

January 12, 2023

Dr. Sethuraman Panchanathan
Director
National Science Foundation
2415 Eisenhower Avenue
Alexandria, VA 22314

RE: *OSTP Memorandum Ensuring Free, Immediate, and Equitable Access to Federally Funded Research*

Dear Director Panchanathan,

I am writing on behalf of the American Society of Civil Engineers (ASCE) to express our support for the principles of public access, while expressing our concerns with the National Science Foundation's (NSF) implementation of the Office of Science and Technology Policy (OSTP) Memorandum: *Ensuring Free, Immediate, and Equitable Access to Federally Funded Research*.

ASCE supports the principles of public access and endorses providing public access and enhancing dissemination of federally funded research to advance public health and safety and strengthen global quality of life. We acknowledge that the scientific and engineering communities must adapt to changing scholarly norms and must develop new dissemination models that address open access, however this must be done in a way that preserves the scholarly value of the peer-reviewed version of record, which is fixed at its time of presentation without any possibility of historical rewriting - that the original work cannot be altered by the author or anyone else. ASCE also believes that learned societies, acting in accordance with their educational mission, should be able to recover their costs of investing in managing the peer review process, editing, publishing, disseminating, and maintaining an ever-growing archive in perpetuity.

Introduction

Founded in 1852, ASCE is the country's oldest civil engineering organization. Representing more than 150,000 civil engineers from private practice, government, industry, and academia, it is ASCE's objective to advance the science and profession of engineering to enhance the welfare of humanity. As such, among its many endeavors, ASCE is the world's largest publisher of civil engineering information—producing more than 55,000 pages of technical content each year. The ASCE Publications Division

produces 35 peer-reviewed research journals (available both in print and online editions), conference proceedings, standards, manuals of practice, technical reports, and monographs under the ASCE Press imprint. ASCE's many other resources for practicing civil engineers include the 170,000-entry Civil Engineering Database, a complete publications catalog, a conference video collection, and the ASCE Library, providing online access to over 700,000 pages of journal articles and proceedings papers.

As written, the memorandum implies that agencies may opt to require deposit of the accepted manuscript of their research paper (version that arises from peer review, but which has not yet been put through publishing process such as copyediting, XML markup, and so forth) or the version of record (final version published through publisher distribution channels) or may allow flexibility to the authors on this point. For society publishers that are heavily reliant on subscription revenues, a requirement to deposit the final version of record would more rapidly erode subscription value and force a swift shift to a fully Open Access business model reliant on article processing charge (APC) revenue from all authors. Such a hurried shift presents a couple of challenges.

- First, non-profit societies are largely not in a position to offset significant lost revenue with new business models as quickly as subscription revenue will likely decline, which will result in fewer programs and services to advance the various scientific professions they represent.
- Second, publishers will either need to provide APC waivers to authors without funding to cover the cost of publication in a fully OA business model (further inflating the APC rate for those who do have ability to pay, which will either require larger grant funding from the federal government or will result in less money available for research itself), or unfunded authors will be precluded from scholarly publication due to the barrier to pay.

Each of these scenarios' present negative consequences on scientific professions and the research enterprise. **ASCE strongly recommends that implementation of this OSTP memorandum focuses on author accepted manuscript and not version of record, therefore allowing flexibility to the author to protect researcher choice.**

The memorandum leaves it to the agencies to determine whether publications will need to be deposited with broad re-use rights under licenses such as CC-BY or similar. Requiring liberal re-use rights under which third parties can re-use, redistribute, and create derivative works from scholarly publications for any purpose (including commercial) presents significant damage to publishers, particularly society publishers. In such a scenario, large commercial technology-focused entities and competitive commercial publishers may legitimately use the deposited scholarly publications to create their own comprehensive research databases supported by advertising revenues, to the detriment and extreme danger of society publisher business models. Further, such actions—particularly creation of derivative works—could present imminent danger to public health and safety. In the aforementioned policy statement, ASCE “deems it essential to preserve the scholarly value of the peer-reviewed version of

record, which is fixed at its time of presentation without any possibility of historical rewriting—that the original work cannot be altered by the author or anyone else.”

ASCE believes that any public access mandates must “protect against the potential abuse or misuse of scientific and technical information.” **ASCE strongly recommends that implementation of this OSTP memorandum does not include any attachment of re-use rights and allows for use restrictions to prevent endangerment of public health and safety.**

Additional areas of concern for ASCE include:

- Expectations on publishers to aid their authors in depositing their underlying data.
- Potential requirements for enhancements in deposited publications to allow for equitable access (e.g., machine readability, broad accessibility for assistive devices, etc.), which would further drive up the cost of publication and therefore APCs.
- The leeway for agencies to apply public access requirements for content beyond scholarly publications in journals, to expand to outputs such as peer-reviewed conference proceedings and book chapters resulting from federal funding.

ASCE supports OSTP’s goals in expanding public access to federally funded research, but advises that careful consideration be given to key decisions that may have serious ramifications for the financial viability of society publishers and professional societies, the proportion of funding available for research vs. remuneration of APCs, the representation of non-funded authors both within the US and abroad in the research literature, the preservation of peer review, and the protection of public health and safety.

Thank you for your consideration of our view, if we can be of further service please do not hesitate to contact Martin Hight, ASCE Senior Manager for Government Relations at mhight@asce.org or 202-789-7843.

Sincerely,

A handwritten signature in black ink that reads "Maria C. Lehman". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Maria C. Lehman, P.E., NAC, ENV SP, F.ASCE
ASCE President 2023