

November 25, 2024

Mr. Jon Snyder
Defense Acquisition Regulation System
3060 Defense Pentagon
Washington, DC 20301-3060
Submitted via electronic form.

STM Comments Regarding Defense Federal Acquisition Regulation Supplement: Public Access to Results of Federally Funded Research (DFARS Case 2020-D028)

To Mr. Snyder:

STM welcomes the opportunity to provide written comments on the on the **Defense Federal Acquisition Regulation Supplement: Public Access to Results of Federally Funded Research**. STM stands for advancing open and trusted research, where researchers and the rest of society can rely on information that is credible, accessible, linked, and searchable in perpetuity.¹ We therefore support the Federal Government’s efforts to increase access to information related to federally-funded research and DOD’s efforts to ensure agency-funded research data are readily findable and accessible to the public.

As noted in the RFI, the proposed DFARS revisions add two clauses requiring “contractors to submit final peer-reviewed manuscripts to the Defense Technical Information Center's publicly accessible repository and to develop and maintain a data management plan.” However, the actual operation of these requirements depends on support for the publication and data sharing activities under any contract, as well as, as noted in the RFI’s section on the expected impact of the rule, on how the publications and data are made available under relevant law, regulation, or policy. This comment, therefore, contains a section making recommendations directly on the proposed rule, as well as on broader issues related to policy that affects the sharing of publications and research data.

Recommendations on the Rule

Definition of data: The background discussion section of the RFI suggests that the proposed rule is in response to the Government Accountability Office’s recommendation “that DoD take steps to ensure appropriate agency-funded research data are readily findable and accessible to the public.” As the proposed rule applies also to publications, which are not considered “data” under generally accepted definitions, this justification may lead to misunderstandings of the proposed data definition in 235.001. STM therefore suggests that the definition in 235.001 (and in 252.235-70YY) be amended to read

¹ See, for example, STM’s statement of support for open access <https://www.stm-assoc.org/stm-oa-position/>, and our research data program <https://www.stm-assoc.org/research-data-program/>.

(suggested additions underlined, suggested cut shown with strikethrough):

Data means the digitally recorded factual material commonly accepted in the scientific community as necessary to validate research findings, including data sets used to support scholarly publications including publicly releasable digital data, algorithms, or other information central to the conclusions of published peer-reviewed scientific ~~research~~ publications, but not the publications themselves.

Definition for peer-reviewed manuscript: The information community has a long-standing recommended practice with respect to the naming of article versions (currently under review for an update). STM recommends that DOD seek consistency with the recommendations from the National Information Standards Organization (NISO)² in its definition of “final peer-reviewed manuscript,” and “author’s final manuscript” in 252.235-70XX. Accordingly, we recommend instead referring to the “accepted manuscript.”

Timing of submission of final peer-reviewed manuscript: Publishing practices vary significantly, and the requirement for submission “When the final title and date of publication of the author's final peer-reviewed manuscript are known” is overly prescriptive and burdensome. The title and date of publication may be known well before the publication date, and flexibility could reduce burdens whilst still ensuring that DOD can provide access under its public access policy. The timing of this requirement is particularly surprising and unnecessary under DOD’s current policy that allows a 12-month delay before access is required, and is inconsistent with the needs of many authors to allow for embargoes to support publishing in subscription journals.³ STM recommends that this requirement be changed to align with DOD’s policy. If DOD wants to emphasize that the version should be only after “the final title and date of publication...are known,” the requirement in 252.235-70XX(b) could include a practicability clause.

Mechanism for submission of final peer-reviewed manuscript: DOD and its contractors are best served by rules that achieve their goals in the least burdensome manner. STM supports the use of public-private partnerships and as much flexibility as possible in implementation procedures. Much of the success of current Federal agency public access policies is through the cooperation of and partnership with the publishing community, through services of individual publishers and collective initiatives like CHORUS (www.chorusaccess.org). The proposed rule requires the Contractor to submit an electronic copy of the manuscript to DTIC, but in practice at many federal agencies, a third-party (publisher or institutionally entity) may submit on the author’s behalf or, where licensing allows, a Version of Record⁴ may be submitted rather than the manuscript. In fact, where the Version of Record is

² NISO RP-8-2008, Journal Article Versions (JAV): Recommendations of the NISO/ALPSP JAV Technical Working Group (<https://www.niso.org/sites/default/files/2017-08/RP-8-2008.pdf>).

³ Most publishers can only support self-archiving of the accepted manuscript after an embargo period, as immediate access in a repository competes with the journal and undermines the subscription revenue upon which such journals depend.

⁴ The Version of Record (VoR) is the most thoroughly vetted version of the publication, having been through all stages of the peer-review and publication process including being copyedited, typeset, having had metadata applied, and having been allocated a DOI (Digital Object Identifier). The VoR can link bi-directionally to research objects like data and code, reflects any post-publication updates or corrections, and can be integrated with other relevant content on the publisher’s platform, allowing the public to better put this information into context.

available openly on a publisher platform, a link to the openly accessible version may be the most efficient and effective way to provide access without creating any additional compliance burdens for researchers.⁵ STM therefore recommends that DOD expand options for submitting articles that report on DOD-funded research in 252.235-70XX(b). In addition, the clause does not indicate the meaning of “the manuscript,” which should be limited to manuscripts related to articles reporting on DOD-funded research. Together with the edits suggested above, the clause in 252.235-70XX(b) could read as follows:

(b) Submission of ~~the accepted final peer-reviewed~~ manuscript. As soon as practicable after ~~When~~ the final title and date of publication of the accepted ~~author's final peer-reviewed~~ manuscript are known, the Contractor shall submit, have submitted on their behalf, or provide a link to a publicly accessible version of, an electronic copy of a version of any peer-reviewed article reporting on DOD-funded research ~~the manuscript~~ no later than one year after publication to one of the following Defense Technical Information Center repositories:

Funding for data sharing: For data management plans to be successful, contractors will need to make sure that they plan and budget for all open science activities that will advance public access. The NIH has set an example of this for its Data Management and Sharing Plans by requiring budgets to include, and review panels and program administrators to evaluate budgets for, appropriate and full support for the costs of all open science practices.⁶ It could help the success of the proposed rule to ensure that the required data management plans consider the necessary budgeting required to support the data sharing and curation activities in the plan by adding budgeting to the list of requirements in 252.235-70YY.

Broader considerations for public access policy and regulation

The key challenges to implementing a public access policy relate to making a transition from the current system to one where peer-reviewed publications and associated data are made openly available and ensuring that the transition enables the continuation of a vibrant ecosystem for the communication of the results of research. These challenges can be addressed with appropriate funding, budgeting support, and guidance; protecting academic freedom and author choice in journal outlets rather than restrictive licensing requirements; and promoting culture change and avoiding confusion amongst stakeholder communities. This is equally true for publications and for research data.

Fostering a vibrant ecosystem for the communication of the results of research with appropriate and sustainable funding: Current global efforts to expand open access indicate that direct support for publishing (which includes APC-supported open access, Read and Publish Agreements, subsidies, memberships, and other evolving models) provides the most sustainable and rapid transition towards open access.⁷ Without consistent and appropriate funding for a diversity of models for access, coupled with guidance and budgeting support, the maintenance and improvement of the quality and integrity of

⁵ As an example, NASA’s public access policy allows for such links to satisfy their public access policy.

⁶ See <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-23-161.html>.

⁷ STM’s Open Access Dashboard provides information on the growth of open access and various types and funding models, including Read and Publish and other pooled funding arrangements <https://www.stm-assoc.org/oa-dashboard/>.

the scientific record is at risk, undermining the ability of scholarly communication to support public trust in science, thereby resulting in a dampening effect on innovation, job growth, and scientific progress. Approaches that call for immediate self-archiving of subscription-funded articles are not sustainable and will undermine the long-term availability of the journals in which they are published, creating new barriers to access. Appropriate and sustained funding to underrepresented groups and fields could also help address equity. For these reasons, we urge DOD to ensure all supported authors have the same opportunity to make their articles open access upon publication through a fully-funded open access route.

Such funding needs to be provided on an equal basis so that researchers who choose to publish in journals that are supported by APCs are not disadvantaged in the resources available for their research, student support, and other critical needs.

Funding is also needed to support the complex costs of data sharing which are significant. These include the costs of preparing datasets for sharing, and for sharing and managing data, are significant, especially when compared with current practices. To maximize its usefulness, data should be curated, tagged, enhanced with metadata, and reviewed to determine what can be shared and where. In addition, there are significant costs associated with storage, distribution bandwidth and overall management and curation.⁸ Initiatives must be carefully developed to support storage, dissemination, tagging, and validation. Success will depend on a collaborative approach that elicits buy-in from all communities and includes consultation and contributions by key stakeholders to develop robust, sustainable, and flexible standards.

Finally, researchers also need to be supported and encouraged to plan and budget for both publication sharing and data sharing activities. As noted in the suggestion on data management costs, the NIH's review of budgets for open science costs is a good model for this practice.

Ensuring author choice and a diversity of business models through licensing options: Flexibility in licensing options not only promotes academic freedom, but it also supports equity, bibliodiversity (i.e., smaller publishers), and supports information integrity. Flexibility supports equity by enabling researchers to choose the methods and modes of communication and protect against misuse and misrepresentation of their work if they so desire. Flexibility supports bibliodiversity by providing options for journals that need exclusive rights to support sustainable business models and continue investments needed for quality, preservation, discoverability, innovation, and impact, particularly those pursuing Green open access approaches. Flexibility supports information integrity by allowing copyright holders to approve translation, modification, and commercial dissemination of works in advance, as well as potential use of works by LLMs and AI tools, preventing the use of the work in ways that misrepresent it or promote misinformation.

Researchers should have the ability to utilize their copyright in any peer-reviewed articles reporting on

⁸ A 2024 report from the Association of Research Libraries (ARL) found the average cost incurred by researchers for data management and sharing was 6 percent of overall grant funding. The report, titled "Making Research Data Publicly Accessible: Estimates of Institutional & Researcher Expense," was funded by a grant from the National Science Foundation (NSF) (<https://www.arl.org/resources/making-research-data-publicly-accessible-estimates-of-institutional-researcher-expenses/>).

research funded by DOD in the manner of their choosing, in order to best serve their interests in communicating their results and increasing the impact of their work. This should include applying their license of choice or assigning copyright to others. Any approaches that restrict author choice in determining the journal in which to publish or that require authors to relinquish rights to the public without the ability to review further uses, is inconsistent with academic freedom and the goals of funding independent research.

Allowing flexibility is important, but surveys and experience have shown that knowledge-creation, discovery, and sharing is best enabled when the final articles resulting from all stages of the peer-review and publication process are immediately openly available to all. The Version of Record is the authoritative version for researchers and the public. It is more cited, more used, and garners more attention than other versions of an article, and is the version preferred by researchers.⁹

Promoting culture change and avoiding confusion amongst stakeholder communities: Surveys regularly demonstrate that researchers are uncertain of open science practices, funder requirements, and their rights and responsibilities for sharing of outputs related to their research, and many do not engage in open science practices even when they support them in principle.¹⁰ Publishers make significant efforts to ensure that researchers understand and have tools to support open science activities through training, editorial policies, and direction to authors. There will need to be cultural changes that value the sharing of data in a responsible, curated, and high-quality manner that is useful to the research community and the general public. The experience of STM and our members in promoting open science practices has shown that focused attention and clear guidance is critical. DOD can build on efforts such as STM's Research Data Program¹¹ that seeks to support the use of clear, transparent data availability statements in the implantation of data management and sharing plans. Such initiatives also demonstrate that all stakeholders need to work together to enhance research data sharing practices.¹² All stakeholders need to come together to support incentives, tools, and education to do so, and financial and logistical support for open science.

In summary, implementation must be structured in order to minimize administrative burdens. This can be achieved through public-private partnerships and through flexibility in implementation procedures. STM notes that there are many mechanisms for providing access to articles and data already in place. Utilizing existing infrastructure to deliver access, where appropriate, can reduce researcher burden and overall costs. These may include access through publisher platforms. Existing standards, including identifiers, should also be used to ensure harmonization and avoid unnecessary duplication in the scholarly record. Publishers welcome discussion on existing and future approaches to capture and

⁹ See, for example, a 2020 survey by Springer Nature, "Exploring researcher preference for the version of record" (<https://www.springernature.com/gp/open-research/version-of-record>).

¹⁰ Note, for example, a 2022 survey of Springer Nature authors discussed here: <https://scholarlykitchen.sspnet.org/2023/02/02/guest-post-are-we-providing-what-researchers-need-in-the-transition-to-open-science/>.

¹¹ More on the STM Research Data Program is available at <https://www.stm-assoc.org/research-data-program/>.

¹² See <https://www.stm-researchdata.org/data-availability-statements-tips/#DASsamples> for our template statements, which are based on the [Belmont Forum's DAS template](#). It was designed by a combined group of funder and publisher representatives, ratified in October 2018 and is available through a CC-BY 4.0 license.

surface metadata, using persistent identifiers, to aid discovery of a diverse array of open science outputs.

We look forward to working with DOD as further developments in public access policy move forward. If we can be of assistance or if you have any questions, feel free to contact me (caroline@stm-assoc.org) or David Weinreich, Director of Policy and Government Relations (weinreich@stm-assoc.org).

Sincerely,

Caroline Sutton
CEO
STM

About STM

At STM we support our members in their mission to advance trusted research worldwide. Our more than 140 members collectively publish 66% of all journal articles and tens of thousands of monographs and reference works. As academic and professional publishers, learned societies, university presses, start-ups and established players, we work together to serve society by developing standards and technology to ensure research is of high quality, trustworthy and easy to access. We promote the contribution that publishers make to innovation, openness and the sharing of knowledge and embrace change to support the growth and sustainability of the research ecosystem. As a common good, we provide data and analysis for all involved in the global activity of research.

The majority of our members are small businesses and not-for-profit organizations, who represent tens of thousands of publishing employees, editors, reviewers, researchers, authors, readers, and other professionals across the United States and world who regularly contribute to the advancement of science, learning, culture and innovation throughout the nation. They comprise the bulk of a \$25 billion publishing industry that contributes significantly to the U.S. economy and enhances the U.S. balance of trade.