

Problem

- **Purpose of Proof of Concept**
 - Show PDF/A as viable alternative to HTML/ZIP for XBRL
 - Improve AI-readiness of reports
- **Current XBRL Reporting**
 - Tagged HTML binds visual data to XBRL facts
 - XBRL Report Package requires viewer tool
- **Use Case Problem Statements**
 - Inline XBRL costly for large filings, especially tables
 - Complex tooling, obscure semantics, poor AI extraction
- **HTML vs PDF submissions**
 - Multiple conversions required for HTML → AI
- **For AI consumability**
 - Current XML taxonomy misses filer’s semantic intent
- **Interest in PDF/A (by rule makers)**
 - ISO standard with structural tagging support

Solution

- **PDF/A with OIM Taxonomy for AI**
 - Embeds taxonomy in JSON directly in PDF
 - Preserves both visual layout and filer semantics
- **PDF/A as HTML rendering alternative (visual)**
 - Pixel-perfect rendering and accessibility structure
- **XBRL and metadata embedded in PDF/A**
 - Facts mapped to structural elements with iXBRL features
- **PDF viewer ⇒ structural element ⇒ XBRL template**
 - Direct mapping enables interactive viewers
- **Structure model / template (diagram)**
 - Supports transforms, scaling, and sign conventions

Proof of Concept & Use Cases

- **Proof of Concept demo**
 - Arelle plugin reads tagged PDF/A + JSON template
- **PDF tools accommodation (UI plugins)**
 - Tag-entry panes and XBRL fact viewing in PDF editors
- **Use Case 1 – Inline XBRL Reports**
 - Replace HTML with PDF/A for filings and agency portals
- **Use Case 2 – Form templates (merged with static forms)**
 - Pre-tagged PDFs eliminate filer need for tagging tools
- **Use Case 3 – Tagged tabular data**
 - Combine tagged statements with xBRL-CSV for large tables
- **PDF/A Portable Collection as the container**
 - Embed OIM taxonomy and metadata files

Inline XBRL — HTML vs PDF Submissions

Today — inline XBRL (tagged HTML) + XBRL taxonomy (XML) in Report Package (zip)



Proposed — PDF/A + OIM JSON + OIM Taxonomy (AI-Ready)



Key differences: • PDF/A carries structure + OIM JSON inside → fewer conversions • Pixel-perfect rendering with accessibility • Easier AI ingestion

XBRL is used for financial and prudential reporting worldwide
PDF is used for just about everything else worldwide
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