DO I-PASS FOR FAIR?

Self assessment tool to measure the FAIR-ness of an organization

BEGINNER

INTERMEDIATE   ADVANCED

DOES YOUR ORGANIZATION...

1 POLICY
...have a FAIR research data policy?

2 SERVICES
...have a DCC which provides services to allow research(ers) to comply with FAIR?

3 SKILLS
...acknowledge that FAIR capacity building requires specific roles and skills?

4 INCENTIVES
...have incentives for FAIR data?

5 ADOPTION
...have adoption of FAIR?

Find the checklist here
DOI: 10.5281/zenodo.4080867

Landelijk Coördinatiepunt Research Data Management
The data support collective

DO I-PASS FOR FAIR?

A self-assessment tool to measure the FAIR-ness of an organization

Product of the LCRDM Task group "FAIR Enabling Research Organization"

Taco de Bruin (NIOZ), Sarah Coombs (Saxion Hogeschool), Irene Haslinger (TUD), Jutta de Jong (EMC), Henk van den Hoogen (UM), Frans Huigen (DANS), Mijke Jetten (DTL), Jacko Koster (LEI), Margriet Miedema (LCRDM), Sjef Öllers (TU/e), Inge Slouwerhof (RU), Ingeborg Verheul (UvA), Jacquelijn Ringersma (WUR)

October 2020

The DO I-PASS FOR FAIR, self-assessment tool for organizations

The 15 FAIR data principles are intended to be applied to a dataset, but the acronym FAIR is also used as an adjective for other (digital) matters, such as FAIR data stewardship, FAIR data infrastructure and FAIR data services. Moreover, in the context of Open Science and scientific integrity, more and more Dutch universities and research organizations discuss a FAIR organization as an important goal, thus implementing RDM practices and support with the FAIR principles as a main driver.

Triggered by this use of the acronym FAIR for organizations, an LCRDM (National Coordination Point Research Data Management) task group explored the definition, characteristics and principles of a so-called 'FAIR enabling organization'. The task group delivered two products: (1) a definition for a FAIR enabling organization and (2) a self-assessment tool to evaluate the FAIR-ness of a research organization (research institute, university or university of applied sciences).

This self-assessment tool is a simple instrument, presented in this editable PDF form. By answering the questions and evaluating the level (beginner, intermediate, or advanced) at which you assess the performance of your organization, you will be able to define the actual FAIR-ness. In addition you can define a Road Map to become a FAIR Enabling Research Organization using the information in de more advances level(s).

A FAIR Enabling Research Organization (FERO) is a research organization with a dedicated staff of data professionals and that has implemented policies on technical, infrastructural and organizational facilities and services to enable the researchers to create and publish FAIR data as a result of their research.

	Beginner	Intermediate	Advanced		Score of our institute	Comments/Actions
Policy: Does your organization (institute / university (of applied sciences)) have a FAIR research data policy?						
1. **Are the FAIR principles explicitly mentioned in the data (or research data) policy of your organization?**	The FAIR principles are not explicitly mentioned, but there is a reference to sustainable and long term storage.	The F and A principle are explicitly mentioned.	All FAIR principles are explicitly mentioned (or there is an explicit reference to the overarching Open Science concept).		☐ Beginner ☐ Intermediate ☐ Advanced	
2. **Is the general research data policy translated into faculty/institutes specific data policies?**	Less than 20% of the faculties or sub-units have a specific policy.	20-80% of the faculties or sub-units have a specific policy.	More than 80% of the faculties or sub-units have a specific policy.		☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not applicable	
3. **Is the general research data policy supported by dedicated service units (e.g. DCC) ?**	There are dedicated staff members responsible for the implementation of the services.	There is a dedicated central organizational unit (either virtual or physical) to provide services needed to execute the policy. However some conditions like very large data sets, or FAIR vocabularies are still not fully covered in the services.	We provide and/or facilitate all services for all aspect, also for domain specific interoperability standards and storing large data.		☐ Beginner ☐ Intermediate ☐ Advanced	
4. **Which means and channels are used to communicate the research data policy and services to the researchers?**	We have a website that contains all information, and in addition we have a central (online) helpdesk.	On top of a website with all information and a central (online) helpdesk, we provide regular workshops, webinars and training events.	On top of a website with all information, a central (online) helpdesk and regular workshops, webinars & training events, new researchers are informed of the data policy upon arrival.		☐ Beginner ☐ Intermediate ☐ Advanced	

	Beginner	Intermediate	Advanced		Score of our institute	Comments/Actions
Services: Does your organization have a (virtual) DCC which provides services (including infrastructure) to allow researchers to comply with FAIR?						
5. **Which services does your organization provide in order for researchers to comply with the F principles**	We provide or refer to a service to deliver a PID for a data set	We provide or refer to service for PID and adding metadata (including reference to the dataset).	On top of adding PIDs and metadata, we provide or refer to a service to make the data findable through indexed resources.		☐ Beginner ☐ Intermediate ☐ Advanced	
6. **Which services does your organization provide in order for researchers to comply with the A principles?**	We provide or refer to a service with a standard and open communication protocol as to access the data.	We provide or refer to a service to enable restricted access to data and meta data (authentication protocol)	Our organization as an archiving policy, both on data and meta data.		☐ Beginner ☐ Intermediate ☐ Advanced	
7. **Which services does your organization provide in order for researchers to comply with the A principles?**	We provide or refer to a service that enriches the dataset metadata, referencing to other datasets and articles (I3).	We provide or refer to a service to attribute (meta)data that use a formal, accessible, shared, and broadly applicable language for knowledge representation.	We provide or refer to a service to attribute (meta)data that use vocabularies that follow FAIR principles in order to facilitate machine readability.		☐ Beginner ☐ Intermediate ☐ Advanced	
8. **Which services you're your organization provide in order for researchers to comply with the R principles?**	We provide advice on licenses and provide or refer a service to add licenses in the metadata	We monitor the reuse of our data, both within the institute as well as outside	We perform quality control on the (meta)data, e.g. adequate read me file as to assure that somebody else can actually reuse the data. We assure that (meta)data meet domain-relevant community standards		☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not yet	
9. **Which services does your organization offer on Research Software Management?**	We leave it to the researchers (i.e.: no service).	We have research software engineers (i.e.: dedicated professionals employed).	We distinguish between 'Software to be reused' and 'For reproduction'; we offer advice on licensing, and we archive in the appropriate repositories (e.g. GitHub, GitLab, Zenodo).		☐ Beginner ☐ Intermediate ☐ Advanced	

	Beginner	Intermediate	Advanced		Score of our institute	Comments/Actions
Skills: Does your organization acknowledge that FAIR capacity building requires specific roles and skills?						
10. **Does your organization have a job description in place for the different roles in data stewardship? If so, are there training standards and/or certificate requirements in place for data stewards?**	We are in the process of recognizing the different roles within Data stewardship	We have functions and role descriptions. We know how many of each is needed. We provide ad hoc trainings for the Data stewardship staff at different levels.	We have functions and descriptions, and we have a training program for the different levels of Data Stewards.		☐ Beginner ☐ Intermediate ☐ Advanced	
11. **Does your organization explicitly finance data science and data stewardship roles?**	Budget is allocated for Data Stewardship (centrally) or Data Management support.	Besides centrally allocated budget, Data Stewardship support research units of projects are budgeted locally (on faculty/research group level).	Both central and local budget is allocated, and the organization invests in Data Science innovation (and similar subjects).		☐ Beginner ☐ Intermediate ☐ Advanced	
12. **How many Data Stewards/Managers/ Research Supporters (strategic, generic, embedded, centrally) (but not RSE or data scientist) does your organization have in relation to scientific staff**	1 fte in relation to 500 scientific staff, including PhD (or even less)	1 fte in relation to 100-500 fte scientific staff (including PhD)	1 fte in relation to scientific staff or even more 100 fte scientific staff (including PhD)		☐ Beginner ☐ Intermediate ☐ Advanced	

	Beginner	Intermediate	Advanced		Score of our institute	Comments/Actions
Incentives: Does your organization have incentives for FAIR data?						
13. **Is FAIR data recognized and rewarded by your organization? How (for instance with policy, services, behavior and/or adoption)?**	All institute employees must endorse the Code of Conduct for Scientific Integrity (e.g. through their employment contracts or appointment decisions).	FAIR data is part of the HR-cycle, for example during performance reviews. Researchers are allocated time to make their data FAIR.	In the recruitment and selection of new researchers, FAIR Data practice is one of the important criteria.		☐ Beginner ☐ Intermediate ☐ Advanced	
14. **Does your organization offer or take part in collaborations that work on new tools, services, expertise and other components of the FAIR data ecosystem?**	We offer the basics in tools and expertise.	We have pilots with new developments within the FAIR ecosystem.	Implementing and innovating in tools/solutions within the FAIR ecosystem is inherent to our institute.		☐ Beginner ☐ Intermediate ☐ Advanced	

	Beginner	Intermediate	Advanced		Score of our institute	Comments/Actions
Adoption: Adoption of FAIR						
15. Does your organization include FAIR data as a criterion in the initial and continuous evaluation process?	FAIR data is a criterion to evaluate our general policy and data policies of faculties/institutes	FAIR data is a criterion in our HR-cycles, and of our data services (of the DCC)	FAIR data is a criterion in evaluating HR, policies and (DCC) services		☐ Beginner ☐ Intermediate ☐ Advanced	
16. Does your organization include the subject of research data in regular HR evaluations with research staff?	Subject of research data not discussed	HR Policy requires executives to monitor the adoption of research data management policies.	Research data management is a regular element in the evaluation cycle.		☐ Beginner ☐ Intermediate ☐ Advanced	
17. Does your organization have formal regular evaluations of the relevance and quality of all services needed to support the data policy	Irregular (ad hoc), only in response to requests	Simultaneous with the SEP or comparable equivalent (every 5-6 years)	Every two years		☐ Beginner ☐ Intermediate ☐ Advanced	
18. How much of your organizations scientific publications contain a DOI (or other PID) reference to the data underlying the publication over the last publication year (now 2019)?	<20% of the publications contain references to the underlying data.	20-80% of the publications contain references to the underlying data.	>80% of the publications contain references to the underlying data.		☐ Beginner ☐ Intermediate ☐ Advanced	
19. Does your DCC know the amount of data, the number of datasets produced within your organization e.g. in the last year?	no idea, but I think/assume we have an overview of less than 20 %	we know at least half	we have an almost complete overview		☐ Beginner ☐ Intermediate ☐ Advanced	

Open Questions

20. What are your organization's most important barriers in becoming FAIR enabling?	
21. What is your organization's largest achievement, in which you take pride, in the development towards a FAIR enabling organization?	
22. Which actions will you take the coming year in improving the Fair Enabling Support within your DCC/organization?	