



FAIRSFair

Fostering Fair Data Practices in Europe

F-UJI : An Automated Assessment Tool for Improving the FAIRness of Research Data

Anusuriya Devaraju & Robert Huber
{adevaraju, rhuber}@marum.de
(on behalf of Task 4.5)



Presentation Outline

- Task 4.5 (FAIR Data Assessments: Pilots)
- FAIR Assessment of Research Data
 - Data Assessment Metrics
 - F-UJI : An Automated FAIR Data Assessment Tool
- Pilot Repositories & Results
- Conclusions



Presentation Outline

- **Task 4.5 (FAIR Data Assessments: Pilots)**
- FAIR Assessment of Research Data
 - Data Assessment Metrics
 - F-UJI : An Automated FAIR Data Assessment Tool
- Pilot Repositories & Results
- Conclusions



Fostering Fair Data Practices in Europe (FAIRsFAIR)

- Aims to supply practical solutions for the use of the FAIR principles throughout the research data life cycle.
- Starting date: 01.03.2019
- Duration: 36 months
- 22 partners from 8 Member States.



Task 4.5 – FAIR Data Assessments: Pilots

- The goal of the task is to **pilot** the FAIR assessment of **research data** from **trustworthy data repositories**.
- Research data...



- KPI 4.2: **Metrics** and **badging** scheme for **assessment of FAIRness of individual datasets** in trusted repositories tested and applied to **100 datasets** in **5 CoreTrustSeal certified repositories**.

Task 4.5 – FAIR Data Assessments: Pilots

- FAIR assessment implementation comprises the development of two main components – **assessment metrics** and **tool**.

Priority Recommendations

Rec. 8: Facilitate automated processing

Rec. 12: Develop metrics for FAIR Digital Objects

Supporting Recommendations

Rec. 25: Implement FAIR metrics to monitor uptake



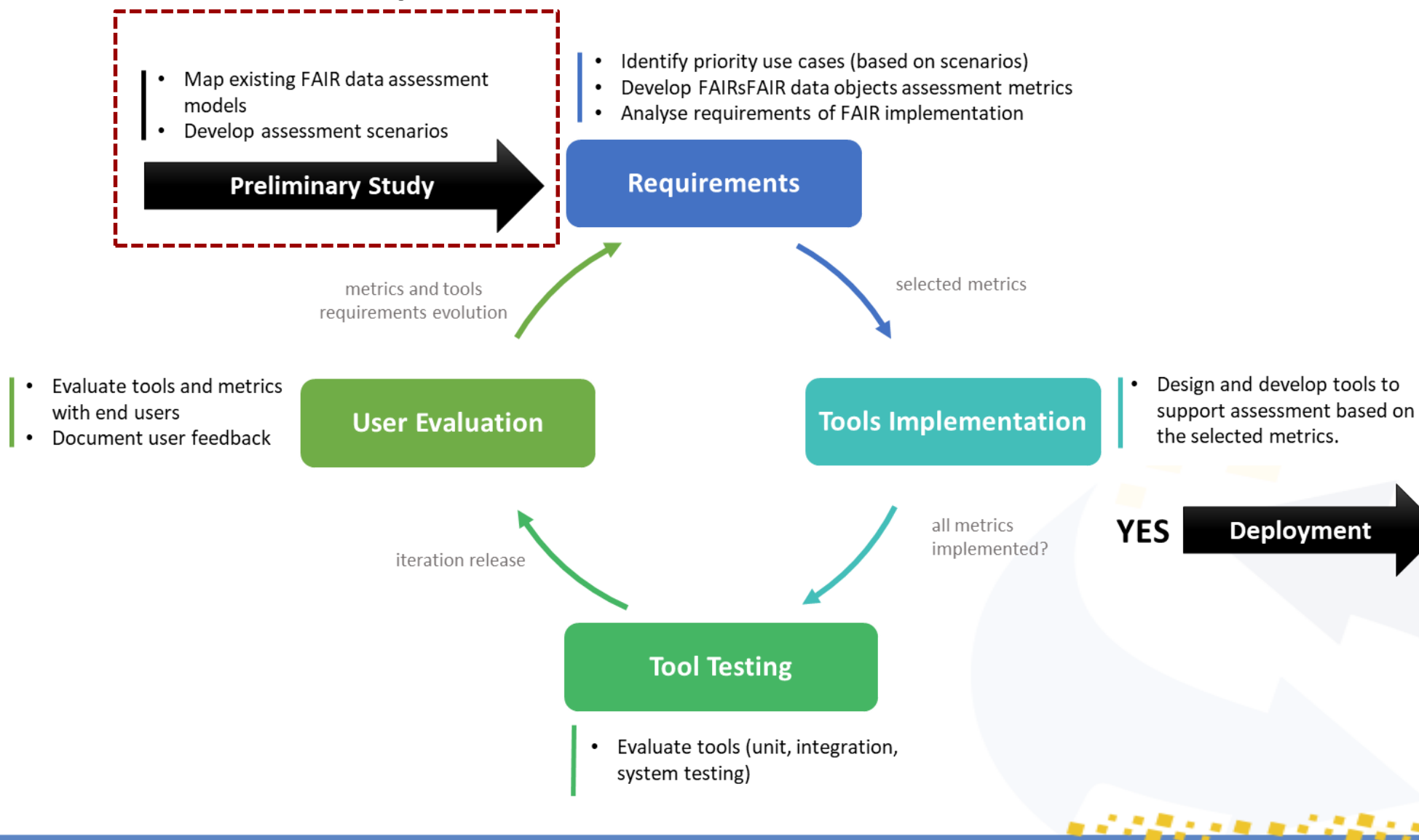
European Commission Expert Group on FAIR Data. 2018. 'Turning FAIR into Reality: Final Report and Action Plan from the European Commission Expert Group on FAIR Data.' <https://doi.org/10.2777/1524>

Presentation Outline

- Task 4.5 (FAIR Data Assessments: Pilots)
- **FAIR Assessment of Research Data**
 - Data Assessment Metrics
 - F-UJI : An Automated FAIR Data Assessment Tool
- Pilot Repositories & Results
- Conclusions



Iterative Development

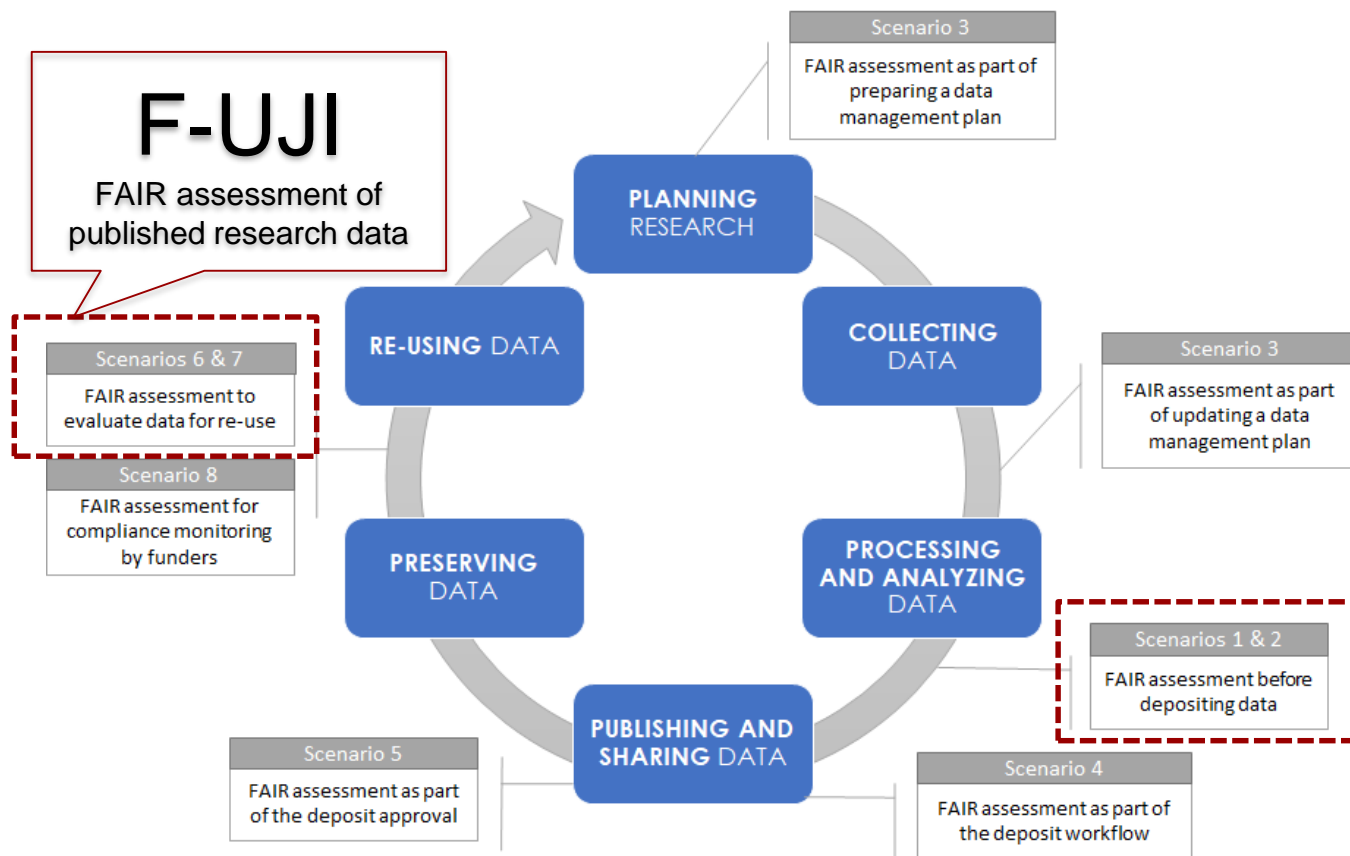


Stakeholders and Scenarios

For more information, see D4.1 Draft Recommendations on Requirements for Fair Datasets in Certified Repositories, <https://doi.org/10.5281/zenodo.3678715>



FAIR stakeholders; figure is derived from 8.3 Stakeholder Groups Assigned Actions (EC Expert Group on FAIR Data, 2018). Dotted lines represent the stakeholders of the FAIRsFAIR Task 4.5.



Research data lifecycle; figure adapted from (Mosconi et al., 2019) and scenarios of FAIR assessment of datasets therein.



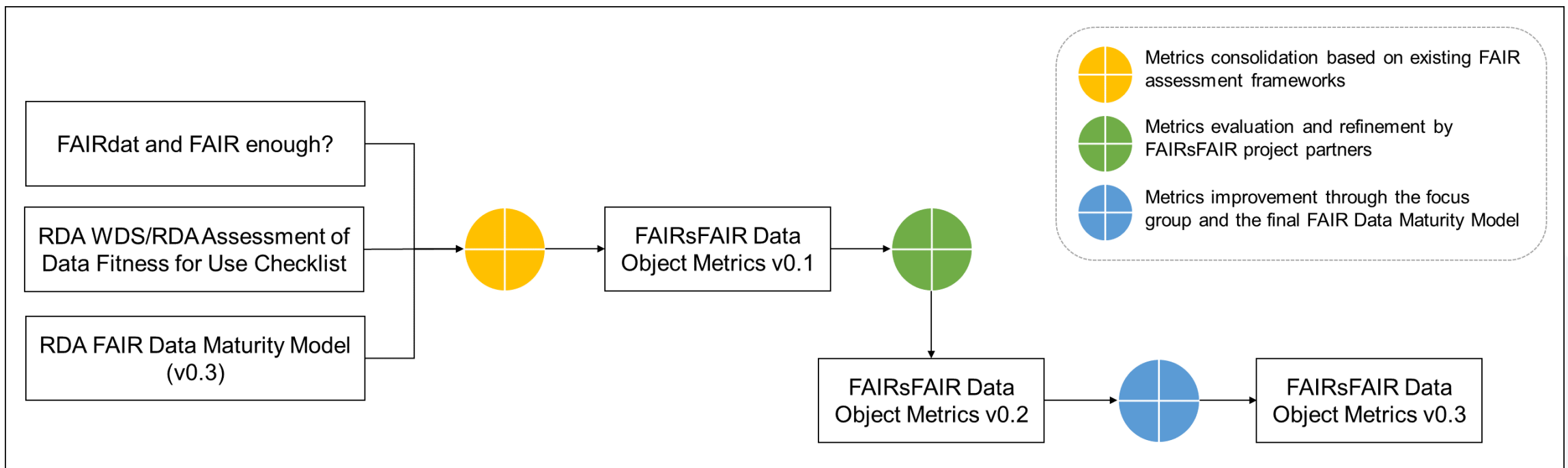
Presentation Outline

- Task 4.5 (FAIR Data Assessments: Pilots)
- FAIR Assessment of Research Data
 - **Data Assessment Metrics**
 - F-UJI : An Automated FAIR Data Assessment Tool
- Pilot Repositories & Results
- Conclusions



FAIRsFAIR Data Assessment Metrics

- There are **15 core metrics** (v0.3) developed based on existing work:
 - RDA FAIR Data Maturity Model, Fairdat/FAIR Enough?, WDS/RDA Assessment of Data Fitness
- Correspond to a part of or the whole of a FAIR principle.



- The metric specification follows the template modified from ([Wilkinson et al., 2018](#)).

COMMENTS
<p>Related Resources</p> <ul style="list-style-type: none"> Examples of metadata recommendations: <ul style="list-style-type: none"> EOSC EDML metadata properties, https://eosc-edmi.github.io/properties W3C Recommendation Data on the Web Best Practices, https://www.w3.org/TR/dwbp/#metadata W3C Data Catalog Vocabulary, https://www.w3.org/TR/vocab-dcat-2/ Sites that provide a list of metadata standards: <ul style="list-style-type: none"> FAIRsharing standards, https://fairsharing.org/standards/ DCC List of Metadata Standards, http://www.dcc.ac.uk/resources/metadata-standards/list RDA Metadata Directory (based on the DCC list), http://rd-alliance.github.io/metadata-directory/ Examples of domain agnostic metadata standards for describing research data: <ul style="list-style-type: none"> Dublin Core Metadata Initiative (DCMI) Metadata Terms, https://www.w3.org/TR/dwbp/#bib-DCTERMS DataCite Metadata Schema, https://doi.org/10.14454/7xq3-zf69 Schema.org, https://schema.org/Dataset Data Catalog Vocabulary (DCAT), https://www.w3.org/TR/vocab-dcat-2/ <p>Known Limitations/Constraints</p> <ul style="list-style-type: none"> The assessment assumes that the identifier resolves to a landing page (e.g., html) that contains the metadata of the data. Landing page may not necessarily be an html page. Data providers may use different standards to expose the metadata of their data. The metadata records maintained by a data provider might not be accessible, due to, e.g., broken link of the landing page, proprietary metadata standard used, and restricted metadata.

FIELD	DESCRIPTION
Metric Identifier	FsF-F2-01M
Metric Name	Metadata includes descriptive core elements (creator, title, data identifier, publisher, publication date, summary and keywords) to support data findability.
Description	<p>Metadata is descriptive information about a data object. Since the metadata required differs depending on the users and their applications, this metric focuses on core metadata. The core metadata is the minimum descriptive information required to enable data finding, including citation which makes it easier to find data. We determine the required metadata based on common data citation guidelines (e.g., DataCite, ESIP, and IASSIST), and metadata recommendations for data discovery (e.g., EOSC Datasets Minimum Information (EDMI), DataCite Metadata Schema, W3C Recommendation Data on the Web Best Practices and Data Catalog Vocabulary).</p> <p>This metric focuses on domain-agnostic core metadata. Domain or discipline-specific metadata specifications are covered under metric FsF-R1.3-01M. A repository should adopt a schema that includes properties of core metadata, whereas data authors should take the responsibility of providing core metadata.</p>
FAIR Principle	F2. Data are described with rich metadata
CoreTrustSeal Alignment	R13. The repository enables users to discover the data and refer to them in a persistent way through proper citation
ASSESSMENT	
Requirement(s)	<ul style="list-style-type: none"> Data identifier (IRI, URL) Machine-accessible and readable metadata
Method	<p>Use the data identifier to access its metadata document. Parse or retrieve core metadata, e.g., through one or more options below, combine the results and then verify presence/absence of the core elements in the metadata.</p> <ul style="list-style-type: none"> Structured data embedded in the landing page of the identifier (e.g., Schema.org, Dublin Core and <u>OpenGraph</u> meta tags) Typed Links in the HTTP Link header; for more information, see https://signposting.org/conventions/ If the identifier specified is a persistent identifier, use it to retrieve the metadata of the data from its PID provider, e.g., see DataCite Content Resolver at https://datacite.org/content.html
COMMENTS	

¹While FAIR principles may apply to any digital objects, we are concerned with the subset of digital objects: research data that are collected, measured, or created for purposes of scientific analysis.

- ✓ FsF-F1-01D - Data is assigned a globally unique identifier
- ✓ FsF-F1-02D - Data is assigned a persistent identifier
- ✓ FsF-F2-01M - Metadata includes descriptive core elements (creator, title, data identifier, publisher, publication date, summary and keywords) to support data findability
- ✓ FsF-F3-01M - Metadata includes the identifier of the data it describes
- ✓ FsF-F4-01M - Metadata is offered in such a way that it can be retrieved by machines
- ✓ FsF-A1-01M - Metadata contains access level and access conditions of the data
- ✓ FsF-A2-01M - Metadata remains available, even if the data is no longer available
- ✓ FsF-I1-01M - Metadata is represented using a formal knowledge representation language
- ✓ FsF-I1-02M - Metadata uses semantic resources
- ✓ FsF-I3-01M - Metadata includes links between the data and its related entities
- ✓ FsF-R1-01MD - Metadata specifies the content of the data
- ✓ FsF-R1.1-01M - Metadata includes license information under which data can be reused
- ✓ FsF-R1.2-01M - Metadata includes provenance information about data creation or generation
- ✓ FsF-R1.3-01M - Metadata follows a standard recommended by the target research community of the data
- ✓ FsF-R1.3-02D - Data is available in a file format recommended by the target research community

Please [login & comment below](#) citing in the subject line the Metric Identifier No. you are referring to – e.g. "FsF-R1.3-01M"

Object Assessment Metrics v0.3

We would love to hear
your feedback!

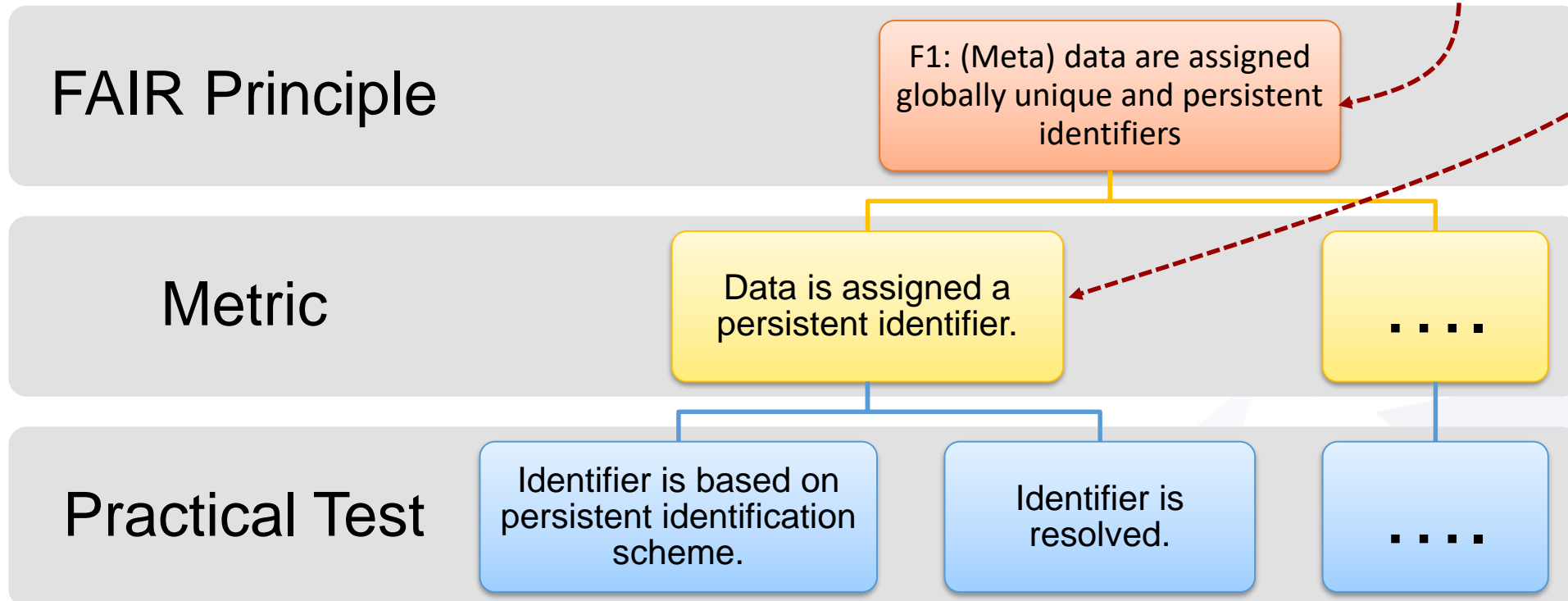
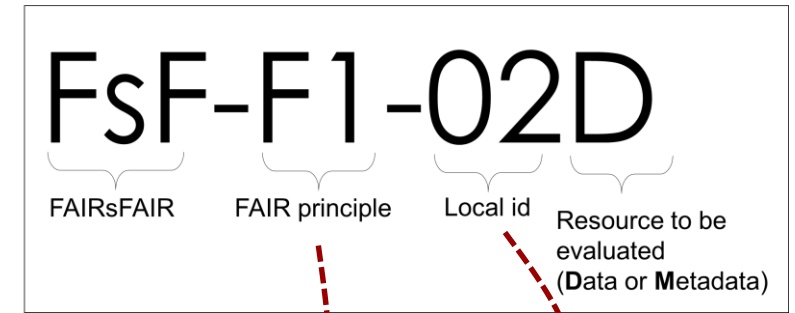
<https://www.fairsfair.eu/fairsfair-data-object-assessment-metrics-request-comments>

Presentation Outline

- Task 4.5 (FAIR Data Assessments: Pilots)
- FAIR Assessment of Research Data
 - Data Assessment Metrics
 - **F-UJI : An Automated FAIR Data Assessment Tool**
- Pilot Repositories & Results
- Conclusions

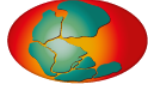


From Principles to Practical Tests



Resources

- Metadata
- Data file(s)
- External resources
 - PID provider service
 - r3data.org
 - SPDX license list
 - RDA Metadata Standards Catalog
 - LOV, LOD
 - ISO/TR 22299 (Digital file format recommendations for long-term storage)
 - Wolfram scientific formats
 - more



PANGAEA.
Data Publisher for Earth & Environmental Science

Citation:

Kölling, Martin (2019): Pyrex 10.10 Model of pyrite oxidation
Supplement to: Kölling, Martin; Bouimetarhan, Ilham
 release by pyrite oxidation on continental shelves prior to the Quaternary

Abstract:

This worksheet comprises a fo...
 calculates the oxygen consum...
 descending pyrite oxidation fr...
 We recommend using Excel 20...

Keyword(s):

"acid capacitor" Q; CO2 relea...


Project(s):

Center for Marine Environm...

Parameter(s):

#	Name
1	File content
2	File name
3	File format
4	File size
5	Uniform resource locator/link to file

License:

 **Creative Commons**

Size: 15 data points

Link relation types

HTML meta tags

Schema.org structured data

Assessment Enabling Services

'Lookup' Services



re3data.org Search Browse Suggest Resources

Repository details
PANGAEA

DataCite Feedback Home

Guides > DataCite Content Negotiation

Testing Guide >

DataCite or Crossref

DEVELOPER DOCUMENTATION

DataCite REST API Guide >

DataCite MDS API Guide

DataCite GraphQL API Guide

DataCite EZ API Guide

DataCite OAI-PMH Guide

DataCite Content Negotiation

DataCite Usage Reports API Guide

Enhanced Publication unknown

Quality management yes

Application programming interfaces (1)

API type OAI-PMH

URL <http://ws.pangaea.de/oai/provider>

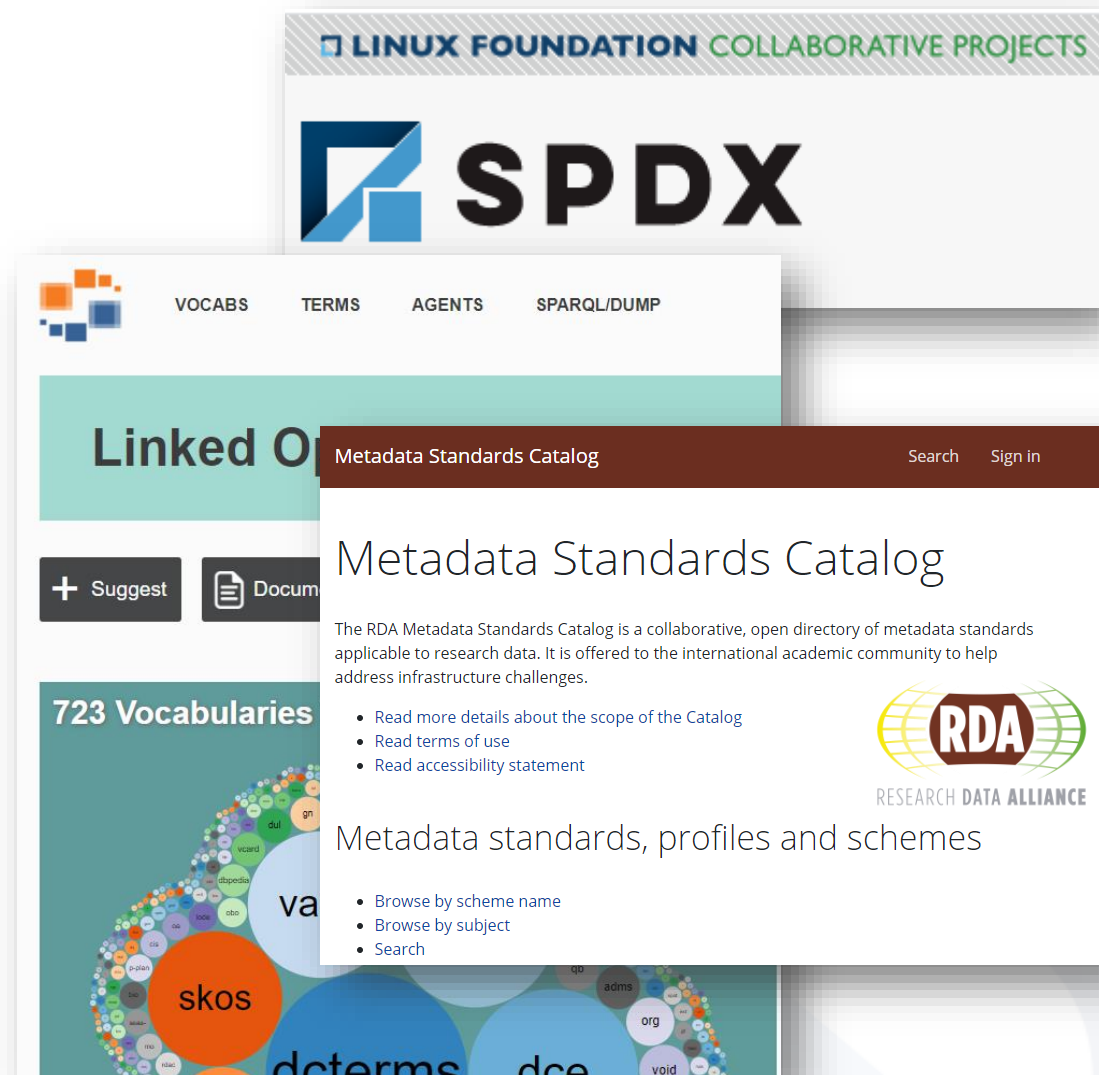
DataCite Content Negotiation

Access DataCite content negotiation here: <https://data.crosscite.org>

What is DataCite Content Negotiation?

The DataCite content negotiation allows you to retrieve DOI metadata in different content negotiated request to a DOI resolver is very similar to a standard HTTP on the list of acceptable content types.

Repository Contexts



LINUX FOUNDATION COLLABORATIVE PROJECTS

SPDX

VOCABS TERMS AGENTS SPARQL/DUMP

Linked Open

Metadata Standards Catalog Search Sign in

Metadata Standards Catalog

The RDA Metadata Standards Catalog is a collaborative, open directory of metadata standards applicable to research data. It is offered to the international academic community to help address infrastructure challenges.

- Read more details about the scope of the Catalog
- Read terms of use
- Read accessibility statement

723 Vocabularies

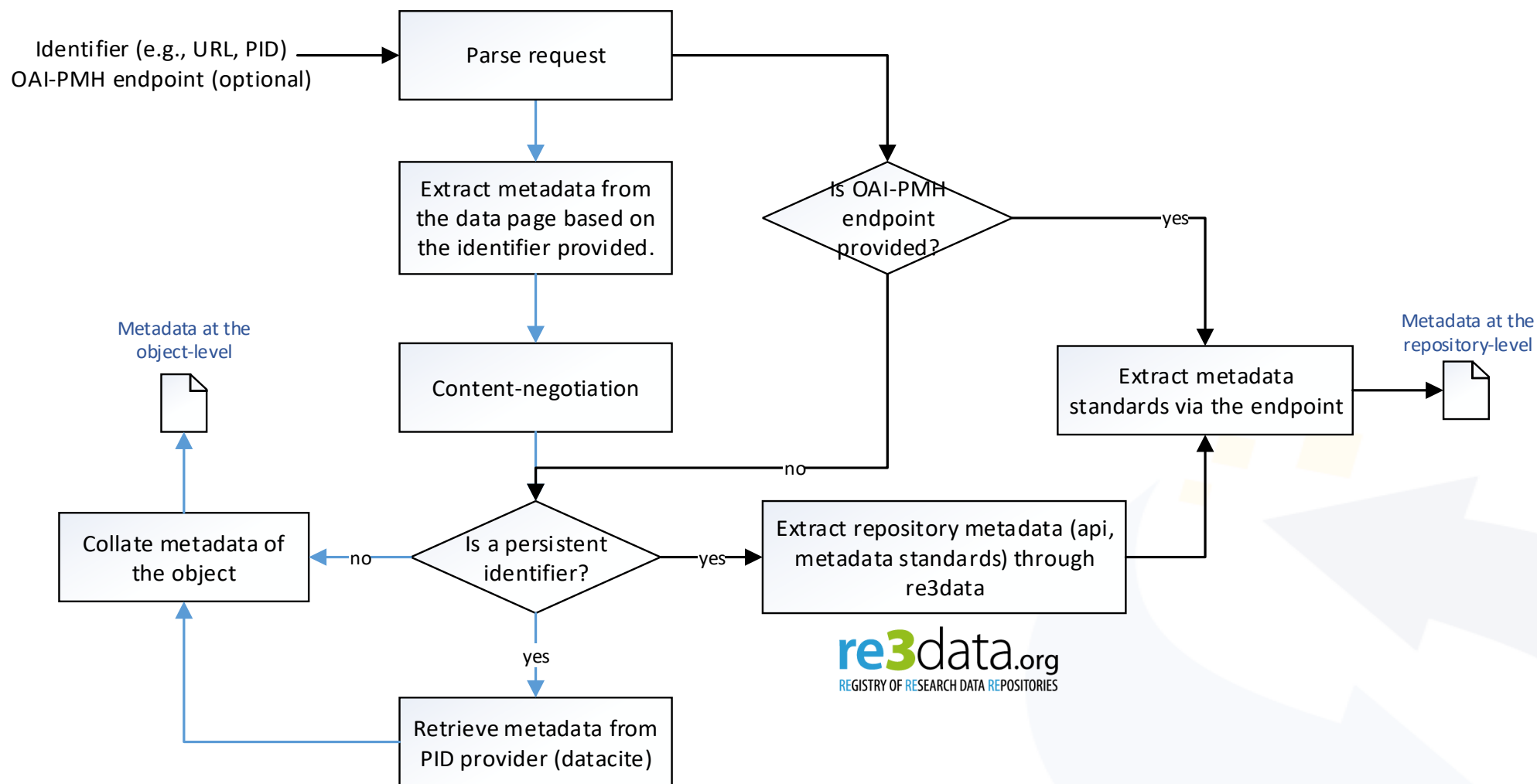
skos dcterms dce void org adms

Metadata standards, profiles and schemes

- Browse by scheme name
- Browse by subject
- Search

RDA
RESEARCH DATA ALLIANCE

High Level Flow (Data Gathering)

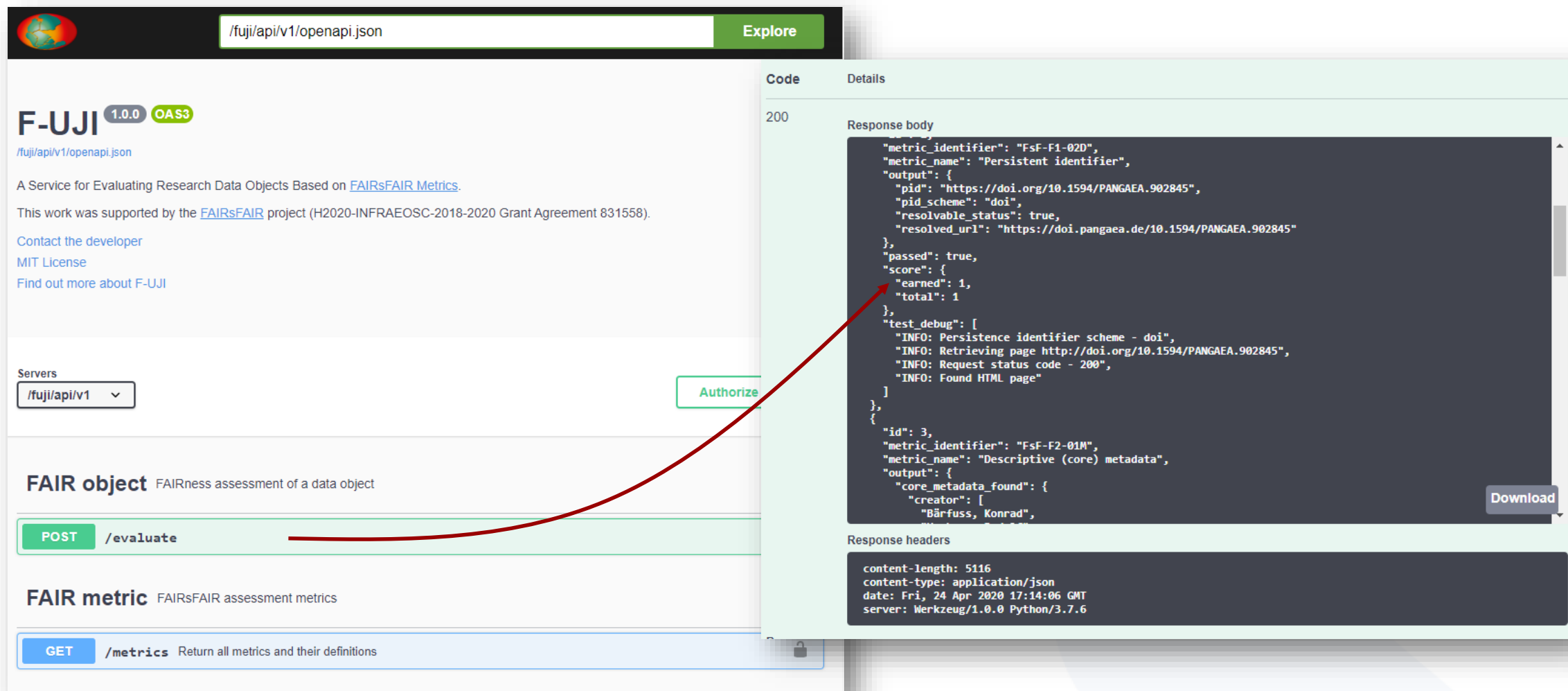


Demo

<https://doi.org/10.1594/PANGAEA.908011>



F-UJI – An Automated FAIR Data Assessment Tool



The screenshot displays the F-UJI web interface. At the top, there's a navigation bar with the FAIRSFAR logo and a search bar containing the API endpoint `/fuji/api/v1/openapi.json` with an **Explore** button. Below this, the main content area shows the **F-UJI 1.0.0 OAS3** title and a description: "A Service for Evaluating Research Data Objects Based on FAIRsFAIR Metrics." It also mentions support from the FAIRsFAIR project (H2020-INFRAEOSC-2018-2020 Grant Agreement 831558) and provides links for contacting the developer, MIT License, and finding out more about F-UJI.

On the left, there's a **Servers** section with a dropdown menu showing `/fuji/api/v1` and an **Authorize** button. Below this, the **FAIR object** section describes it as a "FAIRness assessment of a data object" and shows a **POST /evaluate** endpoint. The **FAIR metric** section describes it as "FAIRsFAIR assessment metrics" and shows a **GET /metrics** endpoint with the description "Return all metrics and their definitions".

On the right, a detailed view of the API response is shown. The **Code** tab is active, displaying a **200** status and a **Response body** in JSON format. A red arrow points from the **POST /evaluate** endpoint to the response body. The JSON response includes the following details:

```
{
  "metric_identifier": "FsF-F1-02D",
  "metric_name": "Persistent identifier",
  "output": {
    "pid": "https://doi.org/10.1594/PANGAEA.902845",
    "pid_scheme": "doi",
    "resolvable_status": true,
    "resolved_url": "https://doi.pangaea.de/10.1594/PANGAEA.902845"
  },
  "passed": true,
  "score": {
    "earned": 1,
    "total": 1
  },
  "test_debug": [
    "INFO: Persistence identifier scheme - doi",
    "INFO: Retrieving page http://doi.org/10.1594/PANGAEA.902845",
    "INFO: Request status code - 200",
    "INFO: Found HTML page"
  ]
},
{
  "id": 3,
  "metric_identifier": "FsF-F2-01M",
  "metric_name": "Descriptive (core) metadata",
  "output": {
    "core_metadata_found": {
      "creator": [
        "Bärfuss, Konrad",
        "Bärfuss, Konrad"
      ]
    }
  }
}
```

The **Response headers** section shows the following information:

```
content-length: 5116
content-type: application/json
date: Fri, 24 Apr 2020 17:14:06 GMT
server: Werkzeug/1.0.0 Python/3.7.6
```

A **Download** button is visible next to the response body.

Request and Response

```
{
  "object_identifier": "https://doi.org/10.1594/PANGAEA.908011",
  "test_debug": true,
  "oaipmh_endpoint": "http://ws.pangaea.de/oai/provider"
}
```

```
},
"test_debug": [
  "INFO: Formats of structured metadata embedded in HTML markup dict_keys(['json-ld', 'opengra",
  "INFO: Extract metadata from Schema.org JSON-LD (Embedded)",
  "INFO: Extract DublinCore metadata from html page",
  "INFO: Retrieving page https://doi.pangaea.de/10.1594/PANGAEA.908011",
  "INFO: Content negotiation accept=application/xml, text/xml;q=0.5, status=406",
  "INFO: Extract metadata from Generic XML (Negotiated)",
  "INFO: Expected XML but content negotiation responded: html",
  "INFO: Extract datacite metadata",
  "INFO: Retrieving page http://doi.org/10.1594/PANGAEA.908011",
  "INFO: Content negotiation accept=application/vnd.datacite.datacite+json, status=200",
  "INFO: Extract metadata from Linked Data (RDF)",
  "INFO: Retrieving page https://doi.pangaea.de/10.1594/PANGAEA.908011",
  "INFO: Content negotiation accept=text/turtle, application/turtle, application/x-turtle;q=0.
  text/rdf+n3;q=0.9, status=406",
  "INFO: Expected RDF Graph but received - text/html",
  "INFO: Linked Data metadata UNAVAILABLE",
  "INFO: Type of object described by the metadata - Dataset",
  "INFO: Required core metadata ['creator', 'title', 'publisher', 'publication_date', 'summary
],
"test_status": "pass"
```

```
{
  "id": 3,
  "metric_identifier": "FsF-F2-01M",
  "metric_name": "Metadata includes descriptive core elements (creator, titl
keywords) to support data findability.",
  "output": {
    "core_metadata_found": {
      "creator": [
        "Robert Huber"
      ],
      "keywords": "Event label, Neogloboquadrina pachyderma sinistral, maxim
investigations, Kasten corer, CTD/Rosette, Scanning electron microscop
ARK-II/5, ARK-VI/2, ARK-V/2, ARK-VII/1, ARK-VIII/3, SO82, Meteor (1986
Karbonatflüsse seit dem Pliozän: Rekonstruktion polarer und atlantisch
"object_identifier": "https://doi.org/10.1594/PANGAEA.908011",
"publication_date": "2019-11-01",
"publisher": "PANGAEA",
"summary": "This data set contains unpublished measurements of the max
Neogloboquadrina pachyderma sin. carried out on surface sediment sampl
"title": "Maximum diameter of Neogloboquadrina pachyderma sinistral fr
    },
    "core_metadata_source": [
      "Schema.org JSON-LD (Embedded)",
      "Embedded DublinCore",
      "Datacite Search"
    ],
    "core_metadata_status": "all metadata"
  },
  "score": {
    "earned": 2,
    "total": 2
  },
  "test_debug": [
    "INFO: Formats of structured metadata embedded in HTML markup dict_keys(
    "INFO: Extract metadata from Schema.org JSON-LD (Embedded)",
```

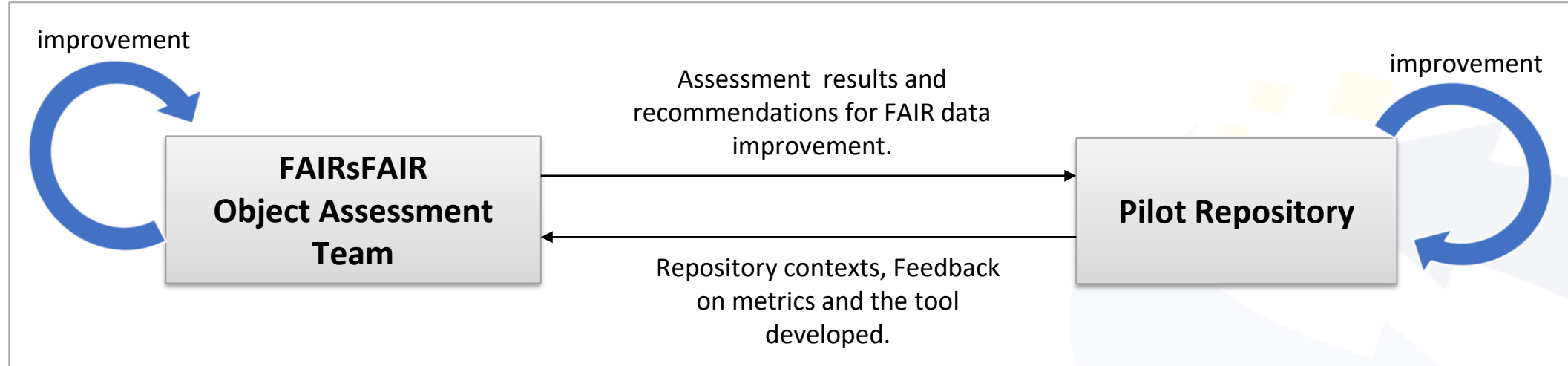
Presentation Outline

- Task 4.5 (FAIR Data Assessments: Pilots)
- FAIR Assessment of Research Data
 - Data Assessment Metrics
 - F-UJI : An Automated FAIR Data Assessment Tool
- **Pilot Repositories & Results**
- Conclusions



Progress Towards the End Goal

- KPI 4.2: [Metrics and badging scheme](#) for [assessment of FAIRness of individual datasets](#) in trusted repositories tested and applied to [100 datasets in 5 CoreTrustSeal certified repositories](#).
- Automated assessment + consultancy with pilot repositories.

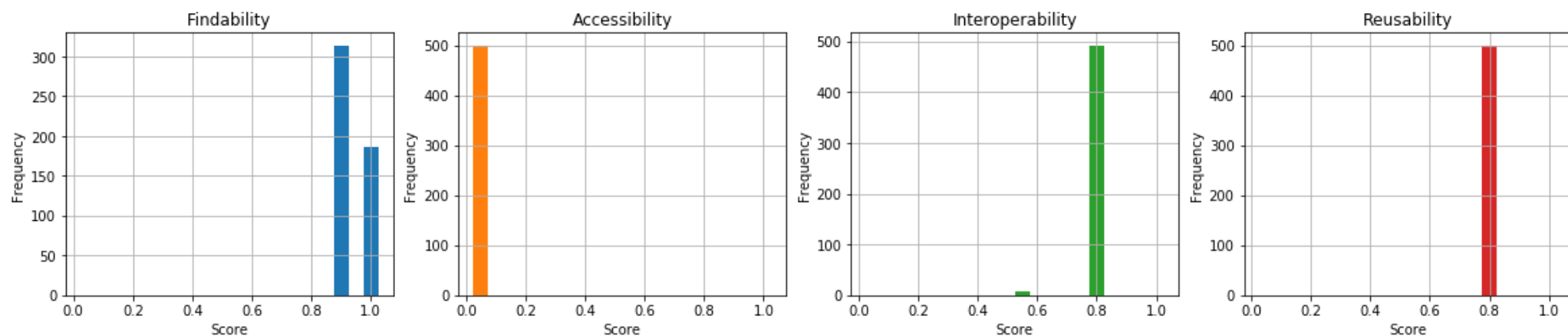


Collaborating Repositories

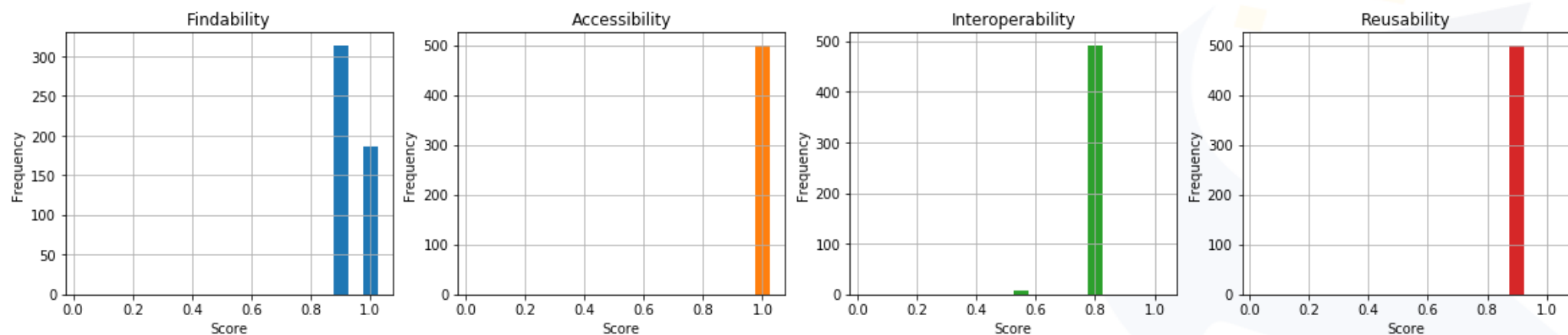
Repository	Certification	Subject Areas	Datasets Evaluated (as of 25.09.2020)	FAIR Data Improvement	Repository Contact
PANGAEA	CoreTrustSeal, WDS Regular Member	Earth and Environmental Science	500	Completed (1 st iteration)	Uwe Schindler Michael Diepenbroek
Phaidra-Italy	CoreTrustSeal	Cultural Heritage	500	Ongoing	Yuri Carrer Cristiana Bettella GianLuca Drago Giulio Turetta
CSIRO Data Portal	CoreTrustSeal	Multiple disciplines	500	Ongoing	Mikaela Lawrence Dominic Hogan Cynthia Love
World Data Centre for Climate (WDCC)	CoreTrustSeal, WDS Regular Member	Earth System Science	500	Ongoing	Amandine Kaiser Andrej Fast Hannes Thiemann
DataverseNO	CoreTrustSeal	Multiple disciplines	500	Ongoing	Philipp Conzett (UiT/DataverseNO) Gustavo Durand, Julian Gautier (Harvard/Dataverse)

Before and After

FAIR Scores of PANGAEA Datasets By Principle (Before Improvement, n=500)

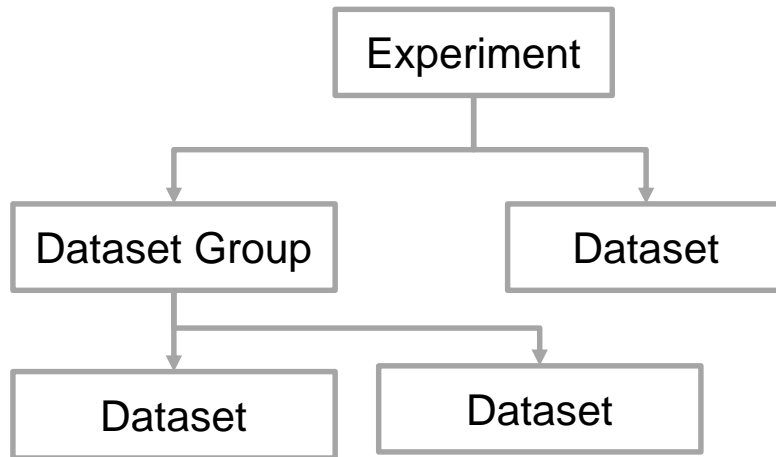


FAIR Scores of PANGAEA Datasets By Principle (After Improvement, n=500)

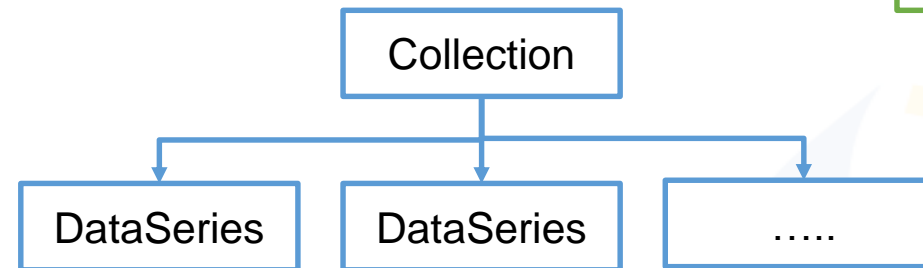


Impressions and Experiences

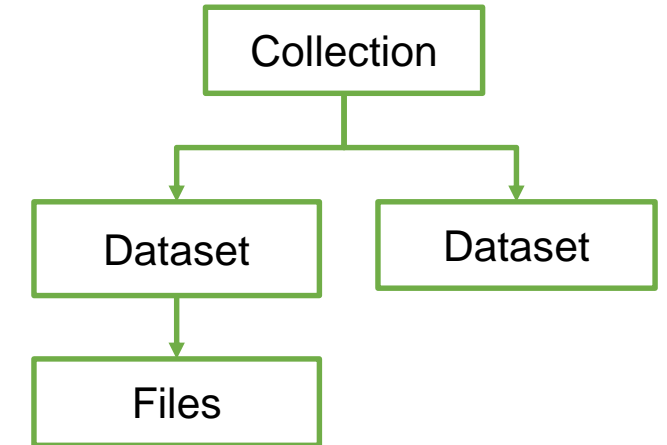
- Identify data objects to be assessed



Data Repository A



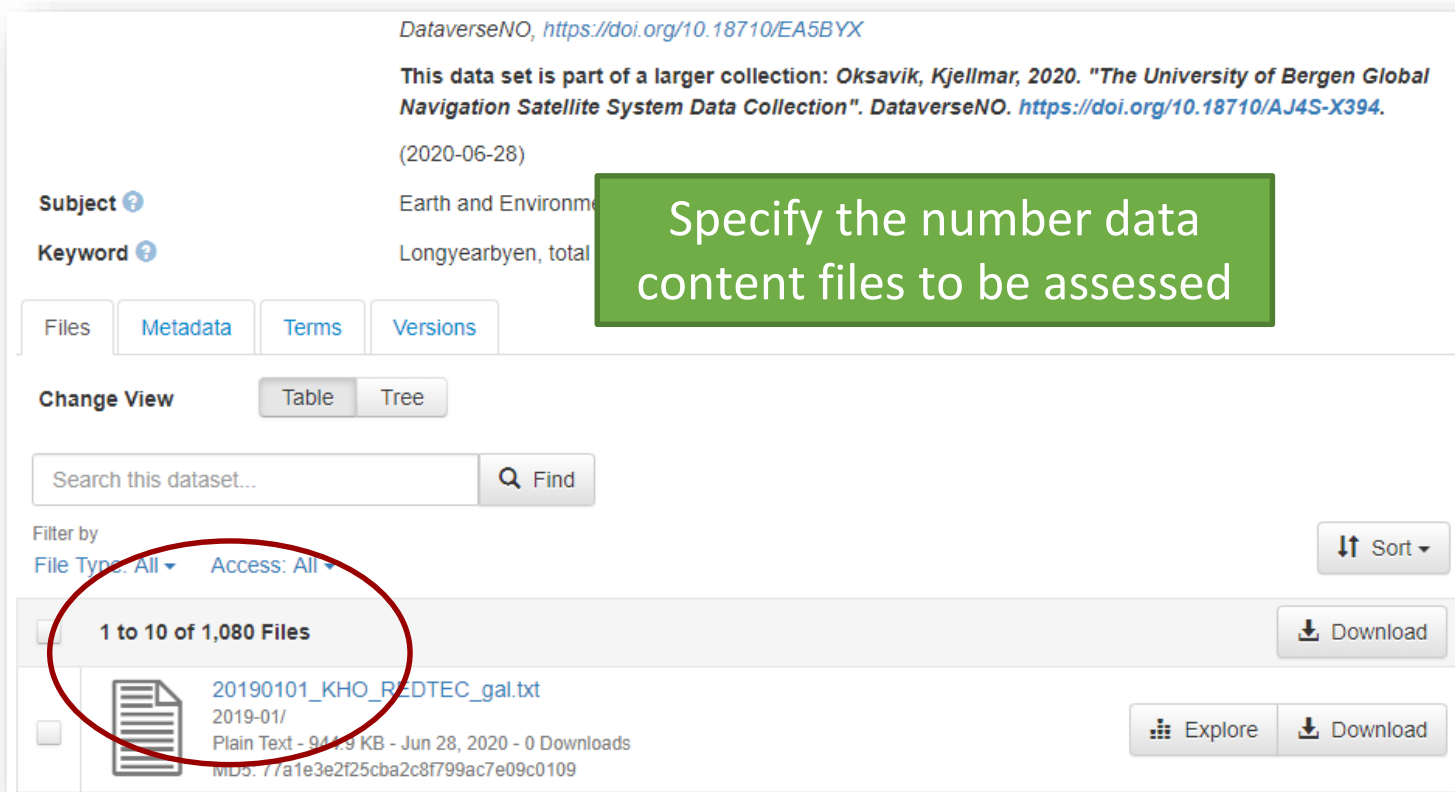
Data Repository B



Data Repository C

Impressions and Experiences

- Performance matters!



DataverseNO, <https://doi.org/10.18710/EA5BYX>

This data set is part of a larger collection: Oksavik, Kjellmar, 2020. "The University of Bergen Global Navigation Satellite System Data Collection". DataverseNO. <https://doi.org/10.18710/AJ4S-X394>. (2020-06-28)

Subject ? Earth and Environmental Sciences

Keyword ? Longyearbyen, total

Files Metadata Terms Versions

Change View Table Tree

Search this dataset... Find

Filter by File Type: All Access: All Sort

1 to 10 of 1,080 Files Download

File Name	File Type	Size	Date	Downloads	MD5
20190101_KHO_REDTEC_gal.txt	Plain Text	94.49 KB	Jun 28, 2020	0 Downloads	MD5: 77a1e3e2f25cba2c8f799ac7e09c0109

Explore Download

Cache external resources
(selected) locally.






Metadata Standards Catalog


Linked Open Data Cloud

Linked Open Vocabularies (LOV)

Impressions and Experiences

- Restricted data can be FAIR

```
"id": 4,  
"metric_identifier": "FsF-F3-01M",  
"metric_name": "Metadata includes the identifier of",  
"output": {,  
"score": {,  
"test_debug": [  
  "INFO: Object identifier specified https://doi.org/10.1594/PANGAEA.570754?format=html",  
  "INFO: Number of object content identifier found = 2",  
  "WARNING: Content identifier https://doi.pangaea.de/10.1594/PANGAEA.570754?format=html",  
    inaccessible, HTTPError code 401",  
  "WARNING: Content identifier https://doi.pangaea.de/10.1594/PANGAEA.570754?format",  
    =textfile inaccessible, HTTPError code 401"  
],  
  "id": 14,  
  "metric_identifier": "FsF-R1.3-02D",  
  "metric_name": "Data is available in a file format recommended by the target re",  
    community.",  
  "output": [],  
  "score": {,  
  "test_debug": [  
    "INFO: File format specified - text/html",  
    "INFO: File format specified - text/tab-separated-values",  
    "WARNING: Could not perform file format checks as data content identifier(s)",  
      unavailable/inaccessible"
```

```
"id": 14,  
"metric_identifier": "FsF-R1.3-02D",  
"metric_name": "Data is available in a file format recommended by the target re",  
  community.",  
"output": [],  
"score": {,  
"test_debug": [  
  "INFO: File format specified - text/html",  
  "INFO: File format specified - text/tab-separated-values",  
  "WARNING: Could not perform file format checks as data content identifier(s)",  
    unavailable/inaccessible"
```

Impressions and Experiences

- Extend ways of retrieving metadata
 - Metadata Aggregators
 - PID provider (datacite) ✓
 - Other potential aggregators? B2FIND?
 - HTML-embedded Data
 - JSON-LD (schema.org) embedded in a <script> tag ✓
 - JSON-LD (schema.org) dynamically ingested into the page through JavaScript code
 - Microdata ✓
 - RDFa ✓
 - Typed Links
 - HEAD/GET request
 - HTML link element ✓
 - Harvesting protocol supported by a repository
 - OAI-PMH ✓



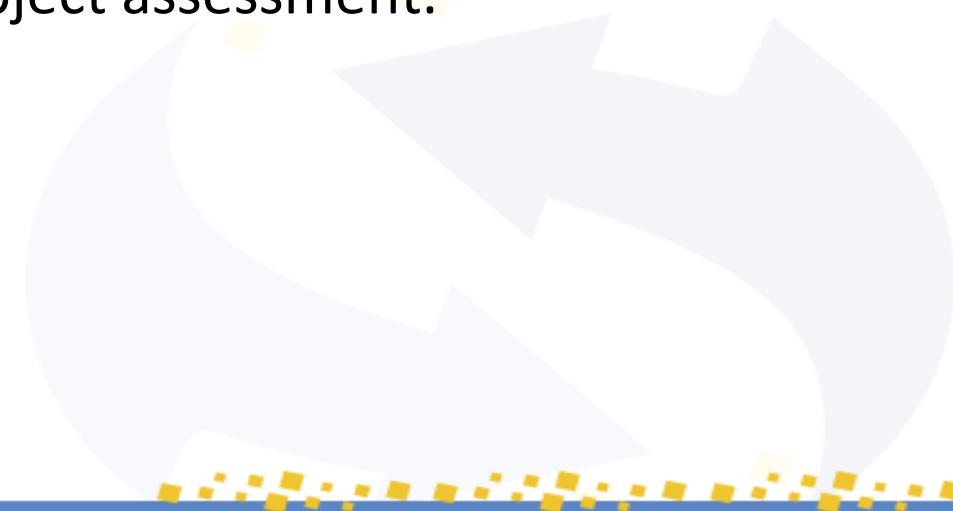
Presentation Outline

- Task 4.5 (FAIR Data Assessments: Pilots)
- FAIR Assessment of Research Data
 - Data Assessment Metrics
 - F-UJI : An Automated FAIR Data Assessment Tool
- Pilot Repositories & Results
- **Conclusions**



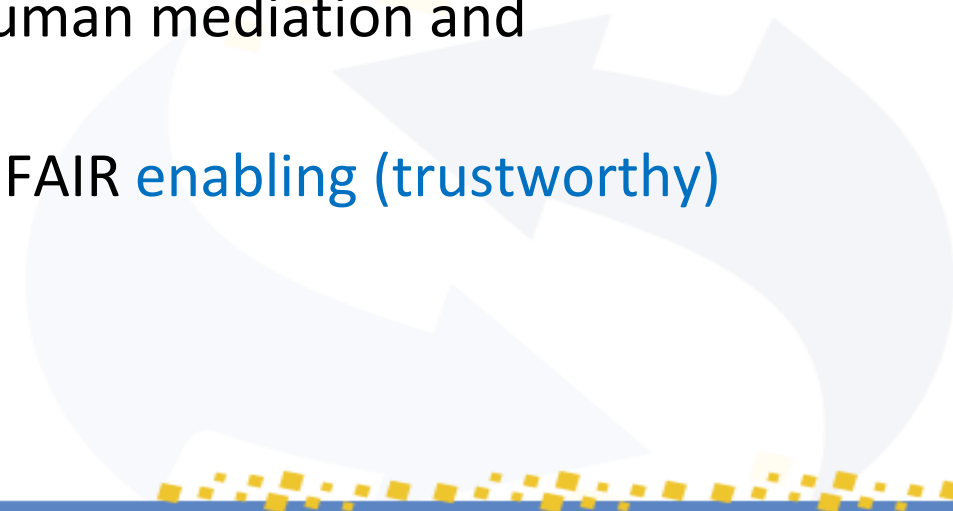
Conclusions

- Our approach → use-case driven, iterative, reuse & adapt.
- Continuous improvement is essential. We need more pilot repositories ;)
- What's Next?
 - Badging implementation
 - Continue liaising with other projects/institutions (EOSC Synergy, EOSC-Nordic, DataverseNL, GOFAIR, ...) with regard to FAIR object assessment.



To remember about measuring FAIR data...

- Metrics for research data focus on **generally applicable data/metadata characteristics** until domain/community-driven criteria have been agreed.
- F. A. I. R. are **not new** to data repositories!
- Must take into account **context** (e.g., disciplinary practices, data structures, types) and **data infrastructure** – human should be in the loop!
- **Automated** assessment saves efforts, but not all components of the research data ecosystem are **machine-friendly**; some aspects (rich, plurality, accurate, relevant) specified in FAIR principles still require human mediation and interpretation.
- FAIR assessment must go beyond the object itself. FAIR **enabling (trustworthy) for repositories/services** evolves in parallel.



Thank You

Task 4.5:

Anusuriya Devaraju, Robert Huber,
 Mustapha Mokrane, Jerry de Vries,
 Patricia Herterich, Linas Cepinkas, Vesa
 Akerman, Joy Davidson, Herve L'Hours.

- [FAIRsFAIR Data Object Assessment Metrics Specification v0.3](#)
- [F-UJI](#)
- [FAIR-Aware](#)


FAIRSFAR
 Fostering Fair Data Practices in Europe

Data Archiving and Networked Services
DANS

FAIR-Aware

Let's assume you have research data almost ready for uploading to a repository: do you already know how you and the repository can work together to make the data as findable, accessible, interoperable and reusable (FAIR) as possible? By guiding you through the assessment process, the FAIR-Aware tool can help you to better understand the FAIR Principles and how making data FAIR can increase the potential value and impact of your data.

FAIR-Aware is an online tool developed by the FAIRsFAIR project. The tool is not meant to give you a score for the FAIRness of a specific dataset. You should, however, have a target dataset in mind to be able to answer the questions and complete the assessment.

The assessment starts with a few questions 'about you' followed by 10 questions about FAIR. After you answer each question additional information and guidance will be displayed. The majority of the questions will help you assess your current level of awareness about what actions are needed to make data FAIR. At the end, Your feedback will help us improve FAIR-Aware and make it as user-friendly as possible. You will need between 10 and 30 minutes to complete the assessment depending on your familiarity with the subject and issues covered.

The FAIRsFAIR Team (DANS, DCC, UniHB)

Find out more about FAIRsFAIR on the project's website. If you have any questions, drop us an e-mail.

About you

Which research domain do you work in? Domain ▾

Which of the following describes your role? Please select all that apply.

<input type="checkbox"/> Researcher	<input type="checkbox"/> Funder
<input type="checkbox"/> Policy maker	<input type="checkbox"/> Publisher
<input type="checkbox"/> Research support (e.g. data steward, curator, data manager, librarian, information technology professional)	<input type="checkbox"/> Other

Which of the following types of organisations best describe your employer? Please select all that apply.

<input type="checkbox"/> Research Infrastructure/einfrastructure (e.g. data repository, service provider, library)	<input type="checkbox"/> Funding Body
<input type="checkbox"/> University or Research Performing Organisation	<input type="checkbox"/> Publisher
<input type="checkbox"/> Research Performing Organisation	<input type="checkbox"/> Industry
<input type="checkbox"/> Government	<input type="checkbox"/> Other
<input type="checkbox"/> eInfrastructure (e.g. repository or scientific data provider)	

FAIR questions

FINDABLE

Are you aware that a dataset should be assigned a globally unique and persistent identifier when deposited with a data repository? Yes No

Are you aware that when you deposit a dataset with a repository, you will need to provide some details (known as discovery metadata) in order to make the data findable, understandable and reusable to others? Yes No

It's quiz time ;)

Go to www.menti.com and use the code 8888200



source : [cruzsuzu](https://www.cruzsuzu.com)