

ETSI TS 131 124 V15.3.0 (2019-05)



**Universal Mobile Telecommunications System (UMTS);
LTE;
Mobile Equipment (ME) conformance test specification;
Universal Subscriber Identity Module
Application Toolkit (USAT) conformance test specification
(3GPP TS 31.124 version 15.3.0 Release 15)**

4e4f-b06f-a73c735121b0-6be0-
https://standards.etsi.org/standards/sist/3gpp/31-series/31.124/v15.3.0/2019-05



Reference

RTS/TSGC-0631124vf30

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

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

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

Users of the present document should be aware that the document may be subject to revision or change of status.
 Information on the current status of this and other ETSI documents is available at

<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

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

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.
 The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2019.
 All rights reserved.

DECT™, PLUGTESTS™, UMTS™ and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.
3GPP™ and **LTE™** are trademarks of ETSI registered for the benefit of its Members and
 of the 3GPP Organizational Partners.

oneM2M™ logo is a trademark of ETSI registered for the benefit of its Members and
 of the oneM2M Partners.

GSM® and the GSM logo are trademarks registered and owned by the GSM Association.

Intellectual Property Rights

Essential patents

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

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

Trademarks

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

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
<http://webapp.etsi.org/key/queryform.asp>.

Modal verbs terminology

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

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

Contents

Intellectual Property Rights	2
Foreword.....	2
Modal verbs terminology	2
Foreword.....	10
1 Scope	11
2 References	12
3 Definitions and abbreviations.....	14
3.1 Mobile station definition and configurations	14
3.2 Applicability	14
3.2.1 Applicability of the present document	14
3.2.2 Applicability of the individual tests	14
3.2.3 Applicability to terminal equipment.....	14
3.2.4 Definitions.....	14
3.2.4.1 Format of the table of optional features.....	14
3.2.4.2 Format of the applicability table.....	15
3.2.4.3 Status and notations	15
3.3 Table of optional features	16
3.4 Applicability table	26
3.5 Conventions for mathematical notations.....	146
3.5.1 Mathematical signs.....	146
4 Test equipment	146
5 Testing methodology in general	146
5.1 Testing of optional functions and procedures	146
5.2 Test interfaces and facilities.....	146
5.3 Information to be provided by the apparatus supplier.....	146
6 Implicit testing	147
7 Measurement uncertainty	147
8 Format of tests.....	147
9 Generic call set up procedures.....	150
10 - 26 Not used	150
27 Testing of the UICC/ME interface	150
27.0 Introduction.....	150
27.1 - 27.21 Void.....	150
27.22 USIM Application Toolkit.....	150
27.22.1A General Test purpose.....	150
27.22.2A Definition of default values for USIM Application Toolkit testing	151
27.22.2B Definition of default values for LTE related USIM Application Toolkit testing	155
27.22.2B.1 Definition of E-UTRAN/EPC UICC	155
27.22.2B.2 Definition of E-UTRAN parameters	156
27.22.2C Definition of E-UTRAN/EPC ISIM-UICC	157
27.22.2C.1 Applications on the E-UTRAN/EPC ISIM-UICC	157
27.22.2C.2 Default USIM values of E-UTRAN/EPC ISIM-UICC	157
27.22.2C.3 Default ISIM values of E-UTRAN/EPC ISIM-UICC	157
27.22.2C.3.1 EF _{AD} (Administrative Data).....	157
27.22.2C.3.2 EF _{IST} (ISIM Service Table)	157
27.22.2C.3.3 EF _{IMPI} (IMS private user identity)	157
27.22.2C.3.4 EF _{DOMAIN} (Home Network Domain Name)	158
27.22.2C.3.5 EF _{IMPU} (IMS public user identity)	158
27.22.2C.3.6 EF _{P-CSCF} (P-CSCF ADDRESS).....	159
27.22.2C.3.7 EF _{SMS} (Short Message Service).....	159

27.22.2C.3.8	EF _{SMSR} (Short message status reports).....	159
27.22.2C.3.9	EF _{SMSP} (Short message service parameters)	159
27.22.2C.3.10	EF _{SMSS} (SMS Status)	160
27.22.2C.4	Default values at DF_TELECOM	160
27.22.2C.4.1	EF _{PSIMSC} (Public Service Identity of the SM-SC).....	160
27.22.1	Initialization of USIM Application Toolkit Enabled UICC by USIM Application Toolkit Enabled ME (Profile Download).....	160
27.22.1.1	Definition and applicability	160
27.22.1.2	Conformance requirement	160
27.22.1.3	Test purpose.....	160
27.22.1.4	Method of test.....	161
27.22.1.4.1	Initial conditions	161
27.22.1.4.2	Procedure	161
27.22.1.5	Test requirement	161
27.22.2	Contents of the TERMINAL PROFILE command	161
27.22.2.1	Definition and applicability	161
27.22.2.2	Conformance requirement	161
27.22.2.3	Test purpose.....	161
27.22.2.4	Method of test.....	162
27.22.2.4.1	Initial conditions	162
27.22.2.4.2	Procedure	162
27.22.2.5	Test requirement	162
27.22.3	Servicing of proactive UICC commands.....	162
27.22.3.1	Definition and applicability	162
27.22.3.2	Conformance requirement	162
27.22.3.3	Test purpose.....	162
27.22.3.4	Method of test.....	162
27.22.3.4.1	Initial conditions	162
27.22.3.4.2	Procedure	163
27.22.3.5	Test requirement	163
27.22.4	Proactive UICC commands	163
27.22.4.1	DISPLAY TEXT	163
27.22.4.1.1	DISPLAY TEXT (Normal).....	163
27.22.4.1.2	DISPLAY TEXT (Support of "No response from user").....	164
27.22.4.1.3	DISPLAY TEXT (Display of extension text)	165
27.22.4.1.4	DISPLAY TEXT (Sustained text)	165
27.22.4.1.5	DISPLAY TEXT (Display of icons).....	167
27.22.4.1.6	DISPLAY TEXT (UCS2 display in Cyrillic)	168
27.22.4.1.7	DISPLAY TEXT (Variable Time out).....	169
27.22.4.1.8	DISPLAY TEXT (Support of Text Attribute)	169
27.22.4.1.9	DISPLAY TEXT (UCS2 display in Chinese).....	176
27.22.4.1.10	DISPLAY TEXT (UCS2 display in Katakana).....	177
27.22.4.2	GET INKEY	177
27.22.4.2.1	GET INKEY(normal)	177
27.22.4.2.2	GET INKEY (No response from User).....	178
27.22.4.2.3	GET INKEY (UCS2 display in Cyrillic)	179
27.22.4.2.4	GET INKEY (UCS2 entry in Cyrillic).....	179
27.22.4.2.5	GET INKEY ("Yes/No" Response)	180
27.22.4.2.6	GET INKEY (display of Icon).....	181
27.22.4.2.7	GET INKEY (Help Information)	182
27.22.4.2.8	GET INKEY (Variable Time out).....	182
27.22.4.2.9	GET INKEY (Support of Text Attribute)	183
27.22.4.2.10	GET INKEY (UCS2 display in Chinese).....	189
27.22.4.2.11	GET INKEY (UCS2 entry in Chinese).....	189
27.22.4.2.12	GET INKEY (UCS2 display in Katakana)	190
27.22.4.2.13	GET INKEY (UCS2 entry in Katakana).....	191
27.22.4.3	GET INPUT	191
27.22.4.3.1	GET INPUT (normal)	191
27.22.4.3.2	GET INPUT (No response from User)	193
27.22.4.3.3	GET INPUT (UCS2 display in Cyrillic)	193
27.22.4.3.4	GET INPUT (UCS2 entry in Cyrillic)	194
27.22.4.3.5	GET INPUT (default text)	195

27.22.4.3.6	GET INPUT (display of Icon)	195
27.22.4.3.7	GET INPUT (Help Information).....	196
27.22.4.3.8	GET INPUT (Support of Text Attribute).....	197
27.22.4.3.9	GET INPUT (UCS2 display in Chinese)	203
27.22.4.3.10	GET INPUT (UCS2 entry in Chinese).....	204
27.22.4.3.11	GET INPUT (UCS2 display in Katakana)	204
27.22.4.3.12	GET INPUT (UCS2 entry in Katakana)	205
27.22.4.4	MORE TIME.....	206
27.22.4.4.2	Conformance requirement.....	206
27.22.4.4.3	Test purpose.....	206
27.22.4.4.4	Method of test	206
27.22.4.4.5	Test requirement	206
27.22.4.5	PLAY TONE	206
27.22.4.5.1	PLAY TONE (Normal).....	206
27.22.4.5.2	PLAY TONE (UCS2 display in Cyrillic)	212
27.22.4.5.3	PLAY TONE (display of Icon)	213
27.22.4.5.4	PLAY TONE (Support of Text Attribute)	214
27.22.4.5.5	PLAY TONE (UCS2 display in Chinese)	220
27.22.4.5.6	PLAY TONE (UCS2 display in Katakana)	221
27.22.4.6	POLL INTERVAL	222
27.22.4.6.1	Definition and applicability	222
27.22.4.6.2	Conformance requirement.....	222
27.22.4.6.3	Test purpose	222
27.22.4.6.4	Method of test	222
27.22.4.7	REFRESH	222
27.22.4.7.1	REFRESH (normal)	222
27.22.4.7.2	REFRESH (IMSI changing procedure)	232
27.22.4.7.3	REFRESH (Steering of roaming)	244
27.22.4.7.4	REFRESH (AID)	262
27.22.4.7.5	REFRESH (IMSI changing procedure, E-UTRAN)	265
27.22.4.8	SET UP MENU and ENVELOPE MENU SELECTION.....	270
27.22.4.8.1	SET UP MENU (normal) and ENVELOPE MENU SELECTION	270
27.22.4.8.2	SET UP MENU (help request support) and ENVELOPE MENU SELECTION	271
27.22.4.8.3	SET UP MENU (next action support) and ENVELOPE MENU SELECTION	272
27.22.4.8.4	SET UP MENU (display of icons) and ENVELOPE MENU SELECTION	273
27.22.4.8.5	SET UP MENU (soft keys support) and ENVELOPE MENU SELECTION	273
27.22.4.8.6	SET UP MENU (support of Text Attribute) and ENVELOPE MENU SELECTION	274
27.22.4.8.7	SET UP MENU (UCS2 display in Cyrillic) and ENVELOPE MENU SELECTION	281
27.22.4.8.8	SET UP MENU (UCS2 display in Chinese) and ENVELOPE MENU SELECTION	282
27.22.4.8.9	SET UP MENU (UCS2 display in Katakana) and ENVELOPE MENU SELECTION	283
27.22.4.9	SELECT ITEM.....	284
27.22.4.9.1	SELECT ITEM (mandatory features for ME supporting SELECT ITEM)	284
27.22.4.9.2	SELECT ITEM (next action support)	285
27.22.4.9.3	SELECT ITEM (default item support)	285
27.22.4.9.4	SELECT ITEM (help request support)	286
27.22.4.9.5	SELECT ITEM (icons support)	286
27.22.4.9.6	SELECT ITEM (presentation style).....	287
27.22.4.9.7	SELECT ITEM (soft keys support)	288
27.22.4.9.8	SELECT ITEM (Support of "No response from user")	288
27.22.4.9.9	SELECT ITEM (Support of Text Attribute)	289
27.22.4.9.10	SELECT ITEM (UCS2 display in Cyrillic)	294
27.22.4.9.11	SELECT ITEM (UCS2 display in Chinese)	295
27.22.4.9.12	SELECT ITEM (UCS2 display in Katakana)	296
27.22.4.10	SEND SHORT MESSAGE	297
27.22.4.10.1	SEND SHORT MESSAGE (normal).....	297
27.22.4.10.2	SEND SHORT MESSAGE (UCS2 display in Cyrillic)	298
27.22.4.10.3	SEND SHORT MESSAGE (icon support)	304
27.22.4.10.4	SEND SHORT MESSAGE (Support of Text Attribute)	309
27.22.4.10.5	SEND SHORT MESSAGE (UCS2 display in Chinese).....	347
27.22.4.10.6	SEND SHORT MESSAGE (UCS2 display in Katakana).....	352
27.22.4.10.7	SEND SHORT MESSAGE (IMS).....	357
27.22.4.10.8	SEND SHORT MESSAGE (over SGs in E-UTRAN).....	369

27.22.4.11	SEND SS	370
27.22.4.11.1	SEND SS (normal).....	370
27.22.4.11.2	SEND SS (Icon support).....	382
27.22.4.11.3	SEND SS (UCS2 display in Cyrillic).....	388
27.22.4.11.4	SEND SS (support of Text Attribute).....	389
27.22.4.11.5	SEND SS (UCS2 display in Chinese).....	424
27.22.4.11.6	SEND SS (UCS2 display in Katakana).....	426
27.22.4.12	SEND USSD	428
27.22.4.12.1	SEND USSD (normal).....	428
27.22.4.12.2	SEND USSD (Icon support)	438
27.22.4.12.3	SEND USSD (UCS2 display in Cyrillic).....	444
27.22.4.12.4	SEND USSD (support of Text Attribute)	446
27.22.4.12.5	SEND USSD (UCS2 display in Chinese)	480
27.22.4.12.6	SEND USSD (UCS2 display in Katakana)	482
27.22.4.13	SET UP CALL	484
27.22.4.13.1	SET UP CALL (normal).....	484
27.22.4.13.2	SET UP CALL (second alpha identifier)	497
27.22.4.13.3	SET UP CALL (display of icons)	499
27.22.4.13.4	SET UP CALL (support of Text Attribute)	508
27.22.4.13.5	SET UP CALL (UCS2 Display in <i>Cyrillic</i>)	550
27.22.4.13.6	SET UP CALL (UCS2 Display in Chinese)	552
27.22.4.13.7	SET UP CALL (UCS2 Display in Katakana)	555
27.22.4.14	POLLING OFF.....	558
27.22.4.14.1	Definition and applicability	558
27.22.4.14.2	Conformance requirement.....	558
27.22.4.14.3	Test purpose.....	558
27.22.4.14.4	Method of test	558
27.22.4.14.5	Test requirement	561
27.22.4.15	PROVIDE LOCAL INFORMATION.....	561
27.22.4.15.1	Definition and applicability	561
27.22.4.15.2	Conformance requirement.....	561
27.22.4.15.3	Test purpose	561
27.22.4.15.4	Method of tests.....	562
27.22.4.15.5	Test requirement	580
27.22.4.16	SET UP EVENT LIST	580
27.22.4.16.1	SET UP EVENT LIST (normal).....	580
27.22.4.17	PERFORM CARD APDU.....	589
27.22.4.17.1	PERFORM CARD APDU(normal)	589
27.22.4.17.2	PERFORM CARD APDU (detachable card reader).....	590
27.22.4.18	POWER OFF CARD.....	591
27.22.4.18.1	POWER OFF CARD (normal)	591
27.22.4.18.2	POWER OFF CARD (detachable card reader).....	592
27.22.4.19	POWER ON CARD	592
27.22.4.19.1	POWER ON CARD (normal)	592
27.22.4.19.2	POWER ON CARD (detachable card reader)	593
27.22.4.20	GET READER STATUS	594
27.22.4.20.1	GET READER STATUS (normal)	594
27.22.4.20.2	GET CARD READER STATUS (detachable card reader)	595
27.22.4.21	TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION.....	595
27.22.4.21.1	TIMER MANAGEMENT (normal)	595
27.22.4.21.2	ENVELOPE TIMER EXPIRATION (normal)	596
27.22.4.22	SET UP IDLE MODE TEXT	597
27.22.4.22.1	SET UP IDLE MODE TEXT (normal)	597
27.22.4.22.2	SET UP IDLE MODE TEXT (Icon support).....	602
27.22.4.22.3	SET UP IDLE MODE TEXT (UCS2 support)	603
27.22.4.22.4	SET UP IDLE MODE TEXT (support of Text Attribute)	604
27.22.4.22.5	SET UP IDLE MODE TEXT (UCS2 display in Chinese)	610
27.22.4.22.6	SET UP IDLE MODE TEXT (UCS2 display in Katakana)	610
27.22.4.23	RUN AT COMMAND	611
27.22.4.23.1	RUN AT COMMAND (normal).....	611
27.22.4.23.2	RUN AT COMMAND (Icon support).....	613
27.22.4.23.3	RUN AT COMMAND (support of Text Attribute)	620

27.22.4.23.4	RUN AT COMMAND (UCS2 display in Cyrillic)	651
27.22.4.23.5	RUN AT COMMAND (UCS2 display in Chinese).....	651
27.22.4.23.6	RUN AT COMMAND (UCS2 display in Katakana).....	652
27.22.4.24	SEND DTMF.....	653
27.22.4.24.1	SEND DTMF (Normal)	653
27.22.4.24.2	SEND DTMF (Display of icons)	658
27.22.4.24.3	SEND DTMF (UCS2 display in Cyrillic)	663
27.22.4.24.4	SEND DTMF (support of Text Attribute)	665
27.22.4.24.5	SEND DTMF (UCS2 Display in Chinese)	706
27.22.4.24.6	SEND DTMF (UCS2 Display in Katakana)	707
27.22.4.25	LANGUAGE NOTIFICATION	709
27.22.4.25.1	Definition and applicability	709
27.22.4.25.2	Conformance Requirement	709
27.22.4.25.3	Test purpose	709
27.22.4.25.4	Method of Test.....	709
27.22.4.25.5	Test requirement	709
27.22.4.26	LAUNCH BROWSER	709
27.22.4.26.1	LAUNCH BROWSER (No session already launched).....	709
27.22.4.26.2	LAUNCH BROWSER (Interaction with current session)	716
27.22.4.26.3	LAUNCH BROWSER (UCS2 display in Cyrillic).....	720
27.22.4.26.4	LAUNCH BROWSER (icons support).....	723
27.22.4.26.5	LAUNCH BROWSER (support of Text Attribute)	728
27.22.4.26.6	LAUNCH BROWSER (UCS2 Display in Chinese)	770
27.22.4.26.7	LAUNCH BROWSER (UCS2 Display in Katakana)	772
27.22.4.27	OPEN CHANNEL.....	774
27.22.4.27.1	Void	774
27.22.4.27.2	Open Channel (related to GPRS)	774
27.22.4.27.3	Open Channel (default bearer)	791
27.22.4.27.3.1	Open Channel (default bearer, E-UTRAN).....	791
27.22.4.27.3.2	Open Channel (Default bearer, GERAN/UTRAN).....	791
27.22.4.27.4	Open Channel (Local Bearer)	794
27.22.4.27.5	Open Channel (GPRS, support of Text Attribute)	794
27.22.4.27.6	Open Channel (related to E-UTRAN).....	854
27.22.4.27.7	Open Channel (UICC Access to IMS)	870
27.22.4.28	CLOSE CHANNEL	876
27.22.4.28.1	CLOSE CHANNEL(normal)	876
27.22.4.28.2	CLOSE CHANNEL (support of Text Attribute)	882
27.22.4.28.3	CLOSE CHANNEL(E-UTRAN/EPC)	925
27.22.4.29	RECEIVE DATA	929
27.22.4.29.1	RECEIVE DATA (NORMAL).....	929
27.22.4.29.1.5	Test requirement	948
27.22.4.29.2	RECEIVE DATA (support of Text Attribute)	948
27.22.4.30	SEND DATA.....	986
27.22.4.30.1	SEND DATA (normal)	986
27.22.4.30.2	SEND DATA (support of Text Attribute)	1001
27.22.4.30.3	SEND DATA (E-UTRAN).....	1029
27.22.4.31	GET CHANNEL STATUS	1039
27.22.4.31.1	Definition and applicability	1039
27.22.4.31.2	Conformance requirements	1039
27.22.4.31.3	Test purpose	1039
27.22.4.31.4	Method of test	1039
27.22.4.31.5	Test requirement	1054
27.22.5	Data Download to UICC	1054
27.22.5.1	SMS-PP Data Download	1054
27.22.5.1.1	Definition and applicability	1054
27.22.5.1.2	Conformance requirement.....	1054
27.22.5.1.3	Test purpose	1054
27.22.5.1.4	Method of Test.....	1054
27.22.5.1.5	Test requirement	1055
27.22.5.2	Cell Broadcast Data Download	1056
27.22.5.2.1	Definition and applicability	1056
27.22.5.2.2	Conformance requirement.....	1056

27.22.5.2.3	Test purpose	1056
27.22.5.2.4	Method of Test	1056
27.22.5.2.5	Test requirement	1060
27.22.5.3	SMS-PP Data Download over IMS	1061
27.22.5.3.1	Definition and applicability	1061
27.22.5.3.2	Conformance requirement	1061
27.22.5.3.3	Test purpose	1061
27.22.5.3.4	Method of Test	1061
27.22.5.3.5	Test requirement	1071
27.22.5.4	SMS-PP Data Download over SGs in E-UTRAN	1071
27.22.5.4.1	Definition and applicability	1071
27.22.5.4.2	Conformance requirement	1071
27.22.5.4.3	Test purpose	1071
27.22.5.4.4	Method of Test	1072
27.22.5.4.5	Test requirement	1072
27.22.6	CALL CONTROL BY USIM	1072
27.22.6.1	Procedure for Mobile Originated calls	1072
27.22.6.1.1	Definition and applicability	1072
27.22.6.1.2	Conformance requirement	1072
27.22.6.1.3	Test purpose	1072
27.22.6.1.4	Method of tests	1073
27.22.6.1.5	Test requirement	1093
27.22.6.2	Procedure for Supplementary (SS) Services	1093
27.22.6.2.1	Definition and applicability	1093
27.22.6.2.2	Conformance requirement	1093
27.22.6.2.3	Test purpose	1094
27.22.6.2.4	Method of tests	1094
27.22.6.2.5	Test requirement	1101
27.22.6.3	Interaction with Fixed Dialling Number (FDN)	1101
27.22.6.3.1	Definition and applicability	1101
27.22.6.3.2	Conformance requirement	1101
27.22.6.3.3	Test purpose	1101
27.22.6.3.4	Method of tests	1102
27.22.6.3.5	Test requirement	1108
27.22.6.4	Support of Barred Dialling Number (BDN) service	1108
27.22.6.4.1	Definition and applicability	1108
27.22.6.4.2	Conformance requirement	1108
27.22.6.4.3	Test purpose	1109
27.22.6.4.4	Method of tests	1109
27.22.6.4.5	Test requirement	1119
27.22.6.5	Barred Dialling Number (BDN) service handling for terminals not supporting BDN	1120
27.22.6.5.1	Definition and applicability	1120
27.22.6.5.2	Conformance requirement	1120
27.22.6.5.3	Test purpose	1120
27.22.6.5.4	Method of tests	1120
27.22.7	EVENT DOWNLOAD	1121
27.22.7.1	MT Call Event	1121
27.22.7.1.1	MT Call Event (normal)	1121
27.22.7.2	Call Connected Event	1123
27.22.7.2.1	Call Connected Event (MT and MO call)	1123
27.22.7.2.2	Call Connected Event (ME supporting SET UP CALL)	1130
27.22.7.3	Call Disconnected Event	1133
27.22.7.3.1	Call Disconnected Event	1133
27.22.7.4	Location Status Event	1137
27.22.7.4.1	Location Status Event (normal)	1137
27.22.7.5	User Activity Event	1144
27.22.7.5.1	User Activity Event (normal)	1144
27.22.7.6	Idle screen available event	1145
27.22.7.6.1	Idle Screen Available (normal)	1145
27.22.7.7	Card reader status event	1146
27.22.7.7.1	Card Reader Status (normal)	1146
27.22.7.7.2	Card Reader Status (detachable card reader)	1146

27.22.7.8	Language selection event.....	1147
27.22.7.8.1	Language selection event (normal)	1147
27.22.7.9	Browser termination event.....	1147
27.22.7.9.1	Browser termination (normal).....	1147
27.22.7.10	Data available event.....	1149
27.22.7.10.1	Definition and applicability	1149
27.22.7.10.2	Conformance requirements	1149
27.22.7.10.3	Test purpose.....	1150
27.22.7.10.4	Method of test	1150
27.22.7.11	Channel Status event	1164
27.22.7.11.1	Definition and applicability	1164
27.22.7.11.2	Conformance requirements	1164
27.22.7.11.3	Test purpose.....	1164
27.22.7.11.4	Method of test	1164
27.22.7.12	Access Technology Change event	1171
27.22.7.13	Display parameter changed event	1174
27.22.7.14	Local Connection event	1174
27.22.7.15	Network search mode change event	1174
27.22.7.15.1	Definition and applicability	1174
27.22.7.15.2	Conformance requirements	1174
27.22.7.15.3	Test purpose.....	1175
27.22.7.15.4	Method of test	1175
27.22.7.16	Browsing status event.....	1176
27.22.7.17	Network Rejection Event.....	1176
27.22.7.18	CSG Cell Selection event	1181
27.22.7.18.1	CSG Cell Selection (normal)	1181
27.22.7.19	IMS registration event	1187
27.22.7.20	Incoming IMS data event	1187
27.22.7.20.1	Incoming IMS data (normal).....	1187
27.22.7.21	Data Connection Status Change event.....	1192
27.22.8	MO SHORT MESSAGE CONTROL BY USIM	1195
27.22.8.1	Definition and applicability.....	1195
27.22.8.2	Conformance requirement	1195
27.22.8.3	Test purpose.....	1195
27.22.8.4	Method of tests	1196
27.22.8.4.1	Initial conditions	1196
27.22.8.4.2	Procedure	1197
27.22.8.5	Test requirement.....	1210
27.22.9	Handling of command number.....	1210
27.22.9.1	Definition and applicability	1210
27.22.9.2	Conformance requirement	1211
27.22.9.3	Test purpose.....	1211
27.22.9.4	Method of tests	1211
27.22.9.4.1	Initial conditions	1211
27.22.9.4.2	Procedure	1211
27.22.9.5	Test requirement.....	1211
27.22.10	CALL CONTROL on EPS PDN Connection	1211
27.22.10.1	Procedure for Mobile Originated calls.....	1211
27.22.10.1.1	Definition and applicability	1211
27.22.10.1.2	Conformance requirement.....	1211
27.22.10.1.3	Test purpose.....	1211
27.22.10.1.4	Method of tests.....	1212
27.22.11	CALL CONTROL on PDP Context Activation	1221
27.22.11.1	Procedure for Mobile Originated calls	1221
Annex A (normative):	Details of Test-SIM (TestSIM).....	1240
Annex B (normative):	Details of terminal profile support.....	1242
Annex C (informative):	Change history	1256
History		1264

Foreword

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

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

Version x.y.z

where:

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

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/35fc63b0-6be0-4e4f-b06f-a73c73be94/etsi-ts-131-124-v15.3.0-2019-05>

1 Scope

The present document describes the technical characteristics and methods of test for testing the USIM Application Toolkit implemented in 3rd Generation Mobile Equipments (ME) or Mobile Station (MS) for the LTE-Advanced, LTE, 3G and 2G digital cellular communications systems within the 3GPP digital cellular telecommunications system, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [19] and ETSI ETS 300 406 [20].

The present document is valid for ME implemented according to 3GPP Release 99, or Release 4, or any later Release.

The present document covers the minimum characteristics considered necessary in order to provide sufficient performance for mobile equipment and to prevent interference to other services or to other users, and to the PLMNs.

It does not necessarily include all the characteristics which may be required by a user or subscriber, nor does it necessarily represent the optimum performance achievable.

The present document is part of the 3GPP-series of technical specifications. The present document neither replaces any of the other 3GPP technical specifications or 3GPP related ETSs or ENs, nor is it created to provide full understanding of (or parts of) the UMTS. The present document lists the requirements, and provides the methods of test for testing the USIM Application Toolkit implemented in a ME for conformance to the 3GPP standard.

For a full description of the system, reference should be made to all the 3GPP technical specifications or 3GPP related ETSIs, ETSs or ENs. Clause 2 provides a complete list of the 3GPP technical specifications, 3GPP related ETSI's EtSs, ENs, and ETRs, on which this conformance test specifications is based.

If there is a difference between this present conformance document, and any other 3GPP technical specification or 3GPP related ETSI, ETS, EN, or 3GPP TS, then the other 3GPP technical specification or 3GPP related ETSI ETS, EN or 3GPP TS shall prevail.

Within the context of this document, the term "terminal" used in ETSI TS 102 384 [26] refers to the Mobile Equipment (ME).

Within the context of this document, the term "UICC" used in ETSI TS 102 384 [26] refers to the USIM card.

Within the context of this document, the term "NAA" used in ETSI TS 102 384 [26] refers to the USIM application.

For the avoidance of doubt, references to clauses of ETSI TS 102 384 [26] or ETSI TS 102 221 [13] include all the subclauses of that clause, unless specifically mentioned.

The target test specification ETSI TS 102 384 [26] contains material that is outside of the scope of 3GPP requirements and the present document indicates which parts are in the scope and which are not.

A 3GPP ME may support functionality that is not required by 3GPP, but the requirements to do so are outside of the scope of 3GPP. Thus the present document does not contain tests or references to ETSI TS 102 384 [26] tests for features which are out of scope of 3GPP.

In the present document, unless explicitly stated otherwise, for Rel-13 onwards the term E-UTRAN implicitly refers to the E-UTRAN in WB-S1 mode. E-UTRAN in NB-S1 mode is always explicitly referred to as NB-IoT.

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 relevant Release*.
- References to 3GPP Technical Specifications and Technical Reports throughout the present document shall be interpreted according to the Release shown in the formal reference in this clause, based upon the Release of the implementation under test.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.001: "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".
- [3] 3GPP TS 22.003: "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".
- [4] 3GPP TS 22.004: "General on supplementary services".
- [5] ETSI TS 101 220: "ETSI numbering system for telecommunication application providers"
- [6] 3GPP TS 21.904: "UE capability requirements"
- [7] 3GPP TS 23.038: "Alphabets and language-specific information".
- [8] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".
- [9] 3GPP TS 23.041: "Technical realization of Cell Broadcast Service (CBS)".
- [10] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".
- [11] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) Support on mobile radio interface".
- [12] 3GPP TS 34.108: "Common test environments for User Equipment (UE) conformance testing".
- [13] If the device under test is a
- R99 ME: ETSI TS 102 221 v3.18.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-4 ME: ETSI TS 102 221 v4.16.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-5 ME: ETSI TS 102 221 v5.10.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-6 ME: ETSI TS 102 221 v6.15.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-7 ME: ETSI TS 102 221 v7.17.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-8 ME: ETSI TS 102 221 v8.5.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-9 ME: ETSI TS 102 221 v9.2.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-10 ME: ETSI TS 102 221 v10.0.0: "UICC-Terminal interface; Physical and logical characteristics",
 - Rel-11 ME: ETSI TS 102 221 v11.1.0: "UICC-Terminal interface; Physical and logical characteristics",