ETSI TS 124 381 V13.3.0 (2017-01)



LTE; Mission Critical Push To Talk (MCPTT) group management; Protocol specification (3GPP TS 24.381 version 13.3.0 Release 13)



Reference RTS/TSGC-0124381vd30 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: http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

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

© European Telecommunications Standards Institute 2017.
All rights reserved.

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

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Intellectual Property Rights

IPRs essential or potentially essential to the present document 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.

Foreword

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

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under http://webapp.etsi.org/key/queryform.asp.

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the <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

| Inte | llectual Property Rights | | 2 | | | | |
|------|-------------------------------|----------------|----|--|--|--|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | References | | | | | | |
| | Definitions and abbreviations | | | | | | |
| | | | | | | | |
| 8 | | | | | | | |
| Anı | | (void) | | | | | |
| Anı | nex B (informative): | (void) | 7 | | | | |
| Anı | nex C (informative): | Change history | 8 | | | | |
| | torv | | 10 | | | | |

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.

1 Scope

The present document specifies the group management protocols needed to support Mission Critical Push To Talk (MCPTT). Group management applies only when the UE operates on the network.

Mission critical communication services are services that require preferential handling compared to normal telecommunication services, e.g. in support of police or fire brigade.

The MCPTT service can be used for public safety applications and also for general commercial applications (e.g., utility companies and railways).

The present document is applicable to User Equipment (UE) supporting the group management client (GMC) functionality, to application server supporting the group management server (GMS) functionality, and to application server supporting the MCPTT server functionality.

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] to [19] (void)

[20] 3GPP TS 24.481: "Mission Critical Services (MCS) group management; Protocol specification".

3 Definitions and abbreviations

(void)

4 to 7

(void)

8 Technical content

The technical content of the present TS now appears in TS 24.481 [20].

Annex A (informative): (void)

Annex B (informative): (void)

Annex C (informative): Change history

| | | | | | | Change history | | |
|---------|-------|---------------|---------------|------|-----|--|--------|--------|
| Date | TSG# | TSG doc | WG Doc. | CR | Rev | Subject/Comment | Old | New |
| 2015-07 | | | | | | Initial proposal to CT1#92-bis | - | 0.0.0 |
| 2015-07 | | | | | | Contains agreed P-CRs from CT1#92-bis: C1ah-150043, C1ah-150004, C1ah-150004 | 0.0.0 | 0.1.0 |
| 2015-08 | | | | | | Contains agreed P-CRs from CT1#93: C1-153181, C1-153182 and changes by rapporteur. | 0.1.0 | 0.2.0 |
| 2015-08 | | | | | | minor fixes from the rapporteur | 0.2.0 | 0.2.1 |
| 2015-09 | | | | | | specification numbers decided by CT#69 are indicated by the rapporteur | 0.2.1 | 0.2.2 |
| 2015-10 | | | | | | Contains agreed P-CRs from CT1#94: C1-153717, C1-153745, C1-153753. | 0.2.2 | 0.3.0 |
| 2015-11 | | | | | | Contains agreed P-CRs from CT1#95: C1-154409, C1-154593, C1-154594. Editorial fixes done and abbreviations added by the rapporteur. | 0.3.0 | 0.4.0 |
| 2015-12 | CT-70 | CP- 150735 | | | | Version 1.0.0 created for presentation for information | 0.4.0 | 1.0.0 |
| 2016-01 | | | | | | Contains agreed P-CRs from CT1#95-BIS: C1-160018, C1-160019, C1-160020, C1-160021, C1-160023, C1-160026, C1-160030, C1-160031, C1-160032, C1-1600367, C1-160369, C1-160467, C1-160468, C1-160469, C1-160470. Subclause renumbering and editorial fixes done by the rapporteur. | 1.0.0 | 1.1.0 |
| 2016-02 | | | | | | Contains agreed P-CRs from CT1-on MCPTT and CT1#96: C1ah-160040, C1ah-160086, C1ah-160093, C1ah-160104, C1-161328, C1-161373, C1-161382, C1-161397, C1-161398, C1-161399. Subclause renumbering and editorial fixes done by the rapporteur. | 1.1.0 | 1.2.0 |
| 2016-03 | CT-71 | CP- 160061 | | | | Version 2.0.0 created for presentation for approval | 1.2.0 | 2.0.0 |
| 2016-03 | CT-71 | | | | | Version 13.0.0 created after approval | 2.0.0 | 13.0.0 |
| 2016-03 | | | | | | Editorial fixes - removal of superfluous spaces and addition of "(GC)", "(GMC)" and "(GMS)" when missing. | 13.0.0 | 13.0.1 |
| 2016-06 | CT-72 | CP- 160322 | C1- 161736 | 0007 | - | Correction for semantic and values of group-priority and user-priority | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162061 | 0001 | 1 | Corrections for internal inconsistencies in the document | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162375 | 0010 | - | Correction for "the present document" | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162399 | 0002 | 2 | Corrections for managing group documents based on group ID | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162590 | 0014 | - | Add validations for <on-network-maximum-duration></on-network-maximum-duration> | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162841 | 0004 | 3 | Correction for missing MCPTT group properties | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162843 | 0012 | 1 | Corrections for group document excluding group members retrieval procedure | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162845 | 0015 | 1 | Corrections for security | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 162846 | 0009 | 2 | Adding security configuration to the group document | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 163047 | 0003 | 4 | Corrections in the temporary MCPTT group formation procedure and the temporary MCPTT group tear down procedure | 13.0.1 | 13.1.0 |
| 2016-06 | CT-72 | CP- 160322 | C1- 163049 | 0013 | 2 | Corrections for group management operations which cannot be expressed by HTTP GET, HTTP PUT or HTTP DELETE methods | 13.0.1 | 13.1.0 |

| | Change history | | | | | | | |
|---------|----------------|-----------|------|-----|-----|---|---------|--|
| Date | Meeting | TDoc | CR | Rev | Cat | Subject/Comment | New | |
| | | | | | | | version | |
| 2016-09 | CT#73 | CP-160502 | 0011 | 2 | F | Corrections in subscription to MCPTT group for not-routable MCPTT | 13.2.0 | |
| | | | | | | identities and for MCPTT signalling security | | |
| 2016-09 | CT#73 | CP-160502 | 0016 | 2 | F | Coding for group communication security | 13.2.0 | |
| 2016-09 | CT#73 | CP-160502 | 0017 | 1 | F | Corrections in security level of temporary MCPTT group | 13.2.0 | |
| 2016-09 | CT#73 | CP-160502 | 0018 | 1 | F | Corrections in temporary MCPTT group formation | 13.2.0 | |
| 2016-09 | CT#73 | CP-160502 | 0019 | | F | Corrections in application/g.3gpp.GMOP+xml IANA registration | 13.2.0 | |
| | | | | | | template | | |
| 2016-09 | CT#73 | CP-160502 | 0020 | | F | Corrections in the flows | 13.2.0 | |
| 2016-09 | CT#73 | CP-160502 | 0021 | | F | Correction for re-grouping with MCPTT group to be combined owned | 13.2.0 | |
| | | | | | | by other MCPTT provider | | |
| 2016-09 | CT#73 | CP-160502 | 0022 | 1 | F | Correction in group key transport payloads | 13.2.0 | |
| 2016-09 | CT#73 | CP-160502 | 0027 | | F | Default document namespace correction | 13.2.0 | |
| 2016-12 | CT#74 | CP-160831 | 0037 | | F | Remove contents, insert pointer to generic spec 24.481 | 13.3.0 | |

History

| Document history | | | | | | |
|----------------------|--------------|-------------|--|--|--|--|
| V13.0.1 | May 2016 | Publication | | | | |
| V13.1.0 | July 2016 | Publication | | | | |
| V13.2.0 | October 2016 | Publication | | | | |
| V13.3.0 January 2017 | | Publication | | | | |
| | | | | | | |