# Webinar: The Essentials for Accessible Publishing in 2021

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<https://daisy.org/news-events/articles/the-essentials-for-accessible-publishing-in-2021-w/>

- [Stacy] Hello, everyone. A very warm welcome to you today. My name is Stacy Scott and I am the Chair of the UK Publishers Association Accessibility Action Group. I am your guest host for today's webinar, The Essentials for Accessible Publishing 2021. Okay, let's get started. Unfortunately, accessibility in publishing is not as simple as a single checkbox. In fact, it's closer to a web of interconnected elements, each of which can have serious implications on the accessibility of your content. In our webinar today, brought to you in partnership by the UK Publishers Association Accessibility Action Group and the DAISY Consortium, we will be navigating this web of elements to highlight five of today's must haves in the publishing arena to deliver accessible publications. There's a lot there for our speakers to cover, so let's hand over to them and I'll ask the panel to please introduce themselves.

- [Agata] Hello, everyone. I'm Agata Mrva-Montoya and I'm Publishing Manager at Sydney University Press.

- [Laura] Hi everyone, my name is Laura Brady, I'm the Director of Cross-Media at the House of Anansi Press and an accessibility busybody.

- [Richard] Hello, everyone. My name is Richard Orme, I'm proud to say I'm a founding member of the Accessibility Action Group, and I work at the DAISY Consortium.

- [Graham] Hello, my name's Graham Bell, and I'm Executive Director of EDItEUR. EDItEUR is the industry standards body responsible for standards like ONIX and Thema.

- [Daniella] Hi everyone. My name is Daniella Levy-Pinto, I am the Project Coordinator with NNELS, National Network for Equitable Library Service, which provides books in accessible formats in Canada, and I am in Toronto.

- [Agata] We have a full of today, so let's get started without delay. First I will talk about advocacy and policy. Next, Laura will present on content workflows. Next, Richard Orme will talk about tools and solutions. Then Graham will cover the mysteries of accessibility metadata. And finally, Daniella Levi-Pinto will finish up the session with the presentation on costumer testing and feedback.

So let's talk about advocacy and policy first. The importance of policy in the implementation of accessibility came out strongly in the results of an exploratory survey of Australian publishers and alternative format producers, which I conducted in 2020. I wanted to understand what publishers and alternative format producers were doing in terms of producing accessible publications, the motivations and challenges. While the survey revealed promising trends about Australian publishers towards the implementation of accessibility, publishers reported the lack of skills and knowledge and limited awareness as the key barriers and challenges affecting the production of accessible eBooks The alternative format producers reported that the current system of accessibility conversion or remediation is expensive and inefficient. It can take from one week to six months to convert a book into accessible format, depending on many variables, such as the time it takes to get a file from the publisher, the type of source file, the size and complexity of the book and the type of output produced. The alternative format producers had numerous suggestions for what publishers could do better to improve the conversion process and facilitate easier and more timely access to print material for people with print disability. So what publishers could do better? In the short-term, publishers could improve the response and turnaround time for providing files and provide updates on the processing of requests. They could provide suitable files, such as InDesign, Illustrated, EPUB, or Microsoft Word or editable PDFs, which are free of DRM restrictions or watermarks, and provide them electronically. Posting a CD-ROM with a file these days is anachronistic and takes a long time. Have a clearly defined and accessible policy and procedure for requesting content on the website. And this is especially important in the case of large international publishers. In the longterm, and ideally, publishers should produce born accessible publication themselves. And by that, I mean accessible eBooks and audio books, if a publisher produces those. I think that braille will remain the domain of alternative format producers in the near future. But publishers should provide well formatted and appropriate files so that the process of conversion is as simple as possible. So how can publishers get started with inclusive publishing practises? This is what I have found out, first, publishers need to increase their awareness and understanding of print disabilities and invest in staff training. Second publishers need to make an organisational commitment to accessibility, and this includes support from senior staff. They need to find an advocate or champion among their staff to take a lead, organise a working party, et cetera. These leaders will need support to develop their knowledge and have the capacity to make changes. Third, it is important to develop and implement an accessibility policy. This will ensure the implementation of accessibility across the whole company. And finally, publishers need to adopt inclusive publishing workflows in order to produce accessible eBooks and audio books. To sum up the findings from my preliminary research show that there's a huge opportunity for publishers, alternative format producers and other disability organisations to work more closely together, to make the conversion process easier and more efficient in the short term, by providing editable source files in a timely manner, and make some of it obsolete in the longer term by producing born accessible publications, leaving the alternative format producers to focus on more complex accessibility conversion projects, such as braille transcription or the production of tactile diagrams. And having an accessibility policies absolutely essential as an overarching strategy that underpins the accessibility implementation into the business as usual processes. An accessibility policies should include, a summary statement to explicitly state the rationale for the policy, expected outcomes, when key steps are to be completed, and how these steps are to be achieved. Policy implementation plan. The policy should stipulate who or what departments are responsible for accessibility implementation. Accessibility needs to be included in planning the workflows and budgets, and assigning responsibilities. Everyone needs to be clear right from the outset on to who is responsible for what, and how it will be paid for. Effective dates. Most likely the policy will include interim dates and deadlines for each aspect of the accessibility implementation. Scope of the policy. While the focusing on producing born accessible of publications, it is not just eBooks or audio books, we need to make sure that our website's accessible as well as our social media. The policy may be implemented in stages. A quick fix could include providing a clear procedure for requesting content for accessibility convention on the website. Next publishers should tackle the existing workflows and the production of frontalis titles before reviewing accessibility of the backlist. Technical standards, such as EPUB Accessibility 1.0 specifications, and the Web Content Accessibility Guidelines, 2.0 specifications. Procurement provisions. This is particularly relevant to publishers who outsource type setting eBook, conversion, audiobook production, or web design. They need to develop clear vendor guidelines and requirements around accessibility. And finally mechanisms for ongoing review. A policy should be reviewed on a regular basis to ensure it stays up to date and achieves its aims. The public statement on the website should invite feedback from users who might find accessibility barriers as a way to help identify further issues. Now, once the accessibility policy is ready, publishers will need to review their workflows and guidelines to make sure they are aligned. For example, at Sydney University Press, we have revised our contracts, our offer guidelines and the house style. We have also updated our schedules to allow time to incorporate alternative texts into eBook files, and accessibility testing into the publishing workflow. Now it is important to have an accessibility advocate on staff, someone who is going to drive the policy development and implementation, though eventually accessibility should become a shared responsibility and business as usual, as part of inclusive publishing practises. As publishers, we also need to become accessibility advocates and work with other stakeholders in the publishing chain in order to reduce the book funding. And that includes office software, developers, librarians, eBook distributors, and hardware producers, and of course, alternative format producers. Together we can make a difference. And now I'll hand over to Laura, who will talk about content workflows. Laura, over to you. Thank you.

- [Laura] Thanks, Agata. Eight minutes, huh? Okay, challenge accepted. I am going to speak about content workflows, try not to talk too fast and try not to leave out anything critical. I would like to encourage audience members to be in touch with me directly if you think I can help or clarify in any way. I work at an independent Canadian publisher in Toronto, over the last few years, we've been able to improve our workflow so much that we were the first in Canada to get the Benetech accessibility certification. How did we do that? A couple of important pieces had to fall in place. Management was supportive, which was critical. In addition, the members of our editorial and production departments see the value of the work required to publish excessively. Editorial now marks up manuscripts in a way that makes the transition to typeset pages easier. The typesetters work to rigorous guidelines and use methods that might not make sense to them, but they understand it benefits the pipeline, and so they play along. And the eBook developers who convert our eBooks are engaged in constant conversation with type setting an editorial about how to smooth out the kinks. Buy-in all along the chain is key to accessible workflows. It can't be one or two people at the end of the production process who are doing all the work. In my experience, a dynamic responsive process means that the entire production workflow, well, it flows. Manuscripts available for braille transcription and audio recording in a timely manner. Alt text is being considered throughout production and is ready on time. And that we can in fact, produce print books, accessible eBooks audio books and braille additions on the same pub date. Well, some of the time anyway. Drilling down a bit, I would also say that styles are foundational to the whole process. The editors prepare a Word file that has three or four different italics style sheets, for example, one for citations, one for emphasis, one for a simple style shift, and one for language shifts. Much later in the process, the eBook developer can then map these different styles to the relevant CSS and language tags so that a screen reader experience of the content, can be as accurate as possible. Understanding the role of headers asides and semantics to some extent is essential to maintaining the structure and integrity of a manuscript, no matter what software conversion tool it ends up in. I would suggest that training on accessibility for editorial staff is as important as the technical know-how of developers. Even if your books are going to be converted out of house, a PDF destined for conversion house that is well formatted and structurally sound will produce a better EPUB. And in addition, a company-wide demo of the screen reader reading experience of one of your own titles is invaluable for a clear understanding and sensitivity toward the print disabled reading experience. So culture change is critical to good accessible content, but how do you get there? There are many paths to EPUB, we're processing software layout tools, and more complex solutions like XML workflows. Earlier this year, DAISY released an excellent Word to EPUB tool that works brilliantly with well-constructed Word files. The URL on the slide will take you to a page explaining the tool and downloading use instructions. If you've ever tried to make HTML from a Word file, I can understand why you might be sceptical, but this is a handy tool made by people whose primary interest is accessibility. It does a great job, including the accessibility all time hits like page numbers, navigation, structural hierarchy, alt text and metadata. It is presently made for windows computers, but I'm told that a cloud-based version is in the works. InDesign is another conduit for eBook development. The clever among you will notice that there are no adjectives there like a great conduit, no adjectives. It is a complex layout tool whose primary focus is print, and unfortunately it shows. But with rigorous layout hygiene and some scripting and a little standing on one's head, it's possible to get decent EPUB from InDesign. This isn't the right forum for an explainer on how to make good eBooks from InDesign, but if you want to know more, I have a LinkedIn learning video on how to make accessible eBooks from InDesign. One tip, generating a page list, a critical piece of the accessibility puzzle is one thing that InDesign just won't do for you. I have a script called PageStaker that will put conditional text at the point of page breaks in an InDesign document. The resulting HTML is predictable and can be formed into the page break code that you need with a little RegEx magic. If you'd like the script, please be in touch. The key to both Word and InDesign pipelines is that the content be cleanly styled using character, paragraph, cell, table and object styles. Headers, for example, are style has headers and cascade properly making for easy navigation for print-disabled readers, XML workflows or automated workflows are at the top of the content workflows food chain in terms of both complexity and agility. Very simply put, XML is a markup language that's a cousin of HTML, the building block of the Web in EPUB Using XML means that workflows can be automated for quick iteration and multiple formats, including print EPUB and PDF from a single source. And InDesign workflow, for example, requires forking the print and digital source at some point in cycle. With an automated system like an XML workflow, the single source eliminates a separate eBook production cycle. This kind of production system requires buying into an existing system or investing in the backend and technical knowledge to make it work. PressBooks, Hederis and DocBook, are all examples of this kind of content workflow. Hachette U.S. for example, produces their books using a system like this. Richard is now gonna tell you about some post export tools that will help you once you have an eBook in hand. Over to you, Richard.

- [Richard] Thanks, Laura. Okay, so in this segment, we're gonna cover tools and solutions for validating and conformance checking eBooks for accessibility. We'll cover EPUBCheck, Ace by DAISY, Ace SMART, the Accessible Publishing Knowledge Base, the Inclusive Publishing Hub. Now you can use all these tools without cost, they're available to you today, and I'll provide links to each of them as we go through. Okay, let's go. EPUBCheck is the official conformance checker for EPUB publications. If you're creating EPUB, then you should be using it anyway, but it's important to accessibility because defects in eBook files may degrade the reading experience, or result in interoperability issues with the assistive technologies used by people with disabilities, screen readers, for example. EPUBCheck is free, it's open source and cross platform. The software evaluates if your publications conform to the requirements defined in the EPUB specifications. You can use it from your desktop or in a command line environment, and it's also integrated into various editors and production tools. EPUBCheck is a project owned by W3C, the same group of people who define the EPUB format and the software is maintained by the DAISY Consortium. You can find out more at w3.org/publishing/epubcheck. Okay, Ace by DAISY. This is the accessibility checker for EPUB. ACE is also free, open source and cross platform, and the software helps you evaluate if eBooks conform to the EPUB accessibility specification. You can use it on your desktop or from the command line, and it is also integrated into various editors and production tools. Ace runs automated accessibility tests on your EPUBS reporting violations of the specification together with an impact rating. It also extracts accessibility related metadata for checking, and you can even edit this metadata in the desktop version of the app. It provides various document outlines for side-by-side comparison and ACE also extracts all the images and their associated accessibility descriptions in a consolidated table for easy review. ACE was developed with the support of a grant from the Google Foundation, and it's gone on to be wildly successful. It's used extensively by publishers, vendors, aggregators and purchasing institutions all around the world. So if you're not using it, you can find out more at daisy.org/ace. Next up is Ace SMART, which stands for Simple Manual Accessibility Reporting Tool. Remember only some accessibility checks can be automated, you also need humans as part of any evaluation process. And SMART is a web based tool that facilitates the manual conformance checks necessary to ensure compliance with the EPUB and WCAG requirements. It's best used in conjunction with the Ace accessibility checker, because the results of the Ace evaluation and the contents of the EPUB are magically used to create a tailored test plan, which then guides the person through the evaluation process. And it provides a convenient way to record the results and make notes as they go. These checks, well, they might be done an in-house team, a third party supplier, or if you're enrolled in the GCA certification scheme led by Benetech that Laura mentioned, well, SMART will be used as part of evaluating your titles. At the end of the checking process, SMART generates a consistent and clear report for you. Now, SMART wouldn't be used on each publication rather when your quality testing samples, maybe from a workflow, or if you were evaluating the services offered by a vendor. You can find out more at daisy.org/smart. Next, I'm going to tell you about the knowledge base on accessible publishing that DAISY hosts. This essential resource helps you apply the specifications at a practical level. It's a definitive and comprehensive reference for HTML-based publishing, and an invaluable library of best practises. For each item, you'll find a clear summary, different techniques, code snippets, frequently asked questions, and references to other resources. There's also a glossary to help you navigate around the very many terms that are used in relation to this topic. The knowledge base can be used standalone through your web browser, and it's also integrated into Ace and SMART So, for example, if you're using Ace and you encounter a violation, there's a link in the report that will take you right to the relevant knowledge base article. And the same in SMART, in the tailored test plan, there are links through to the relevant knowledge base entries to help the evaluator better understand what they're looking for. The accessible publishing knowledge base is free, and so to access this excellent resource, you can pop along to daisy.org/kb. And the last thing I want to mention in this segment, is the Inclusive Publishing Hub. This website contains a treasure trove of guidelines, tools, and evaluation results, thoughtfully organised, so they're easy to discover whether you're working in the publishing industry, you work in education, whether you're a developer or a person with a print disability. You'll find news and event reports, case studies, articles and videos. And if you have news, stories, tools and services that should be mentioned, then please submit them for inclusion. The website is hosted by DAISY, and we're supported in this initiative by W3C, the International Publishers Association, BISG and several others. And there were links to many other resources around the web on the topic of accessible publishing. If you bookmark just one site from this segment on tools and solutions, then I'd recommend inclusivepublishing.org because it's a great jumping off point for everything I've mentioned and much, much more. So that's it from me for the moment. And now I'll turn over to Graham.

- [Graham] Thank you, Richard. This segment's about accessibility metadata. So you followed Agatha's and Laura's great advice. Maybe you're following the knowledge base and BISG's quick start guide or getting your conversion vendor to ensure that your eBooks are accessible. You're producing born accessible products that you've tested successfully with EPUBCheck, with Ace by DAISY and with Ace SMART, You're ready for the requirements of section 508 of the looming European Union Accessible Publishing Regulations, Great. But nobody knows that, if you optimise the accessibility of the books, then your book metadata should also reflect that optimization, should advertise the fact that you've gone through the effort to make your books accessible to everyone. Now there's three sorts of accessibility metadata, the first and perhaps the simplest, accessibility metadata that's embedded in web pages that describe your book. And separately, somewhat similar metadata can be embedded in the eBook itself. The workflows that Laura described, and some of the tools that Richard described lead you to embedding some metadata about accessibility in the eBook itself. But of course, that's not accessible to people who don't have the book yet. Accessibility metadata, the third sort of accessibility metadata is metadata embedded in and alongside the normal commercial metadata that you produce, that you share with your business partners, so they know what products you're putting on the market, and with that extra accessibility metadata, they know how accessible those products are. Now for commercial products, that metadata is typically ONIX. Next slide, please, Richard. Thank you. Now turning to the first of those types of metadata, this is metadata embedded inside web pages about your book. And there are ways described within the web, well, the open web platform that can allow you to say this webpage is about a book, here is the ISBN end of the book, here is the accessibility features of that book. Now this uses a vocabulary derived from schema.org. And there's a very rich vocabulary that allows you to describe invisibly behind your webpage in a way, but in a way that computers can read what that webpage is about. If the web page is about a book, then the schema.org metadata embedded in that webpage can say it's about to book, it's about this ISBNs and by the way, it's accessible. The schema.org vocabulary can describe many, many different types of things, but accessible books is one of them. Now on the slide, I've included just a little tiny sample of this metadata, and you'll see it's embedded inside a script. This information about accessibility does not appear on the web page, but it allows web search engines, for example, to see that this page is about a book and this book is highly accessible. Now this metadata is embedded inside your webpage using that schema.org vocabulary, it's not easy to describe, but it uses a language called JSON-LD, that's the language I've used for this sample. But in fact there are three or four other ways to express exactly the same schema.org data within a web page. And I'd stress again, that that data doesn't appear for human readers of the webpage, it appears only for computers that are interpreting the actual HTML. Next slide, please, thank you. So the second type of accessibility metadata is that metadata that I think Laura alluded to, it's embedded inside the EPUB itself. Now this uses the same schema.org vocabulary. The way it's embedded inside the EPUB is described, for example, in the URL that I've given on the page, so w3c.orgwebpage/submission/epub-a11y. And that will lead you to information about the vocabulary and the how it's embedded. Now, some of the tools for editing EPUBS allow you to put this data into the EPUB, but more likely a publisher is going to be requiring its conversion vendors to look after this. And they'll do that if you instruct them to do so. There's some really good advice on the web available from the accessibility metadata working group, a project that has finished a year or so ago, http://www.a11ymetadata.org that describes the vocabulary you'll use and how you embed it. And that third sort of metadata, the sort of metadata that EDItEUR is more concerned with is about embedding information about how accessible your book is into the ONIX. For those not familiar with the ONIX, ONIX is a very expansive metadata model, it gives you a format to describe your book in very rich terms, including marketing material, including all the commercial data about your book, and then you can distribute that ONIX to all of your business partners. A lot of publishers globally use ONIX, many use Excel, but they embed similar data in the Excel. There's a long URL to give you access to an application note. This is not how to do ONIX, but this is how to do accessibility metadata in ONIX. And in fact, that link leads to a list of about 15 or 20 application notes that focus on individual aspects of ONIX. A lot of larger publishers and mid-size publishers have IT systems to help them manage this ONIX metadata. And to embed accessibility information, you use a feature of ONIX called... And I apologise because this is a terrible name, I should have given it a much sexier name, List 196. List 196 allows you to embed into the metadata information about how accessible your book is. So for example, a product form feature value 10, which I've illustrated on screen, means that no features of the reading system that offer accessibility help have been disabled. Other codes give you access to whether or not your book conforms to the standards, like EPUB Accessibility specification 1.0, there are codes for individual features like structural navigation, like the fact that all of your images have descriptions, and there's also codes to provide links to documentation that show your eBook has been tested. So if you have a compliance certificate that says this eBook reaches a particular standard, then you can link to that too. All of this gives list 196 it's power. And in fact, you can map from the ONIX features to the schema.org features that accessibility or A11Y metadata website on the previous slide also includes a mapping table. So you can take your schema.org data and see what its equivalents are in ONIX, or vice versa. So embed your data in your ONIX Next slide, please. Thank you. So it's a fair question, why is there more than one way of doing this? Well, one of the key things is that the schema.org data, particularly that that's embedded inside the EPUB, is available to the reading system, right, it's available to your library management system. It allows the reading system to make best use of the features of the eBook. It allows a library patron, potentially, to find books in the library that are accessible. But that doesn't help if you don't have, or the library does not stock a copy of the book yet. The point about the ONIX metadata is that it's distributed to retailers, to libraries, to many other organisations long before the book is available. So that metadata is available for consideration prior to purchase. An educator can search for an accessible textbooks that they don't yet have. A consumer, a reader can find a book that they want to buy in the future and know whether or not it will be accessible to them. So there's two streams of metadata, the ONIX distributed long in advance of the book being available and the schema.org data embedded inside the eBook. Now, if you have any detailed questions about ONIX metadata in particular, or accessibility metadata, you can always email us info@editeur.org, we're very happy to receive those questions, and we always try to answer them. And now, over to Daniella.

- [Daniella] Thank you very much, Graham. So I will be talking about consumer testing and feedback. I will be covering accessibility testing as part of the publishing workflow, diversity of reading, the testing process, and findings and accessibility feedback. Checking accessibility of eBooks is a key piece in accessible publishing, especially given the rapid advances in technology and changes in accessibility standards, updates to them. If publishers incorporate accessibility testing in their workflows, it will help them identify barriers and also provide ample opportunity to address and remediate those barriers. Engaging people with lived experience of a print disability is essential here, people with print disabilities actually have experienced using assistive technologies and also finding solutions to access information, so their expertise is going to be very useful. The essence of eBook accessibility relates to flexible ways to engage with the content for people to engage with that content, regardless of whether or not they have a print disability, and regardless of the technology they need to access that content. Now, there is a broad diversity of reading needs and preferences out there, among people with learning print disabilities, and print disabilities include visual mobility and comprehension impairments. Assistive technologies provide opportunities for all of these users to access digital content. So persons who are blind use screen readers and refreshable braille, people who have dyslexia or other learning disabilities benefit from text synchronised with audio on the screen, and highlighting the text as it is spoken. And also they customise the presentation by changing the fonts or adjusting margins, for example. People with low vision may use screen enlargement or magnification software, or they may just increase the font size or adjust the contrast colour with the background and the fonts. So accessibility is a broad range and accessibility is way more than a checklist. Accessibility means that people with print disabilities are actually able to enjoy content. So accessibility testing must take into account the experiences of people with print disabilities, actually trying to engage with that content. Accessibility testing also must take into account various configurations and assistive technology configurations and combinations. The testing process... Well, while automated testing is definitely a good starting point, it provides, it highlights, it will find about 30% of issues, manual testing is essential. For example, automated testing will be able to identify whether or not all images have alt text, but only manual testing will be able to really tell whether or not the prescription provider makes sense in relation to the context in the surrounding paragraphs, or even whether or not that image needs a description, it may only be decorative. So now that hopefully you're convinced that accessibility testing is important, that it should have a human component, and that the best way to go about this is to engage people with lived experience of a print disability, how do you find testers? Well, the best way is to reach out to organisations, working with people with print disabilities, they will have... They will be able to make recommendations for the best channels to recruit testers. Remember that the testing environment should also be accessible. So any written instructions or questionnaires should be provided in accessible formats. Testing, accessibility testing is real work and should be compensated as such. In terms of the process manual... It makes sense to begin with automated testing, and then have a skilled analyst go through the results and confirm the findings. Richard already talked about the robust tools out there, so I will not cover them, but I will say that in addition to that, it is important to also check the compatibility with screen readers and assistive technologies. In the case of screen readers, there can be several combinations between the screen reader and the reading application on the operating system. So it is important to test a few of those combinations, how the eBooks render to ensure interoperability. Now a good testing process also has the benefit that it fosters awareness in the company. And it also fosters communication with other employees, consumers and end users about the company's commitment to accessibility. The best practise, as I've said is to engage people with lived experience of a print disability, but there are also some basic tests that people working in the publishing industry can do using mainstream devices, mainly there is a smartphone with a built-in screen reader, just to get some idea of what it is like to engage with their particular content in this way. NNELS developed a document to guide publishers through some very basic tests that they can do to get an idea of the experience. And the document is linked on the screen, I will read the URL, it is, accessiblepublishing.ca/evaluating-your-epubs-accessibility. And we've heard positive comments about this, that it's helpful, it gives publishers an idea about the experience, but again, the gold standard is to engage people who do this everyday, who use a screen reader every day, so people with lived experience. Now moving on to the findings and accessibility feedback, the testing reports include findings that are relevant to each file being tested in the case of eBooks, and to the particular website in the case of websites. The reports resend the issues in easy to understand human terms and explain how the barriers, how the issues identified are problematic for users. The reports also provide solutions and steps for publishers to take, to fix the barriers in that particular file. But that will also be helpful for publishers to remediate backless titles and to produce more accessible titles in the future. So at the end of the day, when feedback comes directly from users with lived experience, it highlights and humanises accessibility. When publishers become aware about the experience and what it is like to interact with our content, with a screen reader, for example, they are motivated to create content that is accessible from the start. Thank you very much, this concludes my section of the presentation, and now I will pass it back to Stacy.

- [Stacy] So I've got a few questions that I'd like to put to the panel if I may. So Agata, if I could start with you, please. So for publishers just getting started with creating and adopting an accessibility policy, what might be the best first steps?

- [Agata] I think that the first step will be to actually assign a person to champion accessibility in-house. So one of the things that publishers mentioned in my study was that the awareness and skills and knowledge are lacking. And the role of this person will be to develop accessibility expertise and then share it with colleagues and keep accessibility on the agenda, and of course, get management support. Next, very easy step would be to make sure that the website has got information about how to request content for accessibility conversion. And this is especially an issue for bigger publishers, as I mentioned before, that it's really hard to find who is the right person to talk and how to get those files. And then, yes, we view guidelines and workflows and tests the eBook files, as Laura mentioned, because then publishers can actually see where they are at with accessibility, and once they know they can come up with a plan of how to make them better and develop a policy, developing inclusive workflows, review the collaboration with any vendors and so on. And from there, then they can work on their metadata and so on and so forth. So that's probably the first few steps that I would say are really good to get started.

- [Stacy] That's really helpful, thank you, Agata. Laura, if I could ask you, a publisher who used the same tools may there be a recommended workflow.

- [Laura] Good question, the best workflow is the one that is the best understood in-house and that can be carried out the best. So automated workflows or XML workflows are really good at bigger publishers where there are a lot of resources and you can have say an IT person whose role is just to support that chain. The one thing I do say about InDesign, even though I was a little bit critical of it in my talk, it is a kind of a democratic tool, not because it's cheap or free, but because people generally already have it. So tools like Word and InDesign are really readily available. Most publishers are print-focused and already have the creative cloud and have InDesign. So that's the right for them. So it really does depend on in-house expertise and capacity. No one workflow is better than the other, they all require some remediation in general and some knowledgeable accessibility focus. I hope that answers the question.

- [Stacy] That's really great. Thank you, Laura. Graham, if I could ask you, do you have any advice for publishers who want to use accessibility metadata, but whose vendors don't currently use it?

- [Graham] Yes, I suppose we do, I think the first thing to say is, of course, before you start thinking about accessibility metadata, you need to think about accessibility itself. But once your books are accessible or as you're developing your workflow, you also want to develop a way of letting other people know about it. And there certainly are vendors who use this info taken from the ONIX in advance of publication, for example, to highlight upcoming accessible education resources, for example. But I looked at this question earlier and thought, well, the word vendors could be taken two ways, it could either be a question about the system suppliers who provide applications for managing the data, or the vendors could be the booksellers who are making the accessible books available. Now, if it's the software vendors who provide systems for managing book metadata, and you know, all the significant ones will then be able to output that data in ONIX format, if they're not supporting List 196, and the other accessibility features in ONIX then talk to them, put forward the reasoning that Agata and Daniella put forward, remind them of the good reasons for supporting that accessibility metadata, be they financial or social, to ensure readers can find out about accessible books. And for those book sellers, again, there are both strong social and strong financial reasons for them to... If a book is accessible, let the potential audience for that book know. So you can't force people to use the data, there's lots of data that gets put into the ONIX and then ignored by retailers, but some retailers will ignore it, but there'll always be some who use it. And so once you've got some using it, you can then persuade the others because their competitors are using it. But there's good social, good financial reasons for exposing this data to potential customers so they know what they're buying. Talking, that's the main thing.

- [Stacy] Brilliant, that's great. Thank you so much, Graham. And Richard, I'm looking at the Ace tool, so it looks like a very important step forward for accessibility testing, but do you need to be a technical wizard in order to be able to use it?

- [Richard] Absolutely not. The Ace app is really easy to download and instal. And when you run it, you can just open an EPUB by going file open or dragging it onto the app, and it'll run the report for you automatically. The results are presented to you in an easy to understand summary table, it'll then show you some visualisations of the images, of the document structure and so on. And as I mentioned, it's got the knowledge-based built into the app, so it's great for learning more and more about accessible publishing topics. So pretty much anyone can check in EPUB using Ace. If you're getting errors, then fixing them, putting them right, that may well be a discussion with your vendors or your more technical colleagues.

- [Stacy] Wonderful, thank you very much, Richard. Daniella, if I could just ask you a question on your presentation, if you don't mind, please, you talked about testing and it's clearly important, but how often in your view should publishers have their files tested?

- [Daniella] That's a great question, and I think it depends on where publishers are in their accessibility journey. If they are starting, doing testing often in different files is very important because it will help them understand where the barriers may be and we'll help them remove them and find better ways to create those files. When publishers are more advanced in their journey and those who have certification, they only need their files tested every quarter, for example, or only spot checks. So it really depends on where they are and also the different content that they publish. So testing can be different for different... Or workflows rather, can be different for different content.

- [Stacy] That's great, thank you so much, Daniella.

- [Daniella] Thank you.

- [Stacy] I also have a question, I guess for Agata and Laura, perhaps, you both talked about the importance of having management buy-in and that's certainly something that we hear from publishers a lot. Do you have any recommendations on who to go to and how to secure that buy-in?

- [Agata] Laura, shall I go first?

- [Stacy] Please do.

- [Laura] Sure thing.

- [Agata] Yeah, so I work for a very small publishing house, there are just five of us, so we basically decided there was no need to... Like we were committed from when we started. We actually started because we wanted to produce good eBooks. And we decided from scratch that we should input alternative text description or images. And touching of what Daniella was saying, working with a disability organisation in Australia, helped us immensely to get our books much better. So that's about our processes, but in terms of getting management buy-in, there are more and more convincing arguments for making accessible publications, and there are social and legal and business I guess, arguments to do that. And I think using those and like increasingly, there are more and more laws are changing, and for example, in educational publishing, it will be especially important that educators are providing books that are accessible to everyone. So I think using the sort of the business perspective and legal and social imperatives are really important. And this came out again in my survey, that actually people are generally committed to accessible publishing, they just don't know how to get started.

- [Stacy] Thank you, Agata. Laura, do you have anything to add?

- [Laura] Yeah, I sure do. The moral and business imperative, as Agata said are critical, but one of the things that was a real tipping point where I live and work in Canada is that the government of Canada actually allocated a great deal of money towards boosting accessible publishing in this country. And that was a major impetus for a lot of change. So in a way it was cheating, you know, it sounds like I did all this work to get my company up to speed, but I did cheat in that the grants that we were receiving from the Department of Canadian Heritage were to support the work of accessible digital publishing. And that was fantastic and key the whole supply chain from our small publishing house. On top of that, we hired accessibility professionals, we hired Daniella Levy-Pinto to help us craft a business plan for how to move forward, and that was extraordinarily helpful.

- [Stacy] That's great, thank you so much. Those are both really, really helpful answers. Thank you. We have a question from Alison, which I'm going to give to Richard, if you don't mind, Richard. So Alison asks, "Word to EPUB tool, how does it work with images in a Word doc, and are there best practises documented for image sizing and resolution so the quality is maintained?"

- [Richard] Okay, thank you, Alison, for the question, Laura, I'm going to turn to you in a second for some support. Just specifically on the tool, well, images in a Word document, they can be pictures, they could be charts, they could be smart shapes, these are all converted by Word to EPUB and included in the EPUB. And all text and extended descriptions, they can be included in the Word document and come over and also if appropriate, they can also be marked as decorative. And all of those features come through into the EPUB. This question on the resolution, the DPI of the images that you place in your Word document and then find their way into the EPUB, it comes up quite a lot, and as I Google around, I see various recommendations. It's an accessibility question because of course, people with low vision, or maybe with the preference may want to increase the size of that image in the EPUB that you've put in your EPUB to zoom into it. So maybe include that in your kind of testing. But Laura, what have you picked up in terms of best practises for minimum DPI, maximum DPI and so on?

- [Laura] So it's such a good question because controlling image quality is really key to a well-made EPUB for a generalist audience, but also from an accessibility point of view, my recommendation, Alison, is to play around with the tool and see what happens. But if you're not happy with the resolution, as it comes out of Word, you can just crack open that EPUB and replace it with a better version, replace the image with a better version with higher resolution or similar. And then on top of that, if you're interested in having images that are responsive and scale, then perhaps you would consider using SVG because those are going to up size really nicely without any loss of pixel depth or anything like that, they're just a slightly more agile image format, harder to come by and, you know, not gonna work in the case of say a photograph, but it's an option. I hope that helps.

- [Stacy] That's great, thank you both Richard and Laura. I just wanna squeeze one more question and we only have a minute, so Laura, I'm gonna come back to you for a very quick answer, if you can, please, "So assuming you have an accessible book for publication, will the publication work well on platforms such as ISSUU, I-S-S-U-U?" And that's submitted by Roger.

- [Laura] And that's a really great question, Roger. I don't know the answer. I hope that Daniella may have done some testing with ISSUU, I'm not sure I've never worked with it, so I can't say for sure. Daniella, do you know?

- [Daniella] Not at the top of my head, no.

- [Agata] Can I just pop in? I just found on... I just Googled it actually, and apparently screen readers cannot read those flip books, because in the process of creating them, the flip books gets flattened, so all the readable information is stripped off. So it sounds like it's not a good format. - That's encouraging. - That's really helpful.

- [Richard] Strongly underlines, that whole principle we talk about, isn't it? Of accessibility flowing all the way through the workflow. And that you mentioned in your introduction, Stacy, accessibility must be taken care of every stage, right through from the author through to the reading experience itself.

- [Stacy] Yeah, that's a key example, absolutely. Okay, well, unfortunately, we're coming towards the end of today's session, but again, a huge thank you to our speakers. Agata, Laura, Richard, Graham and Daniella for sharing such great information and wonderful presentations with us today. If you've enjoyed the topics raised today, then the DAISY webinars series will resume in September, covering an excellent range of topics, including, Ways People with Print Disabilities Read, EPUB Accessibility 101 and Authoring Accessible Math, as well as many, many more topics. For the latest information, please sign up to the web email list at daisy.org/webinars, where you can also find slides, recordings, and resources for all the DAISY webinars. I really hope you will join us again soon, in the meantime, thank you for your time, stay safe and well and have a wonderful rest of the day. Take care and goodbye.