

# *Introducing ISO 14289*

# PDF/UA

# (Universal Accessibility)

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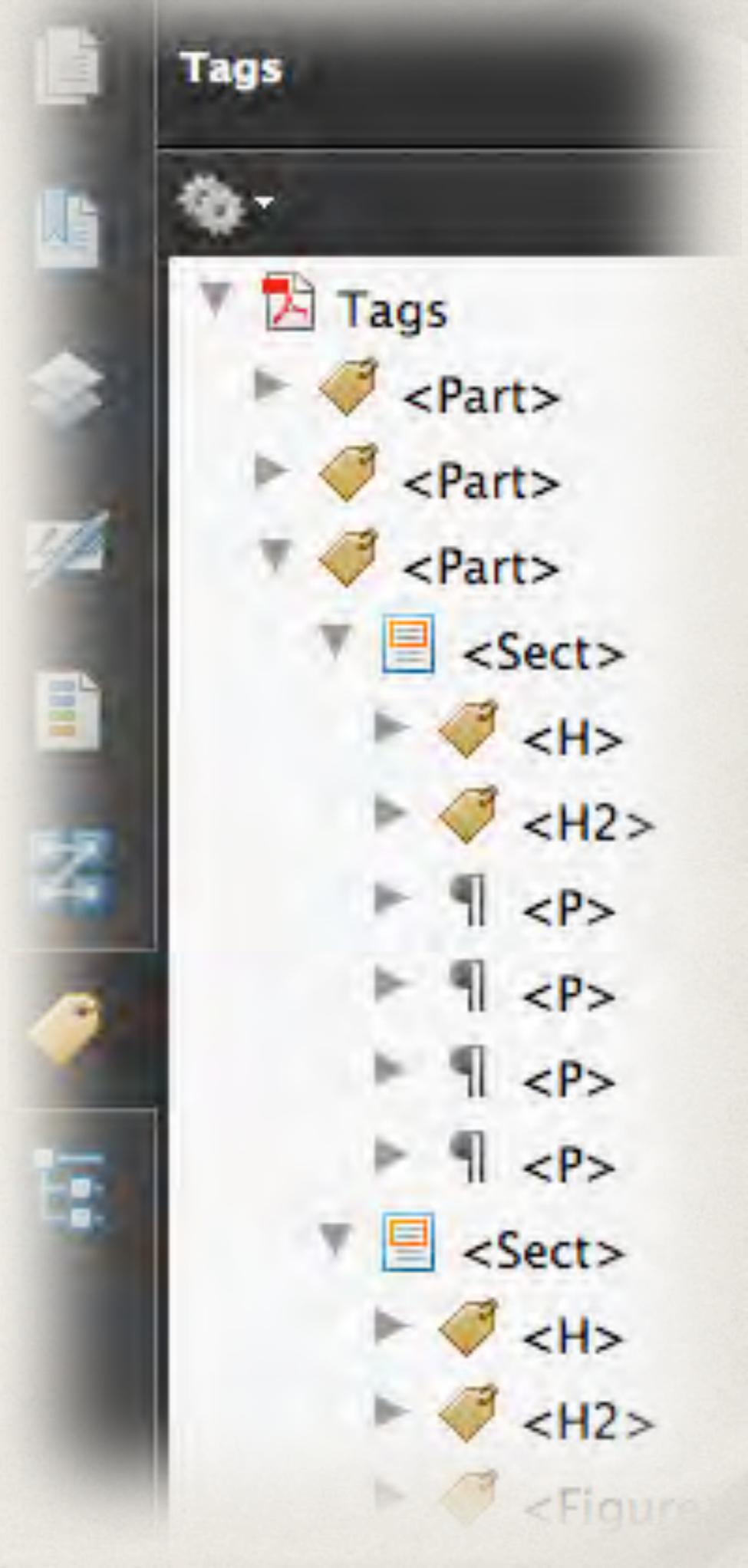
Applicant Document Solutions

Chair, US Committee (AIIM)

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# This Presentation Covers

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- ❖ The History, Purpose, Value & Benefits of PDF / UA
- ❖ Key Terms
- ❖ ISO 14289 by Section
- ❖ Relationship to ISO 32000 (PDF), ISO 19005 (PDF / A) & WCAG
- ❖ Implementers Guide and Best Practices
- ❖ Beyond ISO 14289-1
- ❖ Your questions

# History & Status of ISO 14289-1

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- \* **1993** Adobe PDF | **1999** WCAG 1.0 | **2001** Section 508 | **2005** PDF/A-1a
- \* **2004, Q4** AIIM and Adobe form the PDF/UA Committee, ~20 meetings / year
- \* **2008, Q3** Adobe's PDF Reference 1.7 becomes ISO 32000-1:2008
- \* **2009 Q1** PDF/UA becomes an ISO Accepted Work Item (AWI)
- \* **2009 - 2010** International Committee meetings, 3 Committee Drafts
- \* **ANTICIPATED**
  - \* **Late 2010** Draft International Standard
  - \* **Late 2011** Publication



# The Purpose of PDF/UA

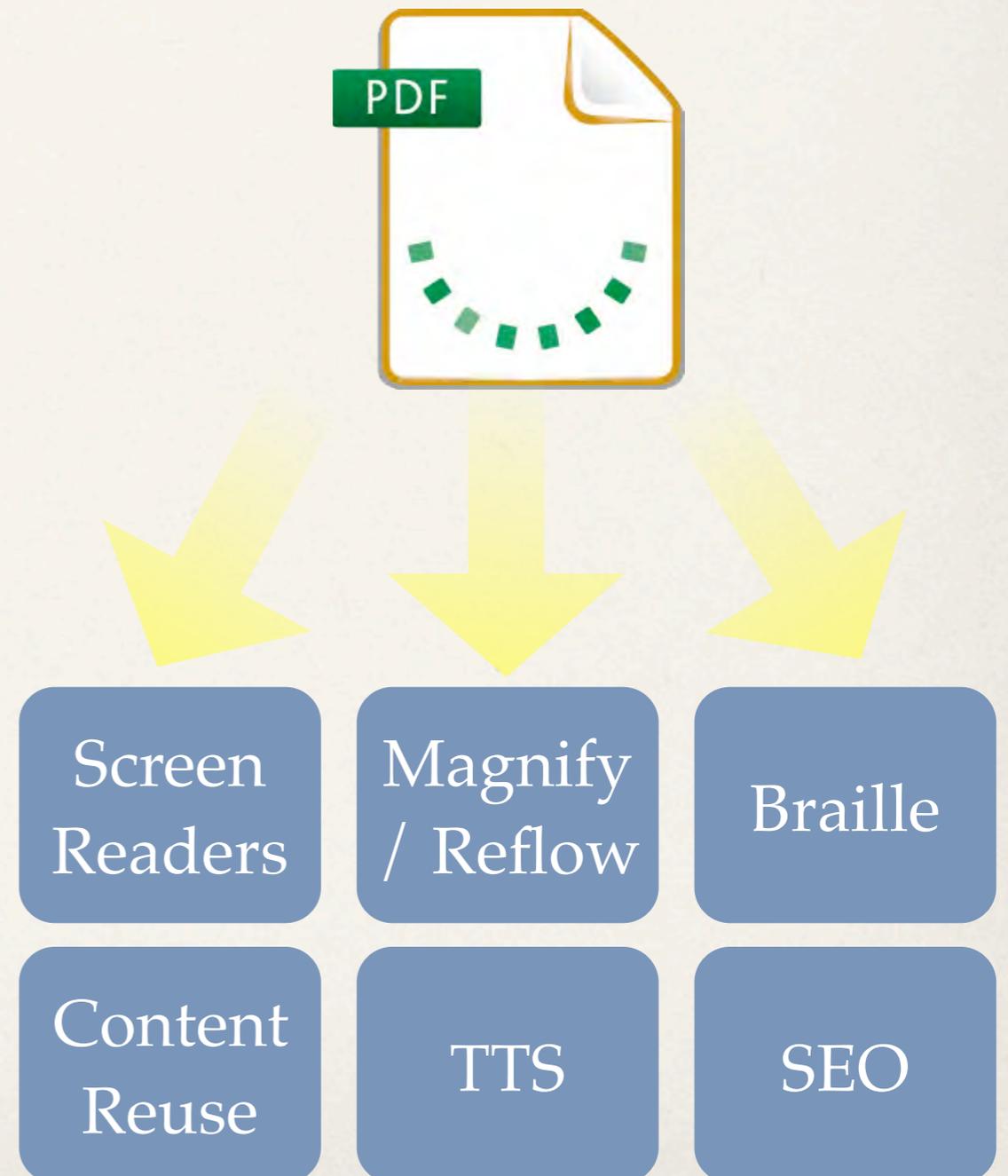
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1. Identify elements in ISO 32000-1:2008 (the PDF specification) relevant to accessibility
2. Specify valid implementation of such elements in conforming files
3. Specify requirements for conforming PDF readers
4. Specify requirements for conforming Assistive Technology (AT)

# The Value of PDF/UA to Users

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- ❖ Enables the alignment of PDF creation and editing software with the capabilities of any PDF consumer, including AT
- ❖ Enables a top-quality reading and navigating experience with AT
- ❖ Enables universally re-deployable PDF content
- ❖ Implies eligibility for PDF / A Conformance Level “a”



# The Benefits of PDF/UA to AT

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- ❖ Specifies the set of PDF elements relevant to AT
- ❖ Specifies logical organization for AT to interpret with reliability
- ❖ Eliminates ambiguity in implementing support for accessible PDF
- ❖ Compliant files include standard or mapped-to-standard tags
- ❖ Compliance implies WCAG 2.0 Levels A - AAA as applicable

# Key Terms

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- ❖ **Tagged PDF** - A PDF file which uses markup to denote the **logical structure** (semantic elements), and **logical order** (flow) of content
  - ❖ Unless **tagged**, PDF content has no **logical order** or **structure**
  - ❖ Unless **tagged**, PDF content has no **semantics** (*heading, para, etc*)
- ❖ **Artifact** content shall not be represented in the **tags tree**
- ❖ **Assistive Technology** provides users with disabilities a means of reading and navigating electronic documents
- ❖ PDF **“Reading Order”** (PDF / UA ignores this subject)

# PDF/UA by Section & Purpose

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Introduction

**7 File Format Requirements**

**1 Scope**

**8 Reader Requirements**

2 Normative References

**9 Assistive Technology  
Requirements**

3 Terms & Definitions

4 Notation

5 Version Identification

6 Conformance Requirements

# PDF/UA ~ Scope

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- ❖ “This part of ISO 14289 specifies how to use the Portable Document Format (PDF) ISO 32000-1:2008 to produce electronic documents which are accessible.”
- ❖ “This part of ISO 14289 does not apply to:
  - ❖ “Specific technical design, user interface, implementation, or operational details of rendering
  - ❖ [...converting....storing...hardware or software...]”

# File Requirements ~ Highlights

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- ❖ All real content shall be tagged. Artifacts shall not be tagged
- ❖ Content shall be marked in the structure tree with semantically appropriate tags in a logical reading order
- ❖ All structure types in use shall be standard or mapped to standard
- ❖ Information shall not be conveyed by contrast, colour, format or layout, nor by combinations thereof, unless the content is tagged to reflect all intended meaning
- ❖ Dynamic XFA forms shall not be used

# Reader Requirements ~ Highlights

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- ❖ Shall have the ability to process all structure types, attributes and key values in this specification
- ❖ Shall have the ability to process artifacts (content outside of the document's logical structure)
- ❖ Shall make its user interface, if any, available to AT
- ❖ Shall make both the overall document language and language changes in the content available to AT devices

# AT Requirements ~ Highlights

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- ❖ Shall have the ability to consume and present all structure types in this specification in the users preferred manner
- ❖ Shall provide a means of presenting PDF “Optional Content”
- ❖ Shall allow navigation by PageLabels (PDF page enumeration)
- ❖ Shall have the ability to navigate via the structure hierarchy (tags)
- ❖ Shall have the ability to navigate via outlines (bookmarks)
- ❖ Shall permit navigation zoom values to be overridden by the user

# PDF/UA in Context

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- ❖ ISO 14289 is a companion to ISO 32000-1:2008 (the PDF specification)
- ❖ ISO 14289 may be used as a basis for updated WCAG 2.0 Techniques
- ❖ ISO 14289 conformance may be considered a Best Practice model for achieving meaningful compliance with ISO 19005-1:2005. (PDF / A-1a)
- ❖ In conjunction with the Standard, AIIM's US TAG intends to publish:
  - ❖ The ISO 14289 **Implementation Guide** (for developers)
  - ❖ The ISO 14289 **Best Practices Guide** (for general users)

# Beyond 14289-1...

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- ❖ 14289-2 will rely on ISO 32000-2 (PDF 2.0), which includes many enhancements generated by the US Committee for ISO 14289
- ❖ Support for MathML
- ❖ New standard Structure Types will bring compatibility with DAISY
- ❖ New algorithm for handling tabular content (tables)
- ❖ New tags for Continuous Lists, Abbreviations, Media Objects, Page Designators, Line Numbers, Redaction, Destinations, Emphasis, Subscript, Superscript, Sidebar, Callout and more!

# Get Involved - Make a Difference

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- ❖ PDF is here to stay
- ❖ PDF / UA development continues...
  - ❖ Implementation Guide & Best Practices Guide
  - ❖ PDF / A, Conformance Level A (ISO 19005)
  - ❖ Beyond ISO 14289-1
  - ❖ Beyond ISO 32000-1
- ❖ Involvement of the AT developer community is vital

# Summary

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“...ISO 14289 specifies how to use the Portable Document Format (PDF) ... to produce electronic documents which are accessible.”

*From the Scope of ISO 14289-1*

# Your Questions...

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**More Information**

<http://www.aiim.org/PDFUA>