



## **EOSC-Enhance**

Journée EOSC au CNRS 22 January 2020, Paris



### A bit of context



- Q2 2017: Establishment and development of an EOSC Portal decided by the European Commission (proposed by Commissioner Moedas)
- Q3 2017: Ad-hoc funding allocated by the EC in the INFRAEOSC-06 call topic to support its further development until 2020
- 2017-18: Initial development of EOSC Portal carried on by a collaboration agreement among eInfraCentral, EOSC-Hub and OpenAIRE-Advance projects.
- Q4 2018: First version of the EOSC Portal unveiled at the EOSC Launch Event
- Q4 2019: EOSC Enhance awarded with EC grant to boost the functionality of the EOSC Portal



# EOSC Portal: main building blocks EOSC ENHANCE

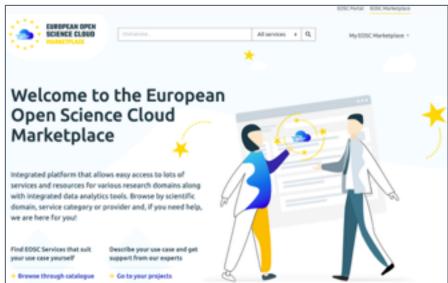


european future innovation system



- For providers: publication and aggregation of services and research outputs information
- For users: browsing, comparison

http://catalogue.eosc-portal.eu/home



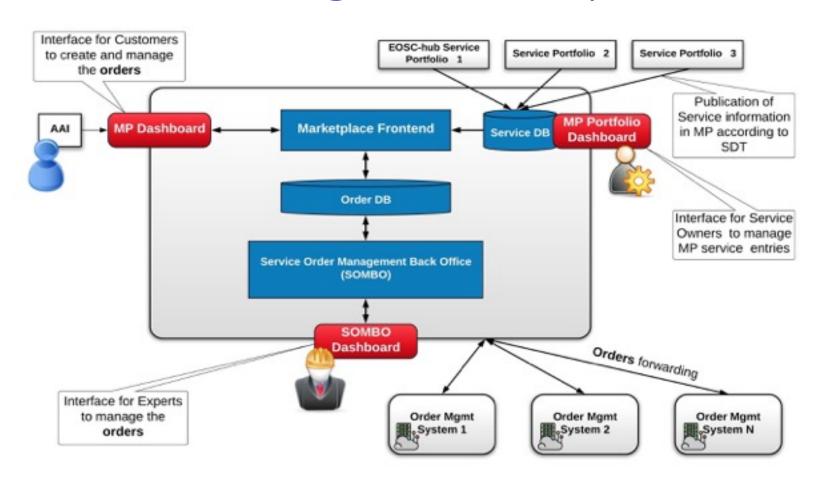
- For providers: publication after validation of eligibility criteria related to service TRL of services and research outputs after validation
- For users: browsing, ordering, user ←→ Provider interaction

https://marketplace.eosc-portal.eu/





## EOSC Portal Catalogue&Marketplace Architecture





# EOSC Enhance: The consortium **EOSC** ENHANCE



european future innovation system

Participant organisation name	Short	Country			
	Name				
EUROPEAN FUTURE INNOVATION SYSTEM CENTRE	EFIS	BE			
TRUST-IT SRL	TRUST-IT	IT			
JNP STRATIGIKI KAI EPICHIRISIAKI SYMVOULEFTIKI IKE	JNP	EL			
AKADEMIA GORNICZO-HUTNICZA IM. STANISLAWA STASZICA W KRAKOWIE	CYFRONET	PL			
ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON	UOA	EL			
University of Manchester	UNIMAN	UK			
STICHTING EGI	EGI	NL			
EUDAT OY	EUDAT	FI			
GEANT VERENIGING	GEANT	NL			
OPENAIRE AMKE	OPENAIRE	EL			
INTEGRATED CARBON OBSERVATION SYSTEM EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIUM	ICOS	FI			
CESSDA ERIC	CESSDA	NO			
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS - Laboratoire d'Annecy de Physique des Particules (LAPP)	LAPP	FR			
EUROPEAN MOLECULAR BIOLOGY LABORATORY	EMBL	DE			
ILL	ILL	FR			



# Objectives



Objective 1: Enhance the service provider interface and incorporate new services and resources into the EOSC catalogue

Objective 2: Accelerate the deployment and uptake of EOSC services and resources

Objective 3: Increase user demand for EOSC services and resources via portal improvements and development

Objective 4: Enabling easier access to thematic clouds services and data



# FFI Methodology



- EOSC Enhance combines a product development axis (EOSC Portal enhancements) and a service operation axis (EOSC Portal operations) running in parallel. The workplan is organised around five workpackages delivering the main project products while the operations aspect is spread horizontally in all WPs and is coordinated by WP1.
- Furthermore, EOSC Enhance will build on specifications, software, content, etc of a number of EOSC coordinating projects, mainly EOSCpilot, eInfraCentral, OpenAIRE-Advance, EOSC-hub and CatRIS to communicate, collect, integrate, deploy and maintain the best in class of the available systems that construct a robust EOSC Portal.
- Collaborate with flagship EOSC contributing projects at mature stage concerned with the integration of their services and resources into a single operational platform with fully functional and comprehensive interfaces.
- Last but not least, EOSC Enhance has to package and deliver all new developments to the successor project resulting from INFRAEOSC-03-2020 in a very comprehensive and professional manner at the end of 2021.





# WP1: Project management and strategic coordination with EOSC Stakeholders

- setting up the appropriate procedures and management structure for the achievement of the overall projects' objectives and to ensure joined up implementation across the work-packages
- facilitating the continuation of the previous fruitful collaborative work on the EOSC portal, to
  further enhance its functionalities and to incorporate progressively access mechanisms to services
  offered by other scientific gateways and thematic platforms
- enabling joint work plans and exploring synergies with relevant projects contributing to the development of the EOSC portal
- liaison with EOSC governance and related stakeholders to establish a constructive and continuous exchange of input with its bodies and working groups
- figuring out measures for the sustainability of the EOSC Enhance project results and its follow-up, including the long-term strategic role of the EOSC Portal within the EOSC Federating Core.



## WP1: Tasks



european future innovation system centre

### • Task 1.1: Project planning management and financial & operational

The coordination of the project activities, internal procedures and the timely mobilisation of resources. Adjust and further develop the work-package (WP) planning and deliverables description.

### Task 1.2: Quality and data management and operational oversight

Follow-up and oversight of continual improvements to the EOSC portal functionalities. Developing and applying an internal quality and risk management plan (QRMP)

### Task 1.3: Liaison with EOSC governance and stakeholders

Liaison with relevant chairs of EOSC WGs and EB and participation to the relevant meetings of the EOSC EB and WGs scheduled via the EOSC Secretariat project. Establishment of joint work plans by Memorandum of Understandings (MoUs) with relevant EOSC initiatives.

### Task 1.4: Sustainability planning for the next phase of the EOSC Portal

Collect and analyse the needs of the post 2020 EOSC Portal to consolidate its function as universal entry-point to the EOSC. Liaising with the EOSC WG on Sustainability and monitoring state of play to prepare a sound business plan for the EOSC Portal focusing on related costs as well as on current and possible future funding sources.





# WP2: EOSC Portal specifications, interoperability and quality framework

#### **OBJECTIVES**

Develop a unified EOSC Catalogue Framework, mutually accepted by EOSC stakeholders for describing and offering services and resources (SaR) to end-users in a harmonised way, guaranteeing the interoperability of SaR information with open APIs and quality across all the EOSC contributors [Aggregators, Repositories and Marketplaces of thematic and national/regional initiatives and clusters (ARMs), Research Infrastructures (RIs) and Service and Resource Providers (SRPs)]

- improve interoperability enabling discovery of the wide range of services and resources through the EOSC Service Catalogue with minimum disturbance for the EOSC contributors (initial low barrier to entry);
- deploy processes that allow for the provision of added value services by combining services, resources and those processes;
- develop the framework to allow automated management of the service and resource information and their accompanying data without human intervention (e.g., harvesting, etc).



### WP2: Tasks



european future innovation system centre

### Task 2.1: EOSC contributors (ARMs, RIs and SRPs) state-of-play analysis

Scoping activities studying active clustering and aggregation initiatives to derive common practices and techniques, dissimilarities, overlaps and best practices of ARMs, RIs and SRPs. Compilation on repositories, catalogues, marketplaces, aggregators, especially their integration models and techniques. Categorising existing service and resource to identify and address potential gaps.

### Task 2.2: EOSC services and resources description and classification

Define an inclusive common service and resource definition model and service management for ARMs, RIs and SRPs to reach a harmonised approach to service and resource catalogues while taking stock of good practices from EOSC-related projects and partners, as well as emerging standards and frameworks. Increase visibility of services and resources and will help the stakeholders to identify the service they need.

### Task 2.3: Service onboarding and validation

Onboarding and validation process of interested ARMs, RIs and SRPs and their offerings in the EOSC Catalogue. Validating the EOSC Rules of Participation (RoP) in collaboration with other EOSC contributors and EOSC projects. Developing metrics for objectively validating the registered services combined with a feedback system from users.

### Task 2.4: Quality assurance and support measures

Establishing a quality process to review and maintain the completeness, accuracy and class characteristics of the registered services. Developing the content for online training and seminar modules





## WP3: Design and development of the EOSC Portal functionalities towards Service and Resource Providers

- Design of the functional specifications that support ARMs, RIs and SRPs in contributing services and resources to the EOSC Portal
- Implementation of the onboarding process for registering new services in the EOSC catalogue
- Integration in the EOSC Portal of the order management services for handling new service requests by the end-users of the EOSC Portal
- Implementation of analysis and visualization services for SRPs to view and analyse the uptake of their offerings and user feedback in the ESOC Portal.
- Specifications of the open APIs for enabling exchange of information related to service updates and service usage with the EOSC Portal



## WP3: Tasks



european future innovation system centre

### Task 3.1: Functional Specifications, Architecture design and setup

Design of the functional and architectural specifications and the design of the EOSC Portal Services to be offered to SRP. Address issues related to UI/UX, open APIs and underlying knowledge base and structures, workflows from content registration to delivery. Describe non-functional specifications

### Task 3.2: Registration and Validation Services

Implement the services offered for the onboarding of new SRPs and implement measures verifying the conformance of registered services and resources metadata to the agreed guidelines.

### Task 3.3. Order Management Services

Integrate order management tools developed within the EOSC-hub project into the EOSC Portal. Enable SRPs to define required or related services, datasets and resources from the EOSC catalogue that can be jointly used (ordered) with their offerings.

### Task 3.4. Provider Analytics

Enhance EOSC SRP workspace (dashboards) for the monitoring and management of their resources. Develop the services for the SRPs to access and analyse usage statistics about their offerings in the portal, via rich visualizations





### WP4: EOSC Portal Functionalities towards EOSC End-Users

- Integrating all activities aiming at making the EOSC Portal the universal entry point to the EOSC for European researchers including the "long-tail" of science.
- Enhancing user experience in discovery and access of EOSC services
- Providing a 'single voice to market', ensuring that each category of users see a coherent and consistent message across the EOSC Portal.
- Integrating the EOSC Service Catalogue and the EOSC Marketplace into a single coherent solution, will present a seamless experience for the end-user.
- Developing enhanced EOSC Portal features that would promote valuable, accessible, mature solutions and will increase the EOSC Portal value through validation in realistic scenarios.



### WP4: Tasks



european future innovation system centre

Task 4.1: User experience modeling for key scenarios and personas

Developing the UX model, such as harmonised user journeys for specified categories of user, based on common user interaction scenarios, verification procedure and results.

Task 4.2: Improving user experience for service discovery and presentation

Integrating software components allowing users to discover services and resources at the ESOC Portal.

• Task 4.3: Improving access and other user-facing operational processes

Adds-on to the EOSC Portal allowing users to order services and act in any other relevant operation processes.

Task 4.4. Improving discoverability and accessibility of research data

Add-on for discovery of research data from 5 RI clusters to the EOSC Portal, guidelines for other RIs to enable discoverability.





# WP5: EOSC Dissemination, Stakeholder Requirements & Engagement

- Gather portal stakeholder requirements
- Engage stakeholders (already active & newcomers)
- Organize sessions and workshops
- Liaise with existing and newly funded projects
- Enhance & maintain the "informative part" of the EOSC Portal website
- Implement a communication & outreach strategy (w/ Portal Editorial Board)
- Publish Success Stories via the EOSC Portal



### WP5: Tasks



european future innovation system centre

### Task 5.1: Stakeholders consultation, requirements gathering & participation into EOSC Portal

Identifying, connecting and engaging with key projects, initiatives and developments at the national and European level that can contribute to the EOSC Portal evolution; gather, analyse and prioritize requirements. Organising dedicated "stakeholder-oriented" sessions and workshops and online consultations to support the technical WPs.

### Task 5.2: Enhancement and operation of the EOSC Portal overall website

Operating and maintaining the EOSC Portal website; liaise with the EOSC Portal Editorial Board and Task 5.3 to develop new features of the website to support the evolving communication and stakeholder engagement needs of the Portal. Ensuring a proper usage of the EOSC branding in the evolution of the portal.

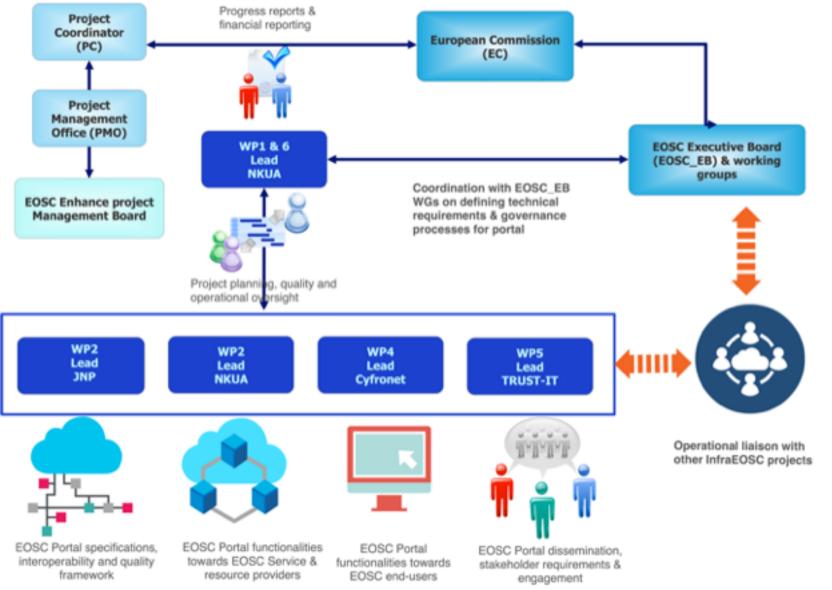
## Task 5.3: Realising the EOSC Portal value proposition in dissemination, communication & outreach

Supporting the enhancement of the EOSC Portal with a valid communication and dissemination strategy to address the overall value-proposition and attractiveness of the EOSC Portal.



## Project structure







## Project timeline



european future innovation system

EOSC ENHANCE					Year 1											Year 2											
Workpa	ickages and tasks	WP/Tlead	1	2	3	4	5	6	7 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22 2	3 24			
WP1	Project management, financial & operational reporting	NKUA																									
T1.1	Project management, financial & operational reporting	NKUA	M1.1 D1.1											M1.3 D1.2										M1.4 D1.9			
T1.2	Quality, data management and operational oversight	EFIS	1		D1.2			D1.4		D1.5								D	1.6								
T1.3	Liaison with EOSC governance and stakeholders	EFIS	1	M1.2		M	11.2		M1.2			M1.2			M1.2		M	1.2			A1.2		M1.2				
T1.4	Sustainability planning for the next phase of the EOSC Portal	EFIS											01.7						_			_		D1.8			
WP2	EOSC Portal specifications, interoperability and quality framework	JNP																									
T2.1	EOSC contributors (ARMs, RIs and SRPs) state-of-play analysis	EFIS				D	2.1																				
T2.2	Service description and classification	JNP	1								M2.1	D2.2											D2.3				
T2.3	Service onboarding and validation	JNP										M2.2	D2.4										D2.5				
T2.4	Quality assurance and support measures	JNP								D2.6			M2.3														
WP3	EOSC Portal functionalities towards EOSC Service & Resource Providers	NKUA																									
T3.1	Functional Specifications, Architecture design and setup	NKUA											D3.1														
T3.2	Registration and validation services	NKUA								M3.1																	
T3.3	Order management services	CYFRONET													M3.2												
T3.4	Provider analytics	NKUA	1															M	3.3								
T3.5	EOSC APIs specifications	NKUA																					D3.2				
WP4	EOSC Portal functionalities towards users	CYFRONET																									
T4.1	User experience modeling for key scenarios and personas (B2C and B2B)	CYFRONET				D4.1								D4.2													
T4.2	Improving user experience for service discovery and presentation	CYFRONET																M	4.2								
T4.3	Improving access and other user-facing operational processes	CYFRONET								M4.1													W4.:				
T4.4	Improving discoverability and accessibility of research data	UNIMAN						D4.3													04.4						
WPS	Dissemination, Stakeholder Requirements & Engagement	TRUST-IT																									
T5.1	Stakeholders consultation, requirements gathering & participation into EOSC portal	EFIS						D5.2										D	5.3								
T5.2	Enhancement and maintenance of the EOSC portal website	TRUST-IT											M5.1									M	5.2				
T5.3	Realising the EOSC portal value proposition in dissemination, communication & out	TRUST-IT				D5.1																		D5.4			
WP6	Ethics Requirements	NKUA	D6.1															,									





# Thank you

For more info: asero@efiscentre.eu