

# ETSI TS 129 230 V13.3.0 (2016-03)



**Digital cellular telecommunications system (Phase 2+) (GSM);  
Universal Mobile Telecommunications System (UMTS);  
LTE;  
Diameter applications;  
3GPP specific codes and identifiers  
(3GPP TS 29.230 version 13.3.0 Release 13)**



---

**Reference**

RTS/TSGC-0429230vd30

---

**Keywords**

GSM, LTE, UMTS

**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  
<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:  
<https://portal.etsi.org/People/CommitteeSupportStaff.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 2016.  
All rights reserved.

**DECT™**, **PLUGTESTS™**, **UMTS™** and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.  
**3GPP™** and **LTE™** 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 [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         |
| Foreword.....   | 2         |
| Modal verbs terminology.....  | 2         |
| Foreword.....   | 4         |
| 1 Scope .....   | 5         |
| 2 References .....  | 5         |
| 3 Definitions and abbreviations.....  | 6         |
| 3.1 Definitions .....   | 6         |
| 3.2 Abbreviations .....   | 7         |
| 4 Application identifiers.....  | 7         |
| 4.1 3GPP specific application identifiers .....   | 7         |
| 5 Command codes .....   | 8         |
| 5.1 Command codes allocated for 3GPP .....  | 8         |
| 6 Vendor identifier .....   | 11        |
| 6.1 3GPP's vendor identifier.....   | 11        |
| 7 Attribute-Value-Pair codes.....   | 11        |
| 7.1 3GPP specific AVP codes .....   | 12        |
| 8 Experimental result codes .....   | 31        |
| 8.1 3GPP specific result codes .....  | 31        |
| 8.1.1 Informational .....   | 32        |
| 8.1.2 Success.....  | 32        |
| 8.1.3 Transient Failures .....  | 32        |
| 8.1.4 Permanent Failures .....  | 33        |
| <b>Annex A (informative): Assignment of the Diameter codes and identifiers in 3GPP.....</b> | <b>37</b> |
| A.1 Application identifiers.....  | 37        |
| A.2 Command codes .....   | 37        |
| A.3 AVP codes.....  | 37        |
| A.4 Result codes.....   | 37        |
| <b>Annex B (informative): Change history .....</b>  | <b>39</b> |
| History .....   | 44        |

---

# Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> 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 lists the 3GPP specific Diameter protocol codes, including the AVP codes and Experimental result codes.

This document lists also the application identifiers assigned to 3GPP specific Diameter applications by IANA and the Diameter command code range which is assigned to 3GPP by IANA.

---

# 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 TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx interfaces; Signalling flows and message contents".
- [2] 3GPP TS 29.229: "Cx and Dx interfaces based on the Diameter protocol; Protocol details".
- [3] 3GPP TS 29.328: "IP Multimedia (IM) Subsystem Sh interface; Signalling flows and message contents".
- [4] 3GPP TS 29.329: "Sh Interface based on the Diameter protocol; Protocol details".
- [5] 3GPP TS 32.299: "Telecommunication management; Charging management; Diameter charging applications".
- [6] 3GPP TS 29.234, Release 11: "3GPP system to Wireless Local Area Network (WLAN) interworking; Stage 3".
- [7] 3GPP TS 29.109: "Generic Authentication Architecture (GAA); Zh and Zn Interfaces based on the Diameter protocol; Stage 3".
- [8] 3GPP TS 29.209, Release 6: "Policy control over Gq interface".
- [9] IETF RFC 3588: "Diameter Base Protocol".
- [10] IETF RFC 3589: "Diameter Command Codes for Third Generation Partnership Project (3GPP) Release 5".
- [11] IANA's Enterprise-Numbers: <http://www.iana.org/assignments/enterprise-numbers>
- [12] IANA's AAA parameters register: <ftp://ftp.iana.org/assignments/aaa-parameters/>
- [13] 3GPP TS 29.061: "Interworking between the Public Land Mobile Network (PLMN) supporting packet based services and Packet Data Networks (PDN)".
- [14] 3GPP TS 32.296: "Telecommunication management; Charging management; Online Charging System (OCS): Applications and interfaces".
- [15] 3GPP TS 29.210, Release 6: "Charging rule provisioning over Gx interface".
- [16] 3GPP TS 29.140 Release 6: "Multimedia Messaging Service (MMS); MM10 interface based on Diameter protocol; Stage 3".