

Is zero post-export remediation possible?

A vision for a more efficient PDF accessibility workflow to reduce post-export remediation steps

Charissa Ramirez | Digital accessibility specialist | charamirez27@gmail.com | PDF Days Europe 2025 Berlin | 15 September 2025

Introduction

Research suggests that more than 90% of the 2.5 trillion PDFs created annually worldwide are untagged¹. PDF accessibility can be achieved to a high standard but requires expertise, time and testing with multiple software and assistive tech stacks.

Question

How might we reduce the time and resources spent on post-export remediation?

Strategies and efficiencies to support this vision



Better tools: accessibility built into authoring environments

- **Accessibility assistant:** Design apps are built-in with accessibility prompts for headings, images, colour, table structure, forms to catch missing tagging, alt text and colour issues before export.
- **Checklists and patterns for designers:** Accessible tables, forms, charts shared as libraries and templates so designers don't start from scratch.
- **Accessibility preview mode:** designers can preview the tag structure and get a text preview of what a screen reader would announce.
- **Reliable structure handoff:** When a designer applies a paragraph style "Heading 1," it should reliably export as <H1> in tagged PDF.
- **Cross-application interoperability:** Authoring tools use a common tagging schema when exporting PDFs.



Smarter remediation assistance

- **AI-assisted tagging:** Machine learning can generate alt text suggestions or detect headings based on style or visual hierarchy.
- **Crowdsourced metadata repositories:** Frequently used images, logos, or charts could have shared, reusable alt text so designers don't reinvent descriptions every time.
- **Predictive warnings:** If a designer creates a complex table, the software could warn: "This may not export well. Consider adding table headers."



Laws, standards, and policy

- **Conformance to standards:** Governments could legislate that all public-sector PDFs must be exported with valid tags and tested against PDF/UA and WCAG standards.
- **Procurement rules:** Agencies could refuse procurement of tools that do not support accessible export workflows.



Education, certification, skills development

- **Design curriculum:** Graphic design programs should teach accessibility principles alongside typography and layout. "Accessible design" becomes part of design literacy.
- **Industry certification:** Support for certification programs covering PDF/UA, WCAG, assistive technology testing and accessible content design.



Shift-left strategy

- **Cultural shift:** Accessibility framed not as compliance, but as part of good design, which results in faster information delivery for all users.
- **Integrating accessibility across all stages of product development:** For documents, this involves planning from the start, knowing their users and understanding their requirements, developing an accessible colour palette, having a content strategy, working with users and testing early and at different stages.

A vision for the future



- **Embedded accessibility diagnostics:** Authoring file runs internal checks according to a selected standard profile and carries a self-check report so QA teams and end users know its compliance level and the relevant standard it is meeting.
- **Smart tagging upon export:** All documents exported to PDF formats will be tagged. Image scans and untagged files will export only as an image format but not as PDF.
- **Responsive PDF:** Retain fixed-layout fidelity but allow reflow for mobile and AT.
- **Dual-format exports:** A "twin" file where the PDF includes an HTML layer for accessibility.

Scan the QR code for the authors contact details and to receive a copy of this presentation.



¹ Adobe Acrobat Team. (2022, November 29). *The complete checklist to PDF accessibility*. Adobe Blog. Retrieved 25 August 2025, from <https://blog.adobe.com/en/publish/2022/11/29/the-complete-checklist-to-pdf-accessibility>