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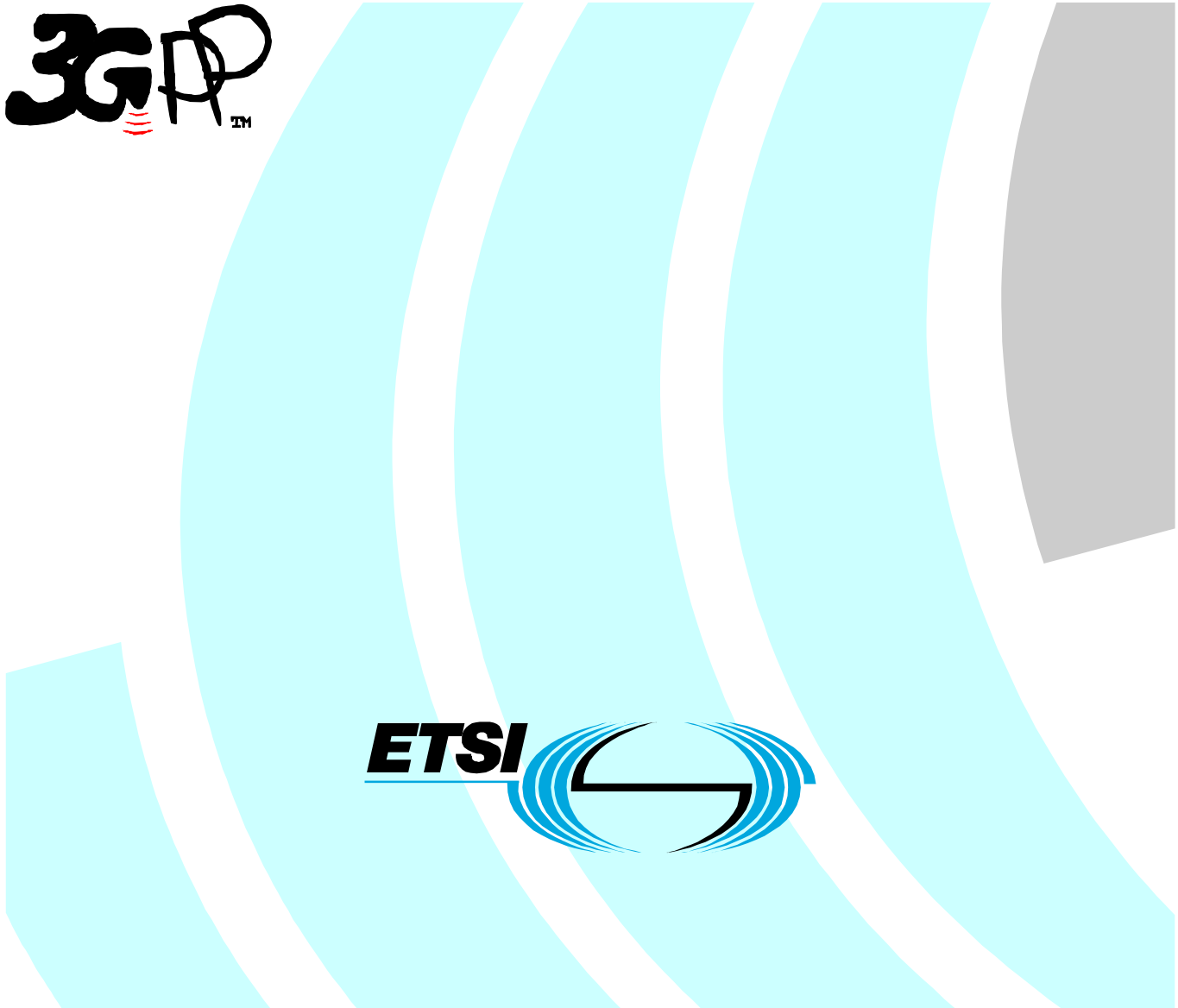
Technical Specification

**Universal Mobile Telecommunications System (UMTS);
User Equipment (UE) conformance specification;
Radio transmission and reception (FDD);
Part 2: Implementation Conformance Statement (ICS)
(3GPP TS 34.121-2 version 7.3.0 Release 7)**



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

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

Siret N° 348 623 562 00017 - NAF 742 C
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Foreword

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Foreword

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Introduction

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

3GPP TS 34.121-1 [20]: User Equipment (UE) conformance specification; Radio transmission and reception (FDD); Part 1: Conformance specification.

3GPP TS 34.121-2: User Equipment (UE) conformance specification; Radio transmission and reception (FDD); Part 2: Implementation Conformance Statement (ICS).

NOTE: TS 34.121 has been converted to multipart TS with version 7.0.0. Previous versions are a single part standard 34.121.

1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for 3rd Generation User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [2] and ETS 300 406 [3].

The present document also specifies a recommended applicability statement for the test cases included in TS 34.121. These applicability statements are based on the features implemented in the UE.

Special conformance testing functions can be found in 3GPP TS 34.109 [45] and the common test environments are included in 3GPP TS 34.108 [44].

The present document is valid for UE implemented according to 3GPP releases starting from Release 99 up to the Release indicated on the cover page of the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
  - For a Release 1999 UE, references to 3GPP documents are to version 3.x.y, when available.
  - For a Release 4 UE, references to 3GPP documents are to version 4.x.y, when available.
  - For a Release 5 UE, references to 3GPP documents are to version 5.x.y, when available.
  - For a Release 6 UE, references to 3GPP documents are to version 6.x.y, when available.
  - For a Release 7 UE, references to 3GPP documents are to version 7.x.y, when available.

[1] ISO/IEC 9646-1: "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[2] ISO/IEC 9646-7: "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[3] ETSI ETS 300 406 (1995): "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[4] 3GPP TR 21.904: "UE capability requirements".

[5] 3GPP TS 22.002: "Circuit Bearer Services (BS) supported by Public Land Mobile Network (PLMN)".

[6] 3GPP TS 22.060: "General Packet Radio Service (GPRS); Service description, Stage 1".

[7] 3GPP TS 22.105: "Services and Service Capabilities".

[8] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core Network Protocols - Stage 3".

[9] 3GPP TS 25.101: "UE radio Transmission and Reception (FDD)".

[10] 3GPP TS 25.102: "UTRA (UE) TDD; Radio Transmission and Reception".

[11] 3GPP TS 25.201: "Physical layer - General Description".

[12] 3GPP TS 25.306: "UE Radio Access Capabilities".

[13] 3GPP TS 25.321: "Medium Access Control (MAC) protocol specification".

[14] 3GPP TS 25.322: "Radio Link Control (RLC) protocol specification".

[15] 3GPP TS 25.323: "Packet Data Convergence Protocol (PDCP) specification".

[16] 3GPP TS 25.324: "Broadcast/Multicast Control BMC".

[17] 3GPP TS 25.331: "Radio Ressource Control (RRC) protocol specification".

[18] 3GPP TS 34.108: "Common Test Environments for User Equipment (UE) Conformance Testing".

[19] 3GPP TS 34.109: "Terminal logical test interface; Special conformance testing functions".

[20] 3GPP TS 34.121-1: "User Equipment (UE) Conformance Specification, Radio transmission and reception (FDD); Part 1: Conformance specification".

[21] 3GPP TS 34.122: "Terminal Conformance Specification, Radio Transmission and Reception (TDD)".

[22] 3GPP TS 34.123-1: "User Equipment (UE) conformance specification; Part 1: Protocol conformance specification".

[23] 3GPP TS 34.123-2: " User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".

[24] 3GPP TS 34.123-3: "User Equipment (UE) conformance specification; Part 3: Abstract Test Suites".

[25] 3GPP TS 34.124: "ElectroMagnetic Compatibility (EMC) for Mobile terminals and ancillary equipment".

[26] 3GPP TS 51.010-1: "Mobile Station (MS) conformance specification; Part 1: Conformance specification ".

[27] 3GPP TS 51.010-2: "Mobile Station (MS) conformance specification; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

3 Definitions and abbreviations

3.1 Definitions

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

- terms defined in the relevant 3GPP core specifications (see normative references);
- terms defined in ISO/IEC 9646-1 [1] and in ISO/IEC 9646-7 [2].

In particular, the following terms defined in ISO/IEC 9646-1 [1] apply:

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
The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, information object ICS, etc.

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

3.2 Abbreviations

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

ICS	Implementation Conformance Statement
SCS	System Conformance Statement
UEUT	User Equipment Under Test

4 Recommended test case applicability

The applicability of each individual test is identified in the table 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.

The columns in table 1 have the following meaning:

Clause

The clause column indicates the clause number in TS 34.121-1 [20] that contains the test body.

Title

The title column describes the name of the test.

Release

The release column indicates the earliest release from which each testcase is applicable, except if otherwise stated of an individual test case.

Applicability

The following notations are used for the applicability column:

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

Comments

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

Table 1: Applicability of tests

Clause	Title	Release	Applicability	Comments
RF Test cases				
5.2	Maximum Output Power	R99	R	UEs supporting FDD
5.2A	Maximum Output Power with HS-DPCCH	Rel-5 only	C_RF02	UEs supporting FDD and HS-PDSCH
5.2AA	Maximum Output Power with HS-DPCCH (Release 6 and later)	Rel-6	C_RF24	UEs supporting FDD and HS-PDSCH and not E-DPDCH
5.2B	Maximum Output Power with HS-DPCCH and E-DCH	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
5.3	Frequency Error	R99	R	UEs supporting FDD
5.4.1	Output Power Dynamics in the Uplink / Power control is used to limit the interference level / Open Loop Power Control in the Uplink	R99	R	UEs supporting FDD
5.4.2	Output Power Dynamics in the Uplink / Power control is used to limit the interference level / Inner Loop Power Control in the Uplink	R99	R	UEs supporting FDD
5.4.3	Output Power Dynamics in the Uplink / Power control is used to limit the interference level / Minimum Output Power	R99	R	UEs supporting FDD
5.4.4	Output Power Dynamics in the Uplink / Power control is used to limit the interference level / Out-of-synchronisation handling of output power	R99	R	UEs supporting FDD
5.5.1	Transmit ON/OFF Power / Transmit OFF Power	R99	R	UEs supporting FDD
5.5.2	Transmit ON/OFF Power / Transmit ON/OFF Time mask	R99	R	UEs supporting FDD
5.6	Change of TFC	R99	R	UEs supporting FDD
5.7	Power setting in uplink compressed mode	R99	C_RF01	UEs supporting FDD and uplink compressed mode.
5.7A	HS-DPCCH	Rel-5	C_RF02	UEs supporting FDD and HS-PDSCH
5.8	Occupied Bandwidth (OBW)	R99	R	UEs supporting FDD
5.9	Spectrum emission mask	R99	R	UEs supporting FDD
5.9A	Spectrum Emission Mask with HS-DPCCH	Rel-5	C_RF02	UEs supporting FDD and HS-PDSCH
5.9B	Spectrum Emission Mask with E-DCH	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
5.10	Adjacent Channel Leakage Power Ratio (ACLR)	R99	R	UEs supporting FDD
5.10A	Adjacent Channel Leakage Power Ratio (ACLR) with HS-DPCCH	Rel-5	C_RF02	UEs supporting FDD and HS-PDSCH
5.10B	Adjacent Channel Leakage Power Ratio (ACLR) with E-DCH	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
5.11	Spurious Emissions	R99	R	UEs supporting FDD
5.12	Transmit Intermodulation	R99	R	UEs supporting FDD
5.13.1	Transmit Modulation / Error Vector Magnitude (EVM)	R99	R	UEs supporting FDD
5.13.1A	Error Vector Magnitude (EVM) with HS-DPCCH	Rel-5 only	C_RF02	UEs supporting FDD and HS-PDSCH

Clause	Title	Release	Applicability	Comments
5.13.1AA	Error Vector Magnitude (EVM) and phase discontinuity with HS-DPCCH	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
5.13.2	Transmit Modulation / Peak code domain error	R99	C_RF11	UEs supporting FDD and uplink RMC 768 kbps
5.13.3	Transmit Modulation / UE phase discontinuity	Rel-5	R	UEs supporting FDD
5.13.4	Transmit Modulation PRACH preamble quality	Rel-5	R	UEs supporting FDD
6.2	Receiver Characteristics / Reference Sensitivity Level	R99	R	UEs supporting FDD
6.3	Receiver Characteristics / Maximum Input Level	R99	R	UEs supporting FDD
6.3A	Maximum Input Level for HS-PDSCH Reception (16QAM)	Rel-5	C_RF26	UEs supporting FDD and HS-PDSCH and supporting 16QAM (HS-DSCH Categories 1-10)
6.4	Receiver Characteristics Adjacent Channel Selectivity (ACS) (Rel-99 and Rel-4)	R99 and Rel-4 only	R	UEs supporting FDD
6.4A	Receiver Characteristics Adjacent Channel Selectivity (ACS) (Rel-5 and later releases)	Rel-5	R	UEs supporting FDD
6.5	Blocking Characteristics / In-band blocking	R99	R	UEs supporting FDD
	Blocking Characteristics / Out of-band blocking			
	Blocking Characteristics / Narrow band blocking		C_RF03	UEs supporting FDD and Band II or Band III or Band IV or Band V or Band VIII
6.6	Spurious Response	R99	R	UEs supporting FDD
6.7	Intermodulation Characteristics / Intermodulation	R99	R	UEs supporting FDD
	Intermodulation Characteristics / Narrow band intermodulation		C_RF03	UEs supporting FDD and Band II or Band III or Band IV or Band V or Band VIII
6.8	Spurious Emissions	R99	R	UEs supporting FDD
7.2.1	Demodulation in Static Propagation conditions / Demodulation of Dedicated Channel (DCH) / Test 1	R99	R	UEs supporting FDD
	Demodulation in Static Propagation conditions / Demodulation of Dedicated Channel (DCH) / Test 2		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation in Static Propagation conditions / Demodulation of Dedicated Channel (DCH) / Test 3		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation in Static Propagation conditions / Demodulation of Dedicated Channel (DCH) / Test 4		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
7.3.1	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 1	R99	R	UEs supporting FDD
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 2		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 3		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 4		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 5		R	UEs supporting FDD

Clause	Title	Release	Applicability	Comments
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 6		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 7		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 8		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 9		R	UEs supporting FDD
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 10		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 11		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 12		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 13		R	UEs supporting FDD
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 14		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 15		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 16		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 17		R	UEs supporting FDD
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 18		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 19		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation of DCH in Multi-path Fading Propagation conditions / Single Link Performance / Test 20		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
7.4.1	Demodulation of DCH in Moving Propagation conditions / Single Link Performance / Test 1	R99	R	UEs supporting FDD
	Demodulation of DCH in Moving Propagation conditions / Single Link Performance / Test 2		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
7.5.1	Demodulation of DCH in Birth-Death Propagation conditions / Single Link Performance / Test 1	R99	R	UEs supporting FDD
	Demodulation of DCH in Birth-Death Propagation conditions / Single Link Performance / Test 2		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
7.6.1	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in open-loop transmit diversity mode / Test 1	R99	R	UEs supporting FDD
7.6.2	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in closed loop transmit diversity mode / Test 1	R99	R	UEs supporting FDD

Clause	Title	Release	Applicability	Comments
	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in closed loop transmit diversity mode / Test 2	R99 and Rel-4 only	R	UEs supporting FDD
7.6.3	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in site selection diversity transmission power control mode / Test 1	R99 and Rel-4 only	R	UEs supporting FDD
	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in site selection diversity transmission power control mode / Test 2			
	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in site selection diversity transmission power control mode / Test 3			
	Demodulation of DCH in downlink Transmit diversity modes / Demodulation of DCH in site selection diversity transmission power control mode / Test 4			
7.7.1	Demodulation in Handover conditions / Demodulation of DCH in Inter-Cell Soft Handover / Test 1	R99	R	UEs supporting FDD
	Demodulation in Handover conditions / Demodulation of DCH in Inter-Cell Soft Handover / Test 2		C_RF08	UEs supporting FDD and downlink RMC 64 kbps
	Demodulation in Handover conditions / Demodulation of DCH in Inter-Cell Soft Handover) / Test 3		C_RF09	UEs supporting FDD and downlink RMC 144 kbps
	Demodulation in Handover conditions / Demodulation of DCH in Inter-Cell Soft Handover) / Test 4		C_RF10	UEs supporting FDD and downlink RMC 384 kbps
7.7.2	Demodulation in Handover conditions / Combining of TPC commands from radio links of different radio link sets / Test 1	R99	R	UEs supporting FDD
	Demodulation in Handover conditions / Combining of TPC commands from radio links of different radio link sets / Test 2			
7.7.3	Demodulation in Handover conditions / Combining of reliable TPC commands from radio links of different radio link sets / Test 1	R99	R	UEs supporting FDD
	Demodulation in Handover conditions / Combining of reliable TPC commands from radio links of different radio link sets / Test 2			
7.8.1	Power control in downlink / Power control in the downlink, constant BLER target / Test 1	R99	R	UEs supporting FDD
7.8.2	Power control in downlink / Power control in the downlink, initial convergence / Test 1	R99	R	UEs supporting FDD
	Power control in downlink / Power control in the downlink, initial convergence / Test 2			
	Power control in downlink / Power control in the downlink, initial convergence / Test 3		C_RF08	UEs supporting FDD and downlink RMC 64 kbps

Clause	Title	Release	Applicability	Comments
	Power control in downlink / Power control in the downlink, initial convergence / Test 4			
7.8.3	Power control in downlink Power control in the downlink, wind up effects / Test 1 / Stage 1	R99	R	UEs supporting FDD
	Power control in downlink / Power control in the downlink, wind up effects / Test 1 / Stage 2			
	Power control in downlink Power control in the downlink, wind up effects / Test 1 / Stage 3			
7.8.4	Power control in the downlink, different transport formats	Rel-5	R	UEs supporting FDD
7.9.1	Downlink compressed mode / Single link performance / Test 1	R99	C_RF04	UEs supporting FDD and downlink compressed mode
	Downlink compressed mode / Single link performance / Test 2			
	Downlink compressed mode / Single link performance / Test 3	R99 and Rel-4 only	C_RF04	UEs supporting FDD and downlink compressed mode
	Downlink compressed mode / Single link performance / Test 4			
7.10	Blind transport format detection / Test 1	R99	R	UEs supporting FDD
	Blind transport format detection / Test 2			
	Blind transport format detection / Test 3			
	Blind transport format detection / Test 4			
	Blind transport format detection / Test 5			
	Blind transport format detection / Test 6			
7.11	Demodulation of Paging Channel (PCH)	Rel-4	C_RF12	UEs supporting FDD Packet Switched Data
7.12	Detection of Acquisition Indicator (AI)	Rel-4	R	UEs supporting FDD
8.2.2.1	Cell Re-Selection - Scenario 1: Single carrier case	R99	R	UEs supporting FDD
8.2.2.2	Cell Re-Selection - Scenario 2: Multi carrier case	R99	R	UEs supporting FDD
8.2.3.1	UTRAN to GSM Cell Re-Selection - Scenario 1: Both UTRA and GSM level changed	R99	C_RF05	UEs supporting FDD and GSM
8.2.3.2	UTRAN to GSM Cell Re-Selection - Scenario 2: Only UTRA level changed	R99	C_RF05	UEs supporting FDD and GSM
8.2.3.3	UTRAN to GSM Cell Re-Selection - Scenario 3: HCS with only UTRA level changed	Rel-6	C_RF05	UEs supporting FDD and GSM
8.2.4	FDD/TDD Cell Re-selection	R99	C_RF06	UE supporting FDD and TDD
8.3.1	UTRAN Connected Mode Mobility FDD/FDD Soft Handover	R99	R	UEs supporting FDD
8.3.2.1	UTRAN Connected Mode Mobility - FDD/FDD Hard Handover to intra-frequency cell	R99	R	UEs supporting FDD
8.3.2.2	FDD/FDD Hard Handover to inter-frequency cell	R99	R	UEs supporting FDD
8.3.3	FDD/TDD Handover	R99 and Rel-4 only	C_RF06	UEs supporting FDD and TDD
8.3.4	Inter-system Handover from UTRAN FDD to GSM	R99	C_RF27	UEs supporting FDD and GSM and supporting speech.

Clause	Title	Release	Applicability	Comments
8.3.5.1	Cell Re-selection in CELL_FACH - One frequency present in neighbour list	R99	R	UEs supporting FDD
8.3.5.2	Cell Re-selection in CELL_FACH - Two frequencies present in the neighbour list	R99	R	UEs supporting FDD
8.3.5.3	Cell Re-selection in CELL_FACH - Cell Reselection to GSM	R99	C_RF07	UEs supporting FDD Packet Switched Data and GPRS
8.3.6.1	Cell Re-selection in CELL_PCH - One frequency present in the neighbour list	R99	C_RF12	UEs supporting FDD Packet Switched Data
8.3.6.2	Cell Re-selection in CELL_PCH - Two frequencies present in the neighbour list	R99	C_RF12	UEs supporting FDD Packet Switched Data
8.3.7.1	Cell Re-selection in URA_PCH - One frequency present in the neighbour list	R99	C_RF12	UEs supporting FDD Packet Switched Data
8.3.7.2	Cell Re-selection in URA_PCH - Two frequencies present in the neighbour list	R99	C_RF12	UEs supporting FDD Packet Switched Data
8.3.8	Serving HS-DSCH cell change	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
8.4.1.1	RRC Connection Control / RRC Re-establishment delay - Test 1	R99	R	UEs supporting FDD
8.4.1.2	RRC Connection Control / RRC Re-establishment delay - Test 2	R99	R	UEs supporting FDD
8.4.2.1	Random Access - Correct behaviour when receiving an ACK	R99, Rel-4 and Rel-5 only	R	UEs supporting FDD
8.4.2.1A	Random Access - Correct behaviour when receiving an ACK – Release 6	Rel-6	R	UEs supporting FDD
8.4.2.2	Random Access - Correct behaviour when receiving an NACK	R99	R	UEs supporting FDD
8.4.2.3	Random Access - Correct behaviour at Time-out	R99	R	UEs supporting FDD
8.4.2.4	Random Access - Correct behaviour when reaching maximum transmit power	R99	R	UEs supporting FDD
8.4.3.1	Transport format combination selection in UE - Interactive or Background, PS, UL: 64 kbps	R99	C_RF13	UEs supporting FDD and downlink RMC 64 kbps and uplink RMC 64 kbps
8.4.4.1	E-TFC restriction in UE - 10ms TTI E-DCH E-TFC restriction	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
8.5.1	Timing and Signalling Characteristics - UE Transmit Timing	R99	R	UEs supporting FDD
8.6.1.1	UE Measurements Procedures / FDD intra frequency measurements - Event triggered reporting in AWGN propagation conditions	R99 only	R	UEs supporting FDD
8.6.1.1A	UE Measurements Procedures / FDD intra frequency measurements - Event triggered reporting in AWGN propagation conditions	Rel-4	R	UEs supporting FDD
8.6.1.2	UE Measurements Procedures / FDD intra frequency measurements - Event triggered reporting of multiple neighbours in AWGN propagation condition	R99 only	R	UEs supporting FDD

Clause	Title	Release	Applicability	Comments
8.6.1.2A	UE Measurements Procedures / FDD intra frequency measurements - Event triggered reporting of multiple neighbours in AWGN propagation condition	Rel-4	R	UEs supporting FDD
8.6.1.3	UE Measurements Procedures / FDD intra frequency measurements - Event triggered reporting of two detectable neighbours in AWGN propagation condition	R99 only	R	UEs supporting FDD
8.6.1.3A	UE Measurements Procedures / FDD intra frequency measurements - Event triggered reporting of two detectable neighbours in AWGN propagation condition	Rel-4	R	UEs supporting FDD
8.6.1.4	Void			
8.6.1.4A	UE Measurements Procedures / FDD intra frequency measurements - Correct reporting of neighbours in fading propagation condition	Rel-4	R	UEs supporting FDD
8.6.2.1	FDD inter frequency measurements - Correct reporting of neighbours in AWGN propagation condition	R99	R	UEs supporting FDD
8.6.2.2	FDD inter frequency measurements - Correct reporting of neighbours in fading propagation condition	Rel-5	R	UEs supporting FDD
8.6.3.1	TDD measurements - Correct reporting of TDD neighbours in AWGN propagation condition	R99 and Rel-4 only	C_RF06	UEs supporting FDD and TDD
8.6.4.1	GSM measurements - Correct reporting of GSM neighbours in AWGN propagation condition	R99	C_RF05	UEs supporting FDD and GSM
8.6.5.1	Combined Interfrequency and GSM measurements - Correct reporting of neighbours in AWGN propagation condition	Rel-6	C_RF05	UEs supporting FDD and GSM
8.7.1.1.1	Measurements Performance Requirements / CPICH RSCP / Intra frequency measurements accuracy - Absolute accuracy requirement	R99	R	UEs supporting FDD
8.7.1.1.2	Measurements Performance Requirements / CPICH RSCP / Intra frequency measurements accuracy - Relative accuracy requirement	R99	R	UEs supporting FDD
8.7.1.2.1	Inter frequency measurement accuracy - Relative accuracy requirement	R99	R	UEs supporting FDD
8.7.2.1.1	CPICH Ec/Io / Intra frequency measurements accuracy - Absolute accuracy requirement	R99	R	UEs supporting FDD
8.7.2.1.2	CPICH Ec/Io / Intra frequency measurements accuracy - Relative accuracy requirement	R99	R	UEs supporting FDD
8.7.2.2.1	Inter frequency measurement accuracy / Absolute accuracy requirement		Void	
8.7.2.2.2	Inter frequency measurement accuracy / Relative accuracy requirement	R99	R	UEs supporting FDD
8.7.3.1	UTRA Carrier RSSI - Absolute measurement accuracy requirement	R99	R	UEs supporting FDD

Clause	Title	Release	Applicability	Comments
8.7.3.2	UTRA Carrier RSSI - Relative measurement accuracy requirement	Rel-6	R	UEs supporting FDD
8.7.3A	GSM Carrier RSSI	R99	C_RF05	UE supporting FDD and GSM
8.7.3B	Transport channel BLER		Void	
8.7.3C	UE transmitted power	R99	R	UEs supporting FDD
8.7.4.1	SFN-CFN observed time difference - Intra frequency measurement requirement	R99	R	UEs supporting FDD
8.7.4.2	SFN-CFN observed time difference - Inter frequency measurement requirement	R99	R	UEs supporting FDD
8.7.5.1	SFN-SFN observed time difference type 1	R99	R	UEs supporting FDD
8.7.5.2	SFN-SFN observed time difference type 2		Void	
8.7.6.1	UE Rx-Tx time difference type 1	R99	R	UEs supporting FDD
8.7.6.2	UE Rx-Tx time difference type 2		Void	
8.7.7	Observed time difference to GSM cell	R99 and Rel-4 only	Void	
8.7.8.1	P-CCPCH RSCP Absolute measurement accuracy	R99 and Rel-4 only	C_RF06	UEs supporting FDD and TDD
8.7.9	UE Transmission Power Headroom	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
9.2.1A	Demodulation of HS-DSCH (Fixed Reference Channel) - Single Link Performance - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 1/2/3	Rel-5	C_RF14	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 1-6
9.2.1B	Demodulation of HS-DSCH (Fixed Reference Channel) - Single Link Performance - QPSK, Fixed Reference Channel (FRC) H-Set 4/5	Rel-5	C_RF15	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 11-12
9.2.1C	Demodulation of HS-DSCH (Fixed Reference Channel) - Single Link Performance - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 6/3	Rel-6	C_RF16	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8
9.2.1D	Demodulation of HS-DSCH (Fixed Reference Channel) – Single Link Performance - Enhanced Performance Requirements Type 1 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 1/2/3	Rel-6	C_RF17	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 1-6 and Enhanced performance requirements type 1
9.2.1E	Demodulation of HS-DSCH (Fixed Reference Channel) – Single Link Performance - Enhanced Performance Requirements Type 1 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 6/3	Rel-6	C_RF18	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8 and Enhanced performance requirements type 1
9.2.1F	Demodulation of HS-DSCH (Fixed Reference Channel) – Single Link Performance - Enhanced Performance Requirements Type 2 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 6/3	Rel-6	C_RF19	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8 and Enhanced performance requirements type 2

Clause	Title	Release	Applicability	Comments
9.2.1G	Demodulation of HS-DSCH (Fixed Reference Channel) – Single Link Performance - Enhanced Performance Requirements Type 3 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 6/3	Rel-7	C_RF25	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8 and Enhanced performance requirements type 3
9.2.2A	Demodulation of HS-DSCH (Fixed Reference Channel) – Open Loop Diversity Performance - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 1/2/3	Rel-5	C_RF14	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 1-6
		Rel-6	C_RF15	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8
9.2.2B	Demodulation of HS-DSCH (Fixed Reference Channel) – Open Loop Diversity Performance - QPSK, Fixed Reference Channel (FRC) H-Set 4/5	Rel-5	C_RF16	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 11-12
9.2.2C	Demodulation of HS-DSCH (Fixed Reference Channel) – Open Loop Diversity Performance - Enhanced Performance Requirements Type 1 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 1/2/3	Rel-6	C_RF20	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 1-8 and Enhanced performance requirements type 1
9.2.2D	Demodulation of HS-DSCH (Fixed Reference Channel) – Open Loop Diversity Performance - Enhanced Performance Requirements Type 2 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 3	Rel-6	C_RF19	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8 and Enhanced performance requirements type 2
9.2.3A	Demodulation of HS-DSCH (Fixed Reference Channel) – Closed Loop Diversity Performance - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 1/2/3	Rel-5	C_RF14	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 1-6
		Rel-6	C_RF15	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8
9.2.3B	Demodulation of HS-DSCH (Fixed Reference Channel) – Closed Loop Diversity Performance - QPSK, Fixed Reference Channel (FRC) H-Set 4/5	Rel-5	C_RF16	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 11-12
9.2.3C	Demodulation of HS-DSCH (Fixed Reference Channel) – Closed Loop Diversity Performance - Enhanced Performance Requirements Type 1 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 1/2/3	Rel-6	C_RF20	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 1-8 and Enhanced performance requirements type 1
9.2.3D	Demodulation of HS-DSCH (Fixed Reference Channel) – Closed Loop Diversity Performance - Enhanced Performance Requirements Type 2 - QPSK/16QAM, Fixed Reference Channel (FRC) H-Set 6/3	Rel-6	C_RF19	UEs supporting FDD and HS-PDSCH and HSDPA UE capability categories 7-8 and Enhanced performance requirements type 2
9.3.1	Reporting of Channel Quality Indicator - Single Link Performance - AWGN Propagation Conditions	Rel-5	C_RF02	UEs supporting FDD and HS-PDSCH
9.3.2	Reporting of Channel Quality Indicator - Single Link Performance - Fading Propagation Conditions	Rel-5	C_RF02	UEs supporting FDD and HS-PDSCH

Clause	Title	Release	Applicability	Comments
9.3.3	Reporting of Channel Quality Indicator - Open Loop Diversity Performance - AWGN Propagation Conditions	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
9.3.4	Reporting of Channel Quality Indicator - Open Loop Diversity Performance - Fading Propagation Conditions	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
9.3.5	Reporting of Channel Quality Indicator - Closed Loop Diversity Performance - AWGN Propagation Conditions	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
9.3.6	Reporting of Channel Quality Indicator - Closed Loop Diversity Performance - Fading Propagation Conditions	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
9.4.1	HS-SCCH Detection Performance - Single Link Performance	Rel-5	C_RF02	UEs supporting FDD and HS-PDSCH
9.4.1A	HS-SCCH Detection Performance - Single Link Performance – Enhanced Performance Requirements Type 1	Rel-6	C_RF21	UEs supporting FDD and HS-PDSCH and Enhanced performance requirements type 1
9.4.2	HS-SCCH Detection Performance - Open Loop Diversity Performance	Rel-6	C_RF02	UEs supporting FDD and HS-PDSCH
9.4.2A	HS-SCCH Detection Performance - Open Loop Diversity Performance - Enhanced Performance Requirements Type 1	Rel-6	C_RF22	UEs supporting FDD and HS-PDSCH and Enhanced performance requirements type 1
10.2.1	Detection of E-DCH HARQ ACK Indicator Channel (E-HICH) - Single Link Performance	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
10.2.2.1	Detection of E-DCH HARQ ACK Indicator Channel (E-HICH) - Detection in Inter-Cell Handover conditions - RLS not containing the Serving E-DCH cell	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
10.2.2.2	Detection of E-DCH HARQ ACK Indicator Channel (E-HICH) - Detection in Inter-Cell Handover conditions - RLS containing the Serving E-DCH cell	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
10.3.1	Detection of E-DCH Relative Grant Channel (E-RGCH) - Single Link Performance	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
10.3.2	Detection of E-DCH Relative Grant Channel (E-RGCH) - Detection in Inter-Cell Handover conditions	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH
10.4.1	Demodulation of E-DCH Absolute Grant Channel (E-AGCH) - Single Link Performance	Rel-6	C_RF23	UEs supporting FDD and HS-PDSCH and E-DPDCH

C_RF01	IF A.7/8 OR A.7/10 THEN R ELSE N/A
C_RF02	IF A.7/14 THEN R ELSE N/A
C_RF03	IF A.6/3 OR A.6/14 OR A.6/15 OR A.6/16 OR A.6/19 THEN R ELSE N/A
C_RF04	IF A.7/9 OR A.7/10 THEN R ELSE N/A
C_RF05	IF A.1/1 AND A.1/4 THEN R ELSE N/A
C_RF06	IF A.1/1 AND (A.1/2 OR A.1/3) THEN R ELSE N/A
C_RF07	IF A.1/1 AND A.1/5 AND A.2/2 THEN R ELSE N/A
C_RF08	IF A.10/4 THEN R ELSE N/A
C_RF09	IF A.10/6 THEN R ELSE N/A
C_RF10	IF A.10/8 THEN R ELSE N/A
C_RF11	IF A.10/9 THEN R ELSE N/A
C_RF12	IF A.2/2 THEN R ELSE N/A
C_RF13	IF A.10/3 AND A.10/4 THEN R ELSE N/A
C_RF14	IF A.7/14 AND (A.8/1 OR A.8/2 OR A.8/3 OR A.8/4 OR A.8/5 OR A.8/6) THEN R ELSE N/A
C_RF15	IF A.7/14 AND (A.8/11 OR A.8/12) THEN R ELSE N/A
C_RF16	IF A.7/14 AND (A.8/7 OR A.8/8) THEN R ELSE N/A
C_RF17	IF A.7/14 AND A.11/1 AND (A.8/1 OR A.8/2 OR A.8/3 OR A.8/4 OR A.8/5 OR A.8/6) THEN R ELSE N/A
C_RF18	IF A.7/14 AND A.11/1 AND (A.8/7 OR A.8/8) THEN R ELSE N/A
C_RF19	IF A.7/14 AND A.11/2 AND (A.8/7 OR A.8/8) THEN R ELSE N/A
C_RF20	IF A.7/14 AND A.11/1 AND (A.8/1 OR A.8/2 OR A.8/3 OR A.8/4 OR A.8/5 OR A.8/6 OR A.8/7 OR A.8/8) THEN R ELSE N/A
C_RF21	IF A.7/14 AND A.11/1 THEN R ELSE N/A
C_RF22	IF A.7/14 AND A.11/2 THEN R ELSE N/A
C_RF23	IF A.7/14 AND A.7/15 THEN R ELSE N/A
C_RF24	IF A.7/14 AND (NOT A.7/15) THEN R ELSE N/A
C_RF25	IF A.7/14 AND A.11/3 AND (A.8/7 OR A.8/8) THEN R ELSE N/A
C_RF26	IF A.1/1 AND A.7/14 AND (A.8/1 OR A.8/2 OR A.8/3 OR A.8/4 OR A.8/5 OR A.8/6 OR A.8/7 OR A.8/8 OR A.8/9 OR A.8/10) THEN R ELSE N/A
C_RF27	IF A.1/1 AND A.1/4 AND A.2/1 AND (A.2a/1 OR A.2a/2) THEN R ELSE N/A

Annex A (normative): ICS proforma for 3rd Generation User Equipment

A.1 Guidance for completing the ICS proforma

A.1.1 Purposes and structure

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

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

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

A.1.2 Abbreviations and conventions

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

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.7/14 is the reference to the answer of item 14 in table A.7.

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:

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.....

.....

Software configuration:

.....

.....

.....

A.2.3 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

A.2.4 Client

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

A.2.5 ICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

A.3 Identification of the protocol

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

A.4 ICS proforma tables

Note: Capability Tables A.1-A.9 are copied from TS 34.123-2 [23].

A.4.1 UE Implementation Types

Table A.1: UE Radio Technologies

Item	UE Radio Technologies	Ref.	Release	Comments
1	FDD (DS)	25.101	R99	
2	TDD 3.84 Mcps	25.102	R99	
3	TDD 1.28 Mcps (LCR)	25.102	Rel-4	
4	GSM	21.904, 5	R99	
5	GPRS	23.060	R99	
6	MultiRAT_Capability	23.060	R99	

A.4.2 UE Service Capabilities

Table A.2: Definition of Bearer Services

Item	Definition of Bearer Services	Ref.	Release	Comments
1	Circuit Switched	22.105, 5.1 22.002	R99	
2	Packet Switched	22.105, 5.1 22.060	R99	
3	UE supports UE operation mode A: PS and CS simultaneously		R99	
Note: Needed for CS only terminals which would not support Cell_PCH/URA_PCH test cases.				

Table A.2a: Teleservices

Item	Teleservices	Ref.	Release	Comments
1	Narrow band speech (AMR)	22.105, 6.4.1	R99	Telephony
2	Emergency call	22.105, 6.4.2	R99	

Table A.3: UE positioning capability

Item	Services Capabilities	Ref.	Release	Comments
1	Support for IPDL			
2	Support of GPS timing of cell frames			
3	Based OTDOA is supporting by UE			
4	Standalone location method is supporting by UE			

A.4.3 Baseline Implementation Capabilities

Table A.4: Supported protocols

Item	Supported protocols	Ref.	Release	Comments
1	Call Control	24.008, 5	R99	
2	Mobility Management	24.008, 4	R99	
3	Session Management	24.008, 6.1	R99	
4	GPRS Mobility Management	24.008, 4	R99	
5	Radio Resource Control	25.331	R99	
6	Packet Data Convergence Protocol	25.323	R99	
7	Broadcast/Multicast Control	25.324	R99	
8	Radio Link Control	25.322	R99	
9	Medium Access Control	25.321	R99	
10	Physical Layer	25.201	R99	

Table A.5: Special Conformance Testing Functions

Item	Special Conformance Testing Functions	Ref.	Release	Comments
1	UE test loop	34.109, 5.3	R99	
2	Max UE test loop UL RLC SDU size 65535 bits	34.109, 6.2	R99	

Note: TL1 and TL2 support should be added.

Table A.6: FDD (DS) RF Baseline Implementation Capabilities

Item	FDD (DS) RF Baseline Implementation Capabilities	Ref.	Release	Comments
1	Chip rate 3,84 Mcps	25.101, 5.1	R99	
2	Frequency band: 1 920-1 980, 2 110-2 170 MHz	25.101, 5.2	R99	Band I
3	Frequency band: 1 850-1 910, 1 930-1 990 MHz	25.101, 5.2	R99	Band II
4	Frequency band: Other spectrum	25.101, 5.2	R99	
5	TX-RX Freq. Sep: 190 MHz	25.101, 5.3	R99	
6	TX-RX Freq. Sep: 80 MHz	25.101, 5.3	R99	
7	TX-RX Freq. Sep: Variable	25.101, 5.3	R99	
8	Carrier raster: 200 kHz	25.101, 5.4	R99	
9	UE Power Class 1 (+33 dBm)	25.101, 6.2.1	R99	
10	UE Power Class 2 (+27 dBm)	25.101, 6.2.1	R99	
11	UE Power Class 3 (+24 dBm)	25.101, 6.2.1	R99	
12	UE Power Class 4 (+21 dBm)	25.101, 6.2.1	R99	
13	Output RF spectrum emissions	25.101, 6.6	R99	Not needed!
14	Frequency band: 1710-1785, 1805-1880 MHz	25.101, 5.2	R99	Band III
15	Frequency band: 1710-1755, 2110-2155 MHz	25.101, 5.2	R99	Band IV
16	Frequency band: 824 – 849, 869-894 MHz	25.101, 5.2	R99	Band V
17	Frequency band: 830-840, 875-885 MHz	25.101, 5.2	R99	Band VI
18	Frequency band: 2500-2570, 2620-2690 MHz	25.101, 5.2	R99	Band VII
19	Frequency band: 880-915, 925-960 MHz	25.101, 5.2	R99	Band VIII
20	Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz	25.101, 5.2	R99	Band IX

Table A.7: FDD Layer 1 UE Radio Access Capabilities

Item	FDD Layer 1 UE Radio Access Capabilities	Ref.	Release	Comments
1	Support of turbo decoding	25.306, 4.5.1	R99	
2	Support of turbo encoding	25.306, 4.5.2	R99	
3	Support for SF 512 (downlink)	25.306, 4.5.3	R99	
4	Support of PDSCH	25.306, 4.5.3	R99and Rel-4 only	
5	Simultaneous reception of SCCPCH and DPCH	25.306, 4.5.3	R99	
6	Simultaneous reception of SCCPCH, DPCH and PDSCH	25.306, 4.5.3	R99 and Rel-4 only	
7	Support of PCPCH	25.306, 4.5.4	R99 and Rel-4 only	
8	Support of uplink compressed mode only	25.306, 4.9	R99	
9	Support of downlink compressed mode only	25.306, 4.9	R99	
10	Support of uplink and downlink compressed mode	25.306, 4.9	R99	
11	Support of Network based Network Assisted GPS	25.306, 4.8	R99	
12	Support of UE based Network Assisted GPS	25.306, 4.8	R99	
13	Support of UE assisted Network Assisted GPS	25.306, 4.8	R99	
14	Support of HS-PDSCH	25.306, 4.5.3	Rel-5	
15	Support of E-DPDCH	25.306, 4.5.4	Rel-6	

Table A.8: FDD HS-DSCH physical layer categories

Item	FDD HS-DSCH physical layer categories	Ref.	Release	Comments
1	Category 1	25.306, 5.1	Rel-5	
2	Category 2	25.306, 5.1	Rel-5	
3	Category 3	25.306, 5.1	Rel-5	
4	Category 4	25.306, 5.1	Rel-5	
5	Category 5	25.306, 5.1	Rel-5	
6	Category 6	25.306, 5.1	Rel-5	
7	Category 7	25.306, 5.1	Rel-5	
8	Category 8	25.306, 5.1	Rel-5	
9	Category 9	25.306, 5.1	Rel-5	
10	Category 10	25.306, 5.1	Rel-5	
11	Category 11	25.306, 5.1	Rel-5	
12	Category 12	25.306, 5.1	Rel-5	

Table A.9: FDD E-DCH physical layer categories

Item	FDD E-DCH physical layer categories	Ref.	Release	Comments
1	Category 1	25.306, 5.1	Rel-6	
2	Category 2	25.306, 5.1	Rel-6	
3	Category 3	25.306, 5.1	Rel-6	
4	Category 4	25.306, 5.1	Rel-6	
5	Category 5	25.306, 5.1	Rel-6	
6	Category 6	25.306, 5.1	Rel-6	

A.4.4 Additional information

Table A.10: Reference Measurement Channels

Item	Reference Measurement Channels	Ref.	Release	Comments
1	Up-link reference measurement channel 12.2 kbps (FDD)	25.101, A.2.1	R99	Mandatory for all terminals
2	Down-link reference measurement channel 12.2 kbps (FDD)	25.101, A.3.1	R99	Mandatory for all terminals
3	Up-link reference measurement channel 64 kbps (FDD)	25.101, A.2.2	R99	
4	Down-link reference measurement channel 64 kbps (FDD)	25.101, A.3.2	R99	
5	Up-link reference measurement channel 144 kbps (FDD)	25.101, A.2.3	R99	
6	Down-link reference measurement channel 144 kbps (FDD)	25.101, A.3.3	R99	
7	Up-link reference measurement channel 384 kbps (FDD)	25.101, A.2.4	R99	
8	Down-link reference measurement channel 384 kbps (FDD)	25.101, A.3.4	R99	
9	Up-link reference measurement channel 768 kbps (FDD)	25.101, A.2.5	R99	

Table A.11: Additional capabilities

Item	Capability	Ref.	Release	Comments
1	Enhanced performance requirements type 1	25.101, 9	Rel-6	This type of UE has to execute also the tests for normal HSDPA UEs.
2	Enhanced performance requirements type 2	25.101, 9	Rel-6	This type of UE has to execute also the tests for normal HSDPA UEs.
3	Enhanced performance requirements type 3	25.101, 9	Rel-7	This type of UE has to execute also the tests for normal HSDPA UEs.

Annex B (informative): Change history

Meeting -1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version -Current	Version -New	Doc-2nd-Level
-	-	-	-	Draft version 0.0.1 based on iWD-004_v005 and TS 34.123-2 v6.1.0.	-	N/A	0.0.1	
RP-31	RP-060055	-	-	For approval as Rel-7 version at RAN plenary	-	2.0.0	7.0.0	R5-060444
RP-32	RP-060329	0001	-	Addition of new test cases from RAN5#30 and correction to applicability	F	7.0.0	7.1.0	R5-061425
RP-32	RP-060332	0002	-	Addition of new Rel-6 test cases introduced in RAN5#31	F	7.0.0	7.1.0	R5-061446
RP-33	RP-060549	0003	-	Correction of applicability for RF test case 6.5 (narrow band blocking requirement)	F	7.1.0	7.2.0	R5-062127
RP-33	RP-060549	0004	-	Addition of applicability for new test cases	F	7.1.0	7.2.0	R5-062453
RP-33	RP-060567	0005	-	New Rel-6 RRM test case: 8.3.8 Serving HS-DSCH cell change	F	7.1.0	7.2.0	R5-062232
RP-33	RP-060549	0006	-	Correction of applicability for RF test case 6.7	F	7.1.0	7.2.0	R5-062416
RP-34	RP-060735	0007	-	Addition of new condition for TC 6.3A in section 4	F	7.2.0	7.3.0	R5-063459
RP-34	RP-060732	0008	-	Addition of PICS parameter ‘speech’ and new condition for TC 8.3.4 in section 4 and Annex A.4.2	F	7.2.0	7.3.0	R5-063460
RP-34	RP-060735	0009	-	Addition of new test case 5.13.1AA	F	7.2.0	7.3.0	R5-063424
RP-34	RP-060743	0010	-	Applicability of new UE Transmission Power Headroom test case	F	7.2.0	7.3.0	R5-063442

History

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