



**TETRA and Critical Communications Evolution (TCCE);  
Testing;  
Plugtest™ scenarios  
for Mission Critical Push To Talk (MCPTT)**

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## Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee TETRA and Critical Communications Evolution (TCCE).

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## 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).

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# 1 Scope

The present document specifies interoperability tests with the purpose of supporting the Mission Critical Push To Talk (MCPTT) Plugtests™ events.

## 2 References

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The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 122 179 (V13.3.0): "Universal Mobile Telecommunications System (UMTS); LTE; Mission Critical Push to Talk (MCPTT) over LTE; Stage 1 (3GPP TS 22.179 version 13.3.0 Release 13)".
- [2] ETSI TS 123 179 (V13.4.0): "LTE; Functional architecture and information flows to support mission critical communication services; Stage 2 (3GPP TS 23.179 version 13.4.0 Release 13)".
- [3] ETSI TS 124 229 (V13.8.0): "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (3GPP TS 24.229 version 13.8.0 Release 13)".
- [4] ETSI TS 124 379 (V13.3.0): "LTE; Mission Critical Push To Talk (MCPTT) call control; Protocol specification (3GPP TS 24.379 version 13.3.0 Release 13)".
- [5] ETSI TS 124 380 (V13.3.0): "LTE; Mission Critical Push To Talk (MCPTT) media plane control; Protocol specification (3GPP TS 24.380 version 13.3.0 Release 13)".
- [6] ETSI TS 124 481 (V13.3.0): "LTE; Mission Critical Services (MCS) group management; Protocol specification (3GPP TS 24.481 version 13.3.0 Release 13)".
- [7] ETSI TS 124 482 (V13.2.0): "LTE; Mission Critical Services (MCS) identity management; Protocol specification (3GPP TS 24.482 version 13.2.0 Release 13)".
- [8] ETSI TS 124 484 (V13.3.0): "LTE; Mission Critical Services (MCS) configuration management; Protocol specification (3GPP TS 24.484 version 13.3.0 Release 13)".
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- [18] IETF RFC 5373: "Requesting Answering Modes for the Session Initiation Protocol (SIP)", November 2008.
- [19] IETF RFC 6665: "SIP-Specific Event Notification", July 2012.
- [20] IETF RFC 7647: "Clarifications for the use of REFER with RFC6665", September 2015.

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Not applicable.

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## 3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AFFIL	AFFILiation
AMR	Adaptative Multi-Rate audio codec
AMR-WB	Adaptative Multi-Rate audio codec Wideband
APN	Access Point Name
APP	Application
AS	Application Server
AVP	Attribute-Value Pairs
BM-SC	Broadcast Multicast Service Centre
CMS	Configuration Management Server
CN	CoNnectivity
CONN	CONNectivity
CSC	Common Services Core
CSCF	Call Session Control Function
DUT	Device Under Test
EMBMS	evolved Multimedia Broadcast Multicast Service
EPC	Evolved Packet Core
EPS	Evolved Packet System
EPS_GX	Policy and charging control over Gx reference point
EUT	Equipment Under Test
EUTRAN	Evolved Universal Terrestrial Radio Access Network
EVS	Enhanced Voice Services

FC	Floor Control
GCSE	Group Communication Service Enabler
GMS	Group Management Server
IdMS	Identity Management Server
IFS	Interoperable Functions Statement
IMPU	IP Multimedia PUBLIC identity
IMS	IP Multimedia Subsystem
IMS_RX	Policy and charging control over Rx reference point
IP	Internet Protocol
KMS	Key Management Server
LOC	Location
LTE-A	LTE-Advanced
MBMS	Multimedia Broadcast and Multicast Service
MC	Multicast
MCC	Mission Critical Communication
MCMC	Mission Critical MBMS subchannel Control Protocol
MCPC	Mission Critical MBMS subchannel Control Protocol
MCPTT ID	MCPTT user identity
MCPTT	Mission Critical Push-To-Talk
MNC	Mobile Network Code
NFC	No Floor Control
OAM	Operation And Maintenance
ONN	ON Network calls
OTT	Over The Top
PCC	Policy and Charging Control
PCRF	Policy and Charging Rules Function
PCSCF	Proxy Call Session Control Function
PSAP	Public Safety Answering Point
PSI	Public Service Identity
PTT	Push-To-Talk
QCI	QoS Class Identifier
RTP	Real-time Transport Protocol
RX	Rx Reference Point
SIP	Session Initiation Protocol
SUT	System Under Test
TD	Test Description
TMGI	Temporary Mobile Group Identity
TR	Technical Report
TS	Technical Specification
UE	User Equipment
UMTS	Universal Mobile Telecommunications System
URI	Uniform Resource Identifier
WFC	With Floor Control

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## 4 Conventions

### 4.1 Test Description Proforma

A Test Description (TD) is a detailed description of the process that needs to be followed to test one or more inter operable functionalities between two or more vendor implementations. A TD should include as a minimum the following elements: The following different types are defined.