

Sharing, collaborating, and co-operating: the approach of DANS on the journey towards to the European Open Science Cloud

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## **DANS**

Mission: Promote and provide permanent access to digital research resources

First predecessor dates back to 1964 (Steinmetz Foundation), Historical Data Archive 1989



Institute of Dutch Academy and Research Funding Organisation (KNAW & NWO) since 2005







# DANS Expertise

We share expertise and collaborate with partners globally to promote Open Science and the FAIR Principles.

Our Research & Innovation Group publishes **peer-reviewed journal articles**; and we produce white papers, training materials, tools, and online resources related to topics from **Research Data Management (RDM)** to **Scientometrics**, **Digital Humanities** and **Knowledge Organization Systems (KOS)**.

We deliver Face-to-Face and online training on RDM and FAIR (including **Train-the-Trainer**) as well as collaborating to provide **educational programs and training events** such as bootcamps, and summer schools with partners like EUDAT, OpenAIRE, CODATA and Research Data Alliance (RDA). We also host workshops and conferences on topics such as **Research Classification** and **Software Sustainability** among other topics.

As a founding member of the **CoreTrustSeal** we have a trusted reputation. We review **Data Management Plans (DMPs)** for the European Commission/H2020, as well as now and again serving as the host institution for a range of **community-driven initiatives**. Right now we are the home for the RDA NL National Node.



# DANS is about keeping data FAIR

- Co-authors of the original publication on the FAIR principles
- Co-developed & tested the FAIR Metrics
- Developed Guidelines for FAIR Data Management; tools to rate the FAIRness of datasets; and a FAIR checklist for researchers
- Evaluated how our own data archives score on FAIRness



- Compared the principles to the requirements of the Data Seal of Approval and the CoreTrustSeal
- Explored the applicability of the FAIR principles to Software Sustainability
- We lead the INFRAEOSC 5(c) Horizon 2020 FAIRsFAIR project



### Core Services

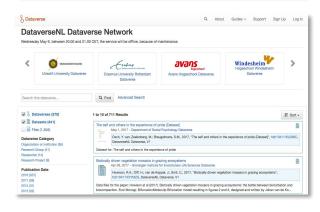
#### **NARCIS**

Gateway to scholarly information in the Netherlands



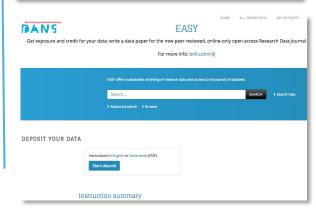
#### **DataverseNL**

For short & mid-term data storage



#### **EASY**

Certified long-term Electronic Archiving System for self-deposit



Training & Consultancy

Supporting the development of policies, practices and skills in data management; and the certification of repositories





#### **Additional Services**

Research Data Journal for the Humanities and Social Sciences

(Data Publications & Publication Packages)





Data Vault for Repositories (and Mirroring)











Getting there...
Software Sustainability

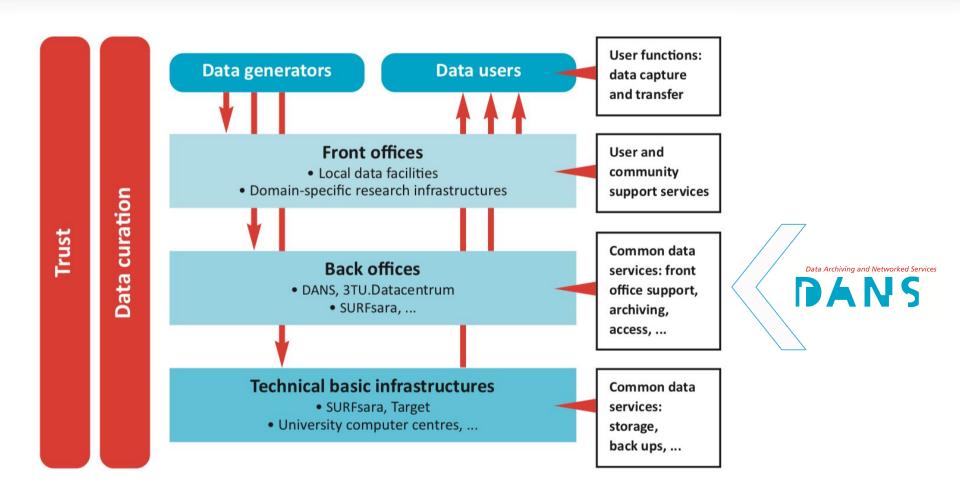






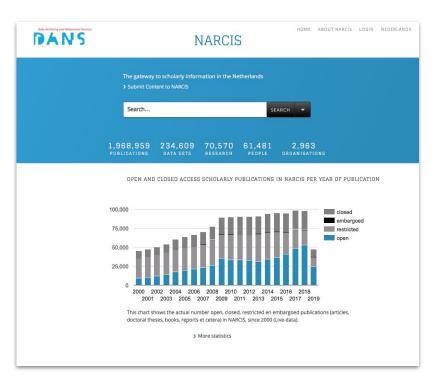


## The FO-BO Model





### NARCIS (Collects CRIS information)



### >70,500 research projects; >12,000 current

Research by financier/by institution

#### >61,000 researchers

- 18,000 experts + expertise
- 9,200 professors and associate professors
- Gender division (not public)
- Working addresses
- Classified (NARCIS classification)

#### >2,900 research institutions

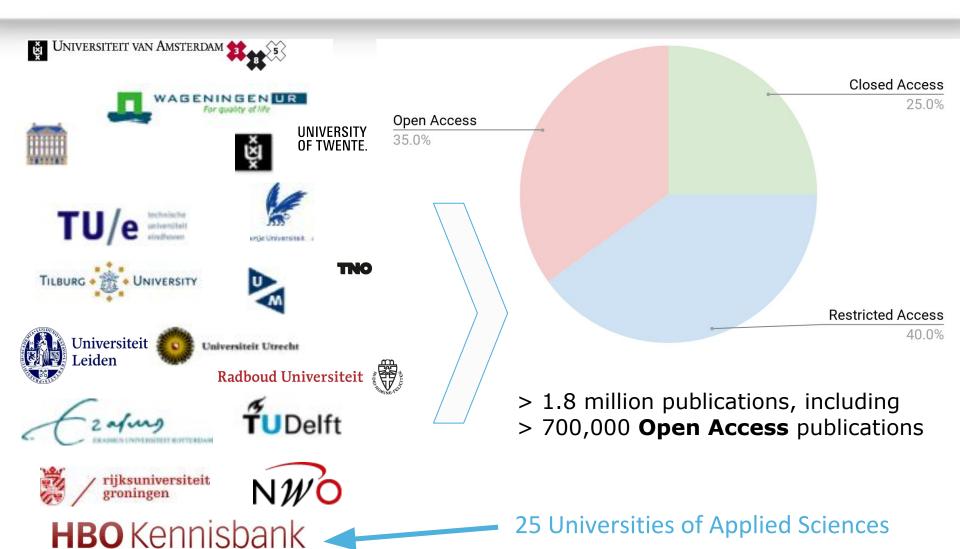
- For example: universities with underlying departments
- Classified (NARCIS classification)



In CERIF based database - euroCRIS



### Harvesting 31 (+25) institutional repositories





### Sharing Metadata to Intl. portals







OCLC

- > Bolas, Dé leeromgeving voor informatievaardigheden
- > C-Content

> ANDS

- > CORE (COnnecting REpositories)
- > DART-Europe E-theses Portal
- > EBSCO
- > EUDAT / B2FIND
- > Ex Libris Group (PRIMO)
- > Google Scholar
- > HU Berlin, Institut für Bibliotheks- und Informationswissenschaft
- > ISIDORE
- > Microsoft Academic Search
- > OCLC
- > OpenAIRE
- > ProQuest LLC (SUMMON)
- > TDNet
- > WorldWideScience.org
- > ZPID Leibniz-Zentrum für Psychologische Information und Dokumentation (PUBPSYCHE)

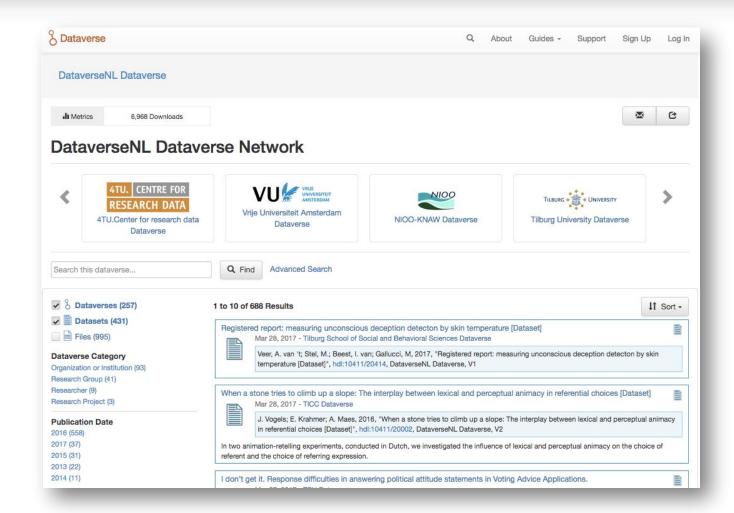








### DataverseNL (Storing data and sharing data during the research)



### DataverseNL is a collaboration platform



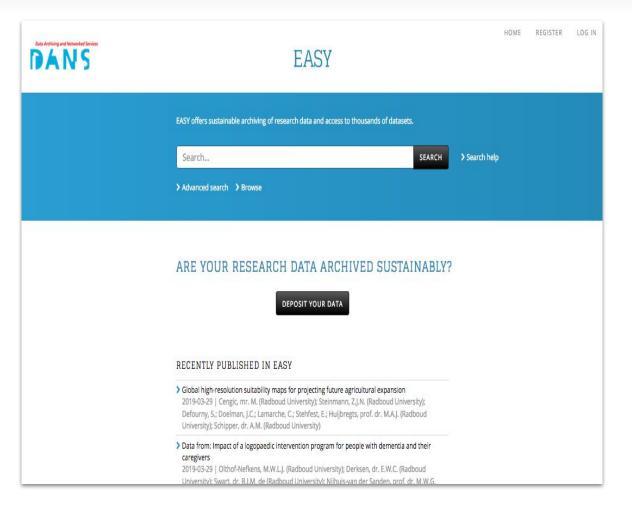
Collaboration of institutional data services with DANS:

- 4TU, VU, Tilburg, Utrecht Uuniversity, Maastricht, Groningen, Leiden, (EUR)
- NIOO-KNAW, PThU, Hogeschool Utrecht
- Several more are following (Rijksmuseum, Trimbosch)

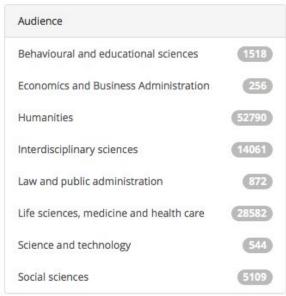
It is also possible to create your own "Research Infrastructure Dataverse" by becoming a member of DataverseNL.



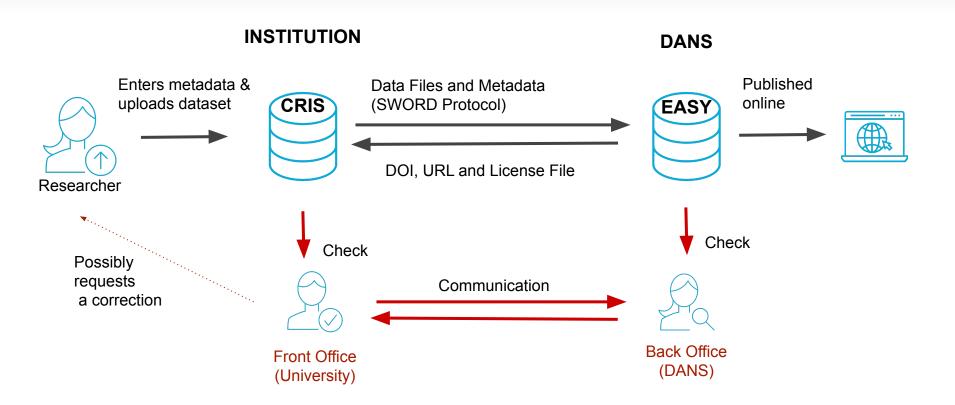
### **EASY** (Storing data and sharing data after the research)



# 103,732 datasets published



### **EASY** (The FO-BO Model in practice)



#### Open if possible, Protected if necessary

Data sharing is according to your wishes and institutional policy



# Collaborating at National level















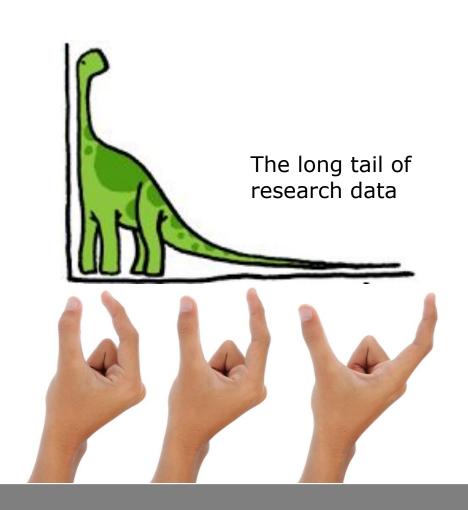


research data netherlands

# Promoting Data Diversity



Characteristics for the Humanities Each "V" poses another set of methodological and technical challenges



# Championing SSH



Consortium of European Social Sciences Data Archives



Digital Research Infra for the Arts and Hu



#### **PARTHENOS**

Pooling Activities, Resources and Tools for Heritage E-research Networking, Optimization and Synergies



# Implementing the EOSC











#### EUROPEAN OPEN SCIENCE CLOUD







### FAIRsFAIR in a nutshell



Data Archiving and Networked Services

Call: H2020-INFRAEOSC-5c

Budget: 10 million euro

Length: 36 months

Starting date: March 1 2019

22 partners from 8 MS

6 core partners





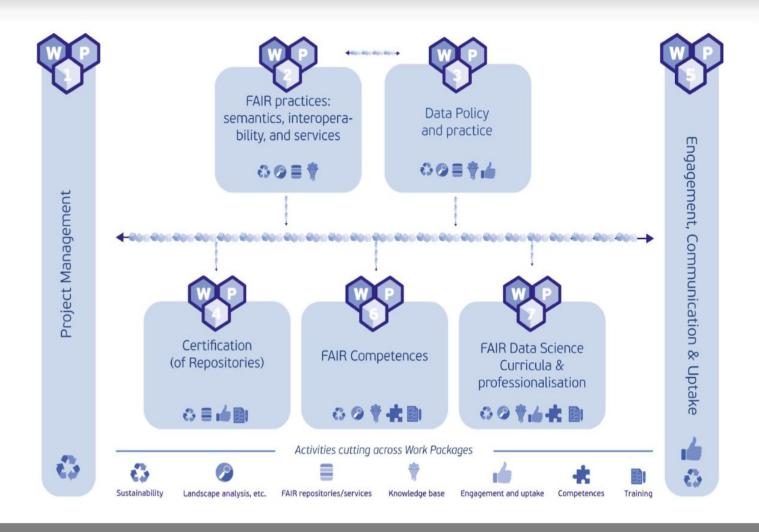






# FAIRsFAIR Work Packages





# **EOSC Synergy**



## Related to FAIR and in collaboration with the other INFRAEOSC (a, b, c) projects, it aims to:

- Increase uptake of the FAIR Principles among the scientific disciplines involved in the project (and make sure that solutions account for data diversity)
- Develop a technical understanding of how FAIR will be implemented in the EOSC (A FAIR baseline & requirements)
- Add FAIR-compliant data repositories to the EOSC Portal
- Motivate service providers to implement FAIR principles and provide examples showing how they can FAIRify their services
- Provide tools to assess the level of FAIRness of EOSC data repositories
- Provide the technical framework to support FAIR practices in the EOSC at the level of implementation, validation and monitoring.





**Any questions?** 

We Love to Share Data

We value Trust



We are Idea Generators



We are Collaborators



We are sociotechnical Problem Solvers

Thanks to colleagues at

DANS for their

slides used for this presentation

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