NEANIAS Open Event 22 September 2022

## **NEANIAS in the EOSC strategy**

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www.neanias.eu



Novel EOSC Services for Emerging Atmosphere, Underwater & Space Challenges

NEANIAS receives funding from European Union under Horizon 2020 Research and Innovation Programme under grant agreement No. 863448



The Vienna Declaration on the European Open Science Cloud Vienna, 23 November 2018

We, Ministers, delegates and other participants attending the launch event of the European Open Science Cloud (EOSC):

 Recall the challenges of data driven research in pursuing excellent science as stated in the "EOSC Declaration" signed in Brussels on 10 July 2017.

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2. Reaffirm the potential of the European Open Science Cloud to transform the research landscape in Europe. Confirm that the vision of the European Open Science Cloud is that of a research data commons, inclusive of all disciplines and Member States, sustainable in the long-term.

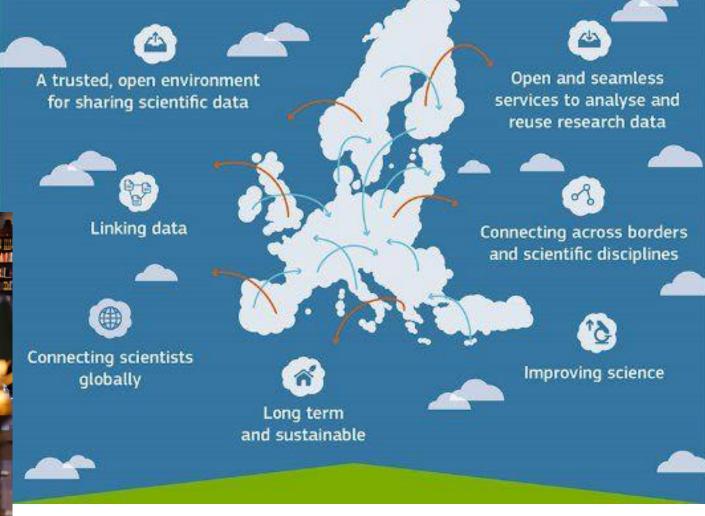
3. Recognise that the implementation of the European Open Science Cloud is a process, not a project, by its nature iterative and based on constant learning and mutual alignment. Highlight the need for continuous dialogue to build trust and consensus among scientists, researchers, funders, users and service providers.

4. Highlight that Europe is well placed to take a global leadership position in the development and application of cloud services for Science. Reaffirm that the European Open Science Cloud will be both European and open to the world, reaching out over time to relevant global research partners.

5. Recall that the Council - in its conclusions of 29 May 2018 - welcomed the implementation roadmap and the federated



#### EUROPEAN OPEN SCIENCE CLOUD BRINGING TOGETHER CURRENT AND FUTURE DATA INFRASTRUCTURES



.c. maps://ec.europa.eu/commission/news/european-open-science-cloud-becomes-reality-2018-nov-23\_en

The Vienna EOBC Declaration was developed by Paolo Budroni, University of Vienna, and Stefan Hanslik, Austrian Federal Ministry for Education, Science and Research in close cooperation with the European Commission



## The European Open Science Cloud at a glance

#### EOSC is

... an environment for hosting and processing research resources to support EU science

### EOSC's ambition

To provide European researchers, innovators, companies and citizens with a federated and open multi-disciplinary environment where they can publish, find and re-use data, sw and services for research, innovation and educational purposes.

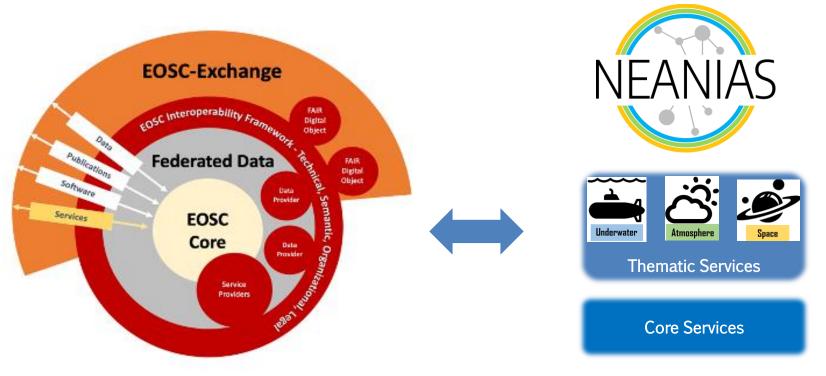


### EOSC aims to:

- provide seamless access to *data*, *sw* and *services*
- support FAIR (Findability, Accessibility, Interoperability and Reusability) management
- enable reliable reuse of research data and all other digital objects produced along the research life cycle (e.g. methods, software and publications)



### **NEANIAS** in the EOSC Ecosystem



- > Develops and provides thematic services in the field of:
  - Underwater,
  - Atmospheric and
  - Space research

> Aims to make thematic services available to EOSC communities

> Integration with EOSC Portal and reuse of EOSC Core services NEANIAS OPEN EVENT, SEPTEMBER 2022



## The NEANIAS journey towards EOSC integration

### Define objectives

to onboard nine (9) thematic services to EOSC; 3 services from each sector(Underwater, Atmospheric and Space research)

### Setup the strategy and the plan

- EOSC integration plan
- NEANIAS Service Management System

### Execute the plan

- Develop underlying core services (AAI, accounting, monitoring, etc.)
- Develop NEANIAS catalogue portal based on EOSC standards
- Facilitate EOSC onboarding (awareness raising, guidance and support to service providers) throughout the process

### Check & adjust the plan

- Validation of EOSC integration plan
- Reporting on the progress of EOSC integration activities Corrective actions

# NEANIAS

## **EOSC integration achievements: EOSC onboarding**

- > 14 NEANIAS services available at EOSC Marketplace
  - eleven (11) thematic services

3 services





Project KPI = 9 thematic services on EOSC

- three (3) core services
  - > Artificial Intelligence: 2 services
  - > Visualisation: 1 service



## **NEANIAS offering in EOSC**



EUROPEAN OPEN SCIENCE CLOUD		Neanias		All resour 🗸	Q	My EOSC Marketplace	
All Resources	<sup>14</sup>	_ooking for: <b>N</b>	eanias				
CATEGORIES		2					
Access physical & eInfrastructures	1	SUGGESTED					
Aggregators & Integrators	3	ATMO-4CAST Atmospheric Forecast	VD-Maps	AT	ATMO-STRESS ATMO-STRESS service for reconstruction of stress trajectories		
Processing & Analysis	10		Neanias' VD-Maps core service provides tools to create, serve				
Security & Operations	0		visualize imagery (2D images)				
Sharing & Discovery	4		terrain				
Training & Support	0						
Other FILTERS	0	Organisation: Ublwhere	Organisation: CORONIS COMPUTING SL	-	anisation ena Rese	: arch and I	

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### **NEANIAS Open Science and FAIR Management**

> Hackathons and Workshops

> Innovation events for SMEs

> Open Data from the 3 thematic areas

> Best practices of EOSC Integration for other communities

# NEANIAS

## EOSC offering in NEANIAS



- > Service Management System adopted by the 3 thematic communities
  - NEANIAS SMS followed EOSC SMS guidelines, processes and standards (FitSM).
- > EOSC Interoperability Guidelines
  - Adoption of EOSC Profiles v4.0
  - Reuse of EOSC APIs to sync service information directly from NEANIAS catalogue portal to EOSC Marketplace
- > Integration of EOSC Core services
  - NEANIAS Service monitoring based on EOSC Monitoring Service (ARGO)
  - Integration of NEANIAS AAI with EGI Check-In
  - Exploitation of Zenodo features for discovery, storage (or linking), publication and formalization of description of research artifacts
  - Use of EGI Resources to enable service ordering with computing resources provided by the user



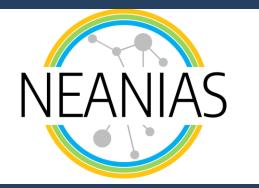
## **NEANIAS twofold contribution to EOSC Strategy**





### ONBOARD COMMUNITIES TO THE OPEN SCIENCE AND FAIR PRINCIPLES

POWER-UP EOSC WITH NEW RESOURCES FOR MULTIDISCIPLINARY RESEARCH



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## Thank you!

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