OFFICE OF SCIENCE AND TECHNOLOGY POLICY

Request for Public Comment on Draft Desirable Characteristics of Repositories for Managing and Sharing Data Resulting From Federally Funded Research

AGENCY: Office of Science and Technology Policy (OSTP).

ACTION: Request for Comments.

SUMMARY: The White House Office of Science and Technology Policy is seeking public comments on a draft set of desirable characteristics of data repositories used to locate, manage, share, and use data resulting from Federally funded research. The purpose of this effort is to identify and help Federal agencies provide more consistent information on desirable characteristics of data repositories for data subject to agency Public Access Plans and data management and sharing policies, whether those repositories are operated by government or non-governmental entities. Optimization and improved consistency in agency-provided information for data repositories is expected to reduce the burden for researchers. Feedback obtained through this Request for Comments (RFC) will help to inform coordinated agency action.

DATES: To ensure that your comments will be considered, please submit your response on or before 11:59 p.m. ET on March 6, 2020.

ADDRESSES: Comments should be submitted online to: OpenScience@ostp.eop.gov. Email submissions should be machine-readable [pdf, word] and not copy-protected. Submissions should include “RFC Response: Desirable Repository Characteristics” in the subject line of the message.

Instructions: Response to this RFC is voluntary. Each individual or institution is requested to submit only one response. Submission should not exceed 5 pages in 12 point or larger font, and should be paginated. Responses should include the name and organizational affiliation(s) of the person(s) filing the comment. Additionally, to assist in analyzing responses, respondents are requested to indicate the primary scientific discipline(s) in which they work (e.g., life sciences, physical sciences, social sciences) and their role (e.g., researcher, librarian, data manager, administrator). Comments containing references, studies, research, and other empirical data that are not widely published should include copies or electronic links of the referenced materials. Comments containing profanity, vulgarity, threats, or other inappropriate language or content will not be considered.

Comments submitted in response to this notice are subject to FOIA. Responses to this RFC may also be posted, without change, on a Federal website. Therefore, we request that no business proprietary information, copyrighted information, or personally identifiable information (beyond filing name and institution) be submitted in response to this RFC.

In accordance with FAR 15.202(3), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. Additionally, those submitting responses are solely responsible for all expenses associated with response preparation.

FOR FURTHER INFORMATION CONTACT: Lisa Nichols at OpenScience@ostp.eop.gov.

SUPPLEMENTARY INFORMATION:

Background

The Subcommittee on Open Science (SOS) of the National Science and Technology Council’s Committee on Science (https://www.whitehouse.gov/ostp/nstc/) convenes more than twenty Federal departments and agencies (hereafter “agencies”) that support research and development (R&D). It aims to advance open science and foster implementation of agency Public Access Plans that were developed in response to the 2013 White House Office of Science and Technology Policy (OSTP) memorandum entitled “Increasing Access to the Results of Federally Funded Scientific Research” that called for improved access to data and publications resulting from Federally funded R&D. [For more information on agency Public Access Plans, see https://www.cendi.gov/projects/Public_Access_Plans_US_Fed_Agencies.html. For more explanation regarding Federally funded research data, see 2 CFR 200.315(e)(3).]

One goal of the Subcommittee’s efforts is to improve the consistency of guidelines and best practices that agencies provide about the long-term preservation of data from Federally funded research, including suitable repositories for preserving and providing access to such data, considering agency missions, best practices, and relevant standards. According to OMB Circular A-81, section 200.315, “Research data means the recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues.” [See: https://www.federalregister.gov/documents/2013/12/26/2013-30465/uniform-administrative-requirements-cost-principles-and-audit-requirements-for-federal-awards#sec-200-315.] These efforts are consistent with and supportive of other Administration priorities, such as the Federal Data Strategy and its associated set of Practices to leverage data as a strategic asset [For more information on Federal Data Strategy Practices, see https://strategy.data.gov/practices/].

In support of its work, the SOS has developed a proposed set of desirable characteristics of data repositories for data resulting from Federally funded research. The proposed characteristics could apply to repositories operated by government or non-governmental entities. They draw from agency experience in developing and supporting data repositories and build on existing information for selecting repositories that agencies developed as part of their public access policies.

Through public comment, the SOS aims to refine and develop a common set of characteristics that Federal R&D-funding agencies can use to support their Public Access and data sharing efforts. These characteristics are not intended to be an exhaustive set of design features for data repositories. Federal agencies would not plan to use these characteristics to assess, evaluate, or certify the acceptability of a specific data repository, unless otherwise specified for a particular agency program, initiative, or funding opportunity. Rather, the set of characteristics is intended to be used as a tool for agencies and Federally funded investigators when, for example, they are:

• Assisting Federally funded investigators in identifying data repositories to use for storing and providing access to research data (e.g., when funding agencies do not host the data and/or have not designated specific repositories for use);

• Identifying specific repositories that a Federal agency might designate for use for particular types of research data resulting from Federally funded research;
Repositories’ (Section I), as well as Data Resulting from Federally Funded
requests for comments on repositories for research data.
agency technical and policy guidance this RFC will help to inform the
management and stewardship over data and sharing data that embody effective
practices related to data management of research and technology, and
update them periodically to reflect desirable characteristics are intended to
exhibit them as well. While the desirable characteristics are intended to be
enduring, Federal agencies might update them periodically to reflect changing expectations, rapid evolution of research and technology, and practices related to data management and sharing.

This RFC, released on behalf of Federal agencies that are members of the SOS, aims to solicit public input on proposed characteristics for selecting or developing a repository for managing and sharing data that embody effective management and stewardship over data resulting from Federally funded research. Feedback obtained through this RFC will help to inform the development of coordinated Federal agency technical and policy guidance on repositories for research data.

Request for Comments

Federal agencies are specifically requesting public comment on the Draft Desirable Characteristics of Repositories to Consider for Managing and Sharing Data Resulting from Federally Funded or Supported Research, found below. The proposed characteristics include “Desirable Characteristics for All Data Repositories” (Section I), as well as “Additional Considerations for Repositories Storing Human Data (even if de-identified)” (Section II), found below. Note that Federal agencies are subject to additional requirements that must be met for repositories they manage or support, such as considerations of security, privacy, and accessibility.

Response to this Notice is voluntary, and respondents are free to address any or all of the topics listed below and should not feel compelled to address all items:

- The proposed use and application of the desirable characteristics (as described in the “Background” section above)
- The appropriateness of the “Desirable Characteristics for All Data Repositories” (Section I) for data repositories that would store and provide access to data resulting from Federally-supported research, considering:
  - Characteristics that are included
  - Additional characteristics that should be included
- Appropriate use of the characteristics listed in the “Additional Considerations for Repositories Storing Human Data (even if de-identified)” (Section II) delineated for repositories maintaining data generated from human samples or specimens, considering:
  - Characteristics that are included
  - Additional characteristics that should be included
- Considerations for any other repository characteristics which should be included to address the management and sharing of unique data types (e.g., special or rare datasets)
- The ability of existing repositories to meet the desirable characteristics
- Consistency of the desirable characteristics with widely used criteria or certification schemes for certifying data repositories
- Any other topic which may be relevant for Federal agencies to consider in developing desirable characteristics for data repositories.

DRAFT Desirable Characteristics of Repositories for Managing and Sharing Data Resulting From Federally Funded or Supported Research

I. Desirable Characteristics for All Data Repositories

A. Persistent Unique Identifiers: Assigns datasets a citable, persistent unique identifier (PUID), such as a digital object identifier (DOI) or accession number, to support data discovery, reporting (e.g., of research progress), and research assessment (e.g., identifying the outputs of Federally funded research). The PUID points to a persistent landing page that remains accessible even if the dataset is de-accessioned or no longer available.

B. Long-term sustainability: Has a long-term plan for managing data, including guaranteeing long-term integrity, authenticity, and availability of datasets; building on a stable technical infrastructure and funding plans; has contingency plans to ensure data are available and maintained during and after unforeseen events.

C. Metadata: Ensures datasets are accompanied by metadata sufficient to enable discovery, reuse, and citation of datasets, using a schema that is standard to the community the repository serves.

D. Curation & Quality Assurance: Provides, or has a mechanism for others to provide, expert curation and quality assurance to improve the accuracy and integrity of datasets and metadata.

E. Access: Provides broad, equitable, and maximally open access to datasets, as appropriate, consistent with legal and ethical limits required to maintain privacy and confidentiality.

F. Free & Easy to Access and Reuse: Makes datasets and their metadata accessible free of charge in a timely manner after submission and with broadest possible terms of reuse or documented as being in the public domain.

G. Reuse: Enables tracking of data reuse (e.g., through assignment of adequate metadata and PUID).

H. Secure: Provides documentation of meeting accepted criteria for security to prevent unauthorized access or release of data, such as the criteria described in the International Standards Organization’s ISO 27001 (https://www.iso.org/isoiec-27001-information-security.html) or the National Institute of Standards and Technology’s 800–53 controls (https://nvd.nist.gov/800-53).

I. Privacy: Provides documentation that administrative, technical, and physical safeguards are employed in compliance with applicable privacy, risk management, and continuous monitoring requirements.

J. Common Format: Allows datasets and metadata to be downloaded, accessed, or exported from the repository in a standards-compliant, and preferably non-proprietary, format.

K. Provenance: Maintains a detailed logfile of changes to datasets and metadata, including date and user, beginning with creation/upload of the dataset, to ensure data integrity.
II. Additional Considerations for Repositories Storing Human Data (Even if De-Identified)

A. Fidelity to Consent: Restricts dataset access to appropriate uses consistent with original consent (such as for use only within the context of research on a specific disease or condition).

B. Restricted Use Compliant: Enforces submitters’ data use restrictions, such as preventing reidentification or redistribution to unauthorized users.

C. Privacy: Implements and provides documentation of security techniques appropriate for human subjects’ data to protect from inappropriate access.

D. Plan for Breach: Has security measures that include a data breach response plan.

E. Download Control: Controls and audits access to and download of datasets.

F. Clear Use Guidance: Provides accompanying documentation describing restrictions on dataset access and use.

G. Retention Guidelines: Provides documentation on its guidelines for data retention.

H. Violations: Has plans for addressing violations of terms-of-use by users and data mismanagement by the repository.

I. Request Review: Has an established data access review or oversight group responsible for reviewing data use requests.

Sean C. Bonyun,
Chief of Staff, Office of Science and Technology Policy.

SECURITIES AND EXCHANGE COMMISSION


Self-Regulatory Organizations; Investors Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Correct Three Typographical Errors in IEX Rules 11.190(e) and 11.220(a)(7)


Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”) and Rule 19b–4 thereunder, IEX is filing with the Commission a proposed rule change to correct three typographical errors in IEX Rules 11.190(e) and 11.220(a)(7). The Exchange has designated this rule change as “non-controversial” under Section 19(b)(3)(A) of the Act and provided the Commission with the notice required by Rule 19b–4(f)(6) thereunder.

The text of the proposed rule change is available at the Exchange’s website at www.iextrading.com, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statement may be examined at the places specified in Item IV below.

The self-regulatory organization has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange recently filed a proposed rule change to amend, in part, IEX Rules 11.190(e) and Rule 11.220(a)(7), which the Exchange proposes to correct as described below.

First, the Exchange proposes to add the number “2” in IEX Rule 11.190(e) to denote a numbered subparagraph between subparagraphs (1) and (3). The Original Filing inadvertently deleted the number “2” to denote the applicable subparagraph.

Second, the Exchange proposes to delete the word “modifier” from the first sentence of IEX Rule 11.190(e)(3). The Original Filing inadvertently did not mark the word for deletion as intended.

Third, the Exchange proposes to modify the first sentence of Rule 11.220(a)(7), in which a deletion bracket and the preceding letter were inadvertently underlined in the Original Filing. The Exchange thus proposes to delete the deletion bracket and preceding letter as intended.

2. Statutory Basis

IEX believes that the proposed rule change is consistent with the provisions of Section 6(b) of the Act in general, and furthers the objectives of Section 6(b)(5) of the Act in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

Specifically, IEX believes that the proposed rule change is consistent with Section 6(b)(5) of the Act because it will eliminate any confusion regarding IEX rules by correcting inadvertent typographical errors introduced by the Original Filing in IEX Rules 11.190(e)(2) and 11.220(a)(7) without changing the substance of such rule provisions.

B. Self-Regulatory Organization’s Statement on Burden on Competition

IEX does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed rule change is not designed to address any competitive issues but rather to correct inadvertent typographical errors, thereby eliminating any potential confusion regarding such rule provisions without changing their substance.

\[\text{\textsuperscript{15 U.S.C. 78s}(b)(1).} \]

\[\text{\textsuperscript{15 CFR 240.19b–4.}} \]

\[\text{\textsuperscript{15 CFR 240.19b–4.}} \]