

# Environmental Research Infrastructures building FAIR services accessible for society, innovation and research - An Introduction

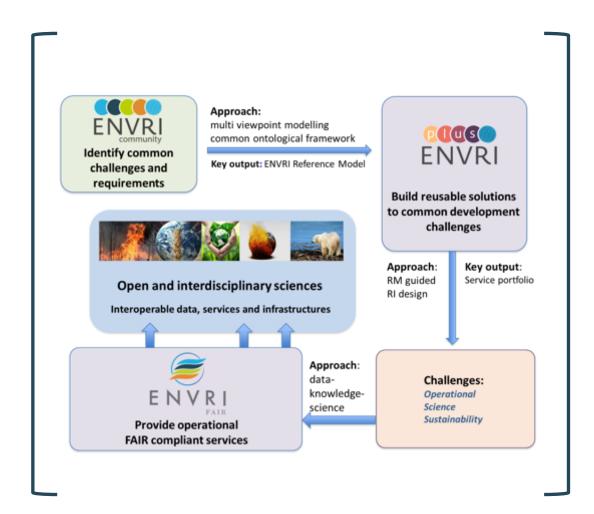
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# The Earth is our Lab Europe's Environmental Research Infrastructures



#### **ENVRI**

- Community Building
- Common framework
- ENVRI Reference Model

#### **ENVRIplus**

- Common developments
- Shared solutions for RI
- Service portfolio

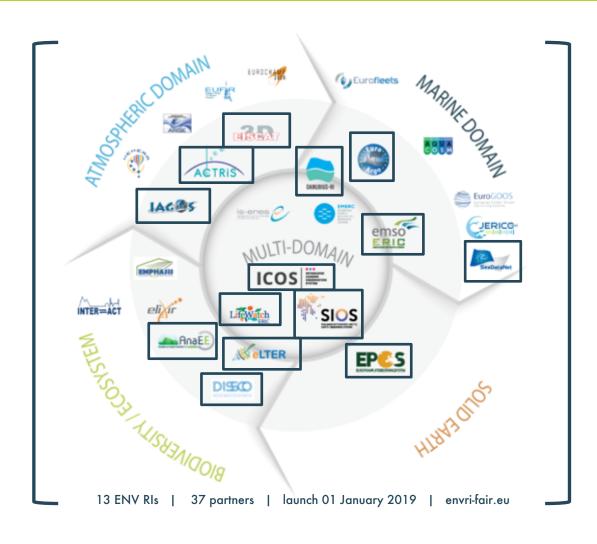
#### **ENVRI-FAIR**

- Enabling RI for FAIR
- FAIR compliant services
- Link ENVRI to EOSC





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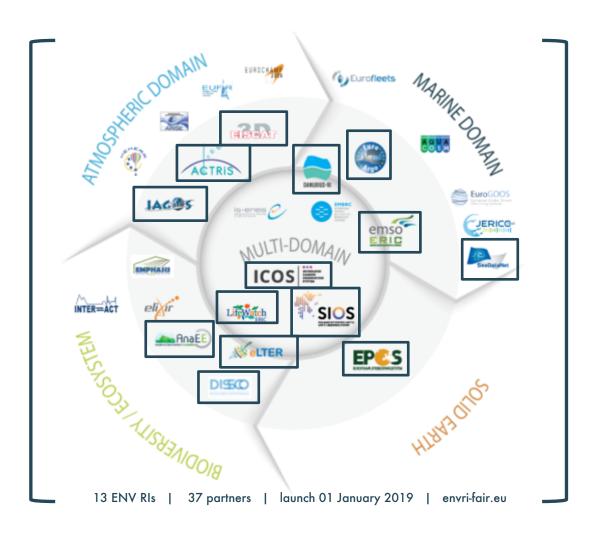
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#### **ENVRI-FAIR** mission

Share experiences and find common solutions to

- data sharing,
- accessibility,
- interoperability

Develop joint services

Expose services to EOSC

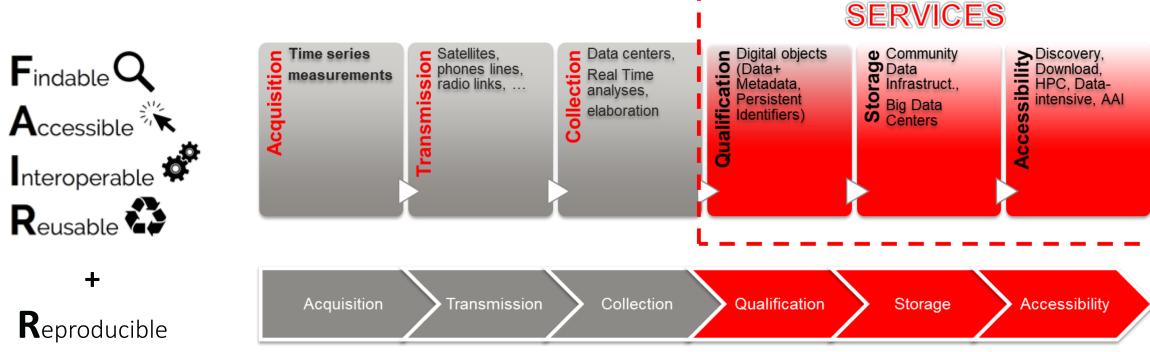
Prepare ENVRI-hub







### The Basics - FAIR Data and Service Provision



Data acquisition, validation & standardization

Data collection, preservation, publication (PID, DOI)

Accessibility, integration, computation





### **ENVRI-FAIR - Overarching Goals**

The primary goal of ENVRI-FAIR is the **implementation and further development of FAIR services** at RI and subdomain levels while ensuring the highest possible level of standardisation at the domain level.

ENVRI-FAIR implies motivation to **share solutions and strategies** moving towards a shared approach to EOSC.

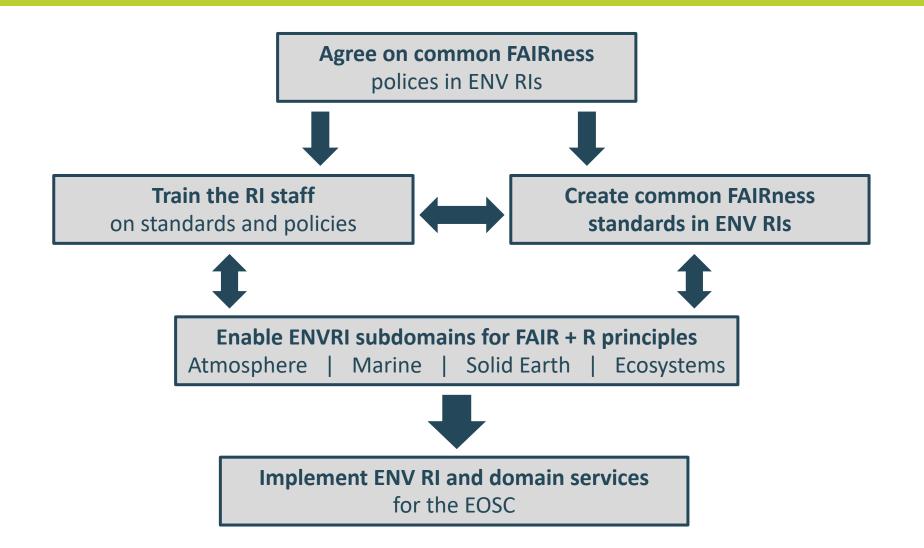
The high-impact ambition of ENVRI-FAIR is to prepare the foundations for the successful implementation of a **virtual**, **federated machine-to-machine interface** to access environmental data and services provided by the contributing EN VRIs.

This interface, the ENVRI-hub, will be realized as the services across RIs and even between environmental subdomains become progressively more integrated.





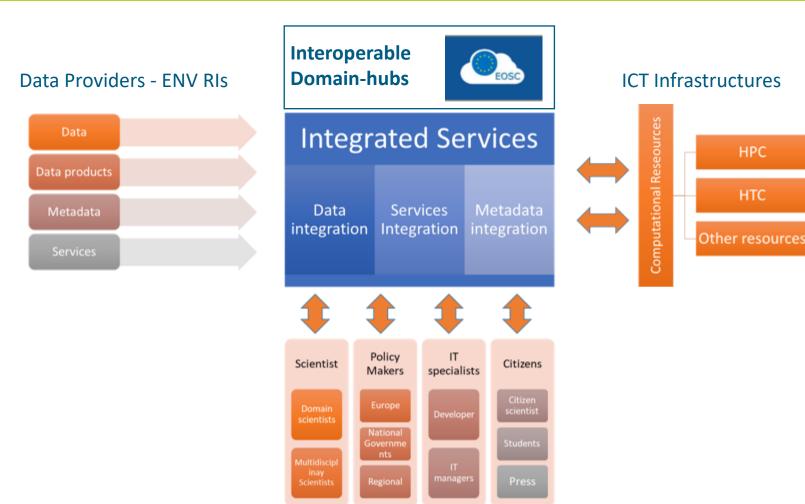
### **ENVRI-FAIR - Work Flow**







### **ENVRI-FAIR - Architecture**









## **ENVRI-FAIR – Implementation Principles**

#### Implementation by the research infrastructures themselves

Standards and implementation are hierarchical

- Cluster level
- Subdomain level
- RI level

Use of external services is recommended when needed

but all solutions must be made as transferrable and provider-agnostic as possible

**Common policies** are agreed, and are the "border control" of what is considered FAIR in the European ENVRI domain

All **policies and standards** are carefully considered with external stakeholders, e.g, in the global research environment, in different fields and user communities/ services





# ITS FAIR!

#### **ENVRI-FAIR...**

- is working towards operational FAIR data services, connecting the ENVRI cluster to the EOSC by implementing the ENVRI-hub
- responds to the need for appropriate tools to manage increasing amounts of complex data of the Earth System and the progressive establishment of Open Science
- is maintaining, utilising and extending the ENVRI community knowledge
- will facilitate a coherent development of the leading ENV RIs, fostering synergies, complementarity and interoperability, and support the alignment of upcoming RIs with the principles of the ENVRI cluster





# **THANKS**











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