# Notes of EPUB 3.1 Accessibility Group conference call,

# held on October 5, 2016, at 16:00 UTC

## Attended by

Avneesh Singh (DAISY Consortium)

Charles LaPierre (Benetech)

George Kerscher (IDPF & DAISY / Benetech)

Naomi Kennedy (PRH)

Matt Garrish

Romain Deltour (DAISY) - First 45 mins.

Madeleine Rothberg - NCAM

Tzviya Siegman (Wiley)

Bill Kasdorf (Apex)

Lloyd Rasmussen (NLS)

## Regrets

Daniel Weck (DAISY Consortium)

## Discussions & Action Items

### 1. Status update for [schema.org](http://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 if 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](http://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](https://www.w3.org/TR/wai-aria-practices/#math))

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, may be 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](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.