

INTERNATIONAL  
STANDARD

ISO  
14289-1

Second edition  
2014-12-15

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)



Tagged PDF Best Practice Guide: **Syntax**  
For developers implementing ISO 14289-1 (PDF/UA)  
Version 1.0 (June 2019)



**Matterhorn Protocol 1.1**  
PDF/UA Conformance Testing Model



PDF Days Online 2021

# Accessible PDF

How to tag content the right way

# Contents



- About me / PDF/UA TWG
- Situation: PDF/UA and its Guidelines in relation to meaningful tagging
- Related documents by the PDF Association
  - The Matterhorn Protocol – what it is and how does it help?
  - Tagged PDF Best Practice Guide: Syntax – what it is and how does it help?
- Some real word examples and how to deal with them
- Future development
- Questions?

# About me



- Klaas Posselt / Germany
- Consultant
- Community Chair  
PDF/UA Technical Working Group (TWG),  
with Matthew Hardy



# About PDF/UA TWG



- 1 of 12 TWGs at PDF Association
- PDF/UA TWG Overview:  
<https://www.pdfa.org/community/pdf-ua-technical-working-group/>
- Get in touch: [pdfua@pdfa.org](mailto:pdfua@pdfa.org)

# Situation



- We do have:
  - PDF [1.7] (ISO 32000-1)
  - Tagged PDF [chapter 14.8]
- Tagged PDF can be used for multiple purposes, e.g.:
  - Accessibility
  - Content reuse
- No precise description how an accessible PDF should look like

# Situation



- Solution: PDF substandard PDF/UA-1 (ISO 14289-1)  
[UA = Universal Accessibility]
- Definition how to use 32000-1 for accessible PDFs
- Core clause 7.1, paragraph 2:  
*“Content shall be marked in the structure tree with semantically appropriate tags in a logical reading order”*

# Why PDF/UA is not enough



- PDF/UA based on PDF
- PDF standard itself and PDF/UA:
  - Do not cover all needs / issues
  - Both are not precise in all areas
- Example, description of Tag <Sect> (Section):  
*“A container for grouping related content elements.”*  
(PDF 32000-1, Table 333)

# Supporting documents



- **Matterhorn Protocol 1.1**

(<https://www.pdfa.org/resource/the-matterhorn-protocol/>)

- **Tagged PDF Best Practice Guide: Syntax**

(<https://www.pdfa.org/resource/tagged-pdf-best-practice-guide-syntax/>)

- Intended for software developers and document testers



# Matterhorn Protocol



- Testing reference / checklist
- 31 checkpoints, 136 failure conditions
- Divided into M (Machine) / H (Human); Examples:
  - Failure conditions 06-001 / 06-004
  - Failure condition 13-008

# Tagged PDF Best Practice Guide



- Intended to help understand the syntactical characteristics of tagged PDF files – compressed into one document
- Detailed explanation of tagging syntax; Examples:
  - Empty tags
  - Footnotes
- And Attributes and properties; Example:
  - ActualText

# Real word examples



We like to have a footnote.

Here you go<sup>1</sup>!

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<sup>1</sup> *I am a footnote*

# Real word examples

I AM A HEADING

I am a normal paragraph, tagged as <P>.

# Real word examples



- How to tag a documents title?
  - <Title>?
  - <H1>?
  - <P>?

PDF 32000-1:2008

First Edition  
2008-7-1

**Document management — Portable document format — Part 1:  
PDF 1.7**

# You need input?



- PDF/UA Reference Suite 1.1

<https://www.pdfa.org/resource/pdfua-reference-suite/>

- PDF Accessibility Liaison Working Group (LWG)

<https://www.pdfa.org/community/pdf-accessibility-liaison-working-group/>

- Development of set of Techniques for PDF accessibility / examples

- Membership open to AT developers, testers, accessibility subject matter experts

# Future development



- PDF/UA-2 (14289-2)
  - Based on PDF 2.0
  - E.g. new tags
  - Issues addressed (e.g. <Caption>)
- Still work in progress strongly forced by the PDF/UA TWG (association with ISO TC 171 SC 2 WG 9)

# Questions?



■ Thanks for you attention