



Andreas Czerniak¹, André Vieira², Jochen Schirrwagen¹, Pedro Principe²

¹ Bielefeld University Library / Germany ; ² University of Minho / Portugal

Lightweight FAIR assessment in the OpenAIRE Validator



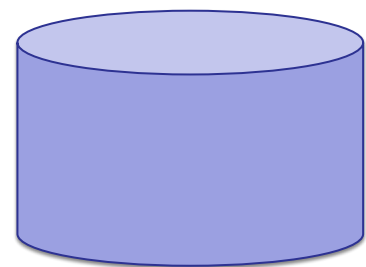
**Interoperability
Guidelines**

OpenAIRE Guidelines, FAIRifications, Enhancements

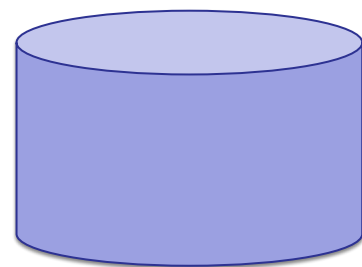
Topics

- Overview Repository Landscape, OpenAIRE Guidelines
- FAIR-principles evaluation process: Guidelines for inst. & themat. repository managers (v4)
- Lightweight FAIR assessment at PROVIDE dashboard

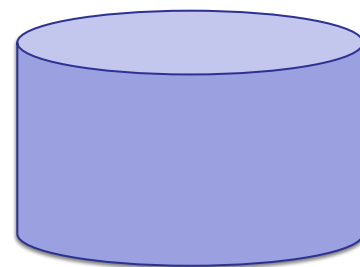
Landscape of Repositories types



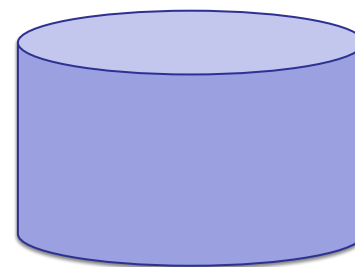
Institutional/
publication
repositories



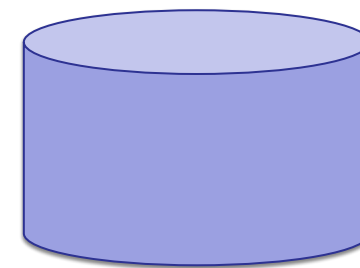
Journals/
publishers



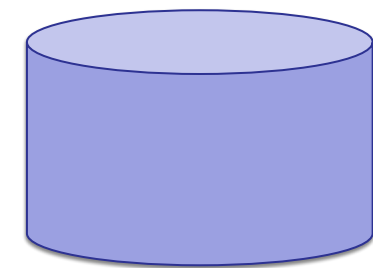
Data
repositories



Software
repositories

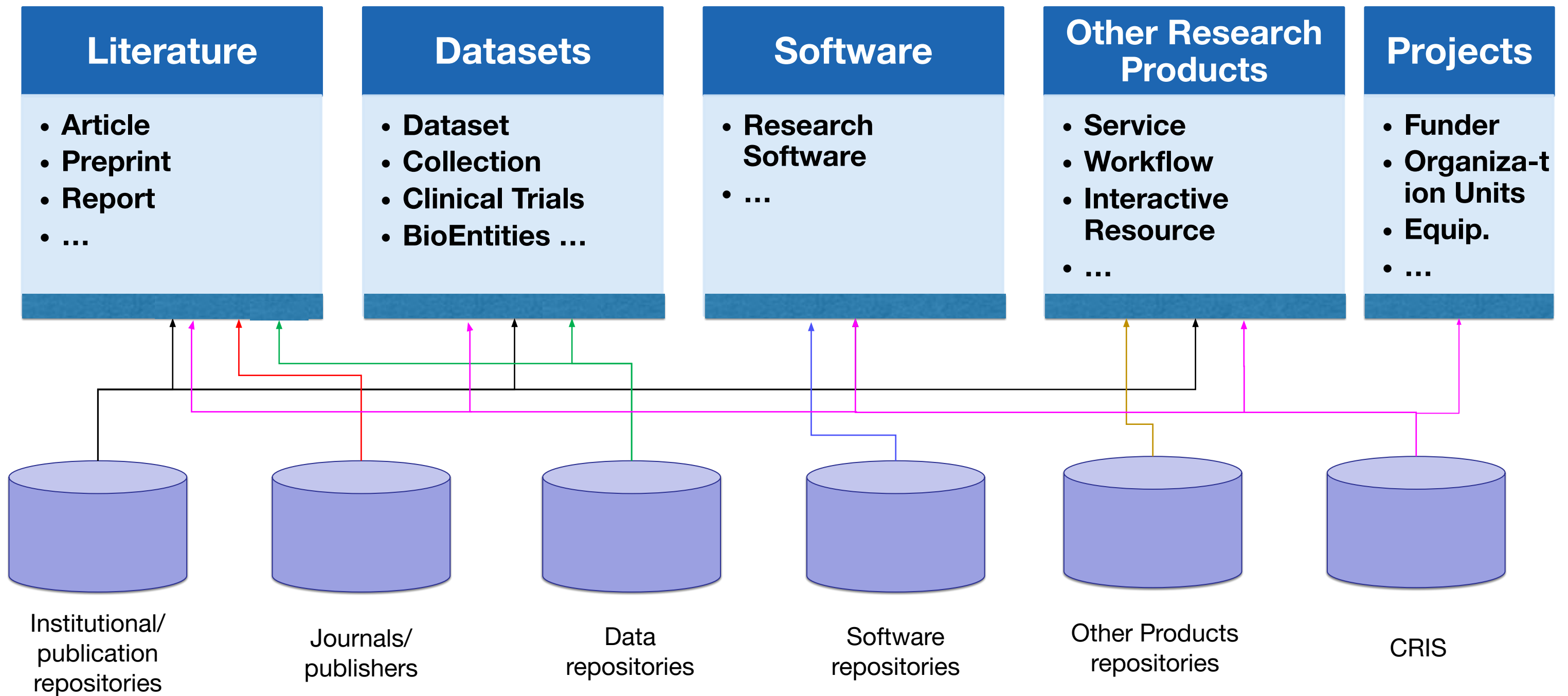


Other Products
repositories



CRIS

Repository types and research output



Evolution of the OpenAIRE-Guidelines - and further perspective

updating
Guidelines
for
Inst. & Them.
repositories,
Data, and
CRIS
Managers

2010
Literature
Guidelines v1

2013
Literature
Guidelines v3

2018
CRIS-CERIF
minor update
v1.1.1

2012
- Literature
Guidelines v2
- Data
Guidelines v1

2014
Data
Guidelines v2

2018
new releases
of **Content
Provider
Guidelines v4**
& Content
Acquisition
Policy

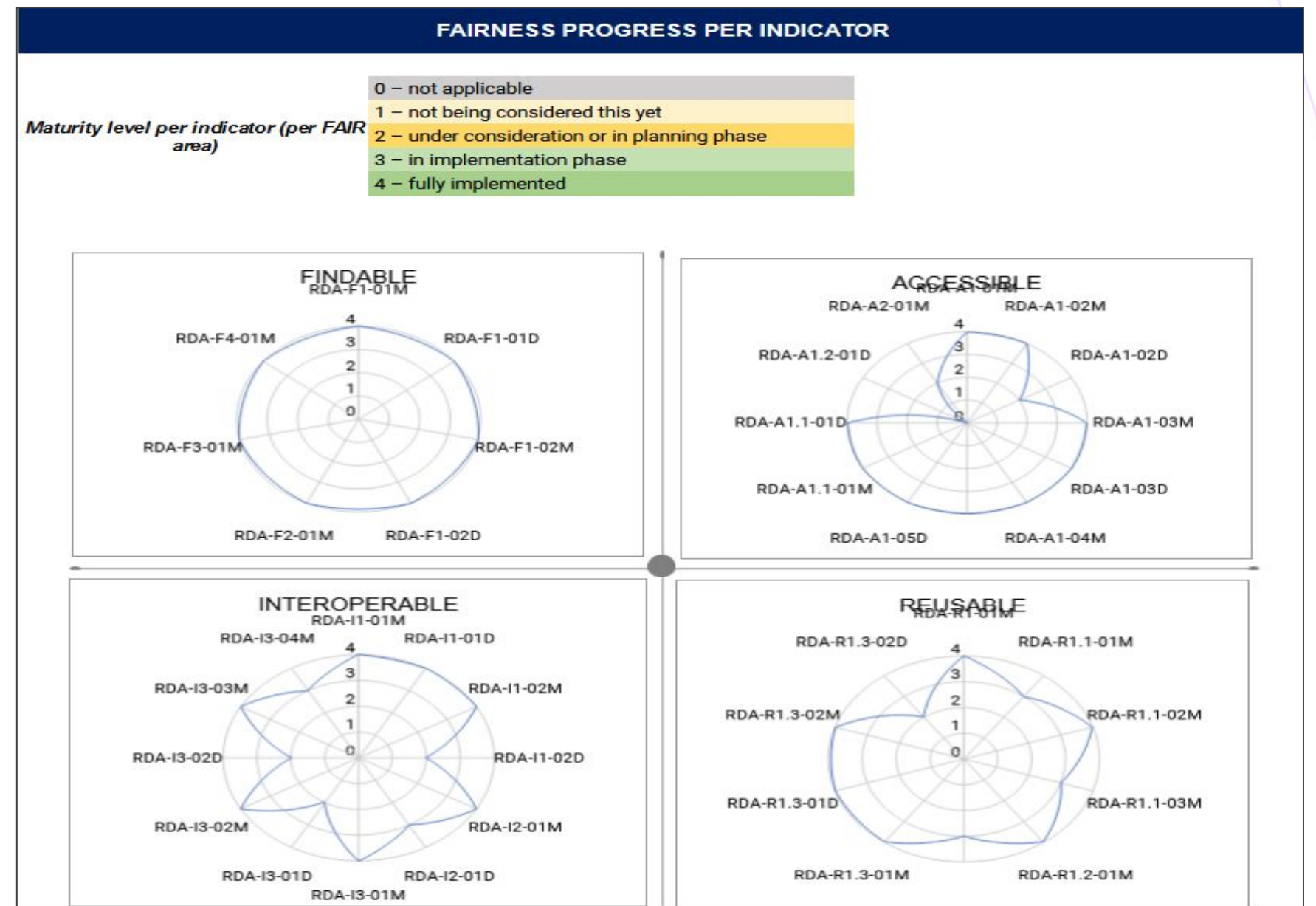
FAIRification

based on Research Data Alliance - FAIR Data Maturity Model: specification and guidelines
[<https://doi.org/10.15497/RDA00050>]

- Findable
- Accessible
- Interoperable
- Reuseable

Evaluation of “OpenAIRE Guidelines for institutional and thematic repository managers 4.0”

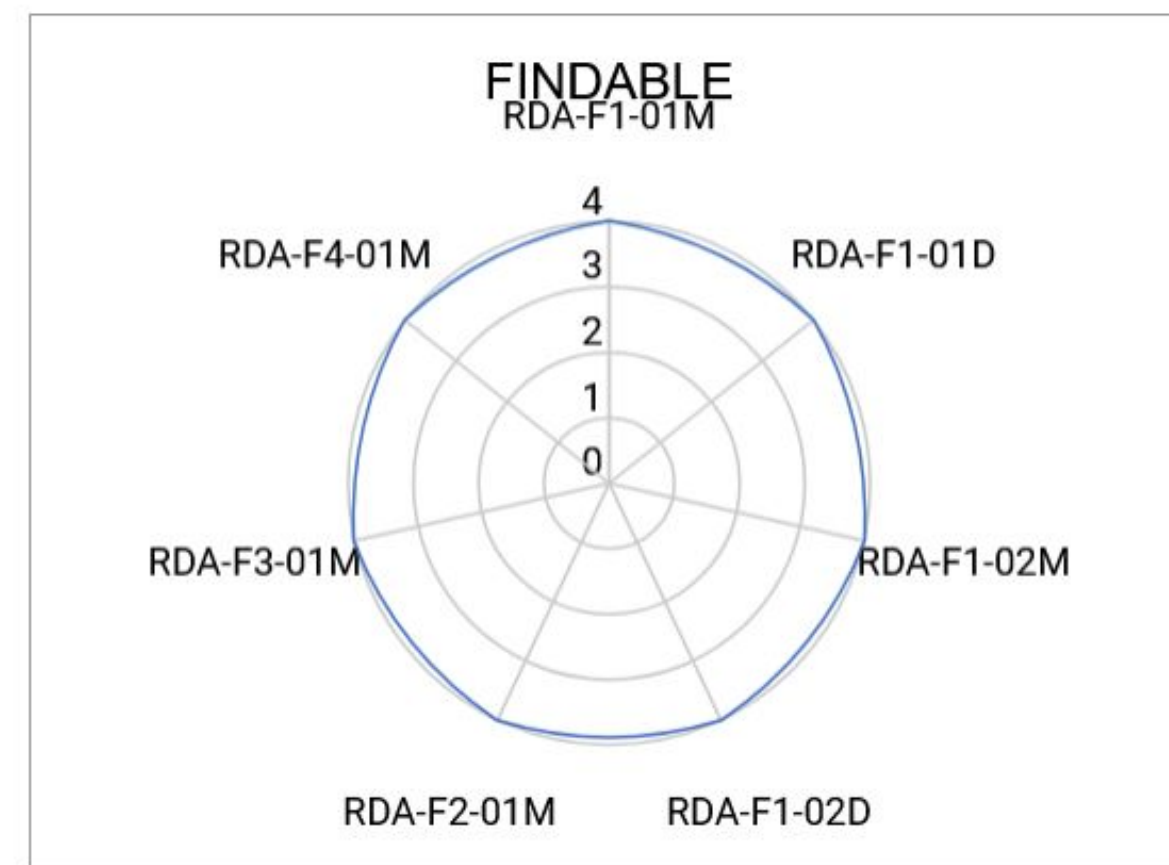
[<https://doi.org/10.5281/zenodo.1299203>]



Evaluation of section

- Findable

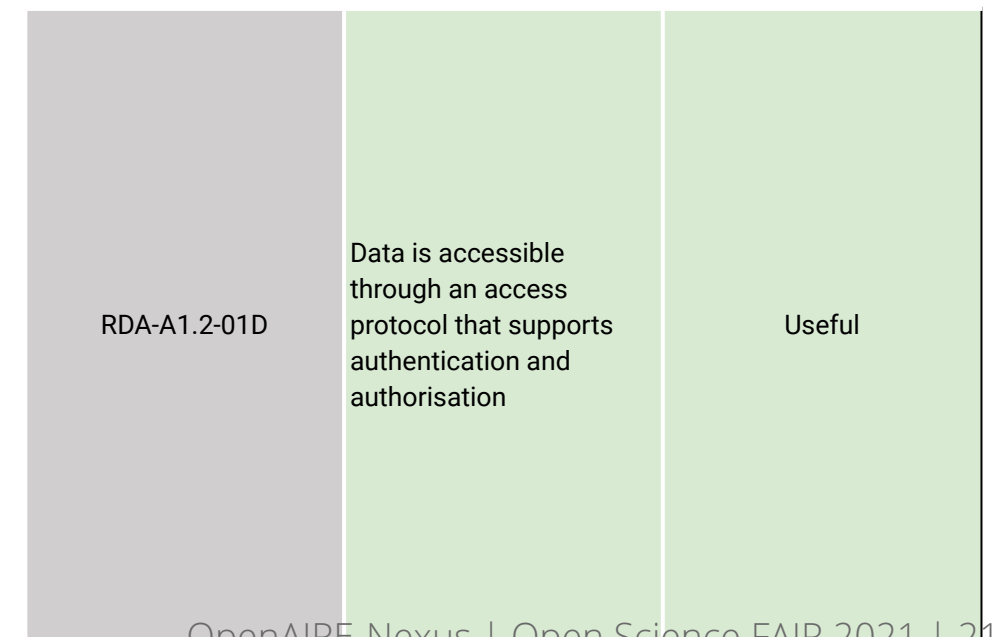
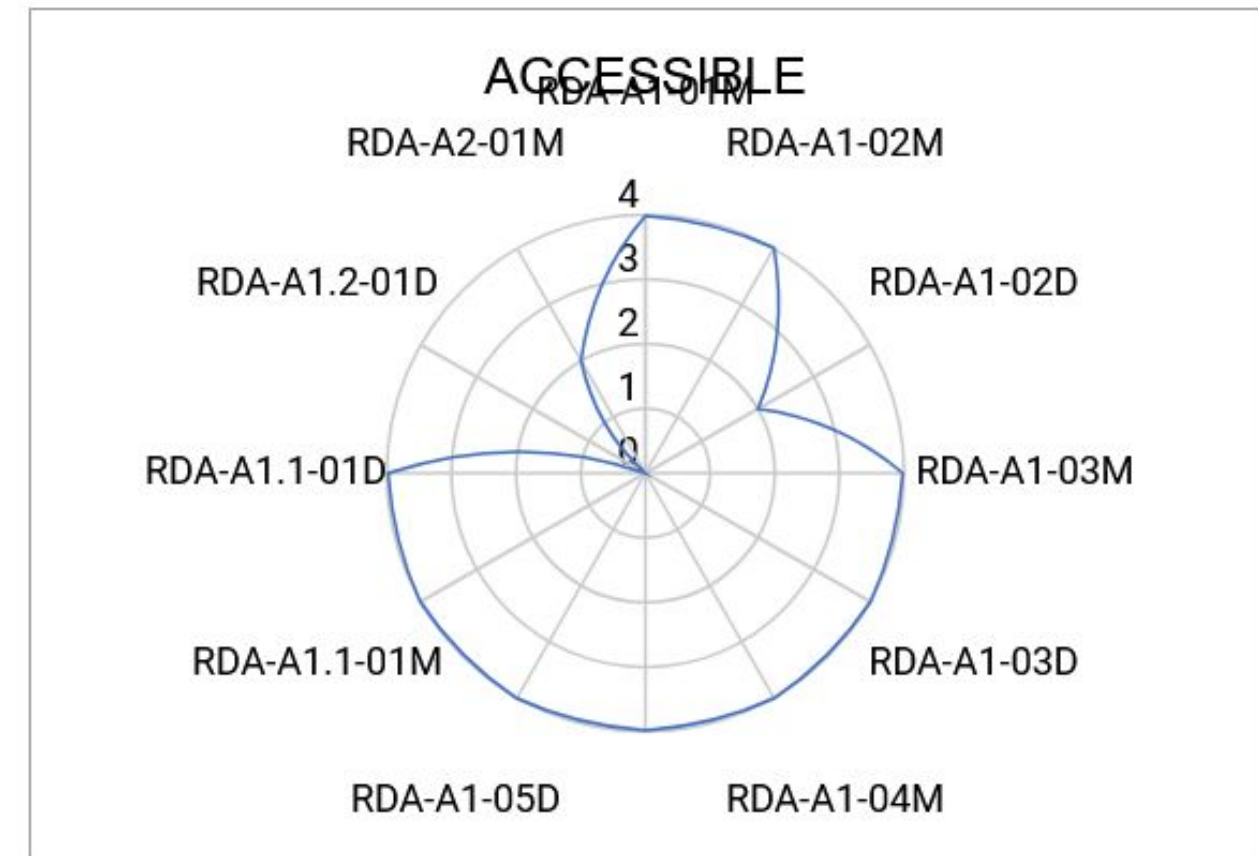
Indicator Id	FAIR Indicator	Priority	met in the guidelines	Primarily Supported in the Guidelines
RDA-F1-01M	Metadata is identified by a persistent identifier	Essential	y	Resource Identifier
RDA-F1-01D	Data is identified by a persistent identifier	Essential	y	Resource Identifier
RDA-F1-02M	Metadata is identified by a globally unique identifier	Essential	y	Resource Identifier
RDA-F1-02D	Data is identified by a globally unique identifier	Essential	y	Resource Identifier
RDA-F2-01M	Rich metadata is provided to allow discovery	Essential	y	implicitly
RDA-F3-01M	Metadata includes the identifier for the data	Essential	y	File Location
RDA-F4-01M	Metadata is offered in such a way that it can be harvested and indexed	Essential	y	implicitly



Evaluation of section

- Accessible

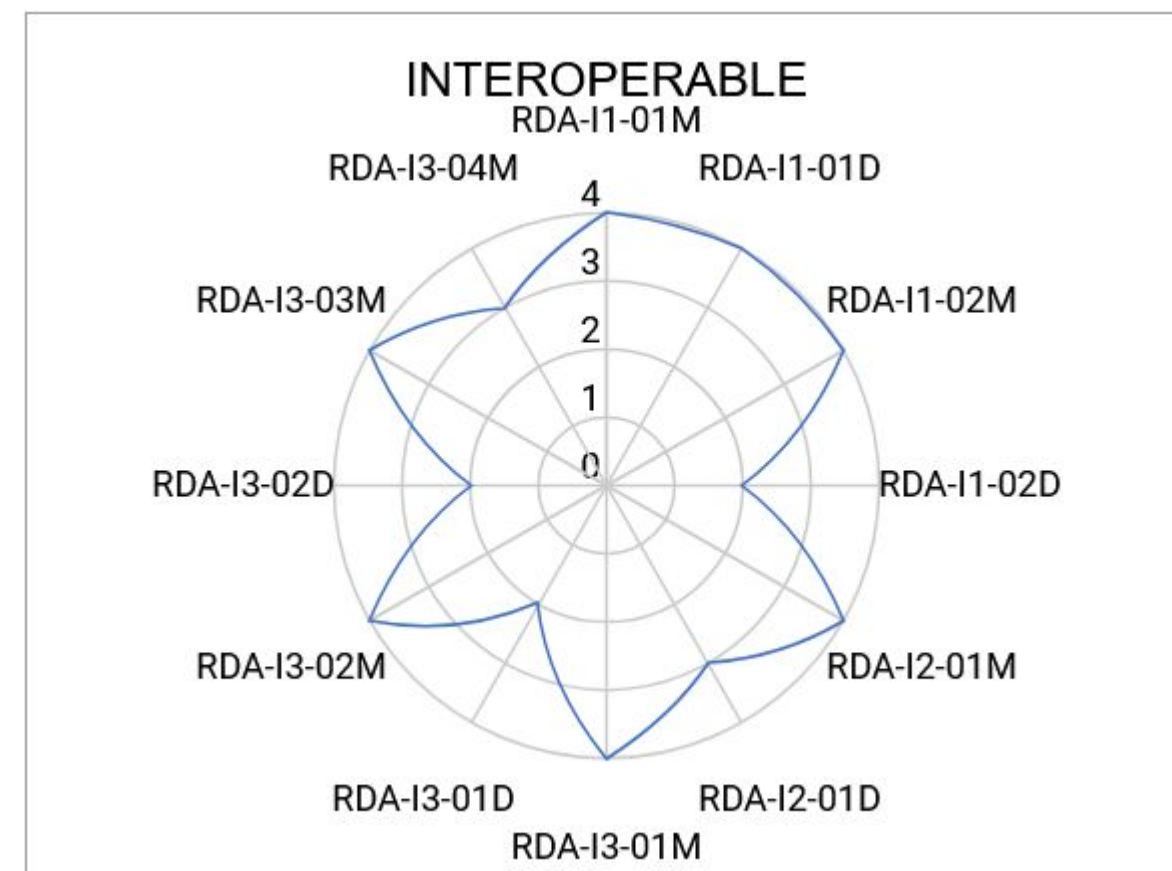
A1	RDA-A1-01M	Metadata contains information to enable the user to get access to the data	Important	y	Access Rights
A1	RDA-A1-02M	Metadata can be accessed manually (i.e. with human intervention)	Essential	y	not controlled by / in the scope of the Guidelines
A1	RDA-A1-02D	Data can be accessed manually (i.e. with human intervention)	Essential	n	not controlled by / in the scope of the Guidelines
A1	RDA-A1-03M	Metadata identifier resolves to a metadata record	Essential	y	implicitly supported by the OAI-PMH protocol but also digital objects minted with a DOI
A1	RDA-A1-03D	Data identifier resolves to a digital object	Essential	y	Resource Identifier
	RDA-A1-04	Metadata is accessed			



Evaluation of section

- Interoperable

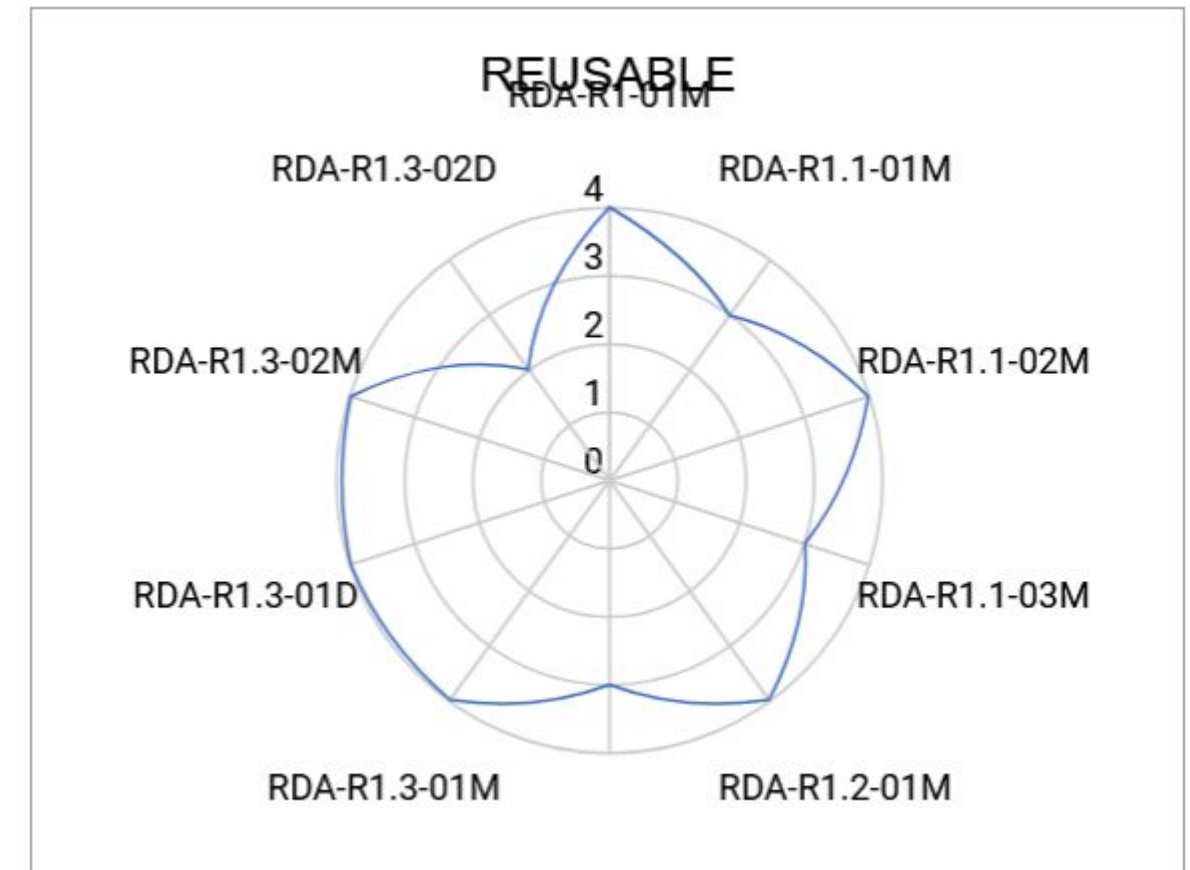
I1	RDA-I1-01M	Metadata uses knowledge representation expressed in standardised format	Important	y	Subject
I1	RDA-I1-01D	Data uses knowledge representation expressed in standardised format	Important	y	Format
I1	RDA-I1-02M	Metadata uses machine-understandable knowledge representation	Important	y	knowledge representation is cross-domain and on the level of XML
I1	RDA-I1-02D	Data uses machine-understandable knowledge representation	Important	n	not explicitly supported
I2	RDA-I2-01M	Metadata uses FAIR-compliant vocabularies	Important	y	supported for some vocabularies in the Guidelines, e.g. COAR vocabularies, CC-licenses vocabularies
I2	RDA-I2-01D	Data uses FAIR-compliant vocabularies	Useful	n	not supported by the guidelines
I3	RDA-I3-01M	Metadata includes references to other metadata	Important	y	related identifier
I3	RDA-I3-01D	Data includes references to	Useful		not in the scope of the



Evaluation of section

- Reusable

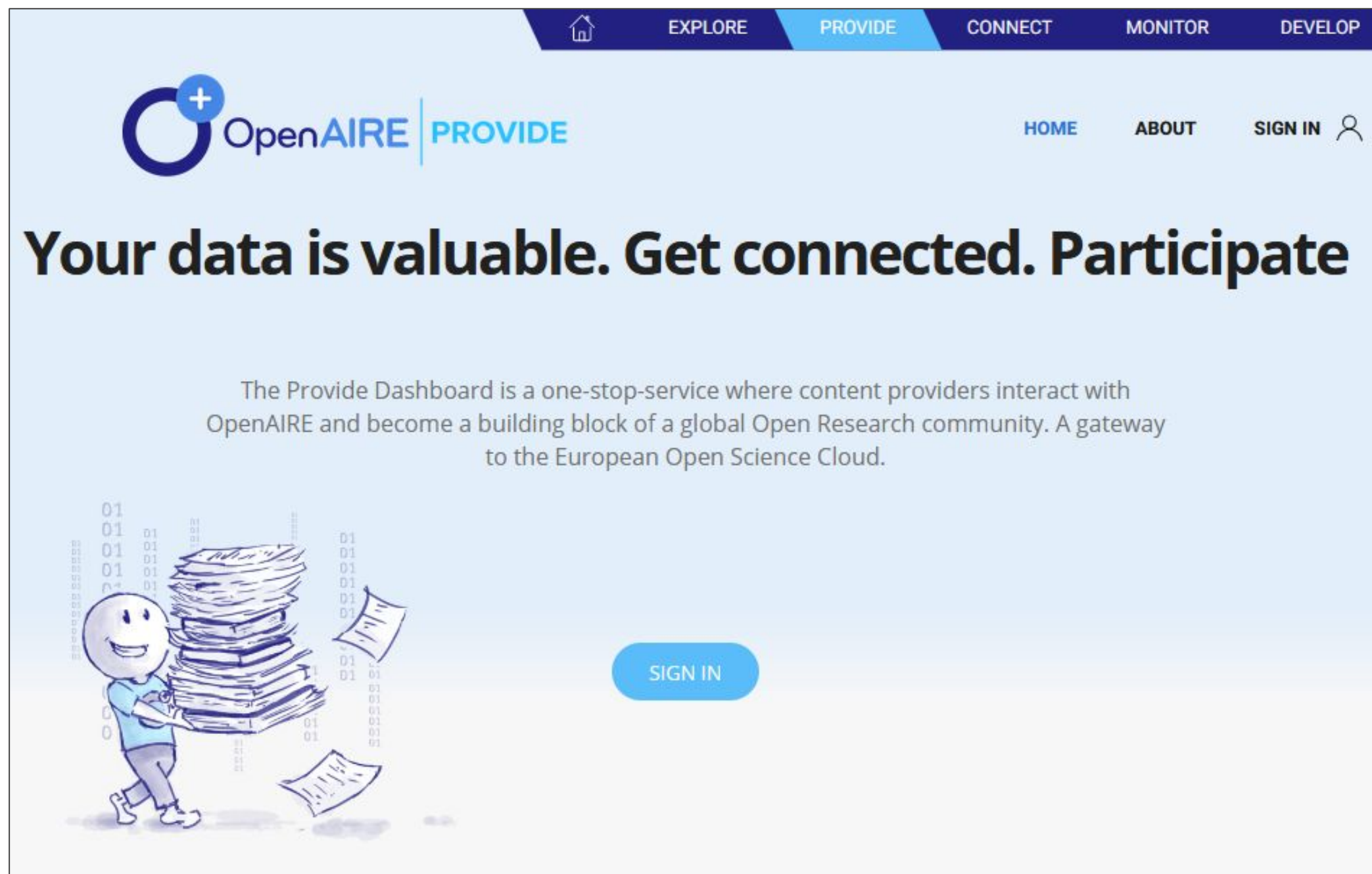
R1	RDA-R1-01M	Plurality of accurate and relevant attributes are provided to allow reuse	Essential	y	yes, as long as it concerns bibliographic information
R1.1	RDA-R1.1-01M	Metadata includes information about the licence under which the data can be reused	Essential	y	License Condition
R1.1	RDA-R1.1-02M	Metadata refers to a standard reuse licence	Important	y	License Condition
R1.1	RDA-R1.1-03M	Metadata refers to a machine-understandable reuse licence	Important	y	License Condition
R1.2	RDA-R1.2-01M	Metadata includes provenance information according to community-specific standards	Important	n	not supported
R1.2	RDA-R1.2-02M	Metadata includes provenance information according to a cross-community language	Useful	n	not supported
R1.2	RDA-R1.2-03M	Metadata complies with a	Essential	y	supported (Dublin Core)



Guidelines for inst.& them.Repository managers v4.1-rc1:

<https://openaire-guidelines-for-literature-repository-managers.readthedocs.io/en/latest/fair-enabled.html>

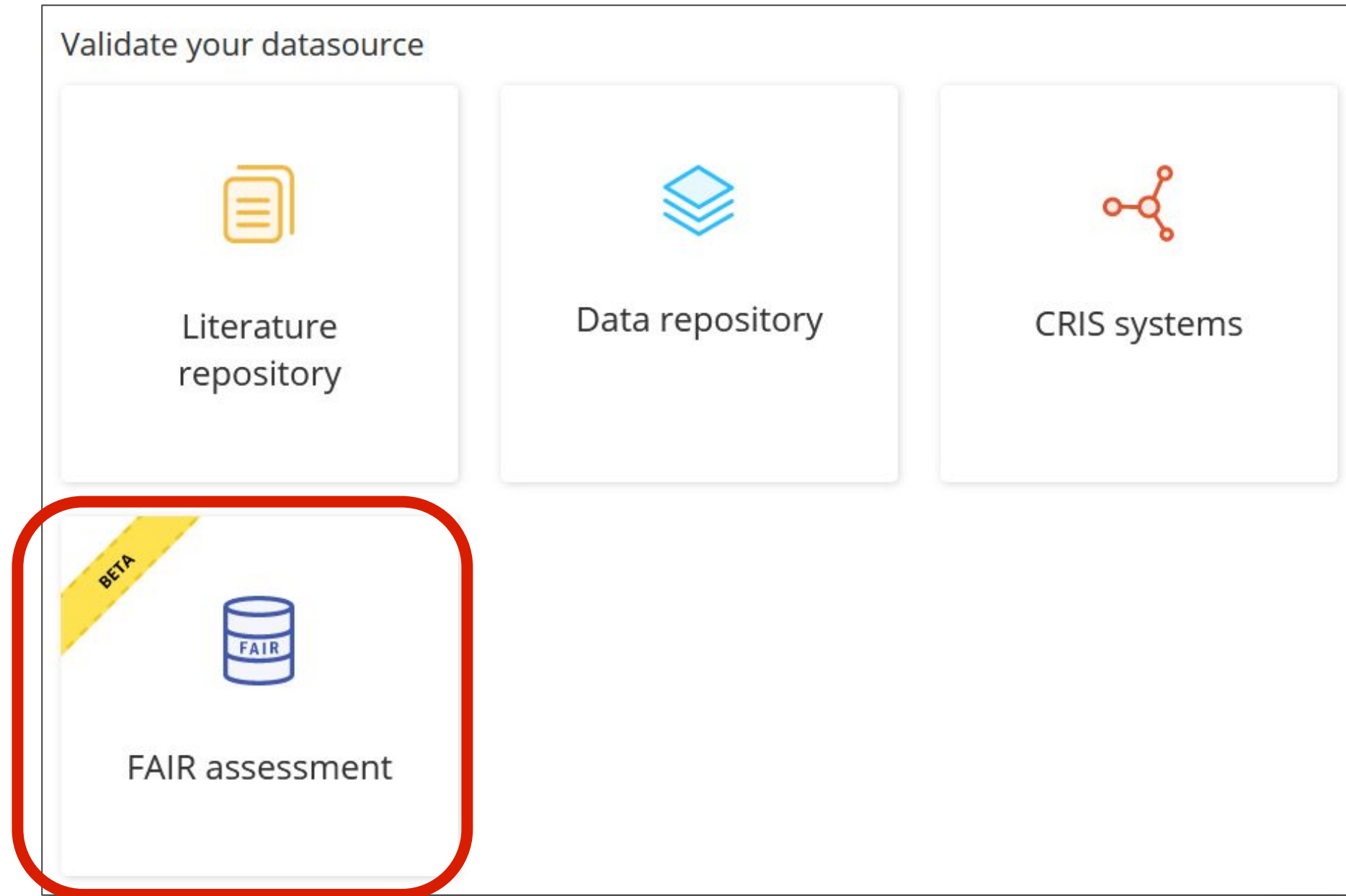
PROVIDE



The screenshot shows the OpenAIRE PROVIDE dashboard homepage. At the top, there is a navigation bar with a home icon and links for EXPLORE, PROVIDE (highlighted), CONNECT, MONITOR, and DEVELOP. Below this is the OpenAIRE PROVIDE logo and navigation links for HOME, ABOUT, and SIGN IN with a user icon. The main heading reads "Your data is valuable. Get connected. Participate". Below the heading is a paragraph: "The Provide Dashboard is a one-stop-service where content providers interact with OpenAIRE and become a building block of a global Open Research community. A gateway to the European Open Science Cloud." To the left, there is an illustration of a smiling character carrying a large stack of papers, with binary code (0s and 1s) floating around. A blue "SIGN IN" button is positioned to the right of the illustration.

<https://provide.openaire.eu>

PROVIDE



<https://provide.openaire.eu> -> **Validator**

PROVIDE

Run compatibility test

1

Select datasource

2

Select guidelines

3

Select parameters

4

Finish

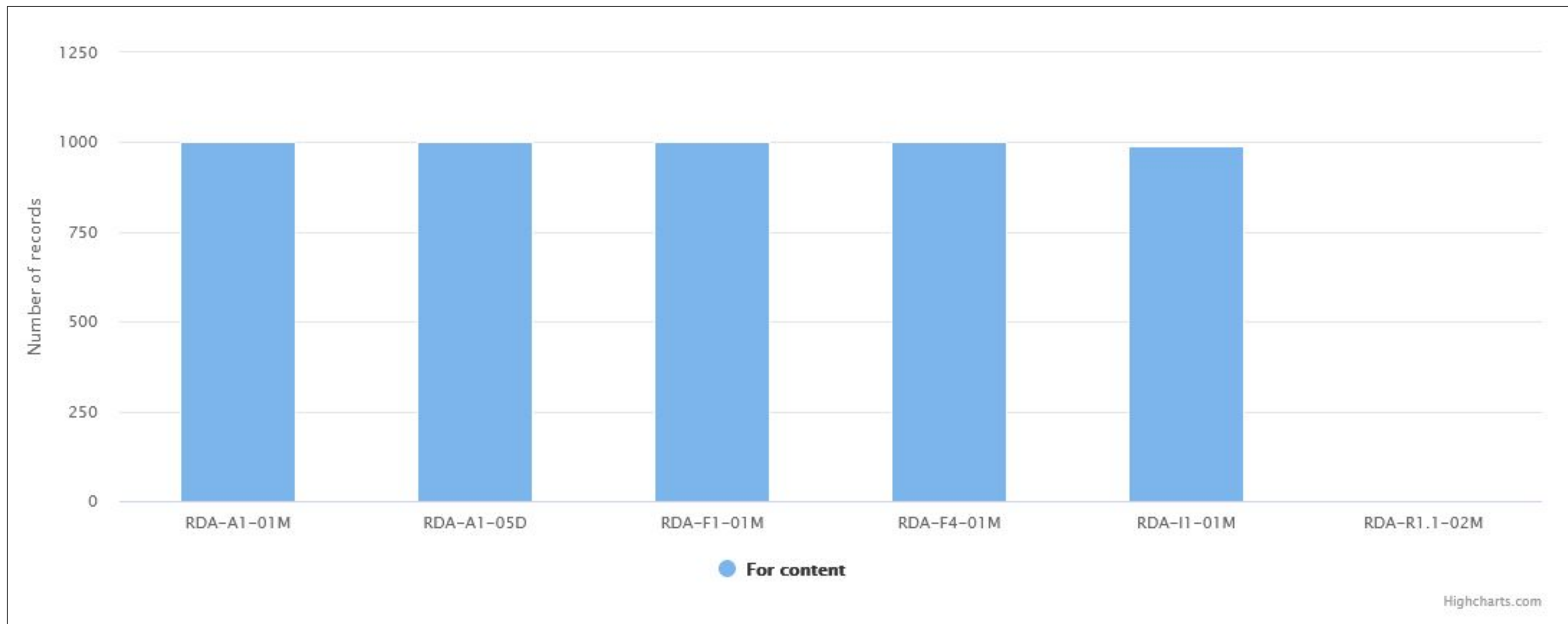
Select base URL from one of your registered repositories

-- none selected --

or enter new

<https://pub.uni-bielefeld.de/oai>

PROVIDE



Lessons learned / Conclusion

- The adaptation of the Guidelines for Institutional & Thematic Repository Manager with regard to the RDA FAIR *Data* Principles was a challenge but possible.
- The analysis of the guidelines has shown that the elements follow the FAIR principles.
- Not yet covered elements could be identified through the OpenAIRE Research Graph.
- Further refinement of guidelines is a key.
- And to expand FAIR-ability.

Conclusion / Outlook

- Practical support for repository and CRIS managers, in a more automated way.
- latest Guidelines versions of literature, data, software, and other research products under considerations
-> OpenAIRE Guidelines Umbrella
- sharing novelties during monthly Community Calls
<https://www.openaire.eu/provide-community-calls>
- contact: guidelines@openaire.eu



@openaire_eu
#OpenAIRE-Nexus

THANK YOU

Andreas Czerniak

andreas.czerniak@uni-bielefeld.de

André Vieira

andre.vieira@usdb.uminho.pt

Jochen Schirrwagen

jochen.schirrwagen@uni-bielefeld.de

Pedro Príncipe

pedro.principe@usdb.uminho.pt

