

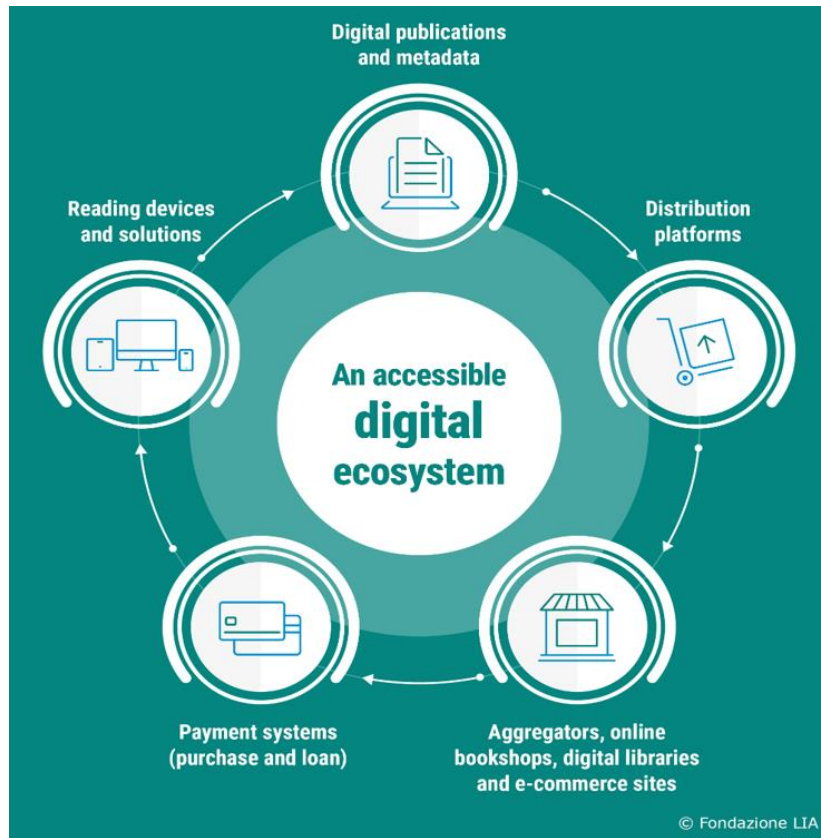


State of the Arts of the EAA implementation

Cristina Mussinelli
Secretary General @ Fondazione LIA

FEP Assembly – November 5°, 2024

An accessible digital publishing ecosystem



Every player should play its part

Publishers and content creators	Digital distributors or aggregators	Books in print catalogues	Digital bookstores or digital libraries	Reading solutions
<ul style="list-style-type: none"> • Produce new publications as born accessible publications following the guidelines • Make the catalogue accessible • Checking Accessibility • Quality control and certification for Accessibility • Create accessibility metadata 	<ul style="list-style-type: none"> • Ingest and distribute accessibility metadata • Implement non-blocking accessibility DRMS 	<ul style="list-style-type: none"> • Ingest and distribute accessibility metadata • Create a catalogue of born accessible publications available on the market 	<ul style="list-style-type: none"> • Produce new publications as born accessible publications following the guidelines • Make the catalogue accessible • Checking Accessibility • Quality control and certification for Accessibility • Create accessibility metadata 	<ul style="list-style-type: none"> • Create graphical user interface following accessibility guidelines • Display accessibility metadata to end users • Implement non-blocking accessibility DRMS • Inform end user of the compliance with accessibility requirements

New projects of collaboration

[Apace – Accelerating Publishing Accessibility through Collaboration in Europe](#)

It's a network set to enhance social inclusion creating a dialogue between publishers and specialist organizations producing accessible publications. It aims to fill the current gap of competences and creating a new generation of professional experts

Activities

- Capacity building through training courses and an Accessibility Summer School
- Networking opportunities: Meet-Ups and "Ask the Experts"
- Awareness events to promote accessibility best practices
- Pilot projects experimenting new methods for producing and distributing accessible e-books

THE FIRST INTERNATIONAL SURVEY ON THE ADOPTION OF ACCESSIBILITY PRACTICES IN VIEW OF EEA

First report of its kind

The survey analyses data gathered from 17 countries:

Austria, Belgium, Bulgaria,
Denmark, Estonia, Finland, France,
Germany, Italy, Lithuania,
Netherlands, Norway, Poland, Spain,
Sweden, Switzerland, UK



The impact of the EAA

- **80,3%** of respondents **currently publish e-books**
- **70,5%** of respondents, including **52% of micro-enterprises**, believe that the **Directive will impact their publishing house**
- **42%** of respondents **have already taken steps to comply** with the new regulations
- **Further 24,9%** are developing strategies or assessing the impact
- **37,4%** of respondents **declare they are currently producing accessible publications**
- **Another 37,4%** plan to **start by the end of 2024**



E-books production

The approach on how to produce e-books is evenly distributed among the respondents:

- **38,1%** handling the activity **entirely in-house,**
- **23%** relying **solely on external suppliers**
- **37,4%** employing a combination of **both in-house and external resources**

Tools for producing digital publications:

- 83% - Adobe InDesign
- 26,6% - Microsoft Word
- 25,2% - XML
- 11,5% - LaTeX
- 4,3% QuarkXPress



Production of accessible e-books

- Over **half of the respondents** reported having established **guidelines for producing accessible e-books**, aligned with standards like WCAG 2 and EPUB Accessibility 1.1, for both in-house teams and external suppliers
- A peculiar aspect of creating accessible e-books is the **creation of image descriptions**, which are textual explanations of visual content that convey information
- The responsibility for image descriptions typically falls to the editorial department (76,3%), authors (36,8%), and external suppliers (26,3%)



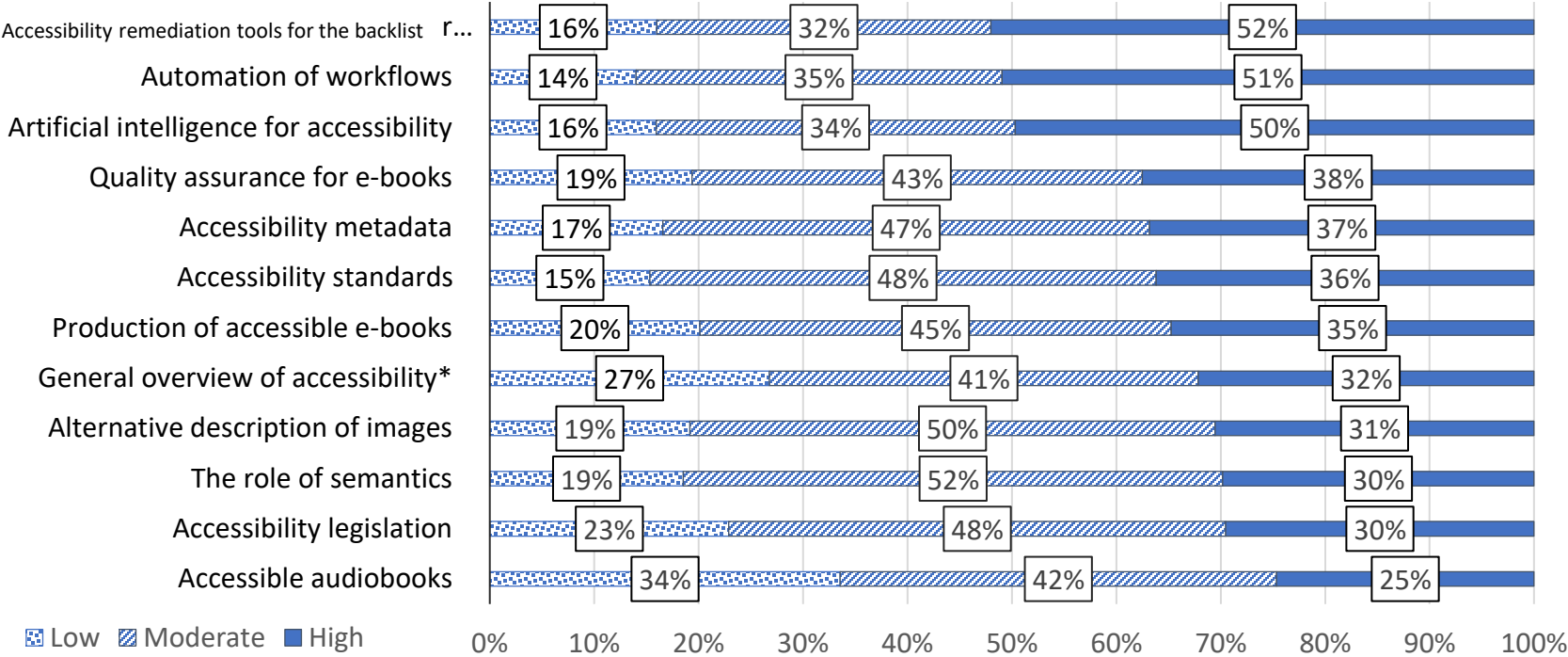
Distribution

- **59,6%** of respondents **declared** that they **adopt accessibility metadata**
 - 67% - EPUB Accessibility Metadata
 - 41.9% - ONIX Metadata
- As for **DRMs**, publishers declared to use:
 - 32% - Watermark DRM
 - 25% - Adobe DRM
 - 5,8% Radium LCP

The accessibility of proprietary DRMs used by vendors such as Amazon, Google, Apple, Kobo, Barnes & Noble, Overdrive etc. does not appear in the survey.



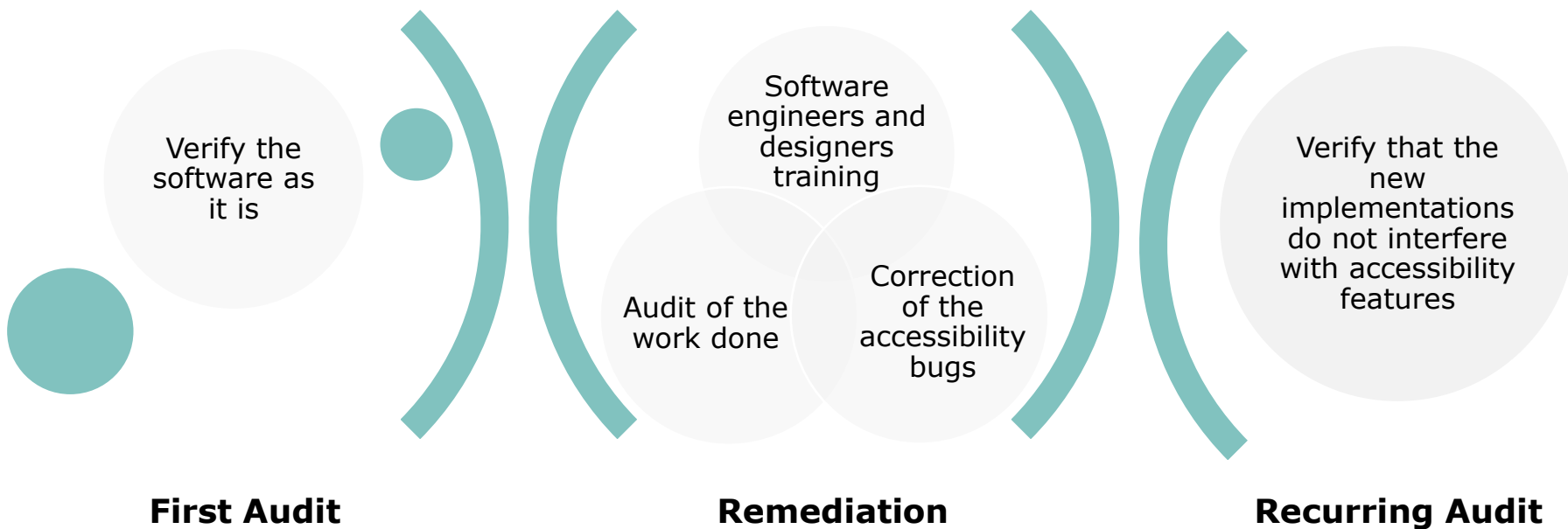
Interest of publishers in receiving training on accessibility issues



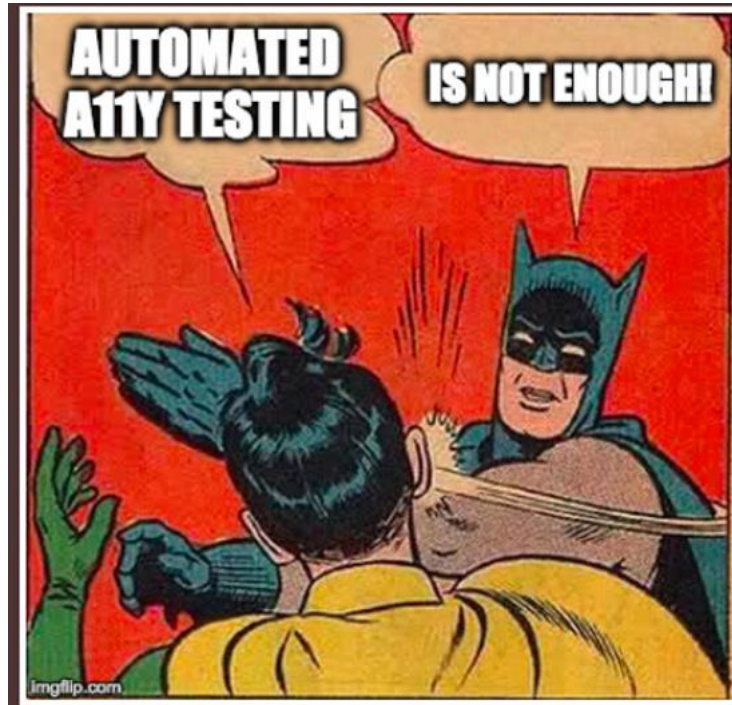
*(what is Born Accessible, which tools are used to read by persons with print impairments)



Audit's Steps



Automated testing is not enough



Mapping and standards

- Fondazione LIA has prepared a detailed document on the compliance of the already existing publishing standards (**EPUB, ONIX, schema.Org**) with the EAA requirements: [european accessibility act: report on the state of the art of publishing standards](#)
- The document had been presented in the last Members' state meeting hold in September 2024 by the EU Commission with the goal that industry standards are adopted as technical specification for the EAA

Metadata: What about the display?



Different metadata standards = different context

ONIX

- trade distribution chain

Schema.org

- EPUB Accessibility Metadata inside the EPUB file
- web pages (SEO)

MARC

- two formats: MARC 21 e UNIMARC
- libraries
- under development

ACCESSIBILITY METADATA DISPLAY GUIDE FOR DIGITAL PUBLICATIONS 2.0



Adobe improvements practical implications of the results in accessible publishing production

Gregorio Pellegrino *Chief Accessibility Officer* @ Fondazione LIA

Technical lead of Accessible EPUB from InDesign Expert Group

This presentation was held during the seminar
"ADOBE InDesign: Progress made towards
mainstreaming accessibility"
Frankfurter Buchmesse 2024 – October 16th

Results achieved so far...

- When **InDesign is used correctly** for producing accessible digital publications (e.g. by applying styles, adding alternative text for images, setting the reading order), recent developments **have made it easier to produce accessible EPUB files**. These advancements enable publishers to:
 - **Reduce the time** needed to create EPUBs that comply with accessibility standards, particularly by minimizing manual post-export code adjustments.
 - **Empower individuals without coding skills** to produce more accessible publications.
- Side effect: some of the developments allow for **better publications for everyone**

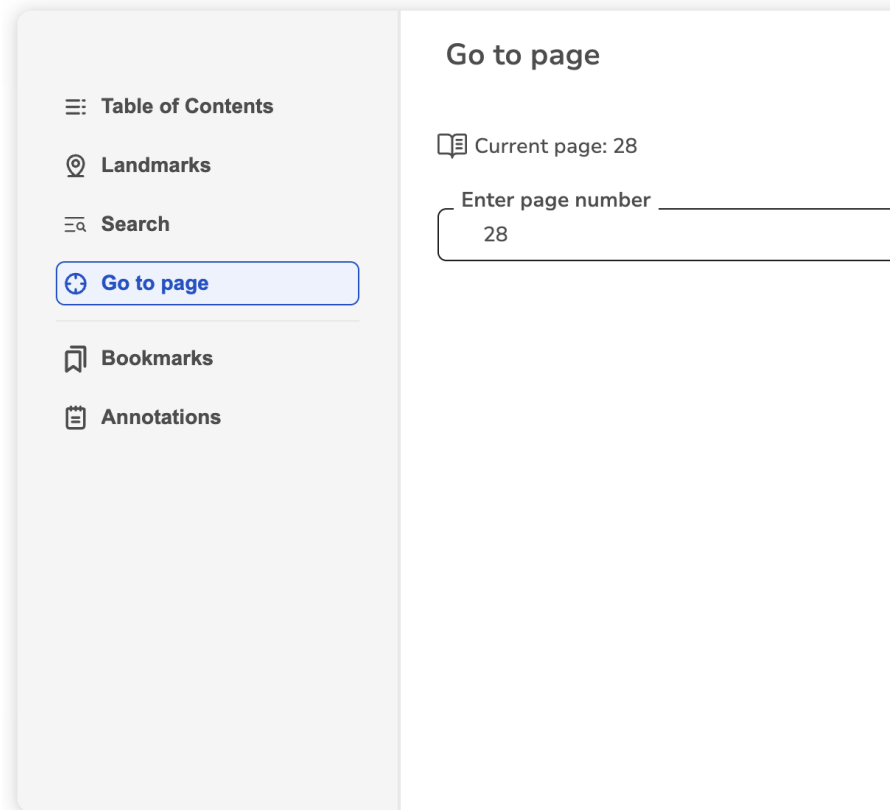


Adobe presented their roadmap in the Frankfurt meeting, and they are supposed to solve all the issues we provided them by June 2025

We will check all the future steps.

**New features relevant
to the production of accessible EPUBs**

- Introduction of **page navigation in reflowable EPUB** exports
- Allows readers to navigate easily **between pages**
- Using the **same numbering** of the printed book
- Relevant in educational settings where the **print text and digital version** are adopted in the same classroom, ensuring that all users are on **the same page**



- **Language attribute improvements:**
 - Enables text-to-speech software to correctly pronounce words in the right language
 - Enables correct spelling of text in different languages in electronic Braille
- **Footnotes and endnotes mark-up:**
 - Make it easier for all readers to access and understand notes
 - Allow readers to jump back and forth between main text and notes intuitively

- **Alt-text for cover images:**

- The feature allows the content creator to insert the alternative cover text during export, avoiding the need to insert it into the code

- **Decorative images management:**

- The functionality was already available for PDFs, it was implemented for EPUBs
- Avoids confusion by distinguishing images that need to be described from purely decorative ones

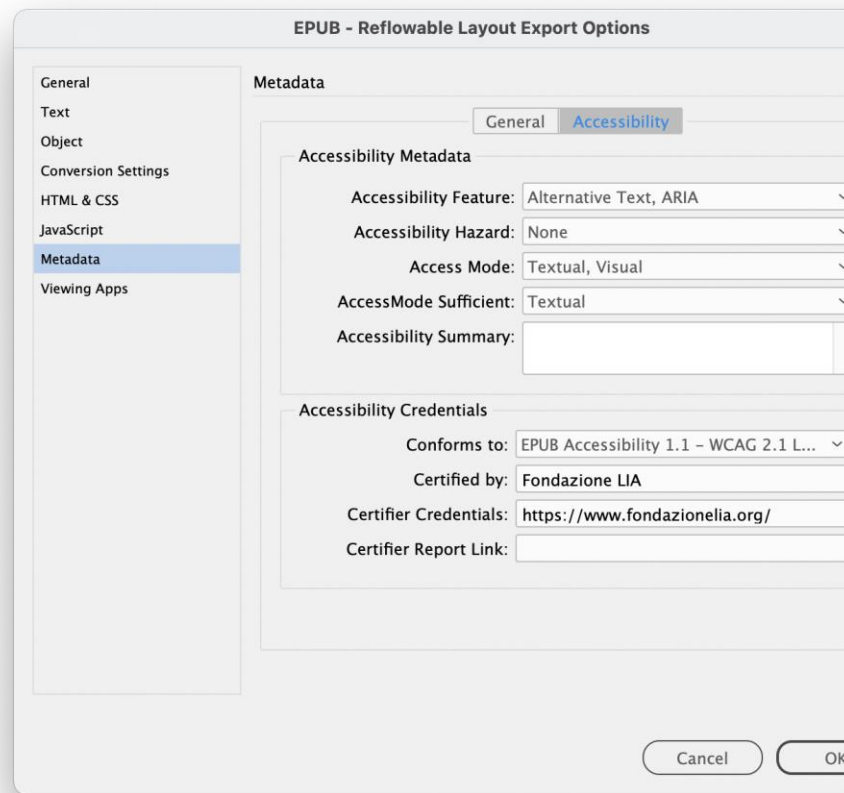
- **Page titles:**

- It helps readers better orient themselves in the document by immediately understanding where they are

Accessibility Metadata Panel

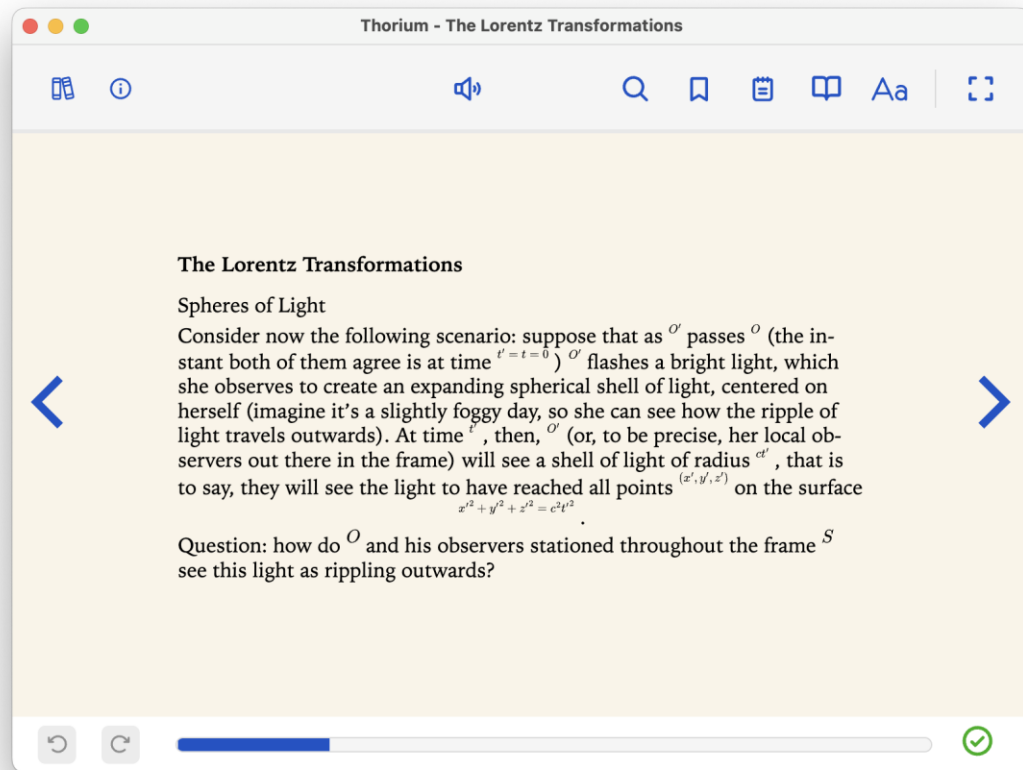
- New **"Accessibility" panel** in EPUB export mask
- Allows direct entry of publication's machine read **accessibility metadata**
- Key requirement of **EPUB Accessibility Guidelines**
- Allows readers to quickly assess whether the publication **meets their accessibility needs**

Caution: creating accessibility metadata requires specific skills



- Ability to insert mathematical **formulas in MathML** directly into InDesign
- Math expressions are exported in EPUBs as **SVG** (with **embedded MathML**)

Note: some optimization and best practices are still being discussed



To learn more...



- Relationship with national Authorities
 - Disproportionated burden evaluation
 - Backlist
- Workflow integration and optimization
- More complex accessible e-books and e-books with fixed layout: textbooks, academic, children books, comics
- Exploring Artificial Intelligence for image description, improve semantic tagging, speed-up accessibility quality assurance
- Areas not directly covered by the EAA – learning management systems, audiobooks, journals

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