Towards the European Open Science Cloud (EOSC): reflections on a local basis for domestic infrastructures

Paolo Budroni (TU Wien Bibliothek) "Focus on Open Science" – Ljubljana 2019





# EOSC – Not a cloud made in Brussels ...

(quote Jean-Claude Burgelman, EOSC Conference, Vienna, 30 October 2018)



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#### EOSC Model: 6 lines of action – These action lines influence the development of the EOSC



Architecture	Architecture of the federated infrastructures as the solution to the current fragmentation in research data infrastructures which are insufficiently interoperable.
Data	FAIR data management and tools. A common data language to ensure data stewardship across borders/disciplines based on FAIR principles.
Services	Available services from a user perspective. A rich environment offering a wide range of services covering the needs of the users.
Access & Interface	Mechanisms/interfaces for accessing EOSC. A simple way for dealing with open data obligations or accessing research data across different disciplines.
Rules	Rules of participation for different EOSC actors. An opportunity to comply with existing legal and technical frameworks and increase legal certainty & trust.
Governance	Governance of the EOSC, aiming at ensuring EU leadership in data-driven science but requiring new governance frameworks.

Source: Implementation Roadmap for the European Science Cloud (Staff Working Document SWD(2018) 83), 14 March 2018: <a href="http://ec.europa.eu/research/openscience/index.cfm?pg=open-science-cloud">http://ec.europa.eu/research/openscience/index.cfm?pg=open-science-cloud</a>

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#### The EOSC is not a new dedicated infrastructure or software package:

 $\rightarrow$  it is a **process** of making research data in Europe accessible to all researchers under the same conditions of use and usage.

 $\rightarrow$  gives a strong push in Europe towards a culture of open research data that are findable, accessible, interoperable and reusable (FAIR)

→ networking the existing European data infrastructures, integrating high-capacity cloud solutions, and in due course, widening the scope of these services to include users from the public sector and industry

→ efforts particularly directed on *Data Culture, Research Data Services,* Federated Architecture and co-Funding.

CREDITS: Budroni/Burgelman/Schouppe, March 2019 https://www.degruyter.com/downloadpdf/j/abitech.2019.39.issue-2/abitech-2019-2006/abitech-2019-2006.pdf



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#### Fachbeitrag

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# Architectures of Knowledge: The European Open Science Cloud

#### http://doi.org/10.1515/abitech-2019-2006

**Abstract:** In November 2018, the European Commission launched the European Open Science Cloud (EOSC) in Vienna. The EOSC envisions establishing a European data infrastructure, integrating high-capacity cloud solutions, eventually widening the scope of these services to include the public sector and the industry. Understanding the EOSC structure is a first step in recognizing the opportunities offered by the newly launched EOSC. This article offers some reflections for a better understanding of the realization of the EOSC at the present stage, including currently ongoing developments.<sup>1</sup>

**Keywords:** European Open Science Cloud, EOSC, Digital Single Market

#### 1 European Open Science Cloud (EOSC): a process, not a project

In November 2018, under the Austrian Presidency, the European Commission launched the European Open Science Cloud at the University of Vienna.<sup>2</sup>

The EOSC is not a new infrastructure or software package, it is a process of making research data in Europe accessible to all researchers under the same terms of use and distribution. The initiative aims to push Europe towards a culture of open research data that are detectable, accessible, interoperable and reusable (FAIR), hence allowing all European researchers to embark on a journey towards data-driven science.

## The EOSC Governance 2019-2020





## **Projects supporting EOSC**

# **e**Infra Central

# **EOSC** secretariat eu

Setup and management of the EOSC Secretariat supporting the EOSC Governance



#### einfraCentral

eInfraCentral is the European catalogue of e-Infrastructure services and resources. For users, this standardised registry makes it easier to discover and access services and resources. For service providers, this quality oriented registry enables publishing of their services to meet researchers' expectations.

#### EOSC Secretariat

EOSC Secretariat delivers 360° support to the EOSC Governance while working openly and inclusively with communities to co-create an allencompassing European Open Science Cloud.

#### EOSC-hub

EOSC-hub brings together multiple service providers to create the Hub: a single contact point for European researchers and innovators to discover, access, use and reuse a broad spectrum of resources for advanced data-driven research. n Clouds Research ronments

promote opening up, sharing and reusing of research outcomes.

cross-disciplinary links to enable such sharing on a global scale.

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# Secretariat support services



EOSCsecretariat.eu has received funding from the European Union's Horizon Programme call H2020-INFRAEOSC-2018-4, grant Agreement number 831644



#### EOSCsecretariat.eu

EOSC Secretariat delivers 360° **support to the EOSC Governance** while working openly and inclusively with communities to co-create an all-encompassing European Open Science Cloud.



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#### Main Objectives



EOSC Liaison Platform for open consultation EOSC Stakeholder Forum for stakeholder engagement Set-up of an operational framework supporting the EOSC Governance





#### EOSC building processes The Austrian participation TU WIEN TEAM



FAKULTÄT FÜR INFORMATIK

**Faculty of Informatics** 



Center for Research Data Management





# Why is TU Wien Bibliothek engaged in a relevant EOSC building process?

- Following the positioning of TU Wien ("technology for people") TU Wien Bibliothek acts as a knowledge hub in both, in a domestic and in an international context
- Innovative approach: TU Wien Bibliothek acts as an incubator for EOSC Stakeholder driven engagement activities in a domestic and crossborder context
- TU Wien Bibliothek actively supports a user centric EOSC implementation, with the Co-creation budget at the command of the EOSC Executive Board

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#### **Consultations, Derived Strategy**

#### AMBASSADORS

- communicate with peers trust
- need to **obtain** them (e.g. RDA Interest Group)
- **motivate** them: connection to EOSC

#### **INPUT FROM RESEARCHERS TO EOSC**

- give researchers a voice in shaping and co-creating EOSC
- meet their needs
- workshops, panel discussions, world cafés, webinars, Liaison Platform
- feed into WGs (specifically rules of participation, services, data)

#### **CLEAR MESSAGE**

 envisioning free at point of use, open and seamless services for storage, management, analysis and reuse of research data across borders and scientific disciplines ("eduroam for data and services")



(i)



#### Message of TU Wien Team

#### **"EDUROAM METAPHOR"**



from a perspective of...



#### Researchers

- is Well-known
- is Ubiquitous
- is Transparent
- is Free at point of use
- is Extremely useful

- has rules of participation
- has System architecture including security

EOSC

- provides a specific (micro-)service
- deals with user data
- has governance

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## TU Wien Team - Timeline / Actions Taken

Launch Ambassadors Program a way for awareness raising and engaging with researchers

> Start: Preparation of Events (Co-)creation with e.g. university networks,

> > Videos Interviews Co-creation activities

STAGE 1 . Analysis

STAGE 2 . Past Actions

STAGE 3 . Outlook







# ABOUT THE CO-CREATION PROCESS



# **Co-creation opportunities through the EOSCsecretariat**

EOSCSecretariat.eu retains a high degree of flexibility in its roll-out plan by adopting a co-creation approach and providing budget for all upcoming, foreseen and unforeseen, activities and actions related to the work of the EOSC Secretariat to support the EOSC Governance.



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Co-creation funding and Open Calls, together with opportunities for Study Suggestions for a total budget 5.95M€ are available at <u>www.eoscsecretariat.eu/funding-opportunities</u>



#### **Co-creation approach**

The EOSC Secretariat fosters stakeholder engagement by introducing a cocreation approach and a budget for its realization. If you have an idea to help co-create the EOSC and need funding you have the chance for budget to be allocated for your action or activity.

#### What can be funded?

The proposed requests will have to clearly demonstrate activities which are related to the work of the EOSC Secretariat to support the EOSC Governance, in particular the activities of the <u>Executive Board</u> Working Groups, the <u>Governance Board</u> Sub Groups and the <u>Stakeholder Forum</u> as well as identify the added value to existing EOSC activities, e.g.

- engaging with stakeholders/coordination (initiatives)
- support services for the EOSC Boards
- support services for the EOSC Executive Board Working Groups
- analysis and studies to support EOSC in practice
- communication, dissemination, stakeholder forum/events



## Who are the stakeholders your Institution can address?

**Researchers & Research Support at your institution** 

National digital infrastructures

National & EU funded projects & initiatives at your institution

**Research & Academia Organisations** 

Policy makers at your institution

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# How can your institution support the EOSC building process?

- Your institution can organize workshops and know-how transfer on EOSC building processes → ask us
- Your institution can entice Research Institutions and Funders to get further engaged with EOSC building processes → ask us
- Your institution can contribute to the creation and development of the right environment for common terminologies in EOSC building processes



### How can the involved Universities help?

- Identifying priority topics
- Sharing stakeholder contacts
- Putting the players in contact with relevant initiatives & projects
- Promoting participation in all initiatives
- Requiring responses to collected suggestions by EOSC Governance Board
- Fostering the creation of WGs addressing collected suggestions
- Participating in the co-creation processes



#### **EOSC Liaison Platform**

#### O Want to provide feedback to the EOSC Accessible only to group members community? Start a discussion here. Unsubscribe from group Add new content Welcome to the EOSC Liaison Platform, an online discussion environment that allows the collection of input and provision of feedback to EOSC governance bodies. Start a new discussion Why take an active role in the Forum? What you can do Latest updates EOSC governance documents START A NEW SHARE YOUR DISCUSSION SURVEYS AND THE TOPICS AND calendar QUESTIONNAIRES OUTPUTS OF THE WORKING GROUPS For disseminating news and events, contact us. EOSC Liaison Platform members Where to start? Who is invited to participate? View all members V Rules Have Your Say On EOSC-Hub Initial Proposals For The EOSC Federating Core And Its Governance And Sustainability Bv Dale Robertson EOSC-hub has produced a Briefing Paper which proposes an open and participatory approach to the definition and provisioning of the EOSC Federating Core based on existing capabilities of e-Infrastructures and research infrastructures. We invite all stakeholders to provide feedback and insight. 30 JUL 2019 Add new commen Read more 1 comment 1 new comment Architecture Sustainability

The EOSC facilitates input from of stakeh provision the EOSC son Platform

The EOSC Liaison Platform facilitates the collection of input from the community of stakeholders and the provision of feedback to the EOSC Governance bodies.

Join the discussion on the EOSCsecretariat website: www.eoscsecretariat.eu/e osc-liaison-platform

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Focus on FAIR - FAIR Data and the European Open Science Cloud (EOSC)

> 7th November 2019 Graz University of Technology

> > 8<sup>th</sup> November 2019 Ljubljana





# EOSC Stakeholder Forum: Symposium 2019



26-28 NOVEMBER 2019 BUDAPEST, HUNGARY #EOSCSYMPOSIUM

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Programme call H2020-INFRAEOSC-2018-4, gran

#### Co-located with the first EOSC Coordination Day 28-29 November 2019, Budapest

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EUROPEAN OPEN SCIENCE CLOUD

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BY:

EOSC-hub







IN COLLABORATION WITH:

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#### Thank you

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# Thank you!

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