDD CQI Reporting under fading conditions - PUSCH 2-0 | Rel-9 | C35 | UE supporting E-UTRA FDD and Feature Group Indicator 1 | |
| 9.3.4.1. 2 | TDD CQI Reporting under fading conditions - PUSCH 2-0 | Rel-9 | C37 | UE supporting E-UTRA TDD and Feature Group Indicator 1 | |

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| 9.3.4.2. 1 | FDD CQI Reporting under fading conditions - PUCCH 2-0 | Rel-9 | C36 | UE supporting E-UTRA FDD and Feature Group Indicator 2 | |
| 9.3.4.2. 2 | TDD CQI Reporting under fading conditions - PUCCH 2-0 | Rel-9 | C38 | UE supporting E-UTRA TDD and Feature Group Indicator 2 | |

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| | | | Condition | Comments | |
| 9.3.5.1. 1 | FDD CQI Reporting under fading conditions - PUCCH 1-0 - Enhanced Performance Requirement Type A | Rel-11 | C44 | UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE | |
| 9.3.5.1. | TDD CQI Reporting under fading conditions - PUCCH 1-0 - Enhanced Performance Requirement Type A | Rel-11 | C45 | UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE | |
| 9.3.5.2. 1 | FDD CQI Reporting under fading conditions - PUCCH 1-1 - Enhanced Performance Requirement Type A | Rel-11 | C44 | UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE | |
| 9.3.5.2. | TDD CQI Reporting under fading conditions - PUCCH 1-1 - Enhanced Performance Requirement Type A | Rel-11 | C45 | UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE | |
| 9.3.6.1_ F.1 | FDD CQI Reporting under fading conditions with Single CSI process for CoMP | Rel-11 | C50 | UE supporting E-UTRA FDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.3.6.1_ F.2 | FDD CQI Reporting under fading conditions with Three CSI processes for CoMP | Rel-11 | C96 | UE supporting E-UTRA FDD and maximum of Three CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.3.6.1_ F.3 | FDD CQI Reporting under fading conditions with Four CSI processes for CoMP | Rel-11 | C97 | UE supporting E-UTRA FDD and maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.3.6.2_ F.1 | TDD CQI Reporting under fading conditions with Single CSI process for CoMP | Rel-11 | C51 | UE supporting E-UTRA TDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.3.6.2_ F.2 | TDD CQI Reporting under fading conditions with Three CSI processes for CoMP | Rel-11 | C98 | UE supporting E-UTRA TDD and maximum of Three CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.3.6.2_ F.3 | TDD CQI Reporting under fading conditions with Four CSI processes for CoMP | Rel-11 | C99 | UE supporting E-UTRA TDD and maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.4.1.1. 1 | FDD PMI Reporting - PUSCH 3-1 (Single PMI) | Rel-8 | C01 | UE supporting E-UTRA FDD | |

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| | | | Condition | Comments | |
| 9.4.1.1. 2 | TDD PMI Reporting - PUSCH 3-1 (Single PMI) | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.4.1.2.1 | FDD PMI Reporting - PUCCH 2-1 (Single PMI) | Rel-9 | C36 | UE supporting E-UTRA FDD and Feature Group Indicator 2 | |
| 9.4.1.2.2 | TDD PMI Reporting - PUCCH 2-1 (Single PMI) | Rel-9 | C38 | UE supporting E-UTRA TDD and Feature Group Indicator 2 | |
| 9.4.1.3.1 _D | FDD PMI Reporting - PUSCH 3-1 (Single PMI) for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.4.1.3. 2_D | TDD PMI Reporting - PUSCH 3-1 (Single PMI) for eDL-MIMO | Rel-10 | C26 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | |
| 9.4.2.1. 1 | FDD PMI Reporting - PUSCH 1-2 (Multiple PMI) | Rel-8 only | C11 | UE supporting E-UTRA FDD and operating bands supporting 20 MHz Bandwidth (UE categories 2, 3, 4, 5) | |
| 9.4.2.1. 1_1 | FDD PMI Reporting - PUSCH 1-2 (Multiple PMI) (Release 9 and forward) | Rel-9 | C01 | UE supporting E-UTRA FDD | |

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| 9.4.2.1. | TDD PMI Reporting - PUSCH 1-2 (Multiple PMI) | Rel-8 only | C12 | UE supporting E-UTRA TDD and operating bands supporting 20 MHz Bandwidth (UE categories 2, 3, 4, 5) | |
| 9.4.2.1. 2_1 | TDD PMI Reporting - PUSCH 1-2 (Multiple PMI) (Release 9 and forward) | Rel-9 | C02 | UE supporting E-UTRA TDD | |
| 9.4.2.2. 1 | FDD PMI Reporting - PUSCH 2-2 (Multiple PMI) | Rel-9 | C32 | UE supporting E-UTRA FDD and Feature Group Indicators 1 | |
| 9.4.2.2. 2 | TDD PMI Reporting - PUSCH 2-2 (Multiple PMI) | Rel-9 | C33 | UE supporting E-UTRA TDD and Feature Group Indicators 1 | |
| 9.4.2.3. 1_D | FDD PMI Reporting - PUSCH 1-2 (Multiple PMI) for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.4.2.3. 2_D | TDD PMI Reporting - PUSCH 1-2 (Multiple PMI) for eDL-MIMO | Rel-10 | C26 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | |
| 9.5.1.1 | FDD RI Reporting - PUCCH 1-1 | Rel-8 and Rel-9 only | C13 | UE supporting E-UTRA FDD (UE categories 2-8) | |
| 9.5.1.1 __ | FDD RI Reporting - PUCCH 1-1 (Release 10) | Rel-10 only | C13 | UE supporting E-UTRA FDD (UE categories 2-8) | |
| 9.5.1.1 __ 2 | FDD RI Reporting- PUCCH 1-1 (Release 11) | Rel-11 | C13 | UE supporting E-UTRA FDD (UE categories 2-8) | |
| 9.5.1.2 | TDD RI Reporting - PUSCH 3-1 | Rel-8 and Rel-9 only | C14 | UE supporting E-UTRA TDD (UE categories 2-8) | |
| 9.5.1.2_ 1 | TDD RI Reporting - PUSCH 3-1 (Release 10) | Rel-10 only | C14 | UE supporting E-UTRA TDD (UE categories 2-8) | |
| 9.5.1.2_ 2 | TDD RI Reporting- PUSCH 3-1 (Release 11) | Rel-11 | C14 | UE supporting E-UTRA TDD (UE categories 2-8) | |
| 9.5.2.1_ D | FDD RI Reporting - PUCCH 1-1 for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicators 103 | |
| 9.5.2.2_ D | TDD RI Reporting - PUCCH 1-1 for eDL-MIMO | Rel-10 | C25 | UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | |
| 9.5.3.1_ C.1 | FDD RI Reporting – PUCCH 1-0 for eICIC (non-MBSFN ABS) | Rel-10 | C29 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | |
| 9.5.3.2_ C.1 | TDD RI Reporting – PUCCH 1-0 for eICIC (non-MBSFN ABS) | Rel-10 | C30 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | |
| 9.5.4.1_ E.1 | FDD RI Reporting – PUCCH 1-0 for felCIC (non-MBSFN ABS) | Rel-11 | C77 | UE supporting E-UTRA FDD and CRS interference handling (UE categories 2-8) | |
| 9.5.4.2_ E.1 | TDD RI Reporting – PUCCH 1-0 for felCIC (non-MBSFN ABS) | Rel-11 | C78 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling (UE categories 2-8) | |

| Clause | Title | Release | Applicability | | Additional Information |
|-----------------|--|---------|---------------|---|------------------------|
| | | | Condition | Comments | |
| 9.5.5.1_ F.1 | FDD RI Reporting with Single CSI processes for CoMP | Rel-11 | C50 | UE supporting E-UTRA FDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.5.5.1_ F.2 | FDD RI Reporting with Multiple CSI processes for CoMP | Rel-11 | C52 | UE supporting E-UTRA FDD and maximum of Three OR maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.5.5.2_ F.1 | TDD RI Reporting with Single CSI process for CoMP | Rel-11 | C51 | UE supporting E-UTRA TDD and maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.5.5.2_ F.2 | TDD RI Reporting with Multiple CSI processes for CoMP | Rel-11 | C53 | UE supporting E-UTRA TDD and maximum of Three OR maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 (UE categories 2-8) | |
| 9.6.1.1_ A.1 | FDD CQI Reporting under AWGN conditions – PUCCH 1-0 for CA (2 DL CA) | Rel-10 | C108 | UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE categories 3-8) | |
| Α.1 | | Rel-11 | C89 | UE supporting E-UTRA FDD and intra-band non- contiguous DL CA(UE categories 3-8) | |
| 9.6.1.2_ A.1 | TDD CQI Reporting under AWGN conditions – PUCCH 1-0 for CA (intra band contiguous DL CA) | Rel-10 | C24 | UE supporting E-UTRA TDD and intra-band contiguous DL CA | |
| 9.6.1.2_ A.2 | TDD CQI Reporting under AWGN conditions – PUCCH 1-0 for CA (inter band DL CA) | Rel-11 | C84 | UE supporting E-UTRA TDD and inter-band DL CA | |
| 9.6.1.2_ A.3 | TDD CQI Reporting under AWGN conditions – PUCCH 1-0 for CA (intra band non- contiguous DL CA) | Rel-11 | C81 | UE supporting E-UTRA TDD and intra-band non- contiguous DL CA | |
| MBMS P | erformance Testing | | | | |
| 10.1 | FDD MBMS performance (Fixed Reference Channel) | Rel-9 | C03 | UE supporting E-UTRA FDD and MBMS | |
| 10.2 | TDD MBMS performance (Fixed Reference Channel) | Rel-9 | C04 | UE supporting E-UTRA TDD and MBMS | |

Table 4.1-1a: Applicability of RF conformance test cases Conditions

| C01 | IF A.4.1-1/1 THEN R ELSE N/A |
|-----|---|
| C02 | IF A.4.1-1/2 THEN R ELSE N/A |
| C03 | IF (A.4.1-1/1 AND A.4.2-1/1) THEN R ELSE N/A |
| C04 | IF (A.4.1-1/2 AND A.4.2-1/1) THEN R ELSE N/A |
| C05 | IF (A.4.1-1/1 AND A.4.2-1/2) THEN R ELSE N/A |
| C06 | IF (A.4.1-1/1 OR A.4.1-1/2 AND A.4.2-1/2) THEN R ELSE N/A |
| C07 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/3) THEN R ELSE N/A |
| C08 | IF (A.4.1-1/2 AND A.4.2-1/2) THEN R ELSÉ N/A |
| C09 | IF (A.4.1-1/1 AND A.4.3-3a/1) THEN R ELSE N/A |
| C10 | IF (A.4.1-1/2 AND A.4.3-3a/1) THEN R ELSE N/A |
| C11 | IF A.4.1-1/1 AND A.4.3-3a/6 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5) THEN R ELSE N/A |
| C12 | IF A.4.1-1/2 AND A.4.3-3a/6 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5) THEN R ELSE N/A |
| C13 | IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| 013 | A.4.3-4/8)) THEN R ELSE N/A |
| C14 | IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| C14 | |
| C45 | A.4.3-4/8)) THEN R ELSE N/A |
| C15 | IF (A.4.1-1/1 AND A.4.3-4/1) THEN R ELSE N/A |
| C16 | IF (A.4.1-1/2 AND A.4.3-4/1) THEN R ELSE N/A |
| C17 | Void |
| C18 | Void |
| C19 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2) THEN R ELSE N/A |
| C20 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2) AND NOT (A.4.6.1-2/1 OR A.4.6.1-2/2)) |
| | THEN R ELSE N/A |
| C21 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND NOT A.4.6.3-2/1) THEN R ELSE N/A |
| C22 | IF (A.4.1-1/1 AND A.4.6.1-1/2) THEN R ELSE N/A |
| C23 | IF (A.4.1-1/1 AND A.4.6.3-1/1) THEN R ELSE N/A |
| C24 | IF (A.4.1-1/2 AND A.4.6.1-1/2) THEN R ELSE N/A |
| C25 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/103) THEN R ELSE N/A |
| C26 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104) THEN R ELSE N/A |
| C27 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104 AND A.4.4-3/109) THEN R ELSE N/A |
| C28 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104 AND A.4.4-3/110) THEN R ELSE N/A |
| C29 | IF (A.4.1-1/1 AND A.4.4-3/115) THEN R ELSE N/A |
| C30 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A |
| C31 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A |
| C32 | IF (A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A |
| C33 | IF (A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A |
| C34 | IF (A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A |
| C35 | IF A.4.1-1/1 AND A.4.4-1/1 THEN R ELSE N/A |
| C36 | IF A.4.1-1/1 AND A.4.4-1/2 THEN R ELSE N/A |
| C37 | IF A.4.1-1/1 AND A.4.4-1/2 THEN R ELSE N/A IF A.4.1-1/2 AND A.4.4-1/1 THEN R ELSE N/A |
| | |
| C38 | IF A.4.1-1/2 AND A.4.4-1/2 THEN R ELSE N/A |
| C39 | IF((A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3b/1) THEN R ELSE N/A |
| C40 | IF (A.4.1-1/1 AND A.4.4-3/103 AND A.4.3-7/1) THEN R ELSE N/A |
| C41 | IF (A.4.1-1/2 AND A.4.4-3/103 AND A.4.3-7/1) THEN R ELSE N/A |
| C42 | IF ((A.4.1-1/1) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C43 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND NOT A.4.6.2-2/1) THEN R ELSE N/A |
| C44 | IF (A.4.1-1/1 AND A.4.3-7/1) THEN R ELSE N/A |
| C45 | IF (A.4.1-1/2 AND A.4.3-7/1) THEN R ELSE N/A |
| C46 | Void |
| C47 | Void |
| C48 | Void |
| C49 | Void |
| C50 | IF (A.4.1-1/1 AND A.4.5-1/8 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.À.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C51 | IF (A.4.1-1/2 AND A.4.5-1/8 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C52 | IF (A.4.1-1/1 AND (A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C53 | IF (A.4.1-1/2 AND (A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C54 | IF (A.4.1-1/2 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A |
| C55 | IF (A.4.1-1/1 AND A.4.2-1/6) THEN R ELSE N/A |
| C56 | IF (A.4.1-1/2 AND A.4.2-1/6) THEN R ELSE N/A |
| C57 | IF (A.4.1-1/12 AND A.4.2-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.2-1/6 AND A.4.3-8/2) THEN R ELSE N/A |
| C58 | IF (A.4.1-1/1 AND A.4.2-1/6 AND A.4.3-8/2) THEN R ELSE N/A |
| C59 | Void |
| C09 | voiu |
| | |

| 000 | <i>M-:</i> |
|------------|--|
| C60 | Void |
| C61 C62 | Void IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND A.4.6.1-1/2) THEN R ELSE |
| C62 | |
| C63 | N/A IF ((A.4.1-1/1) AND (A.4.6.1-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| C63 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C64 | Void |
| C65 | Void |
| | |
| C66 | Void Void |
| C67 | Void Void |
| C68 | Void |
| C69 | IF ((A.4.1-1/1) AND (A.4.6.3-1/1) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C70 | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE |
| C71 | N/A Void |
| C71 | |
| | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| C73 C74 | IF ((A.4.1-1/2) AND (A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A IF ((A.4.1-1/2) AND (A.4.6.1-1/1) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C74 | |
| | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C76 | IF A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4/3 OR A.4.3.4/4) THEN R ELSE N/A |
| C77 | IF (A.4.1-1/1 AND A4.5-2/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C78 | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| 076 | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C79 | IF (A.4.1-1/1 AND A4.5-2/1) THEN R ELSE N/A |
| C80 | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2) THEN R ELSE N/A |
| C81 | IF (A.4.1-1/2 AND A.4.6.2-1/1) THEN R ELSE N/A |
| C82 | IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND A.4.6.3-1/1) THEN R ELSE N/A |
| C83 | IF (A.4.1-1/2) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7) AND (A.4.6.3-1/1)) THEN R ELSE N/A IF ((A.4.1-1/2) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7) AND (A.4.6.3-1/1)) THEN R ELSE |
| 003 | N/A |
| C84 | IF (A.4.1-1/2 AND A.4.6.3-1/1) THEN R ELSE N/A |
| C85 | Void |
| C86 | Void |
| C87 | IF ((A.4.1-1/1) AND (A.4.6.3-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| 001 | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C88 | Void |
| C89 | Void |
| C90 | IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C91 | IF (A.4.1-1/1 AND A.4.2-1/6 AND A.4.4-3/103) THEN R ELSE N/A |
| C92 | IF (A.4.1-1/2 AND A.4.2-1/6 AND A.4.4-3/103) THEN R ELSE N/A |
| C93 | IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE |
| | N/A |
| C94 | Void |
| C95 | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE |
| | N/A |
| C96 | IF (A.4.1-1/1 AND A.4.5-1/11 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C97 | IF (A.4.1-1/1 AND A.4.5-1/12 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C98 | IF (A.4.1-1/2 AND A.4.5-1/11 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C99 | IF (A.4.1-1/2 AND A.4.5-1/12 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C100 | IF (A.4.1-1/1 AND A.4.5-1/13) THEN R ELSE N/A |
| C101 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR |
| | A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C102 | |
| | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C103 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C103 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE |
| C104 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A IF ((A.4.1-1/2) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE |
| C104 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |

| C107 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR |
|------|---|
| | A.4.3-4/7)) THEN R ELSE N/A |
| C108 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |

4.2 RRM conformance test cases

Table 4.2-1: Applicability of RRM conformance test cases, ref. TS 36.521-3 [2]

| Clause | Title | Release Applicability | | | Additional Information | |
|---------|---|-----------------------|-----------|--------------------------|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| E-UTRAN | RRC_IDLE State Mobility | | | | | |
| 4.2.1 | E-UTRAN FDD - FDD cell re- | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| | selection intra frequency case | | | | | |
| 4.2.2 | E-UTRAN TDD - TDD cell re- | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| | selection intra frequency case | | | | | |
| 4.2.3 | E-UTRAN FDD - FDD cell re- | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| | selection inter frequency case | | | | | |
| 4.2.4 | E-UTRAN FDD - TDD cell re- | Rel-9 | C03 | UE supporting E-UTRA FDD | | |
| | selection inter frequency case | | | and E-UTRA TDD | | |
| 4.2.5 | E-UTRAN TDD - FDD cell re- | Rel-9 | C03 | UE supporting E-UTRA FDD | | |
| | selection inter frequency case | | | and E-UTRA TDD | | |
| 4.2.6 | E-UTRAN TDD - TDD cell re- | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| | selection inter frequency case | | | | | |
| 4.2.7 | E-UTRAN FDD – FDD Inter | Rel-9 | C01 | UE supporting E-UTRA FDD | | |
| | frequency case in the existence of | | | | | |
| 400 | non-allowed CSG cell | D 10 | 000 | | | |
| 4.2.8 | E-UTRAN TDD – TDD Inter | Rel-9 | C02 | UE supporting E-UTRA TDD | | |
| | frequency case in the existence of non-allowed CSG cell | | | | | |
| 4.2.9 | E-UTRAN FDD-FDD intra- | Rel-8 | C49 | UE supporting E-UTRA FDD | | |
| 4.2.9 | frequency Cell Re-selection case | Rei-8 | C49 | and only E-UTRA Band 31 | | |
| | for 5MHz bandwidth | | | and only E-OTRA Band 31 | | |
| 4.3.1.1 | E-UTRA FDD - UTRAN FDD cell | Rel-8 | C04 | UE supporting E-UTRA FDD | | |
| 4.3.1.1 | re-selection | Kel-0 | C04 | and UTRA FDD | | |
| 4.3.1.2 | E-UTRA FDD - UTRAN FDD cell | Rel-8 | C04 | UE supporting E-UTRA FDD | | |
| 7.0.1.2 | re-selection: UTRA FDD is of | IXEI-0 | 004 | and UTRA FDD | | |
| | lower priority | | | and OTTO T DD | | |
| 4.3.1.3 | E-UTRAN FDD - UTRAN FDD cell | Rel-8 | C04 | UE supporting E-UTRA FDD | | |
| | re-selection in fading propagation | | | and UTRA FDD | | |
| | conditions: UTRA FDD is of lower | | | | | |
| | priority | | | | | |
| 4.3.1.4 | E-UTRAN FDD - UTRAN FDD cell | Rel-8 | C53 | UE supporting E-UTRA FDD | | |
| | re-selection: UTRA FDD is of | | | and only E-UTRA Band 31 | | |
| | lower priority for 5MHz bandwidth | | | and UTRA FDD | | |
| 4.3.2 | E-UTRAN FDD - UTRAN TDD cell | Rel-8 | C06 | UE supporting E-UTRA FDD | | Rel-9 UTRA TDD |
| | re-selection | | | and UTRA TDD | | |
| 4.3.3 | E-UTRAN TDD - UTRAN FDD cell | Rel-8 | C07 | UE supporting E-UTRA TDD | | |
| | re-selection | | | and UTRA FDD | | |
| 4.3.4.1 | E-UTRA TDD - UTRAN TDD cell | Rel-8 | C05 | UE supporting E-UTRA TDD | | Rel-9 UTRA TDD |
| | re-selection | | | and UTRA TDD | | |
| 4.3.4.2 | E-UTRAN TDD - UTRAN TDD cell | Rel-8 | C05 | UE supporting E-UTRA TDD | | Rel-9 UTRA TDD |
| | re-selection: UTRA is of lower | | | and UTRA TDD | | |
| | priority | | | | | |

| Clause | Title | Release | | Applicability | | Information |
|---------|---|---------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 4.3.4.3 | EUTRA TDD-UTRA TDD cell reselection in fading propagation conditions: UTRA TDD is of lower priority | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | | Rel-9 UTRA TDD |
| 4.4.1 | E-UTRAN FDD - GSM cell reselection | Rel-8 | C08 | UE supporting E-UTRA FDD and GSM | | |
| 4.4.2 | E-UTRAN TDD - GSM cell re- selection | Rel-8 | C09 | UE supporting E-UTRA TDD and GSM | | |
| 4.5.1.1 | E-UTRAN FDD - HRPD Cell re- selection: HRPD is of lower priority | Rel-8 | C10 | UE supporting E-UTRA FDD and cdma2000 HRPD | | |
| 4.5.2.1 | E-UTRAN TDD - HRPD Cell Reselection: HRPD is of Lower Priority | Rel-9 | C34 | UE supporting E-UTRA TDD and cdma2000 HRPD | | |
| 4.6.1.1 | E-UTRAN FDD - cdma2000 1xRTT Cell re-selection: cdma2000 1x is of lower priority | Rel-8 | C11 | UE supporting E-UTRA FDD and cdma2000 1xRTT | | |
| 4.6.2.1 | E-UTRAN TDD-cdma2000 1X Cell Reselection: cdma2000 1X is of Lower Priority | Rel-9 | C35 | UE supporting E-UTRA TDD and cdma2000 1xRTT | | |
| E-UTRAN | RRC_CONNECTED State Mobility | | | | | |
| 5.1.1 | E-UTRAN FDD - FDD Handover intra frequency case | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 5.1.2 | E-UTRAN TDD - TDD Handover intra frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 5.1.3 | E-UTRAN FDD - FDD Handover inter frequency case | Rel-8 | C01d | UE supporting E-UTRA FDD and Feature Group Indicators 5, 13 and 25 | | |
| 5.1.4 | E-UTRAN TDD - TDD Handover inter frequency case | Rel-8 | C02d | UE supporting E-UTRA TDD and Feature Group Indicators 5, 13 and 25 | | |
| 5.1.5 | E-UTRAN FDD - FDD inter frequency handover: unknown target cell | Rel-8 | C01a | UE supporting E-UTRA FDD and Feature Group Indicators 13 and 25 | | |
| 5.1.6 | E-UTRAN TDD-TDD inter frequency handover: unknown target cell | Rel-8 | C02a | UE supporting E-UTRA TDD and Feature Group Indicators 13 and 25 | | |
| 5.1.7 | E-UTRAN FDD – TDD handover inter frequency case | Rel-9 | C21 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 5, 25 and 30 | | |

| Clause | Title | Release | | Applicability | Additional Information | |
|--------|---|---------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 5.1.8 | E-UTRAN TDD – FDD handover inter frequency case | Rel-9 | C21 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 5, 25 and 30 | | |
| 5.1.9 | E-UTRAN FDD-FDD Intra frequency handover for 5MHz bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 5.2.1 | E-UTRAN FDD - UTRAN FDD handover | Rel-8 | C04a | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.2.2 | E-UTRAN TDD - UTRAN FDD handover | Rel-8 | C07a | UE supporting E-UTRA TDD and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.2.3 | E-UTRAN FDD - GSM handover | Rel-8 | C08e | UE supporting E-UTRA FDD and GSM and Feature Group Indicators 9, 15 and 23 | | |
| 5.2.4 | E-UTRAN TDD - UTRAN TDD handover | Rel-8 | C05a | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 8 and 22 | | Rel-9 UTRA TDD |
| 5.2.5 | E-UTRAN FDD - UTRAN TDD handover | Rel-8 | C06a | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 8 and 22 | | Rel-9 UTRA TDD |
| 5.2.6 | E-UTRA TDD - GSM handover | Rel-8 | C09f | UE supporting E-UTRA FDD and GSM and Feature Group Indicators 9, 15 and 23 | | |
| 5.2.7 | E-UTRAN FDD - UTRAN FDD handover: unknown target cell | Rel-8 | C04a | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.2.8 | E-UTRAN FDD - GSM handover: unknown target cell | Rel-8 | C08a | UE supporting E-UTRA FDD and GSM and Feature Group Indicators 9 and 23 | | |
| 5.2.9 | E-UTRAN TDD - GSM handover: unknown target cell | Rel-8 | C09b | UE supporting E-UTRA TDD and GSM and Feature Group Indicators 9 and 23 | | |
| 5.2.10 | E-UTRAN TDD - UTRAN TDD handover: unknown target cell | Rel-8 | C05a | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 8 and 22 | | Rel-9 UTRA TDD |
| 5.2.11 | E-UTRAN FDD - UTRAN FDD handover for 5MHz Bandwidth | Rel-8 | C54 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and UTRA FDD and Feature Group Indicators 8 and 22 | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|---------|---|---------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 5.3.1 | E-UTRAN FDD - HRPD Handover | Rel-8 | C10a | UE supporting E-UTRA FDD and cdma2000 HRPD and Feature Group Indicators 12 and 26 | | |
| 5.3.2 | E-UTRAN FDD - cdma2000 1xRTT handover | Rel-8 | C11a | UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24 | | |
| 5.3.3 | E-UTRAN FDD - HRPD handover: unknown target cell | Rel-8 | C10a | UE supporting E-UTRA FDD and cdma2000 HRPD and Feature Group Indicators 12 and 26 | | |
| 5.3.4 | E-UTRAN FDD - cdma2000 1xRTT handover: unknown target cell | Rel-8 | C11a | UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24 | | |
| 5.3.5 | E-UTRAN TDD-HRPD Handover | Rel-9 | C10a | UE supporting E-UTRA FDD and HRPD and Feature Group Indicators 12 and 26. | | |
| 5.3.6 | E-UTRAN TDD-cdma2000 1X Handover | Rel-9 | C11a | UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24. | | |
| RRC Con | nection Mobility Control | | | | | |
| 6.1.1 | E-UTRAN FDD Intra-frequency RRC Re-establishment | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 6.1.2 | E-UTRAN FDD Inter-frequency RRC Re-establishment | Rel-8 | C01b | UE supporting E-UTRA FDD and Feature Group Indicator 25 | | |
| 6.1.3 | E-UTRAN TDD Intra-frequency RRC Re-establishment | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 6.1.4 | E-UTRAN TDD Inter-frequency RRC Re-establishment | Rel-8 | C02b | UE supporting E-UTRA TDD and Feature Group Indicator 25 | | |
| 6.1.5 | E-UTRAN FDD Intra-frequency RRC Re-establishment for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 6.2.1 | E-UTRAN FDD - Contention Based Random Access Test | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 6.2.2 | E-UTRAN FDD - Non-Contention Based Random Access Test | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 6.2.3 | E-UTRAN TDD - Contention Based Random Access Test | Rel-8 | C02 | UE supporting E-UTRA TDD | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|--------|---|---------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 6.2.4 | E-UTRAN TDD - Non-Contention Based Random Access Test | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 6.2.5 | E-UTRAN FDD - Contention Based Random Access Test for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 6.2.6 | E-UTRAN FDD - Non-Contention Based Random Access Test for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 6.2.7 | E-UTRAN FDD - Non-Contention Based Random Access Test For SCell in sTAG | Rel-12 | C61 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances | | |
| 6.2.8 | E-UTRAN TDD - Non-Contention Based Random Access Test For SCell in sTAG | Rel-12 | C62 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances | | |
| 6.3.1 | Redirection from E-UTRAN FDD to UTRAN FDD | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 6.3.2 | Redirection from E-UTRAN TDD to UTRAN FDD | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 6.3.3 | Redirection from E-UTRAN FDD to GERAN when System Information is provided | Rel-9 | C27 | UE supporting E-UTRA FDD and GERAN | | |
| 6.3.4 | Redirection from E-UTRAN TDD to GERAN when System Information is provided | Rel-9 | C28 | UE supporting E-UTRA TDD and GERAN | | |
| 6.3.5 | E-UTRA TDD RRC connection release redirection to UTRA TDD | Rel-9 | C26 | UE supporting E-UTRA TDD and UTRA TDD | | |
| 6.3.6 | E-UTRA FDD RRC connection release redirection to UTRA TDD | Rel-9 | C25 | UE supporting E-UTRA FDD and UTRA TDD | | |
| 6.3.7 | E-UTRA TDD RRC connection release redirection to UTRA TDD without SI provided | Rel-9 | C26 | UE supporting E-UTRA TDD and UTRA TDD | | |
| 6.3.8 | E-UTRA FDD RRC connection release redirection to UTRA TDD without SI provided | Rel-9 | C25 | UE supporting E-UTRA FDD and UTRA TDD | | |
| 6.3.9 | Redirection from E-UTRAN FDD to UTRAN FDD without System Information | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 6.3.10 | Redirection from E-UTRAN FDD to GERAN when System Information is not provided | Rel-9 | C27 | UE supporting E-UTRA FDD and GERAN | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|-----------|---|---------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 6.3.11 | Redirection from E-UTRAN TDD to GERAN when System Information is not provided | Rel-9 | C28 | UE supporting E-UTRA TDD and GERAN | | |
| 6.3.12 | E-UTRAN TDD RRC connection release redirection to UTRAN FDD without SI provided | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| Timing ar | nd Signalling Characteristics | | | | | |
| 7.1.1 | E-UTRAN FDD - UE Transmit Timing Accuracy | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 7.1.1_1 | E-UTRAN FDD - UE Transmit Timing Accuracy (Non DRx UE) | Rel-8 only | C23 | UE supporting E-UTRA FDD but not supporting Feature Group Indicator 5 | | |
| 7.1.2 | E-UTRAN TDD - UE Transmit Timing Accuracy | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 7.1.2_1 | E-UTRAN TDD - UE Transmit Timing Accuracy (Non DRx UE) | Rel-8 only | C24 | UE supporting E-UTRA TDD but not supporting Feature Group Indicator 5 | | |
| 7.1.3 | E-UTRAN FDD – UE Transmit Timing Accuracy Tests for SCell | Rel-11 | C57 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | | |
| 7.1.4 | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell | Rel-11 | C58 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | | |
| 7.1.5 | E-UTRAN FDD - UE Transmit Timing Accuracy Tests for 5MHz Bandwidth | Rel-8 | C56 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and Feature Group Indicator 5 | | |
| 7.1.6 | E-UTRAN FDD - UE Transmit Timing Accuracy Tests for SCell in sTAG | Rel-12 | C63 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances and Feature Group Indicator 5 | | |
| 7.1.7 | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell in sTAG | Rel-12 | C64 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5s | | |
| 7.2.1 | E-UTRAN FDD - UE Timing Advance Adjustment Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | | |

| Clause | Title | Release | | Applicability | | Information |
|--------|--|---------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.2.2 | E-UTRAN TDD - UE Timing Advance Adjustment Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 7.2.3 | E-UTRAN FDD - UE Timing Advance Adjustment Accuracy Test for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 7.2.4 | E-UTRAN FDD - UE Timing Advance Adjustment Accuracy Test For SCell in sTAG | Rel-12 | C61 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances | | |
| 7.2.5 | E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test For SCell in sTAG | Rel-12 | C62 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances | | |
| 7.3.1 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-Sync | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 7.3.2 | E-UTRAN FDD Radio Link Monitoring Test for In-Sync | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 7.3.3 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-Sync | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 7.3.4 | E-UTRAN TDD Radio Link Monitoring Test for In-Sync | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 7.3.5 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync in DRX | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 7.3.6 | E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 7.3.7 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 7.3.8 | E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 7.3.9 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 7.3.10 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |

| Clause | Title | Release | | Applicability | Additional Information | | |
|--------|---|---------|-----------|---|----------------------------|----------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 7.3.11 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | | |
| 7.3.12 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | | |
| 7.3.13 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | | |
| 7.3.14 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | | |
| 7.3.15 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | | |
| 7.3.16 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | | |
| 7.3.19 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non- MBSFN ABS (felCIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling | | | |
| 7.3.20 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non- MBSFN ABS (felCIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | | | |

| Clause | Title | Release | | Applicability | | Information |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.3.21 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and MBSFN ABS (felCIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling | | |
| 7.3.22 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and MBSFN ABS (felCIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | | |
| 7.3.23 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 7.3.24 | E-UTRAN FDD Radio Link Monitoring Test for In-sync for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 7.3.25 | E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX for 5MHz Bandwidth | Rel-8 | C56 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and Feature Group Indicator 5 | | |
| | rements Procedures | | | , | | |
| 8.1.1 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 8.1.2 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 8.1.3 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 8.1.4 | Void | | | | | |
| 8.1.5 | E-UTRAN FDD - FDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C13 | UE supporting E-UTRA FDD, CSG and intra- frequency SI acquisition for HO | | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.1.6 | E-UTRAN FDD - FDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C13 | UE supporting E-UTRA FDD, CSG and intra- frequency SI acquisition for HO | | |
| 8.1.7 | E-UTRAN FDD-FDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 8.1.8 | E-UTRAN FDD-FDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felCIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling | | |
| 8.1.9 | E-UTRAN FDD-FDD intra frequency event triggered reporting under fading propagation conditions in asynchronous cells for 5MHz bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 8.1.10 | E-UTRAN FDD-FDD intra frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for 5MHz bandwidth | Rel-8 | C56 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and Feature Group Indicator 5 | | |
| 8.2.1 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 8.2.2 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 8.2.3 | E-UTRAN TDD - TDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C15 | UE supporting E-UTRA TDD, CSG and intra- frequency SI acquisition for HO. | | |

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|--------|--|---------|-----------|---|--|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.2.4 | E-UTRAN TDD - TDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C15 | UE supporting E-UTRA TDD, CSG and intra- frequency SI acquisition for HO | | |
| 8.2.5 | E-UTRAN TDD-TDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 8.2.6 | E-UTRAN TDD-TDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felCIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | | |
| 8.3.1 | E-UTRAN FDD-FDD inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-8 | C01b | UE supporting E-UTRA FDD and Feature Group Indicator 25 | It is not necessary for CA UEs to be tested in this test if 8.20.1 case is executed. | |
| 8.3.2 | E-UTRAN FDD-FDD inter- frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells | Rel-8 | C01e | UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25 | | |
| 8.3.3 | E-UTRAN FDD-FDD inter frequency event triggered reporting under AWGN propagation conditions in asynchronous cells with DRX when L3 filtering is used | Rel-8 | C01e | UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25 | | |
| 8.3.4 | E-UTRAN FDD - FDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C14 | UE supporting E-UTRA FDD, CSG and inter- frequency SI acquisition for HO | | |
| 8.3.5 | E-UTRAN FDD - FDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C14 | UE supporting E-UTRA FDD, CSG and inter-frequency SI acquisition for HO. | | |

| Clause | Title | Release | | Applicability | | Additional Information | |
|--------|---|---------|-----------|--|--|------------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 8.3.6 | E-UTRAN FDD-FDD Inter- frequency event triggered reporting without measurement gaps under AWGN propagation conditions in asynchronous cells | Rel-10 | C47 | UE supporting E-UTRA FDD and Feature Group Indicator 25 and Measurement without gaps | | | |
| 8.4.1 | E-UTRAN TDD-TDD inter- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C02b | UE supporting E-UTRA TDD and Feature Group Indicator 25 | It is not necessary for CA UEs to be tested in this test if 8.20.2 case is executed. | | |
| 8.4.2 | E-UTRAN TDD-TDD inter- frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells | Rel-8 | C02e | UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25 | | | |
| 8.4.3 | E-UTRAN TDD-TDD inter- frequency event triggered reporting under AWGN propagation conditions in synchronous cells with DRX when L3 filtering is used | Rel-8 | C02e | UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25 | | | |
| 8.4.4 | E-UTRAN TDD - TDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C16 | UE supporting E-UTRA TDD, CSG and inter- frequency SI acquisition for HO. | | | |
| 8.4.5 | E-UTRAN TDD - TDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C16 | UE supporting E-UTRA TDD, CSG and inter- frequency SI acquisition for HO. | | | |
| 8.5.1 | E-UTRAN FDD-UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C04g | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 15 and 22 | It is not necessary for CA UEs to be tested in this test if 8.20.3 case is executed. | | |
| 8.5.2 | E-UTRAN FDD-UTRAN FDD SON ANR cell search reporting under AWGN propagation conditions | Rel-8 | C04f | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 5, 19 and 22 | | | |
| 8.5.3 | E-UTRAN FDD - UTRAN FDD event triggered reporting when DRX is used under fading propagation conditions | Rel-8 | C04d | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 5, 15 and 22 | | | |

| Clause | Title | Release | | Applicability | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 8.5.4 | E-UTRAN FDD - UTRAN FDD enhanced cell identification under AWGN propagation conditions | Rel-9 | C29 | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicator 15 | | | |
| 8.5.6 | E-UTRAN FDD - UTRAN FDD event triggered reporting without measurement gaps under AWGN propagation conditions | Rel-10 | C48 | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicator 15 and 22 and Measurement without gaps | | | |
| 8.5.7 | E-UTRAN FDD - UTRAN FDD event triggered reporting under fading propagation conditions for 5MHz bandwidth | Rel-8 | C55 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and UTRA FDD and Feature Group Indicators 15 and 22 | | | |
| 8.6.1 | E-UTRAN TDD-UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C07b | UE supporting E-UTRA TDD and UTRA FDD and Feature Group Indicators 15 and 22 | | | |
| 8.7.1 | E-UTRAN TDD-UTRAN TDD event triggered reporting under fading propagation conditions | Rel-8 | C05b | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 15 and 22 | It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed. | | |
| 8.7.2 | E-UTRAN TDD - UTRAN TDD cell search when DRX is used under fading propagation conditions | Rel-8 | C05d | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 5, 15 and 22 | | Rel-9 UTRA TDD | |
| 8.7.3 | E-UTRAN TDD - UTRAN TDD SON ANR cell search reporting under AWGN propagation conditions | Rel-8 | C05b | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicator 22 | | Rel-9 UTRA TDD | |
| 8.7.4 | E-UTRAN TDD - UTRAN TDD enhanced cell identification under AWGN propagation conditions | Rel-9 | C31 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicator 15 | | | |
| 8.8.1 | E-UTRAN FDD-GSM event triggered reporting in AWGN | Rel-8 | C08f | UE supporting E-UTRA FDD and GSM and Feature Group Indicator s 15 and 23 | | | |
| 8.8.2 | E-UTRAN FDD - GSM event triggered reporting when DRX is used in AWGN | Rel-8 | C08d | UE supporting E-UTRA FDD and GSM and Feature Group Indicators 5, 15 and 23 | | | |
| 8.9.1 | E-UTRAN FDD-UTRAN TDD event triggered reporting in fading propagation conditions | Rel-8 | C06b | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 22 | | Rel-9 UTRA TDD | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.9.2 | E-UTRAN FDD - UTRAN TDD enhanced cell identification under AWGN propagation conditions | Rel-9 | C30 | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicator 15 | | |
| 8.10.1 | E-UTRAN TDD-GSM event triggered reporting in AWGN | Rel-8 | C09g | UE supporting E-UTRA TDD and GSM and Feature Group Indicators 15 and 23 | | |
| 8.10.2 | E-UTRAN TDD - GSM event triggered reporting when DRX is used in AWGN | Rel-8 | C09e | UE supporting E-UTRA TDD and GSM and Feature Group Indicators 5, 15 and 23 | | |
| 8.11.1 | Multiple E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions | Rel-8 | C01b | UE supporting E-UTRA FDD and Feature Group Indicator 25 | | |
| 8.11.2 | E-UTRAN TDD - E-UTRAN TDD and E-UTRAN TDD Inter- frequency event triggered reporting under fading propagation conditions | Rel-8 | C02b | UE supporting E-UTRA TDD and Feature Group Indicator 25 | | |
| 8.11.3 | E-UTRAN FDD-FDD Inter- frequency and UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C04e | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 22 and 25 | | |
| 8.11.4 | InterRAT E-UTRA TDD to E- UTRA TDD and UTRA TDD cell search | Rel-8 | C05e | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 22 and 25 | | |
| 8.11.5 | Combined E-UTRAN FDD - E- UTRA FDD and GSM cell search; E-UTRA cells in fading; GSM cell in static propagation conditions | Rel-8 | C08b | UE supporting E-UTRA FDD and GSM and Feature Group Indicator 23 and 25 | | |
| 8.11.6 | Combined E-UTRAN TDD - E- UTRA TDD and GSM cell search; E-UTRA cells in fading; GSM cell in static propagation conditions | Rel-8 | C09a | UE supporting E-UTRA TDD and GSM and Feature Group Indicator 23 and 25 | | |
| 8.12.1 | Void | | | | | |
| 8.13.1 | Void | | | | | |
| 8.14.1 | E-UTRAN TDD-FDD Inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-9 | C22 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicator 25 | | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.14.2 | E-UTRAN TDD-FDD Inter- frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells | Rel-9 | C38 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 4 and 25 | | |
| 8.14.3 | E-UTRAN TDD - FDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C39 | UE supporting E-UTRA FDD and E-UTRA TDD, CSG and inter-frequency SI acquisition for HO and Feature Group Indicator 25 | | |
| 8.15.1 | E-UTRAN FDD-TDD Inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-9 | C22 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicator 25 | | |
| 8.15.2 | E-UTRAN FDD-TDD Inter- frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells | Rel-9 | C38 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 4 and 25 | | |
| 8.15.3 | E-UTRAN FDD - TDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C39 | UE supporting E-UTRA FDD and E-UTRA TDD, CSG and inter-frequency SI acquisition for HO and Feature Group Indicator 25 | | |
| 8.16.1 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |
| 8.16.2 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.3 | E-UTRAN FDD-FDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.4 | E-UTRANTDD-TDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.5 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 20 MHz bandwidth | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |
| 8.16.6 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 20 MHz bandwidth | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.7 | E-UTRA FDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 20 MHz bandwidth | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |
| 8.16.8 | E-UTRAN TDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 20 MHz bandwidth | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.9 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 10MHz+5MHz | Rel-11 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |

| Clause | Title | Release | | Applicability | Additional | Information |
|---------|--|---------|-----------|---|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.10 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 10MHz+5MHz | Rel-11 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.11 | E-UTRAN FDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 10MHz+5MHz | Rel-11 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |
| 8.16.12 | E-UTRAN TDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 10MHz+5MHz | Rel-11 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.13 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 5 MHz+5MHz | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |
| 8.16.14 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 5 MHz+5MHz | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.15 | E-UTRA FDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 5MHz+5MHz bandwidth | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |

| Clause | Title | Release | Applicability | | Additional | Information |
|---------|--|---------|---------------|---|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.16 | E-UTRA TDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 5MHz+5MHz bandwidth | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.17 | E-UTRAN FDD activation and deactivation of known SCell in non-DRX | Rel-10 | C32b | UE supporting E-UTRA FDD and CA and Feature Group Indicator 25 | | |
| 8.16.18 | E-UTRAN TDD activation and deactivation of known SCell in non-DRX | Rel-10 | C33b | UE supporting E-UTRA TDD and CA and Feature Group Indicator 25 | | |
| 8.16.21 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 20MHz+10MHz | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.22 | E-UTRAN TDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 20MHz+10MHz | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.18.1 | E-UTRAN TDD-HRPD event triggered reporting under fading propagation conditions | Rel-9 | C40 | UE supporting E-UTRA TDD and cdma2000 HRPD and Feature Group Indicator 15 | | |
| 8.19.1 | E-UTRAN TDD-CDMA2000 1X event triggered reporting under fading propagation conditions | Rel-9 | C41 | UE supporting E-UTRA TDD and cdma2000 1xRTT and Feature Group Indicator 15 | | |
| 8.20.1 | E-UTRAN FDD-FDD Inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | | |
| 8.20.2 | E-UTRAN TDD-TDD Inter- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|---------------------------|---|--------------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.20.3 | E-UTRAN FDD - UTRAN FDD event triggered reporting under fading propagation conditions | Rel-10 | C43 | UE supporting E-UTRA FDD, CA and UTRA FDD and Feature Group Indicator 15 | | |
| 8.20.4 | E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions | Rel-10 | C44 | UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15 | | |
| Measurer | nent Performance Requirements | | | | | |
| 9.1.1.1 | FDD Intra Frequency Absolute RSRP Accuracy | Rel-8 to Rel-11 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.1.1.1 __ 1 | FDD Intra Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.1.1.2 | FDD Intra Frequency Relative Accuracy of RSRP | Rel-8 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.1.2.1 | TDD Intra Frequency Absolute RSRP Accuracy | Rel-8 to Rel-11 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.1.2.1_ 1 | TDD Intra Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.1.2.2 | TDD Intra Frequency Relative Accuracy of RSRP | Rel-8 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.1.3.1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy | Rel-8 to Rel-11 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.3.1 __ 1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.3.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRP | Rel-8 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.4.1 | TDD - TDD Inter Frequency Absolute RSRP Accuracy | Rel-8 to Rel-11 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.4.1_ 1 | TDD - TDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |

| Clause | Title | | | Applicability | Additional Information | | |
|----------------------|---|---------------------------------|-----------|---|---|----------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.1.4.2 | TDD - TDD Inter Frequency Relative Accuracy of RSRP | Rel-8 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | | |
| 9.1.5.1 | FDD - TDD Inter Frequency Absolute RSRP Accuracy | Rel-9 to Rel-11 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | | |
| 9.1.5.1 __ | FDD - TDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | | |
| 9.1.5.2 | FDD - TDD Inter Frequency Relative Accuracy of RSRP | Rel-9 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | | |
| 9.1.6.1 | FDD Absolute RSRP Accuracy E- UTRA for Carrier Aggregation | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | | |
| 9.1.6.2 | FDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | | |
| 9.1.7.1 | TDD Absolute RSRP Accuracy E- UTRA for Carrier Aggregation | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | | |
| 9.1.7.1_ | TDD Absolute RSRP Accuracy E- UTRA for Carrier Aggregation (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------|--|---------|-----------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.7.2 | TDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | |
| 9.1.8.1 | FDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non- MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.8.2 | FDD Relative RSRP under Time- Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.9.1 | TDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non- MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.9.2 | TDD Relative RSRP under Time- Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.10.1 | FDD Absolute RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.10.2 | FDD Relative RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.11.1 | TDD Absolute RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.11.2 | TDD Relative RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------------|--|---------------------------------|-----------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.12.1 | FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | |
| 9.1.12.2 | FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | |
| 9.1.13.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | |
| 9.1.13.1 _1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | |
| 9.1.13.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | |
| 9.1.14.1 | FDD Intra Frequency Absolute RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felCIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling | | |

| Clause | Title | Release | | Applicability | Additional Information | |
|----------------|--|--------------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.14.2 | FDD Intra Frequency Relative RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felCIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling | | |
| 9.1.15.1 | TDD Intra Frequency Absolute RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felCIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | | |
| 9.1.15.2 | TDD Intra Frequency Relative RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | | |
| 9.1.16.1 | FDD Intra Frequency Absolute RSRP Accuracy for 5MHz Bandwidth | Rel-8 to Rel-11 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.1.16.1 _1 | FDD Intra Frequency Absolute RSRP Accuracy for 5MHz Bandwidth (Rel-12 and forward) | Rel-12 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.1.16.2 | FDD Intra Frequency Relative Accuracy of RSRP for 5MHz Bandwidth | Rel-8 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.1.17.1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy for 5MHz Bandwidth | Rel-8 to Rel-11 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.1.17.1 _1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy for 5MHz Bandwidth (Rel-12 and forward) | Rel-12 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.1.17.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRP for 5MHz Bandwidth | Rel-8 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------------|---|----------------|-----------|---------------------------------|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.18.1 | FDD Absolute RSRP Accuracy for E-UTRA for Carrier Aggregation for 10MHz + 5MHz | Rel-11 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | |
| 9.1.18.2 | FDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation for 10MHz + 5MHz | Rel-11 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | |
| 9.1.19.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz | Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | |
| 9.1.19.1 _1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | 9.1.7.1_1 or TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | |
| 9.1.19.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz | Rel-11 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | |
| 9.1.20.1 | FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | |

| Clause | Title | Release | | Applicability | | Additional Information | |
|----------------|--|---------------------------------|-----------|---------------------------------|---|------------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.1.20.2 | FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | | |
| 9.1.21.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | | |
| 9.1.21_1 | TDD RSRP Accuracy for E- UTRAN Carrier Aggregation for 5MHz + 5MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | | |
| 9.1.21.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | | |
| 9.1.24.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | | |
| 9.1.24.1 _1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------|---|---------|-----------|---|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.24.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | |
| 9.2.1.1 | FDD Intra Frequency Absolute RSRQ Accuracy | Rel-8 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.2.2.1 | TDD Intra Frequency Absolute RSRQ Accuracy | Rel-8 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.2.3.1 | FDD - FDD Inter Frequency Absolute RSRQ Accuracy | Rel-8 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.2.3.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRQ | Rel-8 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4.1 | TDD - TDD Inter Frequency Absolute RSRQ Accuracy | Rel-8 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4.2 | TDD -TDD Inter Frequency Relative Accuracy of RSRQ | Rel-8 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4A.1 | FDD - TDD Inter Frequency Absolute RSRQ Accuracy | Rel-9 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4A.2 | FDD - TDD Inter Frequency Relative Accuracy of RSRQ | Rel-9 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.5.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |

| Clause | Title | Release | | Applicability | | Information |
|----------|--|---------|-----------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.5.2 | FDD Relative RSRQ Accuracy E- UTRA for Carrier Aggregation | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | |
| 9.2.6.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |
| 9.2.6.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.2.7.1 | FDD RSRQ under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.2.8.1 | TDD RSRQ under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.2.9.1 | FDD Absolute RSRQ under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.2.10.1 | TDD Absolute RSRQ under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.2.11.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------|---|---------|-----------|--|---|-------------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.11.2 | FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | 1001 |
| 9.2.12.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |
| 9.2.12.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.2.13.1 | FDD RSRQ Accuracy under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felClC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling | | |
| 9.2.14.1 | TDD RSRQ Accuracy under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (felCIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling | | |
| 9.2.17.1 | FDD Intra Frequency Absolute RSRQ Accuracy for 5MHz Bandwidth | Rel-8 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.2.18.1 | FDD - FDD Inter Frequency Absolute RSRQ Accuracy for 5MHz Bandwidth | Rel-8 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.2.18.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRQ for 5MHz Bandwidth | Rel-8 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------|--|---------|-----------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.19.1 | FDD-FDD Inter Frequency absolute WB-RSRQ | Rel-11 | C01h | UE supporting E-UTRA FDD and WB-RSRQ measurement and Feature Group Indicators 16 and 25 | | |
| 9.2.20.1 | TDD-TDD Inter Frequency absolute WB-RSRQ | Rel-11 | C02h | UE supporting E-UTRA TDD and WB-RSRQ measurement and Feature Group Indicators 16 and 25 | | |
| 9.2.21.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |
| 9.2.21.2 | FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | |
| 9.2.22.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |
| 9.2.22.2 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.2.23.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |

| Clause | Title | Release | | Applicability | Additional | Information |
|----------|---|---------|-----------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.23.2 | FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | |
| 9.2.24.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |
| 9.2.24.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.2.27.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz+10MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |
| 9.2.27.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz+10MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.3.1 | E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 9.3.2 | E-UTRAN TDD - UTRA FDD CPICH RSCP absolute accuracy | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 9.3.3 | E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy for 5MHz bandwidth | Rel-8 | C52 | UE supporting E-UTRA FDD and E-UTRA Band 31 and UTRA FDD | | |
| 9.4.1 | E-UTRAN FDD - UTRA FDD CPICH Ec/No absolute accuracy | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |

| Clause | Title | Release | | Applicability | Additional | Information |
|---------------|--|---------------------------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.4.2 | E-UTRAN TDD - UTRA FDD CPICH Ec/No absolute accuracy | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 9.4.3 | E-UTRAN FDD - UTRA FDD CPICH Ec/No absolute accuracy for 5MHz bandwidth | Rel-8 | C52 | UE supporting E-UTRA FDD and E-UTRA Band 31 and UTRA FDD | | |
| 9.6.1 | GSM RSSI accuracy for E- UTRAN FDD | Rel-9 | C08g | UE supporting E-UTRA FDD and GSM and Feature Group Indicator 16 and 23 | | |
| 9.6.2 | GSM RSSI accuracy for E- UTRAN TDD | Rel-9 | C09h | UE supporting E-UTRA TDD and GSM and Feature Group Indicator 16 and 23 | | |
| 9.9.1.1 | FDD Intra Frequency Serving Cell Absolute RSRP Accuracy | Rel-10 and Rel-11 only | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.9.1.1_ 1 | FDD Intra Frequency Serving Cell Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.9.1.2 | FDD Intra Frequency Serving Cell Absolute RSRQ Accuracy | Rel-10 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.9.2.1 | TDD Intra Frequency Serving Cell Absolute RSRP Accuracy | Rel-10 and Rel-11 only | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.9.2.1_ 1 | TDD Intra Frequency Serving Cell Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.9.2.2 | TDD Intra Frequency Serving Cell Absolute RSRQ Accuracy | Rel-10 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |

Table 4.2-1a: Applicability of RRM conformance test cases Conditions

| C01 | IF A.4.1-1/1 THEN R ELSE N/A |
|--------------|---|
| C01a | IF (A.4.1-1/1 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C01b | IF (A.4.1-1/1 AND A.4.4-1/25) THEN R ELSE N/A |
| C01c | IF (A.4.1-1/1 AND A.4.4-1/5) THEN R ELSE N/A |
| C01d C01e | IF (A.4.1-1/1 AND A.4.4-1/5 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A |
| C01e | IF (A.4.1-1/1 AND A.4.4-1/16) THEN R ELSE N/A |
| C01g | IF (A.4.1-1/1 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C01h | IF (A.4.1-1/1 AND A.4.4-1/16 AND A.4.4-1/25 AND A.4.5-1/7) THEN R ELSE N/A |
| C02 | IF A.4.1-1/2 THEN R ELSE N/A |
| C02a | IF (A.4.1-1/2 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C02b | IF (A.4.1-1/2 AND A.4.4-1/25) THEN R ELSE N/A |
| C02c | IF (A.4.1-1/2 AND A.4.4-1/5) THEN R ELSE N/A |
| C02d | IF (A.4.1-1/2 AND A.4.4-1/5 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C02e | IF (A.4.1-1/2 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A |
| C02f | IF (A.4.1-1/2 AND A.4.4-1/16) THEN R ELSE N/A |
| C02g | IF (A.4.1-1/2 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C02h | IF (A.4.1-1/2 AND A.4.4-1/16 AND A.4.4-1/25 AND A.4.5-1/7) THEN R ELSE N/A |
| C03 | IF (A.4.1-1/1 AND A.4.1-1/2) THEN R ELSE N/A |
| C04 | IF (A.4.1-1/1 AND A.4.1-1/3) THEN R ELSE N/A |
| C04a | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C04b | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/22) THEN R ELSE N/A |
| C04c C04d | Void IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C04d | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/22 AND A.4.4-1/25) THEN R ELSE N/A |
| C04f | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/5 AND A.4.4-1/19 AND A.4.4-1/22) THEN R ELSE N/A |
| C04g | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C05 | IF (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A |
| C05a | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C05b | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-1/25) THEN R ELSE N/A |
| C05c | Void |
| C05d | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/25) THEN R ELSE N/A |
| C05e | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/22 AND A.4.4-1/25) THEN R ELSE N/A |
| C06 | IF (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A |
| C06a | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C06b | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C07 | IF (A.4.1-1/2 AND A.4.1-1/3) THEN R ELSE N/A |
| C07a C07b | IF (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C076 | Void |
| C076 | IF (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A |
| C08a | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/9 AND A.4.4-1/23) THEN R ELSE N/A |
| C08b | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/23 AND A.4.4-1/25) THEN R ELSE N/A |
| C08c | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/22) THEN R ELSE N/A |
| C08d | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C08e | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/9 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C08f | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSÉ N/A |
| C08g | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/16 AND A.4.4-1/23) THEN R ELSE N/A |
| C09 | IF (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A |
| C09a | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/23 AND A.4.4-1/25) THEN R ELSE N/A |
| C09b | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/9 AND A.4.4-1/23) THEN R ELSE N/A |
| C09c | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/22) THEN R ELSE N/A |
| C09d | Void |
| C09e | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C09f C09g | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/9 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C09g | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/16 AND A.4.4-1/23) THEN R ELSE N/A |
| C10 | IF (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1/16 AND A.4.4-1/23) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/6) THEN R ELSE N/A |
| C10a | IF (A.4.1-1/1 AND A.4.1-1/6 AND A.4.4-1/12 AND A.4.4-1/26) THEN R ELSE N/A |
| C11 | IF (A.4.1-1/1 AND A.4.1-1/7) THEN R ELSE N/A |
| C11a | IF (A.4.1-1/1 AND A.4.1-1/7 AND A.4.4-1/11 AND A.4.4-1/24) THEN R ELSE N/A |
| C12 | Void |
| C13 | IF (A.4.1-1/1 AND A.4.5-1/1 AND A.4.5-1/2) THEN R ELSE N/A |
| C14 | IF (A.4.1-1/1 AND A.4.5-1/1 AND A.4.5-1/3) THEN R ELSE N/A |
| C15 | IF (A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/2) THEN R ELSE N/A |
| | |

| C16 | IF (A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/3) THEN R ELSE N/A |
|--------------|---|
| C17 | Void |
| C18 | IF (A.4.1-1/1 AND A.4.2-1/2) THEN R ELSE N/A |
| C19 | IF (A.4.1-1/2 AND A.4.2-1/2) THEN R ELSE N/A |
| C20 | Void |
| C21 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/5 AND A.4.4-1/25 AND A.4.4-1/30) THEN R ELSE N/A |
| C22 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/25) THEN R ELSE N/A |
| C23 | IF (A.4.1-1/1 AND NOT A.4.4-1/5) THEN R ELSE N/A |
| C24 | IF (A.4.1-1/2 AND NOT A.4.4-1/5) THEN R ELSE N/A |
| C25 | IF (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A |
| C26 | IF (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A |
| C27 | IF (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A |
| C28 | IF (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A |
| C29 | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15) THEN R ELSE N/A |
| C30 | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15) THEN R ELSE N/A |
| C31 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/15) THEN R ELSE N/A |
| C32 | IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-3/111) THEN R ELSE N/A |
| C32a | Void |
| C32b | IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-3/25) THEN R ELSE N/A |
| C33 | IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3/111) THEN R ELSE N/A |
| C33a C33b | Void IE (A 4.1.1/2 AND A 4.2.1/2 AND A 4.4.2/25) THEN B ELSE N/A |
| C33b | IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3/25) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.1-1/6) THEN R ELSE N/A |
| C35 | IF (A.4.1-1/2 AND A.4.1-1/6) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.1-1/7) THEN R ELSE N/A |
| C36 | IF (A.4.1-1/2 AND A.4.1-1/7) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.1-1/6 AND A.4.4-1/12 AND A.4.4-1/26) THEN R ELSE N/A |
| C37 | IF (A.4.1-1/2 AND A.4.1-1/7 AND A.4.4-1/11 AND A.4.4-1/24) THEN R ELSE N/A |
| C38 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/4 AND A.4.4-1/25) THEN R ELSE N/A |
| C39 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/3 AND A.4.4-1/25) THEN R ELSE N/A |
| C40 | IF (A.4.1-1/2 AND A.4.1-1/6 AND A.4.4-1/15) THEN R ELSE N/A |
| C41 | IF (A.4.1-1/2 AND A.4.1-1/7 AND A.4.4-1/15) THEN R ELSE N/A |
| C42 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C43 | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.2-1/2 AND A.4.4-1/15) THEN R ELSE N/A |
| C44 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.2-1/2 AND A.4.4-1/15) THEN R ELSE N/A |
| C45 | IF (A.4.1-1/1 AND A.4.4-3/115) THEN R ELSE N/A |
| C46 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A |
| C47 | IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A |
| C48 | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A |
| C49 | IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A |
| C50 | IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A |
| C51 | IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C52 | IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A |
| C53 | IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A |
| C54 | IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C55 | IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C56 | IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A |
| C57 | IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R |
| 050 | ELSE N/A |
| C58 | IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R |
| C59 | ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1) THEN R ELSE N/A |
| C60 | IF (A.4.1-1/1 AND A.4.5-2/1) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2) THEN R ELSE N/A |
| C60 | IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2) THEN R ELSE N/A IF (A.4.1-1/1 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |
| 001 | A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3) THEN R ELSE N/A |
| C62 | IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1)) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |
| 002 | A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3) THEN R ELSE N/A |
| C63 | IF (A.4.1-1/1 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |
| | A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1/5) THEN R ELSE N/A |
| C64 | IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |
| | A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1/5) THEN R ELSE N/A |
| _ | |

Table 4.2-1b: Number of TC Executions - Notes

Note 1: The Carrier Aggregation TCs verify the same core requirement(s) however with different channel bandwidth configurations, this according to the guidance in TS 36.521-3, Annex C.3.3 [2].

Annex A (normative): ICS proforma for E-UTRA User Equipment

Notwithstanding the provisions of the copyright related to the text of the present document, The Organizational Partners of 3GPP grant that users of the present document may freely reproduce the ICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed ICS.

A.1 Guidance for completing the ICS proforma

A.1.1 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in relevant specifications may provide information about the implementation in a standardised manner.

The ICS proforma is subdivided into clauses for the following categories of information:

- instructions for completing the ICS proforma;
- identification of the implementation;
- identification of the protocol;
- ICS proforma tables (for example: UE implementation types, Teleservices, etc).

A.1.2 Abbreviations and conventions

The ICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [4].

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Reference column

The reference column gives reference to the relevant 3GPP core specifications.

Release column

The release column indicates the earliest release from which the capability or option is relevant.

Comments column

This column is left blank for particular use by the reader of the present document.

References to items

For each possible item answer (answer in the support column) within the ICS proforma there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.4.1-1/2 is the reference to the answer of item 2 in table A.4.1-1.

A.1.3 Instructions for completing the ICS proforma

The supplier of the implementation may complete the ICS proforma in each of the spaces provided. More detailed instructions are given at the beginning of the different clauses of the ICS proforma.

A.2 Identification of the User Equipment

Identification of the User Equipment should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

| A.2.1 | Date of the statement |
|------------------|-----------------------|
| A.2.2 UEUT name | |
| Hardware co | onfiguration: |
| Software co | nfiguration: |
| A.2.3 Name: | Product supplier |
| Address: | |
| Telephone r | number: |
| Facsimile n | umber: |
| E-mail addr | ess: |

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A.3 Identification of the protocol

This ICS proforma applies to the 3GPP standards listed in the normative references clause of the present document.

A.4 ICS proforma tables

A.4.1 UE Implementation Types

Table A.4.1-1: UE Radio Technologies

| Item | UE Radio Technologies | Ref. | Release | Comments |
|------|-----------------------|-----------|---------|----------|
| 1 | E-UTRA FDD | 36.101 | Rel-8 | |
| 2 | E-UTRA TDD | 36.101 | Rel-8 | |
| 3 | UTRA FDD | 25.101 | Rel-8 | |
| 4 | UTRA TDD | 25.102 | Rel-8 | |
| 5 | GSM | 45.005 | Rel-8 | |
| 6 | cdma2000 HRPD | C.S0024-A | Rel-8 | |
| 7 | cdma2000 1xRTT | C.S0002-A | Rel-8 | |

A.4.2 UE Service Capabilities

Table A.4.2-1: UE Radio Technologies

| Item | UE Radio Technologies | Ref. | Release | Comments |
|------|-------------------------|---------------------------------|---------|----------|
| 1 | LTE MBMS | 36.101 | Rel-9 | |
| 2 | LTE CA | 36.101 | Rel-10 | |
| 3 | UL-MIMO | 36.306 subclause 4.3.4.6 | Rel-10 | |
| 4 | eDL-MIMO | 36.306 subclause 4.3.4.7 | Rel-10 | |
| 5 | Enhanced Dual Layer TDD | 36.306 subclause 4.3.4.5 | Rel-9 | |
| 6 | EPDCCH | 36.306 subclause 4.3.4.18 | Rel-11 | |

A.4.3 Baseline Implementation Capabilities

Table A.4.3-1: Supported protocols

| Item | Supported protocols | Ref. | Release | Comments |
|------|----------------------------------|-----------|---------|----------|
| 1 | EPS Mobility Management | 24.301, 5 | Rel-8 | |
| 2 | EPS Session Management | 24.301, 6 | Rel-8 | |
| 3 | GPRS Mobility Management | 23.060 | R99 | |
| 4 | Radio Resource Control | 36.331 | Rel-8 | |
| 5 | Packet Data Convergence Protocol | 36.323 | Rel-8 | |
| 6 | Radio Link Control | 36.322 | Rel-8 | |
| 7 | Medium Access Control | 36.321 | Rel-8 | |
| 8 | Physical Layer | 36.201, | Rel-8 | |
| | | 36.302 | | |

Table A.4.3-2: Special Conformance Testing Functions

| Item | Special Conformance Testing Functions | Ref. | Release | Comments |
|------|--|--------|---------|----------|
| 1 | UE test loop | 36.509 | Rel-8 | |
| | Max UE test loop UL RLC SDU size 65535 | 36.509 | Rel-8 | |
| | bits | | | |

Table A.4.3-3: RF Baseline Implementation Capabilities

| Item RF Baseline Implementation Capabilities | | Release | Comments |
|--|---|--|--|
| Frequency band: 1920-1980, 2110-2170 MHz | 36.101, 5.5 | Rel-8 | FDD Band 1 |
| Frequency band: 1850-1910, 1930-1990 MHz | 36.101, 5.5 | Rel-8 | FDD Band 2 |
| Frequency band: 1710-1785, 1805-1880 MHz | 36.101, 5.5 | Rel-8 | FDD Band 3 |
| Frequency band: 1710-1755, 2110-2155 MHz | 36.101, 5.5 | Rel-8 | FDD Band 4 |
| Frequency band: 824-849, 869-894 MHz | 36.101, 5.5 | Rel-8 | FDD Band 5 |
| Frequency band: 830-840, 875-885 MHz | 36.101, 5.5 | Rel-8 | FDD Band 6 |
| Frequency band: 2500-2570, 2620-2690 MHz | 36.101, 5.5 | Rel-8 | FDD Band 7 |
| Frequency band: 880-915, 925-960 MHz | 36.101, 5.5 | Rel-8 | FDD Band 8 |
| Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz | 36.101, 5.5 | Rel-8 | FDD Band 9 |
| Frequency band: 1710-1770, 2110-2170 MHz | 36.101, 5.5 | Rel-8 | FDD Band 10 |
| Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz | 36.101, 5.5 | Rel-8 | FDD Band 11 |
| Frequency band: 699-716, 729-746 MHz | 36.101, 5.5 | Rel-8 | FDD Band 12 |
| Frequency band: 777-787, 746-756 MHz | 36.101, 5.5 | Rel-8 | FDD Band 13 |
| | 36.101, 5.5 | Rel-8 | FDD Band 14 |
| Reserved | 36.101, 5.5 | Rel-8 | FDD Band 15 |
| Reserved | 36.101, 5.5 | Rel-8 | FDD Band 16 |
| Frequency band: 704-716, 734-746 MHz | 36.101, 5.5 | Rel-8 | FDD Band 17 |
| Frequency band: 815-830, 860-875 MHz | 36.101, 5.5 | Rel-9 | FDD Band 18 |
| Frequency band: 830-845, 875-890 MHz | 36.101, 5.5 | Rel-9 | FDD Band 19 |
| Frequency band: 832-862, 791-821MHz | 36.101, 5.5 | Rel-9 | FDD Band 20 |
| Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz | 36.101, 5.5 | Rel-9 | FDD Band 21 |
| Frequency band: 3410-3490, 3510-3590 MHz | 36.101, 5.5 | Rel-10 | FDD Band 22 |
| Frequency band: 2000-2020, 2180-2200 MHz | 36.101, 5.5 | Rel-10 | FDD Band 23 |
| Frequency band: 1626.5-1660.5, 1525-1559 MHz | 36.101, 5.5 | Rel-10 | FDD Band 24 |
| | 36.101, 5.5 | Rel-10 | FDD Band 25 |
| Frequency band: 814-849, 859-894 MHz | 36.101, 5.5 | Rel-11 | FDD Band 26 |
| Frequency band: 807-824, 852-869 MHz | 36.101, 5.5 | Rel-11 | FDD Band 27 |
| Frequency band: 703-748, 758-803 MHz | 36.101, 5.5 | Rel-11 | FDD Band 28 |
| | 36.101, 5. 5 | Rel-11 | FDD Band 29 |
| Frequency band: 2305-2315, 2350-2360 MHz | 36.101, 5.5 | Rel-12 | FDD Band 30 |
| Frequency band: 452.5-457.5, 462.5-467.5 MHz | 36.101, 5.5 | Rel-12 | FDD Band 31 |
| | | | |
| | 36.101, 5.5 | Rel-8 | TDD Band 33 |
| | 36.101, 5.5 | Rel-8 | TDD Band 34 |
| Frequency band: 1850-1910, 1850-1910 MHz | 36.101, 5.5 | Rel-8 | TDD Band 35 |
| | 36.101, 5.5 | Rel-8 | TDD Band 36 |
| | 36.101, 5.5 | Rel-8 | TDD Band 37 |
| | 36.101, 5.5 | Rel-8 | TDD Band 38 |
| | 36.101, 5.5 | Rel-8 | TDD Band 39 |
| | 36.101, 5.5 | Rel-8 | TDD Band 40 |
| Frequency band: 2496-2690, 2496-2690 MHz | 36.101, 5.5 | Rel-10 | TDD Band 41 |
| , | 36.101, 5.5 | Rel-10 | TDD Band 42 |
| · · · | 36.101, 5.5 | Rel-10 | TDD Band 43 |
| Frequency band: 703-803, 703-803 MHz | 36.101, 5.5 | Rel-11 | TDD Band 44 |
| | Frequency band: 1920-1980, 2110-2170 MHz Frequency band: 1850-1910, 1930-1990 MHz Frequency band: 1710-1785, 1805-1880 MHz Frequency band: 1710-1755, 2110-2155 MHz Frequency band: 824-849, 869-894 MHz Frequency band: 824-849, 869-894 MHz Frequency band: 2500-2570, 2620-2690 MHz Frequency band: 880-915, 925-960 MHz Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz Frequency band: 1710-1770, 2110-2170 MHz Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz Frequency band: 699-716, 729-746 MHz Frequency band: 777-787, 746-756 MHz Frequency band: 788-798, 758-768 MHz Frequency band: 788-798, 758-768 MHz Frequency band: 830-845, 875-890 MHz Frequency band: 830-845, 875-890 MHz Frequency band: 832-862, 791-821MHz Frequency band: 3410-3490, 3510-3590 MHz Frequency band: 1626.5-1660.5, 1525-1559 MHz Frequency band: 1850-1915, 1930-1995 MHz Frequency band: 818-834, 859-894 MHz Frequency band: 817-849, 859-894 MHz Frequency band: 818-849, 859-894 MHz Frequency band: 818-849, 859-894 MHz Frequency band: 1850-1915, 1930-1995 MHz Frequency band: 1850-1915, 1930-1995 MHz Frequency band: 1850-1915, 1930-1995 MHz Frequency band: 1800-2020, 2180-2200 MHz Frequency band: 1850-1915, 1930-1995 MHz Frequency band: 1850-1910, 1850-1910 MHz Frequency band: 1900-1920, 1900-1920 MHz Frequency band: 1900-1920, 1900-1920 MHz Frequency band: 1900-1920, 1900-1920 MHz Frequency band: 2010-2025, 2010-2025 MHz Frequency band: 1850-1910, 1850-1910 MHz Frequency band: 1900-1920, 1900-1920 MHz Frequency band: 2500-2620, 2570-2620 MHz Frequency band: 2570-2620, 2570-2620 MHz Frequency band: 2496-2690, 2496-2690 MHz Frequency band: 3400-3600, 3400-3600 MHz Frequency band: 3400-3600, 3400-3600 MHz Frequency band: 3400-3600, 3400-3600 MHz Frequency band: 3600-3800, 3600-3800 MHz | Frequency band: 1920-1980, 2110-2170 MHz 36.101, 5.5 Frequency band: 1850-1910, 1930-1990 MHz 36.101, 5.5 Frequency band: 1710-1785, 1805-1880 MHz 36.101, 5.5 Frequency band: 1710-1755, 2110-2155 MHz 36.101, 5.5 Frequency band: 824-849, 869-894 MHz 36.101, 5.5 Frequency band: 824-849, 869-894 MHz 36.101, 5.5 Frequency band: 820-8270, 2620-2690 MHz 36.101, 5.5 Frequency band: 880-915, 925-960 MHz 36.101, 5.5 Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz 36.101, 5.5 Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz 36.101, 5.5 Frequency band: 1749.9-1784.9, 1475.9-1495.9 MHz 36.101, 5.5 Frequency band: 699-716, 729-746 MHz 36.101, 5.5 Frequency band: 777-787, 746-756 MHz 36.101, 5.5 Frequency band: 788-798, 758-768 MHz 36.101, 5.5 Reserved 36.101, 5.5 Reserved 36.101, 5.5 Frequency band: 704-716, 734-746 MHz 36.101, 5.5 Frequency band: 815-830, 860-875 MHz 36.101, 5.5 Frequency band: 815-830, 860-875 MHz 36.101, 5.5 Frequency band: 830-845, 875-890 MHz 36.101, 5.5 Frequency band: 3410-3490, 3510-3590 MHz 36.101, 5.5 Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz 36.101, 5.5 Frequency band: 1626.5-1660.5, 1525-1559 MHz 36.101, 5.5 Frequency band: 1626.5-1660.5, 1525-1559 MHz 36.101, 5.5 Frequency band: 1800-2020, 2180-2200 MHz 36.101, 5.5 Frequency band: 1800-2020, 2180-2200 MHz 36.101, 5.5 Frequency band: 1800-1915, 1930-1995 MHz 36.101, 5.5 Frequency band: 1800-1920, 1900-1920 MHz 36.101, 5.5 Frequency band: 1900-1920, 1900-1920 MHz 36.101, 5.5 Frequency band: 1800-1920, 1900-1920 MHz 36.101, 5.5 Frequency band: 2570-2620, 2570-2620 MHz 36. | Frequency band: 1920-1980, 2110-2170 MHz 36.101, 5.5 Rel-8 Frequency band: 1850-1910, 1930-1990 MHz 36.101, 5.5 Rel-8 Frequency band: 1710-1785, 1805-1880 MHz 36.101, 5.5 Rel-8 Frequency band: 1710-1755, 2110-2155 MHz 36.101, 5.5 Rel-8 Frequency band: 824-849, 869-894 MHz 36.101, 5.5 Rel-8 Frequency band: 824-849, 869-894 MHz 36.101, 5.5 Rel-8 Frequency band: 830-840, 875-885 MHz 36.101, 5.5 Rel-8 Frequency band: 2500-2570, 2620-2690 MHz 36.101, 5.5 Rel-8 Frequency band: 2500-2570, 2620-2690 MHz 36.101, 5.5 Rel-8 Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz 36.101, 5.5 Rel-8 Frequency band: 1710-1770, 2110-2170 MHz 36.101, 5.5 Rel-8 Frequency band: 17427.9-1447.9, 1475.9-1495.9 MHz 36.101, 5.5 Rel-8 Frequency band: 699-716, 729-746 MHz 36.101, 5.5 Rel-8 Frequency band: 777-787, 746-756 MHz 36.101, 5.5 Rel-8 Frequency band: 777-787, 746-756 MHz 36.101, 5.5 Rel-8 Reserved 36.101, 5.5 Rel-8 Reserved 36.101, 5.5 Rel-8 Reserved 36.101, 5.5 Rel-8 Frequency band: 788-798, 758-768 MHz 36.101, 5.5 Rel-8 Frequency band: 815-830, 860-875 MHz 36.101, 5.5 Rel-8 Frequency band: 832-862, 791-821MHz 36.101, 5.5 Rel-9 Frequency band: 832-862, 791-821MHz 36.101, 5.5 Rel-9 Frequency band: 3410-3490, 3510-3590 MHz 36.101, 5.5 Rel-9 Frequency band: 3410-3490, 3510-3590 MHz 36.101, 5.5 Rel-9 Frequency band: 360-9145, 1930-1995 MHz 36.101, 5.5 Rel-10 Frequency band: 807-824, 852-869 MHz 36.101, 5.5 Rel-10 Frequency band: 807-824, 852-869 MHz 36.101, 5.5 Rel-11 Frequency band: 807-824, 852-869 MHz 36.101, 5.5 Rel-11 Frequency band: 1462-5145, 2350-2360 MHz 36.101, 5.5 Rel-11 Frequency band: 1479-1462.9, 1495-9-1510.9 MHz 36.101, 5.5 Rel-11 Frequency band: 1467-91462.9, 1495-9-1510.9 MHz 36.101, 5.5 Rel-11 Frequency band: 1467-91462.9, 1495-9-1510.9 MHz 36.101, 5.5 Rel-11 Frequency band: 1467-91462.9 MHz 36.101, 5.5 Rel-11 Frequency band: 1467-91462.9 MHz 36.101, 5.5 Rel-11 Frequency band: 1468-9149, 3510-3590 MHz 36.101, 5.5 Rel-11 Frequency band: 1468-9149, 3510-3590 MHz 36.101, 5.5 Rel-11 Frequency band: 1468-9149, 350-250 MHz 3 |

Note: The values indicated in column "Release" are to be understood as the specifications release version in which a band was introduced and not as a mandate that a UE conforming to particular release shall support a particular band. For further guidance to release independent bands see TS 36.307 [16]

Table A.4.3-3a: RF Additional Baseline Implementation Capabilities

| Item | RF Additional Baseline Implementation Capabilities | Ref. | Comments |
|------|---|------------------|--|
| 1 | Support of 1.4 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 1.4 MHz Bandwidth: 2, 3, 4, 5, 8, 12, 23, 25, 26, 27, 31, 35, 36 |
| 2 | Support of 3 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 3 MHz Bandwidth: 2, 3, 4, 5, 8, 12, 23, 25, 26, 27, 28, 31, 35, 36, 44 |
| 3 | Support of 5 MHz channel bandwidth | 36.101, 5.6.1 | All operating bands support 5 MHz Bandwidth |
| 4 | Support of 10 MHz channel bandwidth | 36.101, 5.6.1 | All operating bands support 10 MHz Bandwidth except band 31 |
| 5 | Support of 15 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 15 MHz Bandwidth: 1, 2, 3, 4, 7, 9, 10, 18, 19, 20, 21, 22, 23, 25, 26, 28, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 |
| 6 | Support of 20 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 20MHz Bandwidth: 1, 2, 3, 4, 7, 9, 10, 20, 22, 23, 25, 28, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 |

Table A.4.3-3b: Additional UE Power Class implementation Capabilities

| Item | RF baseline UE Baseline implementation capability | Ref. | Comments |
|------|---|---------|-----------------------|
| 1 | UE Power Class 1 | 36.101, | Applicable to Band 14 |
| | | 6.2.2 | |
| 2 | UE Power Class 3 | 36.101, | All applicable E-UTRA |
| | | 6.2.2 | bands |

Table A.4.3-4: UE Category

| Item | UE Category | Ref. | Release | Comments |
|------|-------------|-------------|---------|-------------------------|
| 1 | Category 1 | 36.306, 4.1 | Rel-8 | |
| 2 | Category 2 | 36.306, 4.1 | Rel-8 | |
| 3 | Category 3 | 36.306, 4.1 | Rel-8 | |
| 4 | Category 4 | 36.306, 4.1 | Rel-8 | |
| 5 | Category 5 | 36.306, 4.1 | Rel-8 | Support for 64QAM in UL |
| 6 | Category 6 | 36.306, 4.1 | Rel-10 | |
| 7 | Category 7 | 36.306, 4.1 | Rel-10 | |
| 8 | Category 8 | 36.306, 4.1 | Rel-10 | Support for 64QAM in UL |
| 9 | Category 9 | 36.306, 4.1 | Rel-11 | |
| 10 | Category 10 | 36.306, 4.1 | Rel-11 | |

Table A.4.3-5: Void

Table A.4.3-6: Void

Table A.4.3-7: Additional capabilities

| Item | Additional capabilities | Ref. | Release | Comments |
|------|--|----------|---------|--------------------------|
| 1 | Enhanced performance requirements type A for | 36.101, | Rel-11 | Support for Enhanced |
| | LTE | Clause 8 | | performance requirements |
| | | | | type A |

Table A.4.3-8: Void

A.4.4 Feature group indicators

In Table A.4.4-1, a 'VoLTE capable UE' corresponds to a UE that is capable of the "Voice domain preference for E-UTRAN" defined in TS 24.301 [15] being set to "IMS PS voice only", "IMS PS voice preferred, CS voice as secondary" or "CS voice preferred, IMS PS voice as secondary" (Ref TS 36.331 [14], clause B.1).

Note 1: From Rel-11 onwards 3GPP TSG RAN has discontinued the usage of FGI bits. Instead it has introduced a different mechanism to accomplish the same purposes based on the principles described in TS 36.306 [17] clause 4. This new principles where applicable have been catered for in section A.4.5, e.g. Table A.4.5-2.

Table A.4.4-1: Feature group indicators 1-32

| Iten | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|-------|---|---------|-------------------|---------------|---|
| 1 | Support of - Intra-subframe frequency hopping for PUSCH scheduled by UL grant - DCI format 3a (TPC commands for PUCCH and PUSCH with single bit power adjustments) - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 – UE selected subband CQI without PMI - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 – UE selected subband CQI with multiple PMI | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_1 | Corresponding to the Index of Indicator, the leftmost binary bit 1. Set to true if supporting all functionalities in the feature group. |
| 2 | Support of - Simultaneous CQI and ACK/NACK on PUCCH, i.e. PUCCH format 2a and 2b - Absolute TPC command for PUSCH - Resource allocation type 1 for PDSCH - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 – UE selected subband CQI without PMI - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 – UE selected subband CQI with single PMI | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_2 | Corresponding to the Index of Indicator, the leftmost binary bit 2. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|---|---|----------------|-------------------|---------------|---|
| 3 | Support of - Semi-persistent scheduling - TTI bundling - 5bit RLC UM SN - 7bit PDCP SN Support of - 5bit RLC UM SN - 7bit PDCP SN | UE has set bit number 7 to 1. | Yes, if UE supports VoLTE Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN. | Rel-9, | 36.331, Annex B.1 | pc_FeatrGrp_3 | Corresponding to the Index of Indicator, the Ieftmost binary bit 3. Set to true if supporting all functionalities in the feature group. |
| 4 | Support of - Short DRX cycle | - can only be set to 1 if the UE has set bit number 5 to 1. | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_4 | Corresponding to the Index of Indicator, the leftmost binary bit 4. Set to true if supporting all functionalities in the feature group. |
| 5 | Support of - Long DRX cycle - DRX command MAC control element | | Yes | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_5 | Corresponding to the Index of Indicator, the leftmost binary bit 5. Set to true if supporting all functionalities in the feature group. |
| 6 | Support of - Prioritized bit rate | | Yes | Rel-8 Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_6 | Corresponding to the Index of Indicator, the Ieftmost binary bit 6. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be | Release | Ref. | Mnemonic | Comments |
|------|---|---|--|--------------------|-------------------|----------------|--|
| | | | implemented and successfully tested for the corresponding release | | | | |
| 7 | Support of - RLC UM | - can only be set to 0 if the UE does not | | | 36.331, Annex B.1 | pc_FeatrGrp_7 | Corresponding to the Index of Indicator, the leftmost binary bit 7. |
| | | support | Yes, if UE | Rel-9 | | | Set to true if supporting |
| | | voice | supports VoLTE Yes, if UE | Rel-11 | | | all functionalities in the feature group. |
| | | | supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN. | Kei-11 | | | reature great |
| 8 | Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH PS handover | - can only be set to 1 if the UE has set | 021000 | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_8 | Corresponding to the Index of Indicator, the leftmost binary bit 8. |
| | Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH PS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD | bit number 22 to 1 | Yes, if UE supports UTRA | Rel-9 | | | Set to true if supporting all functionalities in the feature group. |
| | - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD | | | | | | |
| 9 | Support of - EUTRA RRC_CONNECTED to GERAN GSM_Dedicated handover | - related to SR-VCC - can only be | | Rel-8 to Rel-10 | 36.331, Annex B.1 | pc_FeatrGrp_9 | Corresponding to the Index of Indicator, the leftmost binary bit 9. |
| | | | Yes, if UE supports SRVCC to EUTRAN from GERAN. | Rel-11 | | | Set to true if supporting all functionalities in the feature group. |
| 10 | Support of - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order with NACC (Network Assisted Cell Change) | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_10 | Corresponding to the Index of Indicator, the leftmost binary bit 10. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|--|---|----------------|-------------------|----------------|--|
| | Support of - EUTRA RRC_CONNECTED to CDMA2000 1xRTT CS Active handover | - can only be set to 1 if the UE has sets bit number 24 to 1 | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_11 | Corresponding to the Index of Indicator, the leftmost binary bit 11. Set to true if supporting all functionalities in the feature group. |
| 12 | Support of - EUTRA RRC_CONNECTED to CDMA2000 HRPD Active handover | - can only be set to 1 if the UE has set bit number 26 to 1 | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_12 | Corresponding to the Index of Indicator, the leftmost binary bit 12. Set to true if supporting all functionalities in the feature group. |
| 13 | Support of - Inter-frequency handover (within FDD or TDD) | - can only be set to 1 if the UE has set bit number | Yes, unless UE | Rel-8 Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_13 | Corresponding to the Index of Indicator, the leftmost binary bit 13. Set to true if supporting |
| | | 25 to 1 | only supports band 13 | | | | all functionalities in the feature group. |
| 14 | Support of | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_14 | Corresponding to the |
| | Measurement reporting event: Event A4 - Neighbour > threshold Measurement reporting event: Event A5 - Serving < threshold1 & Neighbour > threshold2 | | Yes | Rel-9 | | | Index of Indicator, the leftmost binary bit 14. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated | Release | Ref. | Mnemonic | Comments |
|--------|--|------------------------------|-----------------------------|---------|-------------------|----------------|--|
| 110111 | Additional information | 140103 | "Yes" the | Reicase | Non. | Milicinomic | Comments |
| | | | feature shall be | | | | |
| | | | implemented | | | | |
| | | | and | | | | |
| | | | successfully tested for the | | | | |
| | | | corresponding | | | | |
| | | | release | | | | |
| 15 | Support of | - can only be | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_15 | Corresponding to the |
| | - Measurement reporting event: Event B1 - Neighbour > threshold for | set to 1 if the | | | | | Index of Indicator, the |
| | UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN | UE has set at least one | | | | | leftmost binary bit 15. |
| | FDD or only UTRAN TDD and has set bit number 22 to 1 | - 6 41 1-14 | | Rel-9 | | | Set to true if supporting all functionalities in the |
| | - Measurement reporting event: Event B1 - Neighbour > threshold for | | UE supports | | | | feature group. |
| | UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and | | only UTRAN FDD and does | | | | group. |
| | UTRAN TDD and has set bit number 22 or 39 to 1, respectively | 39 to 1. | not support | | | | |
| | | - even if the | UTRAN TDD or | | | | |
| | Measurement reporting event: Event B1 - Neighbour > threshold for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, | UE sets bits 41, it shall | GERAN or | | | | |
| | respectively | still set bit 15 | 1xRTT or HRPD | | | | |
| | respectively | to 1 if | | | | | |
| | | measureme | | | | | |
| | | nt reporting | | | | | |
| | | event B1 is | | | | | |
| | | tested for all RATs | | | | | |
| | | supported by | | | | | |
| | | UE | | | | | |
| 16 | Support of | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_16 | Corresponding to the |
| | - non-ANR related intra-frequency periodical measurement reporting; | | | | | | Index of Indicator, the |
| | - non-ANR related inter-frequency periodical measurement reporting, if | | | | | | leftmost binary bit 16. |
| | the UE has set bit number 25 to 1; and - non-ANR related inter-RAT periodical measurement reporting for | | | | | | Set to true if supporting all functionalities in the |
| | UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, | | | | | | feature group. |
| | 24 or 26 to 1, respectively. | | | D 10 | | | J. Saturo group. |
| | • | | Yes | Rel-9 | | | |
| | NOTE: "non-ANR related periodical measurement reporting" | | | | | | |
| | corresponds only to periodical trigger type with purpose set to | | | | | | |
| | reportStrongestCells. Event triggered periodical reporting (i.e., event trigger type with reportAmount > 1) is a mandatory functionality of event | | | | | | |
| | triggered reporting and therefore not the subject of this bit. | | | | | | |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|---------|-------------------|----------------|--|
| | Support of Intra-frequency ANR features including: - Intra-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells - Intra-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 to 1. | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_17 | Corresponding to the Index of Indicator, the leftmost binary bit 17. Set to true if supporting all functionalities in the feature group. |
| | Support of Inter-frequency ANR features including: - Inter-frequency periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> - Inter-frequency periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportCGI</i> | to 1. | Yes, unless UE only supports band 13 | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_18 | Corresponding to the Index of Indicator, the leftmost binary bit 18. Set to true if supporting all functionalities in the feature group. |
| | Support of Inter-RAT ANR features including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON for UTRAN, 1xRTT or HRPD, if the UE has set bit number 22, 24 or 26 to 1, respectively - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively | at least one of the bit number 22, | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_19 | Corresponding to the Index of Indicator, the leftmost binary bit 19. Set to true if supporting all functionalities in the feature group. |
| | If bit number 7 is set to '0': - SRB1 and SRB2 for DCCH + 8x AM DRB If bit number 7 is set to '1': - SRB1 and SRB2 for DCCH + 8x AM DRB - SRB1 and SRB2 for DCCH + 5x AM DRB + 3x UM DRB NOTE: UE which indicate support for a DRB combination also support all subsets of the DRB combination. Therefore, release of DRB(s) never results in an unsupported DRB combination. | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_20 | Corresponding to the Index of Indicator, the leftmost binary bit 20. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|---------|-------------------|----------------|--|
| | | - Regardless of what bit number 7 and bit number 20 is set to, UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB - Regardless of what bit number 20 is set to, if bit number 7 is set to '1', UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB + 1x UM DRB | | Rel-9 | | | |
| 21 | Support of - Predefined intra- and inter-subframe frequency hopping for PUSCH with N_sb > 1 - Predefined inter-subframe frequency hopping for PUSCH with N_sb > 1 | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_21 | Corresponding to the Index of Indicator, the leftmost binary bit 21. Set to true if supporting all functionalities in the |
| 22 | Support of - UTRAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | Yes, if UE supports UTRA | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_22 | feature group. Corresponding to the Index of Indicator, the leftmost binary bit 22. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|-------|---|---------|-------------------|----------------|--|
| | Support of - GERAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_23 | Corresponding to the Index of Indicator, the leftmost binary bit 23. Set to true if supporting all functionalities in the feature group. |
| | Support of - 1xRTT measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_24 | Corresponding to the Index of Indicator, the leftmost binary bit 24. |
| | | | Yes, if UE supports enhanced 1xRTT CSFB | Rel-9 | | | Set to true if supporting all functionalities in the feature group. |
| | Support of - Inter-frequency measurements and reporting in E-UTRA connected mode | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_25 | Corresponding to the Index of Indicator, the leftmost binary bit 25. |
| | NOTE: The UE setting this bit to 1 and indicating support for FDD and TDD frequency bands in the UE capability signalling implements and is tested for FDD measurements while the UE is in TDD, and for TDD measurements while the UE is in FDD. | | Yes, unless UE only supports band 13 | Rel-9 | | | Set to true if supporting all functionalities in the feature group. |
| | Support of - HRPD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_26 | Corresponding to the Index of Indicator, the leftmost binary bit 26. |
| | | | Yes, if UE supports HRPD | Rel-9 | | | Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|----------------|-------------------|----------------|--|
| 27 | Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH CS handover | set to 1 if the | Yes for FDD, if UE supports | Rel-8 Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_27 | Corresponding to the Index of Indicator, the leftmost binary bit 27. Set to true if supporting all functionalities in the feature group. |
| 28 | Support of - TTI bundling | | Yes for FDD | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_28 | Corresponding to the Index of Indicator, the leftmost binary bit 28. Set to true if supporting all functionalities in the feature group. |
| 29 | Support of - Semi-Persistent Scheduling | | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_29 | Corresponding to the Index of Indicator, the leftmost binary bit 29. Set to true if supporting all functionalities in the feature group. |
| 30 | Support of - Handover between FDD and TDD | - can only be set to 1 if the UE has set bit number 13 to 1 | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_30 | Corresponding to the Index of Indicator, the leftmost binary bit 30. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|--|---|--------------------------|-------------------|----------------|--|
| 31 | Support of - Indicates whether the UE supports the mechanisms defined for cells broadcasting multi band information i.e. comprehending multiBandInfoList, disregarding in RRC_CONNECTED the related system information fields and understanding the EARFCN signalling for all bands, that overlap with the bands supported by the UE, and that are defined in the earliest version of TS 36.101 [42] that includes all UE supported bands. | - In this release of the protocol, this bit will never be mandated to be set to 1 - This FGI bit concerns an optional release independent feature (as it was difficult to introduce this from REL-8 when using regular UE capability signalling) | | Rel-8 Rel-9 Rel-10 | 36.331, Annex B.1 | pc_FeatrGrp_31 | Corresponding to the Index of Indicator, the leftmost binary bit 31. Set to true if supporting all functionalities in the feature group. |
| 32 | Undefined | | | | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 32. |

Table A.4.4-2: Feature group indicators 33-64

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|--|---|---------|-------------------|----------------|--|
| 33 | Inter-RAT ANR features for UTRAN including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | set bit number 5 and bit number 22 | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_33 | Corresponding to the Index of Indicator, the leftmost binary bit 33. Set to true if supporting all functionalities in the feature group. |
| 34 | is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and bit number 23 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_34 | Corresponding to the Index of Indicator, the leftmost binary bit 34. Set to true if supporting all functionalities in the feature group. |
| 35 | Inter-RAT ANR features for 1xRTT including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | set bit number 5 and bit number 24 | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_35 | Corresponding to the Index of Indicator, the leftmost binary bit 35. Set to true if supporting all functionalities in the feature group. |
| 36 | Inter-RAT ANR features for HRPD including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and bit number 26 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_36 | Corresponding to the Index of Indicator, the leftmost binary bit 36. Set to true if supporting all functionalities in the feature group. |
| 37 | Inter-RAT ANR features for UTRAN TDD including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and at least one of the bit number 22 (for UEs supporting only UTRA TDD) or the bit number 39 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_37 | Corresponding to the Index of Indicator, the leftmost binary bit 37. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" | Release | Ref. | Mnemonic | Comments |
|------|---|--|--|---------|-------------------|----------------|--|
| | | | the feature shall be implemented and successfully tested for the corresponding release | | | | |
| 38 | -EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD | - can only be set to 1 if the UE has set bit number 39 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_38 | Corresponding to the Index of Indicator, the leftmost binary bit 38. Set to true if supporting all functionalities in the feature group. |
| 39 | -UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD | | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_39 | Corresponding to the Index of Indicator, the leftmost binary bit 39. Set to true if supporting all functionalities in the feature group. |
| 40 | -EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD | - related to SR- VCC - can only be set to 1 if the UE has set bit number 38 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_40 | Corresponding to the Index of Indicator, the leftmost binary bit 40. Set to true if supporting all functionalities in the feature group. |
| 41 | Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD, if the UE supports UTRAN FDD and has set bit number 22 to 1 | | Yes for FDD, unless UE has set bit number 15 to 1 | | 36.331, Annex B.1 | pc_FeatrGrp_41 | Corresponding to the Index of Indicator, the leftmost binary bit 41. Set to true if supporting all functionalities in the feature group. |
| 42 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 42. |
| 43 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 43. |
| 44 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 44. |
| 45 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 45. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|---------|-------------------|----------|--|
| 46 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 46. |
| 47 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 47. |
| 48 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 48. |
| 49 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 49. |
| 50 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 50. |
| 51 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 51. |
| 52 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 52. |
| 53 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 53. |
| 54 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 54. |
| 55 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 55. |
| 56 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 56. |
| 57 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 57. |
| 58 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 58. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|---------|-------------------|----------|--|
| 59 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 59. |
| 60 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 60. |
| 61 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 61. |
| 62 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 62. |
| 63 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 63. |
| 64 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 64. |

Table A.4.4-3: Feature group indicators 101-132

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|---------|-------------------|-----------------|---|
| 101 | - DMRS with OCC (orthogonal cover code) and SGH (sequence group hopping) disabling | - if the UE supports two or more layers for spatial multiplexing in UL, this bit shall be set to 1. - A Category 0 UE shall set this bit to 0 if it does not support this feature. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_101 | Corresponding to the Index of Indicator, the leftmost binary bit 101. Set to true if supporting all functionalities in the feature group. |
| 102 | - Trigger type 1 SRS (aperiodic SRS) transmission (Up to X ports) NOTE: X = number of supported layers on given band | | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_102 | Corresponding to the Index of Indicator, the leftmost binary bit 102. Set to true if supporting all functionalities in the feature group. |
| 103 | - PDSCH transmission mode 9 when up to 4 CSI reference signal ports are configured | - for Category 8 UEs, this bit shall be set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_103 | Corresponding to the Index of Indicator, the leftmost binary bit 103. Set to true if supporting all functionalities in the feature group. |
| 104 | - PDSCH transmission mode 9 for TDD when 8 CSI reference signal ports are configured | - if the UE does not support TDD, this bit is irrelevant (capability signalling exists for FDD for this feature), and this bit shall be set to 0. - for Category 8 UEs, this bit shall be set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_104 | Corresponding to the Index of Indicator, the leftmost binary bit 104. Set to true if supporting all functionalities in the feature group. |
| 105 | - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 – UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 – UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured | - this bit can be set to 1 only if indices 2 (Table B.1-1) and 103 are set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_105 | Corresponding to the Index of Indicator, the leftmost binary bit 105. Set to true if supporting all functionalities in the feature group. |
| 106 | - Periodic CQI/PMI/RI/PTI reporting on PUCCH: Mode 2-1 – UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9- With-8Tx-FDD-r10 is set to 'supported') and if index 2 (Table B.1-1) is set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_106 | Corresponding to the Index of Indicator, the leftmost binary bit 106. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the | Release | Ref. | Mnemonic | Comments |
|------|---|---|--|---------|-------------------|-----------------|---|
| | | | feature shall be implemented and successfully tested for the corresponding release | | | | |
| | - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 – UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 – UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured | - this bit can be set to 1 only if indices 1 (Table B.1-1) and 103 are set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_107 | Corresponding to the Index of Indicator, the leftmost binary bit 107. Set to true if supporting all functionalities in the feature group. |
| 108 | - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 – UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9- With-8Tx-FDD-r10 is set to 'supported') and if index 1 (Table B.1-1) is set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_108 | Corresponding to the Index of Indicator, the leftmost binary bit 108. Set to true if supporting all functionalities in the feature group. |
| 109 | - Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 1 | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9- With-8Tx-FDD-r10 is set to 'supported'). | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_109 | Corresponding to the Index of Indicator, the leftmost binary bit 109. Set to true if supporting all functionalities in the feature group. |
| 110 | - Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 2 | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9- With-8Tx-FDD-r10 is set to 'supported'). | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_110 | Corresponding to the Index of Indicator, the leftmost binary bit 110. Set to true if supporting all functionalities in the feature group. |
| 111 | - Measurement reporting trigger Event A6 | - this bit can be set to 1 only if the UE supports carrier aggregation. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_111 | Corresponding to the Index of Indicator, the leftmost binary bit 111. Set to true if supporting all functionalities in the feature group. |
| 112 | - SCell addition within the Handover to EUTRA procedure | - this bit can be set to 1 only if the UE supports carrier aggregation and the Handover to EUTRA procedure. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_112 | Corresponding to the Index of Indicator, the leftmost binary bit 112. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the | Release | Ref. | Mnemonic | Comments |
|------|--|--|--|---------|-------------------|-----------------|--|
| | | | feature shall be implemented and successfully tested for the corresponding release | | | | |
| 113 | - Trigger type 0 SRS (periodic SRS) transmission on X Serving Cells NOTE: X = number of supported component carriers in a given band combination | - this bit can be set to 1 only if the UE supports carrier aggregation in UL. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_113 | Corresponding to the Index of Indicator, the leftmost binary bit 113. Set to true if supporting all functionalities in the feature group. |
| 114 | - Reporting of both UTRA CPICH RSCP and Ec/N0 in a Measurement Report | - this bit can be set to 1 only if index 22 (Table B.1-1) is set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_114 | Corresponding to the Index of Indicator, the leftmost binary bit 114. Set to true if supporting all functionalities in the feature group. |
| 115 | - time domain ICIC RLM/RRM measurement subframe restriction for the serving cell - time domain ICIC RRM measurement subframe restriction for neighbour cells - time domain ICIC CSI measurement subframe restriction | | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_115 | Corresponding to the Index of Indicator, the leftmost binary bit 115. Set to true if supporting all functionalities in the feature group. |
| 116 | - Relative transmit phase continuity for spatial multiplexing in UL | - this bit can be set to 1 only if the UE supports two or more layers for spatial multiplexing in UL. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_116 | Corresponding to the Index of Indicator, the leftmost binary bit 116. Set to true if supporting all functionalities in the feature group. |
| 117 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 117. |
| 118 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 118. |
| 119 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 119. |
| 120 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 120. |
| 121 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 121. |
| 122 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 122. |
| 123 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 123. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|---------|-------------------|----------|---|
| 124 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 124. |
| 125 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 125. |
| 126 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 126. |
| 127 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 127. |
| 128 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 128. |
| 129 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 129. |
| 130 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 130. |
| 131 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 131. |
| 132 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 132. |

Comments

A.4.5 Additional information

Additional capabilities

Item

Table A.4.5-1: Additional UE radio access capabilites

| Item | Additional capabilities | Ref. | Release | Comments | | | | |
|--------|--|----------------------------|---------|---------------------------------|--|--|--|--|
| 1 | Support of CSG | 36.331, Annex | Rel-8 | | | | | |
| | ** | B.2 | | | | | | |
| 2 | Support of intra-frequency SI acquisition for HO | 36.306, 4.3.11.1 | Rel-9 | | | | | |
| 3 | Support of inter-frequency SI acquisition for HO | 36.306, 4.3.11.2 | Rel-9 | | | | | |
| 4 | Need for inter-frequency gaps (Note 1) | 36.306, 4.3.6.1 | Rel-8 | | | | | |
| 5 | Need for inter-RAT gaps (Note 1) | 36.306, 4.3.6.1 | Rel-8 | | | | | |
| 6 | Support of E-UTRA Band 31 only | 36.133, A.3.7.2 | Rel-12 | | | | | |
| 7 | Support of rsrqMeasWideband | 36.306, 4.3.6.2 | Rel-11 | | | | | |
| 8 | Support of maximum of One CSI process on a component carrier within a band with PDSCH transmission mode 10 | 36.306, 4.3.5.5 | Rel-11 | | | | | |
| 9 | Void | | | | | | | |
| 10 | Disable E-UTRA capability if IMSVoIP not supported by the network | 23.221 7.2a, 24.301 4.5 | Rel-8 | pc_Disable_E- UTRA_NOIMSVoIP | | | | |
| 11 | Support of maximum of Three CSI processes on a component carrier within a band with PDSCH transmission mode 10 | 36.306, 4.3.5.5 | Rel-11 | | | | | |
| 12 | Support of maximum of Four CSI processes on a component carrier within a band with PDSCH transmission mode 10 | 36.306, 4.3.5.5 | Rel-11 | | | | | |
| 13 | Support of multiClusterPUSCH-WithinCC-r10 | 36.306, 4.3.4.13 | Rel-10 | | | | | |
| Note 1 | Note 1: Need for inter-frequency gaps or inter-RAT gaps indicates that the UE does not support corresponding measurement without gaps. | | | | | | | |

Table A.4.5-2: Additional UE radio access capabilities (Mandatory for Rel-11 and onward)

Release

Status

Support

Ref.

| | | | | (Note 1) | (Note 2) | | | | |
|------|---|-----------------|---------------|-------------|-------------|--------------------------|--|--|--|
| 1 | UE supports CRS interference handling | 36.306, | Rel-11 | 0.01 | | This is a Rel-11 | | | |
| | | 4.3.4.15 | | | | Mandatory feature | | | |
| 2 | UE supports ss-CCH interference | 36.306, | Rel-11 | O.01 | | This is a Rel-11 | | | |
| | handling | 4.3.4.20 | | | | Mandatory feature | | | |
| Note | Note 1: From Rel-11 onwards 3GPP TSG RAN has discontinued the usage of FGI bits (see A.4.4). Instead it has | | | | | | | | |
| | introduced a different mechanism to a | | | | | | | | |
| | 36.306 [17] clause 4): 'For optional fea | atures, the UE | radio acce | ss capabili | ty paramete | r indicates whether the | | | |
| | feature has been implemented and su | | | | | | | | |
| | capability parameter, the parameter indicates whether the feature has been successfully tested.' | | | | | | | | |
| | Reflecting this situation, in the present table the status for Mandatory features would be indicated as | | | | | | | | |
| | conditional Optional (O.xx) until IOT to | esting availabi | lity is ensur | ed. The de | cision when | IOT testing availability | | | |

which this requirement apply would be explicitly stated.

Note 2: If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release.

Table A.4.5-2a: Additional UE radio access capabilities Conditions

can be considered ensured is made by 3GPP TSG RAN. After the 3GPP TSG RAN decision that IOT testing is available, the status of the capability parameter will be changed to Mandatory (M) and the release from

| O.01 IF | F The feature has been IOT-ed THEN Support shall be indicated ELS | SE Support shall not be indicated |
|---------|---|-----------------------------------|
|---------|---|-----------------------------------|

A.4.6 CA Physical Layer Baseline Implementation Capabilities

A.4.6.1 Intra-band contiguous CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.1-1: Downlink Intra-band contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.1-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|--|---------------|----------|
| 1 | DL Intra-band contiguous CA BW Class B | 36.101, 5.6A | |
| | | 36.331, 6.3.6 | |
| 2 | DL Intra-band contiguous CA BW Class C | 36.101, 5.6A | |
| | | 36.331, 6.3.6 | |

Table A.4.6.1-2: Uplink Intra-band contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.1-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|--|-------------------------------|--|
| 1 | UL Intra-band contiguous CA BW Class B | 36.331, 6.3.6 | Not used in any valid CA configurations in TS 36.101 yet |
| 2 | UL Intra-band contiguous CA BW Class C | 36.101, 5.6A 36.331, 6.3.6 | • |

Table A.4.6.1-3: Supported CA configurations for Intra-band contiguous CA

| Item / CA Band (Note 1) | Ref. | Release | Supported CA Bandwidth Class(es) in DL (Note 2) | Supported CA Bandwidth Class(es) in UL (Note 2) | Supported Bandwidth Combination Set(s) (Note 3) |
|----------------------------|-------------------------------|---------|--|--|---|
| CA_1 | 36.101, 5.6A 36.331, 6.3.6 | Rel-10 | | | |
| CA_7 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_23 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_27 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_38 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_39 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_40 | 36.101, 5.6A 36.331, 6.3.6 | Rel-10 | | | |
| CA_41 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_42 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |

Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.5A-1, e.g. 'CA_1' indicates CA operation on E-UTRA band 1.

Note 2: The CA capabilities as per Tables A.4.6.1-1 and A.4.6.1-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate the supported CA Bandwidth Class(es), respectively in downlink and uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A-1.

For this release of specification valid choices are 'B' and 'C'.

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-1.

A.4.6.2 Intra-band non-contiguous CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.2-1: Downlink Intra-band non-contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.2-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|------------------------------------|---------------|----------|
| 1 | DL Intra-band non-contiguous CA BW | 36.101, 5.6A | |
| | Class Combination A-A | 36.331, 6.3.6 | |

Table A.4.6.2-2: Uplink Intra-band non-contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.2-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|------------------------------------|---------------|----------|
| 1 | UL Intra-band non-contiguous CA BW | 36.101, 5.6A | |
| | Class Combination A-A | 36.331, 6.3.6 | |

Table A.4.6.2-3: Supported CA configurations for Intra-band non-contiguous CA

| Item / CA Band (Note 1) | Ref. | Release | Supported CA Bandwidth Class Combination(s) in DL (Note 2) | Supported CA Bandwidth Class Combination(s) in UL (Note 2) | Supported Bandwidth Combination Set(s) (Note 3) |
|----------------------------|-------------------------------|---------|--|--|---|
| CA_2-2 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | , | | |
| CA_3-3 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_4-4 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_7-7 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_23-23 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_25-25 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_41-41 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_42-42 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |

Note 1: Notation used for intra-band non-contiguous CA Bands is according to TS 36.101 [2] Table 5.5A-3, e.g. 'CA_25-25' indicates CA operation on E-UTRA band 25.

Note 2: The CA capabilities as per Tables A.4.6.2-1 and A.4.6.2-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate the UE supported CA Bandwidth Class Combination(s), respectively in downlink and uplink of the supported CA Band(s), as per Table 5.6A-1 in TS 36.101 [2] separated by a '-'.

For this release of specification valid choice is only A-A in downlink.

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-3.

A.4.6.3 Inter-band CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.3-1: Downlink Inter-band CA Bandwidth Class Combination capabilities (for one or more of the supported CA configurations in Table A.4.6.3-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|---------------------------------------|---------------|----------|
| 1 | DL Inter-band CA BW Class Combination | 36.101, 5.6A | |
| | A-A | 36.331, 6.3.6 | |

Table A.4.6.3-2: Uplink Inter-band CA Bandwidth Class Combination capabilities (for one or more of the supported CA configurations in Table A.4.6.3-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|---------------------------------------|---------------|-------------------|
| 1 | UL Inter-band CA BW Class Combination | 36.101, 5.6A | Not used in any |
| | A-A | 36.331, 6.3.6 | |
| | | | configurations in |
| | | | TS 36.101 yet |

Table A.4.6.3-3: Supported CA configurations for Inter-band CA (two bands)

| Item / CA Band Combination (Note 1) | Ref. | Release | Supported CA Bandwidth Class Combination(s) in DL | Supported CA Bandwidth Class Combinations(s) in UL | Supported Bandwidth Combination Set(s) (Note 5) |
|--|--|------------------|--|---|--|
| CA_1-3 | 36.101, 5.6A | Rel-12 | (Note 2, 3) | (Note 2, 4) | |
| CA_1-5 | 36.331, 6.3.6 36.101, 5.6A 36.331, 6.3.6 | Rel-10 | | | |
| CA_1-7 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_1-8 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_1-11 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_1-18 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_1-19 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_1-20 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_1-21 CA_1-26 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 Rel-12 | | | |
| CA_1-26 CA_1-28 | 36.101, 5.6A 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_1-26 CA_2-12 | 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_2-13 | 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_2-2-13 | 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_2-17 | 36.331, 6.3.6 36.101, 5.6A | Rel-11 | | | |
| CA_2-4 | 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_2-5 | 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_2-29 | 36.331, 6.3.6 36.101, 5.6A | Rel-11 | | | |
| CA_2-30 | 36.331, 6.3.6 36.101, 5.6A | Rel-12 | | | |
| CA_3-5 | 36.331, 6.3.6 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_3-7 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_3-8 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_3-19 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_3-20 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_3-26 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_3-27 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_3-28 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |
| CA_4-5 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_4-7 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_4_12 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |
| CA_4-13 | 36.101, 5.6A 36.331, 6.3.6 | Rel-11 | | | |

| CA_4-17 | 36.101, 5.6A | Rel-11 | | |
|------------|---------------|----------|---|--|
| O//_+ · 1/ | 36.331, 6.3.6 | 1.61-11 | | |
| CA_4-27 | 36.101, 5.6A | Rel-12 | | |
| _ | 36.331, 6.3.6 | | | |
| CA_4-29 | 36.101, 5.6A | Rel-11 | | |
| _ | 36.331, 6.3.6 | | | |
| CA_4-30 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_5-7 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_5-12 | 36.101, 5.6A | Rel-11 | | |
| | 36.331, 6.3.6 | | | |
| CA_5-13 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_5-17 | 36.101, 5.6A | Rel-11 | | |
| | 36.331, 6.3.6 | | | |
| CA_5-25 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_5-30 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_7-20 | 36.101, 5.6A | Rel-11 | | |
| | 36.331, 6.3.6 | | | |
| CA_7-28 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_8-11 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_8-20 | 36.101, 5.6A | Rel-11 | | |
| | 36.331, 6.3.6 | | | |
| CA_11-18 | 36.101, 5.6A | Rel-11 | | |
| | 36.331, 6.3.6 | | | |
| CA_12-25 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_18-28 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_19-21 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | | |
| CA_23-29 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | <u> </u> | | |
| CA_39-41 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | <u> </u> | | |
| CA_41-42 | 36.101, 5.6A | Rel-12 | | |
| | 36.331, 6.3.6 | | 1 | |

Note 2: The CA capabilities as per Tables A.4.6.3-1 and A.4.6.3-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate the UE supported CA Bandwidth Class Combination(s), respectively in downlink and uplink of the supported CA Band(s), as per Table 5.6A-1 in TS 36.101 [2] as well as using the identifier "Nil" meaning "No operation supported in the band for the indicated CA operation" in the same order as the bands are indicated in the CA Band name separated by a '-'.

For this release of specification valid choice in downlink is only A-A.

For this release of specification valid choices in uplink are:

- for UE supporting UL CA: A-A
- for UE not supporting UL CA: A-Nil and/or Nil-A

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2.N

Table A.4.6.3-4: Supported CA configurations for Inter-band CA (three bands)

| Item / CA Band Combination (Note 1) | Ref. | Release | Supported CA Bandwidth Class Combination(s) in DL (Note 2, 3) | Supported CA Bandwidth Class Combinations(s) in UL (Note 2, 4) | Supported Bandwidth Combination Set(s) (Note 5) |
|--|-------------------------------|---------|---|--|--|
| CA_1-3-19 | 36.101, 5.6A | Rel-12 | | | |
| | 36.331, 6.3.6 | | | | |
| CA_1-7-20 | 36.101, 5.6A | Rel-12 | | | |
| | 36.331, 6.3.6 | | | | |
| CA_1-19-21 | 36.101, 5.6A 36.331, 6.3.6 | Rel-12 | | | |

Note 1: Notation used for inter-band CA Bands is according to TS 36.101 [2] Table 5.5A-2, e.g. 'CA_1-5' indicates CA operation on E-UTRA bands 1 and 5.

Note 2: The CA capabilities as per Tables A.4.6.3-1 and A.4.6.3-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate the UE supported CA Bandwidth Class Combination(s), respectively in downlink and uplink of the supported CA Band(s), as per Table 5.6A-1 in TS 36.101 [2] as well as using the identifier "Nil" meaning "No operation supported in the band for the indicated CA operation" in the same order as the bands are indicated in the CA Band name separated by a '-'.

For this release of specification valid choice in downlink is only A-A-A.

For this release of specification valid choices in uplink are:

for UE not supporting UL CA: A-Nil-Nil and/or Nil-A-Nil and/or Nil-Nil-A

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2.N

Editor's note: CA capabilities as per Tables A.4.6.3-1 and A.4.6.3-2 extension for 3DL CA are for FFS

Annex B (informative): Change history

| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
|---------|------------------|-----------|------|--------------|---|-------|----------|
| 2008-03 | ļ | | 1 | | Skeleton proposed for RAN5#38 Malaga | 0.0 : | 0.0.1 |
| 2008-06 | | | | | Updated after RAN5#39bis: | 0.0.1 | 0.1.0 |
| | | | | | - Editorial update and alignment with 36.523-2 - TC included in 36.521-1 and 36.521-3 included | | |
| | | | | | - Some Conditions for TC selections introduce | | |
| 2008-08 | | | | | Updated after RAN5#40: | 0.1.1 | 0.2.0 |
| 2000 00 | | | | | - Editorial update in regard to changing spec names, etc. | 0.1.1 | 0.2.0 |
| | | | | | - FDD and TDD split (R5-083839) | | |
| | | | | | - RRM TC numbers aligned with 36.521-3 v030 | | |
| 2008-10 | | | | | Update after RAN5#40bis: | 0.2.0 | 0.3.0 |
| | | | | | - Table split in different clauses for Conformance and RRM | | |
| | | | | | test cases | | |
| | | | | | - Extension of applicability tables to include Additional | | |
| | | | | | information column - Change of applicability of TCs that apply to any E-UTRA | | |
| | | | | | device into "R" - recommended | | |
| | | | | | - Updated TCs in accordance to 36.521-1 v110 and 36.521-3 | | |
| | | | | | v040 | | |
| | | | | | - Some editorial updates | | |
| 2008-11 | | | | | Update After RAN5#41 (R5-055360): | 0.3.0 | 2.0.0 |
| | | | | | - Renamed 8.1.1, added new 8.1.2, | | |
| | | | | | - Added new TCs to RRM section Measurement | | |
| | | | | | Performance Requirements | | |
| | | | | | - Added Table A.4.3-2 with reference to test loop functions in | | |
| | | | | | 36.509 - Some editorial changes | | |
| | | | | | - Normative References updated | | |
| | | | | | - Change RRM TC titles to reflect their applicability to FDD | | |
| | | | | | only | | |
| 2008-12 | RAN#42 | RP-080970 | | | Approval of version 2.0.0 at RAN#42, then put to version | 2.0.0 | 8.0.0 |
| | | | | | 8.0.0. | | |
| 2008-01 | | | | | Editorial corrections. | 8.0.0 | 8.0.1 |
| 2009-05 | RAN#44 | RP-090448 | 0001 | | CR to 36.521-2: Applicability changes and additions for RRM | 8.0.1 | 8.1.0 |
| | | | | | test cases | | |
| 2009-05 | RAN#44 | RP-090448 | 0002 | | LTE-RF: Applicability for Output Power Dynamics test cases | 8.0.1 | 8.1.0 |
| 2009-09 | RAN#45 | R5-094035 | 0003 | - | Correction CR to 36.521-2: Applicability changes to | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094572 | 0004 | | introduce additional RRM tests Applicability for Output Power Dynamics test cases | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094710 | 0004 | <u> </u> | Resubmission-Correction CR to 36.521-2: Applicability | 8.1.0 | 8.2.0 |
| 2000 00 | 10/11/11/10 | 100004710 | 0000 | | changes to introduce additional RRM tests | 0.1.0 | 0.2.0 |
| 2009-09 | RAN#45 | R5-094768 | 0006 | - | Update of RRM Conformance test applicability for SON | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094999 | 0007 | - | Correction CR to 36.521-2: Applicability changes to RF | 8.1.0 | 8.2.0 |
| | | | | | PDSCH Demodulation tests | | |
| 2009-12 | RAN#46 | R5-095519 | 8000 | | Correction CR to 36.521-2: Applicability changes to update | 8.2.0 | 8.3.0 |
| | | | | | the Demodulation of PDSCH (FDD) tests based on the CR | | |
| | | | | | merge results from RAN5#44 | | |
| 2009-12 | RAN#46 | R5-095778 | 0009 | | Update of RRM Conformance test applicability for RLM in | 8.2.0 | 8.3.0 |
| 2000 12 | D 4 N H 4 C | R5-095841 | 0010 | | DRX test cases CR to 36.521-2: Applicability additions for new RRM (FDD) | 8.2.0 | 0.2.0 |
| 2009-12 | RAN#46 | K5-095641 | 0010 | - | tests | 0.2.0 | 8.3.0 |
| 2010-03 | RAN#47 | R5-100358 | 0011 | _ | CR to 36.521-2 Rel-8 Introduction of Applicability for E- | 8.3.0 | 8.4.0 |
| 2010 03 | TO AIN THE | 100000 | 0011 | | UTRAN FDD - FDD Intra Frequency Cell Search with DRX | 0.5.0 | 0.4.0 |
| | | | | | when L3 filtering is used | | |
| 2010-03 | RAN#47 | R5-100561 | 0012 | - | CR to 36.521-2: Update baseline implementation capabilities | 8.3.0 | 8.4.0 |
| | | | | | with extended LTE1500 operating bands | | |
| 2010-03 | RAN#47 | R5-100872 | 0013 | - | CSI: Following up corrections to tests titles and RI clause | 8.3.0 | 8.4.0 |
| | | 1 | | | structure | ļ | <u> </u> |
| 2010-03 | RAN#47 | - | - | - | Moved to v9.0.0 with no change | 8.4.0 | 9.0.0 |
| 2010-06 | RAN#48 | R5-103147 | 0014 | - | Adding band 20, 800MHZ in EU to TS36.521-2 | 9.0.0 | 9.1.0 |
| 2010-06 | RAN#48 | R5-103757 | 0015 | - | Introduction of feature group indicator in applicability for | 9.0.0 | 9.1.0 |
| 2010-09 | RAN#49 | R5-104246 | 0017 | <u> </u> | RRM test cases CR to 36.521-2 on Correction to cell search | 9.1.0 | 9.2.0 |
| 2010-09 | RAN#49 RAN#49 | R5-104246 | 0017 | [| Addition of applicability for new RRM test cases | 9.1.0 | 9.2.0 |
| 2010-03 | I V/II VIII 43 | 104204 | 0010 | | Tradition of applicability for flow Ithiri test cases | 0.1.0 | 0.2.0 |
| 2010-09 | RAN#49 | R5-104372 | 0019 | - | Update of Applicability for Demodulation test cases and UE | 9.1.0 | 9.2.0 |
| | | | | | implementation Types for UTRA TDD | | |
| 2010-09 | RAN#49 | R5-104840 | 0020 | - | 36521-2 General update to add-remove TCs applicability | 9.1.0 | 9.2.0 |
| | | | | | correct, TC titles and numbers and editorials | | |
| 2010-09 | RAN#49 | R5-105056 | 0021 | - | Applicability of a new Rel-9 downlink sustained data rate | 9.1.0 | 9.2.0 |
| | | <u> </u> | | | performance test cases | | |
| 2010-12 | RAN#50 | R5-106118 | 0022 | - | | 9.2.0 | 9.3.0 |
| 2011-03 | RAN#51 | R5-110536 | 0023 | <u> </u> | for EUTRA TDD LTE band 41 Defining new bands 42 and 43 (3500MHz) | 9.3.0 | 9.4.0 |
| | | | | | | | |

| Date | TSG # | TSG Doc. | CR | Rev | | Old | New |
|---------|--------|-----------|------|-----|--|--------|--------|
| 2011-03 | RAN#51 | R5-110955 | 0024 | - | CR to 36.521-2: General update to add, remove, and correct applicability of RRM TCs | 9.3.0 | 9.4.0 |
| 2011-06 | RAN#52 | R5-112131 | 0025 | - | Correction to Band 12 frequency range in 36.521-2 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112212 | 0026 | - | Adding Band 24 to TS 36.521-2 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112378 | 0027 | - | Update of FGI bit definitions for rel-9 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112821 | 0028 | - | Add release applicability for spatial multiplexing test cases | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112857 | 0029 | - | Addition of applicability for new RRM test cases 4.3.4.3 and 8.4.3 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112865 | 0030 | - | Addition of applicability for new MBMS test cases 10.1 and 10.2 | 9.4.0 | 9.5.0 |
| 2011-09 | RAN#53 | R5-113306 | 0031 | - | Adding band 25 to TS36.521-2 | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-113625 | 0033 | - | Introduction of applicability of Rel-9 Scenarios | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-113626 | 0034 | - | Introduction of applicability of PDSCH performance tests for low UE categories | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114025 | 0035 | - | Test Cases 6.2.3 and 6.2.4 Applicability Clarification | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114070 | 0036 | - | Update baseline implementation capabilities for FDD LTE Band 23 in 36.521-2 | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114074 | 0037 | - | Applicability for new R9 RRM test cases | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114096 | 0038 | - | Missing FGIs in RRM Test Case Applicabilities in 36.521-2 | 9.5.0 | 9.6.0 |
| 2011-12 | RAN#54 | R5-115128 | 0039 | - | Correction the content of A.4.4-1_16 in 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115134 | 0040 | - | Correction to the test case condition of C12 in 3GPP TS 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115186 | 0041 | - | Adding band 22 (3500MHz FDD) to 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115785 | 0042 | - | Requirement change in UE spurious emissions for Band 7 and 38 co-existence (Rel-8 only) | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115422 | 0043 | - | Update of FGI bit table in 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115813 | 0044 | - | RF: Update of the applicability list | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | - | - | - | Moved to Rel-10 with no change | 9.7.0 | 10.0.0 |
| 2012-03 | RAN#55 | R5-120340 | 0046 | - | Addition of FGI bit 16 into test cases 9.1.x.x and 9.2.x.x | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120534 | 0047 | - | Introduction to Applicability for RSRQ for E-UTRA Carrier Aggregation | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120596 | 0048 | - | Updates to applicability for newly introduced CA feature chapter8 test cases in 36.521-2 | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120811 | 0049 | - | Correction to FGI bits in test case 8.5.2 | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120812 | 0050 | - | Addition of FGI bit 15 into test cases configuring event 1B | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120832 | 0051 | - | Update of FGI bit table in TS36.521-2 | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120836 | 0052 | - | Introduction to CA Applicability for Transmitter Characteristics tests MPR and ACLR | | 10.1.0 |
| 2012-03 | RAN#55 | R5-120838 | 0053 | - | RF/RRM: Applicability for new added RRM test cases | 10.0.0 | |
| 2012-03 | RAN#55 | R5-120840 | 0054 | - | Applicability for new UL MIMO test case | | 10.1.0 |
| 2012-06 | RAN#56 | R5-121185 | 0055 | - | Updates to applicability for newly introduced CA feature TDD chapter 8 test cases in 36.521-2 | | |
| 2012-06 | RAN#56 | R5-121219 | 0056 | - | Adding operating band 26 to TS 36.521-2 | 10.1.0 | |
| 2012-06 | RAN#56 | R5-121904 | 0057 | - | Addition of applicability for E-UTRAN Inter frequency case reselection in the existence of non-allowed CSG cell | | 10.2.0 |
| 2012-06 | RAN#56 | R5-121965 | 0058 | - | Applicability for new UL MIMO test cases | 10.1.0 | |
| 2012-06 | RAN#56 | R5-121966 | 0059 | - | Updates to applicability for Transmit timing tests in 36.521-2 | | 10.2.0 |
| 2012-06 | RAN#56 | R5-121967 | 0060 | - | Applicability for new R9 RRM test cases | 10.1.0 | |
| 2012-06 | RAN#56 | R5-121990 | 0061 | - | Addition of applicability for CA TCs | 10.1.0 | |
| 2012-09 | RAN#57 | R5-123093 | 0062 | - | Updates to applicability for Chapter9 absolute and relative RSRP measurement test cases for carrier aggregation. | 10.2.0 | |
| 2012-09 | RAN#57 | R5-123165 | 0063 | = | Introduction of Applicability for E-UTRAN Event Triggered reporting on deactivated SCell with PCell interruption in non-DRX for CA | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123169 | 0064 | - | Correction to Applicability for RSRQ for E-UTRA Carrier Aggregation | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123170 | 0065 | - | Introduction of eDL MIMO to UE service capabilities | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123533 | 0066 | - | Update of References in 36.521-2 v980 (pointer) | 10.2.0 | |
| 2012-09 | RAN#57 | R5-123542 | 0067 | - | TS 36.521-2:TDD CA test cases applicability correction | 10.2.0 | |
| 2012-09 | RAN#57 | R5-123788 | 0068 | | Clarification of the release of UTRAN-EUTRAN Inter-RAT RRM test cases in 36.521-2 | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123856 | 0069 | - | Applicability for new RRM test cases | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123858 | 0070 | - | Introduction of Applicability for ACS for CA and UE config Tx output power for CA | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123909 | 0071 | - | TS 36.521-2:New UE categories addition | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123942 | 0072 | - | Applicability update for test cases in TS36.521-1 with single BW requirements not defined for all operating bands, rel-8 | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123993 | 0073 | - | Update applicability of UL-MIMO related conformance test cases | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123997 | 0074 | 1- | TS 36.521-2:Applicability for new CQI test cases | 10.2.0 | 10.3.0 |
| 2012-12 | RAN#58 | R5-125251 | 0075 | - | Removing FGI bit 5 from section four RRM test cases | 10.3.0 | |
| | RAN#58 | R5-125390 | 0076 | | Adding bands 28 and 44 to TS36.521-2 | | 10.4.0 |

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| 2012-12 | RAN#58 | R5-125821 | 0077 | - | Correction to Additional Information for RRM 4.3.4.3 | 10.3.0 | 10.4.0 |
| 2012-12 2012-12 | RAN#58 RAN#58 | R5-125833 R5-125836 | 0078 0079 | - | Introduction of Band 27 to TS 36.521-2 Update applicability of UL-MIMO related conformance test | 10.3.0 | 10.4.0 |
| | | | | | cases | | |
| 2012-12 | RAN#58 | R5-125920 | 0080 | - | Applicability removal of RRM TC8.12.1 | | 10.4.0 |
| 2012-12 | RAN#58 | R5-126049 | 0081 | - | Updates to the applicability of CA RF Tx tests | | 10.4.0 |
| 2012-12 | RAN#58 | R5-124138 | 0082 | - | Updates to the applicability of CA RF Performance tests | 10.3.0 | |
| 2012-12 | RAN#58 | R5-124168 | 0083 | - | Updates to the applicability of CA RF Rx tests | 10.3.0 | |
| 2012-12 | RAN#58 | R5-124169 | 0084 | - | Applicability for new RRM CA related TCs | | 10.4.0 |
| 2013-03 | RAN#59 | R5-130177 | 0085 | - | Introduction of new rel-10 Reporting of RI test cases into applicability specification | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130297 | 0086 | - | Introduction of eDL-MIMO applicability | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130306 | 0087 | - | Updates to applicability for newly introduced eICIC feature chapter9 RRM test cases | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130445 | 0090 | - | Correction to CA physical layer implementation capabilities | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130464 | 0091 | - | Correction of FGI bit 8 in 36.521-2 | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130802 | 0092 | - | Addition of applicability for RRM TCs 9.1.7.1 and 9.1.7.2 | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130807 | 0093 | - | Applicability correction to Spurious emission band UE co- existence(36.521-2) | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130997 | 0098 | - | Addition of applicability statement for 6 new eICIC test cases | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130375 | 0088 | - | Updates to CA physical layer baseline implementation capabilities for CA band 7 | | |
| 2013-03 | RAN#59 | R5-130379 | 0089 | - | Updates to CA physical layer baseline implementation | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130927 | 0094 | - | capabilities for CA band 41 Updates on the supported CA configurations for CA_38, | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130928 | 0095 | - | CA_3-7 and CA_7-20 Addition of CA physical layer implementation capabilities for | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130929 | 0096 | _ | CA_4-5 and CA_4-13 Updates of Inter-Band CA combinations CA_3-20 and CA_2- | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130930 | 0097 | _ | 29 CA_2-17 and CA_4-17 addition to supported capabilities in | 10.5.0 | 11.0.0 |
| | | | | | 36.521-2 | | |
| 2013-06 | RAN#60 | R5-131155 | 0100 | - | Introduction of new rel-11 Reporting of RI test cases into applicability specification | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131159 | 0101 | - | Introduction of Maximum Input Level test case for CA (interband DL CA without UL CA) into applicability specification | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131212 | 0102 | - | Correction of applicability conditions for TC 8.2.1.1.1_1: TC 8.2.1.2.1_1 and TC 8.3.2.1.1_1 in 36.521-2 | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131444 | 0103 | - | Addition of applicability for Configured UE transmitted Output Power for inter-band CA | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131525 | 0104 | - | Corrections of eDL-MIMO applicability to align with reporting of CSI | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131712 | 0105 | - | Corrections to Table 4.1-1a "Applicability of RF conformance test cases Conditions" and Table 4.2-1a: Applicability of | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131912 | 0106 | | RRM conformance test cases Conditions 36.521-2: Inter-band CA configurations update | 11 0 0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131914 | 0100 | - | Addition of applicability for FDD RF TCs 9.3.4.1.1, 9.3.4.2.1, 9.4.1.2.1, 9.4.2.2.1 and TDD RF TCs 9.3.4.1.2, 9.3.4.2.2, | 11.0.0 | |
| 2013-06 | RAN#60 | R5-131927 | 0108 | _ | 9.4.1.2.2 and 9.4.2.2.2 Updates to applicability for newly introduced elClC feature | 11.0.0 | 11 1 0 |
| | | | | | chapter9 RRM test cases in 36.521-2 | | |
| 2013-06 | RAN#60 | R5-132013 | 0109 | - | 36.521-2 specification clean up | | 11.1.0 |
| 2013-06 2013-06 | RAN#60 RAN#60 | R5-132015 R5-132111 | 0110 0111 | - | Update of FGI tables in TS 36.521-2 Removal of Spurious emission UE co-existence test case | | 11.1.0 11.1.0 |
| | D 44 **** | | | | 6.6.3.2_1 from 36.521-2 | | |
| 2013-09 | RAN#61 | R5-133125 | 0112 | | editorial correction for RRM test case Condition C46 | 11.1.0 | |
| 2013-09 | RAN#61 | R5-133143 | 0113 | - | Addition of applicability for test cases 7.3.13 and 7.3.15 | | 11.2.0 |
| 2013-09 | RAN#61 | R5-133251 | 0114 | - | Addition of Band 31 to 36.521-2 | | 11.2.0 |
| 2013-09 | RAN#61 | R5-133315 | 0115 | - | Applicability for new CA TCs for 20MHz | | 11.2.0 |
| 2013-09 | RAN#61 | R5-133347 | 0116 | - | eICIC RRM: Applicability for some new added eICIC test cases | 11.1.0 | |
| 2013-09 | RAN#61 | R5-133350 | 0117 | - | CA RF: Applicability for some new added CA test cases | | 11.2.0 |
| 2013-09 | RAN#61 | R5-133403 | 0118 | | CA RRM: Corrections to applicability of CA RRM TC-s | | 11.2.0 |
| 2013-09 | RAN#61 | R5-133816 | 0119 | _ | Update applicability of test cases required to support PUSCH 2-2 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133825 | 0120 | <u> -</u> | eICIC RF: Applicability for some new added eICIC test cases | 11.1.0 | |
| 2013-09 | RAN#61 | R5-133827 | 0121 | - | Correction to applicability of TC 8.3.2.1.2, 8.3.2.1.3 and 8.3.2.2.1 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133839 | 0122 | - | Correction of applicability for FDD RF TCs 9.3.4.1.1, 9.3.4.2.1 & 9.4.1.2.1 and TDD RF TCs 9.3.4.1.2, 9.3.4.2.2 & 9.4.1.2.2 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133840 | 0123 | - | Addition of applicabilities for inter-freq/RAT without | 11.1.0 | 11.2.0 |
| | <u> </u> | | | | measurement gaps TCs | | |

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| 2013-09 | RAN#61 | R5-133841 | 0124 | - | Correction to the reference information of chapter 2. | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133849 | 0125 | - | RRM: Update of applicability of some test cases | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133868 | 0126 | - | Addition of UE capability information Bandwidth Combination | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133872 | 0127 | - | Set for Carrier Aggregation in ICS proforma tables Update RF performance test applicability table for LTE B14 public safety high power UE | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133875 | 0128 | - | Addition of applicability for new TCs 8.3.1.1.3 and 8.3.2.1.4 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133891 | 0129 | - | Applicability addition for CA test cases | 11.1.0 | |
| 2013-09 | RAN#61 | R5-133897 | 0130 | - | Addition of the applicability of TC7.3.14 & TC7.3.16 | 11.1.0 | |
| 2013-12 | RAN#62 | R5-134129 | 0131 | - | RRM: Corrections of applicability of some test cases | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | | | | Introduction of UE TM3 Demodulation Performance under | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134164 | 0132 | - | High Speed Applicability Addition of applicability for Sustained data rate test(FDD) for | 11.2.0 | 11.3.0 |
| | | R5-134281 | 0134 | - | category 6 and 7 UEs | | |
| 2013-12 | RAN#62 | R5-134285 | 0135 | - | Removal of 6.2.5A.2 from applicability table | | 11.3.0 |
| 2013-12 | RAN#62 | R5-134293 | 0136 | - | Correction to applicabilities for inter-freq/RAT without measurement gaps TCs | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134315 | 0137 | - | Removal of comma separated conditions | 11.2.0 | |
| 2013-12 | RAN#62 | R5-134883 | 0138 | - | Addition of applicability for new TCs 7.4A.4 and 7.5A.4 | 11.2.0 | |
| 2013-12 | RAN#62 | R5-134893 | 0142 | _ | Addition of applicabilities of LTE Type A performance requirements | 11.2.0 | |
| 2013-12 | RAN#62 | R5-134895 | 0139 | - | Removal of redundant not applicable to any device tests from applicability table | 11.2.0 | |
| 2013-12 | RAN#62 | R5-134279 | 0133 | _ | Addition of Rel-12 CA band combinations(CA_3-19 and CA_19-21) to Table A.4.6.3-3 | 11.3.0 | 12.0.0 |
| 2013-12 | RAN#62 | R5-135011 | 0141 | - | Updates of Table A.4.6.3-3 for CA 1A-26A | 11.3.0 | 12.0.0 |
| 2013-12 | RAN#62 | R5-135032 | 0140 | - | Applicability for new RRM test cases for 5MHz bandwidth | 11.3.0 | 12.0.0 |
| 2014-03 | RAN#63 | R5-140390 | 0143 | - | LTE Type A performance requirements - Adding a new test case 9.3.5.1.2 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140426 | 0144 | - | Updates to Intra-band non-contiguous CA applicability | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140526 | 0145 | - | Addition of applicability for TC 8.2.2.2.4 and TC 8.2.2.4.3 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140808 | 0146 | - | Correction the applicability for test case 8.2.1.3.2. | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140809 | 0147 | - | Update applicability table for LTE B14 public safety high power UE test cases | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140817 | 0148 | - | Applicability for new DL CoMP test cases | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140870 | 0150 | - | Corrections the applicability of test cases 8.16.3 and 8.16.4 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140871 | 0151 | - | Correcting applicability in 8.2.2.1.1_1 and 8.2.2.2.1_1 for UE categories 1 and/or 2 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140897 | 0152 | - | Addition of Applicability for EPDCCH New Test Cases | | 12.1.0 |
| 2014-03 | RAN#63 | R5-140923 | 0153 | - | Introduction of UE CA Inter-band uplink capabilities | 12.0.0 | |
| 2014-03 | RAN#63 | R5-141020 | 0154 | - | Addition of test applicability of WB-RSRQ measurement | | 12.1.0 |
| 2014-03 | RAN#63 | R5-141035 | 0155 | - | Applicability for new CA RRM TCs 7.1.3+7.1.4 | 12.0.0 | |
| 2014-06 | RAN#64 | R5-142113 | 0157 | - | Addition of CA 3A-28A to 36.521-2 | 12.1.0 | |
| 2014-06 2014-06 | RAN#64 RAN#64 | R5-142337 R5-142345 | 0158 0159 | - | Applicability update for CA band Combo CA_2A-13A Addition of CA band combination CA_39A-41A to Table | | 12.2.0 12.2.0 |
| 2014-06 | RAN#64 | R5-142347 | 0160 | | A.4.6.3-3 in TS 36.521-2 Updates of Table A.4.6.3-3 for CA_3A-26A and CA_3A-27A | 12.1.0 | 1220 |
| 2014-06 | RAN#64 | R5-142583 | 0161 | | Update of FGI definitions in TS 36.521-2 | | 12.2.0 |
| 2014-06 | RAN#64 | R5-142674 | 0162 | - | Definition correction to UL and DL category tables | | 12.2.0 |
| 2014-06 | RAN#64 | R5-142772 | 0163 | _ | Addition of CA_2A-4A and CA_5A-7A to 36.521-2 Annex A4 | | 12.2.0 |
| 2014-06 | RAN#64 | R5-142782 | 0164 | - | Introduction of TC 7.6.xA.4 and 7.7A.4 applicabilities | | 12.2.0 |
| 2014-06 | RAN#64 | R5-142799 | 0165 | - | Addition of applicability for TC 6.6.3B.2 | 12.1.0 | |
| 2014-06 | RAN#64 | R5-143000 | 0166 | - | Conditions C19, C20, C21 | | 12.2.0 |
| 2014-06 | RAN#64 | R5-143016 | 0167 | - | Addition of RF test cases applicability for elCIC | | 12.2.0 |
| 2014-06 | RAN#64 | R5-143017 | 0168 | - | Addition of RRM test cases applicability for eICIC | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143028 | 0169 | - | LTE Type A performance requirements - Adding test case 8.2.1.4.3 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143030 | 0170 | - | Condition C43 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143053 | 0171 | - | Correction to the applicability of the test case 7.6.2A.3 and 7.7A.3. | | 12.2.0 |
| 2014-06 | RAN#64 | R5-143054 | 0172 | - | Correction of the condition of test case 8.7.1.1 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143055 | 0173 | - | Correction of the condition of the test cases 8.2.1.1.1_A.2, 8.2.1.3.1_A.1, 8.2.1.3.1_A.2 and 8.2.1.4.2_A.2 | | 12.2.0 |
| 2014-06 | RAN#64 | R5-143056 | 0174 | - | Correction of the condition for the test cases 8.2.1.1.1_A.1, 8.2.1.4.2_A.1 and 8.2.2.1.1_A.1 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143060 | 0175 | - | Introduction of felCIC applicability statement for CSI test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143061 | 0176 | - | Introduction of felCIC applicability statement for RRM test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143078 | 0177 | - | Applicability for new CoMP TDD TCs | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143083 | 0178 | <u>_</u> | Addition of applicability for newly added RRM test cases | | 12.2.0 |
| 2014-06 | RAN#64 | R5-143084 | 0179 | - | Addition of CA_27B related information into A.4.6 in TS | 12.1.0 | |
| | <u> </u> | | | | 36.521-2 | | |

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| 2014-06 | RAN#64 | R5-143119 | 0180 | - | Update of applicability for EPDCCH test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143145 | 0181 | - | Condition on no UL CA in C20 and C21 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143215 | 0182 | - | Addition of applicability for new TM3, soft buffer management and SDR test cases | 12.1.0 | 12.2.0 |
| 2014-09 | RAN#65 | R5-144109 | 0183 | - | Introduction of felCIC applicability statement for Performance test cases (resubmission of R5-143075 not implemented) | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144121 | 0184 | - | Corrections to felCIC applicability statement for CSI test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144200 | 0185 | - | Applicability for newly added 5MHz+5 MHz and 10MHz+5MHz BW RRM test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144245 | 0186 | - | Corrections to applicability conditions for RRM test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144329 | 0187 | - | Update of FGI definitions in TS 36.521-2 | 12.2.0 | |
| 2014-09 | RAN#65 | R5-144449 | 0188 | - | Applicability update for CA band Combo CA_7A-28A | 12.2.0 | |
| 2014-09 | RAN#65 | R5-144484 | 0189 | - | Update Tx intra-band contiguous DL CA without UL CA TCs applicability to include BW Class B | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144504 | 0190 | - | New CA band combination CA_NC_42 and CA_4-27-Update to 36.521-2 | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144512 | 0191 | - | Addition of applicability for CA band combo CA_2A-5A | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144800 | 0192 | - | Correction to RF Baseline capabilities with Band 29 | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144837 | 0193 | - | Update test applicability for intra band non-contiguous CA test cases | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144848 | 0194 | - | Update test applicability for inter band and intra band contiguous CA test cases | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144849 | 0195 | - | Addition of CA_2A-2A to 36.521-2 Annex A4 | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144864 | 0202 | - | Addition of operating band 30 to TS36.521-2 | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144871 | 0196 | - | Correction to Merge UE category tables | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144877 | 0197 | - | CA: Review of CA capabilities tables | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144878 | 0198 | - | Addition of applicability for newly added performance test cases | 12.2.0 | |
| 2014-09 | RAN#65 | R5-144911 | 0199 | - | Update applicabilities for serving cell RSRP and RSRQ absolute accuracy TCs | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144919 | 0200 | - | Update the applicability conditions for TCs 8.8.2.1 and 8.8.2.2 | | 12.3.0 |
| 2014-09 | RAN#65 | R5-144921 | 0201 | - | Addition of applicability for SDR test case 8.7.1.1_A.3 | 12.2.0 | |
| 2014-12 2014-12 | RAN#66 RAN#66 | R5-145017 R5-145180 | 0202 0203 | - | Correction to 6.7A title number New CA band combination CA_1A-3A - Updates of Table | 12.3.0 12.3.0 | 12.4.0 12.4.0 |
| 201110 | D.4.1.1100 | D5 445000 | 2004 | | A.4.6.3-3 | 40.00 | 10.10 |
| 2014-12 2014-12 | RAN#66 RAN#66 | R5-145226 R5-145244 | 0204 0205 | - | Introducation of CA_42C into TS36.521-2 New CA band combination CA_41-42 update to 36.521-2 | 12.3.0 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145262 | 0206 | - | section A.4.6.3 Applicability table update for RRM CA test cases in clause 8 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145359 | 0207 | - | and 9 to avoid redundant testing Addition of applicability for TCs of activation and deactivation | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145361 | 0208 | - | of known SCell Removing SDR test applicability for Rel-11 and 12 inter- | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145396 | 0209 | - | band CA New CA band combination CA_18A-28A - Updates of Table | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145440 | 0210 | - | A.4.6.3-3 New CA band combination 1+11 and 8+11 û Introduction of | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145478 | 0211 | - | 1+11 and 8+11 to 36.521-2 Correction to felCIC applicability statement for PHICH test | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145529 | 0212 | - | cases Updates to applicability of CA demodulation tests for release | | 12.4.0 |
| 2014-12 | RAN#66 | R5-145821 | 0213 | - | independence Update of applicability statements for mandatory Rel-11 | | 12.4.0 |
| | | | | | capabilities, CoMP, and more | | |
| 2014-12 | RAN#66 | R5-145822 | 0214 | - | Update of FGI definitions in TS 36.521-2 | | 12.4.0 |
| 2014-12 | RAN#66 | R5-145823 | 0215 | - | Updates the applicable release for soft buffer management and TDD SDR CA tests in part 2 | | 12.4.0 |
| 2014-12 | RAN#66 | R5-145842 | 0216 | - | Corrections to applicabilities for COMP | | 12.4.0 |
| 2014-12 | RAN#66 | R5-145869 | 0217 | - | Applicability for FDD TC 8.2.1.1.1_A.3 and TDD TC 8.2.2.1.1_A.3+TC 8.2.2.4.2_A.3 for CA | | 12.4.0 |
| 2014-12 | RAN#66 | R5-145873 | 0218 | - | Update to TM9 test case applicability | | 12.4.0 |
| 2014-12 | RAN#66 | R5-145905 | 0219 | - | Applicability for newly added RRM TCs for testing of SCell in sTAG | 12.3.0 | |
| 2014-12 | RAN#66 | R5-145981 | 0220 | | Update to Additional information section to handle IMSVoIP not supported in 36.521-2 | 12.3.0 | 12.4.0 |
| 2015-03 | RAN#67 | R5-150298 | 0221 | - | Introduction of CA_1A-7A to TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150304 | 0222 | - | Corrections to title of RRM test case 8.7.1 in applicability | 12.4.0 | 12.5.0 |
| 2045.22 | DANI"07 | DE 450005 | 0000 | 1 | table | 40.40 | 40.5.0 |
| 2015-03 | RAN#67 | R5-150365 | 0223 | - | CA: Corrections to CA capability tables | 12.4.0 | 12.5.0 |

| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
|---------|--------|-----------|------|-----|---|--------|--------|
| 2015-03 | RAN#67 | R5-150374 | 0224 | - | Introduction of RF applicability for CA band combinations 5+25 and 12+25 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150444 | 0225 | - | New CA band combination CA_1A-28A - Updates of Table A.4.6.3-3 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150524 | 0226 | - | Addition of CA_1A-20A to TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150546 | 0227 | - | Addition of 2A-12A and 5A-13A 2DL Interband CA to 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150558 | 0228 | - | Applicability conditions added to TCs 9.1.12.x and 9.2.11.x | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150564 | 0229 | - | Addition of CA_2A-2A-13A to TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150805 | 0230 | - | Update of FGI definitions in TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150830 | 0231 | - | Addition of CA_2-30 to Annex A.4.6 of TS 36.521-2. | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150831 | 0232 | - | Addition of CA_4-30 to Annex A.4.6 of TS 36.521-2. | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150832 | 0233 | - | Addition of CA_5-30 to Annex A.4.6 of TS 36.521-2. | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150858 | 0234 | - | Update of applicability statements for CoMP - TCs being split | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150872 | 0235 | - | Addition of applicability for 3DL CA test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150876 | 0236 | - | Addition of applicability for CA_39C in TS36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150882 | 0238 | - | Addition of applicability for newly added 20MHz+10MHz RRM test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150883 | 0239 | - | Addition of applicability for newly added RSRP accuracy RRM test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150904 | 0240 | - | Addition of a new table for Supported CA configurations for Inter-band CA (three bands) | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150914 | 0241 | - | Addition of applicability for Multi-Cluster PUSCH with One Uplink Carrier test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150923 | 0242 | | CA demod test case variants merge in 36.521-2 | 12.4.0 | 12.5.0 |

History

| Document history | | |
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