About standards

RHIC DAP round table #3

 Benefits of following or being guided by standards for implementing and deploying a long-term repository for RHIC DAP

What are the requirements listed by CoreTrustSeal

Benefits of following Standards

Internal Benefits

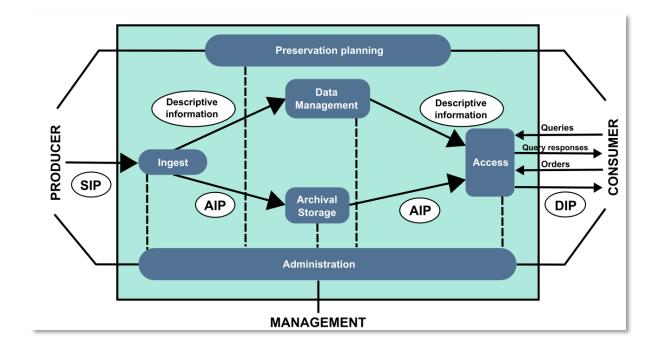
- Help to identify our strengths, weaknesses and areas of improvements (standards are used as benchmark for comparison)
- Improve data management:
 - Check, improve, and update procedures and workflows.
 - Re-evaluate technical solutions and processes for long-term preservation.
- Increase awareness to established standards
- Strengthen internal communication: improve transparency, teamwork and collaboration

External Benefits

- Demonstrate commitment: show dedication to data quality and long-term curation.
- Built trust and reliability: increase stakeholder and funding bodies confidence
- Gain Recognition: Enhance national and international reputation
- Improve visibility: Makes data and services more visible and accessible.
- Ensure data services are searchable, accessible, and meet standards.

CoreTrustSeal 16 requirements

- The <u>16 requirements</u> from CoreTrustSeal are based on the OAIS model
- They are organized in three main categories
 - 1. Organizational infrastructure (R1-6)
 - 2. Digital object management (R7-13)
 - 3. Technology and security (R14-16)
- Not all requirements are of equal importance, or relevant for us



SIP (Submission Information Package): Data and metadata received from the producer.

AIP (Archival Information Package): Data and metadata organized for long-term preservation within the archive.

DIP (Dissemination Information Package): Data and metadata formatted for consumer access.

Organizational infrastructure

- R1 Mission & Scope: The repository has an explicit mission to provide access to and preserve data in its domain.
- R2 Rights Management: The repository maintains all applicable rights and monitors compliance.
- **R3 Continuity of Service:** The Repository has a plan to ensure ongoing access to and preservation of its data and metadata.
- **R4 Legal & Ethical:** The repository ensures, to the extent possible, that data are created, curated, accessed, and used in compliance with disciplinary and ethical norms.
- **R5 Governance & Resources:** The repository has adequate funding and sufficient numbers of qualified staff managed through a clear system of governance to effectively carry out the mission.
- **R6 Expertise & Guidance:** The repository adopts mechanism(s) to secure ongoing expertise, guidance and feedback (either in-house, or external, including scientific guidance, if relevant).

Organizational infrastructure

- **R3 Continuity of Service:** The Repository has a plan to ensure ongoing access to and preservation of its data and metadata.
- Repositories must ensure continuity of their collections and assume responsibility in the case of a temporary
 or permanent break in service. Responses and evidence should demonstrate the level of responsibility taken
 for digital objects, the level of risk for the repository, and the level of succession planning for the future of
 the data collection.

Organizational infrastructure

- **R6 Expertise & Guidance:** The repository adopts mechanism(s) to secure ongoing expertise, guidance and feedback (either in-house, or external, including scientific guidance, if relevant).
- Responses and evidence should demonstrate that the repository has sufficient internal expertise and is linked to a wide network for advice and guidance. Evidence must account for the repository day-to-day activities and the monitoring of potential new challenges on the horizon (community and technology watch).

- **R7 Provenance & Authenticity:** The repository guarantees the authenticity of the digital objects and provides provenance information.
- **R8 Deposit & Appraisal:** The repository accepts data and metadata based on defined criteria to ensure relevance and understandability for data users.
- **R9 Preservation Plan:** The repository applies documented processes and procedures in managing archival storage of the data.
- R10 Quality Assurance: The repository addresses technical quality and standards compliance and ensures that sufficient information is available for end users to make quality-related evaluations.
- **R11 Workflows:** Digital object management takes place according to defined workflows from deposit to access.
- R12 Discovery & Identification: The repository enables users to discover the digital objects and refer to them in a persistent way through proper citation.
- **R13 Reuse:** The repository enables reuse of the digital objects over time, ensuring that appropriate information is available to support understanding and use.

- **R7 Provenance & Authenticity:** The repository guarantees the authenticity of the digital objects and provides provenance information.
- Responses and evidence should provide a clear overview of the processes used to ensure data authenticity throughout the entire curation and preservation lifecycle—including the level of manual and automated practice.

- R9 Preservation Plan: The repository applies documented processes and procedures in managing archival storage of the data.
- Demonstrate clear, managed documentation to ensure:
 - (1) an organized approach to long-term preservation,
 - (2) continued access for data types despite format changes, and
 - (3) there is sufficient documentation to support usability by the Designated Community.
- The response should address whether the repository has defined preservation levels and, if so, how these are applied. The preservation plan should be managed to ensure that changes to data, metadata, technology and user requirements are handled in a stable and timely manner.
- If preservation levels differ between classes or collections of items, the differences in preservation approach, and the criteria applied to determine the preservation level should be explained. This may be relevant if, for example, the file size of an object or the sensitivity of the data it contains determines the number of redundant copies made; or only items deposited in preferred formats are converted to standard preservation formats and will be migrated in the future.
- Policies and documented procedures for reappraisal should be in place to manage changes to the curation or preservation levels of digital objects, or their deletion or removal from the repository.

- **R11 Workflows:** Digital object management takes place according to defined workflows from deposit to access.
- Responses and evidence should demonstrate a consistent, rigorous, documented approach to managing all activities throughout their processes and that changes to those processes are appropriately implemented, evaluated, recorded, and administered.

Technology and security

- R14 Storage & Integrity: The repository applies documented processes to ensure data and metadata storage and integrity.
- R15 Technical Infrastructure: The repository is managed on well-supported operating systems and other core infrastructural software and hardware appropriate to the services it provides to its Designated Community.
- R16 Security: The repository protects the facility and its data, metadata, products, services, and users.