# ETSI TS 137 571-1 V15.6.0 (2020-04)



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 1: Conformance test specification (3GPP TS 37.571-1 version 15.6.0 Release 15)



# Reference RTS/TSGR-0537571-1vf60 Keywords LTE.UMTS

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#### **Foreword**

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

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

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

#### Introduction

The present document is part 1 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 specifies the procedures for the conformance test of the measurement requirements for FDD or TDD mode of UTRA and FDD or TDD mode of E-UTRA, NB-IOT and NR for the User Equipment (UE) that supports one or more of the defined positioning methods. These positioning methods are:

- for UTRA: Assisted Global Positioning System (A-GPS), Assisted Global Navigation Satellite Systems (A-GNSS),
- for E-UTRA: Assisted Global Navigation Satellite System (A-GNSS), Observed Time Difference of Arrival (OTDOA), Enhanced Cell ID (ECID), Metropolitan Beacon System (MBS), Wireless Local Area Network (WLAN), Bluetooth Low Energy (BLE),
- for NB-IOT: Observed Time Difference of Arrival (OTDOA), [others FFS], and
- for NR: Assisted Global Navigation Satellite System (A-GNSS), Observed Time Difference of Arrival (OTDOA), Enhanced Cell ID (ECID), Metropolitan Beacon System (MBS), Wireless Local Area Network (WLAN), Bluetooth Low Energy (BLE).

Tests are only applicable to those mobiles that are intended to support the appropriate functionality. To indicate the circumstances in which tests apply, this is noted in the "Test applicability" part of the test.

The Implementation Conformance Statement (ICS) pro-forma could be found in the 3<sup>rd</sup> part 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 [46] (void)

[47]

3GPP TS 37.571-1 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 1: Conformance test specification"

#### 3 Definitions, symbols and abbreviations

Void

#### 4 General test conditions

The requirements of the present document are provided in 3GPP TS 37.571-1 Release 16 [47].

# 5 to 16 Void

### Annex A to H: Void

# Annex I (informative): Change history

					Change history		1
Date	TSG #	TSG Doc.	CR	Re v	Subject/Comment TS 36.571-1	Old	New
2010-08	RAN5#48	R5-104316			Initial draft TS 36.571-1 created		0.0.0
2010-11		R5-106613			V1.0.0 created for presentation to RAN Plenary	0.0.0	1.0.0
2011-02	RAN5#50	R5-110124			Various values and corrections added	1.0.0	1.1.0
2011-08	RAN5#52	R5-113133			Text changes from R5-112139, R5-112386, R5-112837, R5-112838, R5-112839 added	1.1.0	1.2.0
2011-08	RAN5#53				Text changes from R5-113135, R5-113150, R5-114066, R5-113587 added	1.2.0	-
2011-11	RAN5#53	R5-115206			Initial draft TS 37.571-1 created from TS 36.571-1, TS 34.171 and TS 34.172	-	1.0.0
2011-11	RAN5#53	R5-115207			V2.0.0 created for presentation to RAN Plenary with additions from R5-115246, R5-115247, R5-115248, R5-115809	1.0.0	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	R5-120087	0001	-	Modify OTDOA connection diagrams	9.0.0	9.1.0
2012-03	RAN#55	R5-120089	0002	-	OTDOA parameter corrections	9.0.0	9.1.0
2012-03	RAN#55	R5-120414	0003	-	Adding ECID test cases to Annexes in TS 37.571-1	9.0.0	9.1.0
2012-03	RAN#55	R5-120822	0004	-	Correct A-GNSS signalling	9.0.0	9.1.0
2012-03	RAN#55	R5-120823	0005	-	ECID procedure modifications	9.0.0	9.1.0
2012-03	RAN#55	R5-120893	0006	-	OTDOA procedure updates	9.0.0	9.1.0
2012-06	RAN#56	R5-121126	0007	-	Update to Figure 9.1.1.3-1	9.1.0	9.2.0
2012-06	RAN#56	R5-121127	8000	-	Clarification to notes in tests 9.1.3 & 9.1.4	9.1.0	9.2.0
2012-06	RAN#56	R5-121128	0009	-	Clarifications to frequencies and bandwidths to be used	9.1.0	9.2.0
2012-06	RAN#56	R5-121129	0010	-	Setting responseTime in ECID test cases	9.1.0	9.2.0
2012-06	RAN#56	R5-121130	0011	-	Modifications to signalling used in OTDOA test cases	9.1.0	9.2.0
2012-06	RAN#56	R5-121908	0012	-	Adding operating band 26 to TS 37.571-1	9.1.0	9.2.0
2012-06	RAN#56	-	-	-	Added missing contents from R5-121126, R5-121127, R5-121128	9.2.0	9.2.1
2012-06	RAN#56	-	-	-	Upgraded to v10.0.0 with no change.	9.2.1	10.0.0
2012-09	RAN#57	R5-123066	0013	-	Correction to RSTD Measurement Accuracy Tests 9.1.3 and 9.1.4	10.0.0	10.1.0
2012-09	RAN#57	R5-123913	0014	-	Addition of RRM Test Case 9.8.4 TDD inter-frequency RSTD Accuracy	10.0.0	10.1.0
2012-12	RAN#58	R5-125136	0015	-	Corrections to references	10.1.0	10.2.0
2012-12	RAN#58	R5-125188	0016	_	Correction to LPP Message Content for GNSS Moving Scenario Test		10.2.0
2012-12	RAN#58	R5-125806	0018	-	New test case 10.1 FDD RSTD Measurement Reporting Delay for Carrier Aggregation	10.1.0	10.2.0
2012-12	RAN#58	R5-125807	0019	_	New test case 10.2 TDD RSTD Measurement Reporting Delay for Carrier Aggregation	10.1.0	10.2.0
2012-12	RAN#58	R5-125808	0020	_	New test case 10.3 FDD RSTD Measurement Accuracy for Carrier Aggregation	10.1.0	10.2.0
2012-12	RAN#58	R5-125809	0021	_	New test case 10.4.TDD RSTD Measurement Accuracy for Carrier Aggregation	10.1.0	10.2.0
2012-12		R5-125831	0022	-	Adding bands 28 and 44 to TS 37.571-1		10.2.0
2012-12	RAN#58	R5-125847	0023	_	Corrections to procedures for RSTD tests	10.1.0	10.2.0
2012-12	RAN#58	R5-125848	0024	_	Correction of OCNG Patterns for UE Rx - Tx Time Difference Test Cases	10.1.0	10.2.0
2012-12	RAN#58	R5-125916	0025	-	Add editor's note for value of Iprs for test case 9.1.4	10.1.0	10.2.0
2012-12	RAN#58	R5-124120	0026	-	New common text for test cases 10.1 - 10.4 for RSTD for Carrier Aggregation		10.2.0
2013-03	RAN#59	R5-130959	0027		LBS Perf: Corrections to TCs 8.1.1 and 8.1.2	10.2.0	10.3.0
2013-06	RAN#60	R5-131097	0028	-	Removal of Note 1 from OTDOA parameter tables		10.4.0
2013-06	RAN#60	R5-131176	0029	-	Clarification to RSTD Delay Test procedures		10.4.0
2013-06	RAN#60	R5-131943	0030	-	New Test Case for FDD-FDD inter-frequency RSTD Accuracy		10.4.0
2013-06	RAN#60	R5-131944	0031	-	New Test Case for FDD-FDD inter-frequency RSTD measurement reporting delay	10.3.0	10.4.0
2013-06	RAN#60	R5-131945	0032	-	OTDOA test case alignment with RAN 4	10.3.0	10.4.0
2013-06	RAN#60	R5-131946	0033	-	Corrections to ECID and OTDOA tests Note: same contents as R5-131945 was submitted by accident.	10.3.0	
2013-06	RAN#60	R5-131947	0034	-	RSTD test parameter updates	10.3.0	10.4.0
			_	-	· ·		10.4.0
2013-06	RAN#60	R5-131994	0036	-	New test case for TDD inter-frequency RSTD reporting delay 9.2.2	10.3.0	
2013-09	RAN#61 RAN#61	R5-133173 R5-133174	0037	-	Tidy up of Table 9.2.1.4.1-1		10.5.0
2013-06 2013-06	RAN#60 RAN#60		0035 0036	- - -	9.2.2		10.3.0 10.3.0

					Change history		
Date	TSG #	TSG Doc.	CR	Re	Subject/Comment TS 36.571-1	Old	New
2013-09	RAN#61	R5-133375	0039	-	Uncertainties and Test Tolerances for RSTD test cases 9.1.1 and 9.1.2	10.4.0	10.5.0
2013-09	RAN#61	R5-133378	0040	-	Uncertainties and Test Tolerances for RSTD test cases 9.1.3 and 9.1.4	10.4.0	10.5.0
2013-09	RAN#61	R5-133848	0041	-	LBS Perf: Uncertainties and test tolerances for TCs 8.1.1 and 8.1.2	10.4.0	10.5.0
2013-09	RAN#61	R5-133885	0042	-	LBS Perf: Revision of test procedure for TC-s 8.1.1-2	10.4.0	10.5.0
2013-12	RAN#62	R5-134200	0043	-	Updates to ECID and RSTD tests following RAN 4 updates	10.5.0	10.6.0
2013-12	RAN#62	R5-134202	0044	-	Addition of Capability exchange in ECID and RSTD tests	10.5.0	10.6.0
2013-12	RAN#62	R5-134205	0045	-	Addition of Applicabilities for 9.2.1 - 9.2.5	10.5.0	10.6.0
2013-12	RAN#62	R5-134849	0046	-	Addition of missing acknowledgements in ECID tests		10.6.0
2013-12	RAN#62	R5-134850	0047	-	Corrections to references for OCNG and RMC		10.6.0
2013-12	RAN#62	R5-134899	0048	-	Introduction 8.1.3 E-UTRAN FDD UE Rx-Tx time difference (felCIC)		10.6.0
2013-12	RAN#62	R5-134970	0049	-	Introduction 8.1.4 E-UTRAN TDD UE Rx-Tx time difference (felCIC)	10.5.0	10.6.0
2013-12	RAN#62	R5-134979	0050	-	Addition of new tests 10.1a, 10.2a, 10.3a and 10.4a for 20MHz CA		10.6.0
2013-12	RAN#62	R5-134980	0051	-	LBS Perf: Corrections to RSTD reporting tests		10.6.0
2013-12	RAN#62	R5-135016	0052	-	Uncertainties and Test Tolerances for RSTD test cases 9.2.1 and 9.2.2	10.5.0	
2013-12	RAN#62	R5-135018	0053	-	Uncertainties and Test Tolerances for RSTD test cases 9.2.4 and 9.2.5	10.5.0	10.6.0
2014-03	RAN#63	R5-140107	0054	-	Corrections to PRS_RA in RSTD tests		10.7.0
2014-03	RAN#63	R5-140278	0055	-	Addition of E-UTRA band groups		10.7.0
2014-03	RAN#63	R5-140308	0056	-	LBS RF: Aperiodic CQI configuration for 1.4 MHz bandwidth subtests		10.7.0
2014-03	RAN#63	R5-141033	0057	-	RSTD test case updates	10.6.0	10.7.0
2014-03	RAN#63	R5-140875	0058	-	Additions to TC 8.1.6 E-UTRAN TDD UE Rx-Tx time difference (felCIC)	10.7.0	
2014-03	RAN#63	R5-141010	0059	-	Additions to TC 8.1.5 E-UTRAN FDD UE Rx-Tx time difference (felCIC)		11.0.0
2014-06	RAN#64	R5-142098	0060	-	Corrections for OCNG patterns defined in RSTD Tables		11.1.0
2014-06	RAN#64	R5-142211	0061	-	Additions to felCIC UE Rx-Tx test cases in Annex C		11.1.0
2014-06	RAN#64	R5-142302	0062	-	LBS RF: Aperiodic CQI configuration for 1.4 MHz bandwidth tests	11.0.0	
2014-06	RAN#64	R5-143109	0063	-	Additions to TC 8.1.6 E-UTRAN TDD UE Rx-Tx time difference (felCIC)		11.1.0
2014-06	RAN#64	R5-143111	0064	-	Additions to FDD interruption requirements for SCell		11.1.0
2014-06	RAN#64	R5-143180	0065	-	Additions to TC 8.1.5 E-UTRAN FDD UE Rx-Tx time difference (felCIC)		11.1.0
2014-06	RAN#64	R5-143211	0066	-	LBS RF: Update of RSTD tests		11.1.0
2014-09	RAN#65	R5-144080	0068	-	Corrections to RSTD Measurement Reporting Delay for Carrier Aggregation tests	11.1.0	
2014-09	RAN#65	R5-144125	0069	-	Corrections to Physical Cell Id (PCI) Configuration Conditions in UE Rx-Tx time difference felCIC		11.2.0
2014-09	RAN#65	R5-144193	0072	-	Cell-specific test parameters for E-UTRAN		11.2.0
2014-09	RAN#65	R5-144215	0081	-	Clarification to RSTD Reporting Delay tests		11.2.0
2014-09	RAN#65	R5-144409	0083	-	Update to initial conditions and measurement procedure in for UTRA A-GPS and A-GNSS tests		11.2.0
2014-09	RAN#65	R5-144553	0084	-	Removal of editors note in TC 9.1.4		11.2.0
2014-09 2014-09	RAN#65 RAN#65	R5-144620 R5-144763	0085 0086	-	,		11.2.0 11.2.0
2014-09	RAN#65	R5-144789	0070	-	Uncertainties and Test Tolerances for RSTD test cases 10.1,	11.1.0	11.2.0
2014-09	RAN#65	R5-144790	0071	-	Uncertainties and Test Tolerances for RSTD test cases 10.3,	11.1.0	11.2.0
2014-09	RAN#65	R5-144791	0082	+-	10.3A, 10.4 and 10.4A Updates to Annex E of TS 37.571-1	11 1 0	11.2.0
2014-09	RAN#65	R5-144792	0082	<del> </del>	RSTD tests RAN 4 alignment		11.2.0
2014-09	RAN#65	R5-144865	0088	1-	Editor's note to PRS levels with fading		11.2.0
2014-09	RAN#65	R5-144870	0089	1-	Corrections to Note 3 for RSTD CA tests	11.1.0	
2014-09	RAN#65	R5-144914	0090	-	Corrections to TDD RSTD Measurement Reporting Delay for Carrier Aggregation		11.2.0
2014-09	RAN#65	R5-144915	0091	<b> </b> -	RSTD CA Measurement Accuracy connection diagrams	11.1.0	11.2.0
2014-09	RAN#65	R5-144203	0073	-	Addition of new TC 10.1B FDD RSTD Measurement Reporting Delay CA for 5+5MHz		12.0.0
2014-09	RAN#65	R5-144204	0074	-	Addition of new TC 10.1C FDD RSTD Measurement Reporting Delay CA for 10+5MHz	11.2.0	12.0.0
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Date	TSG #	TSG Doc.	CR	Re v	Subject/Comment TS 36.571-1	Old	New
2014-09	RAN#65	R5-144205	0075	-	Addition of new TC 10.2B TDD RSTD Measurement Reporting Delay CA for 5+5MHz	11.2.0	12.0.0
2014-09	RAN#65	R5-144206	0076	-	Addition of new TC 10.2C TDD RSTD Measurement Reporting Delay CA for 10+5MHz	11.2.0	12.0.0
2014-09	RAN#65	R5-144207	0077	-	Addition of new TC 10.3B FDD RSTD Measurement Accuracy CA for 5+5MHz	11.2.0	12.0.0
2014-09	RAN#65	R5-144208	0078	-	Addition of new TC 10.3C FDD RSTD Measurement Accuracy CA for 10+5MHz	11.2.0	12.0.0
2014-09	RAN#65	R5-144209	0079	-	Addition of new TC 10.4B TDD RSTD Measurement Accuracy CA for 5+5MHz	11.2.0	12.0.0
2014-09	RAN#65	R5-144210	0800	-	Addition of new TC 10.4C TDD RSTD Measurement Accuracy CA for 10+5MHz	11.2.0	12.0.0
2014-12	RAN#66	R5-145133	0092	-	Update Galileo ICD reference	12.0.0	12.1.0
2014-12	RAN#66	R5-145211	0093	-	lo value incorrectly calculated		12.1.0
2014-12	RAN#66	R5-145212	0094	-	Editorial Note clarification		12.1.0
2014-12	RAN#66	R5-145213	0095	-	Alignment of Es/Nos value		12.1.0
2014-12	RAN#66	R5-145214	0096	-	Duplicated lo values listed in RSTD tables		12.1.0
2014-12	RAN#66	R5-145215	0097	-	Correction to References in Specification		12.1.0
2014-12	RAN#66	R5-145254	0098	-	LBS Perf: Corrections to measurement gap configuration	12.0.0	12.1.0
2014-12	RAN#66	R5-145490	0099	-	Test Tolerances for TC 8.1.5 E-UTRAN FDD UE Rx-Tx time difference (felClC)		12.1.0
2014-12	RAN#66	R5-145491	0100	-	Test Tolerances for TC 8.1.6 E-UTRAN TDD UE Rx-Tx time difference (felClC)		12.1.0
2014-12	RAN#66	R5-145492	0101	-	Uncertainties and Test Tolerances to Annex C for felCIC UE Rx- Tx test cases		12.1.0
2014-12	RAN#66	R5-145502	0102	-	Correction to periodicity of ABS pattern in UE RX-TX time difference for felClC		12.1.0
2014-12	RAN#66	R5-145503	0103	-	Introduction of BDS testing in Annex C of 37.571		12.1.0
2014-12	RAN#66	R5-145510	0104	-	Correction to Annex E notes and tables		12.1.0
2014-12	RAN#66	R5-145836	0105	-	Changes to RSTD tests to align with RAN 4		12.1.0
2014-12	RAN#66	R5-145843	0106	-	Difference test cases	12.0.0	
2014-12	RAN#66	R5-145864	0107	-	Introduction of content for BDS and UTRA TDD UE in section 1-3 of TS 37.571-1		
2014-12	RAN#66	R5-145865	0108	-	Introduction of content for BDS in section 4 in TS 37.571-1		12.1.0
2014-12	RAN#66	R5-145870	0109	-	Corrections to measurement procedures for UTRA A-GPS and A-GNSS tests		
2014-12 2014-12	RAN#66 RAN#66	R5-145871 R5-145920	0110	-	Correction to UE Rx-Tx Time difference tests Introduction of test cases for BDS and UTRA TDD UE in section 6 of TS 37.571-1	12.0.0	
2014-12	RAN#66	R5-145930	0112	-	Introduction of test cases for BDS in section 7 of TS 37.571-1	12.0.0	12.1.0
2015-03	RAN#67	R5-150051	0113	-	Updates to RSTD values and terminology following changes in RAN 4	12.1.0	
2015-03	RAN#67	R5-150074	0114	-	Remove incorrect note from CA RSTD accuracy tests		
2015-03	RAN#67	R5-150082	0115	-	Uncertainties and Test Tolerances for RSTD test cases 10.1, 10.1A, 10.1B, 10.1C, 10.2, 10.2A, 10.2B, and 10.2C		12.2.0
2015-03	RAN#67	R5-150085	0116	-	Uncertainties and Test Tolerances for RSTD test cases 10.3B, 10.3C, 10.4B, and 10.4C	12.1.0	
2015-03	RAN#67	R5-150107	0117	-	Corrections to table headings in CA RSTD tests		12.2.0
2015-03	RAN#67	R5-150378	0118	-	Very minor corrections to references for felCIC test cases, 8.1.5 and 8.1.6		12.2.0
2015-03	RAN#67	R5-150609	0119	-	Abbrevation Corrections for BDS in 37.571-1		12.2.0
2015-03	RAN#67	R5-150833	0120	-	Addition of BDS ICD reference		12.2.0
2015-03	RAN#67	R5-150834	0121	-	Corrections to BDS Test Requirements for Minimum Performance tests		
2015-03	RAN#67	R5-150835	0122	-	The lo Unit Parameter is Incorrect		12.2.0
2015-03	RAN#67	R5-150836	0123	-	Inconsistent Text Referenced		12.2.0
2015-03	RAN#67	R5-150837	0124	-	Missing Abbreviations in Specification		12.2.0
2015-03	RAN#67	R5-150888	0125	-	New TC: TDD RSTD Measurement Accuracy for Carrier Aggregation for 20MHz+10MHz bandwidth	12.1.0	12.2.0
2015-03	RAN#67	R5-150911	0126	-	New TC: TDD RSTD Measurement Reporting Delay for Carrier Aggregation for 20MHz +10MHz Bandwidth		
2015-06	RAN#68	R5-151070	0128	-	Delete "FFS" from ECID test conditions		12.3.0
2015 06	RAN#68	R5-151083	0129	-	Uncertainties and Test Tolerances for RSTD test case 10.2D		12.3.0
2015-06	RAN#68	R5-151085	0130	-	Uncertainties and Test Tolerances for RSTD test case 10.4D		
2015-06		<b>D</b> = 2 = 2 = 2					
2015-06 2015-06	RAN#68	R5-151086	0131	-	RSTD accuracy changes for Rel-12	12.2.0	
2015-06 2015-06 2015-06	RAN#68 RAN#68	R5-151088	0132	-	Formatting error in Parameter Sensitivity Coarse Tables	12.2.0	12.3.0
2015-06 2015-06	RAN#68			- - -		12.2.0 12.2.0	12.3.0

	Change history											
Date	TSG #	TSG Doc.	CR	Re	Subject/Comment TS 36.571-1	Old	New					
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2015-06	RAN#68	R5-151331	0136	-	Addition of band 32 to 37.571-1	12.2.0	12.3.0					
2015-06	RAN#68	R5-151335	0137	-	Corrections to message contents for felCIC TCs in 37.571-1	12.2.0	12.3.0					
2015-06	RAN#68	R5-151912	0134	1	LPP responseTime update and correction	12.2.0	12.3.0					
2015-06	RAN#68	R5-151913	0138	1	Introduction of new test case 8.1.3 to 37.571-1	12.2.0	12.3.0					
2015-06	RAN#68	R5-151914	0139	1	Introduction of new test case 8.1.4 to 37.571-1	12.2.0	12.3.0					
2015-06	RAN#68	R5-152014	0127	1	Add TDD to A-GNSS testing	12.2.0	12.3.0					
2015-09	RAN#69	R5-153253	0140	-	CA LBS: Clarification of PHICH configuration	12.3.0	12.4.0					
2015-09	RAN#69	R5-153661	0144	-	Update of Galileo OS SIS ICD reference	12.3.0	12.4.0					
2015-09	RAN#69	R5-153863	0143	1	Update of felCIC Test cases 8.1.5 and 8.1.6	12.3.0	12.4.0					
2015-09	RAN#69	R5-153864	0141	1	Update of elCIC Test case 8.1.3	12.3.0	12.4.0					
2015-09	RAN#69	R5-153865	0142	1	Update of elCIC Test case 8.1.4	12.3.0	12.4.0					

	Change history										
Date	TSG #	TSG Doc.	CR	Re v	Subject/Comment TS 36.571-1	Old	New				
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	R5-155018	0145	-	Uncertainties and Test Tolerances for RSTD Test Cases 10.3A_1 and 10.4A_1	12.4.0	12.5.0				
2015-12	RAN#70	R5-155035	0146	-	Incorrect Table Note referenced in LPP Request Table	12.4.0	12.5.0				
2015-12	RAN#70	R5-155063	0149	-	Incorrect references in TDD test cases	12.4.0	12.5.0				
2015-12	RAN#70	R5-155064	0150	-	Reference [2] has no explanation	12.4.0	12.5.0				
2015-12	RAN#70	R5-155065	0151	-	Remove square brackets from RSTD tests	12.4.0	12.5.0				
2015-12	RAN#70	R5-155066	0152	-	Incorrect Section number referenced	12.4.0	12.5.0				
2015-12	RAN#70	R5-155081	0153	-	Editorial changes to correct Section and Table references	12.4.0	12.5.0				
2015-12	RAN#70	R5-155875	0154	1	Two new 3 DL CA RSTD Measurement Reporting Delay test cases	12.4.0	12.5.0				
2015-12	RAN#70	R5-156111	0155	1	Two new 3 DL CA RSTD Measurement Accuracy test cases	12.4.0	12.5.0				
2016-03	RAN#71	R5-160041	0156	-	Correction to Cells in OTDOA 3DL RSTD Measurement	12.5.0	12.6.0				
2016-03	RAN#71	R5-160900	0164	-	Add Cell values in RSTD Table for 3DL RSTD	12.5.0	12.6.0				
2016-03	RAN#71	R5-160909	0157	1	Correction of Cell Time offset in RSTD CA	12.5.0	12.6.0				
2016-03	RAN#71	R5-161016	0161	1	Add Cell values in OTDOA table for 3DL RSTD Measurement Reporting Delay	12.5.0	12.6.0				
2016-03	RAN#71	R5-161053	0158	1	Correction to Trstd values in 3DL RSTD Measurement Accuracy test cases	12.5.0	12.6.0				
2016-03	RAN#71	R5-161054	0160	1	Addition of antenna diagram Figure for 3DL CA test cases	12.5.0	12.6.0				
2016-06	RAN#72	R5-162114	0165	-	Uncertainties and Test Tolerances for RSTD Test Cases 10.5 and 10.6	12.6.0	12.7.0				
2016-06	RAN#72	R5-162116	0166	-	Uncertainties and Test Tolerances for RSTD Test Cases 10.7 and 10.8	12.6.0	12.7.0				
2016-06	RAN#72	R5-163116	0167	1	Uncertainties and Test tolerances for TS 37.571-1 Test cases 8.1.3 and 8.1.4	12.6.0	12.7.0				
2016-06	RAN#72	R5-162970	0168	1	Add missing LTE FDD TDD bands to E-UTRA Band Groups	12.7.0	13.0.0				
2016-06	RAN#72	R5-162971	0169	1	Add missing LTE FDD band to Annex E	12.7.0	13.0.0				
2016-09	RAN#73	R5-165350	0179	-	Incorrect FDD Band reference noted for Band 32	13.0.0	13.1.0				
2016-09	RAN#73	R5-165360	0181	-	Correct editorial changes in Annex C of 37.571-1	13.0.0	13.1.0				
2016-09	RAN#73	R5-166125	0173	1	Updates to the UE Rx – Tx Time Difference tests for Rel-12 onwards	13.0.0	13.1.0				
2016-09	RAN#73	R5-166126	0178	1	Add missing references to GPS and Galileo and A-GPS and A-Galileo	13.0.0	13.1.0				
2016-09	RAN#73	R5-166127	0180	1	Add Derivation of Test Requirements for test cases 8.1.5 and 8.1.6	13.0.0	13.1.0				
2016-09	RAN#73	R5-166168	0182	1	Addition of performance test specification for Indoor Positioning Enhancements (MBS)	13.0.0	13.1.0				
2016-09	RAN#73	R5-166179	0171	1	Addition of editor's notes for TDD UE Rx-TX tests	13.0.0	13.1.0				
2016-09	RAN#73	R5-166181	0174	1	Unification of Channel BW testing requirements for OTDOA 3 DL CA test cases	13.0.0	13.1.0				

	Change history										
Date	TSG #	TSG Doc.	CR	Re	Subject/Comment TS 36.571-1	Old	New				
2016-09	RAN#73	R5-166283	0183	-	Change of Reference Channel for 1.4 MHz RSTD tests	13.0.0	13.1.0				
2016-12	RAN#74	R5-168060	0185	-	Change references to Reference Channel for RSTD tests	13.1.0	13.2.0				
2016-12	RAN#74	R5-168063	0186	-	Change of applicability of UE Rx-Tx tests for TDD	13.1.0	13.2.0				
2016-12	RAN#74	R5-168147	0187	-	Corrections for errors in 37.571-1	13.1.0	13.2.0				
2016-12	RAN#74	R5-169602	0184	1	Addition of test tolerances to the performance test specification for Indoor Positioning Enhancements (MBS)	13.1.0	13.2.0				
2016-12	RAN#74	R5-169611	0190	1	Clarification of MBS beacon code phase delay	13.1.0	13.2.0				
2016-12	RAN#74	R5-169663	0188	1	Editorial correction on OTDOA TC10.6	13.1.0	13.2.0				
2016-12	RAN#74	R5-168396	0189	-	Band 70 addition to band groups in 37.571-1	13.2.0	14.0.0				
2017-01	RAN#74	-	-	-	correction of floating point of R5-169602 in Table 11.4.5-3	14.0.0	14.0.1				
2017-03	RAN#75	R5-171304	0195	-	Removal of square brackets in the performance test specification for Indoor Positioning Enhancements (MBS)	14.0.1	14.1.0				
2017-03	RAN#75	R5-171902	0191	1	Update TS 37.571-1 with Addition of LTE Band 48	14.0.1	14.1.0				
2017-03	RAN#75	R5-171904	0192	1	Clarification on DRX for Single Mode OTDOA Measurement Reporting Delay Test Cases	14.0.1	14.1.0				
2017-03	RAN#75	R5-171905	0193	1	Clarification on DRX for 2CC OTDOA Measurement Reporting Delay Test Cases	14.0.1	14.1.0				
2017-03	RAN#75	R5-171906	0194	1	Clarification on DRX for 3CC OTDOA Measurement Reporting Delay Test Cases	14.0.1	14.1.0				
2017-06	RAN#76	R5-172179	0197	-	Add Minimum Performance Sub-tests for 3 GNSS	14.1.0	14.2.0				
2017-06	RAN#76	R5-172623	0198	-	Introduction of periodical reporting capability for GNSS	14.1.0	14.2.0				
2017-06	RAN#76	R5-173364	0200	1	Introduction of MBS Assistance Data Measurement Test Cases	14.1.0	14.2.0				
2017-06	RAN#76	R5-173414	0201	1	Addition of ACKs in step 5 of test procedures	14.1.0	14.2.0				
2017-09	RAN#77	R5-173569	0202	-	Correction of PRS Subframe Offset for TC 10.5 and 10.6	14.2.0	14.3.0				
2017-09	RAN#77	R5-173570	0203	-	Correction of SRS-Bandwidth for ECID TC 8.1.3 and 8.1.4	14.2.0	14.3.0				
2017-09	RAN#77	R5-173571	0204	-	Correction of SRS-Bandwidth for ECID TC 8.1.5 and 8.1.6	14.2.0	14.3.0				
2017-09	RAN#77	R5-173572	0205	-	Correction of message contents for ECID (Editorial Change)	14.2.0	14.3.0				
2017-09	RAN#77	R5-173576	0209	-	WLAN and BLE Annex D updates (Editorial Change)	14.2.0	14.3.0				
2017-09	RAN#77	R5-173863	0214	-	Editorial change to clarify the MBS test cases applicability	14.2.0	14.3.0				
2017-09	RAN#77	R5-174053	0215	-	Update Statement Concerning Test System Uncertainties for Operating Bands Above 3 GHz	14.2.0	14.3.0				
2017-09	RAN#77	R5-175116	0206	1	New Abbreviations and References for WLAN and BLE (Editorial Change)	14.2.0	14.3.0				
2017-09	RAN#77	R5-175117	0207	1	WLAN test conditions	14.2.0	14.3.0				
2017-09	RAN#77	R5-175118	0208	1	WLAN and BLE Connection Diagrams	14.2.0	14.3.0				
2017-09	RAN#77	R5-175119	0212	1	BLE test conditions	14.2.0	14.3.0				
2017-09	RAN#77	R5-175186	0210	1	New WLAN AP Identification in Nominal Accuracy Test	14.2.0	14.3.0				
2017-09	RAN#77	R5-175187	0211	1	New WLAN AP Identification in Dynamic Range Test	14.2.0	14.3.0				
2017-09	RAN#77	R5-175188	0213	1	New BLE Reporting Test	14.2.0	14.3.0				
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Date	TSG #	TSG Doc.	CR	Re v	Subject/Comment TS 36.571-1	Old	New		
2017-12	RAN#78	R5-176110	0219	-	Add 4Rx support for OTDOA/ECID tests – Tests	14.3.0	14.4.0		
2017-12	RAN#78	R5-176111	0220	-	Add 4Rx support for OTDOA/ECID tests – Connection Diagrams	14.3.0	14.4.0		
2017-12	RAN#78	R5-177118	0222	1	Adapt LTE A-GNSS test cases for BL/CE devices	14.3.0	14.4.0		
2017-12	RAN#78	R5-177411	0216	1	Complete WLAN and BLE test cases	14.3.0	14.4.0		
2017-12	RAN#78	R5-177413	0217	1	Editorial - Alignment of 2CC 5MHz OTDOA Nprs with core spec	14.3.0	14.4.0		
2017-12	RAN#78	R5-177414	0218	1	Add 4Rx support for OTDOA/ECID tests – Common Sections	14.3.0	14.4.0		
2017-12	RAN#78	R5-177415	0221	1	Add release information for sub-tests of test case 7.5.	14.3.0	14.4.0		
2017-12	RAN#78	R5-176791	0223	-	Band 72 addition to band groups in 37.571-1	14.4.0	15.0.0		
2017-12	RAN#78	R5-176816	0224	-	Band 71 addition to band groups in 37.571-1	14.4.0	15.0.0		
2018-03	RAN#79	R5-180295	0228	-	New OTDOA Cat1bis TC 9.1.3A and 9.1.4A	15.0.0	15.1.0		
2018-03	RAN#79	R5-180296	0229	-	New OTDOA Cat1bis TC 9.2.4A and 9.2.5A	15.0.0	15.1.0		
2018-03	RAN#79	R5-180297	0230	-	Annex C OTDOA Cat1bis tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-180298	0231	-	UE Category M1/M2 General Sections for OTDOA	15.0.0	15.1.0		
2018-03	RAN#79	R5-180299	0232	-	New OTDOA Cat M1/M2 reporting delay normal mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-180300	0233	-	New OTDOA Cat M1/M2 reporting delay enhanced mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-180301	0234	-	New OTDOA Cat M1/M2 reporting accuracy normal mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-180303	0236	-	New OTDOA Cat M1/M2 inter-freq reporting delay normal mode	15.0.0	15.1.0		
2212.22	D.4.1	D= 100001	1000=		tests		1-10		
2018-03	RAN#79	R5-180304	0237	-	New OTDOA Cat M1/M2 inter-freq reporting delay enhanced mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-180307	0240	-	New ECID Cat M1/M2 tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-180308	0241	-	Annex C OTDOA and ECID Cat M1/M2	15.0.0	15.1.0		
2018-03	RAN#79	R5-180311	0244	-	NB-IOT Annex E	15.0.0	15.1.0		
2018-03	RAN#79	R5-180325	0245	-	Band 68 addition to band groups in 37.571-1	15.0.0	15.1.0		
2018-03	RAN#79	R5-180352	0246	-	[Editorial] Correct normative reference for minimum conformance	15.0.0	15.1.0		
2212.22	D.111///		10015		requirements				
2018-03	RAN#79	R5-180583	0247	-	feMTC Annex E		15.1.0		
2018-03	RAN#79	R5-180584	0248	-	4Rx support for OTDOA 2CC	15.0.0	15.1.0		
2018-03	RAN#79	R5-180585	0249	-	4Rx support for OTDOA 3CC		15.1.0		
2018-03	RAN#79	R5-181360	0250	2	WLAN core specification updates		15.1.0		
2018-03	RAN#79	R5-181584	0235	1	New OTDOA Cat M1/M2 reporting accuracy enhanced mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-181585	0238	1	New OTDOA Cat M1/M2 inter-freq reporting accuracy normal mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-181586	0239	1	New OTDOA Cat M1/M2 inter-freq reporting accuracy enhanced mode tests	15.0.0	15.1.0		
2018-03	RAN#79	R5-181599	0226	1	New OTDOA Cat1bis TC 9.1.1A and 9.1.2A	15.0.0	15.1.0		
2018-03	RAN#79	R5-181600	0227	1	New OTDOA Cat1bis TC 9.2.1A and 9.2.2A	15.0.0	15.1.0		
2018-03	RAN#79	R5-181605	0242	1	NB-IOT General Sections	15.0.0	15.1.0		
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2018-03	RAN#79	R5-181606	0243	1	NB-IOT OTDOA Test Cases	15.0.0	15.1.0			
2018-03	RAN#79	R5-181613	0251	1	Addition of the Band 74 information into TS 37.571-1	15.0.0	15.1.0			
2018-06	RAN#80	R5-182218	0256	-	Common clauses updates for new NB-IOT OTDOA tests	15.1.0	15.2.0			
2018-06	RAN#80	R5-182219	0257	-	Annex C updates for NB-IOT OTDOA	15.1.0	15.2.0			
2018-06	RAN#80	R5-182279	0258	-	New ECID Cat1bis tests	15.1.0	15.2.0			
2018-06	RAN#80	R5-182280	0259	-	New ECID Cat1bis tests - Annexes	15.1.0	15.2.0			
2018-06	RAN#80	R5-182382	0261	-	Corrections to WLAN dynamic range test case	15.1.0	15.2.0			
2018-06	RAN#80	R5-182384	0263	-	Corrections to maximum response time for WLAN test cases	15.1.0	15.2.0			
2018-06	RAN#80	R5-183252	0252	1	Completion of OTDOA NB-IOT TC 9.5.1 and 9.5.2	15.1.0	15.2.0			
2018-06	RAN#80	R5-183253	0253	1	Completion of OTDOA NB-IOT TC 9.6.1 and 9.6.2	15.1.0	15.2.0			
2018-06	RAN#80	R5-183261	0264	1	Clarifications for RSSI reporting in WLAN and BLE test cases	15.1.0	15.2.0			
2018-06	RAN#80	R5-183844	0254	1	New OTDOA NB-IOT TC 9.5.3	15.1.0	15.2.0			
2018-06	RAN#80	R5-183845	0255	1	New OTDOA NB-IOT TC 9.6.3	15.1.0	15.2.0			
2018-06	RAN#80	R5-183847	0260	1	Removing editor note from A-GNSS min perf test cases for Cat M1	15.1.0	15.2.0			
2018-06	RAN#80	R5-183848	0262	1	Clarifications and additions to EUTRAN, WLAN and BLE test frequencies and bandwidths	15.1.0	15.2.0			
2018-06	RAN#80	R5-183849	0265	1	Corrections to WLAN and BLE applicabilities	15.1.0	15.2.0			
2018-09	RAN#81	R5-184041	0266	-	Clarifications and corrections to Bluetooth identification test	15.2.0	15.3.0			
2018-09	RAN#81	R5-184189	0271	-	Band groups added to specification	15.2.0	15.3.0			
2018-09	RAN#81	R5-185416	0268	1	Correction to nrs-CRS-PowerOffset-r13 for NB-IOT OTDOA tests	15.2.0	15.3.0			
2018-09	RAN#81	R5-185417	0269	1	NB-IOT OTDOA reporting delay test cases not testable	15.2.0	15.3.0			
2018-09	RAN#81	R5-185419	0270	1	Changes to eMTC OTDOA tests	15.2.0	15.3.0			
2018-09	RAN#81	R5-185552	0267	1	Applicability of tests for types and Categories of UE	15.2.0	15.3.0			
2018-12	RAN#82	R5-186489	0272	-	Resubmission of CR 0269	15.3.0	15.4.0			
2018-12	RAN#82	R5-186615	0274	-	Clarification of the meaning of A-GPS	15.3.0	15.4.0			
2018-12	RAN#82	R5-186616	0275	-	Addition of two missing triple-GNSS test cases	15.3.0	15.4.0			
2018-12	RAN#82	R5-186617	0276	-	Updates to Table 4B.2-1	15.3.0	15.4.0			
2018-12	RAN#82	R5-187983	0277	1	Editorial Changes for TS 37.571-1	15.3.0	15.4.0			
2019-03	RAN#83	R5-191607	0281	-	Editorial Changes for TS 37.571-1	15.4.0	15.5.0			
2019-03	RAN#83	R5-192506	0278	1	Addition of general NR information	15.4.0	15.5.0			
2019-03	RAN#83	R5-192646	0282	1	Editorial updates for RSTD NB-IOT tests	15.4.0	15.5.0			
2019-03	RAN#83	R5-192851	0279	1	Corrections to RSTD reporting accuracy NB-IOT tests	15.4.0	15.5.0			
2020-03	RAN#87	R5-200074	0309	-	Removal of technical content in 37.571-1 v15.5.0 and substitution with pointer to the next Release	15.5.0	15.6.0			

# 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							