

ENVRI-FAIR

Environmental Research Infrastructures building FAIR services accessible for society, innovation and research

coordinated by

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Ari Asmi, University of Helsinki, on behalf of the ENVRI community

13 ENV RIs | 37 partners | launch 01 January 2019 | open to new ENV RI | envri.eu



The Keeling Curve and the Tesla or: Who is the Innovator?

Charles David Keeling or Elon Musk?



- Mission
- ENV RIS
- ENVRI-FAIR



The Earth is our Lab Global Climate Indicators

Temperature and Energy

Atmospheric Composition

Ocean and Water

Cryosphere

Headline Indicators

Surface Temperature Atmospheric CO₂

Ocean

<u>Acidification</u>

Glacier Mass Balance

Ocean Heat

Sea Level

Arctic and
Antarctic Sea Ice
Extent

- Mission
- ENV RIs
- ENVRI-FAIR



The Earth is our Lab

Europe's Environmental Research Infrastructures















- Mission
- ENV RIs
- ENVRI-FAIR



Europe's Environmental Research Infrastructures



Identify common challenges and requirements

Approach:

multi viewpoint modelling common ontological framework

Key output: ENVRI Reference Model



Build reusable solutions to common development challenges

Approach: RM guided RI design

Key output: Service portfolio





Open and interdisciplinary sciences

Interoperable data, services and infrastructures

Mission

- ENV RIs
- ENVRI-FAIR

ENVRI-FAIR

Provide operational FAIR compliant services

Approach:

dataknowledgescience

Challenges:

Operational Science Sustainability

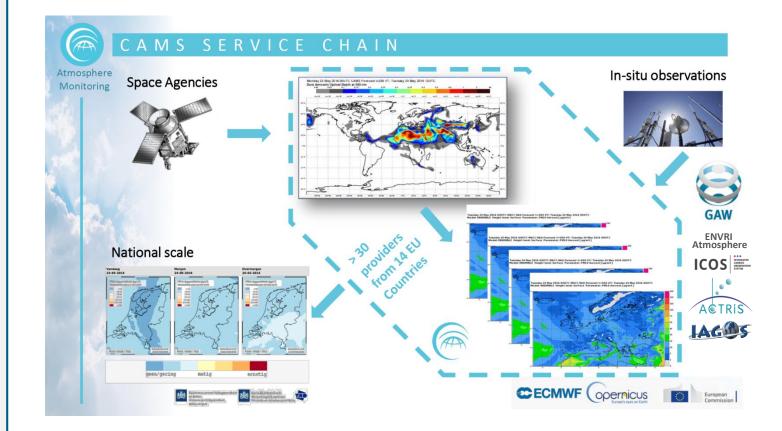






- Mission
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Europe's Environmental Research Infrastructures Joint Data Services and Products for the Society

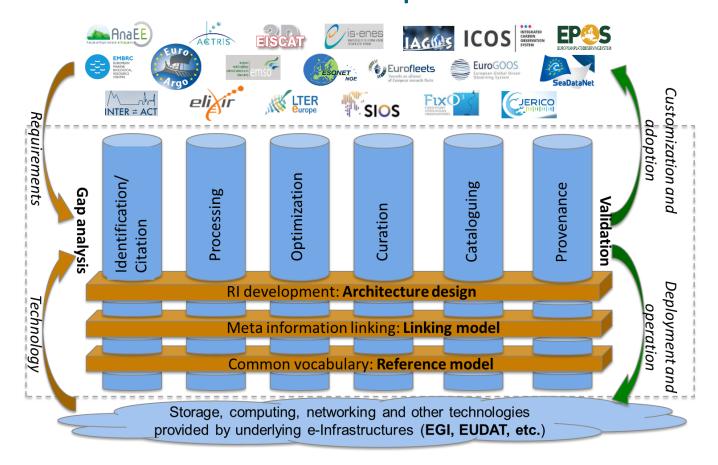




Data Lifecycle Processing Publishing

- Mission
- FNV RIS
- ENVRI-FAIR

ENVRI-FAIR connects ENV RI Cluster to EOSCThe Concept





ENVRI-FAIR connects ENV RI Cluster to EOSC The Ambition

The high-impact ambition of ENVRI-FAIR is to establish the technical preconditions for the successful implementation of a virtual, federated machine-to-machine inter-face to access environmental data and services provided by the contributing ENVRIs, called the ENVRI-hub.

For users that require the full spectrum of environmental parameters, the ENVRI-hub will offer a platform that reflects the complexity and diversity of the ENVRI landscape, while preserving their specific structures and addressing the requirements they were designed for.

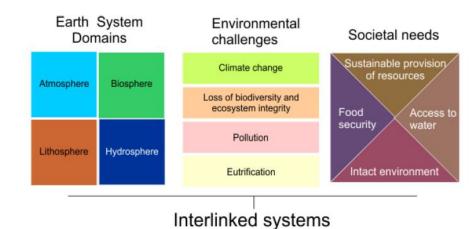
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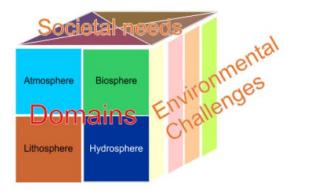
Backup Slides



The Earth is our Lab Landscape of Environmental Challenges

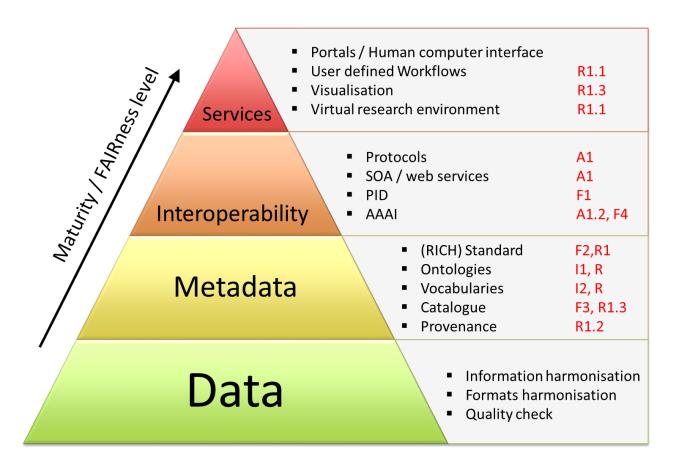


- Mission
- FNV RIS
- ENVRI-FAIR





Europe's Environmental Research InfrastructuresRoadmap to FAIRness



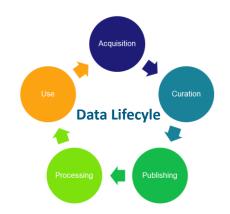
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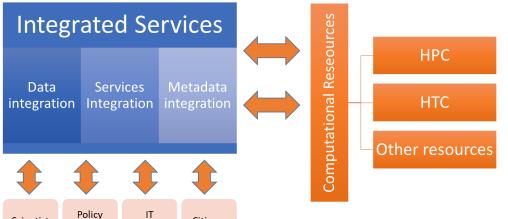
ENVRI-FAIR connects ENV RI Cluster to EOSCThe Ambition

Data Providers - ENV RIs





Technical Infrastructures



Citizens

- Mission
- ENV RIS
- ENVRI-FAIR

Users of Data and Services

Makers

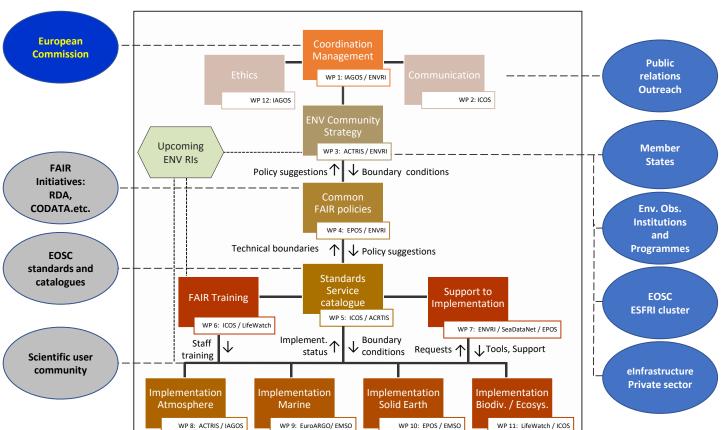
specialists

Scientist



ENVRI-FAIR connects ENV RI Cluster to EOSC

The Workflow



- Mission
- FNV RIS
- ENVRI-FAIR