

BIC

Breakfasts 2018

Welcome to April's BIC Breakfast:
Accessible eBooks

#BICBreakfast

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**What is a
BIC Breakfast?**

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BOOK INDUSTRY COMMUNICATION LTD



THE BOOK INDUSTRY'S
SUPPLY CHAIN ORGANISATION

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BOOK INDUSTRY COMMUNICATION LTD

BIC Committees

Digital Supply Chain

Libraries

Metadata

Physical Supply Chain

Training, Events & Communications



BOOK INDUSTRY COMMUNICATION LTD

Regular BIC Events

BIC Breakfasts (monthly)

New Trends in Publishing Seminar (4th September 2018)

BIC Networking Events including
our annual BIC Bash (November 2018)

Building a Better Business Seminar at LBF
(March 2019)



BOOK INDUSTRY COMMUNICATION LTD

BIC on the web

Extensive Training Programme

Social Media:

@BIC1UK

@KarinaLuke

@LastPhoenixDown

Connect with us on Twitter, Facebook and LinkedIn.



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Over to Ted...



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Bridging the gap between technical accessibility
and accessible content

<https://accessible-digital-documents.com>



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Over to Emma...



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THE **PUBLISHERS**
ASSOCIATION

ACCESSIBLE PUBLISHING

Emma House

**Deputy CEO, The Publishers Association
Chair, PA Accessibility Action Group**

THE **PUBLISHERS**
ASSOCIATION

END GOAL

Same Book, Same Day, Same Price

For everyone to read

ACCESSIBLE PUBLISHING

WHY?

- MORAL
- LEGAL
- COMMERCIAL

WHY - Moral

- Every day 250 people start to lose their sight in the UK Over 2 million people in the UK are living with sight loss
- 1 in 5 people aged 75 and over are living with sight loss.
- Almost half of blind and partially sighted people feel 'moderately' or 'completely' cut off from people and things around them.

OTHER PRINT IMPAIRMENTS

“A print disability is a difficulty or inability to read printed material due to a perceptual, physical or visual disability”

The reasons for print disability vary but may include:

- vision impairment or blindness
- physical dexterity problems such as multiple sclerosis, Parkinson's disease, arthritis or paralysis
- learning disability, such as dyslexia
- brain injury or cognitive impairment
- literacy difficulties
- early dementia

OTHER PRINT IMPAIRMENTS

Between 10-13% of people in the UK have a print impairment which means they have difficulty accessing text-based resources.

Source: Jisc

One in eight people in the UK find it difficult or impossible to read standard print books because of sight loss, dyslexia or a disability which makes it difficult to hold a book or turn a page.

Source: Right2Read Alliance

THE **PUBLISHERS** ASSOCIATION

READING AND LEARNING

Reading for pleasure - RNIB Library:

- Now has over 50,000 members (50,572) and despatches over 1.4 million books a year.
- There are now over 28,000 titles in the RNIB Talking Books library.

Learners - RNIB Bookshare:

- Number of titles in collection: 79,589
- Publishers and imprints working with RNIB : 522
- Number of downloaded files: 84,654
- Number of learners: 10,410
- Number of staff: 10,863
- Number of organisations: 5,614
- Number of UK schools: 4,956 (20.2% of schools)

LEGAL

Publishers should be aware of their legal obligations. We have reached a comfortable situation with legislation in the UK, giving the Visually Impaired Community the access they need whilst maintaining business models, especially licensing.

The 3 main pieces of legislation publishers need to be aware of are:

- 1) UK Copyright and Rights in Performance (Disability Regulations) 2014
- 2) Equalities Act 2010
- 3) We will in the next 12 months see the ratification in the EU/UK of the Marrakesh Treaty

The UK Copyright and Rights in Performances (Disability Regulations) 2014

An exception to copyright for all print disabled persons which allows*

- A disabled person to make copies of works for personal use
- Authorised bodies to make and supply accessible copies both to print impaired persons and other national authorised persons*

*does not apply to works which are accessible and commercially available on reasonable terms by or with the copyright owner

*authorised bodies under the UK Disability Regulations are either an educational establishment, or a body that is conducted not for profit, if, and only to the extent that, they are acting on behalf of PIPs.

THE **PUBLISHERS** ASSOCIATION

EQUALITY ACT 2010

The Equalities Act 2010 makes it illegal for providers of goods and services (including publishers) to discriminate against disabled people, including print impaired people.

‘Discriminating’ is widely defined as ‘treating less favourably’ or failing to make ‘reasonable adjustments to account for the disability concerned’.

If necessary, a publisher must provide a ‘reasonable alternative method’ of making its goods and services available where a physical feature makes it unreasonably difficult for PIP to use them. *

*Publishers are not legally required to provide accessible versions of every book published, but may rely on ie a reasonably accessible licensing scheme

THE **PUBLISHERS** ASSOCIATION

MARRAKESH TREATY

Requires ratifying countries to do 2 things:-

- Provide a copyright exception or limitation in national law to allow print disabled people or organisations supporting them to undertake any changes needed to make a copy of a publication in an format accessible to the person with a print disability.
- Permit the international exchange of these accessible copies for the benefit of people with print disabilities in other countries (for ‘authorised entities’ to export and import accessible format copies)*

THE **PUBLISHERS** ASSOCIATION

MARRAKESH TREATY

*authorised entities are permitted to make an accessible format copy of a work, obtained from another authorised entity and supply those copies to beneficiary people if

- they have lawful access to that work or a copy of that work
- the accessible format does not introduce changes other than those needed to make the work accessible
- the accessible format copies are supplied exclusively to be used by the beneficiary people and
- the activity is undertaken on a non-profit basis

UK AND THE MARRAKESH TREATY

- UK may have to ratify on its own post-Brexit
- Exceptions already in place but would need to consider cross-border access
- UKIPO soon to launch a consultation on steps to be taken to implement in the UK

WHY - COMMERCIAL

The Numbers Speak for Themselves

Providing books in accessible versions reaches a huge audience who may not otherwise purchase a book.

THE JOURNEY

eBooks

Accessible ebooks

- with text to speech
- With braille
- Via switches

Audio Books

- e-audio books

THE JOURNEY

DIGITAL is the enabler

- Technology is delivering devices
- We have a publishing standard (EPUB 3.1) with accessibility built in
- App developers are improving the accessibility of their reading systems

Still a way to go – some in our control, others we need to influence

WHAT NEXT

- Files must have functionality built in
- Files and platform / reading app must be compatible
- Device should have functionality
- Guidance on both the above needs to be made available

The ecosystem needs to work together to continue the good progress

RESOURCES

www.Inclusivepublishing.org

www.publishers.org.uk

www.cla.org.uk

www.rnib.org.uk

Jisc Accessibility List

THE **PUBLISHERS**
ASSOCIATION

THANK YOU

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Tools and Support for accessible EPUB



Richard Orme rorme@daisy.org



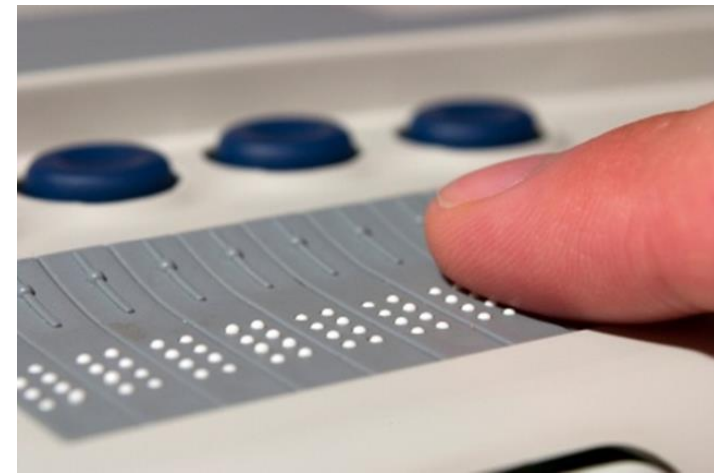
About the DAISY Consortium

- The DAISY Consortium is a global team of organizations “working towards equal access to information and knowledge regardless of disability”
- More than 150 organizations are part of our family, including special libraries for visually impaired people, disability groups, government agencies, universities, technology companies
- Since 1996, more than 20 years experience of accessible publishing
- Registered in Zurich, our team members are based in Belgium, Canada, France, India, UK and USA

Our working domains

- **Supporting specialist services:** provide expertise and technologies for disability services e.g. libraries for blind people
- **Extending the DAISY community:** support and enhance accessible reading services in more countries
- ✓ **Enabling accessible mainstream publishing**: enable mainstream publishers and tech platforms to deliver accessible publications

Are your ebooks accessible?



- EPUB 3 by design is more accessible than other e-publishing formats
- However, its flexibility also allows the creation of inaccessible titles
- Publishers are themselves are not usually accessibility experts, therefore they are asking for help and practical tools
- Technology can support content creators to check their titles conform to accessibility standards and good practice



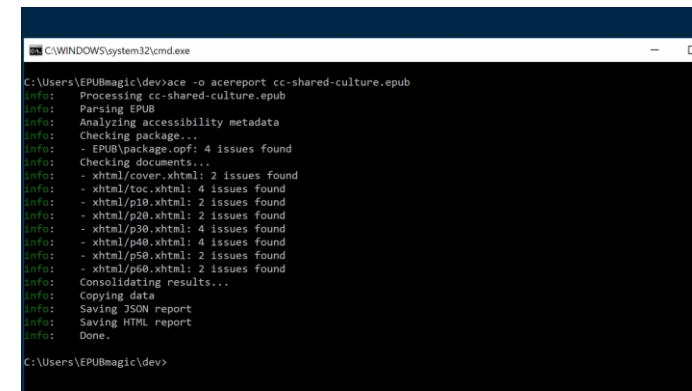
EPUB accessibility specifications



- EPUB 3.1 is an approved recommendation released in January 2017
<http://www.idpf.org/epub/31/spec/epub-spec.html>
- Included is EPUB Accessibility 1.0 which establishes the baseline
<http://www.idpf.org/epub/a11y/accessibility.html>
- At the heart of our tools and support materials- open standards to deliver real world experiences



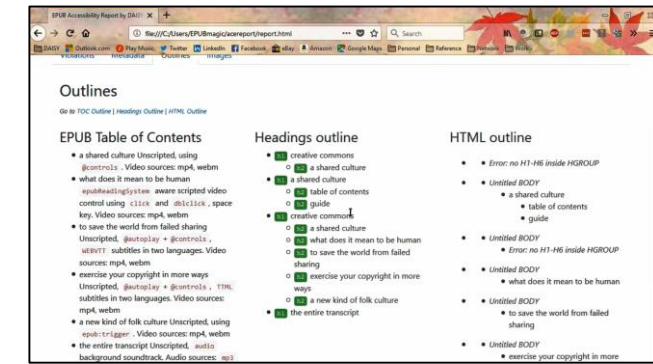
Ace by DAISY automated checking tool



```
C:\WINDOWS\system32\cmd.exe
C:\Users\EPUBmagic\dev>ace -o acereport cc-shared-culture.epub
Info: Processing cc-shared-culture.epub
Info: Parsing EPUB
Info: Analyzing accessibility metadata
Info: Checking package...
Info: - EPUB/package.opf: 4 issues found
Info: Checking documents...
Info: - xhtml/cover.xhtml: 2 issues found
Info: - xhtml/toc.xhtml: 4 issues found
Info: - xhtml/p10.xhtml: 2 issues found
Info: - xhtml/p20.xhtml: 2 issues found
Info: - xhtml/p30.xhtml: 4 issues found
Info: - xhtml/p40.xhtml: 4 issues found
Info: - xhtml/p50.xhtml: 2 issues found
Info: - xhtml/p60.xhtml: 2 issues found
Info: Consolidating results...
Info: Copying data
Info: Saving JSON report
Info: Saving HTML report
Info: Done.
C:\Users\EPUBmagic\dev>
```

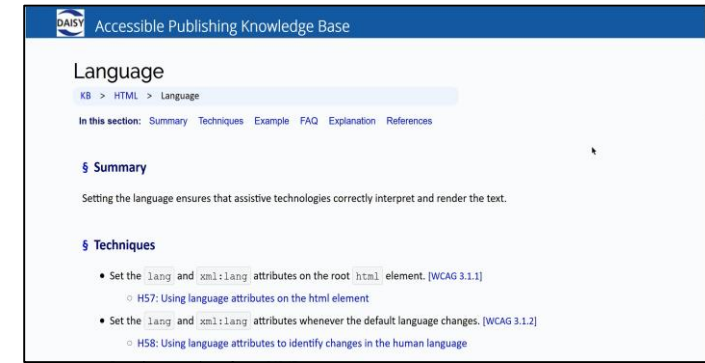
- Ace- **A**ccessibility **C**hecker for **E**PUB
- Free and open source, runs on all platforms
- The Tool can be integrated with production workflow or used independently
- Empowers publishers, vendors and distributors to ensure their publications are accessible
- Developed by a team of the best accessibility experts in the world.
- Manual checks are also required to assure conformance

Ace reports



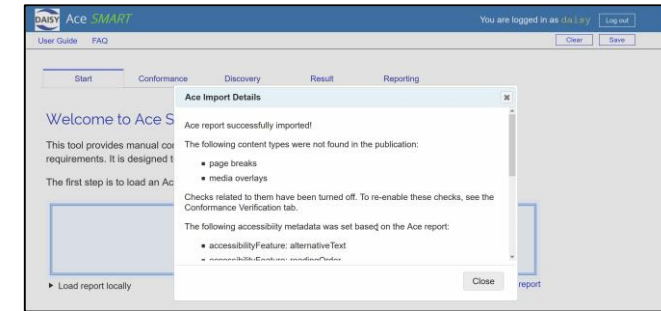
- Detects violations against WCAG A, WCAG AA, EPUB a11y standard, best practice
- Extracts metadata, with a focus on a11y metadata which is part of the baseline standard
- Visualization of the navigational structure
- Presents images together with any descriptive techniques

Accessible Publishing Knowledge Base



- The Ace report links to an up to date and definitive knowledge base
- Summary, Techniques, Example, FAQ, Explanation, References
- Can be used independently of Ace via:
<http://kb.daisy.org/publishing/>

SMART



- **SMART- Simple Manual Accessibility Reporting Tool**
- This tool provides manual conformance checks necessary to ensure compliance with EPUB and WCAG requirements.
- It is designed to be used in conjunction with the Ace accessibility checker.
- Provides a tailored test plan for to guide manual conformance checking, linked to knowledge base
- Generates a consistent and clear report
- Available to publishers and vendors usually via DAISY partners as part of a consulting or audit service

Reading systems accessibility evaluations



- Both the EPUB and the Reading System must be accessible
- A perfectly accessible EPUB can be let down by the Reading System
- We evaluate the accessibility features implemented in a wide range of mainstream reading systems.
- This helps reading systems developers to understand the gaps
- And customers can choose companies that have considered the needs of everyone.
- <http://www.epubtest.org/testsuite/accessibility/>



Inclusive Publishing Hub



A definitive resource for publishers, developers, educators and consumers:

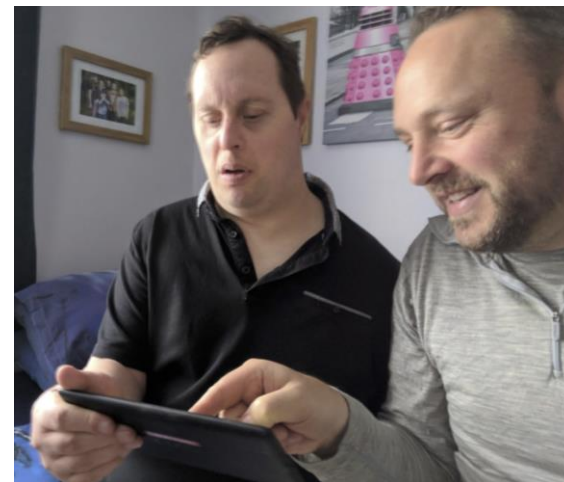
- accessibility guidelines, update on the checker tools and reading systems tests
- news, upcoming events, and event reports
- case studies, videos and tutorials
- more content welcome!

Visit inclusivepublishing.org and sign up for updates





Conclusion



- Readers who benefit from the inclusive approach are many and varied
- There is a standard and techniques
- There are tools to help publishers with conformance
- Developers are addressing the accessibility of reading systems
- The Inclusive Publishing Hub provides helpful information and definitive guidance
- There are people who can help you with advice and guidance



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Accessible e-books

Chris Saynor
EDItEUR

BIC Breakfast, 25th April 2018

About EDItEUR

- not-for-profit membership organisation
- develops, supports and promotes metadata and identification standards for the book, e-book and serials supply chains
- based in London, but a global membership of publishers, distributors, wholesalers, subscription agents, retailers, libraries, system vendors, rights and trade associations
- also provides management services to ISNI International Agency and IDF

About me

- joined EDItEUR in November 2016
- prior to that worked for the ONIX solutions provider GiantChair–ONIXsuite in Paris
- participated in the CLIL Commission in France and the French Thema group
- take part in BISG Metadata Committee
- prior to that worked as a bookseller in Paris and in the UK

Accessibility metadata

- metadata improves the discoverability of all books, and 'good' metadata improves sales
- publishers: collate and distribute metadata about your products
- retailers: display that metadata to readers
- metadata can also build advanced information about the accessibility of titles as part of a accurate and comprehensive set of metadata

Accessibility metadata

- each print-impaired reader has a particular set of requirements
- each book provides a set of features that make it more or less accessible
- metadata about the book helps match the two profiles: the reader can ensure the book meets their particular set of needs prior to purchase

Accessibility metadata

- metadata using schema.org in EPUB
- metadata in ONIX
- crosswalk

schema.org and accessibility



- schema.org provides a collection of shared vocabularies that can be understood by the major search engines
- Google, Bing etc harvest schema.org metadata from web pages and use it to build 'knowledge graphs' that are used to answer organic search queries
- search engines compile information about the nature of [web] content that otherwise would not be easily surfaceable
- can also be inserted into e-book content

schema.org a11y properties

Properties from [CreativeWork](#)

about	Thing	The subject matter of the content.
accessMode	Text	The human sensory perceptual system or cognitive faculty through which a person may process or perceive information. Expected values include: auditory, tactile, textual, visual, colorDependent, chartOnVisual, chemOnVisual, diagramOnVisual, mathOnVisual, musicOnVisual, textOnVisual.
accessModeSufficient	Text	A list of single or combined accessModes that are sufficient to understand all the intellectual content of a resource. Expected values include: auditory, tactile, textual, visual.
accessibilityAPI	Text	Indicates that the resource is compatible with the referenced accessibility API (WebSchemas wiki lists possible values).
accessibilityControl	Text	Identifies input methods that are sufficient to fully control the described resource (WebSchemas wiki lists possible values).
accessibilityFeature	Text	Content features of the resource, such as accessible media, alternatives and supported enhancements for accessibility (WebSchemas wiki lists possible values).
accessibilityHazard	Text	A characteristic of the described resource that is physiologically dangerous to some users. Related to WCAG 2.0 guideline 2.3 (WebSchemas wiki lists possible values).
accessibilitySummary	Text	A human-readable summary of specific accessibility features or deficiencies, consistent with the other accessibility metadata but expressing subtleties such as "short descriptions are present but long descriptions will be needed for non-visual users" or "short descriptions are present and no long descriptions are needed."
accountablePerson	Person	Specifies the Person that is legally accountable for the CreativeWork.
aggregateRating	AggregateRating	The overall rating, based on a collection of reviews or ratings, of the item.
alternativeHeadline	Text	A secondary title of the CreativeWork.
associatedMedia	MediaObject	A media object that encodes this CreativeWork. This property is a synonym for encoding.
audience	Audience	An intended audience, i.e. a group for whom something was created. Supersedes serviceAudience .
audio	AudioObject	An embedded audio object.

schema.org – creative work

accessibilityAPI	Text 	<ul style="list-style-type: none">• AndroidAccessibility• ARIA• ATK• AT-SPI• BlackberryAccessibility• iAccessible2• iOSAccessibility• JavaAccessibility• MacOSXAccessibility• MSAA• UIAutomation	<p>Indicates that the resource is compatible with the referenced accessibility API.</p> <p>See the accessibilityAPI in detail section below for more information.</p>
accessMode	Text 	<ul style="list-style-type: none">• auditory• chartOnVisual• chemOnVisual• colorDependent• diagramOnVisual• mathOnVisual• musicOnVisual• tactile• textOnVisual• textual• visual	<p>The human sensory perceptual system or cognitive faculty through which a person may process or perceive information</p> <p>See the accessMode in detail section below for more information.</p>

Using schema.org in an EPUB

```
<script type="application/ld+json">
{
  "@context"      : "http://schema.org/",
  "@type"         : "Book",
  "name"          : "The Mill on the Floss",
  "bookFormat"    : "EBook",
  "accessibilityControl" : "fullKeyboardControl",
  "accessibilityFeature" : "alternativeText",
  "author" : {
    "@type"      : "Person",
    "givenName"  : "George",
    "familyName" : "Eliot" }
}
</script>
```

ONIX and accessibility

- always had the ability to describe accessible editions of print and audio books
 - large print, Braille, DAISY 2 and 3
- 2011 extension – ‘List 196’ – defines a vocabulary for describing accessibility features of an e-book
 - carefully specified semantics, granular, and extensible via an established review mechanism
 - EDItEUR encourages adoption of interoperable semantics in other metadata frameworks

ONIX List 196

- you can use all the accessibility features of the reading device
- navigation via TOC
- navigation via index
- logical reading order
- alt text descriptions
- full alternative descriptive text
- visualised data also available as text
- accessible maths
- accessible chemistry
- print-equivalent page numbering
- synchronised pre-recorded audio
- compatibility notes

ONIX codelists Issue 41

Previous versions of the ONIX codelists are still available: [Issue 36](#).

Browse the ONIX codelists, or search for a specific term within the vocabularies.

See the [search hints](#) below.

List	Code	Heading	?
196		E-publication Accessibility Details...	*
196	00	Accessibility summary	*
196	01	LIA Compliance Scheme	
196	02	Accessibility Specification 1.0 A	*
196	03	Accessibility Specification 1.0 AA	*
196	09	Inaccessible	*
196	10	No reading system accessibility options disabled (except)	*
196	11	Table of contents navigation	*
196	12	Index navigation	*
196	13	Reading order	*
196	14	Short alternative descriptions	*
196	15	Full alternative descriptions	*
196	16	Visualised data also available as non-graphical data	*

196	14	<p>Short alternative descriptions</p> <p>All or substantially all non-text content has short alternative descriptions, usually provided via alt attributes. Note this applies to normal images (eg photographs, charts and diagrams) and also to any embedded audio, video etc. Audio and video content should include alternative descriptions suitable for hearing-impaired as well as for visually-impaired readers. (Purely decorative non-text content can be ignored, but the accessibility of resources delivered via a network connection rather than as part of the e-publication package must be included)</p>	*
196	15	<p>Full alternative descriptions</p> <p>All or substantially all non-text content has full alternative descriptions. Note this applies to normal images (eg photographs, charts and diagrams) and also to any embedded audio, video etc. Audio and video content should include full alternative descriptions (eg audio-described video) and subtitles or closed captions suitable for hearing-impaired as well as for visually-impaired readers. (Purely decorative non-text content can be ignored, but the accessibility of resources delivered via a network connection rather than as part of the e-publication package must be included)</p>	*

196	02	<p>Accessibility Specification 1.0 A *</p> <p>Conforms with the requirements of EPUB Accessibility Spec 1.0 and WCAG level A. <ProductFormFeatureDescription> may carry a URL linking to a compliance report or certification provided by an independent third party certifier. In the absence of a URL, conformance with the requirements of the Accessibility Specification is self-certified by the publisher</p>
196	03	<p>Accessibility Specification 1.0 AA *</p> <p>Conforms with the requirements of EPUB Accessibility Spec 1.0 and WCAG level AA. <ProductFormFeatureDescription> may carry a URL linking to a compliance report or certification provided by an independent third party certifier. In the absence of a URL, conformance with the requirements of the Accessibility Specification is self-certified by the publisher</p>

196	94	Compliance web page for detailed accessibility information <ProductFormFeatureDescription> carries the URL of a web page giving further detailed description of the accessibility features, compatibility, testing etc. The web page should be maintained by an independent compliance scheme or testing organization	*
196	95	Trusted intermediary's web page for detailed accessibility information <ProductFormFeatureDescription> carries the URL of a web page giving further detailed description of the accessibility features, compatibility, testing etc. The web page should be provided by a trusted intermediary or third party nominated by the publisher	*
196	96	Publisher's web page for detailed accessibility information <ProductFormFeatureDescription> carries the URL of a web page giving further detailed description of the accessibility features, compatibility, testing etc. The web page should be provided by the publisher	*
196	97	Compatibility tested <ProductFormFeatureDescription> carries a short description of compatibility testing carried out for this product, including detailed compatibility with various assistive technology such as third-party screen-reading software	*
196	98	Trusted Intermediary contact <ProductFormFeatureDescription> carries the e-mail address for a contact at a 'trusted intermediary', to whom detailed questions about accessibility for this product may be directed	*
196	99	Publisher contact for further accessibility information <ProductFormFeatureDescription> carries the e-mail address for a contact at the publisher to whom detailed questions about accessibility of this product may be directed	*

<ProductFormFeatureType>09</ProductFormFeatureType>

<ProductFormFeatureValue>10</ProductFormFeatureValue>

</ProductFormFeature>

<ProductFormFeature>

<ProductFormFeatureType>09</ProductFormFeatureType>

<ProductFormFeatureValue>13</ProductFormFeatureValue>

</ProductFormFeature>

<ProductFormFeature>

<ProductFormFeatureType>09</ProductFormFeatureType>

<ProductFormFeatureValue>15</ProductFormFeatureValue>

www.a11ymetadata.org crosswalk

Crosswalk

SCHEMA.ORG	AFA V3	AFA ISO	ONIX	DUBLIN CORE (DRAFT AP)
accessibilityAPI	apiInteroperable		97: Compatibility tested	
accessibilityFeature= alternativeText	(mix of adaptationType and adaptationMediaType)		14: Short alternative descriptions	d is value of sibility
accessibilityFeature= longDescription			15: Full alternative descriptions	
			16: Visualised data also available as non-graphical data	
accessibilityFeature= mathml or latex			17: Accessible math content	
accessibilityFeature= chemml			18: Accessible chem content	
accessibilityFeature = printPageNumbers			19: Print-equivalent page numbering	
			20: Synchronised pre-recorded audio	
accessibilityFeature = ttsMarkup			21: Text-to-speech hinting provided	

Useful links

- ONIX code list 196
<https://ns.editeur.org/onix/en/196>
- Accessibility Metadata Project – crosswalk
<http://www.a11ymetadata.org/the-specification/metadata-crosswalk/>
- schema.org creative works books
<http://schema.org/Book>



chris@editeur.org
www.editeur.org



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Any questions?



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BOOK INDUSTRY COMMUNICATION LTD

Thank you for attending April 2018's BIC Breakfast: **Accessible eBooks**

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