# ETSI TS 136 579-4 V14.6.0 (2021-09)



LTE;

Mission Critical (MC) services over LTE; Part 4: Test Applicability and Implementation Conformance Statement (ICS) proforma specification (3GPP TS 36.579-4 version 14.6.0 Release 14)



Reference

RTS/TSGR-0536579-4ve60

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 - 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: <u>http://www.etsi.org/standards-search</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 at <a href="http://www.etsi.org/deliver">www.etsi.org/deliver</a>.

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

If you find errors in the present document, please send your comment to one of the following services: https://portal.etsi.org/People/CommiteeSupportStaff.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 2021.

All rights reserved.

DECT<sup>™</sup>, PLUGTESTS<sup>™</sup>, UMTS<sup>™</sup> and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP<sup>™</sup>** and LTE<sup>™</sup> are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2M<sup>™</sup>** logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners.

 $\ensuremath{\mathsf{GSM}}\xspace^{\ensuremath{\$}}$  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.

# 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 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
Legal Notice	2
Modal verbs terminology	2
Foreword	4
1 Scope	5
2 References	5
<ul> <li>3 Definitions, symbols and abbreviations</li></ul>	
4 Recommended Test Case Applicability	7
Annex A (normative): ICS proforma for Mission Critical Services over LT	E Client/Server21
<ul> <li>A.1 Guidance for completing the ICS proforma</li></ul>	
<ul> <li>A.2 Identification of the MCPTT Client/Server Equipment</li></ul>	
A.3 Identification of the protocol	24
<ul> <li>A.4 ICS proforma tables</li> <li>A.4.1 Implementation Types</li> <li>A.4.2 Additional information</li> </ul>	
Annex B (informative): Change history	26
History	27

# 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 deliverable covering conformance test specification for Mission Critical Services over LTE consisting of:

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

3GPP TS 36.579-2 [3]: "Mission Critical (MC) services over LTE conformance testing; 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 conformance testing; Part 3: Mission Critical Push To Talk (MCPTT) Server Application test specification"

3GPP TS 36.579-4: "Mission Critical (MC) services over LTE conformance testing; Part 4: Test Applicability and Implementation Conformance Statement (ICS) proforma specification" (the present document)

3GPP TS 36.579-5 [5]: "Mission Critical (MC) services over LTE conformance testing; Part 5: Abstract test suite (ATS)"

3GPP TS 36.579-6 [11]: "Mission Critical (MC) services over LTE; Part 6: Mission Critical Video (MCVideo) User Equipment (UE) Protocol conformance specification".

3GPP TS 36.579-7 [12]: "Mission Critical (MC) services over LTE; Part 7: Mission Critical Data (MCData) User Equipment (UE) Protocol conformance specification".

### 1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for testing Client or Server implementations for compliance to the Mission Critical Services over LTE protocol requirements defined by 3GPP, and in accordance with the relevant guidance given in ISO/IEC 9646-1 [7] and ISO/IEC 9646-7 [8].

The present document specifies the recommended applicability statement for the test cases included in 3GPP TS 36.579-2 [3] and 3GPP TS 36.579-3 [4], as well as, TS 36.579-6 [3] and 3GPP TS 36.579-7 [4]. These applicability statements are based on the features implemented in the Client or the Server respectively.

The present document is valid for Mission Critical Services Servers and Clients implemented according to 3GPP releases starting from Release 13 up to the Release indicated on the cover page of the present document.

The present document is valid for Mission Critical Video (MCVideo) and Mission Critical Data (MCData) Clients implemented according to 3GPP releases starting from Release 14 up to the Release indicated on the cover page of the present document.

The present document does not specify applicability or ICS for protocol conformance testing for the EPS (LTE) bearers which carry the Mission Critical Services data sent or received by the Client and/or the Server. These are defined in TS 36.523-2 [6].

# 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 36.579-1: "Mission Critical (MC) services over LTE; Part 1: Common test environment".
- [3] 3GPP TS 36.579-2: "Mission Critical (MC) services over LTE; Part 2: Mission Critical Push To Talk (MCPTT) User Equipment (UE) Protocol conformance specification".
- [4] 3GPP TS 36.579-3: "Mission Critical (MC) services over LTE; Part 3: Mission Critical Push To Talk (MCPTT) Server Application test specification".
- [5] 3GPP TS 36.579-5: "Mission Critical (MC) services over LTE; Part 5: Abstract test suite (ATS)".
- [6] 3GPP TS 36.523-2: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".
- [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 23.179: "Functional architecture and information flows to support mission critical communication services; Stage 2".
- [10] 3GPP TS 23.401: "3GPP System Architecture Evolution; GPRS enhancements for E-UTRAN access".

- [11] 3GPP TS 36.579-6: "Mission Critical (MC) services over LTE; Part 6: Mission Critical Video (MCVideo) User Equipment (UE) Protocol conformance specification".
- [12] 3GPP TS 36.579-7: "Mission Critical (MC) services over LTE; Part 7: Mission Critical Data (MCData) User Equipment (UE) Protocol conformance specification".
- [13] 3GPP TS 23.379: "Functional architecture and information flows to support Mission Critical Push To Talk (MCPTT); Stage 2".
- [14] 3GPP TS 33.180: "Security of the mission critical service".
- [15] 3GPP TS 24.379: "Mission Critical Push To Talk (MCPTT) call control; Protocol specification".

### 3 Definitions, symbols and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

In addition for the purposes of the present document, the following terms, definitions, symbols and abbreviations apply:

- 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.

**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.

**IUT containing MCX Client:** A statement identifying which entity, and associated requirements, from the MCX service architecture is subject of testing. Depending on the test model, the UE supporting LTE with the MCX Client installed is considered the IUT (MCX EUTRA test model), or, only the MCX Client is considered as the IUT (MCX IPCAN test model). For the test models definitions see TS 36.579-5[5].

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

Void

### 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

CUT	Client Under Test
FFS	For Further Study
ICS	Implementation Conformance Statement
IUT	Implementation Under Test
IXIT	Implementation eXtra Information for Testing
MC	Mission Critical
MCData	Mission Critical Data
MCPTT	Mission Critical Push To Talk
MCVideo	Mission Critical Video
SCS	System Conformance Statement
SS	System Simulator
SUT	Server Under Test
TC	Test Case

# 4 Recommended Test Case Applicability

The applicability of each individual test is identified in Table 4-1 (MCPTT Client), Table 4-2 (MCPTT Server), Table 4-3 (MCVideo Client), Table 4-4 (MCData Client). 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 Table 4-1, Table 4-2, Table 4-3, Table 4-4 have the following meaning:

#### Clause

The clause column indicates the clause number in TS 36.579-2 [3] or TS 36.579-3 [4] or TS 36.579-6 [11] or TS 36.579-7 [12] respectively which contains the test body.

#### Title

The title column describes the name of the test and contains the clause title of the clause in TS 36.579-2 [3] or TS 36.579-3 [4] or TS 36.579-6 [11] or TS 36.579-7 [12] respectively which contains the test body.

#### Release

The release column indicates the earliest release from which the test case is applicable. In some specific cases it may indicate the release(s) for which the TC is **only** applicable.

Note: Some exceptions to this interpretation may be indicated in Notes in column 'Number of TC Executions'.

#### Applicability - Condition

The following notations are used for the applicability column:

- 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 a 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 4-1a (MCPTT Client), Table 4-2a (MCPTT Server), Table 4-3a (MCVideo Client), Table 4-4a (MCData Client) respectively. To avoid ambiguity for the MCPTT Server testing conditions the notation of CCi is used.

#### 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.

NOTE: ICS items specified in other test specifications can be referred, to avoid redundant definitions.

#### Additional Information - Specific IXIT

This column contains the mnemonics of IXIT(s) affecting the dynamic behaviour of the TC. IXITs are defined in TS 36.579-5 [6]

#### Additional Information - Number of TC Executions

This column contains, wherever applicable, the recommended for certification purposes number of TC executions. It may contain also other information e.g. exceptions to the release applicable to the test. Clarifying notes when available are listed in dedicated tables with table numbers having the suffics "b" e.g. Table 4-1b (MCPTT Client).

#### Release RAT

The Release RAT column indicates the earliest release of the RAT bearer over which the test should be conducted. In the present specification the RAT is E-UTRA. Note that the release of the MC functionality does not have to align with that of the E-UTRA bearer. In case the Release RAT column is empty, the release version specified in the Release column (release of the MC functionality) applies.

	Table 4-1: Applicability	of MCPTT Client tests and	l additional information for testing
--	--------------------------	---------------------------	--------------------------------------

Clause	TC Title	Release MCPTT	Applicabilit y		Additional Information				
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	Release RAT	
5	MCPTT Client Configuration	1							
5.1	MCPTT / Configuration / Authentication / User Authorisation / UE Configuration / User Profile / Key Generation	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
5.2	MCPTT / Configuration / Group Creation / Group Regroup Creation / Group Regroup Teardown MCPTT / Configuration / Group Affiliation /	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
5.3	MCPTT / Configuration / Group Affiliation / Remote change / De-affiliation / Home MCPTT system	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
5.4	MCPTT / Configuration / Pre-established Session Establishment / Pre-established Session Modification / Pre-established Session Release	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
5.5	Configuration / Determination of MCPTT Service Settings / Current Active MCPTT Settings / De- subscribe	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6	On-network operation								
6.1	Group Calls - same MCPTT system Group Calls								
6.1.1	Pre-arranged Group Call								
6.1.1.1	MCPTT / On-network / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Floor Control / Upgrade to Emergency Group Call / Cancel Emergency State / Upgrade to Imminent Peril Group Call / Cancel Imminent Peril State / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.1.2	MCPTT / On-network / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Floor Control / Upgrade to Emergency Group Call / Cancel Emergency State / Upgrade to Imminent Peril Group Call / Cancel Imminent Peril State / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.1.3	MCPTT / On-network / On-demand Pre-arranged Group Call / Manual Commencement Mode / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.1.4	MCPTT / On-network / On-demand Pre-arranged Group Call / Manual Commencement Mode / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.1.5	MCPTT / On-network / Pre-arranged Group Call using pre-established session / Client originated Pre-established Session Release with associated MCPTT session / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.1.6	MCPTT / On-network / Pre-arranged Group Call using pre-established session / Automatic Commencement Mode / Server originated Pre-	Rel-14	C01	IUT containing MCPTT Client				Rel-12	

Clause	TC Title	Release MCPTT	Applicabilit v		Additional Information			
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	Release RAT
	established Session Release with associated MCPTT session / Client Terminated (CT)							
6.1.1.7	MCPTT / On-network / Pre-arranged Group Call using pre-established session / Manual Commencement Mode / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.8	MCPTT / On-network / Pre-arranged Broadcast Group Call / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.9	MCPTT / On-network / Pre-arranged Broadcast Group Call / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.10	MCPTT / On-network / Broadcast Group Call with Temporary Group / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.11	MCPTT / On-network / Pre-arranged Emergency Group Call / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.12	MCPTT / On-network / Pre-arranged Emergency Group Call / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.13	MCPTT / On-network / Pre-Arranged Imminent Peril Group Call / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.14	MCPTT / On-network / Pre-Arranged Imminent Peril Group Call / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.15	MCPTT / On-network / Emergency Alert / Cancel Emergency Alert / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.16	MCPT / On-network / Emergency Alert / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.17	MCPTT / On-network / Broadcast Group Call using pre-established session / Client originated Pre-established Session Release with associated MCPTT session / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.1.18	MCPTT / On-network / Broadcast Group Call using pre-established session / Client originated Pre-established Session Release with associated MCPTT session / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.2	Chat Group Calls							
6.1.2.1	Void							
6.1.2.2	MCPTT / On-network / Chat Group Call Using Pre-established Session Including Emergency and Imminent Peril Calls / Client Server originated Pre-established Session Release with associated MCPTT session / Client Origination (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.2.3	Void							
6.1.2.4	Void		1					
6.1.2.5	Void		1					1
6.1.2.6	Void		1					ſ
6.1.2.7	MCPTT / On-network / Chat Group Call / Emergency Group Call / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12
6.1.2.8	MCPTT / On-network / Chat Group Call / Emergency Group Call / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12

Clause	TC Title	Release	Applicabilit		Additional				
		MCPTT	y Condition	Comment	Information Specific ICS	Specific IXIT	Number of TC Executions	Release RAT	
6.1.2.9	MCPTT / On-network / Chat Group Call / Imminent Peril Group Call / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.2.10	MCPTT / On-network / Chat Group Imminent Peril Group Call / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.2.11	MCPTT / On-network / Chat Group Call / Join Chat Group Session / Upgrade to Emergency / Cancel Emergency / Upgrade to Imminent Peril / Cancel Imminent Peril / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.1.2.12	MCPTT / On-network / Chat Group Call / Upgrade to Emergency / Cancel Emergency / Upgrade to Imminent Peril / Cancel Imminent Peril / Client Originated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2	Private Calls								
6.2.1	MCPTT / On-network / Private Call / On-demand / Automatic Commencement Mode / With Floor Control confidentiality and integrity protection/ Upgrade to Emergency Call / Cancellation of Emergency on User request / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.2	MCPTT / On-network / Private Call / On-demand / Automatic Commencement Mode / With Floor Control confidentiality and integrity protection/ Upgrade to Emergency Call / Cancellation of Emergency on User request / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.3	MCPTT / On-network / Private Call / On-demand / Automatic Commencement Mode / Without Floor Control / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.4	MCPTT / On-network / Private Call / On-demand / Automatic Commencement Mode / Without Floor Control / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.5	MCPTT / On-network / Private Call / Emergency Private Call / On-demand / Automatic Commencement Mode / Force of automatic commencement mode / Without Floor Control / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.6	MCPTT / On-network / Private Call / Emergency Private Call / On-demand / Manual Commencement Mode / Force of automatic commencement mode / Without Floor Control / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.7	MCPTT / On-network / Private Call / On-demand / Manual Commencement Mode / Without Floor Control / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.8	MCPTT / On-network / Private Call / On-demand / Manual Commencement Mode / Without Floor Control / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	

Clause	TC Title	Release MCPTT	Applicabilit v		Additional Information	Additional Information			
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	Release RAT	
6.2.9	MCPTT / On-network / Private Call / Within a pre- established session / Automatic Commencement Mode / Without Floor Control / Client Originated (CO)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.10	MCPTT / On-network / Private Call / Within a pre- established session / Automatic Commencement Mode / Without Floor Control / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.11	MCPTT / On-network / Private Call / Within a pre- established session / Manual Commencement Mode / Without Floor Control / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.12	MCPTT / On-network / Private Call / Private Call Call-Back Request / Private Call Call-Back Cancel Request / Client Originated (CO) / Private call call-back fulfilment	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.13	MCPTT / On-network / Private Call / Private Call Call-Back Request / Private Call Call-Back Cancel Request / Client Terminated (CT) / Private call call-back fulfilment	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.14	MCPTT / On-network / Private Call / Ambient listening call / Remotely initiated Ambient listening call / Remotely initiated ambient listening call release / Success / Client Originated (CO) / Server initiated ambient call release	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.15	MCPTT / On-network / Private Call / Ambient listening call / Remotely initiated Ambient listening call / Remotely initiated ambient listening call release / Success / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.16	MCPTT / On-network / Private Call / Ambient listening call / Locally initiated Ambient listening call / Locally initiated ambient listening call release / Success / Client Originated (CO) / Server initiated ambient call release	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.2.17	MCPTT / On-network / Private Call / Ambient listening call / Locally initiated Ambient listening call / Locally initiated ambient listening call release / Success / Client Terminated (CT)	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.3	Location								
6.3.1	MCPTT / On-network / Location / Event Triggered Location Information Report	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.3.2	MCPTT / On-network / Location / On-demand Location Information Request	Rel-14	C01	IUT containing MCPTT Client				Rel-12	
6.4	MBMS		0.51					<b>D</b> 1 4 6	
6.4.1	MCPTT / On-network / MBMS / MBMS Bearer Announcement / MBMS Bearer Listening Status / Transition to MBMS from Unicast / MBMS Floor Control / Transition to Unicast from MBMS	Rel-14	C01	IUT containing MCPTT Client				Rel-12	

Clause	TC Title	Release MCPTT	Applicabilit y		Additional Information	Information			
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	Release RAT	
7	Off-network								
7.1	Group Calls								
7.1.1	MCPTT / Off-network / Group Call / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency / Upgrade to Imminent Peril / Downgrade from Imminent Peril / Release Call / Client Originated (CO)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.2	MCPTT / Off-network / Group Call / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency / Upgrade to Imminent Peril / Downgrade from Imminent Peril / Release Call / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.3	MCPTT / Off-network / Group Call / Leave Group Call when GROUP CALL PROBE sent / Initiate Group Call for Released Call / Receive GROUP CALL ACCOUCHEMENT for Released call / No GROUP CALL ACCOUCHEMENT for Released Call / Receive Response to GROUP CALL PROBE	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.4	MCPTT / Off-network / Group Call / MCPTT User Acknowledgement Required / With Confirm Indication / MCPTT User Reject / MCPTT User Accept / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.5	MCPTT / Off-network / Group Call / MCPTT User Acknowledgement Required / Without Confirm Indication / MCPTT User Reject / MCPTT User Accept / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.6	MCPTT / Off-network / Group Call / Merge Two Calls	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.7	MCPTT / Off-network / Group Call / Emergency Call / Imminent Peril Call/ Client Originated (CO)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.8	MCPTT / Off-network / Group Call / Emergency Call / Imminent Peril Call/ Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.9	MCPTT / Off-network / Group Call / Emergency Alert / Emergency Alert Retransmission / Cancel Emergency Alert / Client Originated (CO)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.10	MCPTT / Off-network / Group Call / Emergency Alert / Emergency Alert Retransmission / Cancel Emergency Alert / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.11	MCPTT / Off-network / Group Call / Broadcast Group Call / Broadcast Group Call Retransmitting / Broadcast Group Call Release / Client Originated (CO)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.12	MCPTT / Off-network / Group Call / Broadcast Group Call / MCPTT User Ack Not Required / Originator Releases Call / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1					
7.1.13	MCPTT / Off-network / Group Call / Broadcast Group Call / MCPTT User Ack Required /	Rel-13	C01	IUT containing MCPTT Client NOTE 1					

TC Title	Release	Applicabilit		Additional			
	WCPTT	y Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	Release RAT
MCPTT User Reject / MCPTT User Accept / MCPTT User Releases Call / Client Terminated (CT)							
Commencement Mode / No Response to Private Call Setup Request / Private call setup success / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency Call / Release Call /	Rel-13	C01	IUT containing MCPTT Client NOTE 1				
MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private call setup success / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency Call / Release Call / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1				
MCPTT / Off-network / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call Reject / Downgrade from Emergency Call Failure / Client Originated (CO)	Rel-13	C01	IUT containing MCPTT Client NOTE 1				
MCPTT / Off-network / Private Call / Manual Commencement Mode / Call Released before establishment completion / Call request Rejected / Call establishment successful / Client Originated (CO)	Rel-13	C01	IUT containing MCPTT Client NOTE 1				
MCPTT / Off-network / Private Call / Manual Commencement Mode Call / Released before establishment completion / User does not answer to Ringing / User Rejects call request / Call establishment successful / Client Terminated (CT)	Rel-13	C01	IUT containing MCPTT Client NOTE 1				
	MCPTT User Reject / MCPTT User Accept / MCPTT User Releases Call / Client Terminated (CT) <b>Private Calls</b> MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Request / Private call setup success / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency Call / Release Call / Client Originated (CO) MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private call setup success / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency Call / Release Call / Client Terminated (CT) MCPTT / Off-network / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call Reject / Downgrade from Emergency Call Failure / Client Originated (CO) MCPTT / Off-network / Private Call / Manual Commencement Mode / Call Released before establishment completion / Call request Rejected / Call establishment successful / Client Originated (CO) MCPTT / Off-network / Private Call / Manual Commencement Mode Call / Released before establishment completion / User does not answer to Ringing / User Rejects call request / Call establishment successful / Client Terminated	MCPTT       MCPTT         MCPTT User Reject / MCPTT User Accept /       MCPTT         MCPTT User Releases Call / Client Terminated       (CT)         Private Calls       Rel-13         MCPTT / Off-network / Private Call / Automatic       Rel-13         Commencement Mode / No Response to Private       Rel-13         Call Setup Request / Private call setup success /       Floor Control / Upgrade to Emergency Call /         Downgrade from Emergency Call / Release Call /       Rel-13         Cilient Originated (CO)       MCPTT / Off-network / Private Call / Automatic         Commencement Mode / No Response to Private       Rel-13         Commencement Mode / Upgrade to Emergency Call /       Rel-13         Commencement Mode / Upgrade to Emergency Call /       Rel-13         Commencement Mode / Upgrade to Emergency Call /       Rel-13         Commencement Mode / Call Released before       Rel-13         Commencement Mode / Call Released before       Rel-13         Commencement Mode / Call Released before       Rel-13         MCPTT / Off-network / Pr	MCPTT       y         Condition         MCPTT User Reject / MCPTT User Accept /         MCPTT User Releases Call / Client Terminated         (CT)         Private Calls         MCPTT / Off-network / Private Call / Automatic         Commencement Mode / No Response to Private         Call Setup Request / Private call setup success /         Floor Control / Upgrade to Emergency Call /         Downgrade from Emergency Call / Release Call /         Client Originated (CO)         MCPTT / Off-network / Private call setup success /         Floor Control / Upgrade to Emergency Call /         Commencement Mode / No Response to Private         Call Setup Accept / Private call setup success /         Floor Control / Upgrade to Emergency Call /         Downgrade from Emergency Call / Release Call /         Client Terminated (CT)         MCPTT / Off-network / Private Call / Automatic         Commencement Mode / Upgrade to Emergency         Call Reject / Downgrade from Emergency Call         Failure / Client Originated (CO)         MCPTT / Off-network / Private Call / Manual         Commencement Mode / Call Released before         establishment completion / Call request Rejected         / Call establishment successful / Client Originated         (CO)         MCPTT / Off-net	MCPTT         Inc.y           Condition         Comment           MCPTT User Reject / MCPTT User Accept / MCPTT User Releases Call / Client Terminated (CT)         Condition         Comment           MCPTT / Off-network / Private Call / Client Terminated (CT)         Rel-13         C01         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Request / Private call setup success / Floor Control / Upgrade to Emergency Call / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private call setup success / Floor Control / Upgrade to Emergency Call / Client Terminated (CT)         Rel-13         C01         IUT containing MCPTT Client NOTE 1           MCPTT / Off-network / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call Reject / Downgrade from Emergency Call Failure / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1           MCPTT / Off-network / Private Call / Manual Commencement Mode / Log react Rejected / Call establishment successful / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1           MCPTT / Off-network / Private Call / Manual Commencement Mode Call / Release defore establishment successful / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1	MCPTT         Y         Information           MCPTT User Reject / MCPTT User Accept / MCPTT User Releases Call / Client Terminated (CT)         Condition         Comment         Specific ICS           MCPTT / User Releases Call / Client Terminated (CT)         Private Calls         IUT containing MCPTT Client         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call / Downgrade from Emergency Call / Release Call / Client Originated (CC)         C01         IUT containing MCPTT Client NOTE 1         NOTE 1           MCPTT / Off-network / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call Reject / Downgrade from Emergency Call Pailure / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client NOTE 1           MCPTT / Off-network / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call Reject / Downgrade from Emergency Call Release before establishment successful / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1         NOTE 1           MCPTT / Off-network / Private Call / Manual Commencement Mode / Lagleased before establishment successful / Client Originated (CO)         C01	MCPTT         WCPTT         WCPTT         Information           MCPTT User Reject / MCPTT User Accept / MCPTT User Releases Call / Client Terminated (CT)         Condition         Comment         Specific ICS         Specific IXT           MCPTT User Releases Call / Client Terminated (CT)         Private Calls         IUT containing MCPTT Client         IUT containing MCPTT Client         IUT containing MCPTT Client         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / No Response to Private Call Release Call /         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Automatic Camencement Mode / Upgrade to Emergency Call / Private Call / Release Call /         Rel-13         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Automatic Camencement Mode / Call Release Defore establishment completion / Call request Rejected (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Manual Commencement Mode / Call Released before establishment completion / Call request Rejected (Coll establishment successful / Client Originated (CO)         C01	MCPTT         Uniformation           MCPTT User Reject / MCPTT User Accept / MCPTT User Releases Call / Client Terminated (CT)         Condition         Comment         Specific ICS         Specific IXIT         Number of TC Executions           MCPTT User Releases Call / Client Terminated (CT)         Frivate Calls         Information         Information         Executions           MCPTT / Off-network / Private Call / Automatic Commencement Mode / No Response to Private Call Setup Request / Private call setup success / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency Call / Release Call / Client Originated (CO)         Rel-13         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client           MCPTT / Off-network / Private Call setup success / Floor Control / Upgrade to Emergency Call / Downgrade from Emergency Call / Automatic Commencement Mode / No Response to Private Call Setup Accept / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call / Downgrade from Emergency Call / Client Originated (CD)         Rel-13         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client NOTE 1           MCPTT / Off-network / Private Call / Automatic Commencement Mode / Upgrade to Emergency Call / Client Originated (CD)         Rel-13         C01         IUT containing MCPTT Client NOTE 1         IUT containing MCPTT Client           MCPTT / Off-network / Private Call / Manual Commencement Mode / Call Released before establishment completion / Call Rejected / Call establishment successful / Client Terminated         C01         IUT contain

#### Table 4-1a: Applicability of tests Conditions MCPTT Client

C01 IF A.4.1-1/1 THEN R ELSE N/A

#### Table 4-2: Applicability of MCPTT Server tests and additional information for testing

Clause	TC Title	Release	Applicabilit y		Additional Information		
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions
5	Configuration						
5.1	MCPTT Server - MCPTT Client / Configuration / Authentication / User Authorisation / UE Configuration / User Profile	Rel-13	CC01	IUT is MCPTT Server			
6	Server - Client operation						
6.1	MCPTT Server - MCPTT Client / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Floor Control	Rel-13	CC01	IUT is MCPTT Server			
7	Server - Server operation						
7.1	MCPTT Server - MCPTT Server / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Floor Control / Controlling Server	Rel-13	CC01	IUT is MCPTT Server			
7.2	MCPTT Server - MCPTT Server / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Floor Control / Participating Server	Rel-13	CC01	IUT is MCPTT Server			

#### Table 4-2a: Applicability of tests Conditions MCPTT Server

CC01 IF A.4.1-1/2 THEN R ELSE N/A

#### Table 4-3: Applicability of MCVideo Client tests and additional information for testing

Clause	TC Title	Release	Applicabilit y		Additional Information		
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions
5	Configuration						
5.1	Configuration / Authentication / User Authorization / UE Configuration / User Profile / Key Generation	Rel-14	CV01	IUT is MCVideo Client			
5.2	Configuration / Group Creation / Group ReGroup Creation / Group ReGroup Teardown	Rel-14	CV01	IUT is MCVideo Client			
5.3	Configuration / Group Affiliation / Remote change / De-affiliation / Home MCVideo system	Rel-14	CV01	IUT is MCVideo Client			
5.4	Configuration / Pre-established Session Establishment / Pre-established Session Modification / Pre-established Session Release	Rel-14	CV01	IUT is MCVideo Client			
5.5	Configuration / Determination of MCVideo Service Settings / Current Active MCVideo Settings / De-subscribe	Rel-14	CV01	IUT is MCVideo Client			

Clause	ause TC Title		Applicabilit y		Additional Information	Information		
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	
6	On-Network Test Scenarios							
6.1	Group Calls							
6.1.1	Pre-Arranged Group Call							
6.1.1.1	On-network / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Transmission Control / Upgrade to Emergency Group Call / Cancel Emergency State / Upgrade to Imminent Peril Group Call / Cancel Imminent Peril State / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.2	On-network / On-demand Pre-arranged Group Call / Automatic Commencement Mode / Reception Control / Upgrade to Emergency Group Call / Cancel Emergency State / Upgrade to Imminent Peril Group Call / Cancel Imminent Peril State / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.3	On-network / On-demand Pre-arranged Group Call / Manual Commencement Mode / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.4	On-network / On-demand Pre-arranged Group Call / Manual Commencement Mode / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.5	On-network / On-demand Pre-arranged Group Call / Emergency Group Call / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.6	On-network / On-demand Pre-arranged Group Call / Emergency Group Call / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.7	On-network / On-demand Pre-arranged Group Call / Broadcast Group Call / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.8	On-network / On-demand Pre-arranged Group Call / Broadcast Group Call / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.9	On-network / On-demand Pre-arranged Group Call / Broadcast Group Call with Temporary Group / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.10	On-network / On-demand Pre-arranged Group Call / Imminent Peril Group Call / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.1.11	On-network / On-demand Pre-arranged Group Call / Imminent Peril Group Call / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.1.2	Chat Group Call							
6.1.2.1	On-network / Chat Group Call / Join Chat Group Session / End Chat Group Call / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.1.2.2	On-network / Chat Group Call / Upgrade to Emergency Chat Group Call / Cancel	Rel-14	CV01	IUT is MCVideo Client				

#### ETSI TS 136 579-4 V14.6.0 (2021-09)

Clause	TC Title	Release	Applicabilit y		Additional Information			
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	
	Emergency Chat Group Call / Upgrade to Imminent Peril Chat Group Call / Cancel Imminent Peril Chat Group Call / Client Origination (CO)							
6.1.2.3	On-network / Chat Group Call / Upgrade to Emergency Chat Group Call / Cancel Emergency Chat Group Call / Upgrade to Imminent Peril Chat Group Call / Cancel Imminent Peril Chat Group Call / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.1.2.4	On-network / Chat Group Call / Emergency Call / Imminent Peril Call / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.2	Private Calls							
6.2.1	On-network / Private Call / On-demand / Automatic Commencement Mode / With Transmission Control / Upgrade to Emergency Call / Cancellation of Emergency on User Request / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.2.2	On-network / Private Call / On-demand / Automatic Commencement Mode / With Transmission Control / Upgrade to Emergency Call / Cancellation of Emergency on User request / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.2.3	On-network / Private Call / On-demand / Automatic Commencement Mode / Without Transmission Control / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.2.4	On-network / Private Call / On-demand / Automatic Commencement Mode / Without Transmission Control / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.2.5	On-network / Private Call / Emergency Private Call / On-demand / Automatic Commencement Mode / Force of Automatic Commencement Mode / Without Transmission Control / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.2.6	On-network / Private Call / Emergency Private Call / On-demand / Manual Commencement Mode / Force of automatic commencement mode / Without Transmission Control / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				
6.2.7	On-network / Private Call / On-demand / Manual Commencement Mode / Without Transmission Control / Client Originated (CO)	Rel-14	CV01	IUT is MCVideo Client				
6.2.8	On-network / Private Call / On-demand / Manual Commencement Mode / Without Transmission Control / Client Terminated (CT)	Rel-14	CV01	IUT is MCVideo Client				

#### Table 4-3a: Applicability of tests Conditions MCVideo Client

#### CV01 IF A.4.1-1/3 THEN R ELSE N/A

#### Table 4-4: Applicability of MCData Client tests and additional information for testing

Clause	TC Title	Release	Applicabilit y		Additional Information			
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions	
5	MCData Client Configuration							
5.1	Configuration / Authentication / User Authorization / UE Configuration / User Profile / Key Generation	Rel-14	CD01	IUT is MCData Client				
5.2	Configuration / Group Creation / Group ReGroup Creation / Group ReGroup Teardown	Rel-14	CD01	IUT is MCData Client				
5.3	Configuration / Group Affiliation / De-affiliation / Home MCData system	Rel-14	CD01	IUT is MCData Client				
5.4	Configuration / Determination of MCData Service Settings / Current Active MCData Settings / De- subscribe	Rel-14	CD01	IUT is MCData Client				
6	On-Network Test Scenarios							
6.1	Short Data Service							
6.1.1	On-network / Short Data Service (SDS) / Standalone SDS Using Signaling Control Plane / One-to-one Standalone SDS / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client				
6.1.2	On-network / Short Data Service (SDS) / Standalone SDS Using Signaling Control Plane / One-to-one Standalone SDS / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client				
6.1.3	On-network / Short Data Service (SDS) / Standalone SDS Using Signaling Control Plane / Group Standalone SDS / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client				
6.1.4	On-network / Short Data Service (SDS) / Standalone SDS Using Signaling Control Plane / Group Standalone SDS / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client				
6.1.5	On-network / Short Data Service (SDS) / Standalone SDS Using Media Plane / One-to-one Standalone SDS / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client				
6.1.6	On-network / Short Data Service (SDS) / Standalone SDS Using Media Plane / One-to-one Standalone SDS / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client				
6.1.7	On-network / Short Data Service (SDS) / Standalone SDS Using Media Plane / Group Standalone SDS / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client				
6.1.8	On-network / Short Data Service (SDS) / Standalone SDS Using Media Plane / Group Standalone SDS / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client				

Clause	TC Title	Release	Applicabilit y		Additional Information		
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions
6.1.9	On-network / Short Data Service (SDS) / SDS Session / One-to-one SDS Session / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.1.10	On-network / Short Data Service (SDS) / SDS Session / One-to-one SDS Session / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			
6.1.11	On-network / Short Data Service (SDS) / SDS Session / Group SDS Session / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.1.12	On-network / Short Data Service (SDS) / SDS Session / Group SDS Session / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			
6.2	File Distribution						
6.2.1	On-network / File Distribution (FD) / FD Using HTTP / One-to-one Standalone FD / Non- Mandatory Download / Before TDU2 Timer Expires / FILE DOWNLOAD REQUEST ACCEPTED / FILE DOWNLOAD COMPLETED / FILE DOWNLOAD REQUEST REJECTED / FILE DOWNLOAD DEFERRED / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.2.2	On-network / File Distribution (FD) / FD Using HTTP / One-to-one Standalone FD / Non- Mandatory Download / Before TDU2 Timer Expires / FILE DOWNLOAD REQUEST ACCEPTED / FILE DOWNLOAD COMPLETED / FILE DOWNLOAD REQUEST REJECTED / FILE DOWNLOAD DEFERRED / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			
6.2.3	On-network / File Distribution (FD) / FD Using HTTP / Group Standalone FD / Non-Mandatory Download / After TDU2 Timers Expires / FILE DOWNLOAD REQUEST ACCEPTED / FILE DOWNLOAD COMPLETED / FILE DOWNLOAD REQUEST REJECTED / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.2.4	On-network / File Distribution (FD) / FD Using HTTP / Group Standalone FD / Non-Mandatory Download / After TDU2 Timers Expires / FILE DOWNLOAD REQUEST ACCEPTED / FILE DOWNLOAD COMPLETED / FILE DOWNLOAD REQUEST REJECTED / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			
6.2.5	On-network / File Distribution (FD) / FD Using HTTP / One-to-one Standalone FD / Mandatory Download / With Disposition Request / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.2.6	On-network / File Distribution (FD) / FD Using HTTP / One-to-one Standalone FD / Mandatory Download / With Disposition Request / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			

Clause	TC Title	Release	Applicabilit y		Additional Information		
			Condition	Comment	Specific ICS	Specific IXIT	Number of TC Executions
6.2.7	On-network / File Distribution (FD) / FD Using HTTP / Group Standalone FD / Mandatory Download / Without Disposition Request / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.2.8	On-network / File Distribution (FD) / FD Using HTTP / Group Standalone FD / Mandatory Download / Without Disposition Request / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			
6.2.9	On-network / File Distribution (FD) / FD Using Media Plane / One-to-one Standalone FD / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.2.10	On-network / File Distribution (FD) / FD Using Media Plane / One-to-one Standalone FD / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			
6.2.11	On-network / File Distribution (FD) / FD Using Media Plane / Group Standalone FD / Client Originated (CO)	Rel-14	CD01	IUT is MCData Client			
6.2.12	On-network / File Distribution (FD) / FD Using Media Plane / Group Standalone FD / Client Terminated (CT)	Rel-14	CD01	IUT is MCData Client			

#### Table 4-4a: Applicability of tests Conditions MCData Client

CD01 IF A.4.1-1/4 THEN R ELSE N/A

# Annex A (normative): ICS proforma for Mission Critical Services over LTE Client/Server

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: Client implementation, Server implementation, etc).

When completing the proforma the supplier need to indicate if this is for a MCPTT Client or a MCPTT Server.

### 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 proform 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 MCPTT Client/Server Equipment

Identification of the MCPTT Client/Server 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 MCPTT Client/Server Under Test (CUT/SUT) identification

#### MCPTT CUT/SUT name:

Hardware configuration:

# A.2.3 Product supplier

Name:

Address:
Telephone number:
Facsimile number:
E-mail address:
Additional information:
A.2.4 The Organisation responsible for the Product testing

Name:			
Address:			
Telephone number:			
Facsimile number:			
E-mail address:			
	 	••••••	 

Additional information:

.....

.....

### A.2.5 ICS contact person

#### Name:

Telephone number:

Facsimile number:

E-mail address:

#### Additional 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 Implementation Types

#### Table A.4.1-1: Mission Critical Services general functionality

ltem	Functionality	Ref.	Release	Mnemonic	Comments
1	MCPTT Client	TS 23.179 [9]	Rel-13	pc_MCPTTClient	IUT containing MCPTT Client
2	MCPTT Server	TS 23.179 [9]	Rel-13	pc_MCPTTServer	
3	MCVideo Client	TS 23.281 [13]	Rel-14	pc_MCVideoClient	
4	MCData Client	TS 23.282 [14]	Rel-14	pc_MCDataClient	
NOTE 1	: TS 23.179 [9] has been s	uperseeded from	Release 1	4 by TS 23.379 [15]	

#### Table A.4.1-2: Mission Critical Services supplementary functionality

Item	Functionality	Ref.	Release	Mnemonic	Comments
1	Void				

# A.4.2 Additional information

Item	Additional information	Ref.	Release	Mnemonic	Comments
1	Support of KMS request security	TS 33.180 [14] Annex D.2.2	N/A	pc_MCX_KMS_Re questSecurity	UE applies KMS request security
2	The UE is capable of displaying emergency call information to the user	TS 24.379 [15]	N/A	pc_MCX_DisplayInf oEmergencyCall	
3	The UE is capable of letting the user change a pre-established session by MMI		N/A	pc_MCX_UserInitia tedPreestablishedS essionModification	
4	The UE automatically initiates emergency alert for emergency calls		N/A		In case of an emergency call in addition to the <emergency-ind> the UE automatically sets the <alert-ind> in the mcptt-info to true</alert-ind></emergency-ind>

#### Table A.4.2-1: Additional information

# Annex B (informative): Change history

						Change history	
Date	Meeting	TDoc	CR	R ev	Cat	Subject/Comment	New version
2017-02	R5#74	R5-171301	-	-	-	Introduction of TS 36.579-4.	0.0.1
2017-12	R5#77	R5-177038	-	-	-	Adding applicability for all Client tests	0.2.0
2017-12	RAN#78	RP-172184	-	-	-	Draft version for information purposes to the RAN Plenary	1.0.0
2018-03	R5#78	R5-180656	-	-	-	Various updates	1.1.0
2018-03	RAN#79	RP-180129	-	-	-	Draft version for approval to move the spec under revision control to the RAN Plenary	2.0.0
2018-03	RAN#79	-	-	-	-	Editorial changes and promoted to v13.0.0	13.0.0
2018-06	RAN#80	R5-182435	0001	-	F	Updates of 36.579-4 for MCPTT APN and more	13.1.0
2018-09	RAN#81	R5-184693	0002	-	F	Adding applicability for new MCPTT Rel-14 TCs	14.0.0
2019-09	RAN#85	R5-196356	0003	-	F	Updates to Table 4-1	14.1.0
2019-12	RAN#86	R5-198129	0005		F	Adding applicability for MCVideo TCs	14.2.0
2019-12	RAN#86	R5-198130	0006		F	Adding applicability for MCData TCs	14.2.0
2019-12	RAN#86	R5-198166	0007		F	Removal of px_MCPTT_APN_Default	14.2.0
2019-12	RAN#86	R5-199058	0004	1	F	Update for MCVideo and MCData Clients test applicability	14.2.0
2020-06	RAN#88	R5-203112	0009	3	F	Update to applicability	14.3.0
2020-09	RAN#89	R5-204369	0010	1	F	Corrections to MCVideo and MCData tables	14.4.0
2020-09	RAN#89	R5-204370	0011	-	F	Update of test case applicability to Rel-14	14.4.0
2020-09	RAN#89	R5-204370	0011	-	F	corrected wrong values to Rel-14 for 6.1.1.17-18	14.4.1
2021-03	RAN#91	R5-211254	0013	-	F	Adding an MCPTT test case to the applicability table	14.5.0
2021-03	RAN#91	R5-211545	0012	1	F	Addition of missing MCX PICS	14.5.0
2021-06	RAN#92	R5-213669	0015	1	F	Update to ICS proforma tables	14.6.0

	Document history						
V14.0.0	October 2018	Publication					
V14.1.0	October 2019	Publication					
V14.2.0	January 2020	Publication					
V14.3.0	July 2020	Publication					
V14.4.1	November 2020	Publication					
V14.5.0	April 2021	Publication					
V14.6.0	September 2021	Publication					

# History