The EOSC Future, C-SCALE, DICE, EGI-ACE, OpenAIRE-Nexus, Reliance and ARCHIVER projects are funded by the European Union Horizon Programme calls INFRAEOSC-03-2020 and INFRAEOSC-07-2020 and H2020-ICT-2018-20.
Topics for today

- Background
- What is the EOSC Interoperability Framework?
  - Why is it important?
  - How is it relevant for providers?
  - How will it manifest?
- Governance
The EOSC Interoperability Framework

Michelle Williams, GÉANT
Feb 2021 the EOSC Executive Board Working Groups FAIR and Architecture publishes the EOSC Interoperability Framework Report.

The SRIA also has sections on interoperability.

“The EOSC IF is meant to be a generic framework that can be used by all the entities participating in the development and deployment of EOSC, providing a common understanding of the requirements, challenges and recommendations that they should take into account, as well as a general set of principles on how these recommendations may be addressed”. 
The Architecture and Interoperability WP (WP3) works to define a governance model to manage and populate the EOSC Interoperability Framework.

EOSC Future work on the EOSC IF

- Finalised in Dec
- Consultation on the EOSC IF governance
- Working on the content
- Webinar:
  - provided context and use cases
  - requested feedback (end users)
- Community guidelines
- Developed outside WP3
- Guidelines for EOSC Core Services
- WP3 Working Groups

Watch the EIF Webinar: https://youtu.be/gopN4TrJKpA
# EOSC Interoperability Framework

<table>
<thead>
<tr>
<th>Why</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>● EOSC is a federated infrastructure of data and services.</td>
<td>● Set of <em>guidelines</em> that promote standard and community best practices within the EOSC</td>
</tr>
<tr>
<td>● Interoperability is essential to deliver services to users.</td>
<td>● And governance to manage EOSC promoted guidelines</td>
</tr>
<tr>
<td>● Adoption of standards is not sufficient...</td>
<td>● A registry to list the guidelines and who supports them</td>
</tr>
<tr>
<td>● we need more to enable resource interoperability.</td>
<td></td>
</tr>
</tbody>
</table>

**Who**

For Providers operating resources, facilities, catalogues, etc and for users with an interoperability requirement.
Fostering Interoperability via the EOSC IF

EOSC Resources (services, datasets, sw, etc.)

EOSC Stakeholders (providers, communities, researchers, etc.)

A multitude of different interfaces
No description of supported interfaces for EOSC Resource

Interfaces of the EOSC Resources
Fostering Interoperability with the EOSC IF

- Promote the adoption of common standards and interfaces in EOSC
  - Facilitate interoperation
  - Not reinventing the wheel → adopting already existing standards and community best practices
- Providers will be able to indicate supported interfaces in the EOSC Resource Catalogue
Interoperability for services

1) Onboard into the EOSC Service Catalogue

2) Indicate the interoperability guidelines supported

3) Users can see which Services can interoperate with their data and/or can understand how to make their data interoperable with your service.

4) It will be possible to interoperate with EOSC Core Services using EOSC-Core Interoperability Guidelines
EOSC Interoperability Registry

Initial scope:
- Output of EOSC Hub, EOSC Enhance, AARC and OpenAIRE projects
- the ‘Main Standards and Interfaces as a Starting Point for EOSC Future’*

Objectives:
- become a library of accepted artefacts, and
- a supporting tool for the governance
- to help track each Guideline through the proposal and consultation process.
- become a de facto EOSC Knowledge Base.
- Facilitate signalling of supported guidelines

The registry will...
- be publicly available,
- link resources, services and research products to supported guidelines
  - help resources/service owners integrate with the resource catalogue
  - help users discover resources on the basis of the guidelines they support
- help identify gaps in interoperability.

*https://wiki.eoscfuture.eu/display/PUBLIC/Main+Standards+and+Interfaces+as+a+Starting+Point+for+EOSC+Future
The EOSC IF must be built, promoted and maintained with structure, fairness and transparency.

- EOSC channels will be used to announce newly adopted/deprecated guidelines to the research community at large
- It will support the identification of gaps in interoperability solutions, and will assist with technical interoperability in the future
- It does not seek to replace existing community guidelines with its own versions
- It will not reinvent existing ‘ISO-style’ certification models
- It intends to confirm the readiness of each proposed interoperability artifact
## Governing bodies

An overarching, independent group that will assess whether requests for inclusion into the EOSC IF are compliant with a minimum set of requirements.

<table>
<thead>
<tr>
<th>Body</th>
<th>Responsibility</th>
<th>Interim body for duration of EOSC Future project</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOSC Interoperability Advisory Board (EIAB)</td>
<td>Responsible for:</td>
<td>EOSC Future Technical Coordination Board</td>
</tr>
<tr>
<td></td>
<td>● overseeing the EOSC IF;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● endorsing guidelines, based on the recommendations of the EIAC.</td>
<td></td>
</tr>
<tr>
<td>EOSC Interoperability Area Chairs (EIAC)</td>
<td>Responsible for:</td>
<td>EOSC Future WP3 task leads supported by</td>
</tr>
<tr>
<td></td>
<td>● performing the initial assessment of the proposed guidelines</td>
<td>editorial board (calling in community experts to</td>
</tr>
<tr>
<td></td>
<td>● making recommendations for inclusion to the EIAB.</td>
<td>help with the review process as needed).</td>
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</tbody>
</table>
## Proposal Process

<table>
<thead>
<tr>
<th>Role</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposer</td>
<td>Submit proposal</td>
</tr>
<tr>
<td>EIAC</td>
<td>Review, Consult, Feedback/recommend</td>
</tr>
<tr>
<td>EIAB</td>
<td>Ratify</td>
</tr>
<tr>
<td>EIF Onboarding</td>
<td>Register &amp; Publish</td>
</tr>
</tbody>
</table>

- EOSC IF governance will support proposal, consultation, ratification and promotion.
- A proposed process is currently undergoing consultation.
- A guardian or owner can propose inclusion using a proposal form.
- The basic foundation of the ‘content’ of the EOSC IF has been proposed*

*See [https://wiki.eoscfuture.eu/display/EOSCF/Main+Standards+and+Interfaces+as+a+Starting+Point+for+EOSC+Future](https://wiki.eoscfuture.eu/display/EOSCF/Main+Standards+and+Interfaces+as+a+Starting+Point+for+EOSC+Future)
Next steps

- Conclude analysis of consultation responses
- Feed into implementation plan
- Confirm charters for EIAB and EIAC, and launch the governance process
- Commence design and implementation of the registry
- Population of the registry