ETSI TS 136 579-5 V15.2.0 (2024-08)



LTE; Mission Critical (MC) services over LTE; Part 5: Abstract test suite (ATS) (3GPP TS 36.579-5 version 15.2.0 Release 15)



Reference RTS/TSGR-0536579-5vf20

Keywords

LTE

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 - APE 7112B Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° w061004871

Important notice

The present document can be downloaded from the ETSI <u>Search & Browse Standards application.</u>

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 on ETSI deliver.

Users should be aware that the present document may be revised or have its status changed, this information is available in the <u>Milestones listing</u>.

If you find errors in the present document, please send your comments to the relevant service listed under <u>Committee Support Staff</u>.

If you find a security vulnerability in the present document, please report it through our <u>Coordinated Vulnerability Disclosure (CVD)</u> program.

Notice of disclaimer & limitation of liability

The information provided in the present deliverable is directed solely to professionals who have the appropriate degree of experience to understand and interpret its content in accordance with generally accepted engineering or other professional standard and applicable regulations.

No recommendation as to products and services or vendors is made or should be implied.

No representation or warranty is made that this deliverable is technically accurate or sufficient or conforms to any law and/or governmental rule and/or regulation and further, no representation or warranty is made of merchantability or fitness for any particular purpose or against infringement of intellectual property rights.

In no event shall ETSI be held liable for loss of profits or any other incidental or consequential damages.

Any software contained in this deliverable is provided "AS IS" with no warranties, express or implied, including but not limited to, the warranties of merchantability, fitness for a particular purpose and non-infringement of intellectual property rights and ETSI shall not be held liable in any event for any damages whatsoever (including, without limitation, damages for loss of profits, business interruption, loss of information, or any other pecuniary loss) arising out of or related to the use of or inability to use the software.

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 2024. All rights reserved.

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The declarations pertaining to these essential IPRs, if any, are 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 Directives including the ETSI IPR Policy, no investigation regarding the essentiality of IPRs, 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.

DECTTM, **PLUGTESTSTM**, **UMTSTM** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPPTM** and **LTETM** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2MTM** 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.

Legal Notice

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. These shall be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between 3GPP and ETSI identities can be found under https://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 <u>ETSI Drafting Rules</u> (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
Legal Notice		2
Modal verbs terminology		2
Foreword		4
1 Scope		5
3 Definitions, symbols an	nd abbreviations	5
4 Test system architectur	e	6
5 to 10 Void		6
Annex A to E:	Void	7
Annex F (informative):	Change history	8
History		11

3

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.

The present document is part 1 of a multi-part conformance test specification for Mission Critical services over LTE consisting of:

3GPP TS 36.579-1 [2]: "Mission Critical (MC) services over LTE; Part 1: Common test environment"

3GPP TS 36.579-2 [3]: "Mission Critical (MC) services over LTE; Part 2: Mission Critical Push To Talk (MCPTT) User Equipment (UE) Protocol conformance specification"

3GPP TS 36.579-3 [4]: "Mission Critical (MC) services over LTE; Part 3: Mission Critical Push To Talk (MCPTT) Server Application conformance specification"

3GPP TS 36.579-4 [5]: "Mission Critical (MC) services over LTE; Part 4: Test Applicability and Implementation Conformance Statement (ICS) proforma specification"

3GPP TS 36.579-5: "Mission Critical (MC) services over LTE; Part 5: Abstract test suite (ATS)" (the present specification)

3GPP TS 36.579-6 [59]: "Mission Critical (MC) services over LTE; Part 6: Mission Critical Video (MCVideo) User Equipment (UE) Protocol conformance specification"

3GPP TS 36.579-7 [60]: "Mission Critical (MC) services over LTE; Part 7: Mission Critical Data (MCData) User Equipment (UE) Protocol conformance specification"

1 Scope

The present document specifies the protocol and signalling conformance testing in TTCN-3 for the Mission Critical services over LTE signalling and protocol requirements defined by 3GPP.

The following TTCN test specification and design considerations can be found in the present document:

- the test system architecture;
- the overall test suite structure;
- the test models and ASP definitions;
- the test methods and usage of communication ports definitions;
- the test configurations;
- the design principles and assumptions;
- TTCN styles and conventions;
- the partial Implementation eXtra Information for Testing (IXIT) proforma;
- the test suites.

The Abstract Test Suites designed in the document are based on the test cases specified in 3GPP TS 36.579-2 [3], TS 36.579-6 [59] and TS 36.579-7 [60]. The test cases specified in 3GPP TS 36.579-3 [4] are out of scope of the present document.

The applicability of the individual test cases is specified in the test ICS proforma specification in 3GPP TS 36.579-4 [5]). Where appropriate the Abstract Test Suites belonging to the present specification may refer to other Abstract Test Suites e.g. 3GPP TS 36.523-3 [27] for test requirements related to the EPS (LTE) bearers which carry the Mission Critical services data.

The present document is valid for TTCN development for Mission Critical services clients' conformance tests according to 3GPP Releases starting from Release 14 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* unless the context in which the reference is made suggests a different Release is relevant (information on the applicable release in a particular context can be found in e.g. test case title, description or applicability, message description or content).
- [1] to [69] (void)
- [70] 3GPP TS 36.579-5 Release 16: "Mission Critical (MC) services over LTE; Part 5: Abstract test suite (ATS)"

3 Definitions, symbols and abbreviations

Void

4 Test system architecture

The requirements of the present document are provided in 3GPP TS 36.579-5 Release 16 [70].

5 to 10 Void

ETSI TS 136 579-5 V15.2.0 (2024-08)

Annex A to E: Void

ETSI TS 136 579-5 V15.2.0 (2024-08)

Annex F (informative): Change history

Change history							
Date	Meeting	TDoc	CR	R ev	Cat	Subject/Comment	New version
2017-02	RAN5#74	R5-171302	-	-	-	Introduction of TS 36.579-5.	0.0.1
2018-03		R5-180687	-	-	-	Implements changes agreed in	0.1.0
2010 00						R5-180618 "MCPTT: Initial Test Model"	00
						R5-180657 "Various updates to 36579-5"	
2018-03	RAN#79	RP-180130	-	-	-	Draft version for information purposes to the RAN Plenary	1.0.0
2018-05	RAN5#79	R5-182437	-	-	-	Implements changes agreed in	2.0.0
						R5-183163	
						R5-183164	
2018-06	RAN#80	RP-180655	-	-	-	put under revision control as v13.0.0 with small editorial changes	13.0.0
2018-09	RAN#81	R5-184081	0001	-	F	MCPTT: Test Model updates	13.1.0
2018-12	RAN#82	R5-192380	0002	1	F	Routine maintenance for TS 36.579-5	13.2.0
2019-06	RAN#84	R5-195221	0003	1	F	Routine maintenance for TS 36.579-5	13.3.0
2019-06	RAN#84	R5-195222	0004	1	F	Introduction of MCPTT test model over IP	13.3.0
2019-12	RAN#86	R5-199050	0005	1	F	Routine maintenance for TS 36.579-5	13.4.0
2020-03	RAN#87	R5-201152	0006	1	F	Routine maintenance for TS 36.579-5	13.5.0
2020-06	RAN#88	R5-203077	0007	1	F	Routine maintenance for TS 36.579-5	13.6.0
2020-09	RAN#89	R5-203554	8000	-	F	Routine maintenance for TS 36.579-5	13.7.0
2020-09	RAN#89	R5-204377	0010	-	F	Updates to introduce support for MCVideo and MCData	14.0.0
2020-12	RAN#90	R5-206465	0011	1	F	Routine maintenance for TS 36.579-5	14.1.0
2021-03	RAN#91	R5-210255	0012	-	F	Routine maintenance for TS 36.579-5	14.2.0
2021-06	RAN#92	R5-213670	0017	1	F	Routine maintenance for TS 36.579-5	14.3.0
2021-09	RAN#93	R5-216343	0019	1	F	Routine maintenance for TS 36.579-5	14.4.0
2021-09	RAN#93	R5s210779	0018	-	В	Addition of MCPTT test case 6.1.1.2 to the MCX ATS	14.4.0
2021-09	RAN#93	R5s210897	0013	1	В	Addition of MCPTT test case 5.1 to the MCX ATS	14.4.0
2021-09	RAN#93	R5s210899	0014	1	В	Addition of MCPTT test case 6.1.1.1 to the MCX ATS	14.4.0
2021-09	RAN#93	R5s211178	0020	-	F	Add new verified and e-mail agreed TTCN test cases in the TC lists	14.4.0
2021 00	10/11/#55	<u>NJ5211170</u>	0020			in 36.579-5 (prose), Annex A	14.4.0
2021-12	RAN#94	R5-216753	0060	-	F	Routine maintenance for TS 36.579-5	14.5.0
2021-12	RAN#94	R5s211359	0046	-	B	Addition of MCPTT test case 6.2.1 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211361	0047	-	В	Addition of MCPTT test case 6.2.2 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211363	0048	-	В	Addition of MCPTT test case 6.2.3 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211365	0049	-	В	Addition of MCPTT test case 6.2.4 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211367	0050	-	В	Addition of MCPTT test case 6.2.5 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211369	0051	-	В	Addition of MCPTT test case 6.2.6 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211371	0052	-	В	Addition of MCPTT test case 6.2.7 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211373	0053	-	В	Addition of MCPTT test case 6.2.8 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211377	0055	-	В	Addition of MCPTT test case 6.2.15 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211381	0057	-	В	Addition of MCPTT test case 6.2.17 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211463	0021	1	В	Addition of MCPTT test case 5.3 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211469	0059	<u>.</u>	F	Configuration of SRTP	14.5.0
2021-12	RAN#94	R5s211617	0023	1	B	Addition of MCPTT test case 6.1.1.4 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211618	0024	1	В	Addition of MCPTT test case 6.1.1.8 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211619	0025	1	В	Addition of MCPTT test case 6.1.1.9 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211620	0026	1	B	Addition of MCPTT test case 6.1.1.11 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211621	0027	1	B	Addition of MCPTT test case 6.1.1.12 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211628	0028	1	B	Addition of MCPTT test case 6.1.1.13 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211629	0020	1	В	Addition of MCPTT test case 6.1.1.14 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211630	0020	1	В	Addition of MCPTT test case 6.1.2.7 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211631	0031	1	В	Addition of MCPTT test case 6.1.2.8 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211632	0032	1	В	Addition of MCPTT test case 6.1.2.9 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211633	0033	1	B	Addition of MCPTT test case 6.1.2.10 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211634	0034	1	B	Addition of MCPTT test case 6.1.2.11 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211635	0035	1	B	Addition of MCPTT test case 6.1.2.12 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211688	0022	1	В	Addition of MCPTT test case 6.1.1.3 to the MCX ATS	14.5.0
2021-12	RAN#94	R5s211695	0061	-	F	Add new verified and e-mail agreed TTCN test cases in the TC lists	14.5.0
202112	10 1 10 1	1100211000	0001			in 36.579-5 (prose), Annex A	1 1.0.0
2022-03	RAN#95	R5-220488	0070	-	F	Routine maintenance for TS 36.579-5	14.6.0
2022-03	RAN#95	R5s220129	0062	-	B	Addition of MCPTT test case 5.4 to the MCX ATS	14.6.0
2022-03	RAN#95	R5s220131	0063	-	В	Addition of MCPTT test case 6.1.1.5 to the MCX ATS	14.6.0
2022-03	RAN#95	R5s220133	0064	-	В	Addition of MCPTT test case 6.1.1.6 to the MCX ATS	14.6.0
2022-03	RAN#95	R5s220135	0065	-	В	Addition of MCPTT test case 6.1.1.10 to the MCX ATS	14.6.0
2022-03	RAN#95	R5s220137	0066	-	В	Addition of MCPTT test case 6.1.1.16 to the MCX ATS	14.6.0
	RAN#95	R5s220139	0067	-	В	Addition of MCPTT test case 6.1.1.18 to the MCX ATS	14.6.0
2022-03				-	В	Addition of MCPTT test case 6.1.1.21 to the MCX ATS	14.6.0
2022-03		R5s220141	0068	-			14.0 0
2022-03	RAN#95	R5s220141 R5s220143	0068	-			
		R5s220141 R5s220143 R5s220344	0068 0069 0071	-	в F	Addition of MCPTT test case 6.2.16 to the MCX ATS Addition of MCPTT test case 6.2.16 to the MCX ATS Correction of MCPTT ambient listening test cases	14.6.0 14.6.0

2022-03	RAN#95	<u>R5s220437</u>	0073	-	F	Add new verified and e-mail agreed TTCN test cases in the TC lists in 36.579-5 (prose), Annex A	14.6.0
2022-06	RAN#96	R5s220559	0074	-	F	Correction of f_MCX_InviteMT_SendINVITE	14.7.0
2022-09	RAN#97	R5-223960	0076	-	F	Routine maintenance for TS 36.579-5	14.8.0
2022-09	RAN#97	R5s220869	0075	-	F	MCX Implementation Issues	14.8.0
2022-09	RAN#97	R5s220992	0077	-	В	Addition of MCPTT test case 5.6 to the MCX ATS	14.8.0
2022-09	RAN#97	R5s220994	0078	-	В	Addition of MCPTT test case 6.1.1.17 to the MCX ATS	14.8.0
2022-09	RAN#97	R5s220996	0079	-	В	Addition of MCPTT test case 6.1.1.20 to the MCX ATS	14.8.0
2022-09	RAN#97	R5s221072	0086	-	F	Add new verified and e-mail agreed TTCN test cases in the TC lists	15.0.0
						in 36.579-5 (prose), Annex A	
2022-12	RAN#98	R5s221283	0082	1	В	Addition of MCData test case 5.1 to the MCX ATS	15.1.0
2022-12	RAN#98	R5s221284	0083	1	В	Addition of MCData test case 6.1.1 to the MCX ATS	15.1.0
2022-12	RAN#98	R5s221285	0084	1	В	Addition of MCData test case 6.1.3 to the MCX ATS	15.1.0
2022-12	RAN#98	R5s221286	0085	1	В	Addition of MCData test case 6.1.4 to the MCX ATS	15.1.0
2022-12	RAN#98	R5s221361	0091	-	F	Add new verified and e-mail agreed TTCN test cases in the TC lists	15.1.0
						in 36.579-5 (prose), Annex A	
2024-06	RAN#104	R5-242300	0109	-	F	Removal of technical content in TS 36.579-5 v15.1.0 and	15.2.0
						substitution with pointer to the next Release	

History

Document history					
V15.0.0	October 2022	Publication			
V15.1.0	January 2023	Publication			
V15.2.0	August 2024	Publication			