# ETSITS 137 571-3 V10.2.1 (2013-04)



Universal Mobile Telecommunications System (UMTS); LTE;

Universal Terrestrial Radio Access (UTRA) and Evolved UTRA (E-UTRA) and Evolved Packet Core (EPC);
User Equipment (UE) conformance specification for UE positioning;

Part 3: Implementation Conformance Statement (ICS) (3GPP TS 37.571-3 version 10.2.1 Release 10)



Reference
RTS/TSGR-0537571-3va21

Keywords
LTE.UMTS

#### **ETSI**

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

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

Siret N° 348 623 562 00017 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

#### Important notice

Individual copies of the present document can be downloaded from: <a href="http://www.etsi.org">http://www.etsi.org</a>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

<a href="http://portal.etsi.org/tb/status/status.asp">http://portal.etsi.org/tb/status/status.asp</a>

If you find errors in the present document, please send your comment to one of the following services: http://portal.etsi.org/chaircor/ETSI\_support.asp

#### **Copyright Notification**

No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2013.
All rights reserved.

**DECT**<sup>TM</sup>, **PLUGTESTS**<sup>TM</sup>, **UMTS**<sup>TM</sup> and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP**<sup>TM</sup> and **LTE**<sup>TM</sup> are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

**GSM**® and the GSM logo are Trade Marks registered and owned by the GSM Association.

# Intellectual Property Rights

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

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

## **Foreword**

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

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

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <a href="http://webapp.etsi.org/key/queryform.asp">http://webapp.etsi.org/key/queryform.asp</a>.

# Contents

| Intell      | ectual Property Rights  | 2        |
|-------------|---|----------|
| Forev       | vord  | 2        |
| Forev       | word  | Δ        |
|             | duction   |          |
| muoc        |   |          |
| 1           | Scope   | 5        |
| 2           | References  | 5        |
| 3           | Definitions, symbols and abbreviations                                  | 6        |
| 3.1         | Definitions   |          |
| 3.2         | Symbols   | <i>6</i> |
| 3.3         | Abbreviations   | e        |
| 4           | Recommended Test Case Applicability                                     | 7        |
| Anno        | ex A (normative): ICS proforma for E-UTRA/EPC Generation User Equipment |          |
| Aime<br>A.1 | Guidance for completing the ICS proforma                                |          |
| A.1.1       | Purposes and structure  |          |
| A.1.2       | Abbreviations and conventions.  |          |
| A.1.3       | Instructions for completing the ICS proforma                            |          |
| A.2         | Identification of the User Equipment                                    |          |
| A.2.1       | Date of the statement   |          |
| A.2.2       | User Equipment Under Test (UEUT) identification                         |          |
| A.2.3       | Product supplier  | 25       |
| A.2.4       | Client  | 26       |
| A.2.5       | ICS contact person  | 26       |
| A.3         | Identification of the protocol  |          |
| A.4         | ICS proforma tables   |          |
| A.4.1       | UE Implementation Types   |          |
| A.4.2       | Baseline Implementation Capabilities                                    |          |
| A.4.3       | UE Positioning Capabilities   |          |
| A.4.4       | Additional information  | 34       |
| Anne        | ex B (informative): Change history                                      | 35       |
| Histo       |   | 36       |

## **Foreword**

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

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

Version x.y.z

where:

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

# Introduction

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 3<sup>rd</sup> 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.
- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 36.509: "Special conformance testing functions for User Equipment".
- [3] 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Common Test Environments for User Equipment (UE) Conformance Testing".
- [4] 3GPP TS 36.355: "Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning 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 mnemonics 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   | C01           | 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   | C02           | 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   | C01           | 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   | C01           | 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   | C01           | 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   | C01           | 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  | C03-1         | 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  | C03-2         | 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  | C03-3         | 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  | C03-4         | 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  | C04-1         | 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  | C04-2         | 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  | C04-3         | 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  | C04-4         | 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  | C03-1         | 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  | C03-2         | 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  | C03-3         | 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  | C03-4         | All UEs supporting UE-Based A-GPS and A-GANSS with GLONASS only or UE-Assisted A-GPS and A-GANSS with GLONASS only  |
| 6.4-1   | Dynamic Range: Sub-Test 1                       | Rel-10  | C03-1         | All UEs supporting UE-Based A-GANSS or UE-Assisted A-GANSS with GLONASS only  |

| Clause | Title   | Release | Applicability | Comments   |
|--------|---|---------|---------------|--|
| 6.4-2  | Dynamic Range: Sub-Test 2                                   | Rel-10  | C03-2         | 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  | C03-3         | 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  | C03-4         | 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  | C03-1         | 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  | C03-2         | 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  | C03-3         | 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  | C03-4         | 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  | C03-1         | 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  | C03-2         | 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  | C03-3         | 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  | C03-4         | 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

| C01   | 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                    |
|-------|---|
| C02   | 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     |
| C03-1 | 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                |
| C03-2 | 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                |
| C03-3 | 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                    |
| C03-4 | 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                    |
| C04-1 | 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 |
| C04-2 | 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 |
| C04-3 | 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     |
| C04-4 | 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   | C01           | All UEs supporting A-GPS                              | xc_eFDD                |               |
|              |  |         |               | L1C/A only  | xc_eTDD                |               |
| 7.1.1-2      | Sensitivity Course Time Assistance: Sub-Test 2 | Rel-9   | C02           | All UEs supporting A-                                 | xc_eFDD                |               |
|              |  |         |               | GLONASS only  | xc_eTDD                |               |
| 7.1.1-3      | Sensitivity Course Time Assistance: Sub-Test 3 | Rel-9   | C03           | All UEs supporting A-Galileo                          | xc_eFDD                |               |
|              |  |         |               | only  | xc_eTDD                |               |
| 7.1.1-4      | Sensitivity Course Time Assistance: Sub-Test 4 | Rel-9   | C04           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
| <del>-</del> |  | D 10    | 005           | Modernized GPS only                                   | xc_eTDD                |               |
| 7.1.1-5      | Sensitivity Course Time Assistance: Sub-Test 5 | Rel-9   | C05           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
| 7.4.0.4      | Openitivity Fig. Time Appleton as Out Tool 4   | D-L0    | 000           | A-GLONASS only  | xc_eTDD                |               |
| 7.1.2-1      | Sensitivity Fine Time Assistance: Sub-Test 1   | Rel-9   | C06           | All UEs supporting A-GPS<br>L1C/A only, and Fine Time | xc_eFDD                |               |
|              |  |         |               | Assistance  | xc_eTDD                |               |
| 7.1.2-2      | Sensitivity Fine Time Assistance: Sub-Test 2   | Rel-9   | C07           | All UEs supporting A-                                 | xc_eFDD                |               |
|              |  |         |               | GLONASS only, and Fine<br>Time Assistance             | xc_eTDD                |               |
| 7.1.2-3      | Sensitivity Fine Time Assistance: Sub-Test 3   | Rel-9   | C08           | All UEs supporting A-Galileo                          | xc_eFDD                |               |
|              | ,  |         |               | only, and Fine Time                                   | xc_eTDD                |               |
|              |  |         |               | Assistance  |                        |               |
| 7.1.2-4      | Sensitivity Fine Time Assistance: Sub-Test 4   | Rel-9   | C09           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
|              |  |         |               | Modernized GPS only, and                              | xc_eTDD                |               |
| 7.1.2-5      | Sensitivity Fine Time Assistance: Sub-Test 5   | Rel-9   | C10           | Fine Time Assistance All UEs supporting A-GPS and     | xc_eFDD                |               |
| 7.1.2-3      | Sensitivity Fine Time Assistance. Sub-Test 5   | Kei-9   | C10           | A-GLONASS only, and Fine                              | xc_eFDD<br>xc_eTDD     |               |
|              |  |         |               | Time Assistance                                       | xc_erbb                |               |
| 7.2-1        | Nominal Accuracy: Sub-Test 1                   | Rel-9   | C01           | All UEs supporting A-GPS                              | xc_eFDD                |               |
| 7.2 1        | Tronmar Accuracy. Sub-rest 1                   | 11010   | 001           | L1C/A only  | xc_eTDD                |               |
| 7.2-2        | Nominal Accuracy: Sub-Test 2                   | Rel-9   | C02           | All UEs supporting A-                                 | xc_eFDD                |               |
|              |  |         |               | GLONASS only  | xc_eTDD                |               |
| 7.2-3        | Nominal Accuracy: Sub-Test 3                   | Rel-9   | C03           | All UEs supporting A-Galileo                          | xc eFDD                |               |
|              | ,  |         |               | only  | xc_eTDD                |               |
| 7.2-4        | Nominal Accuracy: Sub-Test 4                   | Rel-9   | C04           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
|              | ,  |         |               | Modernized GPS only                                   | xc_eTDD                |               |
| 7.2-5        | Nominal Accuracy: Sub-Test 5                   | Rel-9   | C05           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
|              |  |         |               | A-GLONASS only  | xc_eTDD                |               |
| 7.3-1        | Dynamic Range: Sub-Test 1                      | Rel-9   | C01           | All UEs supporting A-GPS                              | xc_eFDD                |               |
|              |  |         |               | L1C/A only  | xc_eTDD                |               |
| 7.3-2        | Dynamic Range: Sub-Test 2                      | Rel-9   | C02           | All UEs supporting A-                                 | xc_eFDD                |               |
|              |  |         |               | GLONASS only  | xc_eTDD                |               |
| 7.3-3        | Dynamic Range: Sub-Test 3                      | Rel-9   | C03           | All UEs supporting A-Galileo                          | xc_eFDD                |               |
|              |  |         |               | only  | xc_eTDD                |               |
| 7.3-4        | Dynamic Range: Sub-Test 4                      | Rel-9   | C04           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
|              |  | 5.10    |               | Modernized GPS only                                   | xc_eTDD                |               |
| 7.3-5        | Dynamic Range: Sub-Test 5                      | Rel-9   | C05           | All UEs supporting A-GPS and                          | xc_eFDD                |               |
|              | I Marie di Colonia                             | D : 0   | 00.1          | A-GLONASS only  | xc_eTDD                |               |
| 7.4-1        | Multi-path scenario: Sub-Test 1                | Rel-9   | C01           | All UEs supporting A-GPS                              | xc_eFDD                |               |

| Clause | TC Title   | Release | Applicability |  | Additional Information |               |
|--------|--|---------|---------------|--|------------------------|---------------|
|        |  |         | Condition     | Comment                                      | Specific ICS           | Specific IXIT |
|        |  |         |               | L1C/A only                                   | xc_eTDD                |               |
| 7.4-2  | Multi-path scenario: Sub-Test 2  | Rel-9   | C02           | All UEs supporting A-                        | xc_eFDD                |               |
|        |  |         |               | GLONASS only                                 | xc_eTDD                |               |
| 7.4-3  | Multi-path scenario: Sub-Test 3  | Rel-9   | C03           | All UEs supporting A-Galileo                 | xc_eFDD                |               |
|        |  |         |               | only   | xc_eTDD                |               |
| 7.4-4  | Multi-path scenario: Sub-Test 4  | Rel-9   | C04           | All UEs supporting A-GPS and                 | xc_eFDD                |               |
|        |  |         |               | Modernized GPS only                          | xc_eTDD                |               |
| 7.4-5  | Multi-path scenario: Sub-Test 5  | Rel-9   | C05           | All UEs supporting A-GPS and                 | xc_eFDD                |               |
|        |  |         |               | A-GLONASS only                               | xc_eTDD                |               |
| 7.5-1  | Moving scenario and periodic update: Sub-Test 1  | Rel-9   | C01           | All UEs supporting A-GPS                     | xc_eFDD                |               |
|        |  |         |               | L1C/A only                                   | xc_eTDD                |               |
| 7.5-2  | Moving scenario and periodic update: Sub-Test 2  | Rel-9   | C02           | All UEs supporting A-                        | xc_eFDD                |               |
|        |  |         |               | GLONASS only                                 | xc_eTDD                |               |
| 7.5-3  | Moving scenario and periodic update: Sub-Test 3  | Rel-9   | C03           | All UEs supporting A-Galileo                 | xc_eFDD                |               |
|        |  |         |               | only   | xc eTDD                |               |
| 7.5-4  | Moving scenario and periodic update: Sub-Test 4  | Rel-9   | C04           | All UEs supporting A-GPS and                 | xc_eFDD                |               |
|        |  |         |               | Modernized GPS only                          | xc_eTDD                |               |
| 7.5-5  | Moving scenario and periodic update: Sub-Test 5  | Rel-9   | C05           | All UEs supporting A-GPS and                 | xc_eFDD                |               |
|        | moving obstrains and portoals apades. Sas 10010  |         | 000           | A-GLONASS only                               | xc_eTDD                |               |
| 8      | E-CID measurement requirements   |         |               |  | X0_0.22                |               |
| 8.1.1  | FDD UE Rx-Tx time difference case  | Rel-9   | C11           | All FDD UEs supporting E-CID                 | xc_eFDD                |               |
| 0.1.1  | 1 DD OL 102-12 tillle dillerence case  | 1161-3  | 011           | with Rx-Tx time difference                   | xc_ei bb               |               |
| 8.1.2  | TDD UE Rx-Tx time difference case  | Rel-9   | C12           | All TDD UEs supporting E-CID                 | xc_eTDD                |               |
| 0.1.2  | TDD OL KX-1X tillle dillelelice case   | IVEI-9  | 012           | with Rx-Tx time difference                   | xc_e1DD                |               |
| 9      | OTDOA magaurement requirements   |         |               | With KX-1X time difference                   |                        |               |
|        | OTDOA measurement requirements   | D-LO    | C13           | All EDD LIEs some selice LIE                 |                        |               |
| 9.1.1  | FDD RSTD Measurement Reporting Delay   | Rel-9   |               | All FDD UEs supporting UE-<br>assisted OTDOA | xc_eFDD                |               |
| 9.1.2  | TDD RSTD Measurement Reporting Delay   | Rel-9   | C14           | All TDD UEs supporting UE-                   | xc_eTDD                |               |
|        |  |         |               | assisted OTDOA                               |                        |               |
| 9.1.3  | FDD RSTD Measurement Accuracy  | Rel-9   | C13           | All FDD UEs supporting UE-                   | xc_eFDD                |               |
|        | , and the second |         |               | assisted OTDOA                               | _                      |               |
| 9.1.4  | TDD RSTD Measurement Accuracy  | Rel-9   | C14           | All TDD UEs supporting UE-                   | xc_eTDD                |               |
|        | ,  |         | _             | assisted OTDOA                               |                        |               |
| 10     | OTDOA measurement requirements for Carrier   |         |               |  |                        |               |
|        | Aggregation  |         |               |  |                        |               |
| 10.1   | FDD RSTD Measurement Reporting Delay for Carrier   | Rel-10  | C15           | All FDD UEs supporting UE-                   | pc_eFDD                |               |
| 10.1   | Aggregation  | 1161-10 | 013           | assisted OTDOA for Carrier                   | pc_er bb               |               |
|        | Aggregation  |         |               | Aggregation                                  |                        |               |
| 10.2   | TDD RSTD Measurement Reporting Delay for Carrier   | Rel-10  | C16           | All TDD UEs supporting UE-                   | pc_eTDD                |               |
| 10.2   | Aggregation  | 1161-10 | 010           | assisted OTDOA for Carrier                   | рс_етоо                |               |
|        | Aggregation  |         |               | Aggregation                                  |                        |               |
| 10.3   | FDD RSTD Measurement Accuracy for Carrier  | Rel-10  | C15           | All FDD UEs supporting UE-                   | pc_eFDD                |               |
| 10.0   | Aggregation  | Noi-10  | 010           | assisted OTDOA for Carrier                   | P0_01 DD               |               |
|        | , 1991. 29dillott  |         |               | Aggregation                                  |                        |               |
| 10.4   | TDD RSTD Measurement Accuracy for Carrier  | Rel-10  | C16           | All TDD UEs supporting UE-                   | pc_eTDD                |               |
| 10.7   | Aggregation  | Noi-10  |               | assisted OTDOA for Carrier                   | P0_0100                |               |
|        | Aggregation  |         |               | Aggregation                                  |                        |               |
|        |  |         | 1             | Aggregation                                  |                        |               |

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

| C01 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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                |
|-----|--|
| C02 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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                |
| C03 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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                |
| C04 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) AND A.4.3-2/8 AND NOT (A.4.3-2/7 OR A.4.3-2/9 ) THEN R ELSE N/A                             |
| C05 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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               |
| C06 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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  |
| C07 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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  |
| C08 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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  |
| C09 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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               |
| C10 | IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-2/1 OR A.4.3.1-1/2) 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 |
| C11 | IF A.4.1-1/1 AND A.4.3-2/5 AND A.4.3-4/3 THEN R ELSE N/A   |
| C12 | IF A.4.1-1/2 AND A.4.3-2/5 AND A.4.3-4/3 THEN R ELSE N/A   |
| C13 | IF A.4.1-1/1 AND A.4.3-2/4 THEN R ELSE N/A   |
| C14 | IF A.4.1-1/2 AND A.4.3-2/4 THEN R ELSE N/A   |
| C15 | IF A.4.1-1/1 AND A.4.3-2/15 THEN R ELSE N/A  |
| C16 | 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<br>Executions (informative) |
|---------|--|---------|---------------|--|--|
| 6.1.1.1 | LCS Network Induced location request/ UE-Based GPS/<br>Emergency Call / with USIM                              | R99     | C01u          | UEs supporting FDD, emergency speech call and UE based Network Assisted GPS L1 C/A only  | 1 Execution: CS                          |
| 6.1.1.2 | LCS Network induced location request/ UE-Based GPS/<br>Emergency call/ Without USIM                            | R99     | C01u          | UEs supporting FDD, emergency speech call and UE based Network Assisted GPS L1 C/A only  | 1 Execution: CS                          |
| 6.1.1.3 | LCS Network induced location request/ UE-Assisted GPS/<br>Emergency call/ With USIM                            | R99     | C03u          | UEs supporting FDD, emergency speech call and UE assisted Network Assisted GPS L1 C/A only                                     | 1 Execution: CS                          |
| 6.1.1.4 | LCS Network induced location request/ UE-Assisted GPS/<br>Emergency call/ Without USIM                         | R99     | C03u          | 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     | C09u          | 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     | C05u          | 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/<br>Position Estimate/ Success                         | R99     | C10u          | UEs supporting FDD and UE assisted Network 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     | C07u          | 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/<br>Transfer to third party/ Success                   | R99     | C08u          | UEs supporting FDD and UE assisted Network 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     | C05u          | 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     | C09u          | 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     | C02u          | 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/<br>Request of additional assistance data/ Success        | R99     | C02u          | 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     | C02u          | UEs supporting FDD and UE based Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability        | 1 Execution: CS                          |
| 6.1.3.4 | LCS Mobile terminated location request/ UE-Assisted GPS/Success  | R99     | C04u          | UEs supporting FDD and UE assisted Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability     | 1 Execution: CS                          |
| 6.1.3.5 | LCS Mobile terminated location request/ UE-Assisted GPS/<br>Request for additional assistance data/ Success    | R99     | C04u          | UEs supporting FDD and UE assisted Network Assisted GPS L1 C/A only and MT-LR LCS location request notification capability     | 1 Execution: CS                          |
| 6.1.3.6 | LCS Mobile terminated location request/ UE-Based GPS/ Privacy<br>Verification/ Location Allowed if No Response | R99     | C02u          | UEs supporting FDD and UE based 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<br>Executions (informative) |
|------------|---|---------|---------------|--|--|
| 6.1.3.7    | LCS Mobile terminated location request/ UE-Based GPS/ Privacy<br>Verification/ Location Not Allowed if No Response    | R99     | C02u          | 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/<br>Privacy Verification/ Location Allowed if No Response     | R99     | C04u          | 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/<br>Privacy Verification/ Location Not Allowed if No Response | R99     | C04u          | 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     | C06u          | 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<br>Sub-test 1   | Rel-8   | C11u          | UEs supporting FDD, emergency speech call and UE based Network Assisted GANSS with GLONASS only  | 1 Execution: CS                          |
| 6.2.1.1_2s | NI-LR Emergency Call: UE-Based A-GNSS<br>Sub-test 2   | Rel-8   | C22u          | UEs supporting FDD, emergency speech call and UE based Network Assisted GANSS with Galileo only  | 1 Execution: CS                          |
| 6.2.1.1_3s | NI-LR Emergency Call: UE-Based A-GNSS<br>Sub-test 3   | Rel-8   | C13u          | 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<br>Sub-test 4   | Rel-8   | C14u          | 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<br>Sub-test 1  | Rel-8   | C15u          | 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<br>Sub-test 2  | Rel-8   | C16u          | 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<br>Sub-test 3  | Rel-8   | C17u          | 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<br>Sub-test 4  | Rel-8   | C18u          | 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<br>Sub-test 1  | Rel-8   | C19u          | UEs supporting FDD and UE based Network 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<br>Sub-test 2  | Rel-8   | C20u          | UEs supporting FDD and UE based Network Assisted GANSS with Galileo only and MO-LR request for a position estimate   | 1 Execution: CS                          |
| 6.2.2.1_3s | MO-LR Position Estimate: UE-Based A-GNSS<br>Sub-test 3  | Rel-8   | C21u          |  |  |
| 6.2.2.1_4s | MO-LR Position Estimate: UE-Based A-GNSS<br>Sub-test 4  | Rel-8   | C22u          | 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                          |

| Clause     | Title   | Release | Applicability | Comments  | Number of TC<br>Executions (informative) |
|------------|---|---------|---------------|---|--|
| 6.2.2.2_1s | MO-LR Position Estimate: UE-Assisted A-GNSS<br>Sub-test 1                                 | Rel-8   | C23u          | UEs supporting FDD and UE assisted Network<br>Assisted GANSS with GLONASS only and MO-LR<br>request for a position estimate   | 1 Execution: CS                          |
| 6.2.2.2_2s | MO-LR Position Estimate: UE-Assisted A-GNSS<br>Sub-test 2                                 | Rel-8   | C24u          | 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<br>Sub-test 3                                 | Rel-8   | C25u          | 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<br>Sub-test 4                                 | Rel-8   | C26u          | 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<br>Enough Satellites<br>Sub-test 1 | Rel-8   | C19u          | UEs supporting FDD and UE based Network 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<br>Enough Satellites<br>Sub-test 2 | Rel-8   | C20u          | 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<br>Enough Satellites<br>Sub-test 3 | Rel-8   | C21u          | UEs supporting FDD and UE based Network 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<br>Enough Satellites<br>Sub-test 4 | Rel-8   | C22u          | 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                          |
| 6.2.2.4_1s | MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS – Success Sub-test 1                | Rel-8   | C27u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) with GLONASS only and MO-LR request<br>for assistance data                     | 1 Execution: CS                          |
| 6.2.2.4_2s | MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS –<br>Success<br>Sub-test 2          | Rel-8   | C28u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) with Galileo only and MO-LR request for<br>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   | C29u          |   |  |
| 6.2.2.4_4s | MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS – Success Sub-test 4                | Rel-8   | C30u          | UEs supporting FDD and ((UE assisted Network<br>Assisted GPS and GANSS) or (UE based Network<br>Assisted GPS and GANSS)) with GLONASS only<br>and MO-LR request for assistance data | 1 Execution: CS                          |
| 6.2.2.5_1s | MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS – Failure Sub-test 1                | Rel-8   | C27u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) with GLONASS only and MO-LR request<br>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   | C28u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) with Galileo only and MO-LR request for<br>assistance data                     | 1 Execution: CS                          |

| Clause     | Title  | Release | Applicability | Comments   | Number of TC<br>Executions (informative) |
|------------|--|---------|---------------|--|--|
| 6.2.2.5_3s | MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS – Failure Sub-test 3                       | Rel-8   | C29u          | UEs supporting FDD and ((UE assisted Network<br>Assisted GPS and GANSS) or (UE based Network<br>Assisted GPS and GANSS)) with Modernized GPS<br>only and MO-LR request for assistance data | 1 Execution: ČS                          |
| 6.2.2.5_4s | MO-LR Assistance Data: UE-Based or UE-Assisted A-GNSS – Failure Sub-test 4                       | Rel-8   | C30u          | UEs supporting FDD and ((UE assisted Network<br>Assisted GPS and GANSS) or (UE based Network<br>Assisted GPS and GANSS)) with GLONASS only<br>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   | C35u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>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   | C36u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>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   | C37u          | UEs supporting FDD and ((UE assisted Network<br>Assisted GPS and GANSS) or (UE based Network<br>Assisted GPS and GANSS)) with Modernized GPS<br>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   | C38u          | UEs supporting FDD and ((UE assisted Network<br>Assisted GPS and GANSS) or (UE based Network<br>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<br>Enough Satellites<br>Sub-test 1        | Rel-8   | C31u          | UEs supporting FDD and UE based Network<br>Assisted GANSS with GLONASS only  | 1 Execution: CS                          |
| 6.2.3.2_2s | MT-LR Position Estimate: UE-Based A-GNSS – Failure Not<br>Enough Satellites<br>Sub-test 2        | Rel-8   | C32u          | UEs supporting FDD and UE based Network<br>Assisted GANSS with Galileo only  | 1 Execution: CS                          |
| 6.2.3.2_3s | MT-LR Position Estimate: UE-Based A-GNSS – Failure Not<br>Enough Satellites<br>Sub-test 3        | Rel-8   | C33u          | UEs supporting FDD and UE based Network<br>Assisted GPS and GANSS with Modernized GPS<br>only  | 1 Execution: CS                          |
| 6.2.3.2_4s | MT-LR Position Estimate: UE-Based A-GNSS – Failure Not<br>Enough Satellites<br>Sub-test 4        | Rel-8   | C34u          | UEs supporting FDD and UE based Network<br>Assisted GPS and GANSS with GLONASS only  | 1 Execution: CS                          |
| 6.2.3.3    | Location Notification  | Rel-8   | C39u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) and MT-LR LCS location request<br>notification capability                             | 1 Execution: CS                          |
| 6.2.3.4    | Privacy Verification - Location Allowed if No Response   | Rel-8   | C39u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) and MT-LR LCS location request<br>notification capability                             | 1 Execution: CS                          |
| 6.2.3.5    | Privacy Verification - Location Not Allowed if No Response                                       | Rel-8   | C39u          | UEs supporting FDD and (UE assisted Network<br>Assisted GANSS or UE based Network Assisted<br>GANSS) and MT-LR LCS location request<br>notification capability                             | 1 Execution: CS                          |

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

| C01u 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   |
|---|
| C02u 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   |
| C03u 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   |
| C04u 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   |
| C05u 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   |
| C06u 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                           |
| C07u 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   |
| C08u 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   |
| C09u 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   |
| C10u 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   |
| C11u 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  |
| C12u 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  |
| C13u 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   |
| C14u 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  |
| C15u 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  |
| C16u 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  |
| C17u 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   |
| C18u 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  |
| C19u 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                                    |
| C20u 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                                    |
| C21u 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                                   |
| C22u 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  |
| C23u 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                                    |
| C24u 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                                    |
| C25u 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                                   |
| C26u 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  |
| C27u 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       |
| C28u 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       |
| C29u 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 |
| C30u 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                |
| C31u 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  |
| C32u 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  |
| C33u 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   |
| C34u 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  |
| C35u 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                     |
| C36u 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                     |
| C37u 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               |
| C38u 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                              |
| C39u 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 | n  |
|------------|--|---------|---------------|--|------------------------|--|
|            |  |         | Condition     | Comment  | Specific ICS           | Specific IXIT                                      |
| 7.1        | NAS Protocol Procedures                                    |         |               |  |                        |  |
| 7.1.1      | UE Network Capability                                      | Rel-9   | C11e          | All UEs supporting LPP                                   | pc_eFDD                |  |
|            |  |         |               |  | pc_eTDD                |  |
| 7.2        | LCS Procedures   |         |               |  | ·                      |  |
| 7.2.1.1    | Location Notification                                      | Rel-9   | C14e          | 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   | C14e          | All UEs supporting EPC-MT-                               | pc_eFDD                | px_UeLcsNotification:                              |
|            |  |         |               | LR Location Notification                                 | pc_eTDD                | value for UE LCS<br>Notification timeout<br>timer. |
| 7.2.1.3    | Privacy Verification – Location not Allowed if No Response | Rel-9   | C14e          | All UEs supporting EPC-MT-                               | pc_eFDD                | px_UeLcsNotification:                              |
|            |  |         |               | LR Location Notification                                 | pc_eTDD                | value for UE LCS<br>Notification timeout<br>timer. |
| 7.2.2.1_1s | Autonomous Self Location: UE-based: Subtest 1              | Rel-9   | C01e          | 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   | C02e          | All UEs supporting UE-Based                              | pc_eFDD                |  |
|            |  |         |               | GNSS with A-GLONASS only                                 | pc_eTDD                |  |
|            |  |         |               | and MO-LR request for                                    | F-2                    |  |
| 7004.0-    | Autonomore Collinaration IIE harant Collinari              | D-LO    | 000-          | assistance data  |                        |  |
| 7.2.2.1_3s | Autonomous Self Location: UE-based: Sub-test 3             | Rel-9   | C03e          | All UEs supporting UE-Based GNSS with A-Galileo only and | pc_eFDD                |  |
|            |  |         |               | MO-LR request for assistance                             | pc_eTDD                |  |
|            |  |         |               | data   |                        |  |
| 7.2.2.1_4s | Autonomous Self Location: UE-based: Subtest 4              | Rel-9   | C04e          | All UEs supporting UE-Based                              | pc_eFDD                |  |
|            |  |         |               | GNSS with A-GPS and A-                                   |                        |  |
|            |  |         |               | GLONASS only and MO-LR                                   | pc_eTDD                |  |
| 70001      | D : 0 1/1 :: 1/5 :: 1 0 1: 14                              | D 10    | 005           | request for assistance data                              |                        |  |
| 7.2.2.2_1s | Basic Self Location: UE-assisted: Subtest 1                | Rel-9   | C05e          | All UEs supporting UE-Assisted GNSS with A-              | pc_eFDD<br>pc_eTDD     |  |
|            |  |         |               | GPS only and MO-LR request                               | pc_e1DD                |  |
|            |  |         |               | for location estimate                                    |                        |  |
| 7.2.2.2_2s | Basic Self Location: UE-assisted: Subtest 2                | Rel-9   | C06e          | All UEs supporting                                       | pc_eFDD                |  |
| _          |  |         |               | UE-Assisted GNSS with A-                                 | pc_eTDD                |  |
|            |  |         |               | GLONASS only and MO-LR                                   |                        |  |
|            |  |         |               | request for location estimate                            |                        |  |
| 7.2.2.2_3s | Basic Self Location: UE-assisted: Subtest 3                | Rel-9   | C07e          | All UEs supporting                                       | pc_eFDD                |  |
|            |  |         |               | UE-Assisted GNSS with A-                                 | pc_eTDD                |  |
|            |  |         |               | Galileo only and MO-LR request for location estimate     |                        |  |
| 7.2.2.2_4s | Basic Self Location: UE-assisted: Subtest 4                | Rel-9   | C08e          | All UEs supporting                                       | pc_eFDD                |  |
| 1.2.2.2_43 | Dadio Joli Eddalion. DE addisted. Jubiest 4                | Kel-9   | 0006          | UE-Assisted GNSS with A-                                 | pc_erDD                | <del>- </del>                                      |
|            |  |         |               | GPS and A-GLONASS only                                   | Po_0100                |  |
|            |  |         |               | and MO-LR request for                                    |                        |  |
|            |  |         |               | location estimate  |                        |  |
| 7.2.2.2_5s | Basic Self Location: UE-assisted: Subtest 5                | Rel-9   | C09e          | All UEs supporting                                       | pc_eFDD                |  |

| Clause     | TC Title  | Release | Applicability |  | Additional Information |               |
|------------|---|---------|---------------|--|------------------------|---------------|
|            |   |         | Condition     | Comment  | Specific ICS           | Specific IXIT |
|            |   |         |               | UE-Assisted OTDOA and MO-LR request for location estimate                    | pc_eTDD                |               |
| 7.2.2.2_6s | Basic Self Location: UE-assisted: Subtest 6           | Rel-9   | C10e          | All UEs supporting UE-Assisted ECID and MO- LR request for location estimate | pc_eFDD<br>pc_eTDD     |               |
| 7.3        | LPP Procedures  |         |               |  |                        |               |
| 7.3.1.1    | Position Capability Transfer                          | Rel-9   | C11e          | All UEs supporting LPP   | pc_eFDD                |               |
|            |   |         |               |  | pc_eTDD                |               |
| 7.3.2.1    | LPP Duplicated Message                                | Rel-9   | C11e          | All UEs supporting LPP   | pc_eFDD                |               |
|            |   |         |               |  | pc_eTDD                |               |
| 7.3.2.2    | LPP Acknowledgment                                    | Rel-9   | C11e          | All UEs supporting LPP   | pc_eFDD                |               |
|            |   |         |               |  | pc_eTDD                |               |
| 7.3.2.3    | LPP Retransmission                                    | Rel-9   | C11e          | All UEs supporting LPP   | pc_eFDD                |               |
|            |   |         |               | <u> </u>   | pc_eTDD                |               |
| 7.3.3.1_1s | LPP Requested Method not Supported– UE-Assisted:      | Rel-9   | C15e          | All UEs supporting UE-   | pc_eFDD                |               |
|            | Subtest 1   |         |               | assisted GNSS with GPS,<br>either alone or with UE-<br>assisted OTDOA or UE- | pc_eTDD                |               |
|            |   |         |               | assisted OTDOA of OE-  |                        |               |
| 7.3.3.1_2s | LPP Requested Method not Supported – UE-Assisted:     | Rel-9   | C16e          | All UEs supporting UE-   | pc_eFDD                |               |
| 7.0.0.1_20 | Subtest 2   | 11010   | 0.00          | assisted GNSS with   | pc_eTDD                |               |
|            |   |         |               | GLONASS, either alone or   | 1                      |               |
|            |   |         |               | with UE-assisted OTDOA or UE-assisted ECID.                                  |                        |               |
| 7.3.3.1_3s | LPP Requested Method not Supported – UE-Assisted:     | Rel-9   | C17e          | All UEs supporting UE-   | pc_eFDD                |               |
|            | Subtest 3   |         |               | assisted GNSS with Galileo,  | pc_eTDD                |               |
|            |   |         |               | either alone or with UE-   |                        |               |
|            |   |         |               | assisted OTDOA or UE-<br>assisted ECID.                                      |                        |               |
| 7.3.3.1_4s | LPP Requested Method not Supported – UE-Assisted:     | Rel-9   | C18e          | All UEs supporting UE-   | pc_eFDD                |               |
|            | Subtest 4   |         |               | assisted GNSS with GPS and   | pc_eTDD                |               |
|            |   |         |               | GLONASS, either alone or with UE-assisted OTDOA or                           |                        |               |
|            |   |         |               | UE-assisted ECID.  |                        |               |
| 7.3.3.1_5s | LPP Requested Method not Supported – UE-Assisted:     | Rel-9   | C19e          | All UEs supporting UE-   | pc_eFDD                |               |
| 7.0.0.1_03 | Subtest 5   | 11013   | 0130          | assisted OTDOA, either alone   | pc_eTDD                |               |
|            |   |         |               | or with UE-assisted GNSS or UE-assisted ECID.                                | po_0188                |               |
| 7.3.3.1_6s | LPP Requested Method not Supported – UE-Assisted:     | Rel-9   | C20e          | All UEs supporting UE-   | pc_eFDD                |               |
|            | Subtest 6   |         |               | assisted ECID, either alone or with UE-assisted GNSS or UE-                  | pc_eTDD                |               |
|            |   |         |               | assisted OTDOA.  |                        |               |
| 7.3.3.1_7s | LPP Requested Method not Supported – UE-Assisted:     | Rel-9   | C21e          | All UEs supporting UE-   | pc_eFDD                |               |
|            | Subtest 7   |         |               | assisted GNSS and UE-  | pc_eTDD                |               |
|            |   |         |               | assisted OTDOA   |                        |               |
| 7.3.4.1_1s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C28e          | All UEs supporting UE-based  | pc_eFDD                |               |
|            | Location Information Transfer: UE-Based: Subtest 1    |         |               | GNSS with A-GPS only   | pc_eTDD                |               |
| 7.3.4.1_2s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C29e          | All UEs supporting UE-based  | pc_eFDD                |               |

| Clause     | TC Title  | Release | Applicability |   | Additional Information |               |
|------------|---|---------|---------------|---|------------------------|---------------|
|            |   |         | Condition     | Comment                                     | Specific ICS           | Specific IXIT |
|            | Location Information Transfer: UE-Based: Subtest 2    |         |               | GNSS with A-GLONASS only                    | pc_eTDD                |               |
| 7.3.4.1_3s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C30e          | All UEs supporting UE-based                 | pc_eFDD                |               |
|            | Location Information Transfer: UE-Based: Subtest 3    |         |               | GNSS with A-Galileo only                    | pc_eTDD                |               |
| 7.3.4.1_4s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C31e          | All UEs supporting UE-based                 | pc_eFDD                |               |
|            | Location Information Transfer: UE-Based: Subtest 4    |         |               | GNSS with A-GPS and A-<br>GLONASS only      | pc_eTDD                |               |
| 7.3.4.2_1s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C32e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | Location Information Transfer: UE-Assisted: Subtest 1 |         |               | assisted GNSS with A-GPS only               | pc_eTDD                |               |
| 7.3.4.2_2s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C33e          | All UEs supporting UE-                      | pc_eFDD                |               |
| _          | Location Information Transfer: UE-Assisted: Subtest 2 |         |               | assisted GNSS with A-<br>GLONASS only       | pc_eTDD                |               |
| 7.3.4.2_3s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C34e          | All UEs supporting UE-                      | pc_eFDD                |               |
| _          | Location Information Transfer: UE-Assisted: Subtest 3 |         |               | assisted GNSS with A-Galileo only           | pc_eTDD                |               |
| 7.3.4.2_4s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C35e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | 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   | C26e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | Location Information Transfer: UE-Assisted: Subtest 5 |         |               | Assisted OTDOA                              | pc_eTDD                |               |
| 7.3.4.2_6s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C27e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | Location Information Transfer: UE-Assisted: Subtest 6 |         | 02.0          | Assisted ECID                               | pc_eTDD                |               |
| 7.3.4.2_7s | E-SMLC Initiated Assistance Data Delivery followed by | Rel-9   | C21e          | All UEs supporting UE-                      | pc_eFDD                |               |
| 7.3.4.2_76 | Location Information Transfer: UE-Assisted: Subtest 7 | Kel-9   | 0216          | assisted GNSS and UE-<br>assisted OTDOA     | pc_eTDD                |               |
| 7.3.4.3_1s | E-SMLC Initiated Position Measurement without         | Rel-9   | C28e          | All UEs supporting UE-based                 | pc_eFDD                |               |
|            | assistance data: UE-Based: Subtest 1                  | 110.0   | 0200          | GNSS with A-GPS only                        | pc_eTDD                |               |
| 7.3.4.3_2s | E-SMLC Initiated Position Measurement without         | Rel-9   | C29e          | All UEs supporting UE-based                 | pc_eFDD                |               |
|            | assistance data: UE-Based: Subtest 2                  |         |               | GNSS with A-GLONASS only                    | pc_eTDD                |               |
| 7.3.4.3_3s | E-SMLC Initiated Position Measurement without         | Rel-9   | C30e          | All UEs supporting UE-based                 | pc_eFDD                |               |
| <u>-</u>   | assistance data: UE-Based: Subtest 3                  |         |               | GNSS with A-Galileo only                    | pc_eTDD                |               |
| 7.3.4.3_4s | E-SMLC Initiated Position Measurement without         | Rel-9   | C31e          | All UEs supporting UE-based                 | pc_eFDD                |               |
| _          | assistance data: UE-Based: Subtest 4                  |         |               | GNSS with A-GPS and A-<br>GLONASS only      | pc_eTDD                |               |
| 7.3.4.4_1s | E-SMLC Initiated Position Measurement without         | Rel-9   | C32e          | All UEs supporting UE-                      | pc_eFDD                |               |
| _          | assistance data: UE-Assisted: Subtest 1               |         |               | assisted GNSS with A-GPS only               | pc_eTDD                |               |
| 7.3.4.4_2s | E-SMLC Initiated Position Measurement without         | Rel-9   | C33e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | assistance data: UE-Assisted: Subtest 2               |         |               | assisted GNSS with A-<br>GLONASS only       | pc_eTDD                |               |
| 7.3.4.4_3s | E-SMLC Initiated Position Measurement without         | Rel-9   | C34e          | All UEs supporting UE-                      | pc_epc_eFDD            |               |
| _          | assistance data: UE-Assisted: Subtest 3               |         |               | assisted GNSS with A-Galileo only           | pc_eTDD                |               |
| 7.3.4.4_4s | E-SMLC Initiated Position Measurement without         | Rel-9   | C35e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | assistance data: UE-Assisted: Subtest 4               | 22      |               | assisted GNSS with A-GPS and A-GLONASS only | pc_eTDD                |               |
| 7.3.4.4_5s | E-SMLC Initiated Position Measurement without         | Rel-9   | C26e          | All UEs supporting UE-                      | pc_eFDD                |               |
|            | assistance data: UE-Assisted: Subtest 5               |         |               | Assisted OTDOA                              | pc_eTDD                |               |
| 7.3.4.4_7s | E-SMLC Initiated Position Measurement without         | Rel-9   | C21e          | All UEs supporting UE-                      | pc_eFDD                |               |

| Clause     | TC Title  | Release | Applicability |  | Additional Information |               |
|------------|---|---------|---------------|--|------------------------|---------------|
|            |   |         | Condition     | Comment  | Specific ICS           | Specific IXIT |
|            | assistance data: UE-Assisted: Subtest 7         |         |               | assisted GNSS and UE-<br>assisted OTDOA  | pc_eTDD                |               |
| 7.3.5.1_1s | E-SMLC initiated Abort: Subtest 1               | Rel-9   | C22e          | All UEs supporting UE-based or UE-assisted GNSS with A-GPS only  | pc_eFDD<br>pc_eTDD     |               |
| 7.3.5.1_2s | E-SMLC initiated Abort: Subtest 2               | Rel-9   | C23e          | All UEs supporting UE-based or UE-assisted GNSS with A-GLONASS only  | pc_eFDD<br>pc_eTDD     |               |
| 7.3.5.1_3s | E-SMLC initiated Abort: Subtest 3               | Rel-9   | C24e          | All UEs supporting UE-based or UE-assisted GNSS with A-Galileo only  | pc_eFDD<br>pc_eTDD     |               |
| 7.3.5.1_4s | E-SMLC initiated Abort: Subtest 4               | Rel-9   | C25e          | All UEs supporting UE-based or UE-assisted GNSS with A-GPS and A-GLONASS only  | pc_eFDD<br>pc_eTDD     |               |
| 7.3.5.1_5s | E-SMLC initiated Abort: Subtest 5               | Rel-9   | C26e          | All UEs supporting UE<br>Assisted OTDOA  | pc_eFDD<br>pc_eTDD     |               |
| 7.3.5.1_6s | E-SMLC initiated Abort: Subtest 6               | Rel-9   | C27e          | All UEs supporting UE<br>Assisted ECID   | pc_eFDD<br>pc_eTDD     |               |
| 7.4        | Circuit Switched (CS) Fallback                  |         |               |  | · <del>-</del>         |               |
| 7.4.1.1    | CS fallback: Network does not support EPC-MO-LR | Rel-9   | C12e          | All UEs supporting MO-LR procedure for location estimate in the CS fallback in EPS.  | pc_eFDD<br>pc_eTDD     |               |
| 7.4.1.2    | CS fallback: UE does not support EPC-MO-LR      | Rel-9   | C13e          | All UEs not supporting EPC-<br>MO-LR and supporting MO-LR<br>procedure for location estimate<br>in the CS fallback in EPS. | pc_eFDD<br>pc_eTDD     |               |

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

| C01e 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  C02e 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  C03e 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  C04e 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  C05e 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  C06e 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) THEN R ELSE N/A  C07e 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  C08e 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  C09e 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  |
|--|
| C03e 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  C04e 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  C05e 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  C06e 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  C07e 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  C08e IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-3/2 THEN R ELSE N/A  C09e 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   |
| C04e 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  C05e 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  C06e 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  C07e 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  C08e 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  C09e 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   |
| C05e 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  C06e 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  C07e 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  C08e 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  C09e 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   |
| C06e 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  C07e 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  C08e 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  C09e 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   |
| C07e 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  C08e 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  C09e 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   |
| C08e 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 C09e 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  |
| C09e 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   |
|  |
| C10e 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   |
| C11e IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/1 THEN R ELSE N/A   |
| C12e 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   |
| C13e 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   |
| C14e IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3/3 THEN R ELSE N/A   |
| C15e 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)) OR ((A.4.3.2/2 AND (A.4.3-2/6 OR A.4.3-2/8)) AND A.4.3-2/4) OR ((A.4.3.2/2 AND (A.4.3-2/6 OR A.4.3-2/8)) AND A.4.3-2/8)   |
| OR A.4.3-2/8)) AND A.4.3-2/5)] THEN R ELSE N/A   |
| C16e IF (A.4.1-1/1 OR A.4.1-1/2) AND [(A.4.3.2/2 AND A.4.3-2/7) OR (A.4.3.2/2 AND A.4.3-2/7 AND A.4.3-2/4) OR (A.4.3.2/2 AND A.4.3-2/7 AND A.4 |
| C17e IF (A.4.1-1/1 OR A.4.1-1/2) AND [(A.4.3.2/2 AND A.4.3-2/9) OR (A.4.3.2/2 AND A.4.3-2/9 AND A.4.3-2/4) OR (A.4.3.2/2 AND A.4.3-2/9 AND A.4 |
| C18e 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) OR ((A.4.3.2/2 AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/4) OF   |
| ((A.4.3.2/2 AND (A.4.3-2/6 OR A.4.3-2/8) AND A.4.3-2/7) AND A.4.3-2/5)] THEN R ELSE N/A  |
| C19e IF (A.4.1-1/1 OR A.4.1-1/2) AND [A.4.3-2/4 OR (A.4.3-2/4 AND A.4.3-2/2) OR (A.4.3-2/4 AND A.4.3-2/5)] THEN R ELSE N/A   |
| C20e IF (A.4.1-1/1 OR A.4.1-1/2) AND [A.4.3-2/5 OR (A.4.3-2/5 AND A.4.3-2/2) OR (A.4.3-2/5 AND A.4.3-2/4)] THEN R ELSE N/A   |
| C21e IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/2 AND A.4.3-2/4 THEN R ELSE N/A   |
| C22e 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  |
| C23e 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  |
| C24e 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  |
| C25e 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  |
| C26e IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/4   |
| C27e IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-2/5   |
| C28e 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   |
| C29e 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   |
| C30e 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   |
| C31e 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   |
| C32e 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   |
| C33e 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   |
| C34e 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   |
| C35e 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   |

# 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 name | User Equipment Under Test (UEUT) identification |
| Hardware co     | nfiguration:                                    |
| Software cor    | 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 |
| Telephone number:        |
| Facsimile number:        |

| nail address:         |  |
|-----------------------|--|
| ditional information: |  |
| ational 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    | UTRA FDD                 |      |         |          | Refer to 3GPP TS    |
|      |                          |      |         |          | 34.123-2 [12] Table |
|      |                          |      |         |          | A.1/1               |
| 4    | UTRA TDD 1.28 Mcps (LCR) | •    |         | •        | Refer to 3GPP TS    |
|      |                          |      |         |          | 34.123-2 [12] Table |
|      |                          |      |         |          | A.1/3               |

Table A.4.1-2: Teleservices

| Item | 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<br>Testing Functions | Ref.                                | Release | Mnemonic    | Comments |
|------|--|-------------------------------------|---------|-------------|----------|
| 1    | LTE Positioning Protocol (LPP)           | 36.355                              | Rel-9   | pc_LPP      |          |
| 2    | Support for OMA LPPe                     | OMA-TS-<br>LPPe-V1_0-<br>20110929-C | Rel-9   | pc_OMA_LPPe |          |

**Table A.4.2-2: Special Conformance Testing Functions** 

|   | Item | Special Conformance Testing Functions      | Ref.   | Release | Comments |
|---|------|--|--------|---------|----------|
| Ī | 1    | Reset of UE Positioning Stored Information | 36.509 | Rel-9   | E-UTRA   |
| Ī | 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        |               | IFramesSup                        |          |
| 3    | UE-based OTDOA is supporting by UE            | 25.306,    | R99           | pc_UE_PositioningBasedOTDOA_Su    |          |
|      |   | 4.8        |               | p                                 |          |
| 4    | Standalone location method is                 | 25.306,    | R99           | pc_UE_PositioningStandaloneLocMet |          |
|      | supporting by UE                              | 4.8        |               | hodsSup                           |          |
| 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, the | nen A.4.3- | ·1/5 or A.4.: | 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<br>NSS            | This implies support of LPP A.4.2-1/1 |
| 2    | Support of UE assisted Assisted-GNSS  | 36.355                        |        | pc_UEA_AG<br>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<br>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_<br>L1C_A          | This implies support of LPP A.4.2-1/1 |
| 7    | Support for A-GLONASS   | 36.355                        | Rel-9  | pc_A_GLON<br>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_<br>L1C_A_MG<br>PS | This implies support of LPP A.4.2-1/1 |
| 9    | Support for A-Galileo   | 36.355                        | Rel-9  | pc_A_Galile<br>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<br>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                        | Rel-9  | pc_GNSS_F<br>TA_UEA         | This implies support of LPP A.4.2-1/1 |
| 12   | Support of GNSS Acquisition Assistance  | 36.355,<br>37.571-2,<br>5.4.1 | Rel-9  | pc_GNSS_A<br>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_<br>CA             | This implies support of LPP A.4.2-1/1 |

**Table A.4.3-3: Supplementary Services** 

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

**Table A.4.3-4: E-CID Measurements** 

| Item | UE Positioning Capabilities           | Ref.                         | Releas | Mnemonic        | Comments |
|------|---------------------------------------|------------------------------|--------|-----------------|----------|
|      |                                       |                              | е      |                 |          |
| 1    | RSRP Supported                        | 36.355, subclause<br>6.5.3.4 | Rel-9  | pc_ECID_Rsrp    | E-UTRA   |
| 2    | RSRQ Supported                        | 36.355, subclause 6.5.3.4    | Rel-9  | pc_ECID_Rsrq    | E-UTRA   |
| 3    | UE Rx-Tx Time Difference<br>Supported | 36.355, subclause 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

| Item | <b>ADR and Velocity Measurements</b> | 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 (Common Assistance Data) | 36.355, 6.5.2.9 | Rel-9   | · · – · · · – · · · · · · · · · · · · | E-UTRA     |
| 2    | Gnss-  | 36.355, 6.5.2.9 | Rel-9   | up                                    | E-UTRA     |
| _    | ReferenceLocationSupport                           | 00.000, 0.0.2.0 | 11010   | pc_GNSS_RefLocSu                      | 2 3 11 0 1 |
|      | (Common Assistance Data)                           |                 |         | p                                     |            |
| 3    | Gnss-IonosphericModelSupport                       | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_lonoModS                      | E-UTRA     |
|      | (Common Assistance Data)                           |                 |         | up                                    |            |
| 4    | Gnss-  | 36.355, 6.5.2.9 | Rel-9   |                                       | E-UTRA     |
|      | EarthOrientationParametersSup                      |                 |         | 01100 5000                            |            |
|      | port (Common Assistance Data)                      | 00.055.05.00    | Dalo    | pc_GNSS_EOPSup                        | E LITOA    |
| 5    | Gnss-TimeModelsSupport for                         | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_TimeMod                       | E-UTRA     |
| 6    | gps Gnss-TimeModelsSupport for                     | 36.355, 6.5.2.9 | Rel-9   | Sup_Gps<br>pc_GNSS_TimeMod            | E-UTRA     |
| 0    | sbas   | 30.333, 0.3.2.9 | 1101-3  | Sup_Sbas                              | L-OTIVA    |
| 7    | Gnss-TimeModelsSupport for                         | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_TimeMod                       | E-UTRA     |
| -    | qzss   |                 |         | Sup_Qzss                              |            |
| 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     |
| 1.5  | glonass  | 00.055.05.5     | D : -   | Sup_Glonass                           | E LITEA    |
| 10   | Gnss-  | 36.355, 6.5.2.9 | Rel-9   | TO CNICO DONOC                        | E-UTRA     |
|      | DifferentialCorrectionsSupport for gps             |                 |         | pc_GNSS_DGNSS_<br>Sup_Gps             |            |
| 11   | Gnss-  | 36.355, 6.5.2.9 | Rel-9   | Sup_Gps                               | E-UTRA     |
|      | DifferentialCorrectionsSupport                     | 00.000, 0.0.2.0 | 11010   | pc_GNSS_DGNSS_                        | 201101     |
|      | for sbas   |                 |         | Sup_Sbas                              |            |
| 12   | Gnss-  | 36.355, 6.5.2.9 | Rel-9   | 1 -                                   | E-UTRA     |
|      | DifferentialCorrectionsSupport                     |                 |         | pc_GNSS_DGNSS_                        |            |
|      | for qzss   |                 |         | Sup_Qzss                              |            |
| 13   | Gnss-  | 36.355, 6.5.2.9 | Rel-9   | 01100 001100                          | E-UTRA     |
|      | DifferentialCorrectionsSupport                     |                 |         | pc_GNSS_DGNSS_                        |            |
| 14   | for galileo<br>Gnss-                               | 36.355, 6.5.2.9 | Rel-9   | Sup_Galileo                           | E-UTRA     |
| ' '  | DifferentialCorrectionsSupport                     | 00.000, 0.0.2.0 | 11010   | pc_GNSS_DGNSS_                        | 201101     |
|      | for glonass  |                 |         | Sup_Glonass                           |            |
| 15   | Gnss-NavigationModelSupport                        | 36.355, 6.5.2.9 | Rel-9   |                                       | E-UTRA     |
|      | for gps  |                 |         | up_Gps                                |            |
| 16   | Gnss-NavigationModelSupport                        | 36.355, 6.5.2.9 | Rel-9   | • – –                                 | E-UTRA     |
| 4=   | for sbas   | 00.055.05.00    | D 1 2   | up_Sbas                               | E LITDA    |
| 17   | Gnss-NavigationModelSupport                        | 36.355, 6.5.2.9 | Rel-9   | 1                                     | E-UTRA     |
| 18   | for qzss Gnss-NavigationModelSupport               | 36.355, 6.5.2.9 | Rel-9   | up_Qzss<br>pc_GNSS_NavModS            | E-UTRA     |
| 10   | for galileo  | 00.000, 0.0.2.0 | 1.01.0  | up_Galileo                            |            |
| 19   | Gnss-NavigationModelSupport                        | 36.355, 6.5.2.9 | Rel-9   |                                       | E-UTRA     |
|      | for glonass  | , -             |         | up_Glonass                            |            |
| 20   | Gnss-RealTimeIntegritySupport                      | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_RTISup_G                      | E-UTRA     |
|      | for gps  |                 |         | ps                                    |            |
| 21   | Gnss-RealTimeIntegritySupport                      | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_RTISup_S                      | E-UTRA     |
| 22   | for sbas   | 26.255.65.20    | Dalo    | bas                                   | E LITDA    |
| 22   | Gnss-RealTimeIntegritySupport                      | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_RTISup_Q                      | E-UIKA     |
| 23   | for qzss Gnss-RealTimeIntegritySupport             | 36.355, 6.5.2.9 | Rel-9   | zss<br>pc_GNSS_RTISup_G               | F-UTRA     |
| 23   | for galileo  | 00.000, 0.0.2.0 | TOI-9   | alileo                                | 2 31100    |
| 24   | Gnss-RealTimeIntegritySupport                      | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_RTISup_G                      | E-UTRA     |
| L    | for glonass  | ·               |         | lonass                                |            |
| 25   | Gnss-DataBitAssistanceSupport                      | 36.355, 6.5.2.9 | Rel-9   | pc_GNSS_DataBitsS                     | E-UTRA     |
|      | for gps  |                 |         | up_Gps                                |            |

| 26 | Gnss-DataBitAssistanceSupport for sbas               | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_DataBitsS<br>up_Sbas      | E-UTRA |
|----|--|-----------------|-------|-----------------------------------|--------|
| 27 | Gnss-DataBitAssistanceSupport for qzss               | 36.355, 6.5.2.9 | Rel-9 |                                   | E-UTRA |
| 28 | Gnss-DataBitAssistanceSupport for galileo            | 36.355, 6.5.2.9 | Rel-9 |                                   | E-UTRA |
| 29 |  | 36.355, 6.5.2.9 | Rel-9 |                                   | E-UTRA |
| 30 | Gnss-<br>AcquisitionAssistanceSupport                | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AcquAssis                 | E-UTRA |
| 31 | for gps  | 36.355, 6.5.2.9 | Rel-9 | tSup_Gps                          | E-UTRA |
| 31 | Gnss-<br>AcquisitionAssistanceSupport<br>for sbas    | 36.333, 6.3.2.9 | Kei-9 | pc_GNSS_AcquAssis<br>tSup_Sbas    | E-UTRA |
| 32 | Gnss-<br>AcquisitionAssistanceSupport                | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AcquAssis                 | E-UTRA |
| 22 | for qzss   | 20.255.05.20    | Dalo  | tSup_Qzss                         | E-UTRA |
| 33 | Gnss-<br>AcquisitionAssistanceSupport<br>for galileo | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AcquAssis<br>tSup_Galileo | E-UTRA |
| 34 | Gnss-  | 36.355, 6.5.2.9 | Rel-9 | ·                                 | E-UTRA |
|    | AcquisitionAssistanceSupport for glonass             |                 |       | pc_GNSS_AcquAssis<br>tSup_Glonass |        |
| 35 | Gnss-AlmanacSupport for gps                          | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AlmanacS<br>up_Gps        | E-UTRA |
| 36 | Gnss-AlmanacSupport for sbas                         | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AlmanacS<br>up_Sbas       | E-UTRA |
| 37 | Gnss-AlmanacSupport for qzss                         | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AlmanacS<br>up_Qzss       |        |
| 38 | Gnss-AlmanacSupport for galileo                      | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AlmanacS<br>up_Galileo    |        |
| 39 | Gnss-AlmanacSupport for glonass                      | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AlmanacS<br>up_Glonass    | E-UTRA |
| 40 | Gnss-UTC-ModelSupport for gps                        | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_UTCModS<br>up_Gps         | E-UTRA |
| 41 | Gnss-UTC-ModelSupport for sbas                       | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_UTCModS<br>up_Sbas        |        |
| 42 | Gnss-UTC-ModelSupport for qzss                       | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_UTCModS<br>up_Qzss        | E-UTRA |
| 43 | Gnss-UTC-ModelSupport for galileo                    | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_UTCModS<br>up_Galileo     |        |
| 44 | Gnss-UTC-ModelSupport for glonass                    | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_UTCModS<br>up_Glonass     |        |
| 45 | Gnss-<br>AuxiliaryInformationSupport for<br>gps      | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AuxInfoSu<br>p_Gps        | E-UTRA |
| 46 | Gnss-<br>AuxiliaryInformationSupport for<br>sbas     | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AuxInfoSu<br>p_Sbas       | E-UTRA |
| 47 | Gnss-<br>AuxiliaryInformationSupport for<br>qzss     | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AuxInfoSu<br>p_Qzss       | E-UTRA |
| 48 | Gnss-<br>AuxiliaryInformationSupport for<br>galileo  | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AuxInfoSu<br>p_Galileo    | E-UTRA |
| 49 | Gnss-<br>AuxiliaryInformationSupport for glonass     | 36.355, 6.5.2.9 | Rel-9 | pc_GNSS_AuxInfoSu<br>p_Glonass    | E-UTRA |

**Table A.4.3-8: Location Coordinate Types** 

34

| 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   | pc_GNSS_EllipPoint | 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               |          |
| 4    | Horizontal With Vertical Velocity | 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** 

| Item | Additional information | Ref. | Release | Mnemonic | Comments |
|------|------------------------|------|---------|----------|----------|
| 1    |                        |      |         |          |          |
| 2    |                        |      |         |          |          |
| 3    |                        |      |         |          |          |

# 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 applicability                                   | 0.1.0  |        |  |  |  |
|          |         | R5-113139 | -    | -   | Addition of UE Network Capability test case   |        |        |  |  |  |
|          |         | R5-113773 | -    | -   | Addition of Notification test cases   |        |        |  |  |  |
|          |         | R5-113148 | -    | -   | Addition of Position Capability Transfer test case  |        | 1.0.0  |  |  |  |
|          |         |           |      |     | 37.571-3  |        |        |  |  |  |
| 2011-11  | RAN5#53 | R5-115253 | -    | -   | Creation of 37.571-3 based on 36.571-3 v1.0.0, 34.123-2 v9.6.0, 34.171 v9.3.0 and 34.172 va.1.0   | -      | 1.0.0  |  |  |  |
| =        | -       | R5-115254 | -    | -   | Corrections to the 37.571-3 baseline text   | -      | -      |  |  |  |
| -        | -       | R5-115255 | -    | -   | Addition of missing test case applicability to the 37.571-3 baseline text                         | -      | -      |  |  |  |
| -        | -       | R5-115256 | -    | -   | Applicable Release for UMTS A-GNSS Test Cases in 37.571-3 baseline text                           | -      | 2.0.0  |  |  |  |
| 2011-12  | RAN#54  | -         | -    | -   | Moved to Rel-9 with editorial changes only.   | 2.0.0  | 9.0.0  |  |  |  |
| 2012-03  | RAN#55  | R5-120365 | 0001 | -   | Addition of missing test case applicability for test cases 7.3.4.1, 7.3.4.2, 7.3.4.3, and 7.3.4.4 | 9.0.0  | 9.1.0  |  |  |  |
| 2012-03  | RAN#55  | R5-120529 | 0002 | -   | Remove redundant mnemonics  | 9.0.0  | 9.1.0  |  |  |  |
| 2012-06  | RAN#56  | -         | -    | -   | Upgraded to v10.0.0 with no change.   | 9.1.0  | 10.0.0 |  |  |  |
| 2012-09  | RAN#57  | R5-123689 | 0003 | -   | Correction of sub-test names and PICS names   | 10.0.0 | 10.1.0 |  |  |  |
| 2012-09  | RAN#57  | -         | -    | -   | Addition of missing sub test cases name change of R5-123689                                       | 10.1.0 | 10.1.1 |  |  |  |
| 2012-12  | RAN#58  | R5-125119 | 0004 | -   | Add new PICS and post-fix for conditions  | 10.1.1 | 10.2.0 |  |  |  |
| 2012-12  | RAN#58  | R5-124121 | 0006 | -   | Applicabilities for new test cases 10.1 - 10.4 for RSTD for Carrier Aggregation                   | 10.1.1 | 10.2.0 |  |  |  |
| 2013-03  | RAN#58  | -         | -    | -   | fix of history table  | 10.2.0 | 10.2.1 |  |  |  |

# History

| Document history |              |             |
|------------------|--------------|-------------|
| V10.0.0          | July 2012    | Publication |
| V10.1.1          | October 2012 | Publication |
| V10.2.1          | April 2013   | Publication |
|                  |              |             |
|                  |              |             |