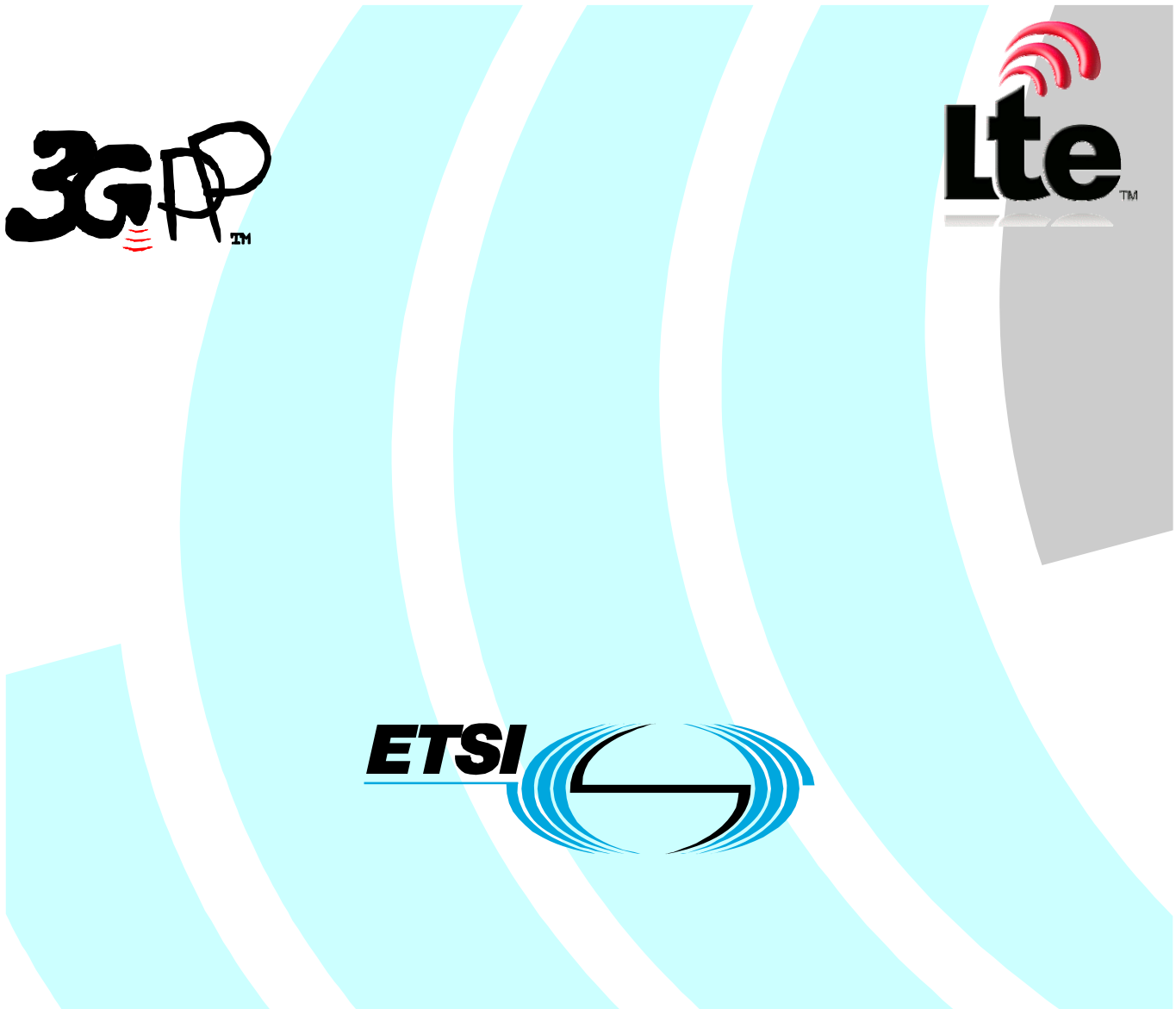
# ETSI TS 136 521-2 V8.3.0 (2010-02)

*Technical Specification*

**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 8.3.0 Release 8)**



Reference
RTS/TSGR-0536521-2v830

Keywords
LTE

***ETSI***

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

# Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://webapp.etsi.org/IPR/home.asp).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

# Foreword

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

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under http://webapp.etsi.org/key/queryform.asp.

# Contents

# Foreword

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

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

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

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.

z the third digit is incremented when editorial only changes have been incorporated in the document.

# 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 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 UE.

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*.
  - For a Release 8 UE, references to 3GPP documents are to version 8.x.y, when available.

Editor's Note: The Reference list is incomplete and some references are still to UMTS specs.

[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"

# 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:

| | |
|---|---|
| ICS | Implementation Conformance Statement |
| IXIT | Implementation eXtra Information for Testing |
| PICS | Protocol Implementation Conformance Statement |

| | |
|---|---|
| PIXIT | Protocol 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.

### 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 nunber. 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 | |
| **Transmiter Characteristics** | | | | | |
| 6.2.2 | Maximum Output Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.2.3 | Maximum Power Reduction (MPR) | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.2.4 | Additional Maximum Power Reduction (A-MPR) | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.1 | void | | | | |
| 6.3.2 | Minimum Output Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.3 | Transmit OFF Power | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.4.1 | General ON/OFF time mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.3.4.2 | PRACH and SRS time mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | 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 |
| 6.5.1 | Frequency Error | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.5.2.1 | Error Vector Magnitude (EVM) | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.5.2.2 | IQ-component | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.5.2.3 | In-band emissions for non allocated RB | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.5.2.4 | Spectrum flatness | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.1 | Occupied bandwidth | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.2.1 | Spectrum Emission Mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.2.2 | Additional Spectrum Emission Mask | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.2.3 | Adjacent Channel Leakage power Ratio | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.2.4 | Additional ACLR requirements | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.3.1 | Transmitter Spurious emissions | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 6.6.3.2 | Spurious emission band UE co-existence | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | UE supporting E-UTRA | TDD |
| 6.6.3.3 | Additional spurious emissions | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| **Receiver Characteristics** | | | | | |

| Clause | Title | Release | Applicability | | Additional Information |
|---|---|---|---|---|---|
| | | | Condition | Comments | |
| 7.3 | Reference sensitivity level | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.4 | Maximum input level | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.5 | Adjacent Channel Selectivity (ACS) | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.6.1 | In-band blocking | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.6.2 | Out of-band blocking | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.6.3 | Narrow band blocking | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.7 | Spurious response | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.8.1 | Wide band Intermodulation | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| 7.9 | Spurious emissions | Rel-8 | R | UE supporting E-UTRA | FDD |
| | | | | | TDD |
| **Performance Requirement** | | | | | |
| 8.2.1.1.1 | FDD PDSCH Single Antenna Port Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.1.2 | FDD PDSCH Single Antenna Port Performance with 1PRB | 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 | |
| 8.2.1.2.2 | FDD PDSCH Transmit Diversity 4x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.3.1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.3.2 | FDD PDSCH Open Loop Spatial Multiplexing 4x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.4.1 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.1.4.2 | FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.2.2.1 | TDD PDSCH Single Antenna Port Performance (Cell-Specific Reference Symbols) | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.2 | TDD PDSCH Transmit Diversity Performance (Cell-Specific Reference Symbols) | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.3 | TDD PDSCH Open Loop Spatial Multiplexing Performance (Cell-Specific Reference Symbols) | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.4 | TDD PDSCH Closed Loop Spatial Multiplexing Performance (Cell-Specific Reference Symbols) | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2.5 | TDD PDSCH Performance (UE-Specific Reference Symbols) | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.3 | Demodulation of PDSCH (User-Specific Reference Symbols) | Rel-8 | FFS | FFS | |
| 8.4.1.1 | FDD PCFICH/PDCCH Single-antenna Port Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.4.1.2 | FDD PCFICH/PDCCH Transmit Diversity Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.4.2.1 | TDD PCFICH/PDCCH Single-antenna Port Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.4.2.2 | TDD PCFICH/PDCCH Transmit Diversity Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.5.1.1 | FDD PHICH Single-antenna Port Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.5.1.2 | FDD PHICH Transmit Diversity Performance | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.5.2.1 | TDD PHICH Single-antenna Port Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.5.2.2 | TDD PHICH Transmit Diversity Performance | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| **Reporting of Channel State Information** | | | | | |

| Clause | Title | Release | Applicability | | Additional Information |
|---|---|---|---|---|---|
| | | | Condition | Comments | |
| 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 | |
| 9.2.2.1 | 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 TDD | |
| 9.3.1.1.1 | FDD Frequency-selective scheduling mode – PUSCH 3-0 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.3.1.1.2 | TDD Frequency-selective scheduling mode – PUSCH 3-0 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.3.2.1.1 | FDD Frequency non-selective scheduling mode – PUCCH 1-0 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.3.2.1.2 | TDD Frequency non-selective scheduling mode – PUCCH 1-0 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.4.1.1.1 | FDD Single PMI – PUSCH 3-1 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.4.1.1.2 | TDD Single PMI – PUSCH 3-1 | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.4.2.1.1 | FDD Multiple PMI – PUSCH 1-2 | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.4.2.1.2 | TDD Multiple PMI – PUSCH 1-2 | Rel-8 | C02 | UE supporting E-UTRA TDD | |

**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 |

# 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 | |
| **E-UTRAN RRC_IDLE State Mobility** | | | | | |
| 4.2.1 | E-UTRAN FDD – FDD cell re-selection intra frequency case | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 4.2.2 | E-UTRAN TDD – TDD cell re-selection intra frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 4.2.3 | E-UTRAN FDD – FDD cell re-selection inter frequency case | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 4.2.4 | E-UTRAN FDD – TDD cell re-selection inter frequency case | Rel-8 | C03 | UE supporting E-UTRA FDD and E-UTRA TDD | |
| 4.2.5 | E-UTRAN TDD – FDD cell re-selection inter frequency case | Rel-8 | C03 | UE supporting E-UTRA FDD and E-UTRA TDD | |
| 4.2.6 | E-UTRAN TDD – TDD cell re-selection inter frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 4.3.1.1 | E-UTRA FDD – UTRAN FDD cell re-selection | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 4.3.1.2 | E-UTRA FDD – UTRAN FDD cell re-selection: UTRA FDD is of lower priority | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 4.3.1.3 | E-UTRAN FDD – UTRAN FDD cell re-selection in fading propagation conditions: UTRA FDD is of lower priority | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 4.3.2 | E-UTRAN FDD – UTRAN TDD cell re-selection | Rel-8 | C06 | UE supporting E-UTRA FDD and UTRA TDD | |
| 4.3.3 | E-UTRAN TDD – UTRAN FDD cell re-selection | Rel-8 | C07 | UE supporting E-UTRA TDD and UTRA FDD | |
| 4.3.4.1 | E-UTRA TDD – UTRAN TDD cell re-selection | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | |
| 4.3.4.2 | E-UTRAN TDD – UTRAN TDD cell re-selection: UTRA is of lower priority | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | |
| 4.4.1 | E-UTRAN FDD – GSM cell re-selection | 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 | |
| 4.6.1.1 | 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 | |
| **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 | C01 | UE supporting E-UTRA FDD | |
| 5.1.4 | E-UTRAN TDD-TDD Handover inter frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 5.1.5 | E-UTRAN FDD – FDD inter frequency handover: unknown target cell | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 5.2.1 | E-UTRAN FDD – UTRAN FDD handover | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 5.2.2 | E-UTRAN TDD – UTRAN FDD handover | Rel-8 | C07 | UE supporting E-UTRA TDD and UTRA FDD | |
| 5.2.3 | E-UTRAN FDD – GSM handover | Rel-8 | C08 | UE supporting E-UTRA FDD and GSM | |
| 5.2.4 | E-UTRAN TDD – UTRAN TDD handover | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | |
| 5.2.5 | E-UTRAN FDD – UTRAN TDD handover | Rel-8 | C06 | UE supporting E-UTRA FDD and UTRA TDD | |
| 5.2.7 | E-UTRAN FDD – UTRAN FDD handover: unknown target cell | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 5.2.8 | E-UTRAN FDD – GSM handover: unknown target cell | Rel-8 | C08 | UE supporting E-UTRA FDD and GSM | |
| 5.3.1 | E-UTRAN FDD – HRPD Handover | Rel-8 | C10 | UE supporting E-UTRA FDD and cdma2000 HRPD | |

| Clause | Title | Release | Applicability | | Additional Information |
|---|---|---|---|---|---|
| | | | Condition | Comments | |
| 5.3.2 | E-UTRAN FDD – cdma2000 1xRTT Handover | Rel-8 | C11 | UE supporting E-UTRA FDD and cdma2000 1xRTT | |
| **RRC Connection Mobility Control** | | | | | |
| 6.1.1 | RRC Re-establishment to E-UTRAN | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 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 | |
| **Timing and Signalling Characteristics** | | | | | |
| 7.1.1 | E-UTRAN FDD – UE Transmit Timing Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 7.1.2 | E-UTRAN TDD – UE Transmit Timing Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 7.2.1 | E-UTRAN FDD – UE Timing Advance Adjustment Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 7.2.2 | E-UTRAN TDD – UE Timing Advance Adjustment Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 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 | C01 | UE supporting E-UTRA FDD | |
| 7.3.6 | E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 7.3.7 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 7.3.8 | E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| **UE Measurements 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 | C01 | UE supporting E-UTRA FDD | |
| 8.1.3 | E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 8.1.4 | Void | | | | |
| 8.2.1 | E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.2.2 | E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 8.3.1 | E-UTRAN FDD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 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 | C01 | UE supporting E-UTRA FDD | |
| 8.4.1 | E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 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 | C02 | UE supporting E-UTRA TDD | |

| Clause | Title | Release | Applicability | | Additional Information |
|---|---|---|---|---|---|
| | | | Condition | Comments | |
| 8.5.1 | E-UTRAN FDD-UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 8.5.2 | E-UTRAN FDD-UTRAN FDD SON ANR cell search reporting under AWGN propagation conditions | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 8.5.3 | E-UTRAN FDD – UTRAN FDD event triggered reporting when DRX is used under fading propagation conditions | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | |
| 8.6.1 | E-UTRAN TDD-UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C07 | UE supporting E-UTRA TDD and UTRA FDD | |
| 8.7.1 | E-UTRAN TDD-UTRAN TDD cell search under fading propagation conditions | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | |
| 8.8.1 | E-UTRAN FDD-GSM event triggered reporting in AWGN | Rel-8 | C08 | UE supporting E-UTRA FDD and GSM | |
| 8.8.2 | E-UTRAN FDD – GSM event triggered reporting when DRX is used in AWGN | Rel-8 | C08 | UE supporting E-UTRA FDD and GSM | |
| 8.9.1 | E-UTRAN FDD-UTRAN TDD event triggered reporting in fading propagation conditions | Rel-8 | C06 | UE supporting E-UTRA FDD and UTRA TDD | |
| 8.10.1 | E-UTRAN TDD-GSM event triggered reporting in AWGN | Rel-8 | C09 | UE supporting E-UTRA TDD and GSM | |
| **Measurement Performance Requirements** | | | | | |
| 9.1.1.1 | FDD Intra Frequency Absolute RSRP Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.1.1.2 | FDD Intra Frequency Relative Accuracy of RSRP | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.1.2.1 | TDD Intra Frequency Absolute RSRP Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.1.2.2 | TDD Intra Frequency Relative Accuracy of RSRP | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.1.3.1 | FDD – FDD Inter Frequency Absolute RSRP Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.1.3.2 | FDD – FDD Inter Frequency Relative Accuracy of RSRP | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.1.4.1 | TDD – TDD Inter Frequency Absolute RSRP Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.1.4.2 | TDD – TDD Inter Frequency Relative Accuracy of RSRP | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.2.1.1 | FDD Intra Frequency Absolute RSRQ Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.2.2.1 | TDD Intra Frequency Absolute RSRQ Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.2.3.1 | FDD – FDD Inter Frequency Absolute RSRQ Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.2.3.2 | FDD – FDD Inter Frequency Relative Accuracy of RSRQ | Rel-8 | C01 | UE supporting E-UTRA FDD | |
| 9.2.4.1 | TDD – TDD Inter Frequency Absolute RSRQ Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | |
| 9.2.4.2 | TDD –TDD Inter Frequency Relative Accuracy of RSRQ | Rel-8 | C02 | UE supporting E-UTRA TDD | |

**Table 4.2-1a: Applicability of RRM 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.4.1-1/2) THEN R ELSE N/A |
| C04 | IF (A.4.1-1/1 AND A.4.1-1/3) THEN R ELSE N/A |
| C05 | IF (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A |
| C06 | IF (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A |
| C07 | IF (A.4.1-1/2 AND A.4.1-1/3) THEN R ELSE N/A |
| C08 | IF (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A |
| C09 | IF (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A |
| C10 | IF (A.4.1-1/1 AND A.4.1-1/6) THEN R ELSE N/A |
| C11 | IF (A.4.1-1/1 AND A.4.1-1/7) THEN R ELSE N/A |

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



## 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 User Equipment Under Test (UEUT) identification

UEUT name:

.....

.....

Hardware configuration:

.....

.....

.....

Software configuration:

.....

.....

.....

### A.2.3 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

### A.2.4 Client

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

### A.2.5 ICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

## 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

Editor's Note: This clause is not completed

### 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 | FFS | |
| 5 | GSM | 45.005 | Rel-8 | |
| 6 | cdma2000 HRPD | FFS | FFS | |
| 7 | cdma2000 1xRTT | FFS | FFS | |

### A.4.2 UE Service Capabilities

**Table A.4.2-1: UE Radio Technologies**

| Item | UE Radio Technologies | Ref. | Release | Comments |
|---|---|---|---|---|
| 1 | FFS | | | |

## 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 | Rel-8 | |
| 2 | EPS Session Management | 24.301 | Rel-8 | |
| 3 | GPRS Mobility Management | FFS | Rel-8 | |
| 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, 36.302 | Rel-8 | |

**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 | |
| 2 | Max UE test loop UL RLC SDU size 65535 bits | 36.509 | Rel-8 | |

**Table A.4.3-3: RF Baseline Implementation Capabilities**

| Item | RF Baseline Implementation Capabilities | Ref. | Release | Comments |
|---|---|---|---|---|
| 1 | Frequency band: 1920-1980, 2110-2170 MHz | 36.101, 5.5 | Rel-8 | FDD Band 1 |
| 2 | Frequency band: 1850-1910, 1930-1990 MHz | 36.101, 5.5 | Rel-8 | FDD Band 2 |
| 3 | Frequency band: 1710-1785, 1805-1880 MHz | 36.101, 5.5 | Rel-8 | FDD Band 3 |
| 4 | Frequency band: 1710-1755, 2110-2155 MHz | 36.101, 5.5 | Rel-8 | FDD Band 4 |
| 5 | Frequency band: 824-849, 869-894 MHz | 36.101, 5.5 | Rel-8 | FDD Band 5 |
| 6 | Frequency band: 830-840, 875-885 MHz | 36.101, 5.5 | Rel-8 | FDD Band 6 |
| 7 | Frequency band: 2500-2570, 2620-2690 MHz | 36.101, 5.5 | Rel-8 | FDD Band 7 |
| 8 | Frequency band: 880-915, 925-960 MHz | 36.101, 5.5 | Rel-8 | FDD Band 8 |
| 9 | Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz | 36.101, 5.5 | Rel-8 | FDD Band 9 |
| 10 | Frequency band: 1710-1770, 2110-2170 MHz | 36.101, 5.5 | Rel-8 | FDD Band 10 |
| 11 | Frequency band: 1427.9-1452.9, 1475.9-1500.9 MHz | 36.101, 5.5 | Rel-8 | FDD Band 11 |
| 12 | Frequency band: 698-716, 728-746 MHz | 36.101, 5.5 | Rel-8 | FDD Band 12 |
| 13 | Frequency band: 777-787, 746-756 MHz | 36.101, 5.5 | Rel-8 | FDD Band 13 |
| 14 | Frequency band: 788-798, 758-768 MHz | 36.101, 5.5 | Rel-8 | FDD Band 14 |
| 15 | Reserved | 36.101, 5.5 | Rel-8 | FDD Band 15 |
| 16 | Reserved | 36.101, 5.5 | Rel-8 | FDD Band16 |
| 17 | Frequency band: 704-716, 734-746 MHz | 36.101, 5.5 | Rel-8 | FDD Band 17 |
| 18 | Frequency band: 815-830, 860-875 MHz | 36.101, 5.5 | Rel-9 | FDD Band 18 |
| 19 | Frequency band: 830-845, 875-890 MHz | 36.101, 5.5 | Rel-9 | FDD Band 19 |
| … | | | | |
| 33 | Frequency band: 1900-1920, 1900-1920 MHz | 36.101, 5.5 | Rel-8 | TDD Band 33 |
| 34 | Frequency band: 2010-2025, 2010-2025 MHz | 36.101, 5.5 | Rel-8 | TDD Band 34 |
| 35 | Frequency band: 1850-1910, 1850-1910 MHz | 36.101, 5.5 | Rel-8 | TDD Band 35 |
| 36 | Frequency band: 1930-1990, 1930-1990 MHz | 36.101, 5.5 | Rel-8 | TDD Band 36 |
| 37 | Frequency band: 1910-1930, 1910-1930 MHz | 36.101, 5.5 | Rel-8 | TDD Band 37 |
| 38 | Frequency band: 2570-2620, 2570-2620 MHz | 36.101, 5.5 | Rel-8 | TDD Band 38 |
| 39 | Frequency band: 1880-1920, 1880-1920 MHz | 36.101, 5.5 | Rel-8 | TDD Band 39 |
| 40 | Frequency band: 2300-2400, 2300-2400 MHz | 36.101, 5.5 | Rel-8 | TDD Band 40 |

**Table A.4.3-4: PUSCH physical layer Categories**

| Item | PUSCH physical layer categories | 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 |

**Table A.4.3-5: PDSCH physical layer Categories**

| Item | PDSCH physical layer categories | 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 | |

**Table A.4.3-6: Supported Mixed MBSFN-unicast capabilities**

| Item | Supported Mixed MBSFN-unicast capabilities | Ref. | Release | Comments |
|---|---|---|---|---|
| 1 | Mixed MBSFN-unicast | 36.211, 6.5 | Rel-8 | Support for MBSFN subframes: 1, 2, 3, 6, 7, 8 |

# Annex B (informative): Change history

| Change history | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Date** | **TSG #** | **TSG Doc.** | **CR** | **Rev** | **Subject/Comment** | **Old** | **New** |
| 2008-03 | | | | | Skeleton proposed for RAN5#38 Malaga | | 0.0.1 |
| 2008-06 | | | | | Updated after RAN5#39bis:<br>- Editorial update and alignment with 36.523-2<br>- TC included in 36.521-1 and 36.521-3 included<br>- Some Conditions for TC selections introduce | 0.0.1 | 0.1.0 |
| 2008-08 | | | | | Updated after RAN5#40:<br>- Editorial update in regard to changing spec names, etc.<br>- FDD and TDD split (R5-083839)<br>- RRM TC numbers aligned with 36.521-3 v030 | 0.1.1 | 0.2.0 |
| 2008-10 | | | | | Update after RAN5#40bis:<br>- Table split in different clauses for Conformance and RRM test cases<br>- Extension of applicability tables to include Additional information column<br>- Change of applicability of TCs that apply to any E-UTRA device into "R" - recommended<br>- Updated TCs in accordance to 36.521-1 v110 and 36.521-3 v040<br>- Some editorial updates | 0.2.0 | 0.3.0 |
| 2008-11 | | | | | Update After RAN5#41 (R5-055360):<br>- Renamed 8.1.1, added new 8.1.2,<br>- Added new TCs to RRM section Measurement Performance Requirements<br>- Added Table A.4.3-2 with reference to test loop functions in 36.509<br>- Some editorial changes<br>- Normative References updated<br>- Change RRM TC titles to reflect their applicability to FDD only | 0.3.0 | 2.0.0 |
| 2008-12 | RAN#42 | RP-080970 | | | Approval of version 2.0.0 at RAN#42, then put to version 8.0.0. | 2.0.0 | 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 test cases | 8.0.1 | 8.1.0 |
| 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 introduce additional RRM tests | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094572 | 0004 | - | Applicability for Output Power Dynamics test cases | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094710 | 0005 | - | Resubmission-Correction CR to 36.521-2: Applicability changes to introduce additional RRM tests | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094768 | 0006 | - | Update of RRM Confomance 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 PDSCH Demodulation tests | 8.1.0 | 8.2.0 |
| 2009-12 | RAN#46 | R5-095519 | 0008 | | Correction CR to 36.521-2: Applicability changes to update the Demodulation of PDSCH (FDD) tests based on the CR merge results from RAN5#44 | 8.2.0 | 8.3.0 |
| 2009-12 | RAN#46 | R5-095778 | 0009 | | Update of RRM Confomance test applicability for RLM in DRX test cases | 8.2.0 | 8.3.0 |
| 2009-12 | RAN#46 | R5-095841 | 0010 | - | CR to 36.521-2: Applicability additions for new RRM (FDD) tests | 8.2.0 | 8.3.0 |

# History

| Document history | | |
|---|---|---|
| V8.0.1 | January 2009 | Publication |
| V8.1.0 | June 2009 | Publication |
| V8.2.0 | October 2009 | Publication |
| V8.3.0 | February 2010 | Publication |
| | | |