Bielefeld University Library / Germany

OpenAIRE services: CRIS registration, Lightweight FAIR assessment, and OpenScience Observatory

Autumn 2021 webinar series of euroCRIS
November, 25th 2021

Grant agreement no. 101017452
Topics

• Brief introduction to OpenAIRE
• Updates on CRIS registration
• Lightweight FAIR assessment
• Open Science Observatory
Collecting metadata, links, and full-texts from more than 12K sources worldwide to materialize a graph where entities of the research life cycle are linked to each other.
PROVIDE dashboard a brief update on CRIS registration
DRIS - Directory of Research Information Systems

https://dspacecris.eurocris.org/cris/explore/dris
DRIS - Directory of Research Information Systems

- registered systems: 926

- collecting CRIS system information from a dedicated API
  - Name, description, country, platform, scope, ...
Your data is valuable. Get connected. Participate

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.
OpenAIRE - PROVIDE dashboard

Register your datasource

- Literature repository
- Data repository
- Journal
- Aggregator
- CRIS systems
PROVIDE dashboard: CRIS registration

Register your datasource

1. Select Re...
2. Register...
3. Register...
4. Finish

Basic information

- The following fields are completed by DRIS
- If you want to edit them, you can do it by using this DRIS link

Software Platform (*)
[Other] (enter name below)

Official Name (*)

Description (*)
### Open Orgs

#### Bielefeld University

**ID:** openorgs__O0000008003  
**Created:** July 16, 2020 11:48:19  
**Modified:** July 16, 2020 11:48:19  

**Metadata Management**

- **Official name and type**
  - **name:** Bielefeld University  
  - **type:** Education

- **Geographical location**
  - **city:** Bielefeld  
  - **country:** Germany  
  - **lat:** 52.057778

- **Other names and identifiers**

  **Acronyms**
  - new acronym...

  **Aliases**
  - **name:** Bielefeld University  
  - **language:** en  
  - **name:** Universität Bielefeld  
  - **language:** de  
  - **new alias...**

  **Identifiers**
  - **id:** 024362  
  - **type:** Wikidata  
  - **id:** 501100005721  
  - **type:** FundRef  
  - **id:** 1548410  
  - **type:** OrgRef  
  - **id:** GRID
PROVIDE dashboard lightweight FAIR assessment
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**

<table>
<thead>
<tr>
<th>Indicator Id</th>
<th>FAIR Indicator</th>
<th>Priority</th>
<th>met in the guidelines</th>
<th>Primarily Supported in the Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDA-F1-01M</td>
<td>Metadata is identified by a persistent identifier</td>
<td>Essential</td>
<td>Y</td>
<td>Resource Identifier</td>
</tr>
<tr>
<td>RDA-F1-01D</td>
<td>Data is identified by a persistent identifier</td>
<td>Essential</td>
<td>Y</td>
<td>Resource Identifier</td>
</tr>
<tr>
<td>RDA-F1-02M</td>
<td>Metadata is identified by a globally unique identifier</td>
<td>Essential</td>
<td>Y</td>
<td>Resource Identifier</td>
</tr>
<tr>
<td>RDA-F1-02D</td>
<td>Data is identified by a globally unique identifier</td>
<td>Essential</td>
<td>Y</td>
<td>Resource Identifier</td>
</tr>
<tr>
<td>RDA-F2-01M</td>
<td>Rich metadata is provided to allow discovery</td>
<td>Essential</td>
<td>Y</td>
<td>Implicitly</td>
</tr>
<tr>
<td>RDA-F3-01M</td>
<td>Metadata includes the identifier for the data</td>
<td>Essential</td>
<td>Y</td>
<td>File Location</td>
</tr>
<tr>
<td>RDA-F4-01M</td>
<td>Metadata is offered in such a way that it can be harvested and indexed</td>
<td>Essential</td>
<td>Y</td>
<td>Implicitly</td>
</tr>
</tbody>
</table>
# Evaluation of section

**Accessible**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Metadata contains information to enable the user to get access to the data</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>RDA-A1-01M</td>
<td>Metadata can be accessed manually (i.e. with human intervention)</td>
<td>Essential</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>RDA-A1-02M</td>
<td>Data can be accessed manually (i.e. with human intervention)</td>
<td>Essential</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>RDA-A1-03M</td>
<td>Metadata identifier resolves to a metadata record</td>
<td>Essential</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>RDA-A1-04M</td>
<td>Metadata is accessed through standardised protocol</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>A1.1</td>
<td>RDA-A1.1-01M</td>
<td>Metadata is accessible through a free access protocol</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>A1.2</td>
<td>RDA-A1.2-01D</td>
<td>Data is accessible through an access protocol that supports authentication and authorisation</td>
<td>Useful</td>
<td></td>
</tr>
</tbody>
</table>

**Access Rights**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>RDA-A1-01M</td>
<td>Access Rights</td>
</tr>
<tr>
<td>A1</td>
<td>RDA-A1-02M</td>
<td>not controlled by / in the scope of the Guidelines</td>
</tr>
<tr>
<td>A1</td>
<td>RDA-A1-03M</td>
<td>not controlled by / in the scope of the Guidelines</td>
</tr>
<tr>
<td>A1</td>
<td>RDA-A1-04M</td>
<td>implicitly supported by the OAI-PMH protocol but also digital objects minted with a DOI</td>
</tr>
</tbody>
</table>

**Useful**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>RDA-A1-05D</td>
<td>Resource Identifier</td>
</tr>
</tbody>
</table>

[Diagram showing RDA guidelines and access levels]
## Evaluation of section

- **Interoperable**

<table>
<thead>
<tr>
<th></th>
<th>RDA-I1-01M</th>
<th>Metadata uses knowledge representation expressed in standardised format</th>
<th>Important</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>I1</td>
<td>RDA-I1-01D</td>
<td>Data uses knowledge representation expressed in standardised format</td>
<td>Important</td>
<td>Format</td>
</tr>
<tr>
<td>I1</td>
<td>RDA-I1-02M</td>
<td>Metadata uses machine-understandable knowledge representation</td>
<td>Important</td>
<td>Knowledge representation is cross-domain and on the level of XML</td>
</tr>
<tr>
<td>I1</td>
<td>RDA-I1-02D</td>
<td>Data uses machine-understandable knowledge representation</td>
<td>Important</td>
<td>Not explicitly supported</td>
</tr>
<tr>
<td>I2</td>
<td>RDA-I2-01M</td>
<td>Metadata uses FAIR-compliant vocabularies</td>
<td>Important</td>
<td>Supported for some vocabularies in the Guidelines, e.g. COAR vocabularies, CC-licenses vocabularies</td>
</tr>
<tr>
<td>I2</td>
<td>RDA-I2-01D</td>
<td>Data uses FAIR-compliant vocabularies</td>
<td>Useful</td>
<td>Not supported by the guidelines</td>
</tr>
<tr>
<td>I3</td>
<td>RDA-I3-01M</td>
<td>Metadata includes references to other metadata</td>
<td>Important</td>
<td>Related identifier</td>
</tr>
<tr>
<td>I3</td>
<td>RDA-I3-01D</td>
<td>Data includes references to other metadata</td>
<td>Useful</td>
<td>Not in the scope of the guidelines</td>
</tr>
</tbody>
</table>
### Evaluation of section

- **Reusable**

<table>
<thead>
<tr>
<th>R1</th>
<th>RDA-R1-01M</th>
<th>Plurality of accurate and relevant attributes are provided to allow reuse</th>
<th>Essential</th>
<th>Yes, as long as it concerns bibliographic information</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1.1</td>
<td>RDA-R1.1-01M</td>
<td>Metadata includes information about the licence under which the data can be reused</td>
<td>Essential</td>
<td>License Condition</td>
</tr>
<tr>
<td>R1.1</td>
<td>RDA-R1.1-02M</td>
<td>Metadata refers to a standard reuse licence</td>
<td>Important</td>
<td>License Condition</td>
</tr>
<tr>
<td>R1.1</td>
<td>RDA-R1.1-03M</td>
<td>Metadata refers to a machine-understandable reuse licence</td>
<td>Important</td>
<td>License Condition</td>
</tr>
<tr>
<td>R1.2</td>
<td>RDA-R1.2-01M</td>
<td>Metadata includes provenance information according to community-specific standards</td>
<td>Important</td>
<td>Not supported</td>
</tr>
<tr>
<td>R1.2</td>
<td>RDA-R1.2-02M</td>
<td>Metadata includes provenance information according to a cross-community language</td>
<td>Useful</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

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.

https://provide.openaire.eu
PROVIDE

Validate your datasource

Literature repository
Data repository
CRIS systems

FAIR assessment

https://provide.openaire.eu -> Validator
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
Open Science Observatory

a glance at the numbers
Our methodological approach is based on the following principles:

**Openness and transparency**: Methodological approaches are made public to the fullest extent possible, in order to provide meaning and context.

**Coverage and accuracy**: As detailed in graph, we cover the maximum number of research outputs, and as accurately as possible. We build on existing vocabularies and ontologies to ensure consistency.

**Clarity and replicability**: We describe our concepts and definitions in plain English and in a way that can be easily replicated and reproduced.

**Readiness and timeliness**: The methodology is regularly updated to reflect the latest research and developments in the domain.

**Trust and robustness**: Our methodology also ensures that research outcomes are operationalized, used and reused, in conjunction with formal criteria.

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### Terminology and construction

<table>
<thead>
<tr>
<th>Entities</th>
<th>Inherited and Inferred Attributes</th>
<th>Constructed Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>publication</td>
<td>There are currently four different types of research outcomes in the OpenAIRE Research Graph:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- publications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- datasets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- software</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- other research products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OpenAIRE deduplicates (merges) different records of research outcomes and keeps the metadata of all instances.</td>
<td></td>
</tr>
<tr>
<td>dataset</td>
<td>Research outcome intended for human reading (published articles, pre-prints, conference papers, presentations, technical reports, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Only peer-reviewed publications are considered in the OS Observatory, unless explicitly stated otherwise (see tab Constructed Attributes for definition of peer-review).</td>
<td></td>
</tr>
<tr>
<td>software</td>
<td>Granularity is not defined by OpenAIRE, it reflects the granularity supported by the sources from which the description of the dataset has been collected.</td>
<td></td>
</tr>
</tbody>
</table>

[https://osobservatory.openaire.eu](https://osobservatory.openaire.eu)
Community feedback
Community feedback

- OpenAIRE Guidelines for CRIS Manager (v1.1.1)

- Feedback:
  - https://github.com/openaire/guidelines-cris-managers/issues (with sign-in)
  - https://docs.google.com/document/d/1BkkO3ysr5Pmsqt7kZ118ZxBv1wE9Md3TYvp9vtUUV-c/edit# (without sign-in)

- sharing novelties during monthly Community Calls
  https://www.openaire.eu/provide-community-calls
THANK YOU

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