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

(Release 11)

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Technical Specification

**3rd Generation Partnership Project;
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Evolved Universal Terrestrial Radio Access (E-UTRA);
User Equipment (UE) conformance specification;
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Part 2: Implementation Conformance Statement (ICS)
(Release 11)**

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Contents

Foreword

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

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Version x.y.z

where:

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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 (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 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*.

[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".

[7] 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".

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 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**	
Transmitter Characteristics					
6.2.2	UE Maximum Output Power	Rel-8	R	UE supporting E-UTRA	FDD
					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
					TDD
6.2.2B	UE Maximum Output Power for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.2.3	Maximum Power Reduction (MPR)	Rel-8	N/A	UE supporting E-UTRA, The minimum requirement tested in 6.2.3 is covered by test case 6.6.2.3.	FDD
					TDD
6.2.3A.1	Maximum Power Reduction (MPR) for CA (intra-band contiguous DL CA and UL CA)	Rel-10	N/A	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA. The minimum requirement tested in 6.2.3A.1 is covered by test case 6.6.2.3A.1	FDD
					TDD
6.2.3B	Maximum Power Reduction (MPR) for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.2.4	Additional Maximum Power Reduction (A-MPR)	Rel-8	N/A	UE supporting E-UTRA. The minimum requirement tested in 6.2.4 is covered by test case 6.6.2.2 or 6.6.3.3 according to the supported NS value.	FDD
					TDD
6.2.4A.1	Additional Maximum Power Reduction (A-MPR) for CA (intra-band contiguous DL CA and UL CA)	Rel-10	N/A	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA. The minimum requirement tested in 6.2.4A.1 is covered by test case 6.6.2.2A.1 or 6.6.3.3A.1 according to the supported NS value.	FDD
					TDD
6.2.4B	Additional Maximum Power Reduction (A-MPR) for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.2.5	Configured UE transmitted Output Power	Rel-8	R	UE supporting E-UTRA	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
					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				
6.3.2	Minimum Output Power	Rel-8	R	UE supporting E-UTRA	FDD
					TDD

Clause	Title	Release	Applicability		Additional Information
			Condition	Comments	
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
					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
					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
					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
					TDD
6.3.4B	ON/OFF time mask for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	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
6.3.5A.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
					TDD
6.5.1	Frequency Error	Rel-8	R	UE supporting E-UTRA	FDD
					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
					TDD
6.5.2.1	Error Vector Magnitude (EVM)	Rel-8	R	UE supporting E-UTRA	FDD
					TDD

Clause	Title	Release	Applicability		Additional Information
			Condition	**Comments**	
6.5.2.1A	PUSCH-EVM with exclusion period	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
6.5.2.2	Carrier leakage	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	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
					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 (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
6.5.2B.1	Error Vector Magnitude for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					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.3	In-band emissions for non allocated RB for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.5.2B.4	EVM equalizer spectrum flatness for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.6.1	Occupied bandwidth	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
6.6.1A.1	Occupied bandwidth 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
6.6.1B	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
					TDD
6.6.2.1A.1	Spectrum Emission 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
					TDD
6.6.2.1B	Spectrum Emission Mask for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.6.2.2	Additional Spectrum Emission Mask	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
6.6.2.2B	Additional Spectrum Emission Mask for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.6.2.3	Adjacent Channel Leakage power Ratio	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
6.6.2.3A.1	Adjacent Channel Leakage power Ratio 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
6.6.2.3B	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

Clause	Title	Release	Applicability		Additional Information
			Condition	**Comments**	
					TDD
6.6.3.1A.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_1	Spurious emission band UE co-existence (Release 9 and forward)	Rel-9	R	UE supporting E-UTRA	FDD
					TDD
6.6.3.2A.1	Spurious emission band UE co-existence 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
6.6.3.3	Additional spurious emissions	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
6.6.3.3A.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
					TDD
6.7	Transmit intermodulation	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
6.7A	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	TDD
					FDD
6.7B	Transmit intermodulation for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
6.8B	Time alignment between transmitter branches for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
Receiver Characteristics					
7.3	Reference sensitivity level	Rel-8	R	UE supporting E-UTRA	FDD
					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
					TDD
7.3B	Reference sensitivity level for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
7.4	Maximum input level	Rel-8	R	UE supporting E-UTRA	FDD
					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
7.4B	Maximum input level for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
7.5	Adjacent Channel Selectivity (ACS)	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
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

Clause	Title	Release	Applicability		Additional Information
			Condition	**Comments**	
7.5A.2	Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA without UL CA)	Rel-10	FFS	UE supporting E-UTRA and intra-band contiguous DL CA but no UL CA	FDD
					TDD
7.5A.3	Adjacent Channel Selectivity (ACS) for CA (inter-band DL CA without UL CA)	Rel-10	FFS	UE supporting E-UTRA and inter-band 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
7.6.1B	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
					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	FFS	UE supporting E-UTRA and inter-band DL CA but no UL CA	FDD
					TDD
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
					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
					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
7.6.3B	Narrow band blocking for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	FDD
					TDD
7.7	Spurious response	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
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

Clause	Title	Release	Applicability		Additional Information
			Condition	Comments	
7.7A.3	Spurious response for CA (inter-band DL CA without UL CA)	Rel-10	FFS	UE supporting E-UTRA and inter-band 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
					TDD
7.8.1	Wide band Intermodulation	Rel-8	R	UE supporting E-UTRA	FDD
					TDD
7.8.1A.1	Wide band 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
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
					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	
8.2.1.1.1_1	FDD PDSCH Single Antenna Port Performance (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	
8.2.1.1.1_A.1	FDD PDSCH Single Antenna Port Performance for CA (intra-band contiguous DL CA)	Rel-10	C22	UE supporting E-UTRA FDD and intra-band contiguous DL CA	
8.2.1.1.1_A.2	FDD PDSCH Single Antenna Port Performance for CA (inter-band DL CA)	Rel-10	C23	UE supporting E-UTRA FDD and inter-band DL CA	
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	C01	UE supporting E-UTRA FDD	
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	
8.2.1.3.1	FDD PDSCH Open Loop Spatial Multiplexing 2x2	Rel-8	C01	UE supporting E-UTRA FDD	
8.2.1.3.1_A.1	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (intra-band contiguous DL CA)	Rel-10	C22	UE supporting E-UTRA FDD and intra-band contiguous DL CA	
8.2.1.3.1_A.2	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (inter-band DL CA)	Rel-10	C23	UE supporting E-UTRA FDD and inter-band DL CA	
8.2.1.3.2	FDD PDSCH Open Loop Spatial Multiplexing 4x2	Rel-8	C01	UE supporting E-UTRA FDD	
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	
8.2.1.4.1	FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2	Rel-8 only	C01	UE supporting E-UTRA FDD	

Clause	Title	Release	Applicability		Additional Information
			Condition	**Comments**	
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	
8.2.1.4.2	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	
8.2.2.1	Void				
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	C02	UE supporting E-UTRA TDD	
8.2.2.1.1_A.1	TDD PDSCH Single Antenna Port Performance for CA (intra-band contiguous DL CA)	Rel-10	C24	UE supporting E-UTRA TDD and intra-band contiguous DL CA	
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	C02	UE supporting E-UTRA TDD	
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	
8.2.2.3	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_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	
8.2.2.3.2	TDD PDSCH Open Loop Spatial Multiplexing 4x2	Rel-8	C02	UE supporting E-UTRA TDD	
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	
8.2.2.4	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 TDD	
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 TDD	
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	Reel 10	C25	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103	

Clause	Title	Release	Applicability		Additional Information
			Condition	Comments	
8.3.1.2.1_D	FDD PDSCH Dual-layer Spatial Multiplexing for eDL-MIMO	Reel 10	C25	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103	
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 TDD	
8.3.2.1.1_1	TDD PDSCH Single-layer Spatial Multiplexing on antenna port 5 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	
8.3.2.1.2	TDD PDSCH Single-layer Spatial Multiplexing on antenna port 7 or 8 without a simultaneous transmission	Rel-9	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	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	
8.3.2.2.1	TDD PDSCH Dual-layer Spatial Multiplexing	Rel-9	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	
8.4.1.1	FDD PCFICH/PDCCH Single-antenna Port Performance	Rel-8	C01	UE supporting E-UTRA FDD	
8.4.1.2	Void				
8.4.1.2.1	FDD PCFICH/PDCCH Transmit Diversity 2x2	Rel-8 only	C09	UE supporting E-UTRA FDD and operating bands supporting 1,4 MHz Bandwidth	
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	
8.4.1.2.2_1	FDD PCFICH/PDCCH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	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	Void				
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	
8.5.1.1	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	
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	

Clause	Title	Release	Applicability		Additional Information
			Condition	Comments	
8.5.2.1	TDD PHICH Single-antenna Port Performance	Rel-8	C02	UE supporting E-UTRA TDD	
8.5.2.2	Void				
8.5.2.2.1	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 TDD	
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	
8.7.1.1	FDD sustained data rate performance	Rel-9	C01	UE supporting E-UTRA FDD	
8.7.2.1	TDD sustained data rate performance	Rel-9	C02	UE supporting E-UTRA TDD	
8.7.2.1_1	TDD sustained data rate performance (Rel-10 and forward)	Rel-10	C02	UE supporting E-UTRA TDD (UE categories 6, 7)	
8.7.2.1_A.1	TDD sustained data rate performance for CA (intra-band contiguous DL CA)	Rel-10	C24	UE supporting E-UTRA TDD and intra-band contiguous DL CA	
Reporting of Channel State Information					
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	
9.2.1.4_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	
9.2.2.1	FDD CQI Reporting under AWGN conditions – PUCCH 1-1	Rel-8	C01	UE supporting E-UTRA FDD	
9.2.2.1_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	
9.2.2.2	TDD CQI Reporting under AWGN conditions – PUCCH 1-1	Rel-8	C02	UE supporting E-UTRA TDD	
9.2.2.2_D	TDD CQI Reporting under AWGN conditions – PUCCH 1-1 for eDL-MIMO	Rel-10	C2xx2	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104	
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 TDD	
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	
9.3.2.1.1	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	Cx1	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	

Clause	Title	Release	Applicability		Additional Information
			Condition	**Comments**	
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	
9.3.3.1.2	TDD CQI Reporting under fading conditions and frequency-selective interference – PUSCH 3-0	Rel-8	C02	UE supporting E-UTRA TDD	
9.4.1.1.1	FDD PMI Reporting – PUSCH 3-1 (Single PMI)	Rel-8	C01	UE supporting E-UTRA FDD	
9.4.1.1.1_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	
9.4.1.1.2	TDD PMI Reporting – PUSCH 3-1 (Single PMI)	Rel-8	C02	UE supporting E-UTRA TDD	
9.4.1.1.2_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, C17	UE supporting E-UTRA FDD and operating bands supporting 20 MHz Bandwidth	
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	
9.4.2.1.1_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	
9.4.2.1.2	TDD PMI Reporting – PUSCH 1-2 (Multiple PMI)	Rel-8 only	C12, C18	UE supporting E-UTRA TDD and operating bands supporting 20 MHz Bandwidth	
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	
9.4.2.1.2_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_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_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	
9.5.1.2	TDD RI Reporting– PUCCH 1-1	Rel-8 and Rel-9 only	C14	UE supporting E-UTRA TDD (UE categories 2-8)	
9.5.1.2_1	TDD RI Reporting– PUCCH 1-1 (Release 10)	Rel-10 only	C14	UE supporting E-UTRA TDD (UE categories 2-8)	
9.5.1.2_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	
MBMS Performance 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 ELSE 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) THEN R ELSE N/A
C12	IF (A.4.1-1/2 AND A.4.3-3a/6) 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 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 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	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) THEN R ELSE N/A
C18	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) THEN R ELSE N/A
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.4.6.1-1/2 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) 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.4.4-1/115) THEN R ELSE N/A
C30	IF (A.4.1-1/2 AND A.4.4-1/115) 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		Release on other RAT
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-9	C03	UE supporting E-UTRA FDD and E-UTRA TDD		
4.2.5	E-UTRAN TDD - FDD cell re-selection inter frequency case	Rel-9	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		
4.2.7	E-UTRAN FDD – FDD Inter frequency case in the existence of non-allowed CSG cell	Rel-9	C01	UE supporting E-UTRA FDD		
4.2.8	E-UTRAN TDD – TDD Inter frequency case in the existence of non-allowed CSG cell	Rel-9	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-UTRA 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		Rel-9 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		Rel-9 UTRA TDD
4.3.4.2	E-UTRA TDD - UTRAN TDD cell re-selection: UTRA is of lower priority	Rel-8	C05	UE supporting E-UTRA TDD and UTRA TDD		Rel-9 UTRA TDD
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 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		
4.5.2.1	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		

| Clause | Title | Release | Applicability | | Additional Information |
			Condition	Comments	Release on other RAT
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	
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	
5.2.1	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
5.3.1	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 Connection 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	

Clause	Title	Release	Applicability		Additional Information	
			Condition	**Comments**		**Release on other RAT**
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		
6.2.1	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		
6.2.4	E-UTRAN TDD - Non-Contention Based Random Access Test	Rel-8	C02	UE supporting E-UTRA TDD		
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		
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 and 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		
7.2.1	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	C01c	UE supporting E-UTRA FDD and Feature Group Indicator 5		

Clause	Title	Release	Applicability		Additional Information	
			Condition	Comments		Release on other RAT
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		
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	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		
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		
8.2.1	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.		
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		
8.3.1	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.		
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.	

Clause	Title	Release	Applicability		Additional Information	
			Condition	**Comments**		**Release on other RAT**
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		
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		
8.6.1	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 cell search 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 Indicators 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
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		

Clause	Title	Release	Applicability		Additional Information	
			Condition	Comments		Release on other RAT
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		
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		
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		
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		
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		
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		
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		
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		

Clause	Title	Release	Applicability		Additional Information	
			Condition	Comments		Release on other RAT
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		
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 Indicators 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 Indicators 15		
Measurement Performance Requirements						
9.1.1.1	FDD Intra Frequency Absolute RSRP Accuracy	Rel-8	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	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	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	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25		
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	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 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		
9.1.6.2	FDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10	C18	UE supporting E-UTRA FDD and CA		
9.1.7.1	TDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10	C19	UE supporting E-UTRA TDD and CA		
9.1.7.2	TDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10	C19	UE supporting E-UTRA TDD and CA		
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 Indicators 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 Indicators 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 Indicators 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 Indicators 115		
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		

Clause	Title	Release	Applicability		Additional Information
			Condition	Comments	Release on other RAT
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	
9.2.5.2	FDD Relative RSRQ Accuracy E-UTRA for Carrier Aggregation	Rel-10	C18	UE supporting E-UTRA FDD and CA	
9.2.6.1	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation	Rel-10	C19	UE supporting E-UTRA TDD and CA	
9.2.6.2	TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation	Rel-10	C19	UE supporting E-UTRA TDD and CA	
9.3.1	E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy	Rel-9	C04	UE supporting E-UTRA FDD 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	
9.3.2	E-UTRAN TDD - UTRA FDD CPICH RSCP absolute accuracy	Rel-9	C07	UE supporting E-UTRA TDD and UTRA FDD	
9.4.2	E-UTRAN TDD - UTRA FDD CPICH Ec/No absolute accuracy	Rel-9	C07	UE supporting E-UTRA TDD and UTRA FDD	
9.6.2	GSM RSSI absolute accuracy for E-UTRAN TDD	Rel-9a	C09	UE supporting E-UTRA TDD and GSM and Feature Group Indicator 23	

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	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
C01e	IF (A.4.1-1/1 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A
C01f	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
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
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	Void
C04d	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
C04e	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.4.4-1/9 AND A.4.4-1/25) 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.4.4-1/11 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	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
C07b	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
C07c	Void
C08	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) 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 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) 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	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
C10	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
C33	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3/111) THEN R ELSE N/A
C34	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.4.1-1/7) THEN R ELSE N/A
C36	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 AND A.4.4-3/115) THEN R ELSE N/A
C46	IF (A.4.1-2 AND A.4.4-3/115) THEN R ELSE N/A

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 User Equipment Under Test (UEUT) identification

UEUT name:

....

....

Hardware configuration:

....

....

....

Software configuration:

....

....

....

A.2.3   Product supplier

Name:

....3GPP..

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	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	

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, 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: 1427.9-1447.9, 1475.9-1495.9 MHz	36.101, 5.5	Rel-8	FDD Band 11
12	Frequency band: 699-716, 729-746 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
20	Frequency band: 832-862, 791-821MHz	36.101, 5.5	Rel-9	FDD Band 20
21	Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz	36.101, 5.5	Rel-9	FDD Band 21
22	Frequency band: 3410-3490, 3510-3590 MHz	36.101, 5.5	Rel-10	FDD Band 22
23	Frequency band: 2000-2020, 2180-2200 MHz	36.101, 5.5	Rel-10	FDD Band 23
24	Frequency band: 1626.5-1660.5, 1525-1559 MHz	36.101, 5.5	Rel-10	FDD Band 24
25	Frequency band: 1850-1915, 1930-1995 MHz	36.101, 5.5	Rel-10	FDD Band 25
26	Frequency band: 814-849, 859-894 MHz	36.101, 5.5	Rel-11	FDD Band 26
27	Frequency band: 807-824, 852-869 MHz	36.101, 5.5	Rel-11	FDD Band 27
28	Frequency band: 703-748, 758-803 MHz	36.101, 5.5	Rel-11	FDD Band 28
...				
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
41	Frequency band: 2496-2690, 2496-2690 MHz	36.101, 5.5	Rel-10	TDD Band 41
42	Frequency band: 3400-3600, 3400-3600 MHz	36.101, 5.5	Rel-10	TDD Band 42
43	Frequency band: 3600-3800, 3600-3800 MHz	36.101, 5.5	Rel-10	TDD Band 43
44	Frequency band: 703-803, 703-803 MHz	36.101, 5.5	Rel-11	TDD Band 44
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, 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, 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
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, 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, 25, 28, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44

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
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

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	
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	

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

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 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 25.331, clause B.1).

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

Item	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) - Multi-user MIMO for PDSCH - 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

3	Support of - Semi-persistent scheduling - TTI bundling - 5bit RLC UM SN - 7bit PDCP SN	- can only be set to 1 if the UE has set bit number 7 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_3	Corresponding to the Index of Indicator, the leftmost binary bit 3 Set to true if supporting all functionalities in the feature group
	Support of - 5bit RLC UM SN - 7bit PDCP SN	- can only be set to 1 if the UE has set bit number 7 to 1.	Yes, if UE supports VoLTE	Rel-9			
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			Rel-8	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
			Yes	Rel-9			
6	Support of - Prioritized bit rate			Rel-8	36.331, Annex B.1	pc_FeatrGrp_6	Corresponding to the Index of Indicator, the leftmost binary bit 6 Set to true if supporting all functionalities in the feature group
			Yes	Rel-9			
7	Support of - RLC UM	- can only be set to 0 if the UE does not support voice		Rel-8	36.331, Annex B.1	pc_FeatrGrp_7	Corresponding to the Index of Indicator, the leftmost binary bit 7 Set to true if supporting all functionalities in the feature group
			Yes, if UE supports VoLTE	Rel-9			
8	Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH PS handover	- can only be set to 1 if the UE has set bit number 22 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_8	Corresponding to the Index of Indicator, the leftmost binary bit 8 Set to true if supporting all functionalities in the feature group
			Yes, if UE supports UTRA	Rel-9			

9	Support of - EUTRA RRC_CONNECTED to GERAN GSM_Dedicated handover	- related to SR-VCC - can only be set to 1 if the UE has set bit number 23 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_9	Corresponding to the Index of Indicator, the leftmost binary bit 9 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
11	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 25 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_13	Corresponding to the Index of Indicator, the leftmost binary bit 13 Set to true if supporting all functionalities in the feature group
			Yes, unless UE only supports band 13	Rel-9			
14	Support of - Measurement reporting event: Event A4 – Neighbour > threshold - Measurement reporting event: Event A5 – Serving < threshold1 & Neighbour > threshold2			Rel-8	36.331, Annex B.1	pc_FeatrGrp_14	Corresponding to the Index of Indicator, the leftmost binary bit 14 Set to true if supporting all functionalities in the feature group

15	Support of - Measurement reporting event: Event B1 – Neighbour > threshold for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set at least one of the bit number 22, 23, 24 or 26 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_15	Corresponding to the Index of Indicator, the leftmost binary bit 15 Set to true if supporting all functionalities in the feature group
16	Support of - non-ANR related intra-frequency periodical measurement reporting; - non-ANR related inter-frequency periodical measurement reporting, if the UE has set bit number 25 to 1; and - non-ANR related inter-RAT periodical measurement reporting for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively. 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.			Rel-8	36.331, Annex B.1	pc_FeatrGrp_16	Corresponding to the Index of Indicator, the leftmost binary bit 16 Set to true if supporting all functionalities in the feature group
			Yes	Rel-9			
17	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
			Yes	Rel-9			
18	Support of Inter-frequency ANR features including: - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-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_18	Corresponding to the Index of Indicator, the leftmost binary bit 18 Set to true if supporting all functionalities in the feature group
			Yes, unless UE only supports band 13	Rel-9			

19	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	- can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 23, 24 or 26 to 1.		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
20	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.	- 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	Yes	Rel-8 Rel-9	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
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 feature group

22	Support of - UTRAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode			Rel-8	36.331, Annex B.1	pc_FeatrGrp_22	Corresponding to the Index of Indicator, the leftmost binary bit 22
			Yes, if UE supports UTRA	Rel-9			Set to true if supporting all functionalities in the feature group
23	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
24	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
25	Support of - Inter-frequency measurements and reporting in E-UTRA connected mode 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.			Rel-8	36.331, Annex B.1	pc_FeatrGrp_25	Corresponding to the Index of Indicator, the leftmost binary bit 25
			Yes, unless UE only supports band 13	Rel-9			Set to true if supporting all functionalities in the feature group
26	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
27	Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH CS handover	- related to SR-VCC - can only be set to 1 if the UE has set bit number 8 to 1		Rel-8	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			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
31	Undefined			Rel-8	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			Rel-8	36.331, Annex B.1	pc_FeatrGrp_32	Corresponding to the Index of Indicator, the leftmost binary bit 32 Set to true if supporting all functionalities in the feature group

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*	- can only be set to 1 if the UE has set bit number 5 and bit number 22 to 1.		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	Inter-RAT ANR features for GERAN including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - 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 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*	- can only be set to 1 if the UE has set bit number 5 and bit number 24 to 1.		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	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 37
38	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 38
39	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 39
40	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 40
41	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 41
42	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 42

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
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
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

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

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
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

A.4.5   Additional information

Table A.4.5-1: Additional information

Item	Additional information	Ref.	Release	Mnemonic	Comments
1	Support of CSG	36.331 Annex B.2	Rel-8	pc_CSG_list	
2	Support of intra-frequency SI acquisition for HO	36.306 4.3.11.1	Rel-9	pc_intraFreqSI-AcquisitionForHO	
3	Support of inter-frequency SI acquisition for HO	36.306 4.3.11.2	Rel-9	pc_interFreqSI-AcquisitionForHO	

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.	Release	Comments
1	DL Intra-band contiguous CA BW Class B	36.101, 5.6A 36.331, 6.3.6	FFS	Not used in any valid CA configurations in TS 36.101 yet
2	DL Intra-band contiguous CA BW Class C	36.101, 5.6A 36.331, 6.3.6	Rel-10	

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.	Release	Comments
1	UL Intra-band contiguous CA BW Class B	36.101, 5.6A 36.331, 6.3.6	FFS	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	Rel-10	

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

Item / CA Band (Note 1)	Ref.	Release	Supported DL CA Bandwidth Class(es) (Note 2)	Supported UL CA Bandwidth Class(es) (Note 2)
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_38	36.101, 5.6A 36.331, 6.3.6	Rel-11		
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		
Note 1:	Notation used for intra-band CA bands is according to TS 36.101 clause 5.6A.1 (e.g. 'CA_1' indicates CA configuration on E-UTRA band 1).			
Note 2:	The capabilities can be supported on a single or multiple band(s). The UE supplier shall indicate in the column "Supported DL CA Bandwidth Class(es)" and column "Supported UL CA Bandwidth Class(es)" the UE supported CA Bandwidth Class(es) in downlink and uplink respectively using CA Bandwidth Class identifiers as per TS 36.101 Table 5.6A-1.			
	For Rel-10 and Rel-11 CA bands then the only valid choice for Intra-band contiguous CA is 'C' or to leave the entry as blank (nothing stated), where blank means that CA is not supported. E.g. for a UE supporting CA Bandwidth Class C for both uplink and downlink then 'C' is stated in both columns.			

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

FFS

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 Combination	Ref.	Release	Comments
1	DL Inter-band CA BW Class Combination A-A	36.101, 5.6A 36.331, 6.3.6	Rel-10	

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

Table A.4.6.3-3: Supported CA configurations for Inter-band CA

Item / CA Band Combination (Note 1)	Ref.	Release	Supported DL CA Bandwidth Class combination(s) (Note 2)	Supported UL CA Bandwidth Class combinations(s) (Note 2)
CA_1-5	36.101, 5.6A 36.331, 6.3.6	Rel-10		N/A
CA_2-17	36.101, 5.6A 36.331, 6.3.6	Rel-10		N/A
CA_2-29	36.101, 5.6A 36.331, 6.3.6	Rel-10		N/A
CA_3-7	36.101, 5.6A 36.331, 6.3.6	Rel-11		N/A
CA_3-20	36.101, 5.6A 36.331, 6.3.6	Rel-10		N/A
CA_4-5	36.101, 5.6A 36.331, 6.3.6	Rel-11		N/A
CA_4-13	36.101, 5.6A 36.331, 6.3.6	Rel-11		N/A
CA_4-17	36.101, 5.6A 36.331, 6.3.6	Rel-10		N/A
CA_7-20	36.101, 5.6A 36.331, 6.3.6	Rel-11		N/A

Note 1: Notation used for inter-band CA configurations is according to TS 36.101 clause 5.6A.2 (e.g. 'CA_1_5' indicates CA configuration on E-UTRA bands 1 and 5).

Note 2: The capabilities can be supported on a single or multiple band(s). The UE supplier shall indicate in the column "Supported DL CA Bandwidth Class combination(s)" and column "Supported UL CA Bandwidth Class combination(s)" the UE supported CA Bandwidth Class combination(s) in downlink and uplink respectively using combination of CA Bandwidth Class identifiers as per TS 36.101 Table 5.6A-1 in the same order as the bands are indicated in the CA Configuration separated by a '-'. For Rel-10 and Rel-11 CA band combinations then the only valid choice for Inter-band CA in downlink is 'A-A' or to leave the entry as blank (nothing stated), where blank means that CA is not supported.

Note 2 continued: For Rel-10 and Rel-11 CA band combinations then uplink CA is not applicable and column "Supported UL CA Bandwidth Class combination(s)" is marked as 'N/A'. E.g. if UE supports Rel-10 CA band combination CA_1-5 and the UE supporting CA Bandwidth Class A for both bands in downlink then 'A-A' is stated in the column "Supported DL CA Bandwidth Class combination(s)" and column "Supported UL CA Bandwidth Class combination(s)" is marked as 'N/A'.

Annex B (informative):
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: - 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	0.0.1	0.1.0
2008-08					Updated after RAN5#40: - Editorial update in regard to changing spec names, etc. - FDD and TDD split (R5-083839) - RRM TC numbers aligned with 36.521-3 v030	0.1.1	0.2.0
2008-10					Update after RAN5#40bis: - 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	0.2.0	0.3.0
2008-11					Update After RAN5#41 (R5-055360): - 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	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 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 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 Conformance 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
2010-03	RAN#47	R5-100358	0011	-	CR to 36.521-2 Rel-8 Introduction of Applicability for E-UTRAN FDD - FDD Intra Frequency Cell Search with DRX when L3 filtering is used	8.3.0	8.4.0
2010-03	RAN#47	R5-100561	0012	-	CR to 36.521-2: Update baseline implementation capabilities with extended LTE1500 operating bands	8.3.0	8.4.0
2010-03	RAN#47	R5-100872	0013	-	CSI: Following up corrections to tests titles and RI clause structure	8.3.0	8.4.0
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 RRM test cases	9.0.0	9.1.0
2010-09	RAN#49	R5-104246	0017	-	CR to 36.521-2 on Correction to cell search	9.1.0	9.2.0
2010-09	RAN#49	R5-104264	0018	-	Addition of applicability for new RRM test cases	9.1.0	9.2.0
2010-09	RAN#49	R5-104372	0019	-	Update of Applicability for Demodulation test cases and UE implementation Types for UTRA TDD	9.1.0	9.2.0
2010-09	RAN#49	R5-104840	0020	-	36521-2 General update to add-remove TCs applicability correct, TC titles and numbers and editorials	9.1.0	9.2.0

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2010-09	RAN#49	R5-105056	0021	-	Applicability of a new Rel-9 downlink sustained data rate performance test cases	9.1.0	9.2.0
2010-12	RAN#50	R5-106118	0022	-	CR to 36.521-2: Update baseline implementation capabilities for EUTRA TDD LTE band 41	9.2.0	9.3.0
2011-03	RAN#51	R5-110536	0023	-	Defining new bands 42 and 43 (3500MHz)	9.3.0	9.4.0
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	10.0.0	10.1.0
2012-03	RAN#55	R5-120838	0053	-	RF/RRM: Applicability for new added RRM test cases	10.0.0	10.1.0
2012-03	RAN#55	R5-120840	0054	-	Applicability for new UL MIMO test case	10.0.0	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	10.1.0	10.2.0
2012-06	RAN#56	R5-121219	0056	-	Adding operating band 26 to TS 36.521-2	10.1.0	10.2.0
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	10.1.0	10.2.0
2012-06	RAN#56	R5-121965	0058	-	Applicability for new UL MIMO test cases	10.1.0	10.2.0
2012-06	RAN#56	R5-121966	0059	-	Updates to applicability for Transmit timing tests in 36.521-2	10.1.0	10.2.0
2012-06	RAN#56	R5-121967	0060	-	Applicability for new R9 RRM test cases	10.1.0	10.2.0
2012-06	RAN#56	R5-121990	0061	-	Addition of applicability for CA TCs	10.1.0	10.2.0
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	10.3.0
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	10.3.0
2012-09	RAN#57	R5-123542	0067	-	TS 36.521-2:TDD CA test cases applicability correction	10.2.0	10.3.0
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

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
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	-	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	10.4.0
2012-12	RAN#58	R5-125390	0076	-	Adding bands 28 and 44 to TS36.521-2	10.3.0	10.4.0
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	RAN#58	R5-125833	0078	-	Introduction of Band 27 to TS 36.521-2	10.3.0	10.4.0
2012-12	RAN#58	R5-125836	0079	-	Update applicability of UL-MIMO related conformance test cases	10.3.0	10.4.0
2012-12	RAN#58	R5-125920	0080	-	Applicability removal of RRM TC8.12.1	10.3.0	10.4.0
2012-12	RAN#58	R5-126049	0081	-	Updates to the applicability of CA RF Tx tests	10.3.0	10.4.0
2012-12	RAN#58	R5-124138	0082	-	Updates to the applicability of CA RF Performance tests	10.3.0	10.4.0
2012-12	RAN#58	R5-124168	0083	-	Updates to the applicability of CA RF Rx tests	10.3.0	10.4.0
2012-12	RAN#58	R5-124169	0084	-	Applicability for new RRM CA related TCs	10.3.0	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	10.5.0	11.0.0
2013-03	RAN#59	R5-130379	0089	-	Updates to CA physical layer baseline implementation capabilities for CA band 41	10.5.0	11.0.0
2013-03	RAN#59	R5-130927	0094	-	Updates on the supported CA configurations for CA_38, CA_3-7 and CA_7-20	10.5.0	11.0.0
2013-03	RAN#59	R5-130928	0095	-	Addition of CA physical layer implementation capabilities for CA_4-5 and CA_4-13	10.5.0	11.0.0
2013-03	RAN#59	R5-130929	0096	-	Updates of Inter-Band CA combinations CA_3-20 and CA_2-29	10.5.0	11.0.0
2013-03	RAN#59	R5-130930	0097	-	CA_2-17 and CA_4-17 addition to supported capabilities in 36.521-2	10.5.0	11.0.0