

Results of the Third GO FAIR Workshop for the German Research Community

“GO BUILD – GO CHANGE – GO TRAIN – Ways for the German Community to Contribute to GO FAIR”

On Wednesday, 15th of May 2019, the third GO FAIR workshop took place in Germany. At the GESIS Leibniz Institute for the Social Sciences in Cologne, representatives of various research and infrastructure institutions met to tackle topics related to the fair provision of research data.

Introduction to the GO FAIR Initiative

The participants of the Third GO FAIR Workshop for the German Research Community were welcomed by Ines Drefs from the GO FAIR International Support & Coordination Office (GFISCO, Hamburg).

Afterwards Anja Busch (also GFISCO, Hamburg) presented

- the content of the [FAIR data principles](#),
- the current state of the GO FAIR initiative with its [governance structure](#) and function
- as well as [the offer of the GO FAIR International Support & Coordination Office \(GFISCO\)](#).

GO FAIR is a bottom-up, stakeholder-driven and self-governed initiative that aims to implement the FAIR data principles, making data Findable, Accessible, Interoperable and Reusable. It offers an open and inclusive ecosystem for individuals, institutions and organisations working together through [Implementation Networks](#) (INs). The INs are operating in three activity pillars: [GO CHANGE](#), [GO TRAIN](#) and [GO BUILD](#). The GO FAIR International Support and Coordination Office (GFISCO) as an internationally operating office at three sites ([Paris](#), [Hamburg](#) and [Leiden](#)) supports the implementation of the FAIR principles. It is funded by the Ministries of Science of France, Germany and the Netherlands. The GFISCO has the following tasks:

- Support the initiation and the operation of GO FAIR Implementation Networks that operate internationally. This includes the organisation of pillar-specific workshops and collaborative meetings/workshops of the IN members. Here is an [overview of the support measures](#) provided by GFISCO.
 - Coordinate the activities amongst the various GO FAIR Implementation Networks to ensure optimal synergy and to prevent undue duplication of effort.
 - Raise awareness of FAIR principles in all interested disciplines and countries to ensure the establishment of further INs
- [Presentation of GO FAIR by Anja Busch](#) (in German only) (*link to pdf file*)

How to become an Implementation Network

In a second presentation Ines Drefs emphasized the possibility of joining and founding Implementation Networks. Currently 15 active, 14 preparatory and 5 interested Implementation

Networks exist and are working on topics like FAIR data policies, FAIR training material or FAIR metadata. To become an IN the following steps are required:

- A group of people with a common interest forms a consortium and selects a consortium coordinator.
 - The consortium coordinator gets in touch with the GFISCO and/or fills out the [GO FAIR Implementation Network Application form](#).
 - All participants of the consortium read and agree the GO FAIR [Rules of Engagement](#).
 - The consortium prepares a GO FAIR Implementation Network [Manifesto](#) which is a brief (not more than 2 pages), high-level description of the aims and operations for the prospective Implementation Network.
- [Presentation of GO FAIR Implementation Networks by Ines Drefs](#) (in German only) (*link to pdf file*)

To give a better idea what establishing an Implementation Network means in practice, Peter Mutschke from the GO FAIR Implementation Network on Cross-Domain Interoperability of Heterogeneous Research Data (GO Inter) gave a presentation on the motivation, goals and tasks of the recently founded IN. As example for their use case driven approach he presented the need of linking social science survey data to spatial data.

- [Presentation of the Implementation Network GO Inter by Peter Mutschke](#) (*link to pdf file*)

Results of the working groups

In the afternoon the participants formed working groups depending on what GO FAIR pillar they were interested in. They answered collaboratively a number of key questions and revealed a number of topics that will be taken up and considered more intensively within the GO FAIR initiative.

GO BUILD

In the break-out session for the GO BUILD pillar the participants discussed the ingredients for a roadmap for the implementation of the FAIR principles. In three groups they adopted three different perspectives.

Perspective 1: Which ingredients do I need for the implementation of the FAIR principles at my institution?

Institutions just starting with research data management or with little resource availability need support in introducing processes based on established tools and services. They wish to be provided with blueprints, best practices and meaningful overviews on expertise and know how in institutions as well as on relevant projects and initiatives. That was the central result of the discussion. Reducing metadata complexity was also a central point, since too many and too large metadata standards are currently existing. Establishing persistent identifiers and consistent formats supporting interoperability as well as licence models were further subjects of debate.

Perspective 2: Which ingredients do I need for the implementation of the FAIR principles in my own research discipline/community?

A central statement from the perspective of research communities was that there are already many useful tools like metadata standards, ontologies and software in existence. Instead of building new tools, research communities should concentrate on simplifying and optimizing existing offers and the integrating of them. There is for example still a need for metadata modularisation, terminology

mappings and converters and terminology services integrated in metadata editors. A low entry point is needed for researchers documenting their data.

Perspective 3: Which ingredients do I need for the implementation of the FAIR principles in an interdisciplinary perspective?

The minimal requirement for the implementation of FAIR from an interdisciplinary point of view is a FAIR kernel as basis. That means some kind of framework including underlying definitions which facilitates the implementation and interoperability of disciplinary solutions. For an interdisciplinary understanding of FAIR the development of comprehensive use cases is needed in which each discipline can find itself from a meta perspective. Generic interfaces can support this approach.

GO CHANGE

Ten participants attended the break-out session for GO CHANGE. They jumped into the discussion right after the introduction round. A burning topic within this group was how exactly researchers can be persuaded to manage their data in a FAIR manner given their tight schedules. It did not take long until voices were being raised that research data management plans and data sharing should be made mandatory on part of the research funders. One of the funders' representatives among the participants argued, however, that in the special case of his self-governed organization, such a requirement would have to be brought forward by the discipline-specific review boards. So far this hadn't been the case, also for lack of a straight-forward monitoring system for grantees' data management plans. In the course of the discussion the focus shifted more from "sticks" to "carrots" when it comes to fostering FAIR research data management. The main issues raised in this context were:

- The *management level* of universities and other research performing institutions need to be supportive of FAIR data management
- There has to be a *tangible benefit* for researchers to engage in FAIR data management, i.e. getting more storage space
- *Success stories and best practices* need to be available for each discipline, otherwise they don't resonate with researchers
- RDM competence centers staff needs a *reliable overview of repositories* in order to be able to quickly guide the researchers to a repository that suits their specific needs
- Any tools or services need to be *developed together with the researchers*, otherwise they won't use them
- Making their research data FAIR needs to be *as easy as possible* for the researchers and should ideally be facilitated by *institutional data stewards*

GO TRAIN

During the breakout session for GO TRAIN, nine participants exchanged their experience and discussed how target groups could be reached and which training formats work. The group agreed that the first step must be to raise awareness, make clear what the use is and create incentives.

Training for FAIR should be discipline or community oriented. Webinars are one important format to reach out to a large group with low barriers, while hands-on-trainings or, if possible, *bring-your-own-data hackathons* are the best ways to learn. The example of an *open access escape room* was presented as an innovative format. Whichever training is chosen, the group agreed that an

evaluation should always follow. A proven example were one-minute evaluations at the end of the training.

Within an organisation, the different positions need to be considered: senior personnel might be better reached through communicating at already scheduled events, students should have a FAIR Curriculum. Train-the-Trainer workshop formats have proven examples and can be particularly addressed at data stewards, data curators and Research Data Management (RDM) trainers.

