Note: the contents of this document are a discussion draft, and do not represent the consensus opinion of the Silver Task Force. Furthermore, the enumeration of Key Principles set forth in this document are not intended to imply that they may not also be key principles of WCAG 3 conformance.

Problem Statement

<to be developed once we have worked through the Key principles below>

Placeholder: "Purpose: To explore solutions to conformance challenges in order to address the potential difficulties presented when testing all content in large digital products and 3rd party content; and bring proposals to the Silver Task Force and Accessibility Guidelines Working Group."

In Scope

- Further development and understanding of conformance challenges
- Develop a set of key principles (with use cases) that address the identified conformance challenges. These principles should describe success for WCAG 3.
- Explore potential solutions to address identified challenges, including how best to use various WAI resources (such as ACT, WCAG-EM, and Education & Outreach resources)
- Propose candidate solutions to Silver (and AGWG if Silver agrees)
- To the extent that they are part of a solution to a challenge, details of testing and scoring

Out of Scope

- Writing new guidelines
- Writing new methods
- Writing new outcomes
- Writing new user needs
- Writing new functional needs
- Revising WCAG-EM

Timeline

- Within February: Subgroup agreement on defining principles and use cases
- Within March: Report on the extent to which the use cases are already addressed by WCAG 3, delivered to Silver
- Within April: Initial proposals for use cases not addressed by WCAG 3
- Within May: Further/updated proposals for use cases not addressed by WCAG 3
- <further dates & deliverables, as requested by Silver>

Link to Github Issues

https://github.com/w3c/silver/labels/Subgroup%3A%20Conformance%20Options

Work toward March deliverable - initial bucketization to be discussed 18Mar21

Bucket 1: fully covered by FPWD (cite how)

Bucket 2: covered by FPWD structure, but needs to be handled in to-be-written Guideline text

- 2(A) Headers missing in small body of text where the lack of headings isn't a significant impediment
- 2(B) 2x2 data table missing row & column headers – the lack of headers isn't a significant impediment
- 2(C) Text causes horizontal scrolling at edge of enlargement limit (380% instead of 400%) – not a significant impediment

Bucket 3: not covered that we see

- 5(B) 3rd party offers commercial, embeddable web payment system
    - Potential solution/direction to address: "Conforms, with the exception of the embeddable web payment system which can be found within our site at these locations/flows, and these are the actions we've taken to address that: x, y, z (e.g. we have informed PaymentFriend of the following issues)". This potential solution/direction itself has challenges, as the embedded web payment system may be critical to the use of the site - in which case we could have a "conforming site" whose primary purpose isn't accessible. Similarly, if the web payment system has a critical error (e.g. strobing which may trigger a photosensitive seizure), we again could have a "conforming site" that contains a horrible problem.
- 5(C) 3rd party user generated content (e.g. social media post, product review)
    - Potential solution/direction to address: "Conforms, with the exception of the user generated content, which can be found within our site in these locations/flows, and these are the actions we've taken to address that: x, y, z (e.g. we prompt the user to create ALT text for their images before they are uploaded, we don't allow the use of text attributes except as they are part of semantic markup such as strong, headings, etc. - variants of we have added code to help encourage users to improve the accessibility.)" This potential solution/direction itself has challenges, as the user generated content may include text important to a visitor which is completely unusable to them - in which case we could have a "conforming site" that blocks something important to a group of site visitors.
- 5(D) & 5(E) 3rd party UI component/library (e.g. LMS system)
- 5(F) 3rd party copyright content that isn't accessible (e.g. a video that lacks audio description).
    - Potential solution/direction to address - variant #1: "Conforms, with the exception of the exception of titles from authors/companies x, y, z [or alternately title list found at <URL>] who have not provided audio description nor giving permission for those to be created for these titles". Variant #2: "Conforms, with the exception of the exception of titles from authors/companies x, y, z who have not provided audio description nor giving

permission for those to be created for these titles. Titles with / without AD are clearly marked in the title listings page, and the pages for each title, so visitors are aware before watching whether the title is described or not".

- 6(A) All software has bugs

Bucket 4: group doesn't agree on bucket 1-3 for this use case

- 3(A) Whoville, but not clear which guideline should handle this now [so also going on the discuss list] - the bucket placement question was around whether bucket 2 (handled in a guideline) or whether bucket 3 (some other part of WCAG 3 would need to speak to this). [13May21 discussion - this belongs in our May report]
- 2(D) Error on login where there isn't a message as to why the login was in error - the bucket placement questions was around whether bucket 2 (handled in an error guideline) or whether bucket 3 (too complex to handle in the error guideline). [13May21 discussion - Janina to bring to Sarah / Errors group, to see if they would like to pick this up. Include in our May report, but invite errors to deliver proposed solution(s)]

To be discussed

- 4(A) five-point Likert scale, never got the author (Detlev) to attend the meeting, speak to the use case

<u>Key principles for the solution to these conformance challenges</u>

1. The solution should set a high, but achievable, accessibility bar. The solution must not be so weak that it excuses or blesses fundamentally inaccessible websites.
2. The solution should enable website visitors with disabilities to accomplish what they want on the site with a minimum of difficulty.

   Use case A [discussed 4Feb21]: A web page with a small amount of content (e.g. 200 words), split between two headings. The headings are only displayed visually, but not marked up as headings. Screen reader users will not have the ability to skip directly to the 2nd heading, and so have to listen to / read the contents under the first heading before they discover the second. They likewise wouldn't be able to discern that the text comprising the second heading is a heading, and not part of the contents underneath it.
   [Jeanne: this is not currently covered specifically by Silver, but would be covered by scoring within the guidelines (the heading guideline would need to be updated for this use case)]

   Use case B [discussed 4Feb21]: A basic two column, two row data table, that is missing row & column headers. In most instances, this is almost a layout table.

   Use case C [discussed 4Feb21]: Text content that is fixed width in an initial viewport width of

1,280 pixels, but doesn't cause horizontal scrolling until the font size is increased beyond 380% (where the guideline potentially requires 400%). Users with motor/mobility impairments may have to scroll just a little bit horizontally to reach the final few letters of the content. [Jeanne: this guideline hasn't been drafted for Silver, and should be addressed when the guideline is written]

Use case D [discussed 4Feb21]: A user is trying to log in, and there is an error on login. The user doesn't receive an error message - they are simply prompted again to log in at the login prompt. The context indicates what should be done next - to correctly enter their username/password - even without an explicit error message. [Concern that for people with cognitive impairments, the context isn't enough, and this isn't a good example of "minimum of difficulty" for these individuals]

3. Assessments of the solution should be modeled around what the site is designed for, and leverage expected user interactions with the site (e.g. what are the P0, P1 tasks, and evaluating the accessibility of those paths through the site for those tasks).

   Use Case A example: The City of Whoville's website includes a calendar of upcoming events, so that citizens of Whoville can learn about what will be happening in the future, and decide whether they want to participate in any given event. As a few Whoville citizens travel, and some events take place virtually, as a convenience there is also a tool on the calendar site for converting event times into different timezones. Generalized timezone conversion isn't a primary use of the site, and an assessment of the accessibility of the Whoville calendar might assess the accessibility of the primary calendar information (what the events are, and when they take place in the timezone that Whoville is situated in) to be at a different, and higher, priority than the accessibility of the timezone conversion convenience feature (which in any case is commonly available elsewhere).

   Issues raised by this use case example: [to be written]

4. The solution should leverage automated tests where they are able to accurately assess WCAG guideline support at scale (if an automated test would have found it, then it is an error to be fixed).

   Proposed Use Case example A [for discussion 21Jan21]: A large eCommerce site has a secondary process in a section for the rating of customer experience, containing a five point Likert scale from "very bad" to "very good" implemented as a row of five radio inputs. Labels are not available programmatically due to the use of 'hidden' on the label and lack of programmatic linking of the visible labels marking the endpoints and the midpoint of the scale. Selecting one of the inputs (for non-sighted users without knowing what they mean) causes the scale to disappear with no way to change the selection. The (possibly unintended) rating has been submitted.

   [From meeting on 28Jan21: it feels that there may be several distinct questions being raised, which we'd like to confirm with the author. First, if an automated test can flag it, but it is in a secondary area, does that mean there is a different priority level, vs. if it requires a human to flag the error in a secondary area (not clear what the answer is, especially as what is

programmatically testable is a moving target). Second, it seems there may be some distinction based on how much a user has to do to reach the inaccessible experience (Issue C below). Third, perhaps there is a question about when multiple guidelines are violated at the same time, and whether that makes a deeper impact on the conformance rating (Issue B below).]

Issues raised by this use case example:

A. Automated testing would easily identify the existence of five radio inputs without accName. Would the automatically detected failure in a secondary process prevent the main process from claiming conformance?
B. Feedback indicates the customer experience has been rated, the context changes, the process is irreversible / incorrectible so it can be said to fail SC 3.2.2 On Input (and of course 1.3.1). How would these Failures impact on the rating of the main product purchase process?
C. Would the same issues in the secondary process affect the conformance rating differently if the process appeared in a popover dialog that users would have to call up explicitly to submit feedback on their experience?

Jeanne will write up the use case of code that the user never encounters being flagged as a WCAG2 failure in an otherwise accessible application. If I remember right, it was an iFrame with no label.

5. The solution should be designed with 3rd party content in mind; there shouldn't be a notion of "partially meeting the solution" that only looks at 1st party content. The language of an assessment of the solution might nonetheless call out any 3rd party distinctions.

   Connects to GitHub issue(s):

   - ITI Comments on First Public Working Draft of W3C Accessibility Guidelines (WCAG) 3.0 (8 - 3rd Party Content) #450

   Proposed Use Case example A [for discussion 14Jan21]: A very popular and active website that connects frequent travelers with each other for discussing their travel, and contains pages that intermix professional reviews of destinations developed by the site itself, with professional reviews licensed from 3rd party reviewers, all alongside contributions and comments from the traveler/members. Content from all three sources includes text, photos, videos, audioscapes, and even 3D models of destinations. Licensed content is owned and under copyright of the owner, with the site acting as a reseller of that content. Traveler/user content often includes first person travelogues, which may make reference to sensory information ("Down the street you can find the entrance to Benny's tavern, clearly identifiable by its distinctive red awning"). Thanks to the popularity and enthusiasm of the site, over 1 million page updates take place each and every day.

   Issues raised by this use case example:

   - Whether the site owner has the right to make content owned by someone else (e.g. copyright), and may not have permission to do so

- Whether a programmatic test is (ever) able to discern an accessibility issue (e.g. reference to sensory information)
- Whether and how effective guidance to the general public can be on creating accessible content (e.g. reference to sensory information)

Proposed Use Case example B [for discussion xxx]: 3rd party application, such as a banking website that includes a 3rd party payment transfer application.

Use Cases we would like to develop for each type of 3rd party content including real world use cases of multiple.

- Embedded content from 3rd party under contract
- Advertising
- Included content that is copyright and doesn't belong to the host
- Content that is structured but otherwise is user generated
- Content that is unstructured user generated
- Content that is unstructured, highly technical, and user generated
- Content that we don't have good solutions for making accessible (e.g. 3D models)
- Authoring environment or products that is developed outside the organization

Proposed Use Case example C for user generated content [for discussion 18Feb21]: A site containing on-line journals of highly technical material allows user comments. While authors of journal articles are required to include clear language summaries (in keeping with WCAG 3 FPWD Clear Words exception), which are verified by paid editors, website visitors are not required to similarly make clear language summaries of the comments they submit on articles.

Proposed Potential Use Case Example D: A community college has taken deliberate steps to use clear words in their public-facing website. However, they use a third-party learning management system (LMS) whose instructions, terms of use, and privacy policy are at times technical and involved. The LMS is used by instructors, students, and sometimes parents. No safeguards are in place to ensure that instructors use clear words in the content they create.

Issues raised by this use case example:

- Can "clear words" conformance be distilled down to a reliable formula, similar to how the?

Proposed Potential Use Case Example E: An apartment complex website uses a third-party app that creates pseudo-3D virtual tours by stitching together two-dimensional still images. The site relies on these visuals to convey the number, type, size, and location of rooms in each apartment unit. Basic information is presented in text (2 beds, 1 bath, 800 sq ft) but not enough to provide depth of information equivalent to the virtual tour.

Issues raised by this use case example:

- Can automated testing detect this kind of reliance? Automation could be trained to sniff out this particular third-party app, but it would be a never-ending task to stay on top of all similar apps and to modify the test when the injected third-party code changes. Moreover, even if automation could detect the presence of this (or similar) apps, it

would also have to detect that the website in fact relies on this app and does not present equivalent information in an accessible way.

Proposed Potential Use Case Example F: A website embeds a collection of videos from a large cross-section of authors/companies on a particular topic (e.g. woodworking). Some of these videos lack audio descriptions, and are copyright by the 3rd party who refuses permission to have audio descriptions created for them.

6. All software – and likewise all dynamic websites – of large enough size or complexity has bugs; this is unfortunately unavoidable. Websites and applications that meet the solution should have no greater acceptance of accessibility bugs as the site or application has for bugs generally, nor should accessibility bugs be disproportionately represented among the number or severity of bugs found. "Everything has bugs. Some are accessibility-related and some aren't. Accessibility-related bugs should not be overrepresented in the bugs overall, tolerated more than other bugs, or given low priority for fixing."

   Connects to GitHub issue(s):

   - Accessibility issues/bugs should just be treated as other issues/bugs #277

   Proposed POTENTIAL Use Case example A [for discussion 14Jan21]: Based on website development industry research [citation needed], more than 50% of dynamic websites at any given moment contain known "blocker bugs" [definition needed] that have been present on the site for more than 24 hours, even though by definition a website update should never be published with blocker bugs. That same research indicates that nearly all dynamic websites contain a substantial number of known "critical bugs" [definition needed] that have been present for more than 1 month, even though by definition critical bugs impact customers ability to use a feature of the website.

   [28Jan21 discussion of this principle & use case: there are two tiers in Silver FPWD - an individual page may have a critical error (e.g. ALT text missing in a critical path on a given page), but in aggregate if the vast majority of pages do NOT have any critical errors then it would score below 4 but above 3.5, and so this use case may be covered in FPWD Silver]

7. Beyond what may arise naturally from a greater emphasis on programmatic testing vs. human evaluation, the solution shouldn't give preferential treatment to one set of functional needs over those of another

   Use case? Date picker that works for some disabilities and a different solution (text input) that works for other disabilities.

8. The solution meets the Silver Requirements.

Additional Use Cases from AGWG meeting (JDelisi)

1. adding public comments to government websites when the comments are mailed in. Some citizens continue to send public comment through physical mail, and there are times where all

public comments must be posted. It is not that they should not be made accessible, however, the time frame for making them accessible, especially during times where an extreme amount may come in, say during the beginning of a pandemic or times of civil unrest, may be something that needs to be considered. [13May21 - meeting discussion. This feels like a variant of two existing use cases: (1) general 3rd party content, but with the twist that something sent in e-mail, let alone physical mail, necessarily bypasses any prompting mechanisms in a web-form submission that pushes the 3rd party submitter to ensure the content is fully accessible; and (2) the issue of updates coming faster than can be addressed by a human - e.g. the ratio of incoming physical letters being at times greater than humans who can enter them digitally including any remediation needed. This may touch also on a 3rd use case - a potential conflict of one law vs. another - in this case if there is a government requirement that letters received be posted within a small number of days and there wasn't sufficient staff to generate accessible versions of those letters within that time frame when there are surges of incoming letters. To be added to the May report.]

2. As a bill becomes law there are things like strike-through, redaction, and other aspects that get loaded sometimes daily onto public facing websites to enable citizen participation in government. While the current method is often PDFs, as future technologies address this use case, the ability for citizens to be aware of what is current, what line it is on (that is how the conversations about a bill happen), and other components used in the discussion of the bill are essential for true participation. [13May21 - meeting discussion. Potentially an accessibility supported issue?]

Other possible use cases:

1. Proposed use case: The authors of a popular react component library would like to ensure its users that their components meet the standards for accessibility. This could be done with a conformance claim, where all components would be put in an otherwise accessible page, to show the components introduce no conformance issues. This however says much more about the particular page than it does the components. For example, a component library that enforces visible focus could not be distinguished from one that relies on the page's default styles for focus. Instead of simply claiming all components are accessible, the authors are looking for a way to claim conformance on just the parts they have ensured accessibility of, leaving out those parts that are the responsibility of the user of the component library. (Suggested by Wilco) [18Mar21 - this belongs in a new Principal about 3rd party tools/libraries/customizable apps, where the a11y issues may be in how they are used vs. inherent in the tool - and put LMS example into that as well (maybe "content-free frameworks" is the general example)]

2. As an independent hairdresser, I have my own website where customers can see my prices, portfolio, and book appointments. I serve a lot of elderly customers, and so want my site to be accessible to them. The budget for my site is small, so I use a lot of off the shelf solutions. Audits for WCAG 2.1 far exceed my budget, and I am not technical enough myself to use tools in any meaningful way. In WCAG 3 I hope there is some level of conformance that is within my budget, so that I can be confident my website is at least minimally accessible. (Suggested by Wilco)

Key Questions to work through:

1. What is the correct name for what we are describing? Should the WCAG 3 term be different - assuming we have two methodologies for assessing websites?
2. Does the solution need to be scoped? Or can it be scoped but doesn't need to be scoped?
3. What is the role of sampling in the solution?
4. If automated tests are a minimum floor for the solution, is it ever tolerable for a site to have an accessibility error for any length of time that an automated test could have found?
5. Is it a requirement that independent 3rd parties are able to verify a site meets the criteria of the solution? [cf. Key Principle #6]
6. Can we develop bug proportionality/disproportionality as an effective measure for principle #6? That development should also include our thoughts on 3rd party content/software.
7. Should we speak to largely static sites, and whether the solution we develop does/should specifically address challenges in them?

To do:i

1. Add example(s) for each principle, to illustrate the challenge(s) that the principle is trying to address.
2.