



DATA SEAL OF APPROVAL

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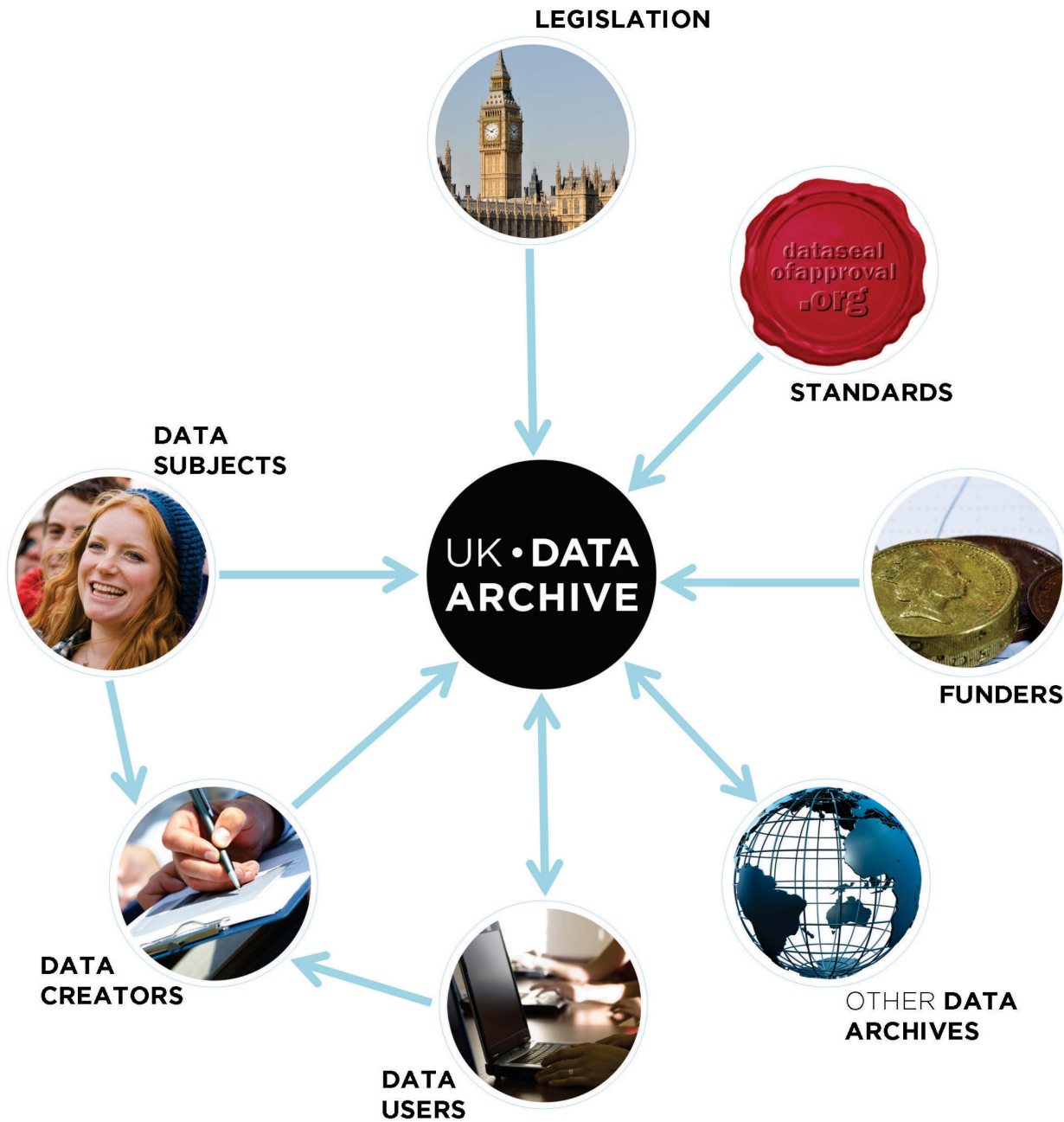
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**UK • DATA
ARCHIVE**

WHAT IS THE UK DATA ARCHIVE

- An “umbrella” data service organization;
- Provides infrastructure and shared data services for:
 - Economic and Social Data Service
 - census.ac.uk (Portal and Registration Service)
 - Secure Data Service
- We provide access to social science data created by government and academics for use by government, academics, commercial researchers, etc.



TRUST AND THE NEED FOR STANDARDS

- ISO 16363 notes: “claims of trustworthiness are easy to make but are thus far difficult to justify or objectively prove.”
- The ‘migration’ of trust alongside digital objects’ lifecycle must be associated with changes of custody through producers, archives and consumers.
- In any relationship with contractual or implied inter-reliance a baseline for trust is critical

EMERGING STANDARDS (1)

- **Data Seal of Approval (DSA)**
- **Trusted Repositories Working Group** cooperated with
 - OCLC/RLG-NARA Digital Repository Certification Task Force
 - the Centre for Research Libraries (CRL),
 - the Digital Curation Centre (DCC)
 - EU-Project Digital Preservation Europe.
- **DIN (German Standards Organisation) working group on Trustworthy Digital Archives**
 - developed the DIN standard 31644 (Information and Documentation - Criteria for Trustworthy Digital Archives)
 - based on the 10 core requirements developed by this international collaboration
 - broadened the scope from memory institutions to all institutions

EMERGING STANDARDS (1)

- **Audit and Certification of Trustworthy Digital Repositories ISO16363**
 - Closely based on the Trusted Digital Repositories and Audit Checklist (TRAC)
 - Supported by ISO 16919, or Requirements for Bodies providing Audit and Certification
 - Managed by the Primary Trustworthy Digital Repository Authorisation Body (ISO-PTAB).
- **Structure**
 - Organisational Infrastructure
 - Digital Object Management
 - Infrastructure and Security Risk Management

TOO MANY **COOKS?**

- European Framework for Audit and Certification of Digital Repositories
 - the European Commission brought together representatives of these three standards to sign a Memorandum of Understanding
 - Basic Certification (based on DSA)
 - Extended Certification (self-assessment based on DSA plus self-audit based on ISO 16363 or DIN 31644)
 - Formal Certification (self-assessment based on DSA plus full external audit of ISO 16363 or DIN 31644)

DATA SEAL OF APPROVAL

- Established by DANS (Data Archiving and Network Services)
- Initial focus on research data
- Handed over to an international board
- Currently undergoing revision to clarify applicability across all data management sectors
- Current formalisation of the governance into a community driven organisation

GOALS

- “to ensure high quality and to guide reliable management of research data for the future without requiring the implementation of new standards, regulations or high costs”
- Gives researchers the assurance that their research results will be stored in a reliable manner and can be reused
- Provides research sponsors with the guarantee that research results will remain available for reuse
- Enables researchers, in a reliable manner, to assess the repository where research data are held.
- Allows data repositories to archive and distribute research data efficiently

SIXTEEN GUIDELINES, FIVE KEY CRITERIA

- The research data can be found on the Internet
- The research data are accessible, while taking into account relevant legislation with regard to personal information and intellectual property of the data
- The research data are available in a usable format
- The research data are reliable
- The research data can be referred to

REFERENCING KEY **STAKEHOLDERS**

- The **data producer** is responsible for the quality of the digital research data.
- The **data repository** is responsible for the quality of storage and availability of the data: data management.
- The **data consumer** is responsible for the quality of use of the digital research data.
- But the repository is the focus of the assessment including their responsibility for enabling the Data Producer and Consumer in fulfilling their role



STRUCTURE

- **Data Producers**
 - The content
 - Data formats
 - Documentation
- **Data Repository**
 - Organisation & Process
 - Technical Infrastructure
- **Data Consumers**
 - Conformance with access restrictions, codes of conduct and applicable licences



UK DATA ARCHIVE AND THE DSA

- **Background**

- Members of the DSA Board
- Already possessed ISO 27001 for Information Security
- Moving towards standards-based preservation policies

EVIDENCE GATHERING AND PREPARATION

- Review of the Guidelines
- Initial Draft
- Sequence of internal meetings
- Identification of evidence
- Formalisation of evidence (e.g. into specific policies/procedures) where applicable
- Improve availability of key evidence online

IMPACT

- The DSA is as much as tool for internal review and the public promotion of good practice as it is an audit methodology
- Provided an invaluable structure to guide internal discussion
- Series of internal meetings promoted better internal information exchange
- Some formalisation of evidence
- Prompted some standardisation and improvement of practices
- Prompted a greater amount of information made public
- We would expect that an archive which had not undergone other audit (e.g. ISO27001) would benefit from some initial records management work to promote evidence capture and, more importantly, on-going evidence management to support continued improvement and certification

PUBLIC COMPONENT

- Unlike the ISO and the DIN a public component is built into the DSA
- DSA remains a required public component throughout the Framework
- As the DSA is based on a peer-reviewed self-assessment without a site visit this transparency and the community nature of its governance are vital in ensuring honesty, but more importantly this provides information to support other archives in the adoption of better practices.

INCREASED RIGOR (MORTIS!)

- **Levels of Applicability**
 - 0. Not applicable
 - 1. We have not considered this yet
 - 2. We have a theoretical concept.
 - 3. We are in the implementation phase.
 - 4. This guideline has been fully implemented for the needs of our repository.
- Each guideline has a specific required level. As best practice emerges and compliant tools and procedures are implemented these will become stricter.

- <http://www.datasealofapproval.org/>





AND FINALLY...

- CESSDA-ERIC preparations
 - Membership requirements
 - Series of workshops and test reviews
 - Planning for inter-operation
 - Understanding legal implications for trust