



**Documents relevant to EN 301 549 "Accessibility requirements
suitable for public procurement of ICT products and services
in Europe"**



Reference

DTR/HF-00126

Keywords

accessibility, HF, ICT, procurement

CENAvenue Marnix 17
B-1000 Brussels - BELGIUMTel: + 32 2 550 08 11
Fax: + 32 2 550 08 19**CENELEC**Avenue Marnix 17
B-1000 Brussels - BELGIUMTel.: +32 2 519 68 71
Fax: +32 2 519 69 19**ETSI**650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCETel.: +33 4 92 94 42 00
Fax: +33 4 93 65 47 16Siret 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**

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/chairecor/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 2014.

© Comité Européen de Normalisation 2014.

© Comité Européen de Normalisation Electrotechnique 2014.

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.

Contents

Contents	3
Intellectual Property Rights	5
Foreword	5
Introduction	5
1 Scope	6
2 References	6
2.1 Normative references	6
2.2 Informative references	6
3 Definitions and abbreviations	8
3.1 Definitions	8
3.2 Abbreviations	8
4 Overview	8
5 Preparation of the EN requirements	9
5.1 General	9
5.2 Global issues within the EN	11
5.3 Definitions (Clause 3 of the EN)	12
5.4 Functional performance (Clause 4 of the EN)	13
5.4.1 Functional performance statements	13
5.4.2 Mapping between requirements and functional performance statements	14
5.5 Generic requirements (Clause 5 of the EN)	15
5.6 ICT with two-way voice communications (Clause 6 of the EN)	15
5.6.1 Audio bandwidth for speech (informative recommendation) (Clause 6.1 of the EN)	15
5.6.2 Real-Time Text (RTT) functionality (Clause 6.2 of the EN)	15
5.7 Video communication (Clause 6.6 of the EN)	16
5.8 Hardware (Clause 8 of the EN)	16
5.8.1 Hardware products with speech output (Clause 8.2 of the EN)	16
5.8.2 Fixed-line devices (Clause 8.2.2.1 of the EN)	16
5.8.3 Wireless communication devices (Clause 8.2.2.2 of the EN)	16
5.8.4 Physical access to ICT (Clause 8.3 of the EN)	16
5.8.5 Mechanically operable parts (Clause 8.4 of the EN)	18
5.9 Web (Clause 9 of the EN)	18
5.10 Non-web documents (Clause 10 of the EN)	19
5.11 Non-web software (Clause 11 of the EN)	20
5.11.1 Software success criteria (Clause 11.2 of the EN)	20
5.11.2 Interoperability with assistive technologies (Clause 11.3 of the EN)	21
5.11.3 Authoring tools (Clause 11.6 of the EN)	21
5.12 ICT providing relay or emergency service access (Clause 13 of the EN)	21
5.13 Annex B	21
5.14 Annex C	22
6 Documents used for the development of test procedures	22
6.1 Simple tests based on inspection or testing	22
6.2 Tests with processes defined in other standards	22
6.3 Selective testing	22
7 New tests and evaluation methods	23
7.1 New tests	23
7.2 Further research	23
7.2.1 Contrast	23
7.2.2 Anthropometry	23
7.2.3 Usage with limited cognition	24
7.2.4 Real-time text correctness	24
7.2.5 The physical design of installed and free-standing ICT	24

History	25
---------------	----

This document is a preview generated by EVS

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 (<http://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 Report (TR) has been produced by ETSI Technical Committee Human Factors (HF).

Introduction

The present document was prepared in response to Phase 2 of Mandate M 376 [i.9] from the European Commission to CEN, CENELEC and ETSI.

The primary objective of Mandate 376 was to produce a European Standard (EN 301 549 [i.3]), hereafter, for the purpose of this document, called "the EN", that sets out in a single source, detailed, practical and quantifiable functional accessibility requirements which: take note of global initiatives in that field, are applicable to all ICT products and services identified in Phase I, and are usable in public procurement.

The present document is one of two Technical Reports that support the EN. The present document lists the standards and technical specifications used in the creation of the compliance requirements for accessibility set out in the EN. It also provides a source reference for other documents needed to implement the test procedures required by the EN.

The present document also notes new test methods developed during the work on the EN and identifies exceptional cases where further research was found to be necessary.

A second Technical Report (TR 101 551 [i.7]) gives guidance to procurers on the award criteria relevant to each area of user needs in the products and services under consideration.

1 Scope

The present document lists the documents used in the creation of EN 301 549 [i.3] on accessibility requirements for public procurement of ICT products and services in Europe and provides a source reference for any other documents needed to implement the test procedures specified in that document.

As well as identifying the sources for the EN content, the present document also provides additional explanation to assist users of the EN with clarifications and supporting information about measurement methods, particularly where no globally agreed test presently exists.

Where there are any test gaps, these are identified and test descriptions and evaluation methodologies are developed. In those exceptional cases where it is not possible to do so, recommendations are given on how the gaps should be filled.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

Not applicable.

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ANSI C.63.19 (2011): "Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids".
- [i.2] ETSI EG 201 013: "Human Factors (HF); Definitions, abbreviations and symbols".
- [i.3] CEN/CENELEC/ETSI EN 301 549: "Accessibility requirements suitable for public procurement of ICT products and services in Europe".
- [i.4] ETSI ES 200 381-1: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids Part 1: Fixed-line speech terminals".
- [i.5] ETSI ES 200 381-2: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids; Part 2: Cellular speech terminals".
- [i.6] ETSI ETS 300 381: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids".
- [i.7] CEN/CENELEC/ETSI TR 101 551: "Guidelines on the use of accessibility award criteria suitable for publicly procured ICT products and services in Europe".
- [i.8] ETSI TR 102 612: "Human Factors (HF); European accessibility requirements for public procurement of products and services in the ICT domain (European Commission Mandate M 376, Phase 1)".