

Dear OSTP Colleagues,

Thank you for leading a nationwide conversation on the importance of digital accessibility in the dissemination of scientific and technical information. This is an important, but often overlooked aspect of providing access to the outputs of the research process. I would also like to thank you for including the National Information Standards Organization (NISO) in this process.

The National Information Standards Organization is an ANSI-accredited standards development body that serves the research, publishing, library, and software communities through the creation of authoritative technical guidance and best practices related to content creation, distribution discovery and preservation. NISO has long been engaged in standards-setting related to accessibility with the publication of several related standards including: the NISO/DAISY Specifications for the Digital Talking Book (ANSI/NISO Z39.86-2005), the Authoring and Interchange Framework for Adaptive XML Publishing Specification (ANSI/NISO Z39.98-2012), JATS: Journal Article Tag Suite (ANSI/NISO Z39.96-2021), and JATS4R Accessibility, Version 1.0 (NISO RP-47-2024). NISO also supports international standardization efforts related to the EPUB standard through our work representing American interests as the ANSI Technical Advisory Group to ISO through the work of the Technical Subcommittees on Information Technology – Document description and processing languages (ISO/IEC JTC1/SC 34) and Information and documentation – Technical interoperability (ISO TC 46/SC 4).

In response to the OSTP's call for Voluntary Commitments to Improve the Digital Accessibility of Scientific and Technical Publications (shared via email on October 22, 2024), I would like to share several accessibility efforts that are presently underway within NISO or are the topic of ongoing conversations as projects to undertake in the future.

- 1) In 2018, NISO launched a project with the support of the Alfred P. Sloan Foundation to do technical development work to build support for MathML in the Chromium browser (the underlying open source code that comprises the foundation of the Google's Chrome browser and others). While the project was successful and MathML support was added to Chromium in January of 2022, there remain features of MathML that are not fully supported. Additional resources from the community would be necessary to complete full implementation of the entire MathML functionality. While partners were sought in 2021 to continue this work, unfortunately no additional support was forthcoming. This remains a gap, albeit it less significant than before, in complete support for mathematics in online environments.

- 2) NISO is presently working toward developing a new standard on accessibility remediation metadata. The Accessibility Remediation Metadata Working Group began work as an outgrowth of an Andrew W. Mellon Foundation project led by the University of Virginia. That project sought to create a model in which accessibility service offices at universities could share information about remediation work to make accessible materials for their community. By sharing the availability of remediated works, the community could speed delivery of accessible versions of content and reduce the costs associated with repeated remediation of texts. The NISO working group began work in January 2024 and will likely distribute a draft for public comment in the middle of 2025. The community is welcome to provide feedback on this draft and as it nears publication toward the end of 2025 or early 2026, NISO will be undertaking a promotional campaign to engage adoption of the specification after it is approved.
- 3) A new project to reaffirm and/or revise, if necessary, the Authoring and Interchange Framework for Adaptive XML Publishing Specification (ANSI/NISO Z39.98) will take place in 2025. Interested parties in reviewing the specification and engaging in the revision work are encouraged to contact the NISO Office.
- 4) At an international level, the international version of the EPUB standard, published by ISO in cooperation with the W3C will be up for systematic review in the fall of 2025. Whether the existing standard, which is based on the 2.2 version of the EPUB standard is revised to align with the newly published 3.1 specification or not is an important question for international markets. Community input in the summer of 2025 will be valuable, as will volunteer participation should further work by the joint working group of JTC1/SC34 and TC46/SC4 be undertaken.
- 5) The problem of the accessibility is a focus not only on the reading public, but also for authors of scientific and technical content. The majority of author manuscript submission software is not compliant with WCAG guidelines for accessibility. While vendors often recognize the value and importance of accessibility, it has often been languishing on the “to-do-list” of product development. Rising this up the priority list will likely take some public scrutiny and publicity on the need for improvements by this sector to improve their performance. NISO plans to undertake some analysis of these systems and promote
- 6) The quality of image alt-text is often a problem when sharing digital content. Alt-text is the descriptive information stored with image or table files that describe the contents of the image for the visually impaired. Best practices should be created and promoted within the publishing community about a) what are the characteristics of quality alt-text, b) guidance on the creation of alt-text, particularly around AI-generation of alt-text, c) production guidance to ensure that alt-text is not stripped out in the production processes from vendor to vendor before content is circulated to the reading community. Initial discussions are underway within the DAISY community around this topic and NISO is ready to support those efforts, either through promotion or formalization, if desired. It might also be valuable to support research to quantify the problem of missing, inappropriate or meaningless alt-text in scientific and technical literature. NISO would be willing to partner with researchers, organizations or funders to support this work.
- 7) NISO is planning to host several training programs in 2025 for the content creation and distribution communities. Specifically, NISO will host an 8-week training course in March-May entitled “Accessibility: ADA Title 2, European Accessibility Act, and What

You Need to Know to Improve Your Organization's Accessibility". The purpose of this program will be to build knowledge within the publishing and library community of the requirements and practical skills development to move organization toward greater compliance with ADA Title 2 and the EU Accessibility Act. NISO will also undertake free information programs about accessibility-related projects underway, such as the Accessibility Remediation Metadata project, as it nears public release.

- 8) As a content provider, albeit on a small scale, NISO recognizes the importance of improving accessibility to the content we provide. NISO is in the process of updating our own website, with an eye toward improving our own accessibility conformance. We expect to release iterative improvements to our website throughout 2025. In addition, NISO is planning to move toward an XML/EPUB based publication structure in 2025, which will improve accessibility of NISO standards and outputs.

NISO always welcomes suggestions for new initiatives that are appropriate for standardization or the creation of best practices, particularly as it relates to accessibility and equity of access. Anyone may suggest a new work item for consideration to the NISO community. Those interested in discussing potential new projects for NISO to undertake are encouraged to contact the NISO office.

Please feel free to share NISO's commitments to supporting work related to accessibility in the scientific, technical and medical communities. You have my permission to share these efforts as well as my personal contact information with any parties who express related support for these initiatives. We are enthusiastic supporters of the efforts of the OSTP to build awareness and adoption of these practices as widely as possible. If there is anything that NISO can do to support your efforts, we stand ready to support your work.

With kindest regards,



Todd A. Carpenter  
Executive Director, NISO  
[tcarpenter@niso.org](mailto:tcarpenter@niso.org)  
[www.niso.org](http://www.niso.org)