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Accessibility requirements for ICT products and services

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Foreword

This draft Harmonised European Standard (EN) has been produced by ETSI Technical Committee Human Factors (HF), and the eAccessibility Joint Working Group (JWG) of CEN/CENELEC/ETSI and is now submitted for the combined Public Enquiry and Vote phase of the ETSI standards EN Approval Procedure.

The present document has been prepared under the Commission's standardisation request C(2017) 2585 final [i.27] to provide one voluntary means of conforming to the essential requirements of Directive 2016/2102 [i.28] on the accessibility of the websites and mobile applications of public sector bodies.

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in tables A.1 and A.2 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

The present document has been developed from ETSI EN 301 549 [i.29] V1.1.2 (2015-04). The changes are limited to those necessary to comply with the requirements of a Harmonised Standard, inclusion of requirements for mobile applications, updating to reflect the state of the art in W3C WCAG, updating of clause 6.1, and corrections of errors.

Proposed national transposition dates

Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	18 months after doa

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "may not", "need", "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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Introduction

The present document is developed in response to standardisation request M 554 from the European Commission to CEN, CENELEC and ETSI. It is based on the European Standard (EN) that was one of several deliverables prepared in response to Phase 2 of Mandate M 376 [i.3].

NOTE: The present document reflects the content of the W3C WCAG 2.1 Candidate Recommendation [5], with the exception of any success criteria that are marked "at risk". According to W3C: "Some Success Criteria are marked as "at risk" due to concerns around implementation and testing challenges, and could be removed if testing does not document sufficient implementation". The aim is to fully harmonise with WCAG 2.1 so the present document will be revised once WCAG 2.1 has been finalised.

The primary objective of Mandate M 376 was to produce a European Standard that sets out in a single source, detailed, practical and quantifiable functional accessibility requirements that take note of global initiatives in that field and which are applicable to all Information and Communication Technology (ICT) products and services identified in Phase I of the Mandate (ETSI TR 102 612 [i.9]) and usable in public procurement.

The European Standard prepared in response to Mandate M 376 is supported by three Technical Reports. The first (ETSI TR 101 550 [i.7]) lists the standards and technical specifications used in the creation of the compliance requirements for accessibility set out in the European Standard. The second Technical Report (ETSI TR 101 551 [i.8]) gives guidance to procurers on the award criteria relevant to each of the accessibility-related needs of ICT users in the products and services under consideration. The third Technical Report (ETSI TR 101 552 [i.30]) incorporates all information and documentation needed in the framework of the procurement process in order to allow conveying the assessment of accessibility via conformity with the functional accessibility requirements contained in the present document and with award criteria.

<https://standards.iso.org/standards/catalogue/standards/sist/301549-v2.1.1/301549-v2.1.1.html>

1 Scope

The present document specifies the functional accessibility requirements applicable to ICT products and services, together with a description of the test procedures and evaluation methodology for each accessibility requirement in a form that is suitable for use in public procurement within Europe. The present document might be useful for other purposes such as procurement in the private sector.

The relationship between the present document and the essential requirements of Directive 2016/2102 on the accessibility of the websites and mobile applications of public sector bodies [i.28] is given in Annex A.

The present document contains the necessary functional requirements and provides a reference document such that if procedures are followed by different actors, the results of testing are similar and the interpretation of those results is clear. The test descriptions and evaluation methodology included in the present document are elaborated to a level of detail compliant with ISO/IEC 17007:2009 [i.14], so that conformance testing can give conclusive results.

All clauses except those in clause 12, related to documentation and support services, are self-scoping. This means they are introduced with the phrase 'Where ICT <pre-condition>'. Compliance is achieved either when the pre-condition is true and the corresponding test (in Annex C) is passed, or when the pre-condition is false (i.e. the pre-condition is not met or not valid).

NOTE 1: Compliance issues are covered in normative clause C.1.

The inherent nature of certain situations makes it impossible to make reliable and definitive statements that accessibility requirements have been met. In those situations therefore, the requirements in the present document are not applicable:

- when the product is in a failure, repair or maintenance state where the ordinary set of input or output functions are not available;
- during those parts of start-up, shutdown, and other state transitions that can be completed without user interaction.

NOTE 2: Even in the above situations, it is best practice to apply requirements in the present document wherever it is feasible and safe to do so.

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at [ETSI References in docbox](#).

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

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

- [1] ETSI ETS 300 381 (Edition 1) (December 1994): "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids".
- [2] ETSI ES 200 381-1 (V1.2.1) (October 2012): "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids Part 1: Fixed-line speech terminals".
- [3] ETSI ES 200 381-2 (V1.1.1) (October 2012): "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids; Part 2: Cellular speech terminals".

- [4] W3C Recommendation (December 2008) /ISO/IEC 40500:2012: "Web Content Accessibility Guidelines (WCAG) 2.0".

NOTE: Available at [WCAG 2.0](#).

- [5] W3C Candidate Recommendation (January 2018): "Web Content Accessibility Guidelines (WCAG) 2.1".

NOTE: Available at [WCAG 2.1 CR](#).

2.2 Informative 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.

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

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/IEEE C63.19 (2011): "American National Standard Method of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids".
- [i.2] ANSI/TIA-4965: "Receive volume control requirements for digital and analogue wireline terminals".
- [i.3] European Commission M 376-EN: "Standardization Mandate to CEN, CENELEC and ETSI in support of European accessibility requirements for public procurement of products and services in the ICT domain".
- [i.4] ETSI EG 201 013: "Human Factors (HF); Definitions, abbreviations and symbols".
- [i.5] ETSI ES 202 975: "Human Factors (HF); Requirements for relay services".
- [i.6] ETSI ETS 300 767: "Human Factors (HF); Telephone Prepayment Cards; Tactile Identifier".
- [i.7] CEN/CENELEC/ETSI TR 101 550: "Documents relevant to EN 301 549 "Accessibility requirements suitable for public procurement of ICT products and services in Europe"".
- [i.8] 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.9] 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)".
- [i.10] ETSI TS 126 114: "Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Multimedia telephony; Media handling and interaction (3GPP TS 26.114)".
- [i.11] ETSI TS 122 173: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1 (3GPP TS 22.173)".
- [i.12] ETSI TS 134 229: "Universal Mobile Telecommunications System (UMTS); LTE; Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification (3GPP TS 34.229)".
- [i.13] IETF RFC 4103 (2005): "RTP Payload for Text Conversation".