# Lessons from science cluster project



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#### Type of action & funding:

Research and Innovation action

(INFRAEOSC-04-2018)



#### Objectives:

- creating the social sciences and humanities (SSH) part of European Open Science Cloud (EOSC)
- maximising reuse through Open Science and FAIR principles (standards, common catalogue, access control, semantic techniques, training)
- interconnecting existing and new infrastructures (clustered cloud infrastructure)
- · establishing appropriate governance model for SSH-EOSC



# SSHOpenCluster: Interconnecting existing and new open science social Sciences & Humanities Resources research infrastructures





















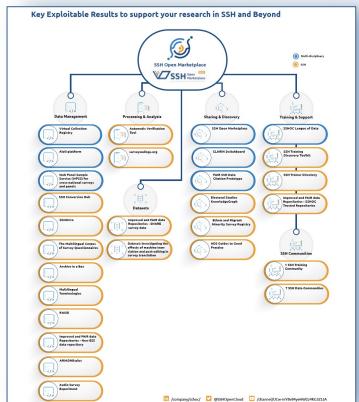


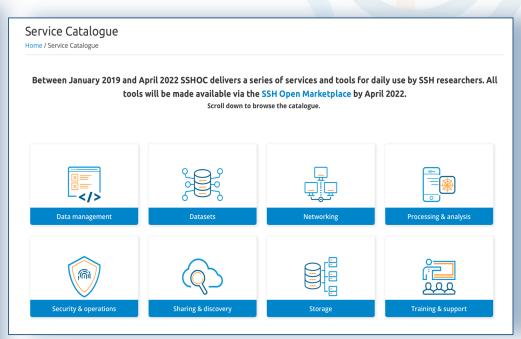
• WageIndicator.org





# Creating the social sciences and humanities (SSH) part of European Open Science Cloud (EOSC)







# SSH-specific challenges and opportunities taken up by SSHOC and the SSH Open Cluster

- SSH's relevance for supporting the implementation of public policies
  - Responses to COVID-19
  - Wide coverage of UN Sustainable Development Goals
  - Science projects in H2020 project EOSC Future
- Interoperability as instrument to capture social and cultural dynamics
  - Diversity of data types, workflows and scholarly cultures
  - Multilinguality, multimodality, terminology, data sensitivity, ...
  - Multidisciplinarity within the cluster
- Longitudinal value of SSH data





# Characteristics of SSH repository landscape

- Distributed service provision
  - Depositing services
  - Discovery platforms based on harvested metadata
- Mature model of service federation and FAIRness of resources
  - Interoperability of metadata for data and tools
  - Identity federation options
  - Federated Content Search
- > 400 SSH institutional nodes
- > 50 CTS certified repositories



## **Characteristics of CLARIN centre network**

## **Centre certification**

- CLARIN assessment committee
- 25 certified centres (CTS, plus CLARIN-specific requirements)
- many more centres with partial compliance

## **Metadata standards**

- CMDI + a range of conversion workflows
- >100 profiles, > 1000 components and around 2000 concepts
- catalogue of harvested metadata:
   Virtual Language Observatory: <a href="https://vlo.clarin.eu">https://vlo.clarin.eu</a>
- CMDI best practice guide: <u>link</u>

## Principles behind creation of CLARIN centre network

- Compatibility at protocol and format level
- Acknowledging the unique situation of each centre (history, organization, technology, etc.)
- Focus on the strengths that a centre can contribute
- Offer for reuse of existing solutions, but no obligation to use specific software stacks
- Combination of do-it-yourself and reuse encouraged.

## 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























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## T8.2 Upskilling and CTS certification support

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

#### Focus

- CoreTrusSeal certification aimed for by 8 out of 14 repositories
- Six repositories were mostly interested in working on the self-assessment without immediate intention to apply for CTS



## T8.2 Lessons learnt

First-time certification takes up some time and resources and often requires involvement of several repository experts.

Can be especially challenging for smaller repositories

Repositories found the support process helpful for facilitating the self-assessment and identification of things to improve.

Sustainable management of trust goes beyond certification.

- Everyday interaction with users and stakeholders needed
- Diversity of organisations providing data services.
- Repositories widely differ in terms of discipline, data types and designated community
- Complex partnerships models and outsourcing can further complicate certification

## **T8.2 Documentation**

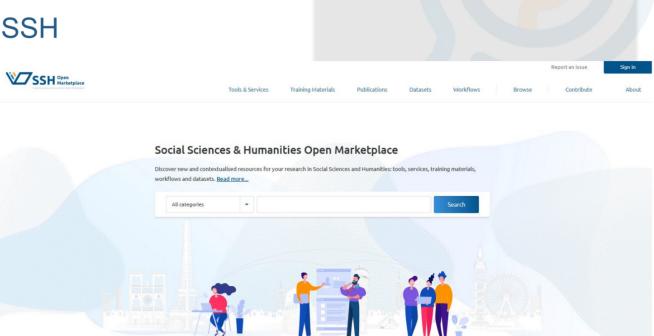
- Kleemola Mari; Tuomas J. Alaterä; Niko Koski; Henri Ala-Lahti; Birger Jerlehag; Hervé L'Hours; Franciska de Jong; Dieter Van Uytvanck; Tomasz Parkoła; Emiliano Degl'Innocenti; Roberta Giacomi; Maurizio Sanesi & René Van Horik (2020). SSHOC D8.2 Certification plan for SSHOC repositories (v1.0). Zenodo. <a href="https://doi.org/10.5281/zenodo.4558303">https://doi.org/10.5281/zenodo.4558303</a>
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# **SSH Open Marketplace**

Discovery portal for SSH resources

- Tools & services
- Training materials
- Workflows
- Datasets
- Publications
- 3 guiding principles
  - Contextualisation
  - Curation
  - Community



An SSH entry point to EOSC

marketplace.sshopencloud.eu



# Marketplace population

- Trusted sources
  - Mass ingestion 10+ sources
- Extraction of relations
  - Extracting tools from publications
- Prioritisation of curation tasks
  - Automatising as much as we can
  - Fine-tuning with manual curation
- Manual additions & enrichment
  - User-friendly interface
  - Datathons & hands-on session
  - Incentives & rewards

7011	
Tools & Services	1699
Training Materials	318
Publications	2952
Datasets	309
Workflows	27









**SSH Training Discovery Toolkit** 







# **Marketplace Maintenance and Governance**

## Agreement between CESSDA, CLARIN, DARIAH

- initial duration: 1,5 years
- in-kind and cash contribution

#### **Curation team**

- Representatives from the three RIs
- Call for volunteers



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