



**Access, Terminals, Transmission and Multiplexing (ATTM);  
Remote management of CPE over broadband networks;  
CPE WAN Management Protocol (CWMP)**

**Document Preview**

[ETSI ES 203 069 V1.2.1 \(2011-09\)](https://standards.iteh.ai/catalog/standards/etsi/d17d2767-3347-47f1-a093-24255725a2ff/etsi-es-203-069-v1-2-1-2011-09)

<https://standards.iteh.ai/catalog/standards/etsi/d17d2767-3347-47f1-a093-24255725a2ff/etsi-es-203-069-v1-2-1-2011-09>

---

Reference

RES/ATTM-02014

---

Keywords

configuration, management, xDSL

**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

**(<https://standards.iteh.ai>)**  
**Document Preview**

---

**Important notice**

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the 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:

[http://portal.etsi.org/chaicor/ETSI\\_support.asp](http://portal.etsi.org/chaicor/ETSI_support.asp)

---

**Copyright Notification**

No part may be reproduced except as authorized by written permission.  
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2011.  
All rights reserved.

DECT<sup>TM</sup>, PLUGTESTS<sup>TM</sup>, UMTS<sup>TM</sup> and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.  
3GPP<sup>TM</sup> and LTE<sup>TM</sup> are Trade Marks of ETSI registered for the benefit of its Members and  
of the 3GPP Organizational Partners.  
GSM<sup>®</sup> and the GSM logo are Trade Marks registered and owned by the GSM Association.

# Contents

|                                                                                             |           |
|---------------------------------------------------------------------------------------------|-----------|
| Intellectual Property Rights .....                                                          | 4         |
| Foreword.....                                                                               | 4         |
| Introduction .....                                                                          | 4         |
| 1 Scope .....                                                                               | 5         |
| 2 References .....                                                                          | 5         |
| 2.1 Normative references .....                                                              | 5         |
| 2.2 Informative references.....                                                             | 5         |
| 3 Definitions and abbreviations.....                                                        | 6         |
| 3.1 Definitions.....                                                                        | 6         |
| 3.2 Abbreviations .....                                                                     | 6         |
| 4 Conventions.....                                                                          | 6         |
| 5 Recommendations .....                                                                     | 7         |
| 6 Remote management of CPE over broadband networks .....                                    | 8         |
| 6.1 Elements of the CPE WAN management protocol.....                                        | 8         |
| 6.1.1 TR-069: CPE WAN management protocol (CWMP).....                                       | 8         |
| 6.1.2 Auto-configuration and dynamic service provisioning.....                              | 9         |
| 6.1.3 Software/firmware image management .....                                              | 9         |
| 6.1.4 Status and performance monitoring .....                                               | 9         |
| 6.1.5 Diagnostics .....                                                                     | 9         |
| 6.1.6 Security .....                                                                        | 9         |
| 6.2 Data models.....                                                                        | 9         |
| 6.2.1 TR-181: Device data model for TR-069 .....                                            | 10        |
| 6.2.2 TR-157: Component objects for CWMP .....                                              | 10        |
| 6.2.3 TR-143: Enabling network throughput performance tests and statistical monitoring..... | 11        |
| 6.2.4 TR-104: DSLHome provisioning parameters for VoIP CPE.....                             | 11        |
| 6.2.5 TR-135: Data model for a TR-069 enabled set-top box.....                              | 11        |
| 6.2.6 TR-140: TR-069 data model for storage service enabled devices .....                   | 11        |
| 6.2.7 TR-196: Femto access point service data model.....                                    | 12        |
| <b>Annex A (informative): Bibliography.....</b>                                             | <b>13</b> |
| History .....                                                                               | 14        |