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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 3: Implementation Conformance Statement (ICS)
(Release 10)





The present document has been developed within the 3rd Generation Partnership Project (3GPP TM) and may be further elaborated for the purposes of 3GPP.

Keywords mobile, UE, terminal, testing, UTRA, E-UTRA, EPC, LCS, UE positioning

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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;
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- 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 3rd Generation UTRAN and E-UTRAN 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 and 3GPP TS 36.509 [2] for E-UTRA. The common test environments are included in 3GPP TS 34.108 [9] for UTRA and in 3GPP TS 36.508 [3] for E-UTRA.

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.
- 3GPP TR 21.905: "Vocabulary for 3GPP Specifications". [1] [2] 3GPP TS 36.509: "Special conformance testing functions for User Equipment". 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet [3] Core (EPC); Common Test Environments for User Equipment (UE) Conformance Testing". 3GPP TS 36.355: "Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning [4] Protocol (LPP)". [5] 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". [6] 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".
- [7] ISO/IEC 9646-1: "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 1: General concepts".
- [8] ISO/IEC 9646-7: "Information technology Open systems interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".
- [9] 3GPP TS 34.108: "Common Test Environments for User Equipment (UE) Conformance Testing".
- [10] 3GPP TS 34.109: "Terminal logical test interface; Special conformance testing functions".
- [11] 3GPP TS 36.523-2: "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".

[12] 3GPP TS 34.123-2: "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".

3 Definitions, symbols and abbreviations

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

- such given in TR 21.905[1]
- such given in ISO/IEC 9646-1 [7] and ISO/IEC 9646-7 [8]

NOTE: Some terms and abbreviations defined in [7] and [8] are explicitly included below with small modification to reflect the terminology used in 3GPP.

3.1 Definitions

Implementation Conformance Statement (ICS): A statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented.

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

Implementation eXtra Information for Testing (IXIT): A statement made by a supplier or implementer of an UEUT which contains or references all of the information (in addition to that given in the ICS) related to the UEUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the UEUT.

IXIT proforma: A document, in the form of a questionnaire, which when completed for an UEUT becomes an IXIT.

Protocol Implementation Conformance Statement (PICS): An ICS for an implementation or system claimed to conform to a given protocol specification.

Protocol Implementation eXtra Information for Testing (PIXIT): An IXIT related to testing for conformance to a given protocol specification.

static conformance review: A review of the extent to which the static conformance requirements are claimed to be supported by the UEUT, by comparing the answers in the ICS(s) with the static conformance requirements expressed in the relevant specification(s).

3.2 Symbols

No specific symbols have been identified so far.

3.3 Abbreviations

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

A-GNSS Assisted - Global Navigation Satellite System

A-GPS Assisted - Global Positioning System

DUT Device Under Test

E-CID Enhanced Cell-ID (positioning method)

ENB Evolved Node B

E-UTRA Evolved UMTS Terrestrial Radio Access

E-UTRAN Evolved UMTS Terrestrial Radio Access Network

FDD Frequency Division Duplex

FFS For Further Study

GLONASS GLObal'naya NAvigatsionnaya Sputnikovaya Sistema (English: Global Navigation Satellite

System)

GNSS Global Navigation Satellite System

GPS Global Positioning System

ICS Implementation Conformance Statement
IXIT Implementation eXtra Information for Testing

LPP LTE Positioning Protocol

MO-LR Mobile Originated Location Request
MT-LR Mobile Terminated Location Request
OTDOA Observed Time Difference Of Arrival

PICS Protocol Implementation Conformance Statement
PIXIT Protocol Implementation eXtra Information for Testing

QZSS Quasi-Zenith Satellite System
SBAS Space Based Augmentation System
SCS System Conformance Statement

TC Test Case
UE User Equipment

UEUT User Equipment Under Test

4 Recommended Test Case Applicability

The applicability of each individual test is identified in Table 4-1 (UTRA) and 4.3 (E-UTRA) for test cases in TS 37.571-1 [5] and in Table 4-5 (UTRA) and 4.7 (E-UTRA) for test cases in TS 37.571-2 [6]. This is just a recommendation based on the purpose for which the test case was written.

The applicability of every test is formally expressed by the use of Boolean expression that are based on parameters (ICS) included in annex A of the present document.

Additional information related to the Test Case (TC), e.g. affecting its dynamic behaviour or its execution may be provided as well

The columns in Tables 4-1, 4.3, 4.5, and 4.7 have the following meaning:

Clause

The clause column indicates the clause number in TS 37.571-1 [5] and TS 37.571-2 [6] that contains the test body.

Title

The title column describes the name of the test and contains the clause title of the clause in TS 37.571-1 [5] and TS 37.571-2 [6] that contains the test body.

Release

The release column indicates the earliest release from which each the test case is applicable.

Applicability - Condition

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.

NOTE: The conditions are defined in Table 4-2, 4-4, 4-6, and 4-8.

Applicability - Comments

This column contains a verbal description of the condition.

Additional Information - Specific ICS

This column contains the mne monics of ICS(s) affecting the dynamic behaviour of the TC.

Additional Information - Specific IXIT

This column contains the mnemonics of IXIT(s) affecting the dynamic behaviour of the TC.

Table 4-1: Applicability of tests and additional information for testing for test cases in TS 37.571-1 [5] for UTRA

Clause	Title	Release	Applicability	Comments
5.2.1	Sensitivity Course Time Assistance	Rel-6	C01ur	All UEs supporting FDD and UE-Based A-GPS L1 C/A only or UE-Assisted A-GPS L1 C/A only
5.2.2	Sensitivity Fine Time Assistance	Rel-6	C02ur	All UEs supporting FDD and UE-Based A-GPS L1 C/A only or UE-Assisted A-GPS L1 C/A only and Fine Time Assistance
5.3	Nominal Accuracy	Rel-6	C01ur	All UEs supporting FDD and UE-Based A-GPS L1 C/A only or UE-Assisted A-GPS L1 C/A only
5.4	Dynamic Range	Rel-6	C01ur	All UEs supporting FDD and UE-Based A-GPS L1 C/A only or UE-Assisted A-GPS L1 C/A only
5.5	Multi-path Performance	Rel-6	C01ur	All UEs supporting FDD and UE-Based A-GPS L1 C/A only or UE-Assisted A-GPS L1 C/A only
5.6	Moving Scenario and Periodic Update Performance	Rel-6	C01ur	All UEs supporting FDD and UE-Based A-GPS L1 C/A only or UE-Assisted A-GPS L1 C/A only
6.2.1-1	Sensitivity Course Time Assistance: Sub-Test 1	Rel-10	C03-1ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only
6.2.1-2	Sensitivity Coarse Time Assistance: Sub-Test 2	Rel-10	C03-2ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with Galileo only
6.2.1-3	Sensitivity Coarse Time Assistance: Sub-Test 3	Rel-10	C03-3ur	All UEs supporting UE-Based A-GPS and A-GANSS with Modernized GPS only or UE-Assisted A-GPS and A-GANSS with Modernized GPS only
6.2.1-4	Sensitivity Coarse Time Assistance: Sub-Test 4	Rel-10	C03-4ur	All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only
6.2.2-1	Sensitivity Fine Time Assistance: Sub-Test 1	Rel-10	C04-1ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only and Fine Time Assistance
6.2.2-2	Sensitivity Fine Time Assistance: Sub-Test 2	Rel-10	C04-2ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with Galileo only and Fine Time Assistance
6.2.2-3	Sensitivity Fine Time Assistance: Sub-Test 3	Rel-10	C04-3ur	All UEs supporting UE-Based A-GPS and A-GANSS with Modernized GPS only or UE-Assisted A-GPS and A-GANSS with Modernized GPS only and Fine Time Assistance
6.2.2-4	Sensitivity Fine Time Assistance: Sub-Test 4	Rel-10	C04-4ur	All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only and Fine Time Assistance
6.3-1	Nominal Accuracy: Sub-Test 1	Rel-10	C03-1ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only
6.3-2	Nominal Accuracy: Sub-Test 2	Rel-10	C03-2ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with Galileo only
6.3-3	Nominal Accuracy: Sub-Test 3	Rel-10	C03-3ur	All UEs supporting UE-Based A-GPS and A-GANSS with Modernized GPS only or UE-Assisted A-GPS and A-GANSS with Modernized GPS only
6.3-4	Nominal Accuracy: Sub-Test 4	Rel-10	C03-4ur	All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only

Clause	Title	Release	Applicability	Comments
6.4-1	Dynamic Range: Sub-Test 1	Rel-10	C03-1ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only
6.4-2	Dynamic Range: Sub-Test 2	Rel-10	C03-2ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with Galileo only
6.4-3	Dynamic Range: Sub-Test 3	Rel-10	C03-3ur	All UEs supporting UE-Based A-GPS and A-GANSS with Modernized GPS only or UE-Assisted A-GPS and A-GANSS with Modernized GPS only
6.4-4	Dynamic Range: Sub-Test 4	Rel-10	C03-4ur	All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only
6.5-1	Multi-path Performance: Sub-Test 1	Rel-10	C03-1ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only
6.5-2	Multi- path Performance: Sub-Test 2	Rel-10	C03-2ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with Galileo only
6.5-3	Multi- path Performance: Sub-Test 3	Rel-10	C03-3ur	All UEs supporting UE-Based A-GPS and A-GANSS with Modernized GPS only or UE-Assisted A-GPS and A-GANSS with Modernized GPS only
6.5-4	Multi- path Performance: Sub-Test 4	Rel-10	C03-4ur	All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only
6.6-1	Moving Scenario and Periodic Update Performance: Sub-Test 1	Rel-10	C03-1ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only
6.6-2	Moving Scenario and Periodic Update Performance: Sub-Test 2	Rel-10	C03-2ur	All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with Galileo only
6.6-3	Moving Scenario and Periodic Update Performance: Sub-Test 3	Rel-10	C03-3ur	All UEs supporting UE-Based A-GPS and A-GANSS with Modernized GPS only or UE-Assisted A-GPS and A-GANSS with Modernized GPS only
6.6-4	Moving Scenario and Periodic Update Performance: Sub-Test 4	Rel-10	C03-4ur	All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only

Table 4-2: Applicability of tests Conditions for test cases in TS 37.571-1 [5] for UTRA

C01ur IF A.4.1-1/3 AND (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C02ur IF A.4.1-1/3 AND (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/5 OR A.4.3-1/6) AND A.4.3-1/12 THEN R ELSE N/A
C03-1ur IF A.4.3-1/7 AND NOT (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C03-2ur IF A.4.3-1/9 AND NOT (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C03-3ur IF A.4.3-1/8 AND (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C03-4ur IF A.4.3-1/7 AND (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C04-1ur IF A.4.3-1/7 AND NOT (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/8 OR A.4.3-1/9) AND A.4.3-1/12 THEN R ELSE N/A
C04-2ur IF A.4.3-1/9 AND NOT (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/7 OR A.4.3-1/8) AND A.4.3-1/12 THEN R ELSE N/A
C04-3ur IF A.4.3-1/8 AND (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/7 OR A.4.3-1/9) AND A.4.3-1/12 THEN R ELSE N/A
C04-4ur IF A.4.3-1/7 AND (A.4.3-1/10 OR A.4.3-1/11) AND NOT (A.4.3-1/8 OR A.4.3-1/9) AND A.4.3-1/12 THEN R ELSE N/A

Table 4-3: Applicability of tests and additional information for testing for test cases in TS 37.571-1 [5] for E-UTRA

Clause	TC Title	Release	Applicability		Additional Information		
			Condition	Comment	Specific ICS	Specific IXIT	
7	A-GNSS minimum performance requirements						
7.1.1-1	Sensitivity Course Time Assistance: Sub-Test 1	Rel-9	C01er	All UEs supporting A-GPS	pc_eFDD		
				L1C/A only	pc_eTDD		
7.1.1-2	Sensitivity Course Time Assistance: Sub-Test 2	Rel-9	C02er	All UEs supporting A-	pc_eFDD		
				GLONASS only	pc_eTDD		
7.1.1-3	Sensitivity Course Time Assistance: Sub-Test 3	Rel-9	C03er	All UEs supporting A-Galileo	pc_eFDD		
				only	pc_eTDD		
7.1.1-4	Sensitivity Course Time Assistance: Sub-Test 4	Rel-9	C04er	All UEs supporting A-GPS and	pc_eFDD		
				Modernized GPS only	pc_eTDD		
7.1.1-5	Sensitivity Course Time Assistance: Sub-Test 5	Rel-9	C05er	All UEs supporting A-GPS and	pc_eFDD		
				A-GLONASS only	pc_eTDD		
7.1.2-1	Sensitivity Fine Time Assistance: Sub-Test 1	Rel-9	C06er	All UEs supporting A-GPS	pc_eFDD		
				L1C/A only, and Fine Time Assistance	pc_eTDD		
7.1.2-2	Sensitivity Fine Time Assistance: Sub-Test 2	Rel-9	C07er	All UEs supporting A-	pc_eFDD		
				GLONASS only, and Fine Time Assistance	pc_eTDD		
7.1.2-3	Sensitivity Fine Time Assistance: Sub-Test 3	Rel-9	C08er	All UEs supporting A-Galileo	pc_eFDD		
	, ,			only, and Fine Time Assistance	pc_eTDD		
7.1.2-4	Sensitivity Fine Time Assistance: Sub-Test 4	Rel-9	C09er	All UEs supporting A-GPS and	pc_eFDD		
	Constant Ny rand rand radiotal control radio rad	1.0.0	2000.	Modernized GPS only, and	pc_eTDD		
				Fine Time Assistance	F-2		
7.1.2-5	Sensitivity Fine Time Assistance: Sub-Test 5	Rel-9	C10er	All UEs supporting A-GPS and	pc_eFDD		
				A-GLONASS only, and Fine Time Assistance	pc_eTDD		
7.2-1	Nominal Accuracy: Sub-Test 1	Rel-9	C01er	All UEs supporting A-GPS	pc_eFDD		
				L1C/A only	pc_eTDD		
7.2-2	Nominal Accuracy: Sub-Test 2	Rel-9	C02er	All UEs supporting A-	pc_eFDD		
	, ,			GLONASS only	pc_eTDD		
7.2-3	Nominal Accuracy: Sub-Test 3	Rel-9	C03er	All UEs supporting A-Galileo	pc_eFDD		
				only	pc_eTDD		
7.2-4	Nominal Accuracy: Sub-Test 4	Rel-9	C04er	All UEs supporting A-GPS and	pc_eFDD		
				Modernized GPS only	pc_eTDD		
7.2-5	Nominal Accuracy: Sub-Test 5	Rel-9	C05er	All UEs supporting A-GPS and	pc_eFDD		
				A-GLONASS only	pc_eTDD		
7.3-1	Dynamic Range: Sub-Test 1	Rel-9	C01er	All UEs supporting A-GPS	pc_eFDD		
				L1C/A only	pc_eTDD		
7.3-2	Dynamic Range: Sub-Test 2	Rel-9	C02er	All UEs supporting A-	pc_eFDD		
				GLONASS only	pc_eTDD		
7.3-3	Dynamic Range: Sub-Test 3	Rel-9	C03er	All UEs supporting A-Galileo	pc_eFDD		
				only	pc_eTDD		
7.3-4	Dynamic Range: Sub-Test 4	Rel-9	C04er	All UEs supporting A-GPS and	pc_eFDD		
				Modernized GPS only	pc_eTDD		

path scenario: Sub-Test 1 path scenario: Sub-Test 2 path scenario: Sub-Test 2 path scenario: Sub-Test 3 path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4 g scenario and periodic update: Sub-Test 5	Rel-9	Applicability Condition C05er C01er C02er C03er C05er C04er C05er C05er C01er C05er C01er C05er C01er C05er C01er C01er	Comment All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GRS only All UEs supporting A-GLONASS only All UEs supporting A-GLONASS only All UEs supporting A-GALILEO only All UEs supporting A-GALILEO only	Specific ICS pc_eFDD pc_eTDD pc_eFDD	Specific IXIT
path scenario: Sub-Test 1 path scenario: Sub-Test 2 path scenario: Sub-Test 3 path scenario: Sub-Test 3 path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 3	Rel-9	C01er C02er C03er C04er C05er C01er C02er C03er	A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only All UEs supporting A- GLONASS only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only	pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD pc_eFDD pc_eTDD pc_eFDD	
path scenario: Sub-Test 2 path scenario: Sub-Test 3 path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C02er C03er C04er C05er C01er C02er C03er	All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only	pc_eFDD pc_eTDD pc_eTDD pc_eFDD	
path scenario: Sub-Test 2 path scenario: Sub-Test 3 path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C02er C03er C04er C05er C01er C02er C03er	L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only	pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD pc_eFDD pc_eTDD pc_eFDD	
path scenario: Sub-Test 3 path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C03er C04er C05er C01er C02er C03er	All UEs supporting A- GLONASS only All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only	pc_eFDD	
path scenario: Sub-Test 3 path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C03er C04er C05er C01er C02er C03er	GLONASS only All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only	pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD pc_eFDD pc_eTDD pc_eTDD pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD	
path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C04er C05er C01er C02er C03er	All UEs supporting A-Galileo only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only All UEs supporting A-GLONASS only All UEs supporting A-Galileo only	pc_eFDD pc_eTDD pc_eFDD	
path scenario: Sub-Test 4 path scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C04er C05er C01er C02er C03er	only All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only All UEs supporting A-GLONASS only All UEs supporting A-Galileo only	pc_eTDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD pc_eFDD pc_eTDD pc_eTDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD	
g scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C05er C01er C02er C03er	All UEs supporting A-GPS and Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only All UEs supporting A-GLONASS only All UEs supporting A-Galileo only	pc_eFDD	
g scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9 Rel-9	C05er C01er C02er C03er	Modernized GPS only All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only All UEs supporting A-GLONASS only All UEs supporting A-Galileo only	pc_eTDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD pc_eFDD	
g scenario: Sub-Test 5 g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9	C01er C02er C03er	All UEs supporting A-GPS and A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A-GLONASS only All UEs supporting A-GLONASS only All UEs supporting A-Galileo only	pc_eFDD pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD pc_eTDD pc_eFDD	
g scenario and periodic update: Sub-Test 1 g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9 Rel-9	C01er C02er C03er	A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only	pc_eTDD pc_eFDD pc_eFDD pc_eTDD pc_eTDD pc_eTDD pc_eTDD pc_eFDD	
g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9	C02er C03er	A-GLONASS only All UEs supporting A-GPS L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only	pc_eFDD pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD	
g scenario and periodic update: Sub-Test 2 g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9 Rel-9 Rel-9	C02er C03er	L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only	pc_eFDD pc_eTDD pc_eFDD pc_eFDD pc_eFDD pc_eFDD pc_eTDD	
g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9	C03er	L1C/A only All UEs supporting A- GLONASS only All UEs supporting A-Galileo only	pc_eTDD pc_eFDD pc_eTDD pc_eFDD pc_eTDD	
g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9	C03er	GLONASS only All UEs supporting A-Galileo only	pc_eFDD pc_eTDD pc_eFDD pc_eTDD	
g scenario and periodic update: Sub-Test 3 g scenario and periodic update: Sub-Test 4	Rel-9		GLONASS only All UEs supporting A-Galileo only	pc_eTDD pc_eFDD pc_eTDD	
g scenario and periodic update: Sub-Test 4	Rel-9		only	pc_eFDD pc_eTDD	
g scenario and periodic update: Sub-Test 4		C04er	only	pc_eTDD	
·		C04er	All I I Ec cupporting A. GPS and		
·	Dol 0		TAIL OF SUPPORTING 4-942 SING	pc_eFDD	
g scenario and periodic update: Sub-Test 5	Dol 0		Modernized GPS only	pc_eTDD	
	Kel-9	C05er	All UEs supporting A-GPS and	pc_eFDD	
			A-GLONASS only	pc_eTDD	
) measurement requirements			,	<u> </u>	
JE Rx-Tx time difference case	Rel-9	C11er	All FDD UEs supporting E-CID	pc_eFDD	
			with Rx-Tx time difference	r -=-	
JE Rx-Tx time difference case	Rel-9	C12er	All TDD UEs supporting E-CID	pc_eTDD	
			with Rx-Tx time difference	F-2	
OA measurement requirements					
	Rel-9	C13er	All FDD UEs supporting UE-	pc eFDD	
			assisted OTDOA	F 2 = 2 = 2	
RSTD Measurement Reporting Delay	Rel-9	C14er		pc_eTDD	
to 12 mode are ment into portung 20taly		0.10.		P0_0.22	
RSTD Measurement Accuracy	Rel-9	C13er		pc_eFDD	
Woodod official Accountacy	1101 0	0.001	assisted OTDOA	po_0. 22	
RSTD Measurement Accuracy	Rel-9	C14er		pc eTDD	
,				F-2	
DD Inter-Frequency RSTD Measurement Reporting	Rel-10	FFS	FFS	pc eFDD	Note 1
== === reporting		1		PO_0	
DD inter-frequency RSTD measurement reporting	Rel-10	FFS	FFS	nc eTDD	Note 1
22 mis equality from the moderation of the reporting	1.0. 10	1		PO_0.55	. 1010
DD Inter-frequency RSTD Accuracy	Rel-10	FES	FFS	nc eFDD	Note 1
	1.0. 10		5	PO_01 DD	11010
DD inter frequency RSTD Accuracy	Rel-10	FES	FFS	nc eTDD	Note 1
DD III.O. Troquoticy Not D Accountacy	101 10		' ' '	PC_C1DD	14010 1
N	DA measurement requirements STD Measurement Reporting Delay STD Measurement Reporting Delay STD Measurement Accuracy STD Measurement Accuracy DD Inter-Frequency RSTD Measurement Reporting DD inter-frequency RSTD measurement reporting DD Inter-frequency RSTD Accuracy DD Inter-frequency RSTD Accuracy	DA measurement requirements STD Measurement Reporting Delay STD Measurement Reporting Delay Rel-9 STD Measurement Accuracy Rel-9 STD Measurement Accuracy Rel-9 DD Inter-Frequency RSTD Measurement Reporting Rel-10 DD inter-frequency RSTD measurement reporting Rel-10 DD Inter-frequency RSTD Accuracy Rel-10 DD inter frequency RSTD Accuracy Rel-10	DA measurement requirements STD Measurement Reporting Delay Rel-9 C13er STD Measurement Reporting Delay Rel-9 C14er STD Measurement Accuracy Rel-9 C13er STD Measurement Accuracy Rel-9 C14er DD Inter-Frequency RSTD Measurement Reporting Rel-10 FFS DD Inter-frequency RSTD measurement reporting Rel-10 FFS DD Inter-frequency RSTD Accuracy Rel-10 FFS DD Inter-frequency RSTD Accuracy Rel-10 FFS DD Inter-frequency RSTD Accuracy Rel-10 FFS	With Rx-Tx time difference PA measurement requirements STD Measurement Reporting Delay STD Measurement Reporting Delay Rel-9 C13er All FDD UEs supporting UE-assisted OTDOA Rel-9 C14er All TDD UEs supporting UE-assisted OTDOA STD Measurement Accuracy Rel-9 C13er All FDD UEs supporting UE-assisted OTDOA All FDD UEs supporting UE-assisted OTDOA STD Measurement Accuracy Rel-9 C14er All TDD UEs supporting UE-assisted OTDOA The All TDD UEs supporting UE-assisted OTDOA Rel-9 C14er All TDD UEs supporting UE-assisted OTDOA FFS DD Inter-Frequency RSTD Measurement Reporting Rel-10 FFS FFS DD Inter-frequency RSTD measurement reporting Rel-10 FFS FFS FFS	with Rx-Tx time difference STD Measurement Reporting Delay Rel-9 C13er All FDD UEs supporting UE- assisted OTDOA STD Measurement Reporting Delay Rel-9 C14er All TDD UEs supporting UE- assisted OTDOA STD Measurement Accuracy Rel-9 C13er All FDD UEs supporting UE- assisted OTDOA STD Measurement Accuracy Rel-9 C13er All FDD UEs supporting UE- assisted OTDOA STD Measurement Accuracy Rel-9 C14er All TDD UEs supporting UE- assisted OTDOA STD Measurement Accuracy Rel-9 C14er All TDD UEs supporting UE- assisted OTDOA FFS FFS DD Inter-Frequency RSTD Measurement Reporting Rel-10 FFS FFS DD Inter-frequency RSTD measurement reporting Rel-10 FFS FFS DD Inter-frequency RSTD Accuracy Rel-10 FFS FFS DD Inter-frequency RSTD Accuracy

Clause	TC Title	Release	Applicability		Additional Information	
			Condition	Comment	Specific ICS	Specific IXIT
	Aggregation					
10.1	FDD RSTD Measurement Reporting Delay for Carrier Aggregation	Rel-10	C15er	All FDD UEs supporting UE- assisted OTDOA for Carrier Aggregation	pc_eFDD	
10.2	TDD RSTD Measurement Reporting Delay for Carrier Aggregation	Rel-10	C16er	All TDD UEs supporting UE- assisted OTDOA for Carrier Aggregation	pc_eTDD	
10.3	FDD RSTD Measurement Accuracy for Carrier Aggregation	Rel-10	C15er	All FDD UEs supporting UE- assisted OTDOA for Carrier Aggregation	pc_eFDD	
10.4	TDD RSTD Measurement Accuracy for Carrier Aggregation	Rel-10	C16er	All TDD UEs supporting UE- assisted OTDOA for Carrier Aggregation	pc_eTDD	

Note 1: This test case can be optionally tested for Rel-9 UEs supporting inter-frequency RSTD measurements that do not require measurement gaps.

Table 4-4: Applicability of tests Conditions for test cases in TS 37.571-1 [5] for E-UTRA

C01er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/6 AND NOT (A.4.3-2/7 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C02er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C03er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) THEN R ELSE N/A
C04er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/8 AND NOT (A.4.3-2/7 OR A.4.3-2/9) THEN R ELSE N/A
C05er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/6 AND A.4.3-2/7 AND NOT (A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C06er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/6 AND NOT (A.4.3-2/7 OR A.4.3-2/8 OR A.4.3-2/9) AND A.4.3-2/3 THEN R ELSE N/A
C07er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) AND A.4.3-2/3 THEN R ELSE N/A
C08er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) AND A.4.3-2/3 THEN R ELSE N/A
C09er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/8 AND NOT (A.4.3-2/7 OR A.4.3-2/9) AND A.4.3-2/3 THEN R ELSE N/A
C10er IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/6 AND A.4.3-2/7 AND NOT (A.4.3-2/8 OR A.4.3-2/9) AND A.4.3-2/3 THEN R ELSE N/A
C11er IF A.4.1-1/1 AND A.4.3-2/5 AND A.4.3-4/3 THEN R ELSE N/A
C12er IF A.4.1-1/2 AND A.4.3-2/5 AND A.4.3-4/3 THEN R ELSE N/A
C13er IF A.4.1-1/1 AND A.4.3-2/4 THEN R ELSE N/A
C14er IF A.4.1-1/2 AND A.4.3-2/4 THEN R ELSE N/A
C15er IF A.4.1-1/1 AND A.4.3-2/15 THEN R ELSE N/A
C16er IF A.4.1-1/2 AND A.4.3-2/15 THEN R ELSE N/A

Table 4-5: Applicability of tests and additional information for testing for test cases in TS 37.571-2 [6] for UTRA

Clause	Title	Release	Applicability	Comments	Number of TC Executions (informative)
6.1.1.1	LCS Netw ork Induced location request / UE-Based GPS / Emergency Call / w ith USIM	R99	C01us	UEs supporting FDD, emergency speech call and UE based Network Assisted GPS L1 C/A only	1 Execution: CS
6.1.1.2	LCS Netw ork induced location request / UE-Based GPS / Emergency call / Without USIM	R99	C01us	UEs supporting FDD, emergency speech call and UE based Network Assisted GPS L1 C/A only	1 Execution: CS
6.1.1.3	LCS Netw ork induced location request / UE-Assisted GPS / Emergency call / With USIM	R99	C03us	UEs supporting FDD, emergency speech call and UE assisted Network Assisted GPS L1 C/A only	1 Execution: CS
6.1.1.4	LCS Netw ork induced location request / UE-Assisted GPS / Emergency call / Without USIM	R99	C03us	UEs supporting FDD, emergency speech call and UE assisted Network Assisted GPS L1 C/A only	1 Execution: CS
6.1.2.1	LCS Mobile originated location request / UE-Based GPS / Position estimate request / Success	R99	C09us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MO-LR request for a position estimate	1 Execution: CS
6.1.2.2	LCS Mobile originated location request UE-Based or UE-Assisted GPS / Assistance data request / Success	R99	C05us	UEs supporting FDD and (UE based or UE assisted Network Assisted GPS L1 C/A only) and MO-LR request for assistance data	1 Execution: CS
6.1.2.3	LCS Mobile originated location request / UE-Assisted GPS / Position Estimate / Success	R99	C10us	UEs supporting FDD and UE assisted Netw ork Assisted GPS L1 C/A only and MO-LR request for a position estimate	1 Execution: CS
6.1.2.4	LCS Mobile originated location request / UE-Based GPS / Transfer to third party / Success	R99	C07us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MO-LR request for transfer to 3rd party	1 Execution: CS
6.1.2.5	LCS Mobile originated location request / UE-Assisted GPS / Transfer to third party / Success	R99	C08us	UEs supporting FDD and UE assisted Netw ork Assisted GPS L1 C/A only and MO-LR request for transfer to 3rd party	1 Execution: CS
6.1.2.6	LCS Mobile originated location request / UE-Based or UE- Assisted GPS / Assistance data request / Failure	R99	C05us	UEs supporting FDD and (either UE based or UE assisted Network Assisted GPS L1 C/A only) and MO-LR request for assistance data	1 Execution: CS
6.1.2.7	LCS Mobile originated location request / UE-Based GPS / Position estimate request / Failure	R99	C09us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MO-LR request for position estimate	1 Execution: CS
6.1.3.1	LCS Mobile terminated location request / UE-Based GPS	R99	C02us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.2	LCS Mobile terminated location request / UE-Based GPS / Request of additional assistance data / Success	R99	C02us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.3	LCS Mobile-terminated location request / UE-Based GPS / Failure - Not Enough Satellites	R99	C02us	UEs supporting FDD and UE based Netw ork Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.4	LCS Mobile terminated location request / UE-Assisted GPS / Success	R99	C04us	UEs supporting FDD and UE assisted Netw ork Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.5	LCS Mobile terminated location request / UE-Assisted GPS / Request for additional assistance data / Success	R99	C04us	UEs supporting FDD and UE assisted Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS

Clause	Title	Release	Applicability	Comments	Number of TC Executions (informative)
6.1.3.6	LCS Mobile terminated location request / UE-Based GPS / Privacy Verification / Location Allowed if No Response	R99	C02us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.7	LCS Mobile terminated location request / UE-Based GPS / Privacy Verification / Location Not Allowed if No Response	R99	C02us	UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.8	LCS Mobile terminated location request / UE-Assisted GPS / Privacy Verification / Location Allowed if No Response	R99	C04us	UEs supporting FDD and UE assisted Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.9	LCS Mobile terminated location request / UE-Assisted GPS / Privacy Verification / Location Not Allowed if No Response	R99	C04us	UEs supporting FDD and UE assisted Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability	1 Execution: CS
6.1.3.10	LCS Mobile terminated location request / UE-Based or UE- Assisted GPS / Configuration incomplete	R99	C06us	UEs supporting FDD and UE based and/or UE assisted Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability, but not UE-based OTDOA	1 Execution: CS
6.2.1.1_1s	NI-LR Emergency Call: UE-Based A-GNSS: Sub-test 1	Rel-8	C11us	UEs supporting FDD, emergency speech call and UE based Netw ork Assisted GANSS with GLONASS only	1 Execution: CS
6.2.1.1_2s	NI-LR Emergency Call: UE-Based A-GNSS: Sub-test 2	Rel-8	C12us	UEs supporting FDD, emergency speech call and UE based Netw ork Assisted GANSS with Galileo only	1 Execution: CS
6.2.1.1_3s	NI-LR Emergency Call: UE-Based A-GNSS: Sub-test 3	Rel-8	C13us	UEs supporting FDD, emergency speech call and UE based Network Assisted GPS and GANSS with Modernized GPS only	1 Execution: CS
6.2.1.1_4s	NI-LR Emergency Call: UE-Based A-GNSS: Sub-test 4	Rel-8	C14us	UEs supporting FDD, emergency speech call and UE based Network Assisted GPS and GANSS with GLONASS only	1 Execution: CS
6.2.1.2_1s	NI-LR Emergency Call: UE-Assisted A-GNSS: Sub-test 1	Rel-8	C15us	UEs supporting FDD, emergency speech call and UE assisted Network Assisted GANSS with GLONASS only	1 Execution: CS
6.2.1.2_2s	NI-LR Emergency Call: UE-Assisted A-GNSS: Sub-test 2	Rel-8	C16us	UEs supporting FDD, emergency speech call and UE assisted Network Assisted GANSS with Galileo only	1 Execution: CS
6.2.1.2_3s	NI-LR Emergency Call: UE-Assisted A-GNSS: Sub-test 3	Rel-8	C17us	UEs supporting FDD, emergency speech call and UE assisted Network Assisted GPS and GANSS with Modernized GPS only	1 Execution: CS
6.2.1.2_4s	NI-LR Emergency Call: UE-Assisted A-GNSS: Sub-test 4	Rel-8	C18us	UEs supporting FDD, emergency speech call and UE assisted Network Assisted GPS and GANSS with GLONASS only	1 Execution: CS
6.2.2.1_1s	MO-LR Position Estimate: UE-Based A-GNSS: Sub-test 1	Rel-8	C19us	UEs supporting FDD and UE based Netw ork Assisted GANSS with GLONASS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.1_2s	MO-LR Position Estimate: UE-Based A-GNSS: Sub-test 2	Rel-8	C20us	UEs supporting FDD and UE based Netw ork Assisted GANSS w ith Galileo only and MO-LR request for a position estimate	1 Execution: CS

Clause	Title	Release	Applicability	Comments	Number of TC Executions (informative)
6.2.2.1_3s	MO-LR Position Estimate: UE-Based A-GNSS: Sub-test 3	Rel-8	C21us	UEs supporting FDD and UE based Netw ork Assisted GPS and GANSS with Modernized GPS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.1_4s	MO-LR Position Estimate: UE-Based A-GNSS: Sub-test 4	Rel-8	C22us	UEs supporting FDD and UE based Network Assisted GPS and GANSS with GLONASS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.2_1s	MO-LR Position Estimate: UE-Assisted A-GNSS: Sub-test 1	Rel-8	C23us	UEs supporting FDD and UE assisted Network Assisted GANSS with GLONASS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.2_2s	MO-LR Position Estimate: UE-Assisted A-GNSS: Sub-test 2	Rel-8	C24us	UEs supporting FDD and UE assisted Network Assisted GANSS with Galileo only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.2_3s	MO-LR Position Estimate: UE-Assisted A-GNSS: Sub-test 3	Rel-8	C25us	UEs supporting FDD and UE assisted Network Assisted GPS and GANSS with Modernized GPS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.2_4s	MO-LR Position Estimate: UE-Assisted A-GNSS: Sub-test 4	Rel-8	C26us	UEs supporting FDD and UE assisted Network Assisted GPS and GANSS with GLONASS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.3_1s	MO-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 1	Rel-8	C19us	UEs supporting FDD and UE based Netw ork Assisted GANSS with GLONASS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.3_2s	MO-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 2	Rel-8	C20us	UEs supporting FDD and UE based Network Assisted GANSS with Galileo only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.3_3s	MO-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 3	Rel-8	C21us	UEs supporting FDD and UE based Netw ork Assisted GPS and GANSS with Modernized GPS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.3_4s	MO-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 4	Rel-8	C22us	UEs supporting FDD and UE based Netw ork Assisted GPS and GANSS with GLONASS only and MO-LR request for a position estimate	1 Execution: CS
6.2.2.4_1s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Success: Sub-test 1	Rel-8	C27us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) with GLONASS only and MO-LR request for assistance data	1 Execution: CS
6.2.2.4_2s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Success: Sub-test 2	Rel-8	C28us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) with Galileo only and MO-LR request for assistance data	1 Execution: CS
6.2.2.4_3s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Success: Sub-test 3	Rel-8	C29us	UEs supporting FDD and ((UE assisted Network Assisted GPS and GANSS) or (UE based Network Assisted GPS and GANSS)) with Modernized GPS only and MO-LR request for assistance data	1 Execution: CS
6.2.2.4_4s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Success: Sub-test 4	Rel-8	C30us	UEs supporting FDD and ((UE assisted Network Assisted GPS and GANSS) or (UE based Network Assisted GPS and GANSS)) with GLONASS only and MO-LR request for assistance data	1 Execution: CS

Clause	Title	Release	Applicability	Comments	Number of TC Executions (informative)
6.2.2.5_1s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Failure: Sub-test 1	Rel-8	C27us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) with GLONASS only and MO-LR request for assistance data	1 Execution: CS
6.2.2.5_2s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Failure: Sub-test 2	Rel-8	C28us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) with Galileo only and MO-LR request for assistance data	1 Execution: CS
6.2.2.5_3s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Failure: Sub-test 3	Rel-8	C29us	UEs supporting FDD and ((UE assisted Network Assisted GPS and GANSS) or (UE based Network Assisted GPS and GANSS)) with Modernized GPS only and MO-LR request for assistance data	1 Execution: CS
6.2.2.5_4s	MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS - Failure: Sub-test 4	Rel-8	C30us	UEs supporting FDD and ((UE assisted Network Assisted GPS and GANSS) or (UE based Network Assisted GPS and GANSS)) with GLONASS only and MO-LR request for assistance data	1 Execution: CS
6.2.3.1_1s	MT-LR UE Based or UE-Assisted A-GNSS - Request for additional assistance data/Success: Sub-test 1	Rel-8	C35us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) with GLONASS only	1 Execution: CS
6.2.3.1_2s	MT-LR UE Based or UE-Assisted A-GNSS - Request for additional assistance data/Success: Sub-test 2	Rel-8	C36us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) with Galileo only	1 Execution: CS
6.2.3.1_3s	MT-LR UE Based or UE-Assisted A-GNSS - Request for additional assistance data/Success: Sub-test 3	Rel-8	C37us	UEs supporting FDD and ((UE assisted Network Assisted GPS and GANSS) or (UE based Network Assisted GPS and GANSS)) with Modernized GPS only	1 Execution: CS
6.2.3.1_4s	MT-LR UE Based or UE-Assisted A-GNSS - Request for additional assistance data/Success: Sub-test 4	Rel-8	C38us	UEs supporting FDD and ((UE assisted Network Assisted GPS and GANSS) or (UE based Network Assisted GPS and GANSS)) with GLONASS only	1 Execution: CS
6.2.3.2_1s	MT-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 1	Rel-8	C31us	UEs supporting FDD and UE based Netw ork Assisted GANSS w ith GLONASS only	1 Execution: CS
6.2.3.2_2s	MT-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 2	Rel-8	C32us	UEs supporting FDD and UE based Netw ork Assisted GANSS w ith Galileo only	1 Execution: CS
6.2.3.2_3s	MT-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 3	Rel-8	C33us	UEs supporting FDD and UE based Network Assisted GPS and GANSS with Modernized GPS only	1 Execution: CS
6.2.3.2_4s	MT-LR Position Estimate: UE-Based A-GNSS - Failure Not Enough Satellites: Sub-test 4	Rel-8	C34us	UEs supporting FDD and UE based Network Assisted GPS and GANSS with GLONASS only	1 Execution: CS
6.2.3.3	Location Notification	Rel-8	C39us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) and MT-LR LCS location request notification capability	1 Execution: CS
6.2.3.4	Privacy Verification - Location Allowed if No Response	Rel-8	C39us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) and MT-LR LCS location request notification capability	1 Execution: CS

Clause	Title	Release	Applicability	Comments	Number of TC Executions (informative)
6.2.3.5	Privacy Verification - Location Not Allowed if No Response	Rel-8	C39us	UEs supporting FDD and (UE assisted Network Assisted GANSS or UE based Network Assisted GANSS) and MT-LR LCS location request notification capability	1 Execution: CS

Table 4-6: Applicability of tests Conditions for test cases in TS 37.571-2 [6] for UTRA

C01us IF A.4.1-1/3 AND A.4.1-2/1 AND A.4.3-1/10 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C02us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-3/8 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C03us IF A.4.1-1/3 AND A.4.1-2/1 AND A.4.3-1/11 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C04us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-3/8 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C05us IF A.4.1-1/3 AND (A.4.3-1/10 OR A.4.3-1/11) AND A.4.3-3/5 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C06us IF A.4.1-1/3 AND (A.4.3-1/10 OR A.4.3-1/11) AND A.4.3-3/8 AND (NOT A.4.3-1/3) AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C07us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-3/7 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C08us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-3/7 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C09us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-3/6 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C10us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-3/6 AND NOT (A.4.3-1/5 OR A.4.3-1/6) THEN R ELSE N/A
C11us IF A.4.1-1/3 AND A.4.3-1/5 AND A.4.3-1/7 AND NOT (A.4.3-1/10 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C12us IF A.4.1-1/3 AND A.4.3-1/5 AND A.4.3-1/9 AND NOT (A.4.3-1/10 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C13us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-1/5 AND A.4.3-1/8 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C14us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-1/5 AND A.4.3-1/7 AND NOT A.4.3-1/9 THEN R ELSE N/A
C15us IF A.4.1-1/3 AND A.4.3-1/6 AND A.4.3-1/7 AND NOT (A.4.3-1/11 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C16us IF A.4.1-1/3 AND A.4.3-1/6 AND A.4.3-1/9 AND NOT (A.4.3-1/11 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C17us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-1/6 AND A.4.3-1/8 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C18us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-1/6 AND A.4.3-1/7 AND NOT A.4.3-1/9 THEN R ELSE N/A
C19us IF A.4.1-1/3 AND A.4.3-1/5 AND A.4.3-1/7 AND A.4.3-3/6 AND NOT (A.4.3-1/10 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C20us IF A.4.1-1/3 AND A.4.3-1/5 AND A.4.3-1/9 AND A.4.3-3/6 AND NOT (A.4.3-1/10 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C21us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-1/5 AND A.4.3-1/8 AND A.4.3-3/6 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C22us IF A.4.1-1/3 AND A.4.3-1/10 AND A.4.3-1/5 AND A.4.3-1/7 AND A.4.3-3/6 AND NOT A.4.3-1/9 THEN R ELSE N/A
C23us IF A.4.1-1/3 AND A.4.3-1/6 AND A.4.3-1/7 AND A.4.3-3/6 AND NOT (A.4.3-1/11 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C24us IF A.4.1-1/3 AND A.4.3-1/6 AND A.4.3-1/9 AND A.4.3-3/6 AND NOT (A.4.3-1/11 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C25us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-1/6 AND A.4.3-1/8 AND A.4.3-3/6 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C26us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-1/6 AND A.4.3-1/7 AND A.4.3-3/6 AND NOT A.4.3-1/9 THEN R ELSE N/A
C27us IF A.4.1-1/3 AND (A.4.3-1/5 OR A.4.3-1/6) AND A.4.3-1/7 AND A.4.3-3/5 AND NOT (A.4.3-1/11 OR A.4.3-1/10 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C28us IF A.4.1-1/3 AND (A.4.3-1/5 OR A.4.3-1/6) AND A.4.3-1/9 AND A.4.3-3/5 AND NOT (A.4.3-1/11 OR A.4.3-1/10 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C29us IF A.4.1-1/3 AND ((A.4.3-1/5 AND A.4.3-1/10) OR (A.4.3-1/6 AND A.4.3-1/11)) AND A.4.3-1/9 AND A.4.3-3/5 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C30us IF A.4.1-1/3 AND ((A.4.3-1/5 AND A.4.3-1/10) OR (A.4.3-1/6 AND A.4.3-1/11)) AND A.4.3-1/7 AND A.4.3-3/5 AND NOT A.4.3-1/9 THEN R ELSE N/A
C31us IF A.4.1-1/3 AND A.4.3-1/6 AND A.4.3-1/7 AND NOT (A.4.3-1/11 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C32us IF A.4.1-1/3 AND A.4.3-1/6 AND A.4.3-1/9 AND NOT (A.4.3-1/11 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C33us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-1/6 AND A.4.3-1/8 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C34us IF A.4.1-1/3 AND A.4.3-1/11 AND A.4.3-1/6 AND A.4.3-1/7 AND NOT A.4.3-1/9 THEN R ELSE N/A
C35us IF A.4.1-1/3 AND (A.4.3-1/5 OR A.4.3-1/6) AND A.4.3-1/7 AND NOT (A.4.3-1/11 OR A.4.3-1/10 OR A.4.3-1/8 OR A.4.3-1/9) THEN R ELSE N/A
C36us IF A.4.1-1/3 AND (A.4.3-1/5 OR A.4.3-1/6) AND A.4.3-1/9 AND NOT (A.4.3-1/11 OR A.4.3-1/10 OR A.4.3-1/7 OR A.4.3-1/8) THEN R ELSE N/A
C37us IF A.4.1-1/3 AND ((A.4.3-1/5 AND A.4.3-1/10) OR (A.4.3-1/6 AND A.4.3-1/11)) AND A.4.3-1/9 AND NOT (A.4.3-1/7 OR A.4.3-1/9) THEN R ELSE N/A
C38us IF A.4.1-1/3 AND ((A.4.3-1/5 AND A.4.3-1/10) OR (A.4.3-1/6 AND A.4.3-1/11)) AND A.4.3-1/7 AND NOT A.4.3-1/9 THEN R ELSE N/A
C39us IF A.4.1-1/3 AND (A.4.3-1/5 OR A.4.3-1/6) AND A.4.3-3/8 THEN R ELSE N/A

Table 4-7: Applicability of tests and additional information for testing for test cases in TS 37.571-2 [6] for E-UTRA

Clause	TC Title	Release	Applicability		Additional Information	
			Condition	Comment	Specific ICS	Specific IXIT
7.1	NAS Protocol Procedures					
7.1.1	UE Netw ork Capability	Rel-9	C11es	All UEs supporting LPP	pc_eFDD	
					pc_eTDD	
7.2	LCS Procedures					
7.2.1.1	Location Notification	Rel-9	C14es	All UEs supporting EPC-MT-	pc_eFDD	
				LR Location Notification	pc_eTDD	
7.2.1.2	Privacy Verification – Location Allowed if no Response	Rel-9	C14es	All UEs supporting EPC-MT- LR Location Notification	pc_eFDD	px_UeLcsNotification:
				LR Location Notification	pc_eTDD	value for UE LCS
						Notification timeout timer.
7.2.1.3	Privacy Verification – Location not Allowed if No Response	Rel-9	C14es	All UEs supporting EPC-MT-	pc_eFDD	px_UeLcsNotification:
1.2.1.3	Frivacy vertication - Location not Allowed I No Nesponse	INGI-3	01465	LR Location Notification	pc_eTDD	value for UE LCS
				El Cedation Notification	pc_e1bb	Notification timeout
						timer.
7.2.2.1_1s	Autonomous Self Location: UE-based: Subtest 1	Rel-9	C01es	All UEs supporting UE-Based	pc_eFDD	
_				GNSS with A-GPS only and	pc_eTDD	
				MO-LR request for assistance	·	
				data		
7.2.2.1_2s	Autonomous Self Location: UE-based: Subtest 2	Rel-9	C02es	All UEs supporting UE-Based	pc_eFDD	
				GNSS with A-GLONASS only	pc_eTDD	
				and MO-LR request for assistance data		
7.2.2.1_3s	Autonomous Self Location: UE-based: Sub-test 3	Rel-9	C03es	All UEs supporting UE-Based	pc_eFDD	
7.2.2.1_00	Additional des Essation. de basea. das test o	NGF3	00003	GNSS with A-Galileo only and	· —	
				MO-LR request for assistance	pc_eTDD	
				data		
7.2.2.1_4s	Autonomous Self Location: UE-based: Subtest 4	Rel-9	C04es	All UEs supporting UE-Based	pc_eFDD	
				GNSS with A-GPS and A-		
				GLONASS only and MO-LR	pc_eTDD	
700040	Danie Cali Lagatiani, III aggintadi Cultigat 4	Dallo	C05es	request for assistance data	TO SERVE	
7.2.2.2_1s	Basic Self Location: UE-assisted: Subtest 1	Rel-9	Coses	All UEs supporting UE-Assisted GNSS with A-	pc_eFDD pc_eTDD	
				GPS only and MO-LR request	pc_e1bb	
				for location estimate		
7.2.2.2_2s	Basic Self Location: UE-assisted: Subtest 2	Rel-9	C06es	All UEs supporting	pc_eFDD	
				UE-Assisted GNSS with A-	pc_eTDD	
				GLONASS only and MO-LR	F	
				request for location estimate		
7.2.2.2_3s	Basic Self Location: UE-assisted: Subtest 3	Rel-9	C07es	All UEs supporting	pc_eFDD	
				UE-Assisted GNSS with A-	pc_eTDD	
				Galileo only and MO-LR		
70004		D.10		request for location estimate	FDD	
7.2.2.2_4s	Basic Self Location: UE-assisted: Subtest 4	Rel-9	C08es	All UEs supporting	pc_eFDD	
				UE-Assisted GNSS with A- GPS and A-GLONASS only	pc_eTDD	
				GPS and A-GLUNASS only		

Clause	TC Title	Release	Applicability		Additional Information	
			Condition	Comment	Specific ICS	Specific IXIT
				and MO-LR request for		
7.2.2.2_5s	Basic Self Location: UE-assisted: Subtest 5	Rel-9	C09es	location estimate All UEs supporting	pc_eFDD	
.2.2.2_58	basic sell Location. OE-assisted. Subtest 5	Kel-9	Coses	UE-Assisted OTDOA and MO-LR request for location estimate	pc_eTDD pc_eTDD	
'.2.2.2_6s	Basic Self Location: UE-assisted: Subtest 6	Rel-9	C10es	All UEs supporting	pc_eFDD	
				UE-Assisted ECID and MO- LR request for location estimate	pc_eTDD	
' .3	LPP Procedures					
7.3.1.1	Position Capability Transfer	Rel-9	C11es	All UEs supporting LPP	pc_eFDD	
					pc_eTDD	
'.3.2.1	LPP Duplicated Message	Rel-9	C11es	All UEs supporting LPP	pc_eFDD	
					pc_eTDD	
7.3.2.2	LPP Acknow ledgment	Rel-9	C11es	All UEs supporting LPP	pc_eFDD	
					pc_eTDD	
7.3.2.3	LPP Retransmission	Rel-9	C36es	All UEs supporting LPP and	pc_eFDD	
				support of sending of acknow ledgement request in LPP Provide Capabilities message.	pc_eTDD	
'.3.3.1	LPP Requested Method not Supported - UE-Assisted	Rel-9	C15es	All UEs supporting at least one	pc_eFDD	
				of UE-assisted GNSS, UE- assisted OTDOA or UE- assisted ECID but not all of them.	pc_eTDD	
′.3.4.1_1s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C28es	All UEs supporting UE-based	pc_eFDD	
	Location Information Transfer: UE-Based: Subtest 1			GNSS with A-GPS only	pc_eTDD	
'.3.4.1_2s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C29es	All UEs supporting UE-based	pc_eFDD	
	Location Information Transfer: UE-Based: Subtest 2			GNSS w ith A-GLŎNASS only	pc_eTDD	
'.3.4.1_3s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C30es	All UEs supporting UE-based	pc_eFDD	
	Location Information Transfer: UE-Based: Subtest 3			GNSS w ith A-Galileo only	pc_eTDD	
7.3.4.1_4s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C31es	All UEs supporting UE-based	pc_eFDD	
	Location Information Transfer: UE-Based: Subtest 4			GNSS w ith A-GPS and A- GLONASS only	pc_eTDD	
7.3.4.2_1s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C32es	All UEs supporting UE-	pc_eFDD	
_	Location Information Transfer: UE-Assisted: Subtest 1			assisted GNSS with A-GPS	pc_eTDD	
				only		
'.3.4.2_2s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C33es	All UEs supporting UE-	pc_eFDD	
	Location Information Transfer: UE-Assisted: Subtest 2			assisted GNSS with A- GLONASS only	pc_eTDD	
'.3.4.2_3s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C34es	All UEs supporting UE-	pc_eFDD	
	Location Information Transfer: UE-Assisted: Subtest 3			assisted GNSS w ith A-Galileo only	pc_eTDD	
'.3.4.2_4s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C35es	All UEs supporting UE-	pc_eFDD	
		1	1			

Clause	TC Title	Release	Applicability		Additional Information	
			Condition	Comment	Specific ICS	Specific IXIT
	Location Information Transfer: UE-Assisted: Subtest 4			assisted GNSS with A-GPS and A-GLONASS only	pc_eTDD	
7.3.4.2_5s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C26es	All UEs supporting UE-	pc_eFDD	
	Location Information Transfer: UE-Assisted: Subtest 5			Assisted OTDOA	pc_eTDD	
.3.4.2_6s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C27es	All UEs supporting UE-	pc_eFDD	
_	Location Information Transfer: UE-Assisted: Subtest 6			Assisted ECID	pc_eTDD	
.3.4.2_7s	E-SMLC Initiated Assistance Data Delivery followed by	Rel-9	C21es	All UEs supporting UE-	pc_eFDD	
	Location Information Transfer: UE-Assisted: Subtest 7	1.0.0	52.55	assisted GNSS and UE- assisted OTDOA	pc_eTDD	
7.3.4.3_1s	E-SMLC Initiated Position Measurement without	Rel-9	C28es	All UEs supporting UE-based	pc_eFDD	
	assistance data: UE-Based: Subtest 1			GNSS w ith A-GPS only	pc_eTDD	
'.3.4.3_2s	E-SMLC Initiated Position Measurement without	Rel-9	C29es	All UEs supporting UE-based	pc_eFDD	
	assistance data: UE-Based: Subtest 2			GNSS w ith A-GLÖNASS only	pc_eTDD	
.3.4.3_3s	E-SMLC Initiated Position Measurement without	Rel-9	C30es	All UEs supporting UE-based	pc_eFDD	
	assistance data: UE-Based: Subtest 3			GNSS w ith A-Galileo only	pc_eTDD	
.3.4.3_4s	E-SMLC Initiated Position Measurement without	Rel-9	C31es	All UEs supporting UE-based	pc_eFDD	
	assistance data: UE-Based: Subtest 4			GNSS with A-GPS and A- GLONASS only	pc_eTDD	
.3.4.4_1s	E-SMLC Initiated Position Measurement without	Rel-9	C32es	All UEs supporting UE-	pc_eFDD	
	assistance data: UE-Assisted: Subtest 1			assisted GNSS w ith A-GPS only	pc_eTDD	
'.3.4.4_2s	E-SMLC Initiated Position Measurement without	Rel-9	C33es	All UEs supporting UE-	pc_eFDD	
	assistance data: UE-Assisted: Subtest 2			assisted GNSS with A- GLONASS only	pc_eTDD	
.3.4.4_3s	E-SMLC Initiated Position Measurement without	Rel-9	C34es	All UEs supporting UE-	pc_epc_eFDD	
	assistance data: UE-Assisted: Subtest 3			assisted GNSS with A-Galileo only	pc_eTDD	
.3.4.4_4s	E-SMLC Initiated Position Measurement without	Rel-9	C35es	All UEs supporting UE-	pc_eFDD	
	assistance data: UE-Assisted: Subtest 4			assisted GNSS with A-GPS and A-GLONASS only	pc_eTDD	
.3.4.4_5s	E-SMLC Initiated Position Measurement without	Rel-9	C26es	All UEs supporting UE-	pc_eFDD	
	assistance data: UE-Assisted: Subtest 5			Assisted OTDOA	pc_eTDD	
.3.4.4_7s	E-SMLC Initiated Position Measurement without	Rel-9	C21es	All UEs supporting UE-	pc_eFDD	
	assistance data: UE-Assisted: Subtest 7			assisted GNSS and UE- assisted OTDOA	pc_eTDD	
7.3.5.1_1s	E-SMLC initiated Abort: Subtest 1	Rel-9	C22es	All UEs supporting UE-based	pc_eFDD	
				or UE-assisted GNSS with A- GPS only	pc_eTDD	
'.3.5.1_2s	E-SMLC initiated Abort: Subtest 2	Rel-9	C23es	All UEs supporting UE-based	pc_eFDD	
				or UE-assisted GNSS with A- GLONASS only	pc_eTDD	
7.3.5.1_3s	E-SMLC initiated Abort: Subtest 3	Rel-9	C24es	All UEs supporting UE-based	pc_eFDD	
				or UE-assisted GNSS w ith A- Galileo only	pc_eTDD	
.3.5.1_4s	E-SMLC initiated Abort: Subtest 4	Rel-9	C25es	All UEs supporting UE-based	pc_eFDD	
				or UE-assisted GNSS with A-	pc_eTDD	

Clause	TC Title	Release	Applicability		Additional Information	
			Condition	Comment	Specific ICS	Specific IXIT
				GPS and A-GLONASS only		
7.3.5.1_5s	E-SMLC initiated Abort: Subtest 5	Rel-9	C26es	All UEs supporting UE	pc_eFDD	
				Assisted OTDOA	pc_eTDD	
7.3.5.1_6s	E-SMLC initiated Abort: Subtest 6	Rel-9	C27es	All UEs supporting UE	pc_eFDD	
				Assisted ECID	pc_eTDD	
7.4	Circuit Switched (CS) Fallback					
7.4.1.1	CS fallback: Network does not support EPC-MO-LR	Rel-9	C12es	All UEs supporting MO-LR	pc_eFDD	
				procedure for location estimate	pc_eTDD	
				in the CS fallback in EPS.		
7.4.1.2	CS fallback: UE does not support EPC-MO-LR	Rel-9	C13es	All UEs not supporting EPC-	pc_eFDD	
				MO-LR and supporting MO-LR	pc_eTDD	
				procedure for location estimate		
				in the CS fallback in EPS.		
7.5	RRC Protocol Procedures					
7.5.1	Inter-Frequency RSTD measurement indication	Rel-10	C37es	All UEs supporting inter-	pc_eFDD	
				frequency RSTD	pc_eTDD	
				measurements for OTDOA		
				that require measurement		
				gaps.		

Table 4-8: Applicability of tests Conditions for test cases in TS 37.571-2 [6] for E-UTRA

C01es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND A.4.3-3/1 AND (A.4.3-2/6 OR A.4.3-2/8) AND NOT (A.4.3-2/7 OR A.4.3-2/9) THEN R ELSE N/A
C02es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND A.4.3-3/1 AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C03es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND A.4.3-3/1 AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) THEN R ELSE N/A
C04es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND A.4.3-3/1 AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/7 AND NOT A.4.3-2/9) THEN R ELSE N/A
C05es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-3/2 AND (A.4.3-2/6 OR A.4.3-2/8) AND NOT (A.4.3-2/7 OR A.4.3-2/9) THEN R ELSE N/A
C06es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-3/2 AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C07es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-3/2 AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) THEN R ELSE N/A
C08es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-3/2 AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/7 AND NOT A.4.3-2/9) THEN R ELSE N/A
C09es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/4 AND A.4.3-3/2 THEN R ELSE N/A
C10es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/5 AND A.4.3-3/2 THEN R ELSE N/A
C11es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/1 THEN R ELSE N/A
C12es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.1-1/3 OR A.4.11/4) AND A.4.3-3/4 THEN R ELSE N/A
C13es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.1-1/3 OR A.4.11/4) AND A.4.3-3/4 AND NOT (A.4.3-2/1 AND A.4.3-2/2) THEN R ELSE N/A
C14es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3/3 THEN R ELSE N/A
C15es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/2 OR A.4.3-2/4 OR A.4.3-2/5) AND NOT(A.4.3-2/2 AND A.4.3-2/4 AND A.4.3-2/5) THEN R ELSE N/A
C22es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND (A.4.3-2/6 OR A.4.3-2/8) AND NOT (A.4.3-2/7 OR A.4.3-2/9) THEN R ELSE N/A
C23es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C24es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) THEN R ELSE N/A
C25es IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3-2/2) AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/7 AND NOT A.4.3-2/9) THEN R ELSE N/A
C26es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/4
C27es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/5
C28es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND (A.4.3-2/6 OR A.4.3-2/8) AND NOT (A.4.3-2/7 OR A.4.3-2/9) THEN R ELSE N/A
C29es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C30es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) THEN R ELSE N/A
C31es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/1 AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/7 AND NOT A.4.3-2/9) THEN R ELSE N/A
C32es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND (A.4.3-2/6 OR A.4.3-2/8) AND NOT (A.4.3-2/7 OR A.4.3-2/9) THEN R ELSE N/A
C33es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-2/7 AND NOT (A.4.3-2/6 OR A.4.3-2/8 OR A.4.3-2/9) THEN R ELSE N/A
C34es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-2/9 AND NOT (A.4.3-2/6 OR A.4.3-2/7 OR A.4.3-2/8) THEN R ELSE N/A
C35es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/7 AND NOT A.4.3-2/9) THEN R ELSE N/A
C36es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/1 AND A.4.4-1/1 THEN R ELSE N/A
C37es IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/16 THEN R ELSE N/A

Annex A (normative): ICS proforma for E-UTRA/EPC Generation User Equipment

Notwithstanding the provisions of the copyright clause related to the text of the present document, The Organizational Partners of 3GPP grant that users of the present document may freely reproduce the ICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed ICS.

A.1 Guidance for completing the ICS proforma

A.1.1 Purposes and structure

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

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

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

A.1.2 Abbreviations and conventions

The ICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [8].

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.

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

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.

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 UEUT nam	
Hardware co	onfiguration:
Software co	nfiguration:
A.2.3 Name:	Product supplier
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:

ail address:	
itional 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

A.4.1 UE Implementation Types

Table A.4.1-1: UE Radio Technologies

Item	UE Radio Technologies	Ref.	Release	Mnemonic	Comments
1	E-UTRA FDD				Refer to 3GPP TS 36.523-2 [11] Table A.4.1-1/1
2	E-UTRA TDD				Refer to 3GPP TS 36.523-2 [11] Table A.4.1-1/2
3	UTRAFDD				Refer to 3GPP TS 34.123-2 [12] Table A.1/1

Table A.4.1-2: Teleservices

ltem	Teleservices	Ref.	Release	Mnemonic	Comments
1	Emergency call				Refer to 3GPP TS 34.123-2 [12] Table A.2/2

A.4.2 Baseline Implementation Capabilities

Table A.4.2-1: Supported Protocols

Item	Special Conformance Testing Functions	Ref.	Release	Mnemonic	Comments
1	LTE Positioning Protocol (LPP)	36.355	Rel-9	pc_LPP	
2	Support for OMA LPPe	OMA-TS- LPPe-V1.0	Rel-9	pc_OMA_LPPe	

Table A.4.2-2: Special Conformance Testing Functions

ltem	Special Conformance Testing Functions	Ref.	Release	Comments
1	Reset of UE Positioning Stored Information	36.509	Rel-9	E-UTRA
2	Reset of UE Positioning Stored Information	34.109	R99	UTRA

A.4.3 UE Positioning Capabilities

Table A.4.3-1: UTRA UE positioning capabilities

Item	Services Capabilities	Ref.	Release	Mnemonic	Comments
1	Support for IPDL	25.306,	R99	pc_UE_PositioningIPDL_Sup	
		4.8			
2	Support of GPS timing of cell frames	25.306,	R99	pc_UE_PositioningGPS_TimingOfCel	
		4.8		IFrames Sup	
3	Support of UE-based OTDOA	25.306,	R99	pc_UE_PositioningBasedOTDOA_Su	
		4.8		p	
4	Support of Standalone location method	25.306,	R99	pc_UE_PositioningStandaloneLocMet	
		4.8		hods Sup	
5	Support of UE-Based A-GANSS	25.306,	Rel-8	pc_UEB_A_GANSS	
		4.8			
6	Support of UE-Assisted A-GANSS	25.306,	Rel-8	pc_UEA_A_GANSS	
		4.8			
7	Support for GLONASS	25.306,	Rel-8	pc_GLONASS	NOTE
		4.8			
8	Support for Modernized GPS	25.306,	Rel-8	pc_MGPS	NOTE
		4.8			
9	Support for Galileo	25.306,	Rel-8	pc_GALILEO	NOTE
		4.8			
10	Support of UE based Network Assisted	25.306,	R99	pc_UeBasedAgps	
	GPS L1 C/A	4.8			
11	Support of UE assisted Network	25.306,	R99	pc_UeAssistedAgps	
	Assisted GPS L1 C/A	4.8			
12	Support of Fine Time Assistance	25.171,	Rel-6		
		4.4			
NOTE:	If the capability is supported by the UE, th	en A.4.3-	1/5 or A.4.3	3-1/6 must be supported as well.	

Table A.4.3-2: E-UTRA UE Positioning Capabilities

Item	UE Positioning Capabilities	Ref.	Releas	Mnemonic	Comments
			е		
1	Support of UE based Assisted-GNSS	36.355	Rel-9	pc_UEB_AG NSS	This implies support of LPP A.4.2-1/1
2	Support of UE assisted Assisted-GNSS	36.355	Rel-9	pc_UEA_AG NSS	This implies support of LPP A.4.2-1/1
3	Support of GNSS Fine Time Assistance	36.355	Rel-9	pc_GNSS_F TA	This implies support of LPP A.4.2-1/1
4	Support of UE assisted OTDOA	36.355	Rel-9	pc_OTDOA	This implies support of LPP A.4.2-1/1
5	Support of UE assisted ECID	36.355	Rel-9	pc_ECID	This implies support of LPP A.4.2-1/1
6	Support for A-GPS L1C/A	36.355	Rel-9	pc_A_GPS_ L1C_A	This implies support of LPP A.4.2-1/1
7	Support for A-GLON ASS	36.355	Rel-9	pc_A_GLON ASS	This implies support of LPP A.4.2-1/1
8	Support for A-GPS L1C/A and Modernized GPS	36.355	Rel-9	pc_A_GPS_ L1C_A_MG PS	This implies support of LPP A.4.2-1/1
9	Support for A-Galileo	36.355	Rel-9	pc_A_Galile o	This implies support of LPP A.4.2-1/1
10	Support of UE Fine Time Assistance measurements for UE-based Assisted- GNSS	36.355	Rel-9	pc_GNSS_F TA_UEB	This implies support of LPP A.4.2-1/1
11	Support of UE Fine Time Assistance measurements for UE-assisted Assisted-GNSS	36.355		pc_GNSS_F TA_UEA	This implies support of LPP A.4.2-1/1
12	Support of GNSS Acquisition Assistance	36.355; 37.571-2, 5.4.1	Rel-9	pc_GNSS_A A	This implies support of LPP A.4.2-1/1
13	Support for A-SBAS	36.355	Rel-9	pc_A_SBAS	
14	Support for A-QZSS	36.355	Rel-9	pc_A_QZSS	
15	Support of UE assisted OTDOA for Carrier Aggregation	36.355	Rel-10	pc_OTDOA_ CA	This implies support of LPP A.4.2-1/1
16	Support of inter-frequency RSTD measurements that require measurement gaps	36.355	Rel-10	pc_InterFreq _RSTD_with Gaps	This implies support of UE assisted OTDOA A.4.3-2/4

Table A.4.3-3: Supplementary Services

Item	UE Positioning Capabilities	Ref.	Release	Mnemonic	Comments
1	Support of EPC-MO-LR request	24.171; 24.030;	Rel-9	pc_EPC_MO_LR_Requ	
	for assistance data	24.080		estAssistanceData	
2	Support of EPC-MO-LR request	24.171; 24.030;	Rel-9	pc_EPC_MO_LR_Requ	
	for a position estimate	24.080		estPositionEstimate	
3	Support of EPC-MT-LR Location	24.171; 24.030;	Rel-9	pc_MT_LR_loc_notif	
	Notification	24.080			
4	Support for CS-MO-LR with CS	23.272	Rel-9	pc_CS_MO_LR_CSFall	
	Fallback for a position estimate			back	
5	Support of MO-LR request for	24.030,	R99	pc_Param Gps Assis Data	UTRA
	assistance data	5.1.1;24.080,			
		4.4.3.44;23.171,			
		8.1.1			
6	Support of MO-LR request for a	23.171, 8.1.1	R99	pc_ParamPosEstimate	UTRA
	position estimate				
7	Support of MO-LR request for	23.171, 8.1.1	R99	pc_ParamXfer3rdPty	UTRA
	transfer to 3rd party				
8	Support of MT-LR LCS value	24.030;23.271	R99	pc_MT_LR	UTRA
	added location request notification				
	capability				

Table A.4.3-4: E-CID Measurements

Item	UE Positioning Capabilities	Ref.	Releas	Mnemonic	Comments
			е		
1	RSRP Supported	36.355, 6.5.3.4	Rel-9	pc_ECID_Rsrp	E-UTRA
2	RSRQ Supported	36.355, 6.5.3.4	Rel-9	pc_ECID_Rsrq	E-UTRA
_	UE Rx-Tx Time Difference Supported	36.355, 6.5.3.4	Rel-9	pc_ECID_ UeRxTx	E-UTRA

Table A.4.3-5: GNSS Signals

Item	GNSS Signals Capabilities	Ref.	Release	Mnemonic	Comments
1	Support of A-GPS L1C signal	36.355, 6.5.2.13	Rel-9	pc_A_GPS_L1C	E-UTRA
2	Support of A-GPS L2C signal	36.355, 6.5.2.13	Rel-9	pc_A_GPS_L2C	E-UTRA
3	Support of A-GPS L5 signal	36.355, 6.5.2.13	Rel-9	pc_A_GPS_L5	E-UTRA
4	Support of QZS-L1 signal in	36.355, 6.5.2.13	Rel-9		E-UTRA
	QZSS			pc_QZSS_QZS_L1	
5	Support of QZS-L1C signal in	36.355, 6.5.2.13	Rel-9		E-UTRA
	QZSS			pc_QZSS_QZS_L1C	
6	Support of QZS-L2C signal in	36.355, 6.5.2.13	Rel-9		E-UTRA
	QZSS			pc_QZSS_QZS_L2C	
7	Support of QZS-L5 signal in	36.355, 6.5.2.13	Rel-9		E-UTRA
	QZSS			pc_QZSS_QZS_L5	
8	Support of G1 signal in Glonass	36.355, 6.5.2.13	Rel-9	pc_GLONASS_G1	E-UTRA
9	Support of G2 signal in Glonass	36.355, 6.5.2.13	Rel-9	pc_GLONASS_G2	E-UTRA
10	Support of G3 signal in Glonass	36.355, 6.5.2.13	Rel-9	pc_GLONASS_G3	E-UTRA
11	Support of E1 signal in Galileo	36.355, 6.5.2.13	Rel-9	pc_GALILEO_E1	E-UTRA
12	Support of E5a signal in Galileo	36.355, 6.5.2.13	Rel-9	pc_GALILEO_E5a	E-UTRA
13	Support of E5b signal in Galileo	36.355, 6.5.2.13	Rel-9	pc_GALILEO_E5b	E-UTRA
14	Support of E6 signal in Galileo	36.355, 6.5.2.13	Rel-9	pc_GALILEO_E6	E-UTRA
15	Support of E5a+E5b signal in	36.355, 6.5.2.13	Rel-9	pc_GALILEO_E5aE5	E-UTRA
	Galileo			b	

Table A.4.3-6: ADR and Velocity Measurements

ltem	ADR and Velocity Measurements	Ref.	Release	Mnemonic	Comments
1	Support of ADR measurement	36.355, 6.5.2.9	Rel-9		E-UTRA
	reporting for Gps			pc_A_GPS_ADR	
2	Support of ADR measurement	36.355, 6.5.2.9	Rel-9		E-UTRA
	reporting for Sbas			pc_SBAS_ADR	
3	Support of ADR measurement	36.355, 6.5.2.9	Rel-9		E-UTRA
	reporting for Qzss			pc_QZSS_ADR	
4	Support of ADR measurement	36.355, 6.5.2.9	Rel-9		E-UTRA
	reporting for Galileo			pc_GALILEO_ADR	
5	Support of ADR measurement	36.355, 6.5.2.9	Rel-9		E-UTRA
	reporting for Glonass			pc_GLONASS_ADR	
6	Support of Velocity	36.355, 6.5.2.9	Rel-9	pc_A_GPS_Velocity	E-UTRA
	measurement reporting for Gps			Meas	
7	Support of Velocity	36.355, 6.5.2.9	Rel-9	pc_SBAS_VelocityMe	E-UTRA
	measurement reporting for Sbas			as	
8	Support of Velocity	36.355, 6.5.2.9	Rel-9	pc_QZSS_VelocityM	E-UTRA
	measurement reporting for Qzss			eas	
9	Support of Velocity	36.355, 6.5.2.9	Rel-9		E-UTRA
	measurement reporting for			pc_GALILEO_Velocit	
	Galileo			yMeas	
10	Support of Velocity	36.355, 6.5.2.9	Rel-9		E-UTRA
	measurement reporting for			pc_GLONASS_Veloci	
	Glonass			tyMeas	

Table A.4.3-7: GNSS Assistance Data Support

Item	GNSS Assistance Data Support	Ref.	Release	Mnemonic	Comments
1	Gnss-ReferenceTimeSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_RefTimeS	E-UTRA
	(Common Assistance Data)			up	
2	Gnss-	36.355, 6.5.2.9	Rel-9		E-UTRA
	ReferenceLocationSupport			pc_GNSS_RefLocSu	
	(Common Assistance Data)			р	
3	Gnss-IonosphericModelSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_lonoModS	E-UTRA
	(Common Assistance Data)	22.255.25.2	D 10	up	E LITO A
4	Gnss-	36.355, 6.5.2.9	Rel-9		E-UTRA
	EarthOrientationParametersSup			TO CNICC FORCUT	
-	port (Common Assistance Data)	36.355, 6.5.2.9	Rel-9	pc_GNSS_EOPSup	E-UTRA
5	Gnss-TimeModelsSupport for	36.333, 6.3.2.9	Kei-9	pc_GNSS_TimeMod	E-UTKA
6	gps Gnss-TimeModelsSupport for	36.355, 6.5.2.9	Rel-9	Sup_Gps pc_GNSS_TimeMod	E-UTRA
	sbas	00.000, 0.0.2.0	I KOI 3	Sup_Sbas	LOTTON
7	Gnss-TimeModelsSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_TimeMod	E-UTRA
'	gzss	00.000, 0.0.2.0	11010	Sup_Qzss	2 0 110 1
8	Gnss-TimeModelsSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_TimeMod	E-UTRA
	galileo			Sup_Galileo	
9	Gnss-TimeModelsSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_TimeMod	E-UTRA
	glonass			Sup_Glonass	
10	Gnss-	36.355, 6.5.2.9	Rel-9	\ <u>-</u>	E-UTRA
	DifferentialCorrectionsSupport			pc_GNSS_DGNSS_	
	for gps			Sup_Gps	
11	Gnss-	36.355, 6.5.2.9	Rel-9		E-UTRA
	DifferentialCorrectionsSupport			pc_GNSS_DGNSS_	
	for sbas			Sup_Sbas	
12	Gnss-	36.355, 6.5.2.9	Rel-9		E-UTRA
	DifferentialCorrectionsSupport			pc_GNSS_DGNSS_	
	for qzss	36.355, 6.5.2.9	Rel-9	Sup_Qzss	E-UTRA
13	Gnss-	36.333, 6.3.2.9	Kei-9		E-UTRA
	DifferentialCorrectionsSupport for galileo			pc_GNSS_DGNSS_ Sup_Galileo	
	Gnss-	36.355, 6.5.2.9	Rel-9		E-UTRA
	DifferentialCorrectionsSupport	00.000, 0.0.2.0	110.0	pc_GNSS_DGNSS_	_ •
	for glonass			Sup_Glonass	
	Gnss-NavigationModelSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_NavModS	E-UTRA
	for gps			up_Gps	
	Gnss-NavigationModelSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_NavModS	E-UTRA
	for sbas			up_Sbas	
17	Gnss-NavigationModelSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_NavModS	E-UTRA
	for qzss			up_Qzss	
	Gnss-NavigationModelSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_NavModS	E-UTRA
	for galileo	20.255.05.0	D-L-C	up_Galileo	E LITDA
	Gnss-NavigationModelSupport	36.355, 6.5.2.9	Rel-9	· · · · · · · · · · · · · · · ·	E-UTRA
	for glonass	26.255.65.00	Dalo	up_Glonass	E LITDA
	Gnss-RealTimeIntegritySupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_RTISup_G	E-UIKA
	for gps	36.355, 6.5.2.9	Dol 0	ps CNCC PTICUS C	E-UTRA
	Gnss-RealTimeIntegritySupport	30.333, 0.3.2.9	Rel-9		E-UIKA
	for sbas Gnss-RealTimeIntegritySupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_RTISup_Q	F-UTRA
	for gzss	3.000, 0.0.2.0		zss	
	Gnss-RealTimeIntegritySupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_RTISup_G	E-UTRA
	for galileo	3.555, 5.5.2.0		alileo	_ •
	Gnss-RealTimeIntegritySupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_RTISup_G	E-UTRA
	for glonass			lonass	
		36.355, 6.5.2.9	Rel-9		E-UTRA
	for gps			up_Gps	
	· · · · · · · · · · · · · · · · · · ·	•	•	– .	

26	Cnop DataBitAppiatangeCuppert	36 355 6 5 2 0	Rel-9	no CNSS DataBitaS	E-UTRA
20	Gnss-DataBitAssistanceSupport for sbas	36.333, 6.3.2.9	Kei-9	pc_GNSS_DataBitsS up_Sbas	E-UTRA
27		36.355, 6.5.2.9	Rel-9	pc_GNSS_DataBitsS	E-UTRA
21		30.333, 0.3.2.9	1161-3	up_Qzss	L-OTKA
28	for qzss Gnss-DataBitAssistanceSupport	36.355, 6.5.2.9	Rel-9	pc_GNSS_DataBitsS	E-UTRA
20		00.000, 0.0.2.0	IXOI 5	l	LOTTON
29	for galileo	36.355, 6.5.2.9	Rel-9	up_Galileo pc_GNSS_DataBitsS	E-UTRA
23	Gnss-DataBitAssistanceSupport for glonass	30.333, 0.3.2.9	1161-3	up_Glonass	L-OTKA
30	Gnss-	36.355, 6.5.2.9	Rel-9	pc_GNSS_AcquAssis	E_LITD A
30	AcquisitionAssistanceSupport	30.333, 0.3.2.9	1161-3	tSup_Gps	L-OTIVA
	for gps			toup_Gps	
31	Gnss-	36.355, 6.5.2.9	Rel-9	pc_GNSS_AcquAssis	F-I ITR A
"	AcquisitionAssistanceSupport	00.000, 0.0.2.0	IXCI 5	tSup_Sbas	LOTTON
	for sbas			ισαρ_συασ	
32	Gnss-	36.355, 6.5.2.9	Rel-9	pc_GNSS_AcquAssis	F-UTRA
0_	AcquisitionAssistanceSupport	00.000, 0.0.2.0	11010	tSup_Qzss	
	for qzss			Cup_G200	
33	Gnss-	36.355, 6.5.2.9	Rel-9	pc_GNSS_AcquAssis	E-UTRA
	AcquisitionAssistanceSupport	, : : :		tSup_Galileo	
	for galileo				
34	Gnss-	36.355, 6.5.2.9	Rel-9	pc_GNSS_AcquAssis	E-UTRA
	AcquisitionAssistanceSupport			tSup_Glonass	
	for glonass			•	
35	Cros Almon as Company for and	36.355, 6.5.2.9	Rel-9	pc_GNSS_AlmanacS	E-UTRA
	Gnss-AlmanacSupport for gps			up_Gps	
36	Casa Almanas Cuanast for abas	36.355, 6.5.2.9	Rel-9	pc_GNSS_AlmanacS	E-UTRA
	Gnss-AlmanacSupport for sbas			up_Sbas	
37	Casa Almanas Cumpart for area	36.355, 6.5.2.9	Rel-9	pc_GNSS_AlmanacS	E-UTRA
	Gnss-AlmanacSupport for qzss			up_Qzss	
38	Gnss-AlmanacSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_AlmanacS	E-UTRA
	galileo			up_Galileo	
39	Gnss-AlmanacSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_AlmanacS	E-UTRA
	glonass			up_Glonass	
40	Gnss-UTC-ModelSupport for	36.355, 6.5.2.9	Rel-9	P	E-UTRA
L	gps	00.055.0.5.5		up_Gps	E LITO A
41	Gnss-UTC-ModelSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_UTCModS	E-UIRA
40	sbas	26.255.05.0	Dalo	up_Sbas	E LITDA
42	Gnss-UTC-ModelSupport for	36.355, 6.5.2.9	Rel-9	pc_GNSS_UTCModS	E-UIKA
42	qzss	26 255 6 5 2 0	Dol 0	up_Qzss	E LITDA
43	Gnss-UTC-ModelSupport for	36.355, 6.5.2.9	Rel-9	F	E-UTRA
11	galileo	36.355, 6.5.2.9	Rel-9	up_Galileo	E-UTRA
44	Gnss-UTC-ModelSupport for	ან.ანე, ნ.ნ.∠.9	Kei-9	pc_GNSS_UTCModS	E-UIKA
45	glonass	36.355, 6.5.2.9	Rel-9	up_Glonass	E-UTRA
-3	Gnss-	00.000, 0.0.2.3	1161-9	no GNSS AuxinfoSu	LOTICA
	AuxiliaryInformationSupport for gps			pc_GNSS_AuxInfoSu p_Gps	
46	Gnss-	36.355, 6.5.2.9	Rel-9	P_OP3	E-UTRA
'	AuxiliaryInformationSupport for	3.000, 0.0.2.0		pc_GNSS_AuxInfoSu	
	sbas			p_Sbas	
47	Gnss-	36.355, 6.5.2.9	Rel-9	P_5546	E-UTRA
'	AuxiliaryInformationSupport for	3.0.2.0		pc_GNSS_AuxInfoSu	
	qzss			p_Qzss	
48	Gnss-	36.355, 6.5.2.9	Rel-9	<u> </u> - ~-~	E-UTRA
	AuxiliaryInformationSupport for			pc_GNSS_AuxInfoSu	
	galileo			p_Galileo	
49	Gnss-	36.355, 6.5.2.9	Rel-9		E-UTRA
	AuxiliaryInformationSupport for			pc_GNSS_AuxInfoSu	
	glonass			p_Glonass	
		•		••	•

Table A.4.3-8: Location Coordinate Types

Item	Location Coordinate Types	Ref.	Release	Mnemonic	Comments
1	Ellipsoid Point Support	36.355, 6.4.1	Rel-9	pc_GNSS_EllipPoint	E-UTRA
2	Ellipsoid Point With Uncertainty	36.355, 6.4.1	Rel-9	po_crico_Lmpr onic	E-UTRA
	Circle Support			UncertCircle	
3	Ellipsoid Point With Uncertainty	36.355, 6.4.1	Rel-9	pc_GNSS_EllipPoint	E-UTRA
	Ellipse Support			UncertEllip	
4	Polygon Support	36.355, 6.4.1	Rel-9	pc_GNSS_Polygon	E-UTRA
5	Ellipsoid Point With Altitude	36.355, 6.4.1	Rel-9	pc_GNSS_EllipPoint	E-UTRA
	Support			Alt	
6	Ellipsoid Point With Altitude And	36.355, 6.4.1	Rel-9	pc_GNSS_EllipPoint	E-UTRA
	Uncertainty Ellipsoid Support			AltUncertEllip	
7	Ellipsoid Arc Support	36.355, 6.4.1	Rel-9	pc_GNSS_EllipArc	E-UTRA

Table A.4.3-9: Velocity Types

Item	Velocity Types	Ref.	Release	Mnemonic	Comments
1	Horizontal Velocity Support	36.355, 6.4.1	Rel-9	pc_GNSS_HVel	E-UTRA
2	Horizontal With Vertical Velocity	36.355, 6.4.1	Rel-9		E-UTRA
	Support			pc_GNSS_HVVel	
3	Horizontal Velocity With	36.355, 6.4.1	Rel-9	pc_GNSS_HVelUnce	E-UTRA
	Uncertainty Support			rt	
	i lonzontai tritii toitioai tolooity	36.355, 6.4.1	Rel-9	pc_GNSS_HVVelUnc	E-UTRA
	And Uncertainty Support			ert	

A.4.4 Additional information

Table A.4.4-1: Additional information

ltem	Additional information	Ref.	Release	Mnemonic	Comments
	Support of sending of acknowledgement request in LPP Provide Capabilities message.	36.355, 4.3.3		pc_LPP_SendingA CK_ProvideCapabil ities	

Annex B (informative): Change history

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	0.1.0					
					applicability						
		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,	-	1.0.0				
					34.171 v9.3.0 and 34.172 va.1.0						
-	-	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	-	2.0.0				
					baseline text						
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,	9.0.0	9.1.0				
2010.00	DANIES	DE 400500	0000		7.3.4.2, 7.3.4.3, and 7.3.4.4	0.00	0.4.0				
2012-03	RAN#55	R5-120529	0002	-	Remove redundant mnemonics	9.0.0	9.1.0				
2012-06	RAN#56	-	-	-	Upgraded to v10.0.0w ith no change.	9.1.0	10.0.0				
2012-09	RAN#57	R5-123689		-	Correction of sub-test names and PICS names		10.1.0				
2012-09	RAN#57		0003	-	Addition of missing sub test cases name change	10.1.0	10.1.1				
2012-12	RAN#58	R5-125119		-	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	8000	-	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	10.3.1	10.4.0				
					measurement indication procedure						
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	10.3.1	10.4.0				
					Test Cases						
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				