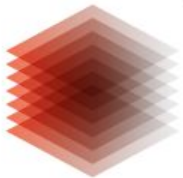
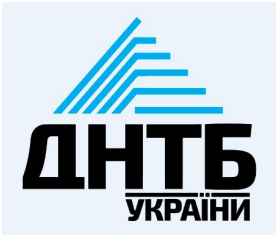
FAIRIO

FAIR Research Information in Open Infrastructure

Towards FAIR research information - insights from expert workshops



TIB LEIBNIZ INFORMATION CENTRE FOR SCIENCE AND TECHNOLOGY UNIVERSITY LIBRARY



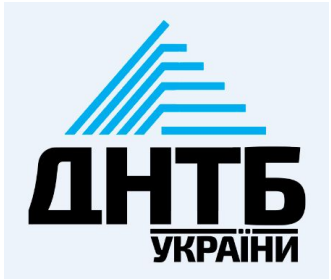
Christian Hauschke
Franziska Altemeier

Serhii Nazarovets
Nataliia Kaliuzhna

Agenda

- About FAIRIO Project
- Participants of four virtual FAIRIO workshops
- FAIR Data Principles
- Key findings
- General conclusion/outlook/future perspectives
- Questions

FAIRO - the project



- Serhii Nazarovets
- Nataliia Kaliuzhna

- Christian Hauschke
- Franziska Altemeier

Expectations ...

- SSTL visits Hannover
  - to discuss FAIR research information
  - to get to know VIVO

- TIB visits Kyiv
  - to learn about Ukrainian Open Citation Index
  - to work on scientometric projects

… and reality.

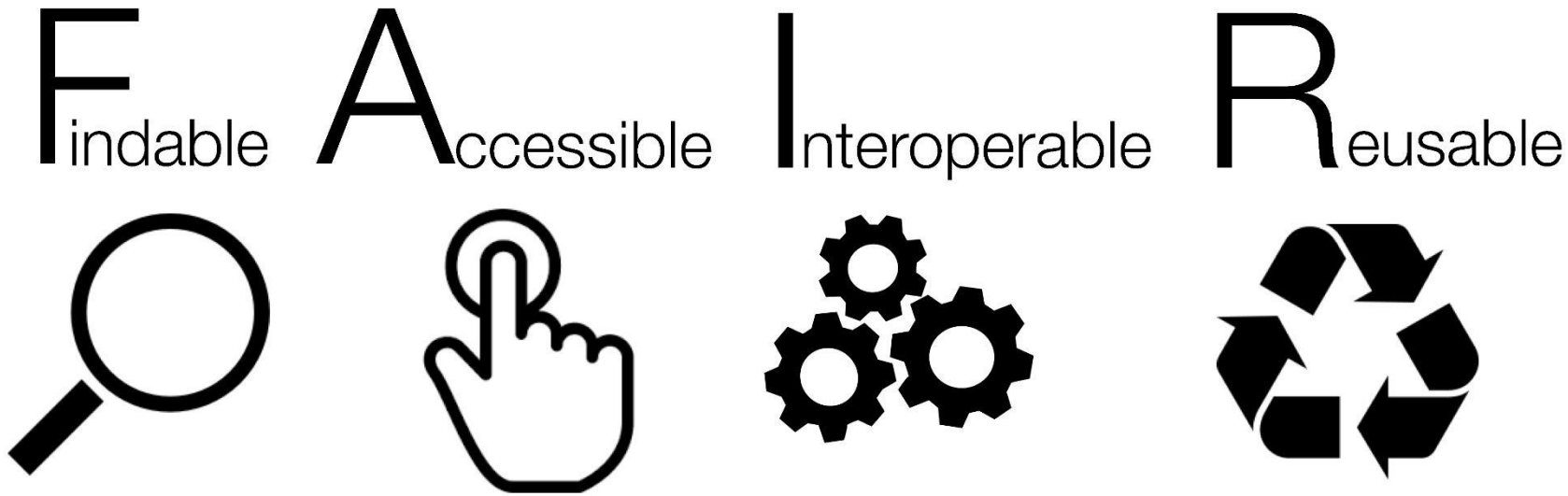
Four virtual workshops on FAIR Research Information

- How can each FAIR principle be defined?
- What are the criteria/requirements for implementing the individual FAIR principles?
- Who are the stakeholders?
- What might be barriers?
- What are the elements that need to be agreed, standardized and implemented by research communities to support FAIR research information?
- What services, tools that currently exist in the research ecosystem are capable of providing FAIR research information?
- What are the best-practices studies for supporting FAIR research information?

Participants

- **Pablo de Castro** (University of Strathclyde, EuroCRIS)
- **Andrea Bollini** (4Science)
- **Ludo Waltmann** (Leiden University)
- **Bianca Kramer** (Utrecht University Library)
- **Violeta Ilik** (Adelphi University)
- **Michael Conlon** (University of Florida, VIVO)
- **Jochen Schirrwagen** (EuroCRIS, Bielefeld University)
- **Susanna Mornati** (4Science)
- **Sebastian Herwig** (University of Münster)
- **Karen Sofie Hytteballe Ibanez** (Technical University of Denmark)
- **Alessia Bardi** (Italian National Research Council)
- **Maya Sianko** (Library of Belarusian State University)
- **Jan Dvořák** (Czech Technical University)
- **Gabriela Mejias** (ORCID)
- **Iryna Kuchma** (Electronic Information for Libraries)
- **Neil P. Chue Hong** (University of Edinburgh)
- **Stephanie van de Sandt** (Humboldt University of Berlin, doctoral student at CERN)
- **Vivien Petras** (Berlin School of Library and Information Science)
- **Jürgen Güdler** (DFG)
- **Yuliya Bezvershenko** (Ministry of Science and Education of Ukraine)
- **Olga Polotska** (National Research Foundation of Ukraine)

FAIR Data Principles



Key findings

1. Findability

- Metadata is the key to findability
- PIDs facilitate identifying entities
- Barrier: institutional CRIS behind closed walls
- Sustainability and persistence have to be secured

2. Accessibility

- Accessibility includes overcoming language barriers;
- Mandatory CC0 licence for scholarly metadata
- Researchers and research institutions should be responsible for collecting information, managing, preserving and disseminating it;
- Usage of open formats, standards and protocols (such as CERIF) can lower barriers

3. Interoperability

- Open protocols for metadata exchange ensure interoperability
- Critical vendor lock-in and the lack of standards are relevant barriers

We need to develop open standards for each type of research information, guarantee data quality, curation processes, and each record of research information has to be clearly identifiable.

4. Reusability

- No need to distinguish between *use* and *reuse*;
- Different national legislations in the international research ecosystem make it difficult to guarantee the reusability of RI;
- Reuse of RI often helps to improve data quality, as errors can be discovered and subsequently corrected through reuse;
- Reuse has been seen as the way to overcome the reproducibility crisis of research results.

General conclusion/outlook/future perspectives I

- Semantic and technical interoperability is a core issue;
- From discussion to action:
  - funders have to be involved;
  - movements like Initiative for Open Citations or Initiative for Open Abstracts are a valuable and promising start and role model.

General conclusion/outlook/future perspectives II

- All actors should organize their workflow in a way which minimizes or excludes the possibility of monopolizing research information by for profit organizations;
- Future research should focus on moving beyond local data structures and semantics to a global knowledge graph of research information.

Thanks for your attention!
Questions

https://projects.tib.eu/fairio

Image sources and rights

- Moahim, CC BY-SA 4.0, via Wikimedia Commons
- Silberchen, CC BY-SA 3.0, via Wikimedia Commons
- https://pixabay.com/illustrations/video-conference-online-meeting-5587603/, Pixabay License by Alexandra Koch
- SangyaPundir, CC BY-SA 4.0, via Wikimedia Commons