

Accessibility Group

[Notes of EPUB 3.1 Accessibility Group conference call, held on October 26 2016, at 16:00 UTC](#)

[Notes of EPUB 3.1 Accessibility Group conference call, held on October 05 2016, at 16:00 UTC](#)

[Notes of EPUB 3.1 Accessibility Group conference call, held on September 28 2016, at 16:00 UTC](#)

[Archived Minutes](#)

Subgroup Team

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MURATA Makoto
Balakrishnan Ramu (MPS)
Rick Johnson (VitalSource)
Bernhard Heinser (Access For All, Zurich)

Planned Meetings

Wednesdays 16:00 UTC (Immediately after EPUB3.1 meeting).

The notes of meetings are on the same page, please scroll down for the same.

Join online at <https://global.gotomeeting.com/join/799620829>

Or, call in using your telephone:

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Audio PIN: Shown after joining the meeting.

Meeting ID: 799-620-829

The group's work is being carried out on the DAISY github wiki at <https://github.com/daisy/epub-revision-a11y/wiki>.

You do not require a github account to follow the work, but will need one if you wish to participate in creating/editing documents. Please send your account name to Avneesh and Charles to gain access.

Notes of EPUB 3.1 Accessibility Group conference call, held on November 02 2016, at 16:00 UTC

Attended by

Madeleine Rothberg, NCAM
Charles LaPierre
Lloyd
Naomi Kennedy (PRH)
George
Avneesh
Romain
Daniel Weck
Rachel
Bernhard
Bill Kasdorf (15 min late)
Tzviya Siegman (30 min late)

Regrets

Agenda

1. Discussions for creating success criteria and techniques for WCAG 2.1.
Matt will send further information and questions to the mailing list before the call.

We decided to work on 3 concepts.

- Collection of webpages as a single entity (structure and logical reading order)
- Navigation in collection of webpages.
- Accessibility metadata (including schema.org accessibility properties on which we worked over past 10 months).

2. Decision for the distribution section of the EPUB accessibility specifications.

Discussion and Action Items

1. Discussions for creating success criteria and techniques for WCAG 2.1.

- Accessibility metadata (including schema.org accessibility properties on which we worked over past 10 months).

Matt: not sure how much we need to propose on our side from the WCAG folks. We just need to open up the discussion and ask them how to work from there.

Avneesh: maybe we can get some tips from Madeleine, how to create the proposal so that it is received well by WCAG.

Madeleine: I will reach out to a friend to has done more of WCAG work before

Matt: key will be what the benefit is, search ability i.e. don't have to search the content. Challenge will be to describe how the metadata is useful for usual web pages.

Madeline: Metadata is a workaround for resources that are not 100% accessible. Concern that is not a compelling argument for web folks, although it is compelling argument for publishing industry. We don't have 100% accessibility on the web. So the metadata can be useful for searching but how to make that a compelling argument to WCAG.

George: In view of combination of IDPF and W3C, the success criteria for digital publishing should be there from beginning instead of inserting later on. This can be the compelling argument.

Avneesh: we use this argument in ACT AUTO-WCAG group. It worked well, But because Judy was in the call.

George: is the form easy to fill in?

Matt: they have a github tracker, for this one we just add an issue, we don't need to do a success criteria, I am not sure that will not give them enough.

Avneesh: for metadata it will be difficult to propose the success criteria at this stage.

Matt: I can add the tracker and send them a note to discuss. They wanted discussion for metadata on the mailing list.

- Collection of WebPages as a single entity (structure and logical reading order)
- Navigation in collection of WebPages.

Matt: how is a page defined in wcag now. We need to propose wording, what they are willing to change/listen too, and broadening page to expand to a publication. Techniques are to define reading a publication which is a distributed across multiple documents. Trying to get these clarified within wcag itself. When you see a webpage it doesn't apply but epub is a multitude of pages. I don't know how to propose a web page inside the spec. We have the page list we can put forward, but they do have TOC and logical reading orders but not like we have. Even when they say "Web Page" doesn't really mean a single page.

Avneesh: I copied the definition of web page, epub publication falls within that definition?

Lloyd: when you have a URL in an exploded epub is it the root of zip file package file, or nav doc? What does it point to?

Avneesh: container.xml should be the entry.

Romain: this is not defined is it?

Avneesh: no but that is what Radium uses. Daniel: correction - Radium URL points to root folder, not container.xml (level of indirection into OPE, then Navdoc / spine of HTML documents, is intrinsic to EPUB standard)

Romain: that is really implementation details, but it is not defined anywhere.

Lloyd: as we define what a PWP really is, we will find out what that URL points to.

George: I don't know if that is our work. We just want to talk about and get it into their scope of thinking. EPUB4 or whatever.

Matt: ties into a set of web pages, a web publication is a set of pages, but don't go down to the end of a URI. EPUB file onto a web. We want this not specific to epub. Any digital publication. Maybe it's just adding an example when they talk about a web page, is a linear set of pages. We give abstract definition

George: totally agree

Romain: do you know if they have some changes to this in the pipeline?

Matt: not in our last call, so I assume no.

Avneesh: we need to engage the group to include epub type of definition to the definitions which are provided for a "web page" once it is defined it is pretty straight fwd.

Daniel: readium urls point to root folder. Not to the container.xml. container.xml is entry point but Readium do not get to it directly.

Avneesh: Multiple renditions? One has to go through container.xml for multiple renditions.

Daniel: from container.xml, We can discover the various renditions (each is an OPF XML doc).

Avneesh: not a big issue, we are working at abstract level so it does not matter if URL is going directly to container.xml or it is going to root and then to container.xml.

Matt: if this is how we want to start I can craft this and put in an example and get the ball rolling. Draft text for example then send to our list then send to WCAG group.

Avneesh: what about time being consumed.

George: Just start it on their wiki and let us comment and go from there. Tight timeline

Matt: Ok., could be not finalized but that's ok. And open up to anything else they see to be done.

Avneesh: ok: so we have anything more for WCAG?

Matt: I think this is good to start. Should we do pagelist now with their template, we don't have to discuss and is just a technique,

George: and it is more foreign to the web.

Matt: better to get out there soon. When we talk about a page list with pages and numbers, but just web pages.

Avneesh: this is dependent on web page definition. without that success criteria would not be specific to epub.

George: leave it out...too complicated.

Avneesh: Without inclusion of publication in definition of web page, the page markers will apply to websites?

Lloyd: there can many print pages within the web pages.

Bill: Sorry, I joined late. Are we talking about use-cases?

Avneesh: No We are talking about update to WCAG 2.1 and the success criteria.

Bill: we are providing input to the accessibility folks, so they would understand page numbers. One success criteria if there is a referenceable paginated reference then success means one needs to be able to navigate to those pages breaks.

Matt: GOOD TO clarify sets of pages, but does not imply a page list., they could have page #'s with a page list

Bill: huge obstacle is fixed pages versus generated pages. Ebook dynamically generated with the print equivalent, with font size increases page #s change but the page list won't change. Referenceable pagination. If pagination is always dynamic then this is mute. Locations in content are referenced By page and AT must navigate.

Lloyd: maybe too early to discuss page-lists at all

Matt: without publication set of techniques they may not take these. So show them here it is what do you think and this is important for DPUB community, but may not apply to web.

George: WCAG may say we have too much now and wait for 3.0

Bill: this is digital publishing specific

Matt: let's start the discussion, and ask them what they want to expand on now or punt to 3.0 once they are understanding what we have continue then.

George: navigate to permanent positions

Avneesh: should we just get to mailing list / github and then propose pages a little late?

diverting to a previous topic..

Tzviya: in DPUB PWP we have a definition of Web pages you may want to just use that.

A Packaged Web Publication (PWP) is a Web Publication whose constituent resources are combined into a single distributable file, using some standard packaging format

Avneesh: While Tzviya is searching the definition, Matt do you think we should wait for pages?

Matt: I think we should wait and we can broaden it and gage how they are feeling and understand where we are coming from.

Tzviya: I pasted above, but may want to remove PWP and could use as PDF as an example.

Avneesh: Andrew stated in WCAG call that if a pdf can be accessed by a single url, it is considered as webpage even if it consists of 800 resources.

George: WCAG applies to multiple file types.

2. Decision for the distribution section of the EPUB accessibility specifications.

Matt: this came up last week, decoupling discussion. Romain commented that we don't have evaluation of content on how it is distributed.

Distribution section now doesn't have a home. Now we have a distribution conformance requirement which points to: split out author controlled components, metadata/drm when these apply this is what you should do. Login searches etc... moved to appendix in back. Informative guidelines on how to make more accessibility and how to do it. One for DRM on for distribution metadata and testable way to follow that for the production chain everything else goes into the appendix.

Avneesh: does the DRM trigger the IP review process. Internally all of us know that it is just a clarification, but how would the external people interpret it?

Matt: We are not introducing a statement not about the drm itself, we are not introducing anything that is patentable, and this is just a clarification. Tzviya thoughts about it?

Tzviya: clarifications are fine. Lets remember review period ends next week so we need to finish this up.

Avneesh: We are just moving some things from techniques to general document.

Matt: it's all open and on the list so no one is objecting to it. This is all we can do.

Tzviya: let's just finish up other stuff for the review.

Matt: there was this and Makoto's comments on techniques, but it is not for specifications.

George: do you have the sentence handy where you mention DRM?

Matt: DRM if applied to epub that the author does not impose restrictions to assistive technology.

We are not saying anything else about DRM.

Avneesh: any objections?

RESOLVED.

3. Plan ahead

Avneesh: plan for next week? Call needed? Matt you will send out the announcements / github to WCAG.

Matt: let's wait and see the response from WCAG, and we can decide early next week if we need a call.

Avneesh: from 13-20 George and I will be travelling.

George: WCAG chairs, I will need guidance about right time to participate in WCAG. What is the resource expectations.

Avneesh: Matt and Romain are currently on WCAG mailing list, I am also waiting for right time to nominate myself.

Romain: I am on ACT task force, I am on their mailing list.

Tzviya: I know you have talked to WCAG chairs. Either Romain/Avneesh should reach out to Josh / Andrew to know more about it.

Matt: we have been talking to them.

Tzviya: how do you take next steps.

Matt: either their mailing list / issue tracker.

George: once you have that link mail it to josh/andrew and the rest of us.

Matt: yes.

George: has that chairs coordination call been quiet since TPAC. I didn't get that mail for last weeks call.

Tzviya: It happens, there is one I missed from the 12th.

George: i will check into that.

Avneesh: sounds like we may need to start attending Tuesdays call with WCAG.

Tzviya: i am not sure how they handle their calls.

Avneesh: matt can log the issues and we will see how to proceed. Anything for IP review for next week?

Tzviya: assuming all documents are in order we don't want to send anything out to the list, and not any status changes to the document since IP review already started.

Avneesh: when is the final date for freeze.

Tzviya: Public review ends on Nov 7.

Matt: yeah that is it Nov 7 Monday final day.

Tzviya: IDPF board meeting that evening. IP review 45 days ends later in November.

Avneesh: Thanks everyone for excellent work over past year, and we will be on emails till we need another call.

Action Items

- Madeleine: Get in touch with colleague who have dealt with WCAG, for seeking suggestions for accessibility metadata proposal.
- Matt: Open WCAG 2.1 Github issues for clarification for inclusion of digital publication/EPUB/collection of pages in the definition of webpage, and accessibility metadata. Thereafter start the email discussion on WCAG mailing list.

Notes of EPUB 3.1 Accessibility Group conference call, held on October 26 2016, at 16:00 UTC

Attended by

Avneesh Singh (DAISY Consortium)
Charles LaPierre (Benetech)
George Kerscher (DAISY)
Matt Garrish
Romain Deltour (DAISY)

Gregario (LIA Foundation)
Madeleine Rothberg - NCAM
Lloyd Rasmussen (NLS)
Amy (TFA)
Catherine (TFA)

Regrets

Daniel Weck
Tzviya Siegman
Bernhard Heinser

Agenda

1. Update from call with WCAG 2.1, for success criteria and techniques related to digital publishing.
2. Quick update on [schema.org](https://github.com/schemaorg/schemaorg/issues/1100). It looks that it is waiting on finish line.
<https://github.com/schemaorg/schemaorg/issues/1100>
3. ARIA-details for extended descriptions.
4. Github issues highlighted by Matt:
#897 Accessibility requirements in one place
<https://github.com/IDPF/epub-revision/issues/897>

#904 Informative section for Media Overlays
<https://github.com/IDPF/epub-revision/issues/904>

#905 example for accessibility summary for optimized publication (Lloyd or Keith may provide an example for Braille publication)
<https://github.com/IDPF/epub-revision/issues/905>

#908 "MUST follow accessible distribution practices" perhaps weakly defined?
<https://github.com/IDPF/epub-revision/issues/908>
- 5 . Any other business
6. Next call.

Discussion and Action Items

1. Update from call with WCAG 2.1, for success criteria and techniques related to digital publishing.

Avneesh: The timeline is quite short. The techniques should get in till mid November. And the success criteria should get in till December 1.

For techniques we would get another window in May but for the success criteria December 1 is the only window we have.

We proposed 2 concepts collection of web pages (eBook) and metadata in Schema.org

George: Success criteria, web html pages WCAG refer to a web page. In DPUB Note (Charles & Deborah) this notion of a "package" web publication needs to be explained what it is. Provide overview. Success criteria is logical reading order of that publication, structure, navigation and then accessibility metadata related to that web publication are the 3 success criteria's we want to put it now. Techniques get updated every 6 months. Within the next 2-3 weeks

Avneesh: multiple docs WCAG group is aware, and they have suggested to look what definition states, if there is a single url to an entity it can be treated as a web page. Katie was excited about the metadata, she said that IMS Global metadata came up in discussions earlier also. We are proposing the same things. But, Most of the web people don't have an idea what it means for the web or e-Publishing. So, this piece will take more time. Discussion for collection of documents was more straightforward.

George they were very friendly and receptive. We do not have to have perfect success criteria and techniques for submission. It can be improved after submission also.

Avneesh: Matt, how does the things look to you to writing these criteria and techniques.

Matt: the main thing will be to get this into their github repo. Not sure how to get them to understand a collection of web pages., maybe Andrew was thinking of the zip / epub as the link to a set of web pages.

Is this a set of pages, and terminology issues we may encounter. Goal is not to have perfect success criteria, but get it on their radar, and we can work on these moving fwd.

George: exploded epub versus a single package needs to be in this success criteria.

Avneesh: do we need to get into technologies like zip. WCAG success criteria is at higher level than technologies.

Matt: I don't think that we should get into zip, if it is zipped or not it's a set of web pages. Making a set of web pages or a single web page URL is what they are use to. The state it is in doesn't matter as much.

Amy: we use the term EPUB media content when we are talking about it. This is the content that is on the web page.

Matt: They are very focused on web page or web pages. We are going to have to work with them on this. Maybe inject some epub documents a document spread out over multiple pages but is all inclusive.

Avneesh: so what can we do in the next 3 weeks?

Matt: let's start opening github issues open. Regardless we should begin there, as well as bring it up on lists. Maybe someone on their side will take them to the list after it is on the issue tracker.

Avneesh: sounds good.

Matt: I don't have access to this.

Madeleine: the interest group is public. Would discussions happen on WCAG technical list? Or public list?

Avneesh: I will ask them which list they want to discuss this. And put Matt on the WCAG working group if needed.

Other thing is the priority, Should we take the accessibility metadata seriously now or just start discussions?

Madeleine: w3c and schema.org are close so I don't expect it to be a problem.

Matt: it's getting all the documentation in page. That might be just something daunting that they are just not sure how big it is.

George success criteria with web publications, if they want to apply this metadata to every web page then it might just become boilerplate and no one take it seriously.

Madeleine: what are we suggesting the success criteria. Maybe start with publications

George we start with epub but not apply to all web pages.

Matt: this may be a WCAG AAA if you are applying it is something you are actively doing.

Avneesh: What is the conclusion, are we proposing success criteria for only collection of webpages or for accessibility metadata also?

George: Lets propose all 3 success criteria

Structure and logical reading order in collection of documents.

, navigation in collection of documents

Accessibility metadata.

2. Quick update on [schema.org](https://github.com/schemaorg/schemaorg/issues/1100). It looks that it is waiting on finish line.

<https://github.com/schemaorg/schemaorg/issues/1100>

Madeleine: these are at pending webpage on schema.org, I still don't see the new lists. Maybe he put the wrong examples in but I will poke Dan again. Our stuff as pending and when they trigger the new release then it will become approved.

Avneesh: George, when does specification go to the IDPF board for approval.

George: 45 days after the 14th, end of Nov. will be the end of the IP review. And voting end of Nov. beginning of Dec for voting.

Matt: we are good we have the links to the pending site. The potential for these to be delayed but we should be good to present to the board.

3. ARIA-details for extended descriptions.

Avneesh: I wrote an email to Janina but could not get a reply yet. I will take action to contact her again.

4. Github issues highlighted by Matt

#897 Accessibility requirements in one place

<https://github.com/IDPF/epub-revision/issues/897>

Matt: Makoto highlighted this. ARIA best practices and RS req. The first part we don't do anything about. Rich asked this it's a lower requirement. Jason said to meet scripting for WCAG and ARIA is a must so we are saying this a s should if there are higher req. We will put it in the accessibility. RS> must expose ARIA semantics and why do we have a lower req. I tried putting this out to the general list but didn't get a response. Maybe the old epub 2 model maybe you wouldn't have full scripting support or UA, but maybe you should expose this... is this is something we should recommend the WG take out or not touch this and this is something that has disappeared over time and is not really a requirement anymore.

Lloyd: not sure, at NLS we may build a EPUB based device to display in Braille. It might not have screen/audio and consume epub documents in HTML, and understand ARIA roles. But this is a low style dev / raspberry pie. I think people have to get comfortable that not everything will be a web browser. Not even optimized publications just textual pages. But not limited to any browser does currently.

Matt: audio playback system doesn't have to expose them so it should be a should requirement. So maybe leave it alone and it is fine as is.

Avneesh: yes. The assumption that all reading systems will be based on browsers may not hold true. So, this statement would be helpful in such a case.

#904 Informative section for Media Overlays

<https://github.com/IDPF/epub-revision/issues/904>

Matt: Brady has raised when MO why is this a requirement when we don't add any other requirements for anything in this sections. We are only highlighting. Again this is not sure what we do with this. We have an informative section epub considerations and have this shifted down so it is not introducing new requirements but at this point we want to highlight it. It's a fair point.

Avneesh: objective was to have a placeholder on which we will be working on in the future. Media Overlays is important for accessibility, so people concerned with accessibility may say why Media Overlays is not in accessibility specifications. On the other hand it gets into the flow of normative requirements, one does not realize immediately that this is informative section.

Matt: we can add an informative label. Instead of moving it.

Charles: I agree

Avneesh: Yes

George: this is a very popular with children's materials narrative picture books.

Matt: there is that note in this section and we will review this in a future rev.

Charles: how do we change this now when IP review is in progress?

Matt: we still are allowed to make changes during IP review. As long as we don't do something drastic. Introducing new features would be out of scope.

Avneesh: And this is a clarification, and not change in specification.

Charles: how does this work for diff's?

Matt: yes we have diff links at the top of the documents. Depending on the change I would do a 72 hour review, but for these are mostly minor changes and clarifications.

#905 example for accessibility summary for optimized publication (Lloyd or Keith may provide an example for Braille publication)

<https://github.com/IDPF/epub-revision/issues/905>

Matt: Dave read optimization wanted an example for accessibility summary for an optimized publication. Maybe Keith or Lloyd might have a better wording, I agree with Dave having an example would be nice. Basically has to state what formatting would go into this optimization. I was thinking a Braille summary...

Lloyd: I looked at the Braille summary and it was not bad. We should have example for both Braille and audio-only.

George: could almost take the NLS announcement "this book is structured with level 1 and 2 and captions two images are at the end of the book.

Lloyd: an accessibility summary what kind of don't expect to find any text in here because this is a Braille rendition.

Madeleine: this is a Braille only file and not a traditional epub.

Lloyd: this publication has been produced with unicode Braille that is not readable without a Braille device. Maybe conforms to some Braille standard.

George: the audio one conducive for a mainstream audio publishers that uses the epub without text.

Avneesh: so who will take action item for accessibility summary for audio-only?

George: I will do it.

Lloyd: I will take another look at the Braille.

#908 "MUST follow accessible distribution practices" perhaps weakly defined?

<https://github.com/IDPF/epub-revision/issues/908>

Matt: Romain added, distribution practices need more normative description. "In their power, best of their abilities"... power... we should list the two items and find some general text, we still have the opening and tighten it up a little more. Do everything you can... let's deal with the things we know of, and expand where we can... add more objective text than subjective. T

Avneesh: this came about from DRM right? Distribution we don't want to talk about the distribution mechanism Right?

Romain: yeah, this is tricky. I agree with matt said, tighten this a bit. The loosely defined with the must, maybe by changing it to a should makes it easier to be open, if we have a must where we don't define sounds awkward.

Matt: I think we may end up with some ambiguity if we discuss DRM with actionable statements. So Romain you are ok with moving this from Must to Should?

Romain: making this is a Should we don't have any means to enforce this rule so but maybe not satisfying for accessibility.

Avneesh: DRM must not prevent access to accessibility. DRM should not block access to assistive technology, so that must stay a must here.

Matt: must ensure that their distribution process does not impact on the eventual accessibility when consumed by the user.

Romain: if we want it to be about DRM, in the accessibility we don't talk about DRM. must follow

Matt: maybe we should state that must is for DRM and distribution data, and we leave the should for the blanket statement does not affect the accessibility.

George: where are we at now with this because this could be a substantive change.

What is the problem? Too vague?

Matt: steps within their power is vague.

Lloyd: it doesn't even say accessibility / usable. Publication is accessible because you can find it on the web.. Which is not what we imply.

George: It says authors?

Avneesh: author means publishers as per the definition in the specs. We may use something like encryption kind of things and packaging. So if we can be more specific about what we are referring to.

Matt: bringing DRM back in may cause issues at this point. If we bring this in too generally, that people may not realize that this statement this is referring to.

George: DRM in different products is fine as long as it doesn't block access to accessibility technologies, what we have is ok, but if we add DRM that might trigger another IP review.

Matt: is there a way to say this in general, right permissions, talk about DRM in the techniques, and have a more concrete example, on author size, and how it's implemented on the reading system. So we get out of the DRM not working on a reading system and we focus on the author applying it.

George: audio rights gets sold separately than the print rights many times, and publisher does not have the audio rights then the read-aloud function would not work, but the assistive technology must be able to read it. But button for read aloud would be grayed out. what we have is OK.

Matt: so leave well enough alone?

George: this is in an accessibility section so I think we are good. Just changes usability to accessibility?

Romain: authors must take steps within their power for accessibility, how do they test that?

Matt: should we take this taken out and a guideline for accessibility. We are accessing content prior to distribution. This is not part of the official conformance?

Avneesh: mailing list discussions took place in past. About Radium LCP to block access to the content under audio rights protection. There was follow up with Fernando and Daniel that accessibility specification should state that no rights protection system should block access to assistive technology. So, people are leveraging this statement with "must" for advocating.

Matt: content distribution, how do make sure that it is distributed accessibility, we keep the section here and k

We decouple this from your distribution channels. We broke off reading systems and authoring tools focus on the production change get the content accessibility and the distribution.

George: I would be go on moving it to distribution. Perfect accessibility epub 3 and put it into a distribution change and it ruins it.

Avneesh: certification is on the content, not on distribution, so this looks fine.

Charles: agreed, move it.

Avneesh: resolved.

5 . Any other business

No

6. Next call.

Avneesh: Do we need call next week or 2 weeks from now?

Matt: We need to discuss WCAG success criteria quite early.

Avneesh: Ok, we will be having call next week.

Action Items

- Matt: Start work on WCAG success criteria and techniques for digital publishing
- Avneesh: Check with WCAG group if we need to join the working group to work on success criteria, and add Matt to it if needed.
- Avneesh: Send Follow-up email to Janina for reminding the ARIA details improvements.
- Madeleine: Post another comment on schema.org issue tracker for correction of examples.
- Matt: Resolve the EPUB 3.1 issues as discussed.

Notes of EPUB 3.1 Accessibility Group conference call, held on October 05 2016, at 16:00 UTC

Attended by

Avneesh Singh (DAISY Consortium)
Charles LaPierre (Benetech)
George Kerscher (DAISY)
Madeleine Rothberg (NCAM)
Naomi Kennedy (PRH)
Tzviya Siegman (Wiley)
Matt Garrish
Romain Deltour (first 45 minutes)
Bill Kasdorf (Apex)
Lloyd Rasmussen

Regrets

Daniel Weck

Agenda

1. Status update for [schema.org](https://github.com/schemaorg/schemaorg/issues/1100). It looks that proposal is near the finish line.

<https://github.com/schemaorg/schemaorg/issues/1100>

Latest comment on Monday from Dan Brickley "I'll work on getting the webschemas pending version in a form you can all say "looks good" to, tomorrow. After which I will move them directly out of "pending" into the candidate v3.2 release for final review and publication. Since we have had quite detailed discussions involved [schema.org](https://github.com/schemaorg/schemaorg/issues/1100) steering group members here there should be no big hurdles beyond that."

2. Briefing of the discussion regarding IP review and schema.org proposal.

3. Updates done by Matt to accessibility specifications.

- Improved definition of AccessModeSufficient
- Media Overlays section is made informative in accessibility conformance & discovery.
- Updated techniques for page-markers, for including example of Media Overlays.
- The section for skippability and escapability is removed from techniques for this release.
- Section of MathML is removed from techniques for now, it will be added as soon as we have appropriate solution(s).

The links to specifications are at the end of agenda.

4. W3C TPAC highlights and action items points:

- Collaboration with WCAG.
- MathML discussions.
- ARIA-details discussions for extended descriptions.

Accessibility specification:

<https://rawgit.com/IDPF/epub-revision/master/build/a11y/accessibility.html>

Accessibility techniques:

<https://rawgit.com/IDPF/epub-revision/master/build/a11y/techniques/techniques.html>

Media Overlays:

<https://rawgit.com/IDPF/epub-revision/master/build/31/spec/epub-mediaoverlays.html>

Discussion and Action Items

1. Status update for schema.org. It looks that proposal is near the finish line.

Madeleine: good progress, posted my examples. Dan said they were fine but needed to add some new info. Proposed to be in Schema.org 3.2. Still no exact date but good progress. New definitions, we may want to provide additional definitions. Still open on where the documentation should be, but my sense is should be on W3C wiki or external website by Benetech for example.

Avneesh: accessibility features went to W3C wiki.

Madeleine: good I will add that to my list.

2. Briefing of the discussion regarding IP review and schema.org proposal.

Avneesh: comments from Bill, Garth & Matt conclude that it is not a big issue if the external specs are not finalized. Clause 1.5.7 excludes it from essential claims so it shouldn't affect us. And for the worst case, if schema.org properties are dropped, then Matt said we can add an errata and add these or change these as needed.

Matt: if we need to do something after the fact

Tzviya: We are elevating to next phase either today or tomorrow all the 3.1 documentation. No meeting is scheduled for it.

3. Updates done by Matt to accessibility specifications.

- Improved definition of AccessModeSufficient

Matt: any comments to Jason's comment? It wasn't clear to him what was AMS. So I just rewrote the definition. Some other clarifications that there may be more than 1 definitions. Madeleine any comments?

Madeleine: I was on holiday, I will take a look this afternoon. I will see if I have any further comments.

- Media Overlays section is made informative in accessibility conformance & discovery.
- Updated techniques for page-markers, for including example of Media Overlays.
- The section for skippability and escapability is removed from techniques for this release.
- Section of MathML is removed from techniques for now, it will be added as soon as we have appropriate solution(s).

Matt: changed to Media Overlays Playback, more generalized and Must have... there are no additional requirements for conformance, but instead just point out the accessibility enhancements for Media Overlays. instead of identifying structures, instead we encourage skip / esc ability. We no longer put stricter requirements but keeping Media Overlays specs front and center for accessibility. At this point it is more informative.

Matt: Page Markers Added example to identify it in SMIL markup so that it can be skipped by reading system.

The par in smil should have epub-type=pagebreak

Avneesh: MathML has been removed, As well as the Skippability / Escapability specifically

Lloyd: I was having issues connecting to updated links sent with agenda.

Matt: it may have been just offline.

Charles: couldn't we add MathML to techniques.

Avneesh: Matt mentioned that W3C have techniques for MathML, they are not perfect but something is there. So, if we have a better solution, we can place it in our techniques, till then people can rely on W3C techniques.

Matt: we can edit the techniques at any time.

George: or if our technique is more suited for Digital publishing so we may want our technique instead of just the WCAG technique.

Avneesh: do we want to make the decision in this call. We can do it any time.

Charles: I don't think we need to make this decision now, and really this debate is still happening on the email list so I propose that once we come to some consensus on the list of one or two top contenders even if they are not 100% perfect we take those options create samples of them and then go test them out with some reading systems and various AT, then we could schedule a call and discuss put the leading options in our techniques document.

Romain: what WCAG technique? It's the ARIA technique?

Matt: Yes

Romain: mathML is mentioned in WCAG but only marginally.

(post minute edit, for the record: I think we were talking about [ARIA Authoring Practices](#))

Avneesh: yes this is open, MathML techniques can get in anytime we are ready with it.

Tzviya: it's important who owns this issue. This isn't owned by any one group CSS, this isn't a solution that the DPUB group, there is no Math WG so this group needs to take ownership.

Avneesh: Yes I think we have its ownership, for deciding what is good for our EPUB accessibility techniques document, and put it in our techniques document.

Matt: all we can own is how to include mathML or have duplication. We need some practical solutions and start doing testing, and absolute positioning is not always respected in reading systems. I remember reviewing this with Markus and Janina and couldn't find a solution.. But maybe things are better.

Avneesh: what is your test with screen readers or built in TTS?

Matt: we asked Janina if there was any hiding off-screen solutions, but we were only verbally discussing it. We need to see what happens in different reading systems.

Avneesh: epub test.org, in many reading systems like Vital Source, JAWS behaviour is similar to that on browsers. So, maybe things have improved since then.

Matt: the visual rendering is problematic, it may not be hidden visually, and relying on things that may not be supported in reading systems.

Lloyd: at this point in time screen reader combination that follows the specs in good way is NVDA with firefox I am thinking about this: some way of switching off the MathML generated images unless a Reading System user wants it fetch some resource but another display mode with representing MathML.

Tzviya: it's a public list will get a link. <https://lists.w3.org/Archives/Public/public-digipub-ig/2016Oct/0004.html>

4. W3C TPAC highlights and action items points:

Collaboration with WCAG.

George: with WCAG is going to 2.1 and they said that if any kind of success criteria that needs to be added it would be great to get those things in before December. For consideration in including in 2.1

Avneesh: Q1 2018 over a year from now. So we need to. Matt so this falls in your lap.

Matt: yes.

Avneesh: For WCAG 2.1, it would be easy things, maybe page markers or schema.org properties, but skippable/escapable may be a tall order for 2.1 so it may go into WCAG 3.0. It may happen that we develop these things in EPUB next and in parallel work with WCAG 3. We will have a call with WCAG in 2nd half of October, and we will discuss specifics there.

Matt: will these be EPUB specific or Web?

Avneesh: May not too much EPUB specific, there are already PDF things there.

Matt: skippability / escapability but that is definitely 3.0 but it must be done in a web friendly.

Tzviya: I don't know if WCAG WG were shared but there is a how to write up good success criteria. https://www.w3.org/WAI/GL/wiki/WCAG_2.1_Success_Criteria
Success Criteria Template: <https://github.com/w3c/wcag21/issues/1>.

Avneesh: we need to be careful on how to write up the success criteria requirements as it is rejected usually due to language.

Tzviya: as we transition to formal WCAG requirements,

Avneesh: Our existing EPUB accessibility specs 1.0 will remain the same. But we will refine the success criteria as per the requirements of WCAG, and submit it.

Tzviya: there is also a template, and I don't think we should start this now but have a meeting with then 2nd half of Oct.

Avneesh: Who all should be in that call, the whole group or a subgroup?

Tzviya: we could make this part of the DPUB call but we can discuss this Avneesh.

MathML discussions.

George: maybe a trial version of test book with a couple different techniques and then we should test it with different Reading Systems.

Avneesh: any timeline? I will be busy to mid October.

George: I am just as busy. If we can get the different techniques identified, we could ask Marisa to put it into a test book

Avneesh: we have Mark's and Robin's techniques.

George: they are both similar, and if we put a couple of them side by side.

Avneesh: let's talk to Marissa and fwd her the emails and we can move this along by 15 oct.

George: put those alternatives on the github page we looked at 3,5 look at them first on a web page and then pull into a EPUB.

Avneesh: issue tracker which Romain updated?

George: Yes.

Romain: what we need is to have more complete suite of math examples that can be represented as mathML with images with alt-text and based on these examples we can test against devices / AT.

Avneesh: Charles sent Benetech's MathML book, it could have expressions to use.

Romain: has it been tested yet?

George: that needs to be updated and doesn't use the techniques we are talking about. Start with real simple equation and get one that working. With a couple different techniques and if any are useful then

Charles: <https://mathmlcloud.org> would be useful to get mathML, image, svg, alt text for any example we wish to play with could be as simple as $y=x+1$, or something with a super script and a fraction: $y=x^2 / 3$

Avneesh: important input from matt, reading systems can behave very differently from browsers, so we can use these different techniques with simpler MathML, and if reading systems work well with it then we can use complex MathML examples.

ARIA-details discussions for extended descriptions.

Avneesh: George, Romain and I in that room.

We provided 3 use cases to APA group.

1. the aria details missing pieces highlighted by Tzviya, if we have condition pixel perfect replica of book or children's book we needs a detail without being distracting.

2. A screen reader user may want to open only the details that that contain image descriptions. So, there should be a way to indicate that details contain image descriptions.

3. A picture of microprocessor can have 2 details, one can be for its technical specifications, and other can to provide its image descriptions. How to have both. The discussions were finally leaning towards using Media Queries for personalization. It was not close to a decision but that was the direction.

George: personalization an MQ hopefully allow simplified language for a dyslexic learner or cognitively impaired, and alternative to tactile/3d one or more things could be selected.

Avneesh: publishers concerns if they are using ARIA details it is invisible to sighted users, if they use html details then it may not be ultimate for screen reader.

Tzviya: that was the main objection to Longdesc and this concerns me.

Romain: visual que of aria details could be styleable by developers and its not clear to me how this would happen in ARIA scope and how this would be in the UX in browsers and would rather be in HTML core. But we didn't reach consensus.

Tzviya: none of browsers were present at meeting... and whether this gets implemented is a HUGE question. I would love to hear from APA, I know Leonie has a good relationship with the browsers,

George: is one of the issues here that this is showing content where other AIRA techniques are adding semantics and this is really content.

Tzviya: biggest objective was content that was accessible but only to AT. if we have content it MUST be accessible to everyone not just AT.

Romain: that was the one of the two big objectives.

Tzviya: This is a political hot bed... so let's not take this on again.

Romain: we want something that is useable to everyone, so it feels like it doesn't fall into the scope of ARIA. or a more general solution in HTML core.

Avneesh: but it would be true for other ARIA elements.

Romain: many AIRA attributes and features are specifically for AT, but here we are identifying descriptions for everyone, but is different that semantic roles for AT.

Avneesh: this is for content where ARIA is more for augmenting on controls and features etc... semantic

Avneesh: Aria Details allows for branching, whereas HTML has everything in same capsule. If we want to use HTML details then we need to see something similar there.

Tzviya: that's where I hoped this would go. This puts burden on User Agents. This is something details element then the burden is the information being presented i, but this is a conversation that has to happen outside this call. We need to ask Janina if there has been any feedback from Browsers.

Avneesh: In the room we heard that User Agents don't want heavy lifting and will reject anything that requires more work on their end.

Tzviya: I would like to hear that from them.

Avneesh: maybe we need to get in touch with them.

Tzviya: I think we need to talk to Janina, but I think the use of a MQ is a great solution.

(Romain: I have to go, sorry. I agree with what Tzviya just said!)

Avneesh: Apart of our discussions, CSS also had more meetings that highlighted use of MQ for personalization.

Avneesh: who will talk to Janina?

Tzviya: someone else should but loop me in.

Avneesh: we also had a meeting with DAN from schema.org which went well and has been discussed in previous call.

Avneesh: Next call?

Bill: 2 weeks is Frankfurt Book Fair.

Avneesh: do we need a full group call, the things like MathML can be carried by a sub group call or on emails? So, should we have call after 3 weeks?

George: That sounds GREAT! If we need to have any small calls we can just call between us. There is no reason we could post to list any anyone who wanted to join in on the call.

Avneesh: so if we have a small call we will post it on the list otherwise we will meet again in 3 weeks.

Matt: should we do a consensus for release, since technically this is a separate document. The group here should have a vote for release.

Avneesh: we are moving to IP review... any objections?.

George: and its also a proposal to membership. But this is the one we think is right to move to the membership and IP review.

Avneesh: any objections ? Please raise now.

All: Silence.

George: Perfect, great work.

Avneesh: absolutely great work, it is 1st accessibility specification for EPUB.

Charles: Great work everyone, this is a great moment.

RESOLVED: No objections, Accessibility 1.0 is approved to send to IDPF membership and IP Review.

Action Items

- Madeleine: Add additional definitions for schema.org proposal to W3C wiki.
- Madeleine: Review the updated definition of AccessModeSufficient
- Avneesh, Charles, George, Romain & Matt: Work on creating MathML samples and testing on epubtest.org.
- Avneesh: Write follow-up email to Janina for aria-details issues.

Notes of EPUB 3.1 Accessibility Group conference call, held on September 28 2016, at 16:00 UTC

Attended by

Avneesh Singh (DAISY Consortium)
Bernhard Heinser (Access for All)
George Kerscher (DAISY)
Charles LaPierre (Benetech)
Matt Garrish
Madeleine Rothberg (NCAM)
Romain Deltour (DAISY) (first 45 minutes)
Rachel Comerford (Macmillan)
Lloyd Rasmussen
Daniel Weck (DAISY)
Naomi Kennedy (PRH) (first 40 minutes)
Tzviya Siegman (Wiley) (10 min late)
Gregario (LIA Foundation)

Regrets

Agenda

1. Official date for starting IP review?
2. Update for metadata proposal submitted to schema.org. We had a face to face meeting in TPAC, and it helped in accelerating it.

<https://github.com/schemaorg/schemaorg/issues/1100>

3. Decision for Media Overlays requirements in accessibility specifications. The issue is regarding skippable and escapable structures, which are not defined very well in EPUB Media overlays specifications.
4. MathML techniques for the techniques document. Expecting some sample content.
5. Accessibility specifications work will continue for techniques, alignment with WCAG and extended descriptions. What should be the frequency of con. calls from here on?

Discussion and Action Items

1. Official date for starting IP review?

Matt: As per email exchange with Tzviya and Garth, it should be around 5th October. So, we have a week.

2. Update for metadata proposal submitted to schema.org. We had a face to face meeting in TPAC, and it helped in accelerating it.

Avneesh: We had meeting with Dan in TPAC. We clarified definitions, added brief example for clarifying definition and removed the confusing terms that could delay the process.

Madeleine: It looks good, but there are 2 terms that I would like to retain, these are long standing and important terms.

The two to keep are Color Dependent. The other is Text on Image. That is a picture not real text. Those who use Read Aloud all the text on screen but they won't hear it.

Charles: I agree with you the color dependent and the TextOnImage are the two most important terms to keep, but of the two TextOnImage seems to be the larger of the two issues in schema's mind.

Lloyd: Text As Image or TextAsPicture. You don't know if it's a part of the image or superimposed on image.

Madeleine: TextAsImage I could see this.

Lloyd: whole block of text to read as an image.

Charles: if you have Alt-Text do you still need this metadata.

Madeleine: yes first we convey what is in original publication, then the accessibility feature like alttext is conveyed. So, metadata for both is added.

Avneesh: These are good, as long as this doesn't reduce the speed to adoption with schema.org.

Madeleine: we didn't have the definitions, and provided definitions. So we just need Dan to put up the syntax, and once we have this I can add full scale documentation. This could happen over the next couple months

Avneesh: Do we know timeline of schema version ?

Madeleine: No Dan usually just posts that a new version is about to be release. We need Dan to write up the formal examples with the syntax.

Charles: I think we should send him the 2 examples on schema.org.

Tzviya If there is an example Dan would just accept it.

Madeleine: I do not know the exact syntax that Dan is planning to use. I will write up the example without syntax so he will convert it to the correct syntax which he has an action item to do.

Avneesh: Good, Madeleine can alert him. The other important thing is IP review, is it ok to have open issues going into IP review, which has dependency on external specifications?

Matt: I don't think this affects IP review, and we don't have the final URL but will need to ask Bill M. if we keep a note in, and replace existing schema.org URLs with final URLs of specifications after IP review. It becomes little tricky after this next final step.

Avneesh: The next question, considering the worst case, if it doesn't happen until after board approval and we have to fall back to backup plan of adding these properties in EPUB vocabulary. Will it trigger the IP review again?

Matt: I guess no, we are just moving the properties to a different location.

Tzviya: Avneesh, it would be good to send email to me and Garth with these questions. We are looking at next steps for going into the IP review.

Avneesh: ACTION: I will do this. Send question to chairs of EPUB team.

3. Decision for Media Overlays requirements in accessibility specifications. The issue is regarding skippable and escapable structures, which are not defined very well in EPUB Media overlays specifications.

Matt: current objective states structural navigation, table navigation, etc... It's a valid question should MO be more complicated. This is a two big an issue for 1 week. This is something that goes beyond Media Overlays. I don't want to bog down the meeting and what to put into the specification. How to address Media Overlays as a requirement it would become conditional. If contains Media Overlays you must provide escapable skippable, at the level of granularity that is supported. Requirement MO in navigational document, we leave out the structural navigational aspects. Require work on MO specification with definitions what is skippable/escapable we would should provide these structures as defined in the structure vocab which reading systems could apply. Daniel suggested some additional semantics. to improve already what is defined what is already in Media Overlays.

Tzviya: During discussions with WCAG working group, skippability and escapability was not well understood, and this seems like an area which needs a lot of work. Right now what we have is fuzzy and, adding more semantics may not be the right idea at this point. This solution seems very temporary.
<http://www.idpf.org/epub/31/spec/epub-mediaoverlays.html#sec-behaviors-skip-escape>

Avneesh: Skippable and escapable structures were always considered by us as advance features since we moved to EPUB 3 from DAISY. It is difficult for main stream reading systems to support it. That is why the Media Overlays book on epubtest.org doesn't have these features.

The other question is, if book is full accessible with text, and doesn't provide full support with Media Overlays. it would still be accessible. Should we have two different conforms to the a11y guidelines and MO guidelines to resolve this?

Matt: I don't think that would be a problem. Yes that would be one way to address this and not fall under the a11y conforms to like we did with audio only.

George: I would like to see the specs that lead to greatest adoption. skip/esc, has evolved in DAISY. I am not sure people in main stream can implement this or have a spec that they just don't implement it because they don't understand it. We need to keep it simple.

Tzviya WCAG was just concerned that it should be WCAG compliant, if they are picked up in WCAG.

Matt: I am not sure it would be useful in WCAG, but there is PDF stuff in there as well, and this is audio specific.

George: these concepts apply equally to Video. Could be useful in the future but not now.

Matt: Automated word level sync. With pauses etc... production system will provide semantics. We don't want to fail the publication if they have word level but don't pass this. Regardless of granularity

Avneesh: Granularity is dependent on the need of user. some would like word, sentence, paragraph, and in UNICEF meeting, we came to know that sign language video may be synchronized with half or full page. So, it is not feasible to have requirement for granularity.

Matt: how do we say what the granularity, and how you meet these requirements.

Avneesh: if we ignore skippable & escapable from accessibility specs At this time how does that look? We would have only the requirements related to Logical Play order, nesting of list / tables and we remove skip/esc.

Matt: maybe we can strengthen up skip/esc. And it becomes the expand on structure vocab and tighten up. These are should requirements and there is good guidance there that authors should be doing this and not the "must" level.

Lloyd: specialized publishing env. Skippability the authoring tools provide set those on notes, refs, page numbers NISO 2002 . I would say escapability nested there is a structure it does provide a way to escape. Not really well understood by our users. We did put it in ios/android apps but not done very well. Producing agency must set some rules. Mark them all as default playing as yes but if you rewind back you may get to other content that was skipped by mistake due to the markup.

George: the one item for skippability was Page announcement. People didn't want to hear those page numbers in the middle of a "love scene" and everything else in terms of esc. #1 was image descriptions get to be really long in audio and LD person wants to skip back them. Two different versions with/without descriptions and the ability to skip past allowed to create only 1 version.

Avneesh: Also, right now no other mainstream system other than Radium does skip/esc.

Daniel: problem is that the specification lays out clear Reading System conformance but not so much content requirements. seems we need accessibility space to have some stricter guidelines with page breaks. Should be skippable, Radium works with that fine. If it's skippable if switch is turned on. User is not allowed to elements that are considered skippable.

Lloyd: there is a plectalk which allows you to see that list.

Daniel: reading the spec as a editor, there is a strict epub type to par elements in SMIL file, it has to be authored, and role of a11y doc to lay out.

Skip we need to refine the list in the spec, What is missing: semantic properties in html markup must be mirrored in SMIL.

Lloyd: Daniel has good point.

Daniel: there is not even a list for escapability. We could use the same principle if an element in html markup say glossary, and SMIL must have the same as well.

George: text document reading system playback. We are saying that reflecting those in the SMIL is the only way a player can implement those semantics.

Daniel: it could fetch it from the HTML as well. But in general case epub types in html "MUST" be mirrored in the SMIL.

Avneesh: Matt if all these things go into Media Overlays specification will this conflict with what Daniel says, his approach is in other direction, to have these in accessibility specs.

Matt: If it is a should then technically you won't fail outright unless we make it a must. We would want to be careful on how strict. We do have a page section, lower in MO and stronger in the a11y spec. Is there a concern that people will fail this with no page breaks defined. If MO is a feature and we want it to be more A11y, but do a better job at making these a should in MO spec.

Daniel: I think it's too late for Media Overlays spec for 3.1. Alternative way is updating the accessibility spec to plug those holes.

Avneesh: It is same for accessibility spec we are at the end of the game. What if we just change these to should in accessibility specs.

Matt: I am not sure what these would fall under, structural navigation? Or a new section on its own. Even some of the MO stuff talks about deprecated terms. I don't know you should add skippability page breaks. Do they even put in page numbers as text?

Avneesh: Daniel can we just forget skippable and escapable structures for accessibility specs 1.0 and define this in better way in version 1.1 next year?

Daniel: there is a lot of subjectivity what is skip/esc. Page Numbers could be skippable, but sidebar is skippable? What level is escapable/skippable. We need a lot more to do. So, it is ok to drop it for now.

Avneesh: Finally, we are dropping skippability and escapability requirement from accessibility specs and will mainly have the requirements related to playback order, nesting of structure etc. in accessibility specs 1.0.

Daniel: Additional comment, the list of skippable is clearly labeled as an informative, and we can move this to normative in the future.

George: publisher produces a fully accessible epub book with no Media Overlays. and all is good. If MO is added it doesn't affect the a11y rating right?

Avneesh: it can if you don't put the correct nesting synchronization.

Matt: I think that then goes Media Overlays requirements. If you added this is fine even if you don't have skip/esc features. But it must follow the HTML markup for structure.

4. MathML techniques for the techniques document.

Avneesh: Mark has provided the sample. <https://rawgit.com/mhakkinen/extdesc/master/Extended-desc.md.html> Does it look good enough to the technique?

The 3 check points we have are:

1. Publishers need to have pixel perfect math.
2. screen readers need access to the mathML
3. And for old assistive technologies we need alternate text or label, because MathML may not be supported.

Does this example pass these 3 check points?

Charles: Don't we have that the alt-text is on the image.

Avneesh: But the image is ARIA hidden, along with the alt-text.

Matt: I am concerned if it will be hidden off-screen with all reading systems.

Tzviya we need a solution for all users. Is it tested in real environment?

Avneesh: It looks that it is tested with screen readers and browsers.

Tzviya: Reading systems may not behave like browsers.

Lloyd: we need an accessibility label. Maybe hope we don't drop math for it. Another thought is that people who read such kind of advance content should be using sophisticated assistive technology.

Avneesh: Lloyd, you are saying that we may consider dropping the requirement of having accessible label.

Tzviya we are not neglecting math for accessible label, but looking at this example I am confused.

Avneesh: Mark says that this example is for extended descriptions, and we should replace the respective code with MathML.

Daniel: the preference using raster image is visually and we need vector graphics. The structured math we need to find a better way to render this.

Avneesh: It is quite clear that we cannot move ahead with this example straight away, we need more testing from EPUB reading systems perspective in any case. Techniques are not under IP review. Do we want to remove the issue or keep it while under IP review.

Mat: there are some WCAG guidelines on this, so we are not creating a void by removing existing MathML techniques. I do not think that we can solve this. There will be some limitations.

Avneesh: It is possible that instead of one solution, a month from now we provide a couple of solutions in techniques and list pros and cons of each.

George: build on Mark's idea with image with aria-hidden and put alt-text in with older systems will present it. Newer systems will hide the whole thing, and use Mark's technique to put it off-screen .

Avneesh: We can build on Matt's approach. But we need to create a sample book, which is also required for reading systems testing project, and test it with EPUB reading systems. But it cannot happen today, so we would need to pull out the existing techniques for now.

Will also like to remind that timeline of techniques is not tied with specs, we can update techniques 2 or 3 weeks from now also.

Daniel: alt has to be empty. Some other oral rendition could be separate fragment off-screen. To have alt attribute anything other than "" would be a problem.

Also, css MQ is the proposed solution? <https://github.com/IDPF/epub-revision/issues/845>

Avneesh: No it is not the decision yet.

Charles: It looked as the solution on first day at TPAC, but then we realized problems in it. We can switch between image and MathML based on media queries, but it does not guarantee that MathML will be visually perfect.

George: people need to see it while mathML is explored

Matt: AAG had something related, did we discuss with them?

Avneesh: Not at TPAC, but we need to talk to WCAG 2.1 for success criteria's, so this may be something to keep in mind.

George: I think Avneesh is right, we need to get our techniques out the door. Having a test book with math that shows the current best options (mark's option slight variations) will be a good approach.

Resolution: Pull out MathML issue from techniques document, and rely on WCAG MathML guidance for now. In parallel continue work on testing different MathML approaches.

5. Accessibility specifications work will continue for techniques, alignment with WCAG and extended descriptions. What should be the frequency of con. calls from here on?

Avneesh: From here on, do we need call next week, or bi-weekly calls are better?

George: are we done with spec?

Avneesh: We have to resolve Media Overlays, and issue of MathML.

Matt: I think we need a call next week, before we get into IP review.

Avneesh: Good. We will have call on Oct 5.

Thanks for staying over.

Action Items

- Madeleine: Provide the example to Dan, without syntax to accelerate the schema.org proposal a little.
- Avneesh: Send email to Tzviya and Garth for clarification related to IP review.
- Matt: Update the Media Overlays requirements as per discussions.
- Matt: Remove MathML issue from the techniques document.

Archived Minutes

Please refer to [the archive](#) for the minutes from older meetings.