



**ARIB STD-T104-37.571-5 V10.11.0**

**User Equipment (UE)  
conformance specification for UE  
positioning;  
Part 5: Test scenarios and  
assistance data**

**(Release 10)**

# 3GPP TS 37.571-5 V10.11.0 (2015-12)

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*Technical Specification*

**3rd Generation Partnership Project;  
Technical Specification Group Radio Access Network;  
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  
(Release 10)**

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Keywords

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UMTS, radio

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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.

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## Introduction

The present document is part 5 of a multi-part 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.**

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## 1 Scope

The present document specifies the test scenarios and assistance data required for the conformance test for FDD or TDD mode of UTRA and E-UTRA for the User Equipment (UE) that supports one or more of the defined positioning methods. For UTRA these are Assisted Global Positioning System (A-GPS) and Assisted Global Navigation Satellite System (A-GNSS). For E-UTRA these are A-GNSS, Observed Time Difference of Arrival (OTDOA) and Enhanced Cell ID (ECID).

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## 2 References

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

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

[1] to [20]        (void)

[21]              3GPP TS 37.571-5 Release 11: "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"

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## 3 Definitions, symbols and abbreviations

Void

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## 4 General

The requirements of the present document are provided in 3GPP TS 37.571-5 Release 11 [21].

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## 5 to 7 Void

## Annex C (informative): Change history

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2010-08	RAN5#48	R5-104318			Initial draft created as TS 36.571-5		0.0.0
2010-11	RAN5#49	R5-106146			Initial draft created from TS 36.571-5 with minor updates	0.0.0	0.1.0
2010-11	RAN5#49	R5-106615			Editor's notes added	0.1.0	0.1.1
2010-11	RAN5#49	R5-106614			Version 1.0.0 prepared for presentation to RAN Plenary	0.1.1	1.0.0
2011-05	RAN5#51	R5-112807			Version 1.1.0 with additional values and editorial changes	1.0.0	1.1.0
2011-08	RAN5#52	R5-113136			Additional values and editorial changes	1.1.0	-
2011-08	RAN5#52	R5-113137			Version 2.0.0 prepared for presentation to RAN Plenary	1.1.0	2.0.0
2011-09	RAN#53	RP-111127			v2.0.0 approved at RAN#53 and raised to v9.0.0 with no change	2.0.0	9.0.0
2011-12	RAN5#53	R5-115203	0001	-	Removal of editor's notes on OTDOA values	9.0.0	9.1.0
2011-12	RAN5#53	R5-115204	0002	-	Correction of references	9.0.0	9.1.0
2012-03	RAN5#54	R5-120085	0003	-	OTDOA reference corrections	9.1.0	9.2.0
2012-03	RAN5#54	R5-120086	0004	-	Update references	9.1.0	9.2.0
2012-03	RAN5#54	R5-120092	0005	-	OTDOA parameter corrections	9.1.0	9.2.0
2012-06	RAN5#55	R5-121136	0006	-	Corrections to GPS Almanac data file	9.2.0	9.3.0
2012-06	RAN5#55	R5-121137	0007	-	Removal of OTDOA data for signalling test cases	9.2.0	9.3.0
2012-06	RAN5#55	R5-121249	0008	-	LBS: Corrections to gnss-SystemTime message	9.2.0	9.3.0
2012-06	RAN5#55	R5-121853	0009	-	Additions and corrections to GNSS data	9.2.0	9.3.0
2012-06	RAN5#55	R5-121910	0010	-	Additions and corrections to GNSS data	9.2.0	9.3.0
2012-06	RAN5#55	R5-121911	0011	-	Reduction in size of GPS data file	9.2.0	9.3.0
2012-06	RAN5#55	-	-	-	Upgraded to v10.0.0 with no change.	9.3.0	10.0.0
2012-09	RAN5#56	R5-123097	0012	-	Addition of missing Assistance Data	10.0.0	10.1.0
2012-09	RAN5#56	R5-123699	0013	-	Addition of Rel-10 Information Elements	10.0.0	10.1.0
2012-09	RAN5#56	R5-123914	0014	-	Addition of missing Assistance Data	10.0.0	10.1.0
2012-12	RAN5#57	R5-125577	0015	-	Correction to Reference UE Position value	10.1.0	10.2.0
2012-12	RAN5#57	R5-125779	0017	-	LBS Sig: Corrections to GLONASS acquisition assistance data	10.1.0	10.2.0
2012-12	RAN5#57	R5-125780	0018	-	LBS Sig: Corrections to GNSS assistance data	10.1.0	10.2.0
2012-12	RAN5#57	R5-125849	0019	-	LBS Perf: Correction of coordinates for GNSS Scenario #2 and #5	10.1.0	10.2.0
2012-12	RAN5#57	R5-125850	0020	-	LBS Perf: Corrections to GNSS assistance data	10.1.0	10.2.0
2012-12	RAN5#57	R5-125917	0021	-	LBS Perf: Corrections to GLONASS acquisition assistance data	10.1.0	10.2.0
2012-12	RAN5#56 bis	R5-124122	0022	-	OTDOA data for new test cases 10.1 - 10.4 for RSTD for Carrier Aggregation	10.1.0	10.2.0
2013-03	RAN5#58	R5-130118	0023	-	Addition of Rel-10 IEs	10.2.0	10.3.0
2013-03	RAN5#58	R5-130119	0024	-	Addition of Rel-10 IEs	10.2.0	10.3.0
2013-03	RAN5#58	R5-130122	0025	-	Change of file names for assistance data	10.2.0	10.3.0
2013-03	RAN5#58	R5-130123	0026	-	Change of file names for assistance data	10.2.0	10.3.0
2013-03	RAN5#58	R5-130529	0027	-	Correction to GPS assistance data	10.2.0	10.3.0
2013-03	RAN5#58	R5-130689	0028	-	Correction to GLONASS assistance data	10.2.0	10.3.0
2013-03	RAN5#58	R5-130690	0029	-	Correction to GPS assistance data	10.2.0	10.3.0
2013-03	RAN5#58	R5-130960	0030	-	Correction to GLONASS assistance data	10.2.0	10.3.0
2013-06	RAN5#59	R5-131103	0031	-	Additional OTDOA assistance data for new inter-frequency tests	10.3.0	10.4.0
2013-06	RAN5#59	R5-131108	0032	-	Correction to GLONASS ToD	10.3.0	10.4.0
2013-06	RAN5#59	R5-131329	0033	-	Correction to available GNSS assistance data elements for signalling tests	10.3.0	10.4.0
2013-06	RAN5#59	R5-131330	0034	-	Addition of missing Rel-10 IE	10.3.0	10.4.0
2013-06	RAN5#59	R5-131509	0035	-	Corrections to UTC Model assistance data values	10.3.0	10.4.0
2013-06	RAN5#59	R5-131511	0036	-	Corrections and clarifications to use of UTC Model and Auxiliary Information	10.3.0	10.4.0
2013-06	RAN5#59	R5-131948	0037	-	OTDOA assistance data alignment with RAN 4	10.3.0	10.4.0
2013-06	RAN5#59	R5-131949	0038	-	Corrections to UTC Model assistance data values	10.3.0	10.4.0
2013-06	RAN5#59	R5-131997	0039	-	LBS Perf: Introduction of GLONASS acquisition assistance data	10.3.0	10.4.0
2013-06	RAN5#59	R5-131998	0040	-	Addition of GLONASS Acquisition Assistance data	10.3.0	10.4.0
2013-06	RAN5#59	R5-132060	0041	-	Addition of GLONASS Acquisition Assistance data	10.3.0	10.4.0
2013-06	RAN5#59	R5-132061	0042	-	LBS Sig: Introduction of GLONASS acquisition assistance data	10.3.0	10.4.0
2013-06	RAN5#59	R5-132100	0043	-	Corrections and clarifications to use of UTC Model and Auxiliary Information	10.3.0	10.4.0
2013-06	RAN5#59	R5-132101	0044	-	Correction to GLONASS SV Health value in data file	10.3.0	10.4.0
2013-09	RAN5#60	R5-133177	0045	-	Removal of old Assistance Data files	10.4.0	10.5.0
2013-09	RAN5#60	R5-133179	0046	-	Addition of missing Assistance Data files	10.4.0	10.5.0
2013-09	RAN5#60	R5-133180	0047	-	Correction of Doppler 1 values for RRC	10.4.0	10.5.0
2013-09	RAN5#60	R5-133341	0048	-	Change of SV for GNSS Scenario #2 for Multi-path test	10.4.0	10.5.0
2013-09	RAN5#60	R5-133487	0050	-	Correction of Doppler 1 values for RRC	10.4.0	10.5.0
2013-09	RAN5#60	R5-133488	0051	-	Correction of Doppler values for LPP	10.4.0	10.5.0
2013-09	RAN5#60	R5-133726	0052	-	Correction of Doppler values for LPP	10.4.0	10.5.0

2013-12	RAN5#61	R5-134206	0053	-	Correction to GPS Almanac WNa value for scenarios #2 and #5	10.5.0	10.6.0
2013-12	RAN5#61	R5-134251	0054	-	Correction of OmegaA0 value for SV1 in scenario #1	10.5.0	10.6.0
2013-12	RAN5#61	R5-134257	0055	-	Deletion of FFS and Editor's note in clause 6.2.7	10.5.0	10.6.0
2013-12	RAN5#61	R5-134357	0057	-	Correction to GLONASS Navigation Model for scenario #2 and #5	10.5.0	10.6.0
2013-12	RAN5#61	R5-134443	0058	-	LBS Perf: Corrections to the headers of GPS acquisition assistance data files	10.5.0	10.6.0
2013-12	RAN5#61	R5-134444	0059	-	LBS Sig: Corrections to the headers of GPS acquisition assistance data files	10.5.0	10.6.0
2013-12	RAN5#61	R5-134851	0060	-	Addition of OTDOA Assistance Data for new 20MHz CA test cases	10.5.0	10.6.0
2013-12	RAN5#61	R5-134912	0061	-	Correction of OmegaA0 value for SV1	10.5.0	10.6.0
2013-12	RAN5#61	R5-134913	0062	-	Correction to GNSS Navigation Model (sub-test 1)	10.5.0	10.6.0
2013-12	RAN5#61	R5-135064	0063	-	LBS Perf: Corrections to the GNSS acquisition assistance data - CR 1	10.5.0	10.6.0
2013-12	RAN5#61	R5-135065	0064	-	LBS Perf: Corrections to the GNSS acquisition assistance data - CR 2	10.5.0	10.6.0
2013-12	RAN5#61	R5-135072	0065	-	LBS Sig: Corrections to the GNSS acquisition assistance data	10.5.0	10.6.0
2014-03	RAN5#62	R5-140198	0066	-	Adjustment of SV IDs of Satellites to be simulated	10.6.0	10.7.0
2014-03	RAN5#62	R5-140377	0067	-	LBS Perf: Update of headers of some GNSS acquisition assistance data files	10.6.0	10.7.0
2014-03	RAN5#62	R5-140378	0068	-	LBS Sig: Removal of redundant inappropriate files from GNSS_Data_Sig_V7.zip file	10.6.0	10.7.0
2014-03	RAN5#62	R5-140383	0069	-	LBS Perf: Introducing Ephemeris files in Rinex format	10.6.0	10.7.0
2014-03	RAN5#62	R5-140384	0070	-	LBS Sig: Introducing Ephemeris files in Rinex format	10.6.0	10.7.0
2014-03	RAN5#62	R5-140794	0071	-	LBS Sig: Clarification on usage of acquisition assistance files	10.6.0	10.7.0
2014-03	RAN5#62	R5-140795	0072	-	LBS Sig: Changing the name of Almanac files not in Yuma format	10.6.0	10.7.0
2014-03	RAN5#62	R5-140873	0073	-	LBS Perf: Clarification on usage of acquisition assistance files	10.6.0	10.7.0
2014-03	RAN5#62	R5-140874	0074	-	LBS Perf: Changing the name of Almanac files not in Yuma format	10.6.0	10.7.0
2014-03	RAN5#62	R5-140879	0075	-	Corrections to GLONASS GANSS Day and gnss-DayNumber values	10.6.0	10.7.0
2014-03	RAN5#62	R5-140900	0076	-	Corrections to GLONASS GANSS Day and gnss-DayNumber values	10.6.0	10.7.0
2014-03	RAN5#62	R5-141034	0077	-	RSTD value updates	10.6.0	10.7.0
2014-06	RAN5#63	R5-142097	0078	-	Corrections to prs-MutingInfo	10.7.0	10.8.0
2014-06	RAN5#63	R5-142249	0079	-	Correction to T_lamda_n_A values for scenario #1	10.7.0	10.8.0
2014-06	RAN5#63	R5-142250	0080	-	Correction to T_lamda_n_A values	10.7.0	10.8.0
2014-06	RAN5#63	R5-142252	0081	-	Clarification of use of satellite simulator	10.7.0	10.8.0
2014-06	RAN5#63	R5-142884	0082	-	LBS Sig: Correction of FT values in GLONASS scenarios and RINEX file update	10.7.0	10.8.0
2014-06	RAN5#63	R5-142885	0083	-	LBS Sig: Moving some .rnx files to the right .zip file	10.7.0	10.8.0
2014-06	RAN5#63	R5-143110	0084	-	LBS Perf: Moving some .rnx files to the right .zip file	10.7.0	10.8.0
2014-06	RAN5#63	R5-143128	0085	-	LBS Perf: Correction of FT values in GLONASS scenarios and RINEX file update	10.7.0	10.8.0
2014-09	RAN5#64	R5-144133	0086	-	LBS Perf: Adding missing information for QZSS	10.8.0	10.9.0
2014-09	RAN5#64	R5-144135	0087	-	LBS Perf: Adding missing files for QZSS	10.8.0	10.9.0
2014-09	RAN5#64	R5-144136	0088	-	LBS Sig: Adding missing files for QZSS	10.8.0	10.9.0
2014-09	RAN5#64	R5-144139	0091	-	LBS Perf: Adding missing files for Galileo	10.8.0	10.9.0
2014-09	RAN5#64	R5-144140	0092	-	LBS Sig: Adding missing files for Galileo	10.8.0	10.9.0
2014-09	RAN5#64	R5-144793	0089	-	LBS Perf: Adding missing information for Galileo and introduction of Galileo hybrid-subtest	10.8.0	10.9.0
2014-09	RAN5#64	R5-144795	0090	-	LBS Sig: Adding missing information for Galileo and introduction of Galileo hybrid-subtest	10.8.0	10.9.0
2014-09	RAN5#64	R5-144872	0097	-	Updates OTDOA Neighbour Cell Info List	10.8.0	10.9.0
2014-12	RAN5#65	R5-145101	0102	-	LBS Perf: Adding missing information for Galileo	10.9.0	10.10.0
2014-12	RAN5#65	R5-145102	0103	-	LBS Sig: Adding missing information for Galileo	10.9.0	10.10.0
2014-12	RAN5#65	R5-145135	0104	-	Clarification to OTDOA Assistance Data	10.9.0	10.10.0
2014-12	RAN5#65	R5-145136	0105	-	Update Galileo ICD reference	10.9.0	10.10.0
2015-12	RAN#70	R5-155049	0128	-	Removal of technical content in 37.571-5 v10.10.0 and substitution with pointer to the next Release	10.10.0	10.11.0