BIC

Breakfasts 2017

Welcome to May's BIC Breakfast: Accessibility in Publishing: Creating an Inclusive Future for All

#BICBreakfast

Kindly sponsored by

NON SOLUS

ELSEVIER

What is a BIC Breakfast?

BIC

THE BOOK INDUSTRY'S SUPPLY CHAIN ORGANISATION

BIC Committees

Digital Supply Chain

Libraries

Metadata

Physical Supply Chain

Training, Events & Communications

Regular BIC Events

BIC Breakfasts (monthly)

New Trends in Publishing Seminar (5th September 2017)

BIC Networking Events
including our annual BIC Bash (November 2017)

Building a Better Business Seminar at LBF
(12th April 2017)

BIC on the web

New website coming soon

Extensive Training Programme

Social Media:
@BIC1UK
@KarinaLuke
@LastPhoenixDown
@BIC_LCF
Connect with us on Twitter, Facebook and LinkedIn.

Over to Alicia...

BIC Accessibility Breakfast

Empowering Knowledge

Presented By   Alicia Wise, Senior Vice President for Global Strategic Networks   @wisealic
Date   23 May 2017

World Leader in Digital Information Solutions

Founded over 135 years ago

Majority of **Nobel Laureates** have published with Elsevier over the last **50 years**

Employ over **7,200 employees** and legal entities in **26 countries**

Published approximately **400,000 articles** & over **945 books** in 2015

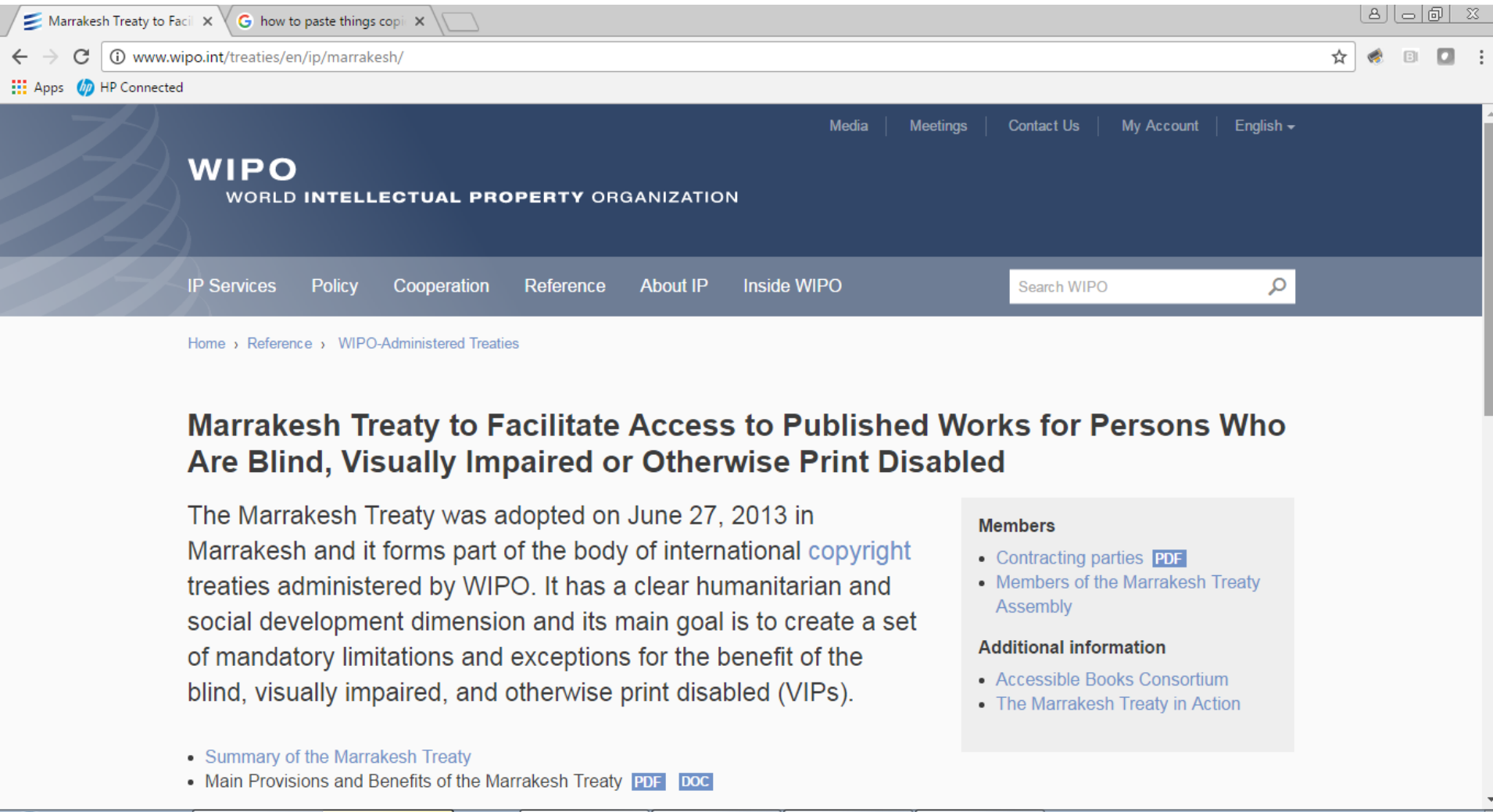Received over **1.3 million submissions** in 2015

Over **60 million items** indexed by Scopus

Over **14 million publications** available on ScienceDirect

Nearly **800 million full-text downloads** from ScienceDirect in 2015

CONTENT	SOLUTIONS			
Elsevier eBooks, Online Journals, Databases	**Elsevier Research Intelligence**	**Elsevier R&D Solutions**	**Elsevier Clinical Solutions**	**Elsevier Education**
Publishes over 3,500 online journals & over 34,000 e-books	Provides universities, governments, and research institutions with the resources and insights to improve institutional research strategy, management, and performance.	Helps corporate researchers, R+D professionals, and engineers improve how they interact with, share, and apply information to solve problems using our digital workflow tools, analytics, and data	Helps medical professionals apply trusted data and sophisticated tools to make better clinical decisions, deliver better care, and produce better healthcare outcomes.	Helps educate highly-skilled, effective healthcare professionals, using the most advanced pedagogical tools and reference works.
Cell, ap, THE LANCET, Compendex	Pure, SciVal	Knovel, Geofacets, Embase, Reaxys	ClinicalKey, Order Sets	Sherpath, HESI

CAPABILITIES / PLATFORMS

ScienceDirect   Scopus   MENDELEY

Marrakesh Copyright Treaty

Implementing Marrakesh in practice

BIC
BOOK INDUSTRY COMMUNICATION LTD

Over to Robin...

The Reader Perspective

What makes for an inclusive and immersive reading experience?

Background and Context

- Robin is a dad, husband, cyclist, tech enthusiast and Senior Strategy Manager at RNIB. He's worked with hundreds of organisations across 31 countries to help them accommodate persons with disability within an employment, product and customer service context. He's also a person born with low vision.

- Try at least one new thing each day and continue to dream about what feels impossible

- Every person in this room can contribute to making reading even more engaging and accessible!

So what contributes to the inclusive and immersive experience?

- Improving display technology such as Kindle Paperwhite and Voyage

- Night Light on Kindle and other Amazon accessibility features

- Being able to seamlessly switch from sight reading to audio reading. More work is needed here!
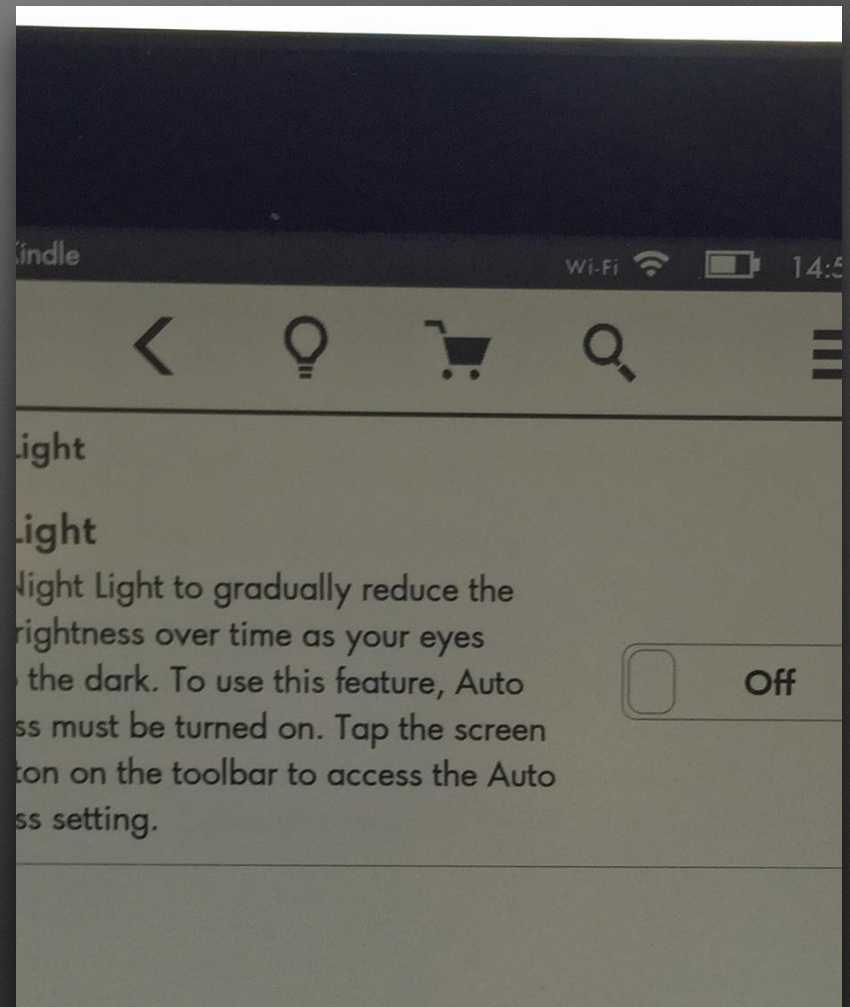
Apple: Accessibility as a Human Right

- Tim Cook declared that Apple view accessibility as a human right on 16/05/17

- Apple accessibility continues to lead the charge in the mainstream tech industry with an ever growing feature set.

- Colour Filters and Magnifier are two new examples to check out. Note Magnifier is very different from Zoom!
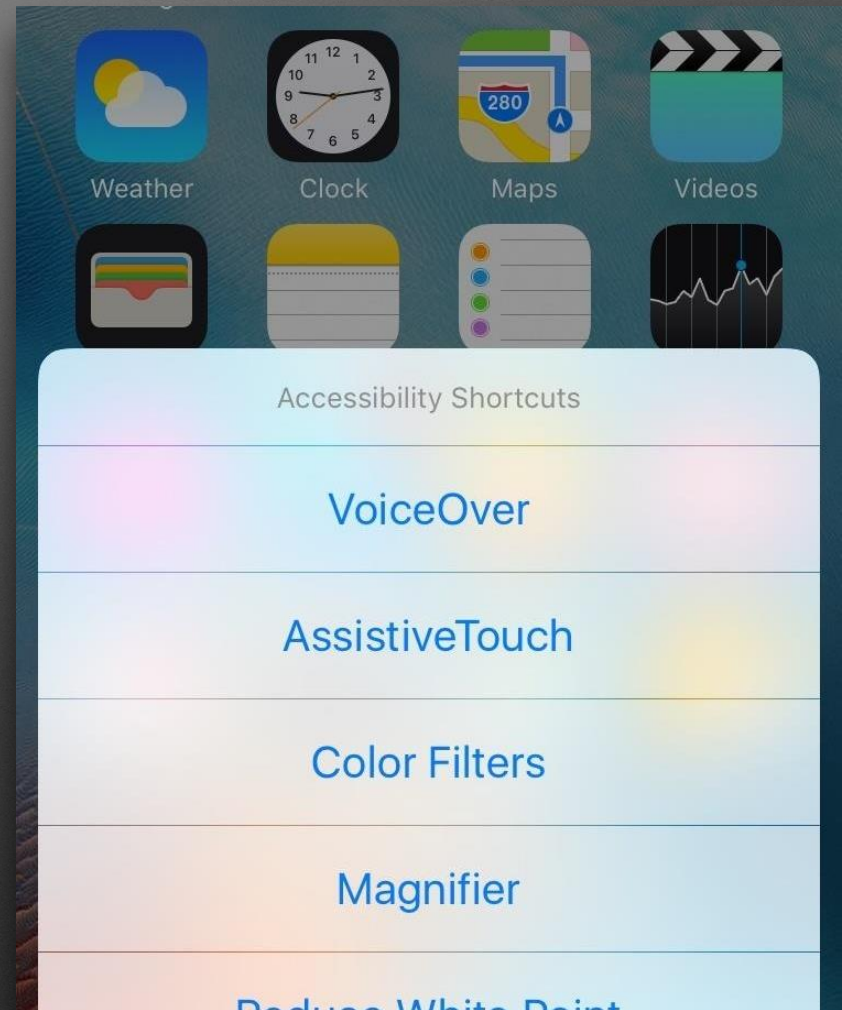
Browser based accessibility is becoming more critical to an accessible reading experience

Safari Reader
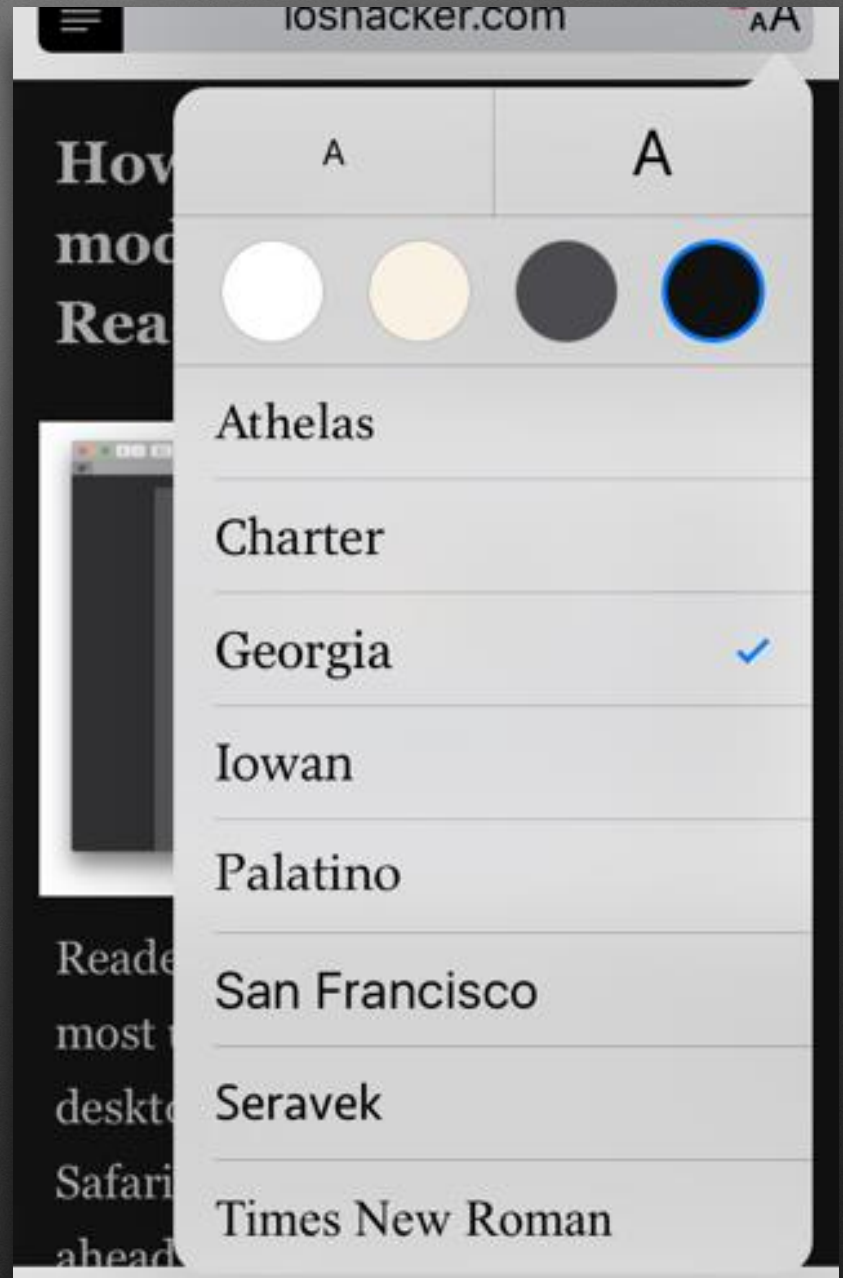
Access Suite.

Dolphin
SuperNova

Thinking Differently About Reading

AI as the Next Revolution!

@robinspinks on Twitter

Thanks for Listening

Over to Charlotte...

DK Braille

Accessible Publishing

DK Braille
From concept to reality

The Team
DK Braille Concept team

- Fleur Star, Senior Editor
- Jemma Westing, Project Art Editor
- Charlotte Oliver, Senior Producer

Back in 2012 . . .

Fleur & Jemma were researching sensory elements for new ideas, especially tactile illustrations and braille

I came back from maternity leave and read an article saying less than 5% of books converted to braille

The Concept
Braille books with DK content

They must:

- be fit for purpose
- be inclusive
- be safe
- utilise existing techniques, materials and methods
- be cost-effective
- meet international requirements
- be translation-friendly
- be enjoyable!

Flocking

Emboss

Spot UV

DK
A WORLD OF IDEAS:
SEE ALL THERE IS TO KNOW
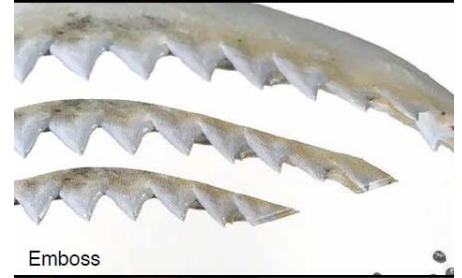
The Design
A new way to visualise

Design - Seeing with your fingers
- Images should reflect reality (eg a dog should have all four legs showing)
- Use appropriate effects
- Anno lines must be distinguishable from text and image outlines
- Effects crossing the gutter

Editorial with limited space
- Allow space for braille
- Remember international translation – 10% extra
- Consider whether uncontracted or contracted braille
- Uniform layout helps readers locate content

Six bees buzzing
in the breeze.
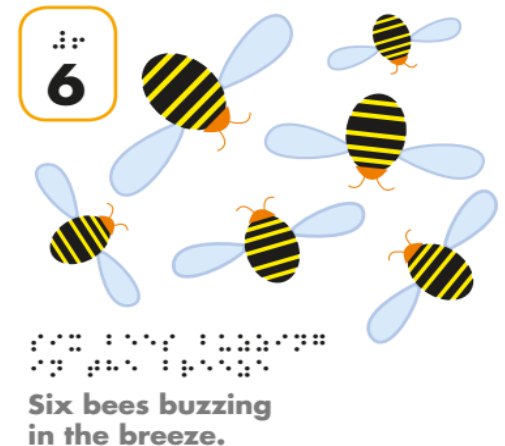
The Production
Using existing methods to new ends

The boundaries
- Manufacturing costs
- Safety requirements
- Quality control

Finishes
- Existing cover finishes
- Tolerances
- Test! Test! Test!

On press
- Treat every page like a cover
- Quality control
- Extended production schedule

The Result

''I've recently purchased copies of your braille books for two different children who are part of the charity Post Pals...

I just wanted to let you know that both children loved the books, one parent said it made her cry, because he was so excited because it was the first book he had ever had to keep, all his others had been library books, when you bear in mind he is eight years old it's very sad, but you are changing his world. ''

Beverley Higgins, Post Pals

[Share a Star](#)

Braille Awards:

<u>Winner:</u>
Junior Design Awards 2016 – Innovative Book of the Year.
DK Braille Counting - **Platinum** award (the top level of accreditation) at the **Junior Design Awards 2016**, for the category of **Innovative Book of the Year**.

The Accessible Books Consortium International Excellence Award for Accessible Publishing 2016
DK Braille series - joint winners of **The Accessible Books Consortium International Excellence Award for Accessible Publishing 2016** in the **Initiative category.**

<u>Shortlisted:</u>
British Book Design and Production Awards 2016
DK Braille Series - finalist for the Brand/Series Identity category

UK Nominations for IBBY's List of Outstanding Books for Young People with Disabilities 2017
It Can't Be True
Counting

DK A WORLD OF IDEAS:
SEE ALL THERE IS TO KNOW

BIC
BOOK INDUSTRY COMMUNICATION LTD

Over to Chris...

BIC Breakfast – Accessibility in Publishing

Chris Saynor
EDItEUR

London 23rd May 2017

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 International ISBN, IDF and ISNI Agencies

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

- Part of BISG Metadata Committee

- Prior to that worked as a bookseller in Paris and in the U.K.

Less than ten years ago...

- PDF, proprietary file formats, and DRM for commercial e-books

- DAISY – limited range of non-commercial material, specialised authoring tools and reading devices

- proprietary assistive technology

- publisher files – difficulties contacting publisher, lack of awareness of requirements, no XML available...

- almost entirely separate supply chains

We've come a long way

Best Practices for Creating
Universally Usable Content

Excerpt from EPUB 3 Best Practices

Accessible
EPUB 3

O'REILLY®   Matt Garrish

BISG

BOOK INDUSTRY STUDY GROUP
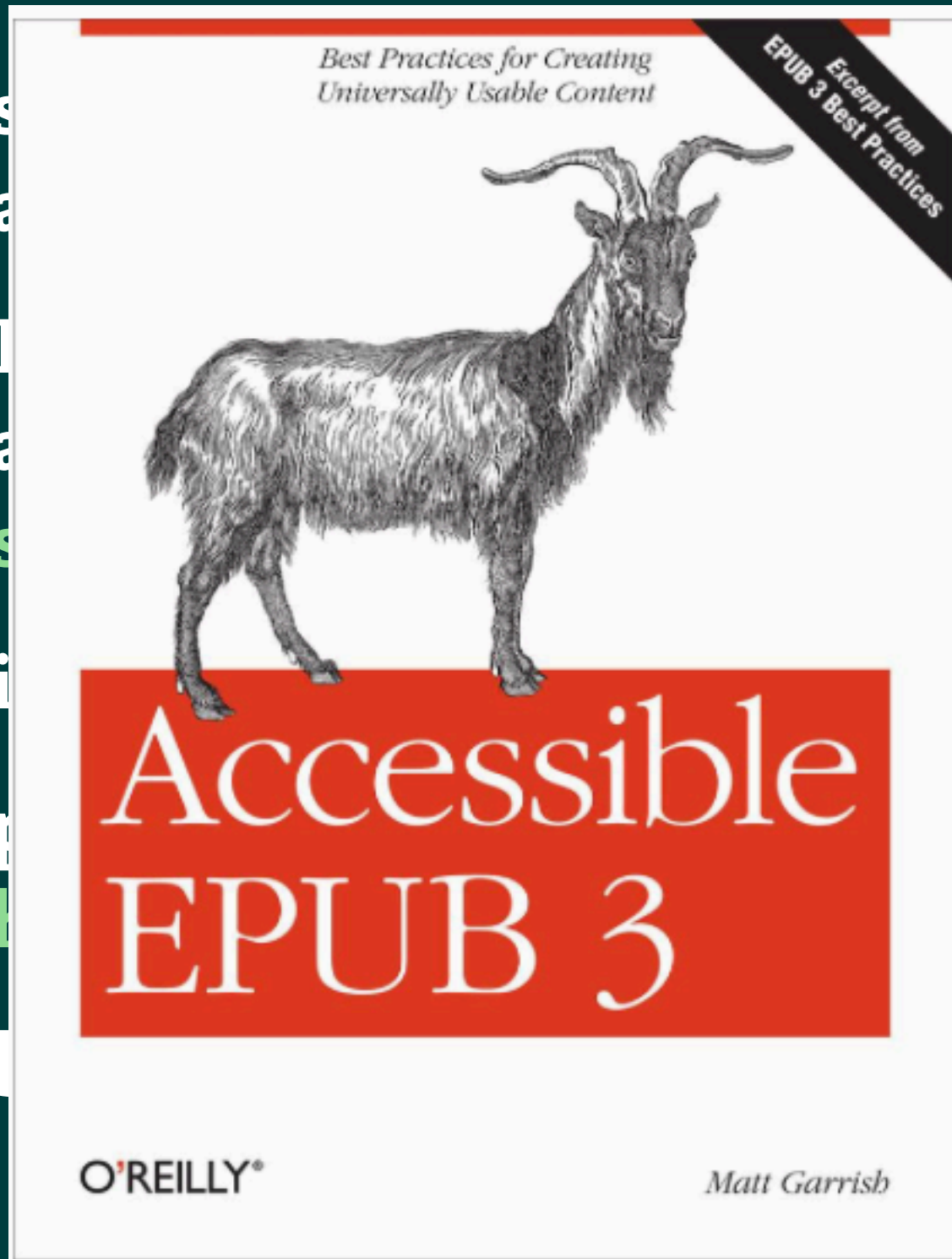
BISG Quick Start Guide
to Accessible Publishing

March 2016

Compiled by the BISG Content Structure Committee's

Accessible Publishing Working Group

FEATURING

Creating accessible content
How accessibility adds value
Building teams & processes
Legal requirements
Glossary
And more…

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 own particular set of needs

- publishers: collate and distribute accessibility metadata about your products

- retailers: display that metadata to readers

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-publication

  - carefully specified semantics, granular, and extensible via an established review mechanism

  - EDItEUR encourges 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 List 196

List 196	E-publication Accessibility Details		15	
00	Accessibility summary	<ProductFormFeatureDescription> contains a short explanatory summary of the accessibility of the product, consistent with the more specific conformance and feature details provided. The summary should note both the accessibility features provided and any potential deficiencies. More detailed information may be provided using codes 94–97. For use in ONIX 3.0 only	37	
01	LIA Compliance Scheme		16	
02	Accessibility Specification 1.0 A	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	36	
03	Accessibility Specification 1.0 AA	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	36	
10	No reading system accessibility options disabled (except)	No accessibility features offered by the reading system, device or reading software (including but not limited to choice of text size or typeface, choice of text or background color, text-to-speech) are disabled, overridden or otherwise unusable with the product EXCEPT – in ONIX 3 messages only – those specifically noted as subject to restriction or prohibition in <EpubUsageConstraint>. Note that provision of any significant part of the textual content as images (ie as pictures of text, rather than as text) inevitably prevents use of these accessibility options	15	

ONIX List 196

11	Table of contents navigation	Table of contents allows direct (eg hyperlinked) access to all levels of text organization above individual paragraphs (eg to all sections and subsections) and to all tables, figures, illustrations etc. Non-textual items such as illustrations, tables, audio or video content may be directly accessible from the Table of contents, or from a similar List of illustrations, List of tables, etc	15	
12	Index navigation	Index provides direct (eg hyperlinked) access to uses of the index terms in the document body	15	
13	Reading order	All or substantially all textual matter is arranged in a single logical reading order (including text that is visually presented as separate from the main text flow, eg in boxouts, captions, tables, footnotes, endnotes, citations, etc). Non-textual content is also linked from within this logical reading order. (Purely decorative non-text content can be ignored)	15	
14	Short alternative descriptions	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)	15	
15	Full alternative descriptions	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-	15	

ONIX List 196

16	Visualised data also available as non-graphical data	Where data visualisations are provided (eg graphs and charts), the underlying data is also available in non-graphical (usually tabular, textual) form	15	
17	Accessible math content	Mathematical content such as equations is usable with assistive technology, eg through use of MathML. Semantic MathML is preferred but Presentational MathML is acceptable	15	
18	Accessible chem content	Chemistry content such as chemical formulae is usable with assistive technology, eg through use of ChemML	15	
19	Print-equivalent page numbering	For a reflowable e-publication, contains references to the page numbering of an equivalent printed product	15	
20	Synchronised pre-recorded audio	Text-synchronised pre-recorded audio narration (natural or synthesised voice) is included for substantially all textual matter, including all alternative descriptions	15	
21	Text-to-speech hinting provided	Text-to-speech has been optimised through provision of PLS lexicons, SSML or CSS Speech synthesis hints	19	
22	Language tagging provided	The language of the text has been specified (eg via the HTML or XML lang attribute) to optimise text-to-speech (and other alternative renderings), both at whole document level and, where appropriate, for individual words, phrases or passages in a different language	20	
24	Dyslexia readability	Specialised font, character and line spacing, justification and paragraph spacing, colouring and other options provided specifically to improve readability for dyslexic readers. Details, including the name of the font, should be listed in <ProductFormFeatureDescription>	33	

```xml
<ProductFormFeature>
  <ProductFormFeatureType>09</ProductFormFeatureType>
  <ProductFormFeatureValue>10</ProductFormFeatureValue>
</ProductFormFeature>
<ProductFormFeature>
  <ProductFormFeatureType>09</ProductFormFeatureType>
  <ProductFormFeatureValue>13</ProductFormFeatureValue>
</ProductFormFeature>
<ProductFormFeature>
  <ProductFormFeatureType>09</ProductFormFeatureType>
  <ProductFormFeatureValue>15</ProductFormFeatureValue>
</ProductFormFeature>
```

EPUB 3.0

- e-book content standard developed by IDPF

- the 'master format' for most e-book production systems

- the distribution and consumption format for most non-Kindle e-books

- the preferred accessible format for print-impaired readers, superseding DAISY

- EPUB for education (formerly EDUPUB)

- extends beyond books
  - *eg* EPUB in Google Docs

EPUB 3.1

- very conservative update, back-compatible

- tightens up *Specification* where there was ambiguity, deprecates some old / unused features, final version that includes NCX

- extends support for resources outside the book (*eg* remote fonts or datasets)

- improves alignment with current versions of 'open web platform' (HTML, CSS, SVG *etc*), fewer EPUB-specific extensions

EPUB 3.1

- simplifies embedded metadata, prioritises remote metadata

- introduces *Accessibility Specification 1.0*
  - accessibility information embedded in the e-book
  - alignment with requirements of WCAG 2.0 A or AA

- IDPF ratified this version in early January

- Future development of EPUB now continues with W3C

WCAG 2.0

- Web Content Accessibility Guidelines *1.0* published 1999

- WCAG 2.0 published 2008

- 2.0 Designed around principles not technology

- WCAG 2.0 has three levels

  - Level A –the most basic web accessibility features

  - Level AA – deals with the biggest and most common barriers for users

  - Level AAA–the highest (and most complex) level of web accessibility

WCAG 2.0 Principles

- **The Four Principles of Accessibility**

- **Perceivable**

  - The senses used when browsing a website

- **Operable**

  - The actions taken when browsing

- **Understandable**

  - Easy for the user

- **Robust**

  - Still works even with technological changes

WCAG 2.0 Level A

- Provide text alternatives for non-text content

- Provide an alternative to video-only and audio-only content

- Present content in a meaningful order

- Use more than one sense for instructions

- Page has a language assigned

- Use helpful and clear page titles

- Don't use presentation that relies solely on colour

- Build all elements for accessibility

WCAG 2.0 Level AA

- Text can be resized to 200% without loss of content or function

- Don't use images of text

- Use clear headings and labels

- Tell users when the language changes

- Contrast ratio between text and background is at least 4.5:1

- Consistent navigation

- Consistent identification

- Users have access to audio description for video content

chris@editeur.org
www.editeur.org

Any questions?

Thank you for attending May's BIC Breakfast:

Accessibility in Publishing:
Creating an Inclusive Future for All

Alaina-Marie Bassett
Business Manager
Book Industry Communication Ltd

0207 255 0513
Alaina-Marie@bic.org.uk

7 RIDGMOUNT STREET, LONDON WC1E 7AE | +44 (0)20 7255 0516/3
WWW.BIC.ORG.UK | INFO@BIC.ORG.UK | @BIC1UK