

Specification and Implementation of Accessibility Metadata in EPUB3

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Overview

- EPUB 3.3 in Candidate Recommendation at the W3C
- Includes EPUB Accessibility 1.1
 - Requires accessibility metadata for conformance and discoverability
- Obtain metadata upon ingestion of EPUB
- ONIC crosswalk with Schema.org
- User Experience guide for display of accessibility metadata

EPUB Accessibility: EU Accessibility Act mapping

- Work on MARC

EPUB 3.3 is a Candidate Recommendation in the W3C

- Expected to be approved in early 2023
- Backward compatible with earlier versions of EPUB 3
- Includes EPUB accessibility 1.1 specification

EPUB Accessibility 1.1

- Conformance and Discoverability Requirements for EPUB publications
- Builds on Web Accessibility Guidelines (WCAG)
 - Adds requirements specific to publishing not included in WCAG
 - Conformance to accessibility requirements
 - Features
 - Hazards
 - Accessibility Summary (really an addendum)

Conformance Statements

- The all-important ConformsTo statement **MUST** be included.

```
<meta
```

```
property="dcterms:conformsTo"
```

```
id="conf">
```

```
EPUB Accessibility 1.1 - WCAG 2.1 Level AA
```

```
</meta>
```

- certifiedBy must also be included.
- Other related conformance statements in the specification

Features MUST be included

- `accessMode` — a human sensory perceptual system or cognitive faculty necessary to process or perceive the content (e.g., textual, visual, auditory, tactile).
- `accessModeSufficient` — a set of one or more access modes sufficient to consume the content without significant loss of information. An EPUB publication can have more than one set of sufficient access modes for its consumption depending on the types of content it includes (i.e., unlike access modes, this property takes into account any alternatives for content that is not broadly accessible, such as the inclusion of transcripts for audio content).

Screen Reader Friendly

- `accessModeSufficient`
- Values:
 - Visual
 - Auditory
 - Tactile
 - Textual
- Textual by itself, i.e., no other modes means it will be screen reader friendly
- WCAG at the A and AA levels can also infer that it is screen reader friendly

Hazards and Summary (not really a summary)

- Motion, flashing, sound
- Most of the time there will be none
- If present, explain in the accessibilitySummary and identify the location to be avoided

User Experience Guide for Displaying Accessibility Metadata

- This explains what should be presented to end users, because metadata is not user friendly.
- Principles section is at a high level and is not expected to change to often.
- Schema.org Accessibility Properties Crosswalk Values:
 - Mapping to ONIX
 - Mapping to MARC is under development
- European Accessibility Act requires accessibility metadata, and EPUB accessibility Specification meets requirements
 - See the mapping to EU Act report in references

RedShelf and VitalSource Implementations

RedShelf [Biology for the AP® Course](#)

When viewing the record for this book, click on the accessibility link to view their User Experience Guide implementation

VitalSource [Biology for the AP® Course](#)

When viewing the VitalSource record of the biology book, click on the accessibility tab to view their implementation of the User Experience guide

References

- EPUB 3.3 <https://www.w3.org/TR/epub-33/>
- EPUB Accessibility 1.1 - Conformance and Discoverability Requirements for EPUB publications
<https://w3c.github.io/epub-specs/epub33/a11y/index.html>
- Schema.org Accessibility Properties for Discoverability Vocabulary
<https://www.w3.org/2021/a11y-discov-vocab/latest/>
- Schema.org Accessibility metadata on the Knowledge Base
<http://kb.daisy.org/publishing/docs/metadata/schema.org/index.html>
- Schema.org Accessibility Properties Crosswalk <https://w3c.github.io/a11y-discov-vocab/crosswalk/>
- RedShelf has implemented the UX Guide <https://redshelf.com/>, [Biology for the AP® Course](#)
- VitalSource has implemented the UX Guide <https://www.vitalsource.com/>, [Biology for the AP® Course](#)