

Data Stewardship Competence Centers Implementation Network (DSCC-IN) manifesto

Introduction

Universities and other research performing institutions¹ across Europe, and globally, are currently facing the challenge of establishing professional, institution-wide research data stewardship² (RDS) and building its related infrastructure. These RDS competence and expertise centers will be collaborating with the researchers in their institutions to enable better data stewardship and to comply with FAIR practices to better support open science.

As many of the crucial decisions around data stewardship, including the use of interoperable protocols, standards, formats, and terminology systems will be made within the EU network of these competence centres, they also play a key role in the drive towards international convergence for interoperability and reuse of research outputs in open science environments. Next to institutional DSCCs there is a need for consolidation of good practices per domain in supra-institutional DSCCs, national and international. These may also become members of this IN.

In this common statement, we use the umbrella term ‘Data Stewardship Competence Centres (DSCC)’, to refer to these emerging professional environments, with full acknowledgement that such expertise groups may have many different names and will be organised in many different ways, fitting the needs of their institution, discipline, country and region. On the other hand, we also recognise that many of the crucial skills and good practices will be generic and, when appropriate, ideally be shared between centers (and if they were to operate in isolation, sustain undue risk of duplication of effort and silo formation).

Thus, the establishment and running of DSCCs must be a collaborative mission within a complex socio-technological environment. Many stakeholders must contribute to building the competent DSCCs at universities and other research performing institutions. The most effective and efficient way to build stable institution-wide DSCC is when existing competence centres of universities or research institutions collaborate, network and share their accumulated experience. In particular, the most difficult and at the same time most important aspects for the establishment of competence centres – including a cultural change within the universities or research institutions – should be promoted and facilitated by such networking, through “speaking with one voice” about the needs for appropriate FAIR compliant data stewardship being key to enabling open science.

The DSCC-IN is composed mainly by individual national DSCC chapters that can properly reflect local setup needs and ensure a functioning network of DSCCs on the national or regional level.

Purpose of the Implementation Network

There are clear and expressed needs for DSCCs in universities and other research and data-intensive institutions, including for instance ministries and companies. A network/cooperation structure in the form of a GO FAIR Implementation Network (IN) is the first step towards establishing a broader consensus on the requirements for sustainable DSCC infrastructures. As is true for any GO FAIR IN, also this one is open to all partners that share our goals and sign up for the GO FAIR Rules of Engagement³.

Overarching Principle of Operation

We commit to comply with the Rules of Engagement of GO FAIR Implementation Networks.

¹ In the following “research institutions” are always included when using the generic term universities and vice versa

² Data management during a research project (DM) is distinct from data stewardship that also considers what happens to the research outputs after the project has ended (DS).

³ <https://www.go-fair.org/resources/rules-of-engagement/>

The Primary Objectives/Tasks

The overall aim of this IN is networking and establishing pragmatic cooperation, reuse of assets and convergence between national and international DSCCs at universities or other research performing institutions and in overarching formats. All partners of the DSCC IN are committed to the continuous and collaborative improvement of the RDS infrastructure and RDS services of their respective universities or research-related institutions, especially with regards to implementation of the FAIR principles. Strong emphasis will be on joint development of skills, requirements, services and the underlying protocols, formats, templates, and standards that will drive interoperability and reuse through practical convergence, especially across geographical and disciplinary borders.

This mutual support and knowledge transfer might contain, for example:

- Co-develop and share awareness building methods and good practices in FAIR RDS.
- Jointly choose optimal technologies, software, open source code, repositories, etc to build and maintain (an IN connectable) national IT infrastructure also usable within the new generation research workspaces (cloud, FAIR, VRE).
- Develop and share FAIR metadata templates (generic or discipline-specific), and coordinate this over various disciplines and domains, in close collaboration with international organisations.
- Jointly develop strategies to deal with data privacy, licensing, security and copyright.
- Test and feedback on funder-supported tooling for FAIR compliant RDS.
- Jointly develop requirements and skill sets needed and training/education requirements for data stewards.
- Share and where needed participate in the appropriate development of e-learning tools, courses and curricula for professional data stewards.
- Share and co-develop approved incentives for RDS.
- Share/compare strategies to make DSCC sustainable in the long-term

Specific tasks

Task 1: Fostering a cultural change towards FAIR compliant RDS within institutions and domains and a mentality shift of researchers and management concerning the acceptance of RDS. This can be reached for instance, by knowledge transfer on effective activities for awareness-raising methods.

Task 2: Supporting each other in one's efforts to ensure that the data and software produced at universities and other research-related institutions meets the FAIR principles.

Task 3: Develop and share successful strategies that help bringing together stakeholders in the institutions to speak with one voice, in order to attract a broad support, e.g. from the university management.

Task 4: Reaching a critical mass, raising awareness, also by a proactive promotion of the IN, e.g. to have an impact on institutional RDS policies or a better acceptance of researchers, for example by pointing to concrete best practices or success stories based on the experience of IN partners.

Task 5: Establishing a broader consensus on the requirements for sustainable, RDS infrastructures at universities involving both researchers and ICT departments, thereby strengthening the RDS communities within a region. This will include contact with stakeholders beyond the DSCCs, such as Funders and Publishers (as they are depicted in the FAIR Funder Implementation Study⁴).

Task 6: Translation of the IN activities under GO BUILD, GO TRAIN, GO CHANGE to specific requirements, including detection of novel DS skills and mutual 'training on the job' in good practices.

⁴ <https://www.go-fair.org/today/FAIR-funder/>

Task 7: Setting up practical information exchange platforms for common RDS services and mutually supportive DSCC forums.

Task 8: Seek collaboration with other important organizations active in this field, e.g. Research Data Alliance Working Groups, the European Open Science Cloud and other regional infrastructures for open science.

Membership list

We consider this Manifesto to be one way by which the undersigned stakeholders can speak with one voice on a number of critical issues that are of generic importance to the objectives of FAIR, and on which we feel we have reached consensus.

Timeline

This IN is aimed to be long-term and sustainable, for as long as the RDS community needs it. Forming of national chapters within the IN is encouraged while the international link and coordination of activities can then be ensured on the level of the DSCC-IN.

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