



FAIR-IMPACT

Expanding FAIR solutions across EOSC

FAIR-IMPACT Synchronisation Force workshop 2023

Introduction session, 2 November 2023

Ingrid Dillo, Vasso Kalaitzi, Sara Pittonet,
Marjan Grootveld

Welcome message

Ingrid Dillo, DANS, and Sara Pittonet, Trust-IT



Synchronisation Force

ONLINE WORKSHOP

eosc

FAIR-IMPACT
Expanding FAIR solutions across EOSC

2023 Edition

2 November 2023 - 8 February 2024

Save the Date!

Welcome!

The workshop aims to discuss common challenges and priorities related to turning the FAIR principles into practice.

Five online collaborative sessions between the 27th of November and the 7th of December 2023 will assess the implementation of **selected recommendations** and ambitions from the [Turning FAIR into Reality Report](#) (2018), the [EOSC Interoperability Framework](#) (2021), the [FAIRsFAIR White Paper](#) (2021), the [SRIA](#) (version November 2022), [FAIR-IMPACT SyncForce report](#) (2023) and the [EOSC Multi-Annual Roadmap 2025-2027](#).

They will be opened by today's **introductory session** and will conclude with a **discussion session on the 8th of February 2024**.

Plan for today

- Introduction to FAIR-IMPACT and the Synchronisation Force
- Looking back on the Synchronisation Force workshop 2022
- Goal of this workshop and intended output
- Stakeholders in this workshop
- What do we expect from you?
- Q&A

FAIR-IMPACT in a Nutshell

Vasso Kalaitzi, DANS

Expanding FAIR Solutions across Europe

Call HORIZON-INFRA-2021-EOSC-01-05

Enabling discovery and interoperability of federated research objects across scientific communities

3year EU funded project started in June 2022

28 partners involved in the project

Coordination and Support Action

- ★ **Now: 2nd year of the project**
- ★ **Successful 1st year having achieved all goals and outputs for the period**

4 project management and governance bodies (PCO, EXC, GA, HLAC)

3 coordination mechanisms (TBT, FIT, SF)

4 Support Tiers to enable adoption and implementation

1 Body of ambassadors: EOSC FAIR Champions

FAIR-IMPACT overall objective



WHAT:

to realise a FAIR EOSC by **supporting the implementation** of FAIR-enabling practices ***across scientific communities and research outputs at a European, national, and institutional level;***

How:

- ★ **Engaging** a wide range of stakeholders early and using a matrix of **coordination and support** mechanisms => Optimising cross-collaboration and alignment
- ★ **Identifying** current/emerging FAIR-enabling components (practices, policies, tools, technical specs)
- ★ Translating viable solutions, guidelines and frameworks that have been developed for one domain or research output and **supporting** their application in others
- ★ taking the next step in implementation by **defining** the support, governance, and coordination mechanisms required to ensure the continuous function of FAIR-enabling practices in the EOSC

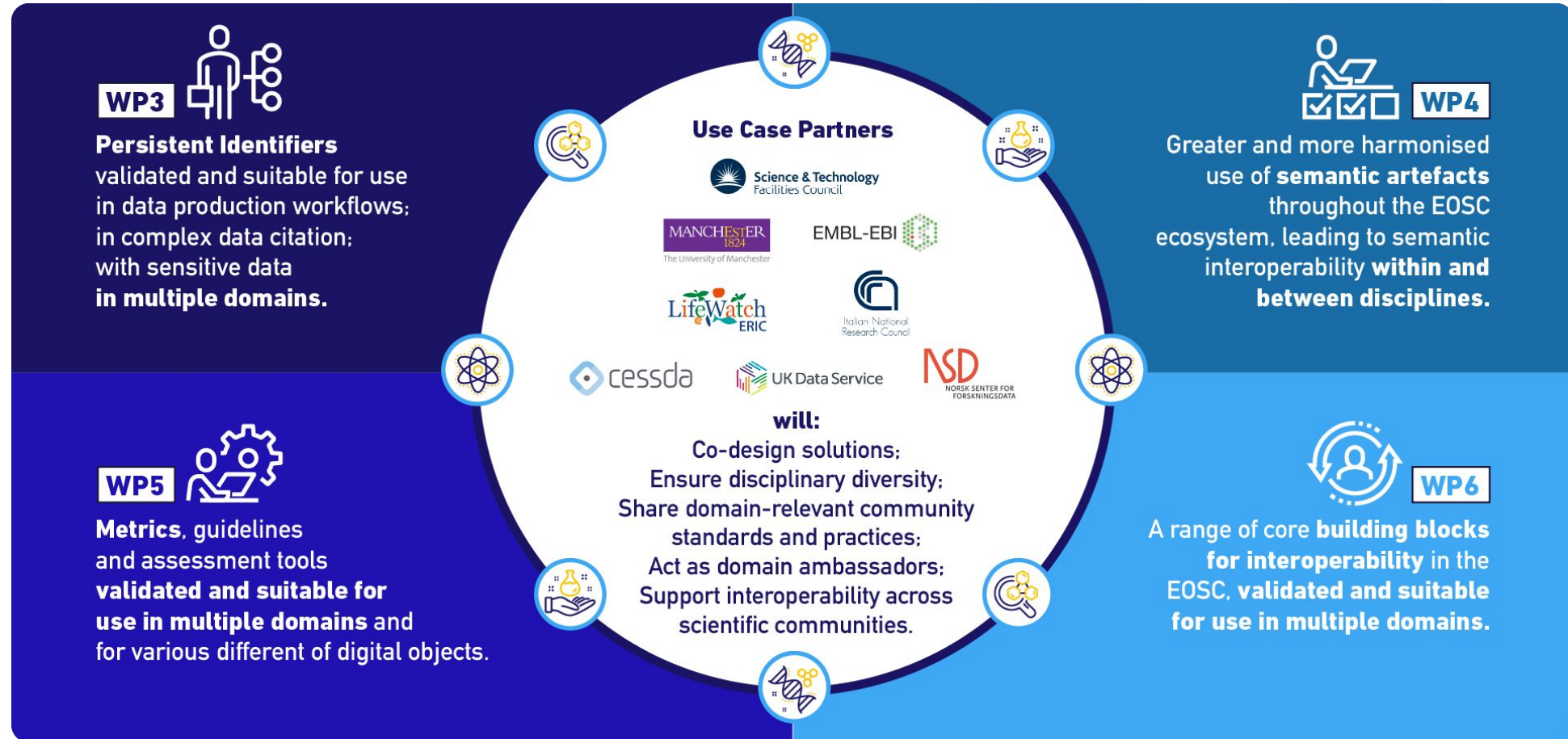
FAIR-IMPACT project design

[FAIR-IMPACT Workplan](#)

FAIR-IMPACT PROJECT DESIGN - WORK PACKAGES



FAIR-IMPACT integrated use cases supporting practical implementation of the FAIR principles



Integrated use cases => Added value

- ★ The “**bridge**” to four scientific domains
- ★ **Provide expertise** in defining requirements, identifying gaps and implementation opportunities across the FAIR-IMPACT focus areas
- ★ Being involved in **translating** what works for them and support adoption beyond their original domains, stakeholder groups and output types

Examples of integrated use cases in FAIR-IMPACT:

Social Sciences and Humanities: The F-UJI tool is adapted to fit SSH relevant community standards for FAIR

Photon & Neutron science: A range of components for cross-domain research data description will be tested

Life science: Data provenance will be better documented by extending RO-Crate to practices on PID usage

Agri-food: Metadata providers will implement a common API for federating access to semantic artefacts

Adoption & implementation support

Supporting you on your FAIR-enabling journey

★ **Support programme** to boost uptake of FAIR data principles and practices by research performing organisations, data service providers and repositories:

- **Cascading grants**
- **In-kind support**
- **FAIR Implementation Workshops**
- **Harmonisation for EOSC-readiness** => Contributing to EOSC TFs

FAIR-IMPACT - Year 1 Highlights

fair-impact.eu/events/synchronisation-force-events

Project management and governance bodies: PCO, EXC, GA and



Support Tiers to enable adoption and implementation



National Roadshow Series

Coordination mechanisms



FAIR Implementation Team



Body of ambassadors



First synchronisation workshop report
Highlights and recommendations



FAIR-IMPACT - Year 1 Highlights

- ★ All Y1 outputs achieved on schedule/in good quality
- ★ Alliances built with relevant initiatives, INFRAEOSC projects and EOSC-A
- ★ 51 independent entities applied for 1st call of support
- ★ Interaction with relevant EOSC TFs
- ★ Contribution to EOSC Focus macro-roadmap
<https://eosc.eu/roadmap/>

- ★ Policy brief on contributions to EOSC SRIA
<https://doi.org/10.5281/zenodo.8255645>



**York Sure-Vetter**

Affiliation: Nationale Forschungsdateninfrastruktur (NFDI)
Country: Germany

HLAC Chair

**Michelle Barker**

Affiliation: Research Software Alliance (ReSA)
Country: Australia

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**Sarah Jones**

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**Nicolas Fressengeas**

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**Kathleen Shearer**

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**Sarah Barber**

Affiliation: Eastern Switzerland University of Applied Sciences
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**Mari Kleemola**

Affiliation: Finnish Social Science Data Archive
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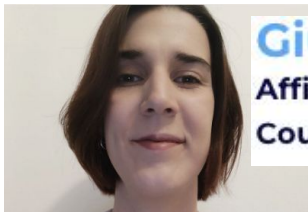
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Country: Spain

Get in touch - Visit our website to know more about:



BROWSE THE BETA VERSION OF THE CATALOGUE

FAIR-IMPACT Calls for Support Options, Timeline, Deadlines

Upcoming events

EOSC Compliant PID Implementations - Practical Guidelines for Implementing Best Practices

09.00 - 13.00 CET
21 November 2023 Online

Online

Documenting mapping community practices

10.00 - 13.00 CET
24 November 2023 Online

online

Project Outputs:

- ★ Deliverables/Milestone reports
- ★ Publications
- ★ Event materials
- ★ Materials for community review

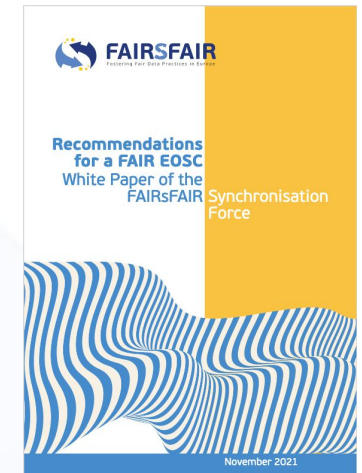
Introduction to the Synchronisation Force 2023 edition

Marjan Grootveld, DANS

The Synchronisation Force continues

Building on the successful Synchronisation Force approach from the FAIRsFAIR project (2019-2021), FAIR-IMPACT establishes dialogue for collaboration and harmonisation of efforts between FAIR-IMPACT and other EOSC and FAIR-related initiatives. We do this to

1. reduce redundancy;
2. ensure that solutions are more widely promoted, sustainable and can be transferred to the relevant EOSC Partnership and current and future EOSC stakeholders;
3. take the next step in implementing FAIR-enabling practices.



<https://fair-impact.eu/fairsfair-legacy>



[FAIR-IMPACT SyncForce workshop 2022](#)



Synchronisation Force

Target Stakeholders

EOSC Partnership



EOSC Tripartite collaboration

(European Commission, the EOSC Association, and the Member States and Associated Countries)

- PID policy and implementation
- Researcher engagement and adoption
- FAIR metrics and data quality
- Semantic interoperability
- Technical interoperability of data & services
- Long-term data preservation

Open Science initiatives



February 2023

Building an EOSC in practice - engaging with solution providers

HORIZON-INFRA-2021-EOSC-01 Projects



ESFRI Cluster Projects



EOSC Technical Core



EOSC Providers



Goal of the workshop and intended output

2022 Workshop

8 November - 12 December

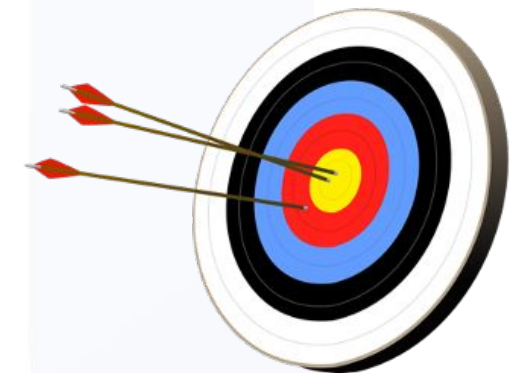
2023 Workshop

2 November - 7 December 2023

2024 Workshop

I want to stay tuned!

- Goal: chart developments in five areas from the represented projects and initiatives.
- Output of this workshop:
 - Spreadsheet with your input
 - Concise workshop report, to be finalised by February 2024
- Output of the *three* workshops: White Paper with recommendations for how to encourage impact, alignment and synchronisation around FAIR and EOSC



Structure of the workshop 2023

Date	Session Topic	Chair & Rapporteur
27 November 13.00-14.30 CET	Metrics and assessing FAIRness	Chair: Mike Priddy, DANS Rapporteur: Maaïke Verburg, DANS
28 November 10.30-12.00 CET	Metadata, semantics and interoperability	Chair: Esteban Gonzalez, UPM Rapporteur: Anne-Sofie Fink, DeIC
30 November 10.30-12.00 CET	Persistent Identifiers	Chair: Josefine Nordling, CSC Rapporteur: Liisi Marjamaa-Mankinen, CSC
5 December 14.00-15.30 CET	Trustworthy and FAIR-enabling repositories	Chair: Joy Davidson and Laurence Horton, DCC Rapporteur: Maaïke Verburg, DANS
7 December 15.00-16.30 CET	Legal & organisational interoperability	Chair: Olivier Rouchon, CNRS Rapporteur: Anne-Sofie Fink, DeIC
8 February 2024 10.30-12.00 CET	Plenary discussion session	

Same link to join the FAIR-IMPACT Synchronisation Workshop series:

<https://us06web.zoom.us/j/82365193516?pwd=QmU1RE5vbjd1NTNVN3pRYU9KQIFLZz09>

Reminders will be sent prior to each session, including details about its structure, chairs and rapporteurs.

What we expect from you

Provide information about topic-related developments and plans in your project, initiative or domain:

1. fill in the **online survey** [here](#) by **23 November**: your inputs will constitute the starting point for our discussions;
2. during the topic sessions, use a shared **Google spreadsheet** to complete the information provided;
3. help in reporting on workshop findings and recommendations in the concluding plenary session.

Synchronisation Force Workshop 2023 - preliminary survey

[View](#) [Edit](#) [Results](#)

Welcome on board!

Between **27 November and 7 December 2023** you'll join us for four online collaborative sessions to assess the implementation of the FAIR principles across research projects and initiatives in the EOSC framework. We will focus on work related to FAIR-IMPACT focus areas, namely **Metrics and assessing FAIRness** (Session 1 Monday, November 27), **Metadata, semantics and interoperability** (Session 2 Tuesday, November 28), **Persistent identifiers** (Session 3 Thursday, November 30), **Trustworthy and FAIR-enabling repositories** (Session 4 Tuesday, December 5) and **Legal & organisational interoperability** (Session 5 Thursday, December 7)

In order to ensure an interactive meeting, we kindly ask you to complete the light survey below by Thursday 23rd of November. Select the sessions that you will join and complete the questions that will appear: your inputs will constitute the starting point for our discussions!

NB: Please note that you first need to login to the FAIR-IMPACT website. This will allow us to properly manage your data while being compliant with FAIR-IMPACT Privacy policy. Thanks for understanding!



Project or initiative *

Please indicate which project or initiative you are providing information about. Add only one, if you represent more projects / initiatives please submit another survey

Metrics and assessing FAIRness

27 November 13.00-14.30 CET

Key questions, to be answered in the survey:

1. **What does your project or initiative do** to implement FAIR assessment metrics?
2. **Which tools for automated FAIR assessment of digital objects** <...> does your initiative, community or organisation use? What informed your decision?
3. Is your project, initiative <...> investigating or implementing **discipline or community-specific metrics** for FAIR assessments? Please provide links <...>
4. Do you have any **suggestions to improve** the <...> metrics and tools you use?
5. Do the tools and metrics require further **convergence**?
6. How is the **adoption of FAIR principles being measured** in your community or infrastructure?

Chair: Mike Priddy, DANS

Rapporteur: Maaïke Verburg, DANS

Nov 2 Nov 27 Nov 28 Nov 30 Dec 5 Dec 7

Topic Session 1: Monday, November 27, 13.00-14.30 CET: Metrics and assessing FAIRness

Chair: **Mike Priddy**, DANS

Rapporteur: **Maaïke Verburg**, DANS

In this session, we will look into the metrics, their associated tests, and tools available for the FAIRness assessment of digital objects, but this time concentrating on research software and semantic artefacts, although information and experience with metrics and assessment tools for data objects is most definitely welcome. We will discuss current topics, such as discipline specific metrics for FAIR assessments, harmonisation, benchmarking of metrics and tools, and the most effective use and interpretation of tools and their results.

From the [last Synchronisation Force workshop](#) on metrics and assessing FAIRness these recommendations will be used to guide the discussions and information gathering in this workshop:

- We need to work on a **further convergence of metrics and tools**, which requires further discussion, synchronisation and alignment;
- We need **more domain-sensitive assessment methods**, in order to incorporate domain maturity as well as specific good practices and requirements.
- We need **assessment tools** for other research outputs, like **software and semantic artefacts**.
- The instrument of **FAIR assessment and scoring** should be seen and used as the **starting point** for assistance and improvement.

The [EOSC Multi Annual Roadmap \(MAR\)](#) objectives relevant for this workshop are:

- **Objective 2 - European level priority F** "Focus on community-specific FAIR metrics and data quality constraints (especially on the interoperability of these) by engaging with research clusters to apply FAIR in their contexts. (2025)"
- **Objective 2 - European level priority G** "Support the emergence of a widely representative

Metadata, semantics and interoperability

28 November 10.30-12.00 CET

Key questions, to be answered in the survey:

1. **What does your project/institution/community do to implement semantic artefacts** (ontologies, schemas, standard, vocabularies, etc) into your (meta)data?
2. In your project/institution/community do you **publish your (meta)data following FAIR principles**?
3. Do you **reuse data** from other projects/ institutions/ communities? Provide links and challenges.
4. What are the **worst data practices** adopted in your project/institution/community?

Chair: Esteban Gonzalez, UPM
Rapporteur: Anne-Sofie Fink, DeIC

Nov 2 Nov 27 Nov 28 Nov 30 Dec 5 Dec 7

Topic Session 2: Tuesday, November 28, 10.30-12.00 CET: Metadata, semantics and interoperability

Chair: **Esteban Gonzales**, UPM
Rapporteur: **Anne-Sofie Fink**, DeIC

Interoperability is one of the FAIR Principles that recently has taken up more and more attention. Interoperability will often be the more challenging principles of the four principles - indeed when we want to address interoperability across scientific domains. In this session we will explore the subject of semantic and technical interoperability within and across scientific domains. **The aim of the workshop will be to explore the semantic and technical interoperability adopted by representatives from different research communities and institutions to explore their compliance with the EOSC Interoperability Framework's recommendations.** We expect participation from different scientific domains in order to get a picture of their semantic and technical practices. Our point of departure for addressing semantic and technical interoperability is the [EOSC interoperability framework](#).

Recommendations to be assessed during the session

Overall session recommendations:

- More cross-disciplinary work is needed to align semantic artefacts with the same terms or concepts.
- Maintenance, sustainability, and governance of semantic artefacts deserve attention and agreement across disciplinary communities.
- The FAIR-at-large community should intensify the work on crosswalks and mappings to produce more best practices.

Recommendations from relevant literature:

- Recommendation 1: Develop domain and cross-domain interoperability frameworks at the level of vocabularies, ontologies, and metadata schema ([FAIRsFAIR white paper - Rec1](#)).

Persistent identifiers

30 November 10.30-12.00 CET

Key questions, to be answered in the survey:

1. **What does your project or initiative do to implement PIDs?** Please provide links.
2. What are the **guiding principles for you when choosing a PID system** or service?
3. What does in your opinion constitute trust in a PID service?

Chair: Josefine Nordling, CSC

Rapporteur: Liisa Marjamaa-Mankinen, CSC

Nov 2 Nov 27 Nov 28 Nov 30 Dec 5 Dec 7

Topic Session 3: Thursday, November 30, 10.30-12.00 CET: Persistent identifiers

Chair: **Josefine Nordling**, CSC

Rapporteur: **Liisa Marjamaa-Mankinen**, CSC

The goal of this session is to provide input for the PID Policy assessment regarding the more qualitative factors, especially those related to trust and sustainability. The session will begin with short presentations of the PID Compliance Assessment Tool done in FAIRCORE4EOSC and the integrated PID use cases in FAIR-IMPACT. Representatives of these use cases, *PIDs in data production workflows*, *PIDs in complex data citation and PIDs and sensitive data*, will reflect on the relevant PID solutions and requirements and identify gaps. They will also describe how they evaluate different PID services and systems.

Following this, the workshop will be organised around three questions:

- 1. What does your project or initiative do to implement PIDs? (Please provide any relevant links.)
- 2. What are the guiding principles for you when choosing a PID system or service?
- 3. What does in your opinion constitute trust in a PID service?

In the EOSC context this session is related to the objective **OO11 Implement the EOSC persistent identifier (PID) policy and architecture by 2025** in the [Strategic Research and Innovation Agenda](#) and relates to the following recommendations in the draft [EOSC Multi-Annual Roadmap \(MAR\) 2025 and 2026-2027](#):

- Promote and sustain the use of Persistent Identifiers (PIDs) that are already common practice. Support activities where PID usage is not yet a common practice. (2.1 A, 2.2 H)

and it supports the national and institutional level recommendation:

- Integrate widely used and adopted PIDs into institutional services and incentivise usage of PID technologies being developed in EOSC (like PID Meta Resolver, Data Type Registry, PID graph, PID

Trustworthy and FAIR-enabling repositories

5 December 14.00-15.30 CET

Key questions, to be answered in the survey:

1. **What is your project or initiative doing to help define trustworthiness?**
2. **What is your project or initiative doing to increase the number and visibility of trustworthy, FAIR-enabling and/or certified repositories?**
3. **Are you planning to sustain your activities and/or efforts? If so, how?**
4. **How can we best work together to progress a network of TDRs?**

Chair: Joy Davidson and Laurence Horton, DCC
Rapporteur: Maaïke Verburg, DANS

Nov 2 Nov 27 Nov 28 Nov 30 Dec 5 Dec 7

Topic Session 4: Tuesday, December 5, 14.00-15.30 CET: Trustworthy and FAIR-enabling repositories

Chair: **Joy Davidson and Laurence Horton**, DCC
Rapporteur: **Maaïke Verburg**, DANS

In this session we will discuss the current mechanisms and cooperation opportunities for Trustworthy and FAIR-enabling repositories. We will look into the wider range of transparency and trust, and the incremental and sustainable support needed. This session aims to pick up on progress against the three recommendations identified from the 2022 Synchronisation Force session which were to:

- Measure the percentage of repositories in EOSC that will have a certification such as CoreTrustSeal or expose trustworthiness using other mechanisms
- Provide incremental, continuous and sustainable guidance and assistance to repositories, and certification processes
- Contribute to cooperation across the current initiatives to build and sustain a network of trustworthy digital repositories

Questions that participants in this session will explore:

1. What is your project or initiative doing to help define trustworthiness?
2. What is your project or initiative doing to increase the number and visibility of trustworthy, FAIR-enabling and/or certified repositories?
3. In your project, initiative, or community, do you work with repositories that consider themselves to be trustworthy and/or have a certification such as CoreTrustSeal?
4. For those repositories that are not certified, is any support or guidance provided to help them to expose their trustworthiness using other mechanisms?
5. Are you planning to sustain your activities and/or efforts? If so, how? How can we best work together to progress a network of trustworthy digital repositories?

Expected outcomes:

Legal and organisational interoperability

7 December 15.00-16.30 CET

Key questions, to be answered in the survey:

1. Are you aware of **existing registries, catalogues or vocabularies** enabling any of the following <...>
2. In your project / initiative, what are the **licensing terms and conditions** of datasets? Are they compatible? <...>
3. How is **data protected** in accordance with privacy laws? Any obligations related to data anonymization, pseudonymization, or consent **when combining datasets**?
4. How do **intellectual property rights** affect the use, distribution, and modification of combined datasets?
5. How do the **terms of use impact end user rights**?
6. **What does your project or initiative do to implement legal interoperability**? Please provide links

Chair: Olivier Rouchon, CNRS

Rapporteur: Anne Sofie Fink, DeIC

Nov 2 Nov 27 Nov 28 Nov 30 Dec 5 Dec 7

Topic Session 5: Thursday, December 7, 15.00-16.30 CET: Legal & organisational interoperability

Chair: **Olivier Rouchon**, CNRS

Rapporteur: **Anne Sofie Fink**, DeIC

Legal interoperability seems sometimes to have been overshadowed by semantic and technical interoperability in the EOSC [interoperability framework](#). However, legal interoperability is of almost importance for realising the EOSC as a web of FAIR data and related services. Legal interoperability is about ensuring that organisations operating under different legal or organisational frameworks, policies and strategies are able to work together. This might require that legislation does not block the establishment of European public services within and between Member States and that there are clear agreements about how to deal with differences in legislation across borders, including the option of putting in place new legislation. In this session we will pick on the issues of legal interoperability in the perspectives of different scientific domains.

Recommendations to be assessed during the session

From the [EOSC Interoperability Framework](#)

Selected legal/organisational interoperability recommendations:

- Organisational
 - Usage recommendations of standardised data formats and/or vocabularies, and with their corresponding metadata.
 - A clear management of permanent organisation names and functions needs to be provided.
- Legal
 - Standardised human and machine-readable licenses, with a centralised source of knowledge and support on copyright and licenses.

Interactive sessions and a collaborative spreadsheet

Synch Force 2023 - Collaborative spreadsheet

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	A	D	E	F	G	J	K	L	M	N	O	P	Q	R	S
1	collaborative notes:					Topic Session 1 Monday, November 27, 13.00-14.30 CET: Metrics and assessing FAIRness									
2	Created	Affiliation	Organisation type	Country	Project or initiative	2.a. Have you changed the tools being used and why?	2.b. If you are not using tools for automated FAIR assessment, why is that? Please provide any relevant links to the tools used	3. Is your project, initiative, community or organisation investigating or implementing discipline or community-specific metrics for FAIR assessments?	3.a Please provide the relevant links to any examples for research software, semantic artefacts and data.	3.b If you are only using generic metrics is there a reason why?	4. Do you have any suggestions to improve the (generic or discipline-specific) metrics and tools you use?	4.a Do the tools provide suitable feedback about the tests and results?	5. Do the tools and metrics require further convergence? If so, why would this be useful in your community or organisation?	6. How is the adoption of FAIR principles being measured in your community or infrastructure?	6.a Does your community or infrastructure have a form of governance around FAIR metrics, tools and assessment processes across different digital objects? Please provide any relevant links.
3	Thu, 10/26/2023 - 13:38	University of Minho	Service providers, National University of Health and Biomedical Education	Portugal	OpenAIRE	No	NA				FAIR Assessment at the level of the OpenAIRE data sources and not at the level of the digital object.			FAIR Assessment at the level of the OpenAIRE data sources and not at the level of the digital object.	
4															
5															
6															
7															

Be to the point and specific:

- DOIs or URLs where possible;
- background information in session & notes.

“Not applicable” is fine.

Next steps

1. We email you again the link to the survey.
2. You fill out the survey before 24 November - maybe with colleagues. In any case it is important to complete the survey the day before the session you will be joining.
3. You engage in the sessions and contribute to discussion, collaborative session notes and collaborative spreadsheet.
4. You can adapt your information until 7 December.
5. We will draft a short report with recommendations.
6. You join the concluding session 8 February to feed back on our draft.
7. We will publish the report on Zenodo.

Questions for you! Questions for us?



Thank you for filling out [the survey](#)
and see you in the topic sessions!



@fairimpact_eu /company/fair-impact-eu-project



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the European Union