Implementation of the Data Seal of Approval

The Data Seal of Approval board hereby confirms that the Trusted Digital repository Inter-university Consortium for Political and Social Research (ICPSR) complies with the guidelines version 2014-2017 set by the Data Seal of Approval Board.
The afore-mentioned repository has therefore acquired the Data Seal of Approval of 2013 on May 19, 2014.

The Trusted Digital repository is allowed to place an image of the Data Seal of Approval logo corresponding to the guidelines version date on their website. This image must link to this file which is hosted on the Data Seal of Approval website.

Yours sincerely,

The Data Seal of Approval Board

Assessment Information

Guidelines Version:	2014-2017 | July 19, 2013
Guidelines Information Booklet:	DSA-booklet_2014-2017.pdf
All Guidelines Documentation:	Documentation
Repository:	Inter-university Consortium for Political and Social Research (ICPSR)
Seal Acquiry Date:	May. 19, 2014

For the latest version of the awarded DSA
for this repository please visit our website: http://assessment.datasealofapproval.org/seals/

Previously Acquired Seals:	Seal date:	December 6, 2012
	Guidelines version:	2010 | June 1, 2010
	Seal date:	February 15, 2011
	Guidelines version:	2010 | June 1, 2010

This repository is owned by: **Inter-university Consortium for Political and Social Research (ICPSR)**
- Perry Building
  330 Packard Road

  48104 Ann Arbor
  Michigan
  USA

  T 734-615-8400
  F 734-647-8200
  E netmail@icpsr.umich.edu
  W http://www.icpsr.umich.edu/

Assessment

0. Repository Context

Applicant Entry

Self-assessment statement:

ICPSR is a sustainable repository with over 50 years of experience reliably curating, archiving, and providing access to social and behavioral science research data. Figure 1 is a detailed flowchart of ICPSR's workflow from acquisition to dissemination, which is based on the OAIS Reference Model [1].
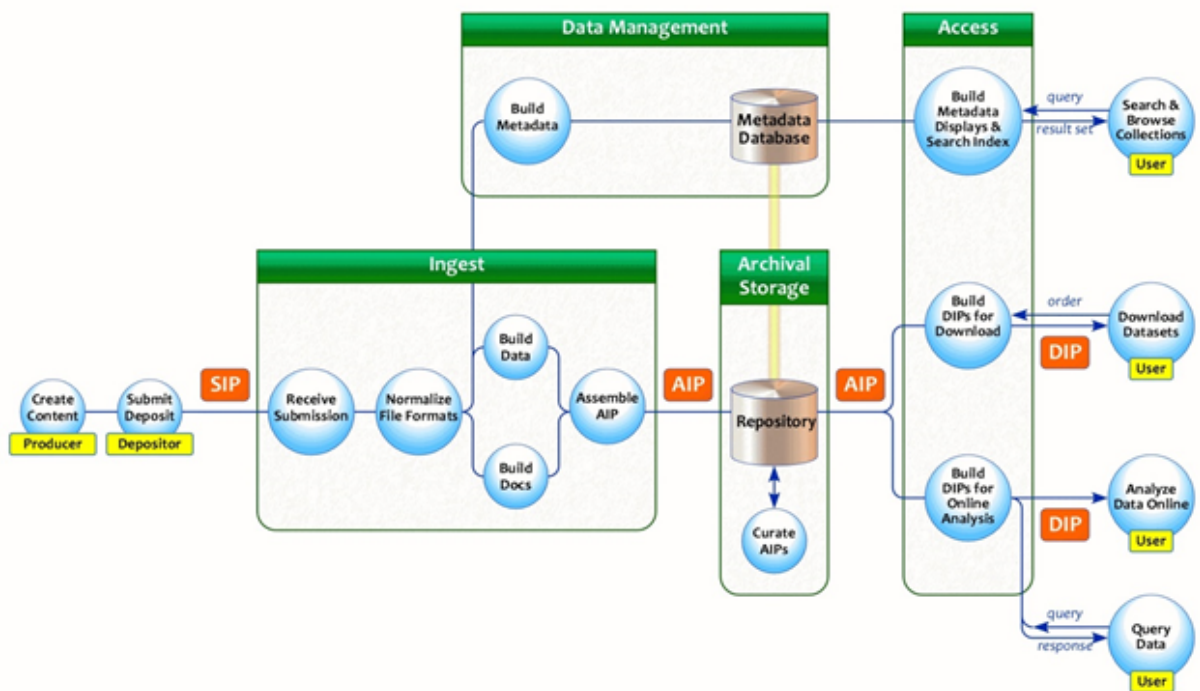

Figure 1. ICPSR's OAIS-based Processes

Data producers deposit files (SIPs) with ICPSR through an online form. Files are then normalized, described, and assembled (as AIPs) for archival storage. Metadata about the files are captured throughout ICPSR's curation activities. Data are available (as DIPs) through the ICPSR web site, either by downloading files or through online analysis in Web browser.

ICPSR partners with several United States federal statistical agencies and foundations to curate, preserve, and provide access to their data resources. These 'topical archives' generally follow ICPSR's standard workflow, although for purposes of this certification, ICPSR is certifying just the membership-funded General Archive [3]. Divisions within ICPSR that conduct limited or no curation of data, such as the Publication-Related Archive [4], a self-archiving mechanism that facilitates the deposit of data supporting publications, and openICPSR [5], a self-archiving public access research data-sharing service, are also not covered under this application.

URLs:

[1] ICPSR Web site, OAIS-Based Process:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/oais.html (accessed 2013-10-01)

[2] ICPSR Web site, Thematic Collections:
http://www.icpsr.umich.edu/icpsrweb/content/membership/partners/archives.html (accessed 2013-10-01)

[3] ICPSR Web site, Life of a Dataset:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/life-of-dataset.html (accessed 2013-10-01)

[4] ICPSR Web site, Replication Datasets: http://www.icpsr.umich.edu/icpsrweb/deposit/pra/index.jsp (accessed 2014-02-19)

[5] openICPSR Web site: http://openicpsr.org/ (accessed 2014-02-19)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

1. The data producer deposits the data in a data repository with sufficient information for others to assess the quality of the data, and compliance with disciplinary and ethical norms.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR provides information and guidance online about the full package of information that should be deposited to facilitate data assessment and reuse [1] [2]. ICPSR also works with researchers before data deposit to ensure that the research data are fully documented and optimally usable, including by providing guidance on creating data management plans [3].

With respect to ethical norms, the ICPSR Data Deposit Form elicits information from data producers about their compliance with Institutional Review Board (IRB) regulations for protection of human subjects. This includes requiring depositors attest to the following statement: "To the extent allowable by law or permitted by the sponsor of the data collection, in preparing this data collection for public archiving and distribution, I have removed all information directly identifying the research subjects in these data, and I have used due diligence in preventing information in the collection from being used to disclose the identity of research subjects" [4].

In addition, ICPSR requests citations to publications based on the data to be included in its Bibliography of Data-Related Literature [1]. Also solicited is information about the provenance of and methodology used in collecting the data, and how the data have been managed, and possibly changed, over the life course [4].

While assessments of data quality are ultimately the task of the secondary analyst, ICPSR attempts to gather enough information about any given study and its investigators to make quality assessments possible.

URLs:

[1] ICPSR Web site, Deposit Data: https://www.icpsr.umich.edu/icpsrweb/deposit/index.jsp (accessed 2013-10-01)

[2] ICPSR Guide to Data Preparation and Archiving: Best Practice Throughout the Data Life Cycle, 5th ed., 2012: http://www.icpsr.umich.edu/files/deposit/dataprep.pdf (accessed 2013-10-01)

[3] ICPSR Web site, Guidelines for Effective Data Management Plans: http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/dmp/index.html (accessed 2013-10-01)

[4] ICPSR Deposit Form: http://www.icpsr.umich.edu/cgi-bin/ddf2 (accessed 2013-10-01)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

2. The data producer provides the data in formats recommended by the data repository.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR publishes a list of preferred formats and encourages the community to comply with them; these include SAS, SPSS, and Stata files, as well as ASCII files accompanied with setup files [1]. As ICPSR begins to take in other types of digital content like video and geographic information systems files, additional format requirements will be required.

A diagnostic tool runs during data deposit, analyzes file formats, and presents a list to the depositor of the file types the tool has identified [2]. A list of file formats deposited is made available internally so that the ICPSR Director of Curation Services can determine whether there are new content types that ICPSR should be addressing.

Although this is the exception, ICPSR acquires at-risk data in non-recommended formats (e.g., punched cards) for studies appraised as high value. ICPSR considers it part of its mission to acquire these materials on behalf of the social science research community [3]. When non-recommended formats are deposited, ICPSR attempts to normalize them to preservable formats [4]. In terms of preservation of files submitted in non-recommended formats unable to be normalized into preservable formats, ICPSR commits to bit-level only preservation.

URLs:
[1] ICPSR Deposit Form: http://www.icpsr.umich.edu/cgi-bin/ddf2 (accessed 2013-10-01)

[2] ICPSR Web site, Receipt of Submission:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/ingest/index.html (accessed 2013-10-01)

[3] Data Preservation Alliance for the Social Sciences (Data-PASS) project site: http://data-pass.org (accessed 2013-10-01)

[4] ICPSR Web site, Deposit Data: http://www.icpsr.umich.edu/icpsrweb/deposit/index.jsp (accessed 2013-10-01)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

3. The data producer provides the data together with the metadata requested by the data repository.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

In general, the descriptive and structural metadata deposited by data producers is sufficient to use ICPSR data. The ICPSR Deposit Form solicits fielded content describing the data collection being submitted [1], and this information forms the basis of the metadata record, which is ultimately searchable and made available in both Data Documentation Initiative (DDI) XML and MARC formats [2] [3]. The form also solicits file-level information [1].

For dissemination, ICPSR generally supplements the codebook submitted with a DDI version of the variable-level documentation [4]. If key metadata are lacking, ICPSR data managers contact the data producer to obtain the required information.

URLs:
[1] ICPSR Deposit Form: http://www.icpsr.umich.edu/cgi-bin/ddf2 (accessed 2013-10-01)

[2] ICPSR Web site, Metadata:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/metadata.html (accessed 2013-10-01)

[3] ICPSR Guide to Social Science Data Preparation and Archiving, Phase 3: Data Collection and File Creation:
http://www.icpsr.umich.edu/icpsrweb/content/deposit/guide/chapter3docs.html (accessed 2013-10-01)

[4] ICPSR Web site, Metadata Records:
http://www.icpsr.umich.edu/icpsrweb/content/membership/or/metadata/index.html (accessed 2013-10-01)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

4. The data repository has an explicit mission in the area of digital archiving and promulgates it.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR has a mission statement describing its commitment to digital archiving [1]. The organization integrates the mission into its policies (e.g., ICPSR Digital Preservation Policy Framework [2]), procedures (e.g., ICPSR deposit guidelines and form [3]), and practices (e.g., data management and curation activities [4]). A Strategic Plan provides further guidance in mission areas [5].

ICPSR promotes its resources and services to the community in a variety of ways, including exhibits at conferences and meetings of professional associations, print and electronic brochures, and staff efforts in specific areas [6].

ICPSR commits to finding a successor to manage the data holdings in the event that ICPSR can no longer manage them. Succession planning has been a topic for the U.S. social science data archives that are part of the Data-PASS project. It is possible that the group would share responsibility for any of the partners' holdings should it be necessary [7].

URLs:
[1] ICPSR Mission Statement: http://www.icpsr.umich.edu/icpsrweb/content/membership/about.html (accessed 2012-12-04)

[2] Preservation Policy Framework:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/policies/dpp-framework.html
(accessed 2013-10-01)

[3] ICPSR Web site, Deposit Data: http://www.icpsr.umich.edu/icpsrweb/deposit/index.jsp (accessed 2013-10-01)

[4] ICPSR Web site, Data Management & Curation:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/index.html (accessed 2013-10-01)

[5] ICPSR Strategic Plan: http://www.icpsr.umich.edu/icpsrweb/strategic/ (accessed 2012-12-04)

[6] ICPSR Web site, Publications and Promotional Materials:
http://www.icpsr.umich.edu/icpsrweb/content/membership/publications/index.html (accessed 2012-10-01)

[7] Data-PASS project site: http:// http://data-pass.org/ (accessed 2013-10-01)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

5. The data repository uses due diligence to ensure compliance with legal regulations and contracts including, when applicable, regulations governing the protection of human subjects.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR is legally considered a part of the University of Michigan. The primary legal contracts/regulations that ICPSR handles are the Membership Form [1], Deposit Form [2], Terms of Use [3], and Restricted-Use Contracts [4]. The Membership Form specifies responsible use of ICPSR data resources and prohibits the illegal redistribution of data. The ICPSR Deposit Form stipulates that the depositor must have copyright in order to transfer to ICPSR the right to disseminate the data and obtains permission from the depositor for ICPSR to manage the data for purposes of distribution and preservation. ICPSR Terms of Use specify that data may not be redistributed and that users must not disclose the identities of research participants. The Terms of Use include information on penalties for noncompliance. ICPSR's Restricted-use Contracts are agreements governing the use and protection of data that carry a risk of disclosure. These contracts use model language and are reviewed by legal counsel.

ICPSR offers three levels of access to data: public-use [5], restricted-use available via contract [4], and restricted-use available only onsite at ICPSR under secure conditions [6]. All data are reviewed for disclosure risk and, when necessary, modified in consultation with the investigator [7]. ICPSR is in the process of implementing software that will provide a secure virtual data enclave for individuals using confidential data to ensure that they are in compliance with disclosure risk protocols [6] [8]. ICPSR staff are trained and certified in handling restricted-use data [7]. Data are deposited and processed in a secure non-networked environment [9]. Confidential data are stored in encrypted form in multiple locations [10].

With respect to compliance with national laws under which ICPSR operates, in the United States there are several statutes and codes related to the privacy and protection of research participants. Of particular note is the federal regulation on Protection of Human Subjects (45 CFR 46). Institutions bear the responsibility for compliance with 45 CFR 46. Every university must file an "assurance of compliance" with the Office for Human Research Protections which includes "a statement of ethical principles to be followed in protecting human subjects of research." University Institutional Review Boards (IRBs) review research to address these issues. Other relevant U.S. laws include the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA). ICPSR requests from depositors copies of IRB approval, approved protocols, privacy certificates, and blank consent forms.

URLs:

[1] ICPSR Web site, How to Join ICPSR: http://www.icpsr.umich.edu/icpsrweb/content/membership/join.html (accessed 2013-10-01)

[2] ICPSR Deposit Form: http://www.icpsr.umich.edu/cgi-bin/ddf2 (accessed 2013-10-01)

[3] ICPSR Web site, What are ICPSR's terms of use?: http://icpsr-support.blogspot.com/2009/01/what-are-icpsrs-terms-of-use.html (accessed 2013-10-01)

[4] ICPSR Web site, Accessing Restricted-Use Data: http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/access/restricted/index.html (accessed 2013-10-01)

[5] ICPSR Web site, Find Data: http://www.icpsr.umich.edu/icpsrweb/ICPSR/index.jsp (accessed 2013-10-01)

[6] ICPSR Web site, Data enclaves: http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/access/restricted/enclave.html (accessed 2013-10-01)

[7] ICPSR Web site, Confidentiality: http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/confidentiality/index.html (accessed 2013-10-01)

[8] SAMHDA Web site, Data Portal: http://www.icpsr.umich.edu/icpsrweb/content/SAMHDA/dataportal.html (accessed 2013-10-01)

[9] ICPSR 2010-2011 Annual Report, From the Director: http://www.icpsr.umich.edu/files/membership/or/annualreport/2010-2011.pdf (accessed 2013-10-01)

[10] ICPSR Web site, Archival Storage: http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/storage.html (accessed 2013-10-01)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

6. The data repository applies documented processes and procedures for managing data storage.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR has a high-level policy (ICPSR Digital Preservation Policy Framework) in place that has been vetted and implemented and is developing a comprehensive set of lower-level and preservation-related policies [1].

ICPSR pursues several strategies for managing data storage, including:
(1) Redundancy on spinning disk in multiple locations; backups on removable media [2].
(2) "Warm backups" of the Web server in two locations enabling the Web site to "fail over" to another server in the event that the ICPSR server is not available [3].

Checksums are run on a routine schedule to ensure the integrity of the data in the repository [4]. Storage media are monitored for deterioration and new storage media are evaluated on an ongoing basis as part of a Technology Watch program. [5].

ICPSR has implemented policies and procedures dealing with data recovery in the event of disaster [6] [7]. These documents also deal with the human side, ensuring that systems for communication are in place should a disaster occur [8]. ICPSR has defined a specific disaster plan for archival storage and tested the restoration of content from backup copies. Periodic drills are conducted to make sure that staff are familiar with how to respond in the event of emergencies or disasters [9].

For older archival content, outdated file formats have been updated to current formats to avoid the risk of loss through obsolescence, and stored formats are routinely monitored to identify potential preservation issues [10] [11]. Known risk factors for file formats are being explored with the view of formally extending those factors to include common social science research formats.

ICPSR has considered appropriate security levels for each phase of life cycle management and as confidential data are increasingly acquired, it is adjusting existing procedures accordingly. Currently, ICPSR has a system with a

layered design to support a private non-networked area, a semi-private area, and a public area [12]. When new technologies for managing security become available, ICPSR evaluates each for possible integration into the current security approach.

URLs:

[1] Preservation Policy Framework:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/policies/dpp-framework.html
(accessed 2013-10-02)

[2] ICPSR Web site, Archival Storage:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/storage.html (accessed 2013-10-02)

[3] ICPSR Web Services Continuity Plan: http://www.icpsr.umich.edu/files/datamanagement/disaster/wscp.pdf
(accessed 2013-10-02)

[4] Technology at ICPSR Web site: http://techaticpsr.blogspot.com/2011/06/trac-b44-monitoring-integirty.html
(accessed 2013-10-02)

[5] ICPSR Web site, Ingest:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/ingest/index.html (accessed 2013-10-02)

[6] ICPSR Web site, Disaster Planning: http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/disaster/
(accessed 2013-10-02)

[7] ICPSR Disaster Planning Policy Framework:
http://www.icpsr.umich.edu/files/datamanagement/disaster/dppf.pdf (accessed 2013-10-02)

[8] ICPSR Crisis Communication Plan: http://www.icpsr.umich.edu/files/datamanagement/disaster/ccp.pdf
(accessed 2013-10-02)

[9] ICPSR Disaster Planning Training Plan: http://www.icpsr.umich.edu/files/datamanagement/disaster/dptp.pdf (accessed 2013-10-02)

[10] Technology at ICPSR Web site:
http://techaticpsr.blogspot.com/2011/03/trac-b32-tracking-format-obsolescence.html (accessed 2013-10-02)

[11] Data-PASS Data Security Standards: Integrity and Availability:
http://www.data-pass.org/sites/default/files/DataSecurity.pdf (accessed 2013-10-02)

[12] ICPSR 2010-2011 Annual Report, From the Director:
http://www.icpsr.umich.edu/files/membership/or/annualreport/2010-2011.pdf (accessed 2013-10-01)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

7. The data repository has a plan for long-term preservation of its digital assets.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The ICPSR Digital Preservation Policy Framework documents that ICPSR has adopted normalization and migration as its primary preservation strategies and refers to our disaster planning program [1].

Preservation planning is integrated into ICPSR's operations and has enabled ICPSR to successfully navigate several generations of technology with a track record for reliable archiving. ICPSR focuses mostly on normalization and migration in terms of its methods [2].

The possible obsolescence and potential vulnerabilities of current file formats are monitored as one component of an ongoing technology responsiveness program [3].

URL:
[1] ICPSR Digital Preservation Policy Framework:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/policies/dpp-framework.html
(accessed 2013-10-02)

[2] Technology at ICPSR Web site:
http://techaticpsr.blogspot.com/2011/03/trac-b32-tracking-format-obsolescence.html (accessed 2013-10-02)

[3] Data-PASS Data Security Standards: Integrity and Availability:
http://www.data-pass.org/sites/default/files/DataSecurity.pdf (accessed 2013-10-02)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

8. Archiving takes place according to explicit work flows across the data life cycle.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR has policies and procedures that follow the archival life cycle and predetermined criteria that apply at each stage. A Collection Development Policy informs the selection of data for archiving [1]. Staff who manage data have a set of instructions that they adhere to and they document data transformations [2]. The "data pipeline" at ICPSR parallels the OAIS Reference Model and the research data life cycle model [3]. Storage is managed according to strict criteria regarding media, redundancy, etc.

Staff who handle data are trained and certified in issues of disclosure risk [4]. They hold relevant degrees in social science and are provided with appropriate professional development opportunities [5] [6].

The majority of data that ICPSR manage are quantitative in nature, but an increasing number of new content types are being deposited. ICPSR has a template for evaluating the new content types and developing strategies for managing each across the archival life cycle [7].

URLs:

[1] ICPSR Collection Development Policy:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/policies/colldev.html (accessed 2013-10-03)

[2] ICPSR Web site, Data Enhancement:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/ingest/enhance.html (accessed 2013-10-03)

[3] ICPSR Data Pipeline, Future State: http://www.icpsr.umich.edu/ICPSR/images/DataPipelineLarge.jpg (accessed 2013-10-03)

[4] ICPSR Web site, Confidentiality:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/confidentiality/ (accessed 2013-10-01)

[5] ICPSR Web site, Careers and Internships:
http://www.icpsr.umich.edu/icpsrweb/content/membership/careers/index.html (accessed 2013-10-03)

[6] ICPSR Web site, Staff: http://www.icpsr.umich.edu/icpsrweb/content/membership/contact-people.html
(accessed 2013-10-03)

[7] ICPSR Digital Content Review – Lifecycle Report Outline:
http://www.icpsr.umich.edu/files/ICPSR/curation/DigitalContentReviewTemplate.pdf (accessed 2013-10-03)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

9. The data repository assumes responsibility from the data producers for access and availability of the digital objects.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The ICPSR Access Policy Framework specifies access rules for all ICPSR data resources [1]. The Deposit Form governs the assumption of responsibility by ICPSR for safekeeping and dissemination of the data [2]. The depositor's signature on the form indicates that the depositor is granting permission to ICPSR to manage the data for dissemination and preservation. The Restricted-use Data Agreement for confidential data controls access and availability for this special category of data [3].

ICPSR also has a set of Disaster Planning documents designed to protect its staff and its digital assets in the event of a disaster or crisis [4].

URLs:
[1] ICPSR Access Policy Framework:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/policies/access-policy-framework.html
(accessed 2013-10-03)

[2] ICPSR Deposit Form: http://www.icpsr.umich.edu/cgi-bin/ddf2 (accessed 2013-10-03)

[3] ICPSR Accessing Restricted-Use Data:
http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/access/restricted/index.html (accessed 2013-10-03)

[4] ICPSR Web site, Disaster Planning:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/disaster/index.html (accessed 2013-10-03)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

10. The data repository enables the users to discover and use the data and refer to them in a persistent way.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR ensures that all of its data are usable and are identified uniquely. ICPSR provides Digital Object Identifiers (DOIs) at the study level as well as downloadable data citations for use in publications based on analyses of the data [1] [2]. Guidance on data citation practice is provided in multiple locations on the ICPSR Web site [3] [4]. All files have unique IDs, and ICPSR soon expects to implement a comprehensive set of persistent identifiers that encompasses content at all levels as well as research identification schemes and other relevant identification initiatives [5].

ICPSR offers a robust search of its holdings based on Solr/Lucene so that users can find data efficiently [6] [7] [8].

Data are provided in formats that the social science research community typically uses: SPSS, SAS, Stata, R, tab-delimited (for use in spreadsheets like Excel), and SDA (online analysis) [9]. Data use tutorials describing how to use these formats are available [10].

URLs:
[1] ICPSR Web site, What is a Persistent URL? What is a DOI:
http://www.icpsr.umich.edu/icpsrweb/content/shared/ICPSR/faqs/what-is-doi.html (accessed 2013-10-03)

[2] ICPSR Web site, About the Bibliography of Data-related Literature:
http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/citations/methodology.html (accessed 2013-10-03)

[3] ICPSR Web site, Why and how should I cite data:
http://www.icpsr.umich.edu/icpsrweb/ICPSR/support/faqs/2008/10/why-and-how-should-i-cite-data (accessed 2013-10-03)

[4] Data Citation Example:
http://www.icpsr.umich.edu/icpsrweb/content/shared/ICPSR/faqs/why-and-how-should-i-cite-data.html (accessed 2012-12-04)

[5] ICPSR 2011-2012 Annual Report, File-Level Archive Management Engine (FLAME):
http://www.icpsr.umich.edu/files/membership/or/annualreport/2011-2012.pdf

[6] ICPSR Web site, How do I search your web site?:
http://www.icpsr.umich.edu/icpsrweb/content/shared/ICPSR/faqs/how-do-i-search.html (accessed 2013-10-03)

[7] ICPSR Web site, Faceted Searching Using SOLR:
http://staging.icpsr.umich.edu/icpsrweb/XSLT/archived-blogs/blogger.jsp?file=icpsr-news-2013-02-07 (accessed 2013-10-03)

[8] ICPSR Web site, Find and Analyze Data: http://www.icpsr.umich.edu/ICPSR/ (accessed 2013-10-03)

[9] ICPSR Web site, What kind of data formats does the archive distribute?:
https://www.icpsr.umich.edu/icpsrweb/content/shared/ICPSR/faqs/what-kind-of-data-formats-does-archive.html (accessed 2014-04-23)

[10] See for example: ICPSR Web site, How do I use an SPSS setup file to import ASCII data?: https://www.icpsr.umich.edu/icpsrweb/ICPSR/support/faqs/2007/02/how-do-i-use-spss-setup-file-to-import

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

11. The data repository ensures the integrity of the digital objects and the metadata.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR runs checksums at every step of the life cycle from original deposit through data processing to creation of the Archival Information Package for long-term preservation. ICPSR uses a regimen of checksum utilities to routinely confirm the integrity of deposited content that ensures the completeness of the collection [1].

The ICPSR site is available 24/7 through a mechanism that involves constant monitoring and a switchover to a "warm back-up" site in the event of that the primary site becomes unavailable [2] [3] [4].

Versions numbers are incremented whenever a file is replaced (version number of the resource is part of its citation). ICPSR only provides Web access to the most recent version of files. For earlier versions, users must contact ICPSR directly [5].

URLs:

[1] Technology at ICPSR Web site: http://techaticpsr.blogspot.com/2011/06/trac-b44-monitoring-integirty.html (accessed 2013-10-07)

[2] ICPSR Web Services Continuity Plan: http://www.icpsr.umich.edu/files/datamanagement/disaster/wscp.pdf (accessed 2013-10-07)

[3] ICPSR Web site, Disaster Planning:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/disaster/index.html (accessed 2013-10-07)

[4] ICPSR Web Services Continuity Policy: http://www.icpsr.umich.edu/files/datamanagement/disaster/wscp.pdf
 (accessed 2013-10-07)

[5] ICPSR Web site:
http://www.icpsr.umich.edu/icpsrweb/content/shared/NACJD/faqs/im-interested-in-replicating-research.html
(accessed 2013-10-07)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

12. The data repository ensures the authenticity of the digital objects and the metadata.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

A chain of custody is maintained to track changes to the ICPSR digital objects, and content is versioned [1] [2]. Provenance of the collection is also recorded. ICPSR does not check the identity of depositors. This has never been an issue for ICPSR to the best of our knowledge. Depositors are contacted at specific life cycle milestones: upon receipt of deposits and upon release of the deposited content. Problems with the identity of depositors should be detected at one of these points.

URLs:

[1] ICPSR Council Minutes, March 13-14, 2008:
http://www.icpsr.umich.edu/icpsrweb/content/membership/governance/minutes/2008-03.html (accessed 2013-10-07)

[2] ICPSR Web site:
http://www.icpsr.umich.edu/icpsrweb/content/shared/NACJD/faqs/im-interested-in-replicating-research.html (accessed 2013-10-07)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

13. The technical infrastructure explicitly supports the tasks and functions described in internationally accepted archival standards like OAIS.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

Applicant Entry

Statement of Compliance:

3. In progress: We are in the implementation phase.

Self-assessment statement:

ICPSR is transitioning to a system that will explicitly align ICPSR's archival functions with OAIS [1]. Currently, ICPSR identifies Submission Information Packages (SIPs) and is working on a system whereby data managers will make explicit choices about the content of the Archival Information Packages (AIPs) and Dissemination Information Packages (DIPs) [2].

This transition will address the Archival Storage and Preservation Planning components of OAIS. ICPSR is also working on TRAC compliance, which has a strong OAIS orientation [3]. Life cycle management is a distributed process at ICPSR. Roles and responsibilities have been assigned for each TRAC requirement, including those that specifically address OAIS components, and evidence is being cumulatively compiled and developed, when missing. Once this process is completed, ICPSR will post the results and share the model used for the process.

ICPSR has established a technology prioritization process to direct ongoing investments in technology and related software development. The technological infrastructure is adequate for life cycle management and continually enhanced to incorporate new capabilities offered by emerging technologies and to meet evolving requirements.

URLs:

[1] ICPSR Web site, OAIS-Based Processes:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/oais.html (accessed 2013-10-07)

[2] ICPSR 2011-2012 Annual Report, File-Level Archive Management Engine (FLAME):
http://www.icpsr.umich.edu/files/membership/or/annualreport/2011-2012.pdf

[3] ICPSR Web site, Trusted Digital Repositories:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/trust.html (accessed 2013-10-07)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

14. The data consumer complies with access regulations set by the data repository.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

ICPSR's Data Access Policy Framework specifies access rules and regulations related to ICPSR data and related resources [1]. Any access restrictions or conditions are clearly noted and described for users on the Web site. Because ICPSR is a membership organization, contract law governs the use of ICPSR data. Some data are provided only to individuals at member institutions (these data may be purchased by nonmembers for a fee), while other data are provided free of charge, depending on the source of funding for data archiving. ICPSR data consumers agree to Terms of Use [2] and for confidential data, to the terms of the Restricted-use Data Contract [3].

ICPSR distributes its metadata collection and its Data-Driven Learning Guides under Creative Commons licenses [4]. It is exploring licenses for other ICPSR products. The Science Commons licenses for data are another area of investigation.

URLs:
[1] ICPSR Access Policy Framework:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/policies/access-policy-framework.html
 (accessed 2013-10-07)

[2] Terms of Use: http://icpsr-support.blogspot.com/2009/01/what-are-icpsrs-terms-of-use.html (accessed 2013-10-07)

[3] ICPSR Web site, Accessing Restricted-use Data:
http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/access/restricted/index.html (accessed 2013-10-07)

[4] ICPSR Web site, Metadata Records:
http://www.icpsr.umich.edu/icpsrweb/content/membership/or/metadata/index.html (accessed 2013-10-07)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

15. The data consumer conforms to and agrees with any codes of conduct that are generally accepted in the relevant sector for the exchange and proper use of knowledge and information.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

In the U.S., government agencies (like the National Institutes of Health) and professional associations (like the American Statistical Association) promulgate codes of ethics for responsible data use. ICPSR emphasizes these codes of conduct and best practice in its publications and training courses, on its Web site, and through its Terms of Use [1]. ICPSR plays a key role in educating data consumers about relevant codes of conduct -- for example, not identifying survey respondents [2]. ICPSR also complies with applicable federal laws including 45 CFR part 46, the regulation governing protection of human subjects [3]. Providing guidance in the responsible use of confidential data is an important role for ICPSR [4].

URLs:
[1] ICPSR Web site: What are ICPSR's terms of use?:
http://icpsr-support.blogspot.com/2009/01/what-are-icpsrs-terms-of-use.html (accessed 2013-10-07)

[2] ICPSR Web site, Accessing Restricted-Use Data:
http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/access/restricted/index.html (accessed 2013-10-07)

[3] ICPSR Access Policy Framework:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/preservation/policies/access-policy-framework.html
 (accessed 2013-10-07)

[4] ICPSR Web site, Confidentiality:
http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/confidentiality/ (accessed 2013-10-07)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

16. The data consumer respects the applicable licences of the data repository regarding the use of the data.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The applicable licenses are found in the ICPSR membership contract [1], the Terms of Use [2], and the Restricted-use Data Agreements [3]. ICPSR informs and guides data consumers about relevant data access and use issues and determines what are considered breaches of the license terms.

URLs:

[1] ICPSR Web site, How to Join ICPSR: http://www.icpsr.umich.edu/icpsrweb/content/membership/join.html (accessed 2013-10-07)

[2] ICPSR Web site: What are ICPSR's terms of use?: http://icpsr-support.blogspot.com/2009/01/what-are-icpsrs-terms-of-use.html (accessed 2013-10-07)

[3] ICPSR Web site, Accessing Restricted-Use Data: http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/access/restricted/index.html (accessed 2013-10-07)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments: