

Advancing SSH Research with SSHOCingly good and sustainable resources

6 & 7 April 2022 Brussels & online





Advancing SSH Research with SSHOCingly good and sustainable resources

6-7 April 2022 - Brussels & Online **REGISTER NOW**

How to become a SSHOCingly trustworthy environment for SSH data



Mari Kleemola
Tampere University
CESSDA



Henri Ala-Lahti, Tampere University, CESSDA



Deborah Wiltshire, GESIS / CESSDA



Holly WrightUniversity of York



Marianne Høgetveit Myhren SIKT / NSD

Final Conference

How to become a SSHOCingly trustworthy environment for SSH data.

Tips & tricks for Research Infrastructures

Chair: Mari Kleemola (Tampere University, CESSDA)

Thursday, 07th April 2022

11:00 - 12:30

Room: Baekeland





Agenda

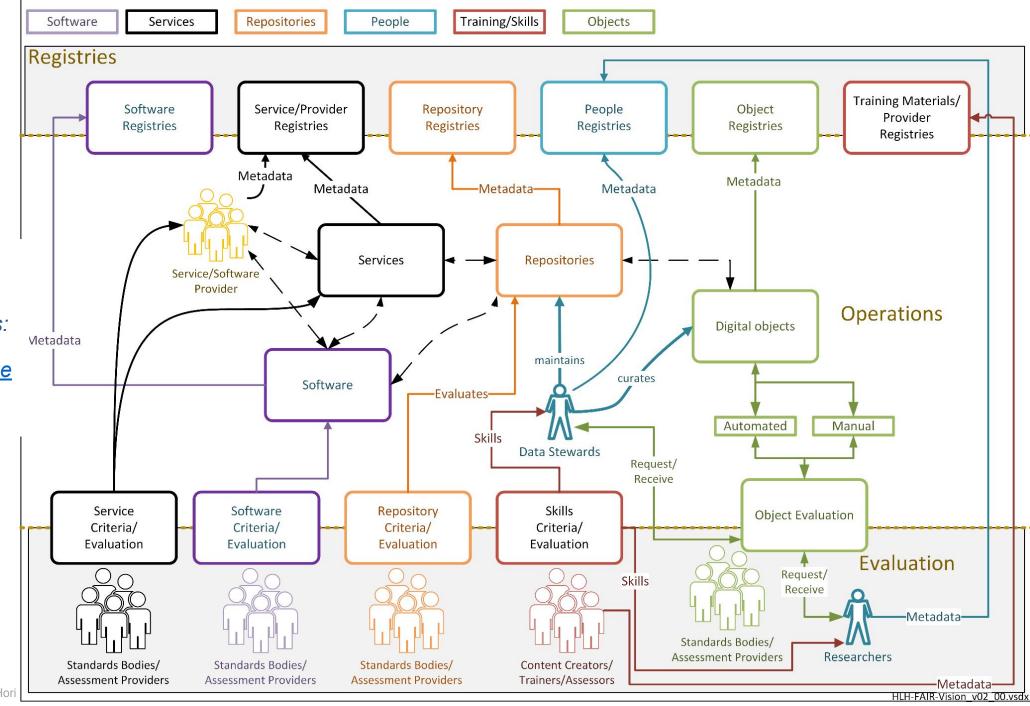
- Setting the scene Moderator [10 min]
- Presentations [15 minutes each]
 - SSHOC Trusted Respoitories user stories and certification issues for specific communities Henri Ala-Lahti (Tampere University, CESSDA)
 - Initiate to create SSH GDPR Code of Conduct and legal data protection issues
 Marianne Høgetveit Myhren (SIKT, NSD)
 - GESIS and UKDA Pilot on secure connection Deborah Wiltshire (GESIS)
 - Opening access to research data in the archaeology domain Holly Wright (University of York)
- Discussion [20 min]
 - questions from online chat, F2F room



Setting the scene

Source:

Hervé L'Hours, & Ilona von Stein. (2020). FAIR Ecosystem Components: Vision (02.00). Zenodo. https://doi.org/10.5281/zenodo.3734273



Final Conference

SSHOC Trusted Repositories user stories and certification issues for specific communities

Henri Ala-Lahti, Information Specialist, Finnish Social Science Data Archive

How to become a SSHOCingly trustworthy environment for SSH data 7.4.2022

Brussels, Belgium





SSHOC Task 8.2 Trust & Quality Assurance, Impact

Purpose: Bolstering and improving trust in and quality of the SSHOC repositories by supporting them and by exploring the trust landscape and providing feedback to certification bodies.

Team:

- CESSDA/FSD
- CESSDA/SND
- CESSDA/UKDS
- KNAW/DANS
- CLARIN ERIC
- CNR/E-RIHS
- DARIAH/PNSC























T8.2 Activities with user focus

- CoreTrustSeal certification support for repositories selected through an open call: 1-on-1 support, workshops, review of self-assessments
 - 14 supported repositories
 - Support process ran from autumn 2020 till spring 2022
- Survey for SSHOC organisations
 - 14 responses from various organisations providing data services
- Desk research on SSHOC repositories
 - 96 repositories from four SSHOC infrastructures (CESSDA, CLARIN, DARIAH and E-RIHS)



Supported repositories

- CLARIN-LV
- Corpus OVI dell'italiano antico
- Croatian Social Science Data Archive (CROSSDA)
- DAIS Digital Archive of the Serbian Academy of Sciences and Arts
- DARIAH-DE Repository
- Digital Library of University of Maribor
- Digital Repository of Scientific Institutes
- Historic Graves
- Lithuanian Data Archive for Social Sciences and Humanities (LiDA)
- mdw Repository
- NAKALA
- SB/CLARIN Repository (Språkbanken Text CLARIN Repository)
- Sciences Po, Center for Socio-Political Data (CDSP)
- Slovak Archive of Social Data (SASD)





Support outcomes (1/2)

- Out of the 8 repositories with CoreTrustSeal certification as their goal, 3 have submitted their application and 3 are close to submitting theirs
 - Out of the remaining two, one was not able to devote resources and the other was involved in support from another project
- Six repositories were mostly interested in working on the self-assessment without intention to apply during the project timeline



Support outcomes (2/2)

- First-time certification takes up some time and resources and often requires involvement of several repository experts
 - Can be especially challenging for smaller repositories
- Half of the repositories were interested in a wider network of existing and aspiring TDRs
 - Sustaining trust activities after SSHOC
- Repositories found the support process helpful in facilitating the self-assessment and recognising things to improve in their policies and procedures



User story: Tomasz Parkoła, Digital Repository of Scientific Institutes

- "Trustworthiness is one of the most important aspects of every digital repository"
- "We found the SSHOC Certification Support service very helpful when preparing the CoreTrustSeal application"
- "Without [support], the preparation process would have been much longer and required a lot more effort"



Results of survey and desk research (and Deliverable 8.3)

- Diversity of organisations providing data services
 - Organisations and repositories widely differ in terms of discipline, data types and designated community
 - Complex partnerships models and outsourcing can further complicate certification
- Challenges of finding a certification solution that works for all
- TDR certification clearly improves repository practices and provision of information to users
 - Infrastructure membership is closely connected to certification status



Conclusions and next steps

- CoreTrustSeal is a core-level certification standard that should not be narrowed down nor extended
 - Already comprises the bare minimum criteria for trustworthy repositories
- Sustainable management of trust goes beyond certification
 - Everyday interaction with users and stakeholders
 - SSH community cooperation and common goals
- Sustainability of trust efforts after SSHOC
 - Trust support provided by infrastructures
 - Plans for and interest in a network of TDRs



Further information

- Kleemola Mari; Tuomas J. Alaterä; Niko Koski; Henri Ala-Lahti; Birger Jerlehag; Hervé L'Hours; Franciska De Jong; Dieter Van Uytvanck; Tomasz Parkoła; Emiliano Degl'Innocenti; Roberta Giacomi; Maurizio Sanesi & René Van Horik (2020). SSHOC D8.2 Certification plan for SSHOC repositories (v1.0). Zenodo. https://doi.org/10.5281/zenodo.4558303
- Ala-Lahti, Henri; Benjamin Jacob Mathers; Hervé L'Hours; Mari Kleemola & Tuomas J. Alaterä (2022). Repositories and Beyond: Analysis of Survey for SSHOC Organisations (v1.0). Zenodo. https://doi.org/10.5281/zenodo.6325149
- Ala-Lahti, Henri; Benjamin Jacob Mathers; Hervé L'Hours; Mari Kleemola & Tuomas J. Alaterä (2022). Data Repositories and Certification in a Diverse Trust Landscape: Results of SSHOC T8.2 Desk Research (v1.0). Zenodo. https://doi.org/10.5281/zenodo.6334025
- Kleemola, Mari; Henri Ala-Lahti; Tuomas J. Alaterä; Hervé L'Hours; Benjamin Jacob Mathers; Daan Broeder; René Van Horik; Birger Jerlehag; Emiliano Degl'Innocenti; Maurizio Sanesi & Niko Koski (2022). SSHOC D8.3 Trustworthy Digital Repository status update and certification solutions for SSHOC repositories [Forthcoming].
- Tomasz Parkoła. (2021, December 16). How SSHOC Meets the Needs of Researchers A Conversation with Tomasz Parkoła. Zenodo. https://doi.org/10.5281/zenodo.5785651



Final Conference

Recommendations for a GDPR Code of Conduct for SSH

Marianne Høgetveit Myhren, Head of Section, Data Protection Services, Sikt (CESSDA)

How to become a SSHOCingly trustworthy environment for SSH data.





Overview

- What are GDPR Codes of Conduct?
- Topics and scope
- Challenges
- Approval process
- Benefits
- Necessary next steps
- Recommendations



Task 8.3: Legal and ethical issues

Lead: CESSDA/Sikt, Partners: CLARIN ERIC, DARIAH ERIC, SHARE ERIC, ESSERIC, CNR

"Aim is to contribute to a legal and ethical framework for SSH research that handle uncertainties and contribute to consistent and sustainable data-sharing rules across countries, legal systems and cultures to support the realisation of the EOSC"

D.8.5 Recommendations for a GDPR Code of Conduct for SSH



What are GDPR Codes of Conduct?

- Voluntary accountability tool
- Sector specific
- Rule book for compliance
- Must be approved by a Supervisory Authority
- Needs to be monitored





Suggesting an SSH Code of Conduct

- Broad or narrow scope?
 - Material
 - Territorial
- What can a SHH Code of Conduct regulate?
 - Is creating a Code of Conduct for lawful bases for processing personal data for research purposes a place to start?





Approval of a Code of Conduct

- Determine material and territorial scope
- Determine which organization(s) have the mandate to draft the Code
- Gather explanatory statement and supporting documents
- Determine which Supervisory Authority to assess and approve the Code
- Identify a Monitoring Body for the Code
- Consult with stakeholders
- Ensure that the Code is compliant with national legislation
- Determine language of the Code



Challenges of an SSH GDPR Code of Conduct

- Define material and territorial scope
- Consultation with relevant stakeholders
- Few existing codes
- Choice of Supervisory Authority
- Choice of Monitoring Body
- Engagement from the SSH sector



Benefits of an SSH GDPR Code of Conduct

- Facilitate easier and harmonized application of the GDPR within the SSH sector
- Improve conditions for SSH research across Europe
- Make it easier for the SSH community to operate in compliance with the GDPR
- Demonstrate sufficient guarantees
- Reduce administrative burden of demonstrating compliance
- Reduce risk of sanctions



Necessary next steps:

- Consult the sector to identify and document its specific needs
- Find and agree on an organisation or a body that can represent the SSH Environment
- Determine the scope of an SSH GDPR Code of Conduct
- Identify and designate a Monitoring body
- Determine mechanisms to ensure transparency and monitor compliance
- Determine a Supervisory authority
- Ensure compliance with national legislation
- Meet the language requirements for a draft Code



Recommendations

It is recommended that the work of establishing an SSH GDPR Code of Conduct is continued, for the benefit of the EOSC, the European research environment, data sharing and society at large.





Final Conference

Building secure data access infrastructure, building resources and networks

Deborah Wiltshire, Head of the Secure Data Center, GESIS Leibniz Institute for the Social Sciences

Advancing SSH Research with SSHOCingly good and sustainable resources
7th April 2022
Brussels





Task 5.4 Innovations in Data Access

Remote Access to Sensitive Data: Key Objectives

- Providing guidance and recommendations for future infrastructure, new & existing secure data access services
- Building secure data access infrastructure,
- Building resources and networks

Deliverables & milestones

120+ expert reports delivered in 40 months, to realise the Social Sciences and Humanities Open Cloud.



D6.8 Report on training materials



D6.3 Final report on the outcome of the awareness raising workshops



D4.17 New version of the Aïoli platform





Key Deliverables: Part 1

- M28 Assessment of existing (Remote Desktop) platforms
 - Looked at 13 established platforms
 - Assessed legal, organisational & technical aspects
- D5.10 White Paper "Remote Access to Sensitive Data in the Social Sciences and Humanities: 2021 and Beyond"
 - Provides guidance & recommendations for future infrastructure investment



Key Deliverables: Part 2

- D5.9 Framework and contract for international data use agreements on remote access to confidential data
- D5.11 European Remote Access Pilot
 - 1 secure remote connection set up
 - FORS Case Study
- M29 Tested connections between partners with live data and researcher projects











The FORS case study

After an internal needs assessment and interviews with staff from strategic, archival, legal, and technical perspectives, FORS conceived and implemented a secure room for sensitive data during the course of the SSHOC project.

The entire process was documented and described in a "case study", annex to the white paper deliverable. It is hoped that this will serve as a model for institutions thinking about moving towards a remote access solution.



Key Deliverables: Part 3

- D5.20 Training materials of workshop for secure data facility professionals
 - Canonical materials available online
 - Workshop held in Sept 2021
 - Brought together access professionals from across Europe & US
- D5.12 International Secure Data Facility
 Professionals Network (<u>isdfpn@ukdataservice.ac.uk</u>)
 - First meeting held 30 March 2022, next meeting 7 September 2022
 - Initially: 22 members
 - Carried forward after April 2022 in joint collaboration between UKDS and GESIS

SSHOC Workshop: Providing canonical training materials for secure data facility professionals

Home / Events / SSHOC Workshop: Providing canonical training materials for secure data facility professionals



Date: 21 September 2021 - 14:30 to 16:30 Location: Online

Training researchers who want to access confidential, legally controlled data in data protection and statistical disclosure is a key part of ensuring the safe use of these data and an important task for secure data facility professionals. But developing suitable training materials can be resource intensive.

We have developed a set of canonical training materials that cover a wide range of relevant topics from understanding data access, the Five Safes framework to key statistical disclosure control principles. These materials are designed to be used by a wide range of safe data access facilities to form the basis of their researcher training programme. We have designed these materials so that individual facilities can adapt the content to suit the needs of their service and researchers with minimal additional resource requirements.

During this virtual workshop we will discuss the format and development of the training materials and how we believe they could be adapted before presenting the materials themselves. These training materials are still development, so we are keen to get feedback to enable us to further develop and improve them. Therefore, the workshop will close with a discussion session to allow attendees a chance to discuss the materials in small groups, and to allow presenters to gather valuable feedback.

This workshop will be particularly relevant to secure data facility professionals who currently deliver or who are considering delivering such training, or who have an interest in secure data access or statistical disclosure.

News

SSHOC Workshop Notes: Data Citation in Practice

The findability of data and other resources is crucially dependent on good...

Implementing EOSC together: read the report of the EOSC Symposium 2021
The EOSC Symposium 2021 provided a key engagement opportunity for the EOSC...

SSHOC Webinar Notes: SSHOC'ing drama in the cloud: the added value of SSHOC/CLARIN services

Social science and humanities research infrastructures provide a variety of...

SSHOC Workshop: Exploration of Society
Through the Lens of Labour Market Related
Documentation – CBAQuest - Post Event

The world of work is changing rapidly. These changes present new opportunities...

Onboarding Citizen Science and the role of research libraries: barriers and accelerators - Post Event Report

The workshop Onboarding Citizen Science and the role of research libraries....



Going forward....

Key outcomes that will continue to develop:

- White Paper and training materials
 - Continues to guide secure data services, both old and new
 - Training materials selected to form the basis of training at GESIS & Bundesbank (so far)
- Remote connection between the Safe Rooms at GESIS and UKDS
 - Ready to welcome researchers as soon as COVID allows!!
 - Wide range of data available
- International Secure Data Access Professionals Network
 - Continued/run in joint collaboration between UKDS and GESIS
 - 2-3 online meetings a year aiming at knowledge exchange, provision of support/resources, and to spark collaborations



Opening access to research data in the archaeology domain

Archaeology as a case study for FAIR

Holly Wright, Archaeology Data Service, University of York, UK

SSHOC Final Event
7 April 2022
Brussels, Belgium





D5.15 Report on opening access to research data in the Archaeology domain

Task 5.6: Examination of the issues and challenges faced in providing FAIR access to archaeological data, and review of the solutions adopted across Europe

Approach

- Archaeological data is extremely diverse, and therefore a useful case study to extrapolate best practice analysis across many Social Sciences and Humanities domains.
- As the leading domain-specific archive for archaeological data, the Archaeology Data Service (ADS) was an ideal test case to undertake an in-depth exploration for SSHOC.



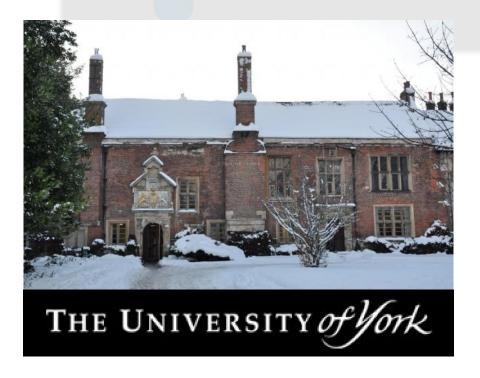
Intro to the Archaeology Data Service

Domain Specific Digital Archive Set up in 1996 Based at the University of York

Mission: Support research, learning and teaching with free, high quality and dependable digital resources

- Digital preservation
- Free online access to data
- Guidance and support for data creators
- Research





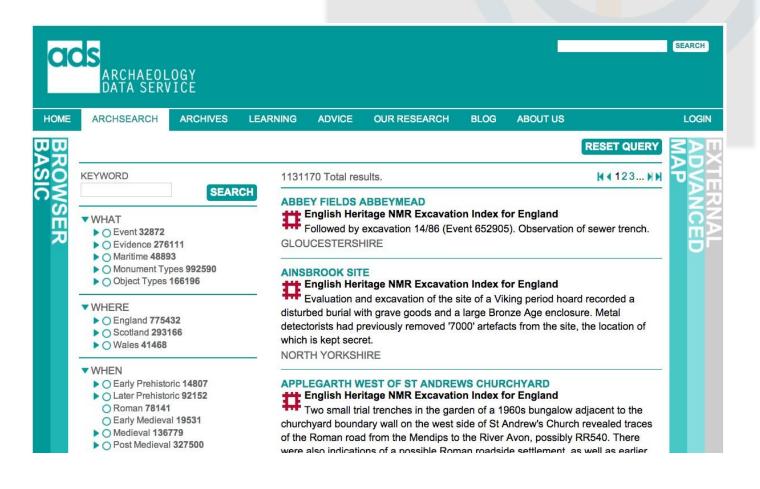




Intro to the Archaeology Data Service

What do we hold?

- ArchSearch: Online catalogue indexing over 1.3 million metadata records including ADS collections
 - 1000+ Project Archives
 - 62,000+ Grey Lit Reports
- Metadata aggregated from over 30 UK national and regional historic environment inventories.



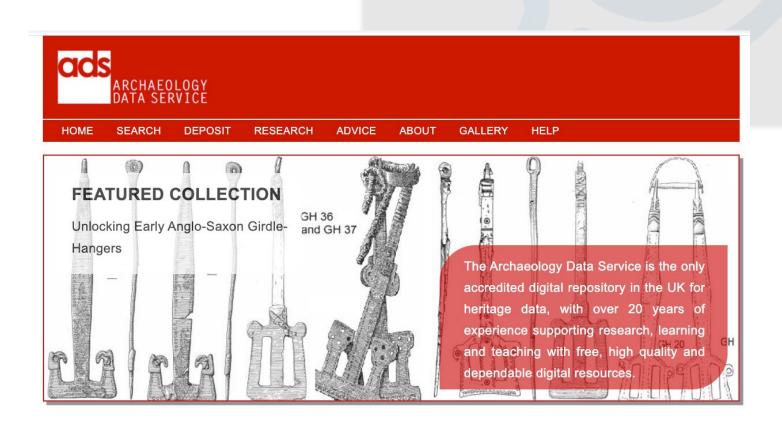




Intro to the Archaeology Data Service

What do we disseminate?

- Disseminate data we hold
- Provide integrated resource discovery across data we aggregate
- Also disseminate to other aggregators
 - OAI-PMH
 - Linked Data
 - Via Export









Intro to the Archaeology Data Service







Intro to the Archaeology Data Service

How is archaeological data different to other SSH data?

- Archaeological research is often non-repeatable (e.g. excavation destroys the archaeological site) so the data becomes primary data.
- Digital data is also fragile and requires long-term stewardship.
 - This is why people who work with archaeological data are obsessed with preservation and data persistence.
- Archaeological data is typically very heterogeneous and difficult.
- Archaeologists will use any kind of research tool or methodology if it helps to answer their research questions, so they are digital early adopters of a huge range of data types, including scientific data (so not only a good SSH case study).

D5.15 Report on opening access to research data in the Archaeology domain

Task 5.6: Examination of the issues and challenges faced in providing FAIR access to archaeological data, and review of the solutions adopted across Europe

Implementation

- Overview of the FAIR landscape, including larger European and international alignments such as EOSC.
- Assessment of the current FAIRness of ADS.
- An automated assessment using the F-UJI tool developed by the FAIRsFAIR project.
- Discussion of how workflows may be developed to address FAIR data quality within a CoreTrustSeal accredited repository.

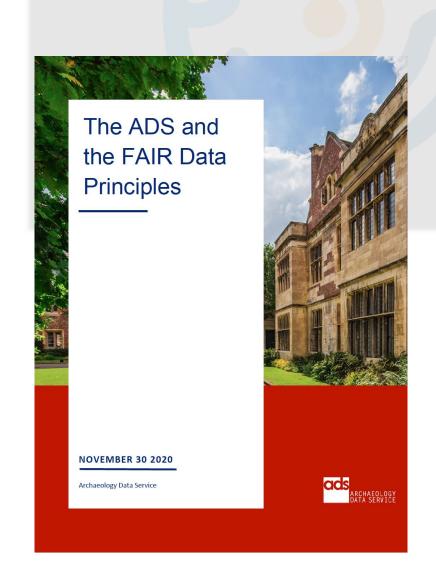


Archaeology Data Service FAIR Audit

Led by Digital Archivist Ray Moore, who undertook our Core Trust Seal accreditation process, with input from all staff

Determined we should do an audit that would result in internally and externally-facing reports

- Internal report for ADS staff to inform our strategic planning process using the RDA FAIR Data Maturity Model tool, so that our progress can be measured over time
- External report for users/depositors to show how data deposited with ADS is made more FAIR





Archaeology Data Service FAIR Audit

External audit was meant to provide transparency for users and depositors

- Most archaeologists are not familiar with the FAIR Principles
- Helps depositors understand the value of FAIR data and convey it in funding applications and as impact indicators
- Helps to promote best practice, both for data creators and data users
- Will continue to be updated as ADS works to make its data more FAIR

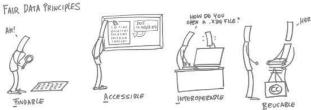


The ADS and the FAIR Data Principles

The ADS is an advocate for FAIR and the FAIR principles for data stewardship. As such the ADS recognise that while preservation and dissemination of data remain of core importance, stewardship should also include demonstratable quantitative and qualitative evidence for data reuse. The ADS is actively investigating how the datasets it curates can be fully compliant with the FAIR principles and is working within SSHOC, ARIADNEplus and E-RIHS to promote this.

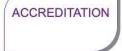
As a result when you deposit your datasets with the ADS, you can be confident that your data becomes FAIR data.

What is FAIR Data?



(after Bezjak et al. 2018.)









https://archaeologydataservice.ac.uk/about/adsFAIR.xhtml



"In 2016, the 'FAIR Guiding Principles for scientific data management and stewardship' were published in Scientific Data. The authors intended to provide guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets. The principles emphasise machine-actionability (i.e., the capacity of computational systems to find, access, interoperate, and reuse data with none or minimal human intervention) because humans increasingly rely on computational support to deal with data as a result of the increase in volume, complexity, and creation speed of data."

GOFAIR: https://www.go-fair.org/fair-principles/



Collaboration with FAIRsFAIR and testing the F-UJI Tool

| Pilot Repository | Certification | Subject Areas | Repository Representatives |
|--------------------------------|-------------------------------------|---------------------------------|---|
| | CoreTrustSeal WDS Regular Member | Earth and Environmental Science | Uwe Schindler Michael Diepenbroek |
| PHAIDRA DIGITAL COLLECTIONS | CoreTrustSeal | Cultural Heritage | Yuri Carrer Cristiana Bettella GianLuca Drago Giulio Turetta |
| CSIRO | CoreTrustSeal | Multiple disciplines | Mikaela Lawrence Dominic Hogan Cynthia Love |
| C CLIMATE | CoreTrustSeal WDS Regular Member | Earth System Science | Andrej Fast Amandine Kaiser Hannes Thiemann |
| 8 DataverseNO | CoreTrustSeal | Multiple disciplines | Philipp Conzett (Uit/DataverseNO) Gustavo Durand (Harvard/Dataverse) Julian Gautier (Harvard/Dataverse) |
| Data verse <i>NL</i> | ψ. | Multiple disciplines | Laura Huis in 't Veld Marion Wittenberg Paul Boon |



F-UJI is a service based on REST, piloting a programmatic assessment of the FAIRness of research datasets







A1.1 The protocol is open, free, and universally implementable

External Qualitative Assessment

- The ADS uses the HTTPS protocol for the sharing of resources and transfer of datasets. This is widely supported, open, and freely available.
- The repository utilises open and free file-sharing services where files or datasets are too large for easy exchange using HTTPS. Typically the ADS utilises the open and free University of York DropOff Service to share data when this is necessary.

Internal Qualitative Recommendation

Recommendation A1.1: A clear policy of sharing large files and datasets using more open services.

F-UJI Automated Assessment

| Result | Comments | Next Step |
|---------------------|----------|-----------|
| Score: 1.0-1.0 of 1 | ОК | |
| | | |



12. (Meta)data use vocabularies that follow FAIR principles

External Qualitative Assessment

The ADS uses a variety of sustainable, open vocabularies to qualitatively classify and identify resources and datasets, including:

- Heritage Data vocabularies, including those provided by the Forum on Information Standards in Heritage (FISH), Historic England (HE), Historic Environment Scotland (HES), and the Royal Commission on Ancient & Historical Monuments of Wales (RCAHMW)
- Library of Congress Subject Headings (LCSH)
- Marine Environmental Data and Information Network (MEDIN)
- Getty Thesaurus of Geographic Names (TGN)
- The ADS also utilises recognised technical vocabularies to denote and categorise preservation activities
- PREservation Metadata: Implementation Strategies (PREMIS)
- Getty metadata types



12. (Meta)data use vocabularies that follow FAIR principles

Internal Qualitative Recommendation

- Recommendation I2.1: An investigation of FAIRness of vocabularies used by the ADS. Where there are issues, raise awareness of FAIR with creators/communities, and ideally to leverage increased FAIRness.
- Recommendation I2.2: Consider a more wholesale and consistent implementation of these thesauri at an object level.
- Recommendation 12.3: Request clearer documentation from depositors where data makes use of controlled vocabularies (for example, in a database). Currently, this is not directly requested, but would mean we could highlight FAIRness of data. Active encouragement of use of controlled vocabularies within Guides to Good Practice/Guidelines for Depositors.



12. (Meta)data use vocabularies that follow FAIR principles

F-UJI Automated Assessment

| Result | Comments | Next Step |
|---------------------|--|---|
| Score: 0.0-0.0 of 1 | Whereas the service seems to use controlled vocabularies such as http://purl.org/heritagedata it seems not be used in the metadata detected by F-UJI. | Rec.: Use vocabularies in schema.org as discussed here: https://github.com/ESIPFed/science-on-schema.org/is sues/27 |

| debug message | count |
|--|-------|
| NO vocabulary namespace match is found | 500 |
| Vocabulary namespace (s) specified but no match is found in LOD reference list | 500 |



12. (Meta)data use vocabularies that follow FAIR principles

Discussion

- ADS makes extensive use of a number of controlled vocabularies within its metadata, but could take a more critical approach to the vocabularies themselves in terms of FAIRness.
- UK Heritage thesauri certainly meets most of the requirements for FAIR, but other vocabularies, and linkages to other persistent identifiers could be considered.



D5.15 Report on opening access to research data in the Archaeology domain

Task 5.6: Examination of the issues and challenges faced in providing FAIR access to archaeological data, and review of the solutions adopted across Europe

Review

- During SSHOC, ADS was actively involved as Deputy Coordinator of ARIADNEplus and Chair of the SEADDA COST Action.
- These relationships were used to contextualise the archaeology case study by synthesising recent, proximal work undertaken in collaboration with ADS that is highly relevant:
 - Comprehensive international survey of repository practices (holding archaeological data) undertaken by Geser (2021) for ARIADNEplus
 - Special issue authored by SEADDA Working Group 1: Stewardship of Archaeological Data, and its survey on Digital Archiving in Archaeology: The State of the Art (Richards et al. 2021)



D5.15 Report on opening access to research data in the Archaeology domain

Task 5.6: Examination of the issues and challenges faced in providing FAIR access to archaeological data, and review of the solutions adopted across Europe

Conclusion

Undertaking this research was very useful to better understand how, *in practice*, FAIRness can be:

Implemented
Assessed
Communicated
Improved

for archaeological data, and therefore SSH data (and beyond).



Discussion

[Questions from chat & F2F audience]

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Mari Kleemola Tampere University CESSDA



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Holly Wright University of York



Marianne Høgetveit Myhren SIKT / NSD





SSHOC'n Tell Challenge

Try our tools in fun challenges!

Join us online on the mornings of 6 & 7 April

Your chance to win SSHOC gifts and vouchers of up to €1000 for the best user stories





Thank you for your attention!

Join our community



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info@sshopencloud.eu



/in/sshopencloud



