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

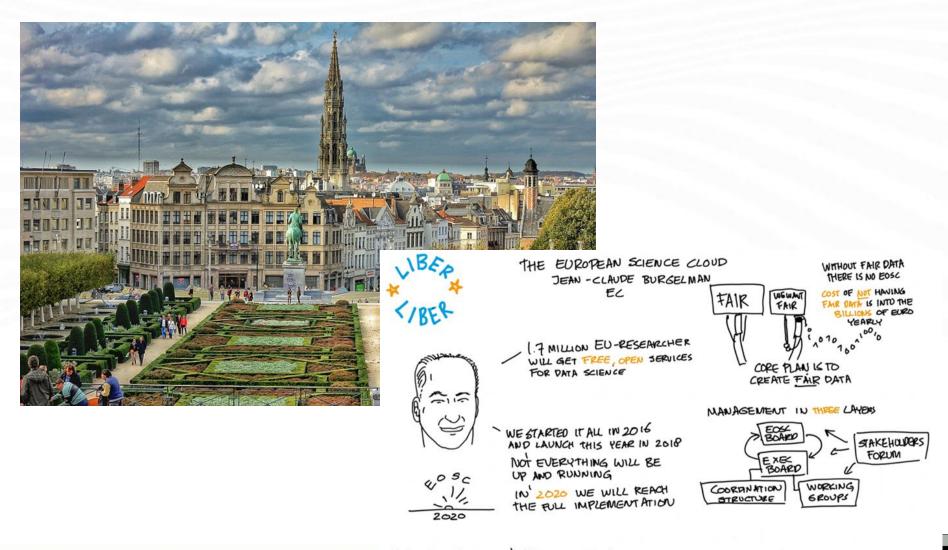
Paolo Budroni (TU Wien Bibliothek) "Focus on Open Science" – Ljubljana 2019





EOSC - Not a cloud made in Brussels ...

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





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 of the EOSC, aiming at ensuring EU leadership in data-driven science

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

but requiring new governance frameworks.



Governance

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

- → it is a **process** of making research data in Europe accessible to all researchers under the same conditions of use and usage.
- → 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.¹

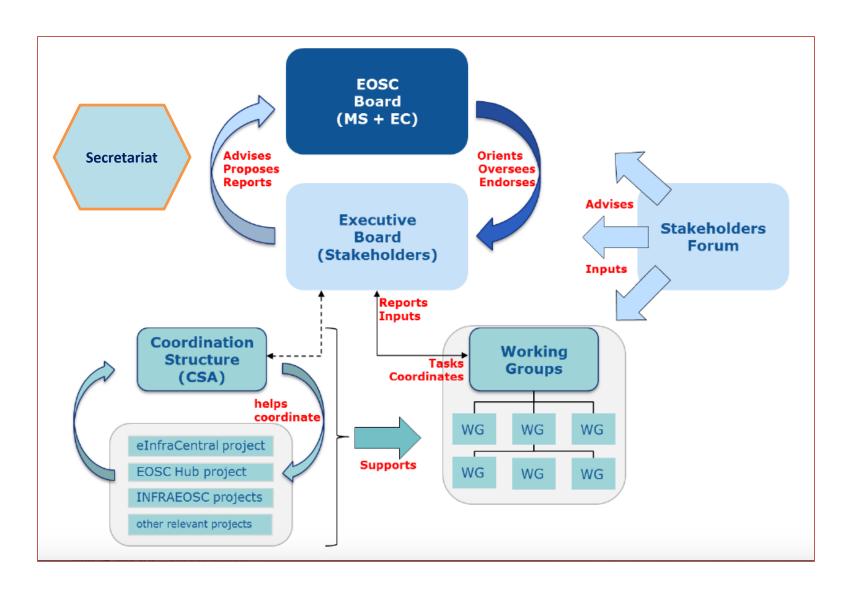
Keywords: European Open Science Cloud, EOSC, Digital Single Market

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.²

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





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.

ve the European
ss to commercial digital
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(EO) services.









Secretariat support services



EOSCsecretariat.eu

to the EOSC Governance while working openly and inclusively with communities to co-create an all-encompassing European Open Science Cloud.



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

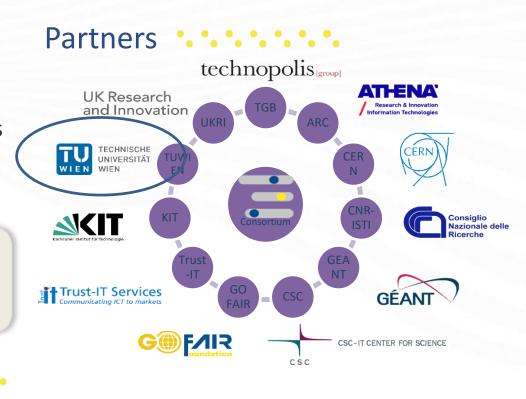
Main Objectives ...



Co-creation funding opportunities



EOSC Liaison
Platform for open
consultation





for stakeholder forum engagement



Set-up of an operational framework supporting the EOSC Governance



EOSC building processes The Austrian participation TU WIEN TEAM





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





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")





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





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

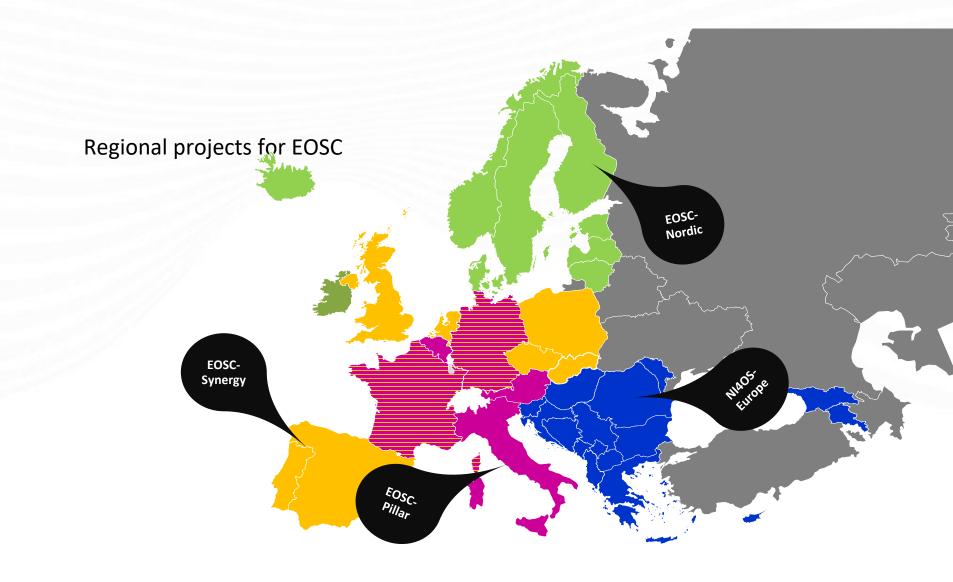


STAGE 1 . Analysis

STAGE 2 . Past Actions

STAGE 3. Outlook





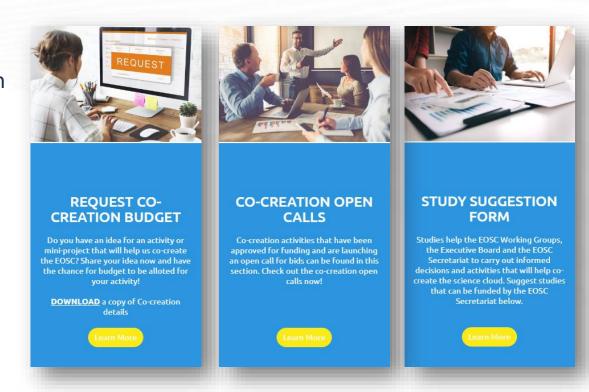




ABOUT THE CO-CREATION PROCESS

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.



Co-creation funding and Open Calls, together with opportunities for Study Suggestions for a total budget 5.95M€ are available at

www.eoscsecretariat.eu/funding-opportunities





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 Executive Board Working Groups, the Governance Board Sub Groups and the Stakeholder Forum 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





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





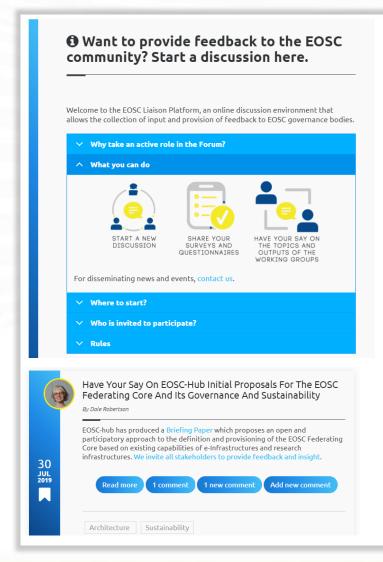
How can the involved Universities help?

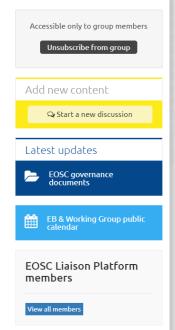
- Identifying priority topics
- Sharing stakeholder contacts
- Putting the players in contact with relevant initiatives & projects
- Promoting participation in all initiatives
- Requiring responses to collected suggestions by EOSC Governance Board
- Fostering the creation of WGs addressing collected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





EOSC Liaison Platform





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:

<u>www.eoscsecretariat.eu/e</u> <u>osc-liaison-platform</u>







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

7th November 2019
Graz University of Technology

8th November 2019 Ljubljana





EOSC Stakeholder Forum: Symposium 2019



ORGANISED BY:











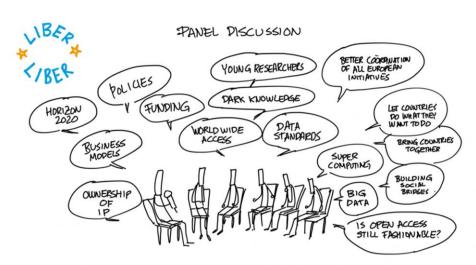
IN COLLABORATION WITH:





Thank you

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