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LTE;
Mission Critical (MC) services over LTE;
Part 5: Abstract test suite (ATS)
(3GPP TS 36.579-5 version 14.9.0 Release 14)



Reference

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Keywords

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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
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Foreword

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

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

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 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 15: "Mission Critical (MC) services over LTE; Part 5: Abstract test suite (ATS)"

3 Definitions, symbols and abbreviations

Void

4 Test system architecture

4.1 General system architecture

The requirements of the present document are provided in 3GPP TS 36.579-5 Release 15 [70].

5 to 10 Void

Annex A to E: Void

Annex F (informative): Change history

| Change history | | | | | | | |
|----------------|---------|---------------------------|------|-----|-----|---|-------------|
| Date | Meeting | TDoc | CR | Rev | Cat | Subject/Comment | New version |
| 2017-02 | RAN5#74 | R5-171302 | - | - | - | Introduction of TS 36.579-5. | 0.0.1 |
| 2018-03 | RAN5#78 | R5-180687 | - | - | - | Implements changes agreed in R5-180618 "MCPTT: Initial Test Model" R5-180657 "Various updates to 36579-5" | 0.1.0 |
| 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 R5-183163 R5-183164 | 2.0.0 |
| 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 | 0008 | - | 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 | - | B | Addition of MCPTT test case 6.1.1.2 to the MCX ATS | 14.4.0 |
| 2021-09 | RAN#93 | R5s210897 | 0013 | 1 | B | Addition of MCPTT test case 5.1 to the MCX ATS | 14.4.0 |
| 2021-09 | RAN#93 | R5s210899 | 0014 | 1 | B | 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 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 | - | B | Addition of MCPTT test case 6.2.2 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211363 | 0048 | - | B | Addition of MCPTT test case 6.2.3 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211365 | 0049 | - | B | Addition of MCPTT test case 6.2.4 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211367 | 0050 | - | B | Addition of MCPTT test case 6.2.5 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211369 | 0051 | - | B | Addition of MCPTT test case 6.2.6 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211371 | 0052 | - | B | Addition of MCPTT test case 6.2.7 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211373 | 0053 | - | B | Addition of MCPTT test case 6.2.8 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211377 | 0055 | - | B | Addition of MCPTT test case 6.2.15 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211381 | 0057 | - | B | Addition of MCPTT test case 6.2.17 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211463 | 0021 | 1 | B | Addition of MCPTT test case 5.3 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211469 | 0059 | - | 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 | B | Addition of MCPTT test case 6.1.1.8 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211619 | 0025 | 1 | B | 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 | 0029 | 1 | B | Addition of MCPTT test case 6.1.1.14 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211630 | 0030 | 1 | B | Addition of MCPTT test case 6.1.2.7 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211631 | 0031 | 1 | B | Addition of MCPTT test case 6.1.2.8 to the MCX ATS | 14.5.0 |
| 2021-12 | RAN#94 | R5s211632 | 0032 | 1 | B | 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 | B | 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 in 36.579-5 (prose), Annex A | 14.5.0 |
| 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 | - | B | Addition of MCPTT test case 6.1.1.5 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220133 | 0064 | - | B | Addition of MCPTT test case 6.1.1.6 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220135 | 0065 | - | B | Addition of MCPTT test case 6.1.1.10 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220137 | 0066 | - | B | Addition of MCPTT test case 6.1.1.16 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220139 | 0067 | - | B | Addition of MCPTT test case 6.1.1.18 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220141 | 0068 | - | B | Addition of MCPTT test case 6.1.1.21 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220143 | 0069 | - | B | Addition of MCPTT test case 6.2.16 to the MCX ATS | 14.6.0 |
| 2022-03 | RAN#95 | R5s220344 | 0071 | - | F | Correction of MCPTT ambient listening test cases | 14.6.0 |
| 2022-03 | RAN#95 | R5s220346 | 0072 | - | F | Update of function f_URL_Decoding | 14.6.0 |

| | | | | | | | |
|---------|--------|---------------------------|------|---|---|--|--------|
| 2022-03 | RAN#95 | R5s220437 | 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 | - | B | Addition of MCPTT test case 5.6 to the MCX ATS | 14.8.0 |
| 2022-09 | RAN#97 | R5s220994 | 0078 | - | B | Addition of MCPTT test case 6.1.1.17 to the MCX ATS | 14.8.0 |
| 2022-09 | RAN#97 | R5s220996 | 0079 | - | B | Addition of MCPTT test case 6.1.1.20 to the MCX ATS | 14.8.0 |
| 2022-12 | RAN#98 | R5-225988 | 0089 | - | F | Removal of technical content in 36.579-5 v14.8.0 and substitution with pointer to the next Release | 14.9.0 |

History

| Document history | | |
|-------------------------|----------------|-------------|
| V14.0.0 | November 2020 | Publication |
| V14.1.0 | January 2021 | Publication |
| V14.2.0 | April 2021 | Publication |
| V14.3.0 | September 2021 | Publication |
| V14.4.0 | October 2021 | Publication |
| V14.5.0 | January 2022 | Publication |
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