

Sensitive Data Handling in the Social Sciences

CESSDA & UK Data Service Use Case

Hervé L'Hours herve@essex.ac.uk



CESSDA UKDS - About

- CESSDA- Consortium of European Social Science Data Archives
 - 22 member countries and one observer
 - Explore use case specification across Service Providers
- UK Data Service
 - UK Service Provider to CESSDA
 - partnership between the Universities of Essex, Manchester, Southampton, UCL, Edinburgh and Jisc since 2012
- Lead partner: UK Data Archive
 - Originally Established 1967 at the University of Essex



Context

- Data about humans in the Social Sciences
- Secure Remote Access
- Access via Safe Room
- Hybrid file-driven and RDF Linked Data Ecosystem
- ISO27000 Information Security
- UK Digital Economy Act Certification
- EOSC PID Policy & evolving expectations of PID kernel metadata



Scope & approach

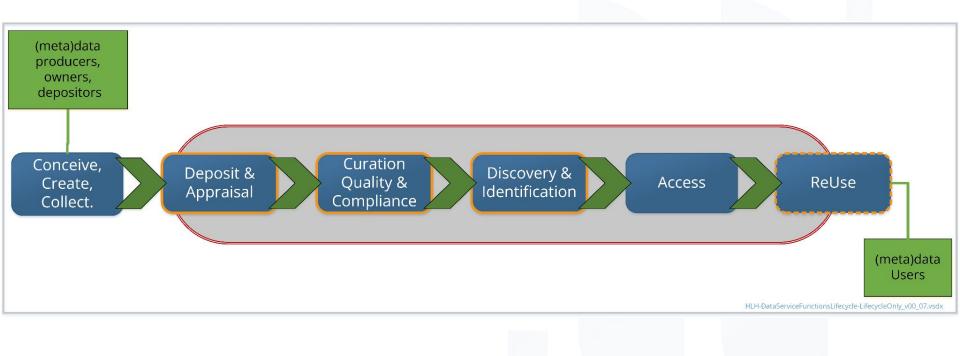
Digital Object Models (data & metadata), kernel metadata, rights management

Sensitive data and non-sensitive data classification and division

- At deposit
- During initial curation and, later active preservation (if sensitivity concerns change)
- Handling synthetic data, subsetting, outputs for checking etc



Lifecycle Perspective

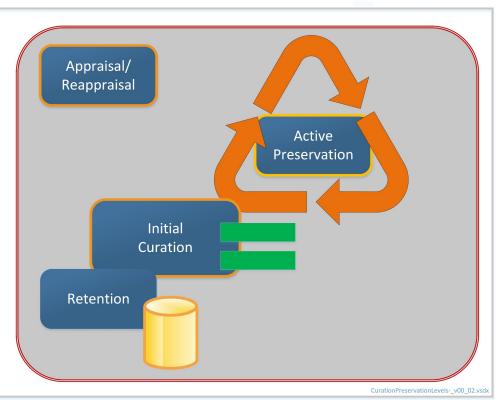




Trustworthy & Transparent Research Data Management

What is appraised & reappraised to be:

- retained
- curated
- preserved





Scope & approach: Considerations

Classifications of Sensitivity

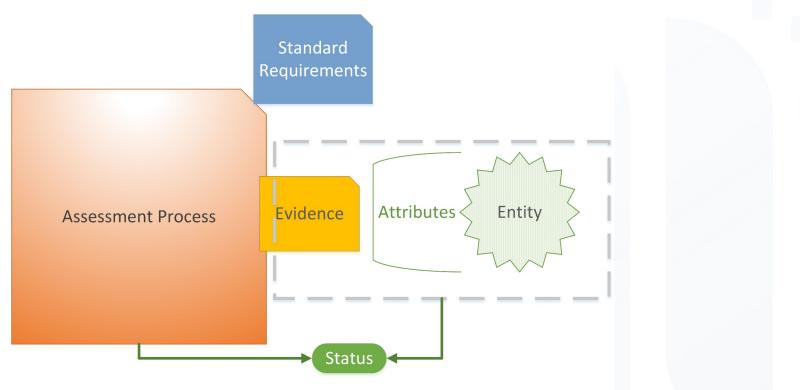
- Personal data, commercially, environmentally, culturally sensitive
- Data vs. metadata

Assertions of Sensitivity

- Data owner-prescribed rights (self-declaration of sensitivity)
- Intrinsic properties of the data (empirical run-time analysis)



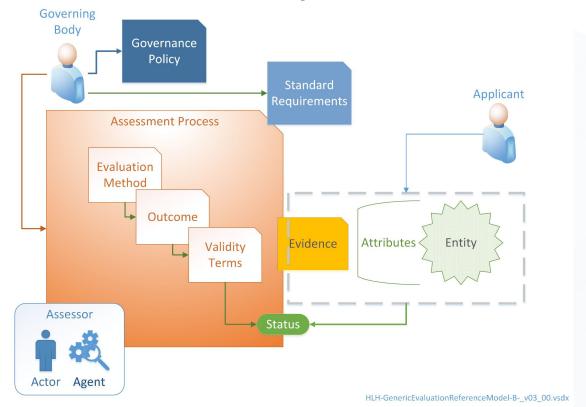
Sensitivity Evaluation



HLH-GenericEvaluationReferenceModel-A-_v03_00.vsdx

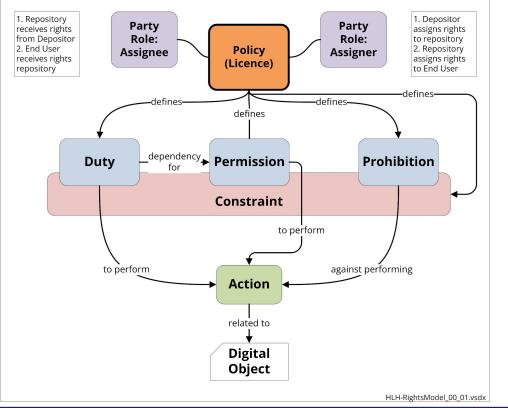


Sensitivity Evaluation





FAIR-IMPACT





Scope & approach: Considerations

• PIDS Resolving & Routing to...

- Multiple serialisations e.g. XML, JSON etc. or RDF (RDF/XML, JSON-LD, Turtle etc.)
- vs html landing pages & catalogue records
- cf: machine actionability
- Granularity & Version Management
 - Sub-"object": variables (statistics), questions (surveys) etc
- PID Syntax and Semantics
 - RDA PID Kernel recommendation, & FAIRCORE4EOSC



Five Safes Framework

- Safe Data
- Safe Projects
- Safe People
- Safe Settings
- Safe Outputs





Expected outcome & added-value

- Practical guidance on optimal PID usage (access & management) for sensitive data
- Better aligned and documented practices
- Consistent handling of sensitive data within and between secure environments
- More efficient use of PIDs for sensitive data to benefit research & deliver societal and economic impact