INTERNATIONAL STANDARD

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Document management applications — Electronic document file format enhancement for accessibility —

Part 1: Use of ISO 32000-1 (PDF/UA-1)

Applications de la gestion de documents — Amélioration de format du fichier du document électronique pour l'accessibilité —

Partie 1: Utilisation de l'ISO 32000-1 (PDF/UA-1)

Reference number
ISO 14289-1:2014(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 171, *Document management applications*, Subcommittee SC 2, *Application issues*.

This second edition of ISO 14289-1 cancels and replaces the first edition (ISO 14289-1:2012, Corrected version), of which it constitutes a minor revision incorporating the following corrections:

— in Scope, line 1, rewording clarifies the reference to ISO 32000-1:2008 that was changed in the ISO publishing process;

— in Clause 5, the method for specifying version and conformance has been clarified;

— in 7.3 (line after second bullet), bold type has been applied to the word "Caption";

— in 7.3 (line before Note 1), "Table 333 has been replaced by "Table 323" and a reference to subclause 14.7.2 has been added;

— in 7.4.1 (second line), a reference to subclause 14.7.2 has been added;

— in 7.4.3 (first paragraph), the phrase "listed above" in the second sentence has been replaced with the correct reference in this International Standard;

— in 7.4.4 (first line), bold type has been applied to the letter "H";

— in 7.5 (second paragraph), the normative requirement to have a Scope attribute on a TH structure element has been changed from a shall to a should, and additional normative text added to explicate when the Scope element is required;

— in 7.6 (second bullet), LI has been replaced by L;

— in 7.17 (last paragraph), a reference to 7.7.2 has been added;

— in 7.18.1 (first paragraph), elements of Subtype Popup have been exempted from the requirements in this clause;

— in 7.18.1 (fourth paragraph), alternative descriptions for widget annotations have been clarified;

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— in 7.18.2 (first line), 7.17.1 has been replaced by 7.18.1;

— in 7.18.5 (first paragraph), the reference has been corrected to ISO 32000-1:2008, 14.8.4.4.2;

— in 7.18.8, the requirements for handling of annotation type PrinterMark have been clarified;

— in 8.4 (third bullet), the word “the” has been added before “value”;

— in 8.8 (Note), a reference to 12.2 has been added.

ISO 14289 consists of the following parts, under the general title *Document management applications — Electronic document file format enhancement for accessibility*:

— *Part 1: Use of* ISO 32000-1 *(PDF/UA-1)*

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Introduction

PDF is a digital format for representing documents. PDF files may be created natively in PDF form, converted from other electronic formats, or digitized from paper. Businesses, governments, libraries, archives and other institutions and individuals around the world use PDF to represent considerable bodies of important information. These PDF files should be made accessible to users with disabilities.

The accessibility of a document is dependent on the inclusion of a variety of semantic information in a document such as (but not limited to) machine-recoverable text presented in a declared language, logical structure of content, and organization of that content in pages, sections and paragraphs. Semantic information can also contain a variety of descriptive metadata, such as alternative text for images. The primary purpose of ISO 14289 (known as PDF/UA) is to define how to represent electronic documents in the PDF format in a manner that allows the file to be accessible. This is accomplished by identifying the set of PDF components that may be used and restrictions on the form of their use. PDF/UA is intended as a companion standard, to be used in conjunction with ISO 32000, ISO 19005, ISO 15930 and other standards as may apply for the purpose of achieving accessibility or as mandated by this International Standard. In order for PDF/UA conforming files to be truly accessible, requirements on conforming readers and conforming assistive technology are also stipulated herein. By itself, PDF/UA does not necessarily ensure that the visual appearance of the content accurately reflects any original source material used to create the conforming file. For example, the process used to create a conforming file might substitute fonts, reflow text, downsample images, or use lossy compression. Organizations that need to ensure that a conforming file is an accurate representation of original source material may need to impose additional requirements on the processes that generate the conforming file beyond those imposed by this International Standard. In addition, it is important for those organizations to implement policies and practices regarding the inspection of conforming files for correct placement of accessibility information.

AIIM (an accredited standards developing organization) maintains an ongoing series of application notes for guiding developers and users of this International Standard. These application notes will be displayed, when available, at http://www.aiim.org/pdfua/app-notes. AIIM will also retain copies of the specific non-ISO normative references in this International Standard that are publicly available electronic documents.

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Document management applications — Electronic document file format enhancement for accessibility —

Part 1: Use of ISO 32000-1 (PDF/UA-1)

1 Scope

This part of ISO 14289 specifies the use of ISO 32000-1:2008 to produce accessible electronic documents.

This part of ISO 14289 is not applicable to:

— specific processes for converting paper or electronic documents to the PDF/UA format;

— specific technical design, user interface, implementation, or operational details of rendering;

— specific physical methods of storing these documents, such as media and storage conditions;

— required computer hardware and/or operating systems.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 32000-1:2008, *Document management — Portable document format — Part 1: PDF 1.7*

Web Content Accessibility Guidelines 2.0, W3C Recommendation, 11 December 2008. Available from the Internet <http://www.w3.org/TR/WCAG20>.

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1
assistive technology
AT
software and/or hardware used by a person with a disability that provides alternative controls and/or renditions to facilitate their access to and usage of available functionality and information

3.2
alternate description
description of a structure element and its children

[SOURCE: ISO 32000-1:2008, 14.9.3]

Note 1 to entry: ISO 32000-1 uses both “alternate text” and “alternate description” to refer to the same item.

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