ETSI TS 137 571-3 V15.6.0 (2020-04)

TECHNICAL SPECIFICATION

Universal Mobile Telecommunications System (UMTS);
LTE;
Universal Terrestrial Radio Access (UTRA)
and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC);
User Equipment (UE) conformance specification
for UE positioning;
Part 3: Implementation Conformance Statement (ICS)
(3GPP TS 37.571-3 version 15.6.0 Release 15)

Reference

RTS/TSGR-0537571-3vf60

Keywords

LTE,UMTS

ETSI

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

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

Important notice

The present document can be downloaded from:
http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at
https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

If you find errors in the present document, please send your comment to one of the following services:
https://portal.etsi.org/People/CommiteeSupportStaff.aspx

Copyright Notification

ETSI

Intellectual Property Rights

Essential patents

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

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

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

Legal Notice

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

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

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

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Contents

Foreword

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

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

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater indicates TSG approved document under change control.

y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

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

Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called an Implementation Conformance Statement (ICS).

The present document is part 3 of a multi-parts TS:

3GPP TS 37.571-1: Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification for UE positioning; Part 1: Conformance test specification.

3GPP TS 37.571-2: Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification for UE positioning; Part 2: Protocol conformance.

3GPP TS 37.571-3: Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification for UE positioning; Part 3: Implementation Conformance Statement (ICS).

3GPP TS 37.571-4: Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification for UE positioning; Part 4: Test suites.

3GPP TS 37.571-5: Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification for UE positioning; Part 5: Test scenarios and assistance data.

1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for UTRAN, E-UTRAN and NR User Equipment (UE) supporting UE positioning, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 [7] and ISO/IEC 9646-7 [8].

The present document also specifies a recommended applicability statement for the test cases included in 3GPP TS 37.571-1 [5] and 3GPP TS 37.571-2 [6]. These applicability statements are based on the features implemented in the UE.

Special conformance testing functions can be found in 3GPP TS 34.109 [10] for UTRA, 3GPP TS 36.509 [2] for E-UTRA and 3GPP TS 38.509 [14] for NR. The common test environments are included in 3GPP TS 34.108 [9] for UTRA, in 3GPP TS 36.508 [3] for E-UTRA and in 3GPP TS 38.508-1 [15] for NR.

The present document is valid for UE supporting UE positioning 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 unless the context in which the reference is made suggests a different Release is relevant (information on the applicable release in a particular context can be found in e.g. test case title, description or applicability, message description or content).

[1] to [16] (void)

[17]   3GPP TS 37.571-3 Release 16: "Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification for UE positioning; Part 3: Implementation Conformance Statement (ICS)"

3 Definitions, symbols and abbreviations

Void

4 Recommended Test Case Applicability

The requirements of the present document are provided in 3GPP TS 37.571-3 Release 16 [17].

Annex A: Void

Annex B (informative): Change history

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
					36.571-3		
2010-08	RAN5#48	R5-104317	-	-	Initial version		0.0.0
2011-02	RAN5#50	R5-110253	-	-	Addition of test case applicability	0.0.0	0.1.0
2011-08	RAN5#52	R5-113273	-	-	Addition of E-CID and OTDOA performance test case applicability	0.1.0	
		R5-113139	-	-	Addition of UE Network Capability test case		
		R5-113773	-	-	Addition of Notification test cases		
		R5-113148	-	-	Addition of Position Capability Transfer test case		1.0.0
					37.571-3		
2011-11	RAN5#53	R5-115253	-	-	Creation of 37.571-3 based on 36.571-3 v1.0.0, 34.123-2 v9.6.0, 34.171 v9.3.0 and 34.172 va.1.0	-	1.0.0
-	-	R5-115254	-	-	Corrections to the 37.571-3 baseline text	-	-
-	-	R5-115255	-	-	Addition of missing test case applicability to the 37.571-3 baseline text	-	-
-	-	R5-115256	-	-	Applicable Release for UMTS A-GNSS Test Cases in 37.571-3 baseline text	-	2.0.0
2011-12	RAN#54	-	-	-	Moved to Rel-9 with editorial changes only.	2.0.0	9.0.0
2012-03	RAN#55	R5-120365	0001	-	Addition of missing test case applicability for test cases 7.3.4.1, 7.3.4.2, 7.3.4.3, and 7.3.4.4	9.0.0	9.1.0
2012-03	RAN#55	R5-120529	0002	-	Remove redundant mnemonics	9.0.0	9.1.0
2012-06	RAN#56	-	-	-	Upgraded to v10.0.0 with no change.	9.1.0	10.0.0
2012-09	RAN#57	R5-123689	0003	-	Correction of sub-test names and PICS names	10.0.0	10.1.0
2012-09	RAN#57	R5-123689	0003	-	Addition of missing sub test cases name change	10.1.0	10.1.1
2012-12	RAN#58	R5-125119	0004	-	Add new PICS and post-fix for conditions	10.1.1	10.2.0
2012-12	RAN#58	R5-124121	0006	-	Applicabilities for new test cases 10.1 - 10.4 for RSTD for Carrier Aggregation	10.1.1	10.2.0
2013-03	RAN#59	R5-130594	0007	-	Correction of applicability for TC 7.3.2.3	10.2.0	10.3.0
2013-04	-	-	-	-	fix of history table	10.3.0	10.3.1
2013-06	RAN#60	R5-131305	0008	-	Correction of applicability for LTE UE Positioning test cases	10.3.1	10.4.0
2013-06	RAN#60	R5-131328	0009	-	Applicability for new test case 7.5.1 for inter-frequency RSTD measurement indication procedure	10.3.1	10.4.0
2013-06	RAN#60	R5-131995	0010	-	Applicabilities for new TDD inter-frequency tests 9.2.2 and 9.2.5	10.3.1	10.4.0
2013-06	RAN#60	R5-131996	0011	-	Addition of the Applicability for FDD-FDD inter-frequency RSTD Test Cases	10.3.1	10.4.0
2013-06	RAN#60	R5-132011	0012	-	Corrections and clarifications to Applicabilities tables	10.3.1	10.4.0
2013-09	RAN#61	R5-133633	0013	-	Correction to 7.3.3.1	10.4.0	10.5.0
2013-12	RAN#62	R5-134203	0014	-	Corrections to Applicabilities C12es and C13es	10.5.0	10.6.0
2013-12	RAN#62	R5-134204	0015	-	Addition of Applicabilities for 9.2.1 - 9.2.5	10.5.0	10.6.0
2013-12	RAN#62	R5-134911	0016	-	Change Applicability of test 7.3.5.1	10.5.0	10.6.0
2013-12	RAN#62	R5-134981	0017	-	Applicabilities for new tests 10.1a, 10.2a, 10.3a and 10.4a	10.5.0	10.6.0
2014-06	RAN#64	R5-142102	0018	-	Correction to test case title in the Applicability Table 4-1 and Table 4-3	10.6.0	10.7.0
2014-06	RAN#64	R5-142406	0019	-	Correction of conditions of C26es and C27es.	10.6.0	10.7.0
2014-09	RAN#65	-	-	-	Upgraded to v11.0.0 with no change	10.7.0	11.0.0
2014-09	RAN#65	R5-144843	0020	-	Applicability for new 10+5 and 5+5 RSTD related test cases	11.0.0	12.0.0
2014-12	RAN#66	R5-145263	0021	-	Applicability table update for RRM CA test cases in clause 10 to avoid redundant testing	12.0.0	12.1.0
2014-12	RAN#66	R5-145388	0022	-	Addition of Beidou	12.0.0	12.1.0
2014-12	RAN#66	R5-145843	0023	-	Introduction of feICIC applicability statement for UE Rx-TX Time Difference test cases	12.0.0	12.1.0
2014-12	RAN#66	R5-145894	0024	-	Add BDS testing contents in TS37.571-3	12.0.0	12.1.0
2015-03	RAN#67	R5-150075	0025	-	Remove incorrect note from CA RSTD accuracy tests	12.1.0	12.2.0
2015-03	RAN#67	R5-150608	0026	-	Typo in name of parameter pc_BDS_B1I	12.1.0	12.2.0
2015-03	RAN#67	R5-150838	0027	-	Missing Abbreviations in Specification	12.1.0	12.2.0
2015-03	RAN#67	R5-150889	0028	-	Missing Fine Time Assistance Conditions	12.1.0	12.2.0

2015-03	RAN#67	R5-150890	0029	-	Applicability for new 20+10MHz RSTD test cases	12.1.0	12.2.0
2015-06	RAN#68	R5-151087	0034	-	RSTD accuracy changes for Rel-12	12.2.0	12.3.0
2015-06	RAN#68	R5-151090	0035	-	Missing applicability of test case executions in Table 4-3 for E-UTRA pc_eTDD tests	12.2.0	12.3.0
2015-06	RAN#68	R5-151985	0033	1	Change Galileo Release Applicability	12.2.0	12.3.0
2015-06	RAN#68	R5-152034	0031	1	Change Galileo Release Applicability	12.2.0	12.3.0
2015-09	RAN#69	R5-153152	0036	-	Incorrect ICS information in Table 4-7	12.3.0	12.4.0
2015-09	RAN#69	R5-153335	0037	-	Change BDS Applicability for LCR TDD	12.3.0	12.4.0
2015-09	RAN#69	R5-153339	0038	-	Restoration of condition C21es	12.3.0	12.4.0
2015-09	RAN#69	R5-153941	0039	1	Adding applicability statements for ECID eICIC test cases 8.1.3 and 8.1.4	12.3.0	12.4.0
2015-09	RAN#69	-	-	-	update of the "non-specific references" in section 2 according to the approved R5-153582 and an action point on ETSI MCC	12.3.0	12.4.0
2015-12	RAN#70	R5-155137	0044	-	Updating applicability statements for ECID feICIC test cases 8.1.5 and 8.1.6	12.4.0	12.5.0
2015-12	RAN#70	R5-155876	0042	1	Applicabilities for two new 3 DL CA RSTD Measurement Reporting Delay test cases	12.4.0	12.5.0
2015-12	RAN#70	R5-155945	0047	1	Addition of release RAT column to applicability tables 4-7	12.4.0	12.5.0
2015-12	RAN#70	R5-156010	0045	1	Addition of release RAT column to applicability table 4-3	12.4.0	12.5.0
2015-12	RAN#70	R5-156112	0043	1	Applicabilities for two new 3 DL CA RSTD Measurement Accuracy test cases	12.4.0	12.5.0
2016-03	RAN#71	R5-160044	0048	-	Releases for the new OTDOA tests 10.5 to 10.8 are missing	12.5.0	12.6.0
2016-03	RAN#71	R5-160045	0049	-	Correct TC Title typo errors in Table 4-3	12.5.0	12.6.0
2016-06	RAN#72	R5-163036	0052	1	Editorial correction of Positioning PICS Mnemonic	12.6.0	12.7.0
2016-09	RAN#73	R5-165128	0053	-	Updates to the UE Rx – Tx Time Difference tests for Rel-12 onwards	12.7.0	12.8.0
2016-09	RAN#73	R5-165352	0054	-	Applicability of new A-GPS and A-Galileo RF test conditions missing for UE Based GNSS	12.7.0	12.8.0
2016-09	RAN#73	R5-165353	0055	-	Applicability of new A-GPS and A-Galileo signaling test conditions missing for UE Based GNSS	12.7.0	12.8.0
2016-09	RAN#73	R5-165997	0057	1	Introduction of Indoor Positioning enhancements (MBS) (protocol)	12.8.0	13.0.0
2016-09	RAN#73	R5-166150	0056	1	Introduction of Indoor Positioning enhancements (MBS) (rf)	12.8.0	13.0.0
2016-12	RAN#74	R5-168062	0058	-	Change of applicability of UE Rx-Tx tests for TDD	13.0.0	13.1.0
2016-12	RAN#74	R5-168064	0059	-	Change of applicability of ECID tests for TDD	13.0.0	13.1.0
2016-12	RAN#74	R5-168381	0061	-	Modification to note 1 in table A.4.3-1 to remove abiguity	13.0.0	13.1.0
2016-12	RAN#74	R5-169104	0060	1	Clarification of applicability of TC 7.3.3.1 and 7.3.3.1A	13.0.0	13.1.0
2016-12	RAN#74	R5-169105	0062	1	Add WLAN signaling sub-test and references for Indoor Positioning	13.0.0	13.1.0
2016-12	RAN#74	R5-169106	0063	1	Add BT signaling sub-test and references for Indoor Positioning	13.0.0	13.1.0
2016-12	RAN#74	R5-169107	0064	1	Add Sensor signaling sub-test and references for Indoor Positioning	13.0.0	13.1.0
2017-03	RAN#75	R5-170669	0065	-	Maintenance of 37.571-3 Table 4-7 for XML conversion	13.1.0	13.2.0

2017-03	RAN#75	R5-170737	0066	-	Remove Bluetooth Abbreviations	13.1.0	13.2.0
2017-03	RAN#75	R5-170738	0067	-	Correct applicability of tests clause reference	13.1.0	13.2.0
2017-03	RAN#75	-	-	-	Administrative release upgrade to match the release of 3GPP TS 37.571-1 which was upgraded at RAN#74 to Rel-14 due to Rel-14 relevant CR(s)	13.2.0	14.0.0
2017-06	RAN#76	R5-172180	0071	-	Add new applicability conditions for GPS, GLONASS and BDS	14.0.0	14.1.0
2017-06	RAN#76	R5-172668	0073	-	Introduction of periodical reporting capability for GNSS	14.0.0	14.1.0
2017-06	RAN#76	R5-172965	0070	1	Merge GNSS sub-tests into one sub-test	14.0.0	14.1.0
2017-06	RAN#76	R5-172968	0075	1	Introduction of Conditions and Applicability for MBS Assistance Data Signalling Sub-tests	14.0.0	14.1.0
2017-06	RAN#76	R5-173365	0074	1	Introduction of Conditions and Applicability for MBS Assistance Data Measurement Test Cases	14.0.0	14.1.0
2017-06	RAN#76	-	-	-	The titles of 7.3.3.1A and B were corrected editorially to (Rel 13 only) and (Rel 14 onwards) in order to align with the actual TC Titles.	14.0.0	14.1.0
2017-09	RAN#77	R5-173865	0078	-	Editorial change to align MBS test case names with 37.571-2	14.1.0	14.2.0
2017-09	RAN#77	R5-173866	0079	-	Editorial change to align MBS test case names with 37.571-1	14.1.0	14.2.0
2017-09	RAN#77	R5-175120	0080	1	Editorial correction to Table 4-3 in 3GPP TS 37.571-3	14.1.0	14.2.0
2017-09	RAN#77	R5-175189	0077	1	Test case applicability for WLAN and BLE	14.1.0	14.2.0
2017-12	RAN#78	R5-177416	0081	1	Applicability changes for OTDOA/ECID 4Rx support and WLAN/BLE	14.2.0	14.3.0
2017-12	RAN#78	-	-	-	Administrative release upgrade to match the release of 3GPP TS 37.571-1 which was upgraded at RAN#78 to Rel-15 due to Rel-15 relevant CR(s)	14.3.0	15.0.0
2018-03	RAN#79	R5-180312	0083	-	Applicability of Cat1bis OTDOA tests	15.0.0	15.1.0
2018-03	RAN#79	R5-180313	0084	-	Applicability of feMTC OTDOA and ECID tests	15.0.0	15.1.0
2018-03	RAN#79	R5-180314	0085	-	Applicability of NB-IOT OTDOA tests	15.0.0	15.1.0
2018-03	RAN#79	R5-180586	0086	-	4Rx support for OTDOA 2CC - Applicability	15.0.0	15.1.0
2018-03	RAN#79	R5-180587	0087	-	4Rx support for OTDOA 3CC - Applicability	15.0.0	15.1.0
2018-03	RAN#79	R5-180878	0089	-	Update Applicability for Rel-14 Sensor Positioning Protocol Tests and Sub-Tests	15.0.0	15.1.0
2018-03	RAN#79	R5-181273	0088	1	Update Applicability for Rel-14 WLAN Positioning Protocol Tests and Sub-Tests	15.0.0	15.1.0
2018-06	RAN#80	R5-182220	0090	-	Applicability for new NB-IOT OTDOA tests	15.1.0	15.2.0
2018-06	RAN#80	R5-182281	0091	-	New ECID Cat1bis tests - Applicability	15.1.0	15.2.0
2018-06	RAN#80	R5-183850	0092	1	Applicability statement for A-GNSS min perf test cases for Cat M1	15.1.0	15.2.0
2018-06	RAN#80	R5-183851	0094	1	Corrections to C03-Xur and C04-Xur applicabilities	15.1.0	15.2.0
2018-09	RAN#81	R5-184038	0096	-	Addition of PICS for support of LPP message segmentation	15.2.0	15.3.0
2018-09	RAN#81	R5-184190	0098	-	Editorial - Updates for GNSS Signal Capabilities	15.2.0	15.3.0
2018-09	RAN#81	R5-185359	0099	-	Correction of the title for OTDOA IOT tests	15.2.0	15.3.0
2018-12	RAN#82	R5-186619	0100	-	Addition of applicabilities for two missing Minimum Performance triple-GNSS test cases	15.3.0	15.4.0

2018-12	RAN#82	R5-186620	0101	-	Correction to applicabilities of Modernized GPS for Minimum Performance test cases	15.3.0	15.4.0
2018-12	RAN#82	R5-186621	0102	-	Addition of Category NB2 information	15.3.0	15.4.0
2018-12	RAN#82	R5-186622	0103	-	Addition of PICs for support of Acquisition Assistance for Galileo E5A and GPS L5 signals	15.3.0	15.4.0
2018-12	RAN#82	R5-186623	0104	-	Addition of NR signalling background information	15.3.0	15.4.0
2018-12	RAN#82	R5-187465	0106	-	Editorial Changes for TS 37.571-3	15.3.0	15.4.0
2018-12	RAN#82	R5-188198	0105	2	Applicability for NR NSA Option 3 protocol tests	15.3.0	15.4.0
2019-03	RAN#83	R5-191126	0107	-	Addition of general NR information for minimum performance	15.4.0	15.5.0
2019-03	RAN#83	R5-192381	0108	1	Addition LPP Rel-15 missing PICS	15.4.0	15.5.0
2020-03	RAN#87	R5-200076	0125	-	Removal of technical content in 37.571-3 v15.5.0 and substitution with pointer to the next Release	15.5.0	15.6.0

3GPP TS 37.571-3 version 15.6.0 Release 15

History

Document history		
V15.2.0	July 2018	Publication
V15.3.0	October 2018	Publication
V15.4.0	April 2019	Publication
V15.5.0	May 2019	Publication
V15.6.0	April 2020	Publication