



Measuring the Impact of Digital Repositories

Core Trustworthy Data Repository Requirements

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ICSU
WORLD DATA SYSTEM

Core Trustworthy Data Repository Certification

Catalogue of requirements :

1. Context (1)
 - **Usage and impact** of the repository data holdings (citations, use by other projects, etc.).
 - A **national, regional, or global role** that the repository serves.
 - Any **global cluster or network organization** that the repository belongs to.

2. Organizational infrastructure (6)

3. Digital object management (8)

4. Technology (2)

5. Applicant feedback (1)

Procedures for assessment:

1. Self-assessment, public evidence, compliance level
2. Peer-review (2 reviewers)
3. Periodic review (3 years)

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Context Repository type, designated community, Level of curation performed , Outsource partners, **Impact**

Organizational infrastructure

- R1. DR has **an explicit mission** to provide access to and preserve data in its domain.
- R2. DR maintains all applicable **licenses** covering data access & use & monitors compliance
- R3. DR has a **continuity plan** to ensure ongoing access to and preservation of its holdings.
- R4. DR ensures that data are created, curated, accessed, and used in compliance with **disciplinary and ethical norms**.
- R5. DR has **adequate funding** and sufficient numbers of **qualified staff** managed through a clear system of governance
- R6. repository adopts mechanism(s) to secure ongoing **expert guidance** and feedback (either in-house, or external, scientific guidance).

Digital object management

- R7. DR guarantees the **integrity and authenticity** of the data.
- R8. DR accepts data & metadata based on **defined criteria to ensure relevance and understandability** for users.
- R9. DR applies **documented processes and procedures** in managing archival storage of the data.
- R10. DR assumes responsibility **for long-term preservation** and manages this function in a planned and documented way.
- R11. DR has appropriate expertise to address **technical data and metadata quality** sufficient to make quality evaluations.
- R12. Archiving takes place according to **defined workflows** from ingest to dissemination.
- R13. DR enables users to **discover the data** and **refer to them in a persistent way** through proper citation.
- R14. DR enables reuse of the data over time, ensuring that **appropriate metadata** support the understanding and use of the data.

Technical infrastructure

- R15. DR functions on **well-supported operating systems and other core infrastructural software** and is using hardware and software technologies appropriate to the services it provides to its Designated Community.
- R16. The technical infrastructure of the repository provides for **protection** of the facility and its data, products, services, and users.

Impact of Core Certification

- Builds stakeholder confidence (funders, publishers, etc.)
- Raises awareness about digital preservation
- Improves communication inside the repository
- Improves repository processes
- Ensures transparency (public assessments)
- Differentiates the repository from others

The research DR is either certified or supports a repository standard

re3data.org Search Browse Suggest Resources Contact DataCite

Repository details

NASA Socioeconomic Data and Applications Center

General Institutions Terms Standards

Name of repository: NASA Socioeconomic Data and Applications Center

Additional name(s): SEDAC

Repository URL: <http://sedac.ciesin.columbia.edu/>

Subject(s): Social Sciences, Human Geography, Geophysics and Geodesy, Geosciences (including Geography), Social and Behavioural Sciences, Humanities and Social Sciences, Geography, Natural Sciences, Political Science, Soil Sciences, Economics, Urbanism, Spatial Planning, Transportation and Infrastructure Planning, Landscape Planning, Agriculture, Forestry, Horticulture and Veterinary Medicine, Life Sciences, Construction Engineering and Architecture, Engineering Sciences

Description: SEDAC, the Socioeconomic Data and Applications Center, is one of the Distributed Active Archive Centers (DAACs) in the Earth Observing System Data and Information System (EOSDIS) of the U.S. National Aeronautics and Space Administration. SEDAC is a regular member of the World Data System and focuses on human interactions in the environment. Its mission is to develop and operate applications that support the integration of socioeconomic and Earth science data and to serve as an "Information Gateway" between the Earth and social sciences.

Contact: <http://sedac.uservoice.com/>

Content type(s): Standard office documents, Scientific and statistical data formats, Structured graphics

Certificates and Standards: World Data System

Keyword(s): environmental assessment, environmental health, environmental treaties, environmental indicators, energy infrastructure, poverty, environmental sciences, water, remote sensing, population, marine and coastal, land use, infrastructure, health, hazards, conservation, climate, agriculture, socioeconomics, global environment, sustainability, governance

Repository size: 37 data collections; 196 datasets

Repository type(s): disciplinary

Mission statement for designated community: <http://sedac.ciesin.columbia.edu/about>

Research data repository: eng

Certificates and Standards World Data System