#### Let's discuss about FAIRifying OS policies

Your 90 minutes in the policy drivers seat

EOSC-5 Policy Task Force Open Science Fair 2021, 20 - 23 September 2021

#### A brief history



- → Implementing EOSC. The INFRAEOSC-05-2018 Call a, b and c projects
- → Collaboration in Task Forces aligned with the EOSC working groups from summer 2019 till today.
- → Task Force on national policies and governance
- → Contributions from each project are very different (in focus, scope, approach)













#### Goals

- Assist the projects with their actions: priority and content
- Deliver to policy makers
- Deliver to the EOSC Association
- Presented are proposed actions on
  - Data management planning
  - Persistent Identifiers
  - Legal aspects of policies for data protection
  - Intellectual property rights of research products
- Interaction with audience on proposed actions: Zoom raised hands, Mentimeter poll
- Chance to name your own priority action during the session

#### Agenda

Item	Moderator	Start Time	
Introduction	Jos van Wezel / EOSCsecretariat, KIT/DE)	9:30	
Use cases from transnational experiments	Brian Matthews (ExPaNDS, STFC/UK)	9:35	
Data management planning	Joy Davidson (FAIRsFAIR, DCC/UK)	0.45	
PIDs	Michal Růžička (EOSC Synergy, Masaryk University/CZ)	9:45	
Mentimeter poll: vote on the priority of the actions		10:00	
Legal aspects of policies for data protection	Elektra Sifakaki (NI4OS, AthenaRC/GR), Ilias Papastamatiou (NI4OS, GRNET/GR)		
Intellectual property rights of research products	Nadina Fogetti (EOSC-Pillar, CNR/IT), Catarina Sganga (EOSC-Pillar, Scuola Superiore, Sant'Anna/IT)	10:10	
Mentimeter poll: vote on the priority of the actions		10:25	
Discussion on the results	Moderators and Audience	10:35	
Mentimeter poll: your choice of action		10:45	
Conclusions and closing remarks	Jos van Wezel	10:55	
End		11:00	

#### Let's discuss FAIRifying OS policies

- Harmonisation of policies at regional level: example of transnational experiments

Brian Matthews, UKRI.

ExPaNDS WP Leader on Enabling FAIR Data

EOSC-5 Policy Task Force Open Science Fair 2021, 20–23 September 2021

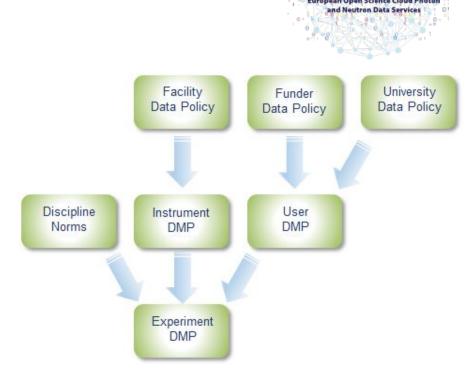
#### **EOSC Strategic Research and Innovation Agenda (SRIA)**

SRIA Objective	KPI	Target
Enable the definition of standards, and the development of tools and services, to allow researchers to find, access, reuse and combine results	Percentage of the active data spaces that take up data management practices, including the FAIR data principles, and provide into the EOSC ecosystem	At least 50% by 2027

#### Why FAIRify policies?

#### ExPaNDS project

- National experimental facilities
- Researchers from RPOs
  - Funded by other funding organisations
- Transnational access
  - Researchers from across borders
  - Funded by other countries
  - Working in multiple facilities
- Access to research outputs
  - From other countries
  - Combining outputs from other facilities



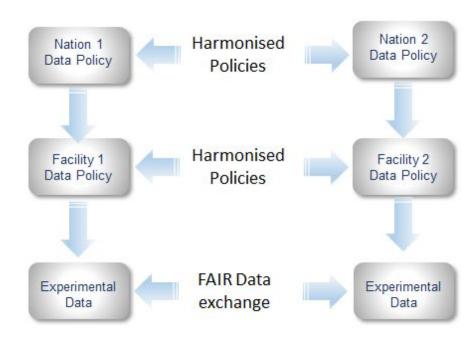
#### **Policy Harmonisation**

Institutes and funders data policies are determined by national priorities

- National legal frameworks
- Priorities of national funders

However there is immense value in harmonising policies

- Enabling transnational access
- Compatibility of access and use of research outputs



#### **Barriers to harmonisation**

- Legal frameworks
  - o GDPR
  - Data licences and copyright
- IPR
  - Who owns the data?
  - The facility or the scientist?
- Access
  - Similar reasons to restrict data
  - Embargos
- Data management approach
  - The depth of the commitment to FAIR
  - What types and forms of research output are covered.

#### **Proposed Actions**

- Raise awareness.
- Propose common approach to experimental facilities policies.
- Working within a harmonised approach in national, European-Regional and cross-European levels.

# Let's discuss about FAIRifying OS policies - Data Management Plans (DMPs)

EOSC-5 Policy Task Force
Open Science Fair 2021, 20–23 September 2021

#### **EOSC Strategic Research and Innovation Agenda (SRIA)**

The SRIA provides a clear roadmap over the next seven years to achieve the EOSC vision and objectives. It results from a collective, forward-looking co-creation process to identify and prioritise complementary activities at EU, national, and institutional levels.

SRIA Objective	KPI	Target	
Enable the definition of standards, and the development of tools and services, to allow researchers to find, access, reuse and combine results	Percentage of EOSC Association members that have policies which require FAIR to be implemented in project design via Data Management Plans	70% by 2023	EUROPEAN OPEN SDIENCE CLOUD  Does Bonsultation  for the Strategic Research and Innovation Agends (St of the European Open Science Cloud (EOSC)

#### **Project Findings**



Require updating of DMPs over the research lifecycle leading to comprehensive, high-quality end stage DMPs that are included in end-stage reporting. Policy makers should provide consistency across policies on requirements for DMPs and the timing of their delivery.



D5.2 Landscape Gap Analysis and Recommendations Require the submission of DMPs as standard, following the requirements and guide from Science Europe, ensuring the existence of national services and infrastructures to support this.



- The drafting of DMPs should be taken for granted for all activities that are related to data collection, handling, etc. It should be left up to the organisation/researcher to decide if to a) integrate customised DMP tools or b) use an existing online service.
- Machine actionability should be ensured in both cases

#### **Policy Actions**

- Require submission of DMPs as standard
- Require updating of DMPs over lifecycle
- Require end-stage DMPs
- DMPs should follow Science Europe requirements
- Ensure the existence of national services and infrastructures to provide support
- DMPs should be machine actionable

### Let's discuss about FAIRifying OS policies

- Persistent Identifiers

EOSC-5 Policy Task Force
Open Science Fair 2021, 20–23 September 2021

#### **EOSC Strategic Research and Innovation Agenda (SRIA)**

SRIA Objective	KPI	Target
Enable the definition of standards, and the development of tools and services, to allow researchers to find, access, reuse and combine results	Percentage of the active data spaces that take up data management practices, including the FAIR data principles, and provide into the EOSC ecosystem	At least 50% by 2027

#### **Project Findings 1: Synergy**

A PID standard should be recommended by EOSC for every PID type for assigning new PIDs.

- To avoid assignment of multiple identifiers per object.
- However, systems should support multiple standards so as to be compatible with other PID types already assigned.

Creation and adoption of national policies for PIDs for the identified important artefact types should be supported.

- Publications, datasets, physical persons, institutions, projects, grant numbers, software, software containers, software pipelines/workflows, ...
- Coordination of these policies is highly recommended for compatibility reasons.

Raise awareness and support standardisation and use of PIDs for 'uncommon' artefacts.

 Software, containers, workflows, institutions, research projects, grants and institutions.

For PIDs for institutions, the EOSC-synergy data shows ROR could be a usable standard and mapping of national IDs for ROR should be possible in all Synergy countries.

#### **Project Findings 2**

ExPANDS	FAIRsFAIR	NI4OS
Specify responsibilities and commitments of different actors in relation to data handling/RDM; for example, who is responsible for providing metadata? Storing data? Ensuring long term access to data?  Policy should seek to cover all types of relevant data, i.e. so that there are no grey areas or data where it is unclear whether or not they are covered by the policy.	OS policies themselves should be FAIR and assigned PIDs	NI4OS repository service is integrated with a persistent identifier service as an assigned PID is required for each digital object (item, collection, community).
Specify the retention period for each type of data (retention periods may differ).		

#### **Proposed Actions**

- Raise awareness.
- 2. Support standardisation via national policies.
  - a. The government should agree on a national policy.
  - b. The policy should explicitly identify one (or a small number) of suitable standards for PIDs for particular entity.
  - c. The policy should require Research Performing Institutions (RPI) to assign PIDs for their dataset uploading to repositories etc.
- 3. Insist on the use of standard PIDs as standard for referencing entities.

#### **Prioritising policy actions**

Please go to menti.com and enter the code

47 82 16

to rank the actions you feel should be prioritised.

# Let's discuss about FAIRifying OS policies - Legal aspects

EOSC-5 Policy Task Force Open Science Fair 2021, 20 - 23 September 2021

#### Legal considerations in SRIA

- → "... legal interoperability within EOSC is essential to federate services and provide added value for users, across disciplines, countries and sectors"
- → "Research communities define discipline-specific Open Science policies, and the related implementation guidelines and incentives, in respect of researchers' needs, practices, services and legal constraints.:
- → "Services and resources are provided and maintained by different providers under the observance of legal frameworks and under a variety of licences and access requirements"
- → "To compose resources from autonomous and distributed service provider federations in a user environment requires a legal and organisational framework."

#### Findings by the 5b projects



**Expertise in organisations**, legal support, as well as **willingness & readiness** to enforce data management best practices, are required within organizations to effectively enable data sharing across borders.



Define and implement **national strategies and policies on Open Science and FAIR data**, based on Open Science principles and research data management best practices and recommendations.



National legal and policy frameworks take precedence for national institutions - **Law trumps policy**. **Policy review** is important for continued legal compliance - if policies are not reviewed, they can become out of date from a legal perspective.



Legal aspects related to FAIR and ORDM are very often addressed by **non-legal experts**. The development of **technical solutions to address legal aspects in FAIR and ORDM** will take the burden off their shoulders, by addressing issues of legal interoperability and legal uncertainty.

#### **Proposed actions**

- → From incentivation to enforcement: making OS policies integral part of national research framework and legislation
- → Compliance through review: ensuring that policies cover the needs of the research communities
- → In-house legal expertise #not: developing technical solutions addressing legal needs, to support researchers and administrators dealing with legal aspects of FAIR and ORDM













# Let's discuss about FAIRifying OS policies Intellectual property rights of research products

EOSC-5 Policy Task Force Open Science Fair 2021, 20 - 23 September 2021

## The Strategic Research and Innovation Agenda (SRIA)

The EOSC-Core will be constituted of widely used production-quality services, which are already deployed by the EOSC-related projects and communities, to provide:

A minimum legal metadata framework, for ensuring openness and interoperability, privacy and security and all related legal and ethical issues (copyright status, disclosure limitations, patents pending, other intellectual property rights (IPR) on the datasets or workflows, the existence of personal data, designation of data as Public Sector Information (PSI) and issues related to the General Data Protection Regulation (GDPR).

# Obstacles to the realization of FAIR ecosystems and the implementation of OA and OS policies in IPR

- the system of exceptions and limitations (E&L) of using copyrighted works
  - E&L: rules of law that allow or disallow use of copyrighted works
  - E&L: Copyright is not absolute. There are some uses of copyrighted works that do not require permission. These uses are limitations on the exclusive rights normally granted to copyright holders and are known as "exceptions and limitations" to copyright.
  - The closed-list approach, and strict interpretation of copyright E&L
  - The numerus clausus design of E&L is to date not realistic as a feasible policy option
- lack of harmonization of copyright contract law

#### **Proposed Actions**

- Introduce the principle of "open repository by design" in copyright law.
- Introduce the second publication right
- Introduce specific rules for the scientific sector in copyright law
- Introduce mandatory Exceptions and Limitations (rules that allow/dis-allow use of copyrighted material) in copyright law
- Update existing Exceptions and Limitations to create uniformity in the countries

#### **Prioritising policy actions**

Please go to menti.com and enter the code

47 82 16

to rank the actions you feel should be prioritised.

#### Top policy priorities from menti polls - but it was very close!

#### **DMPs**

- Require submission of DMPs as standard
- DMPs should be machine actionable

#### Legal aspects

 Making OS policies integral part of national research framework and legislation

#### **PIDs**

- Insist on the use of standard PIDs as standard for referencing entities
- Raise awareness

#### **IPR**

- Introduce specific rules for the scientific sector in copyright law
- Update existing Exceptions and Limitations to create uniformity in the countries

#### What do you think? Are there others?

#### Have your say on the fifth priority action!

Please go to menti.com and enter the code 47 82 16 to add your suggestions.

#### Thank you!