ESFRI WORKSHOP ON RIS AND EOSC, London, 30 January 2019

ENVRI-FAIR

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

Coordination:

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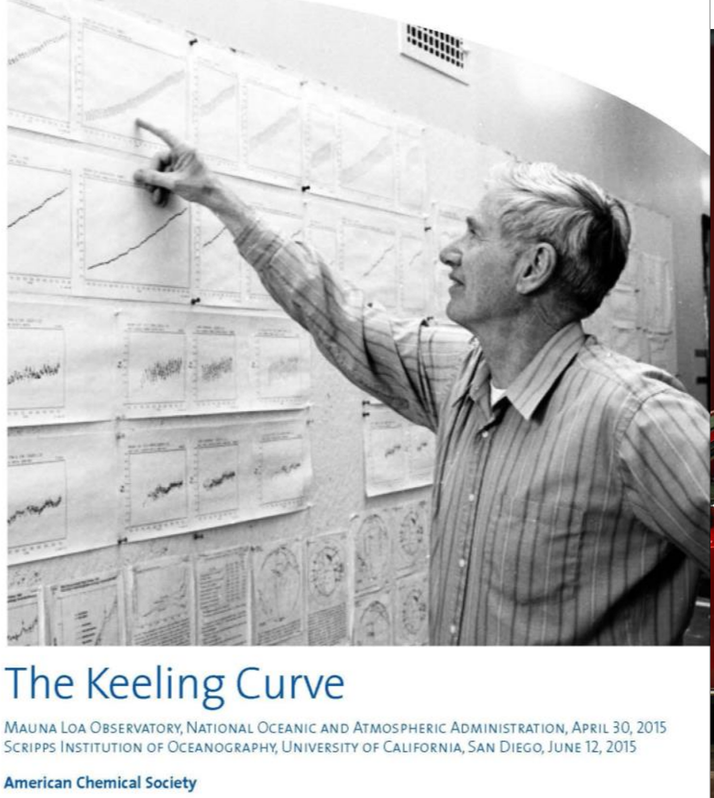
JÜLICH Forschungszentrum

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

Charles David Keeling or Elon Musk?



- Mission
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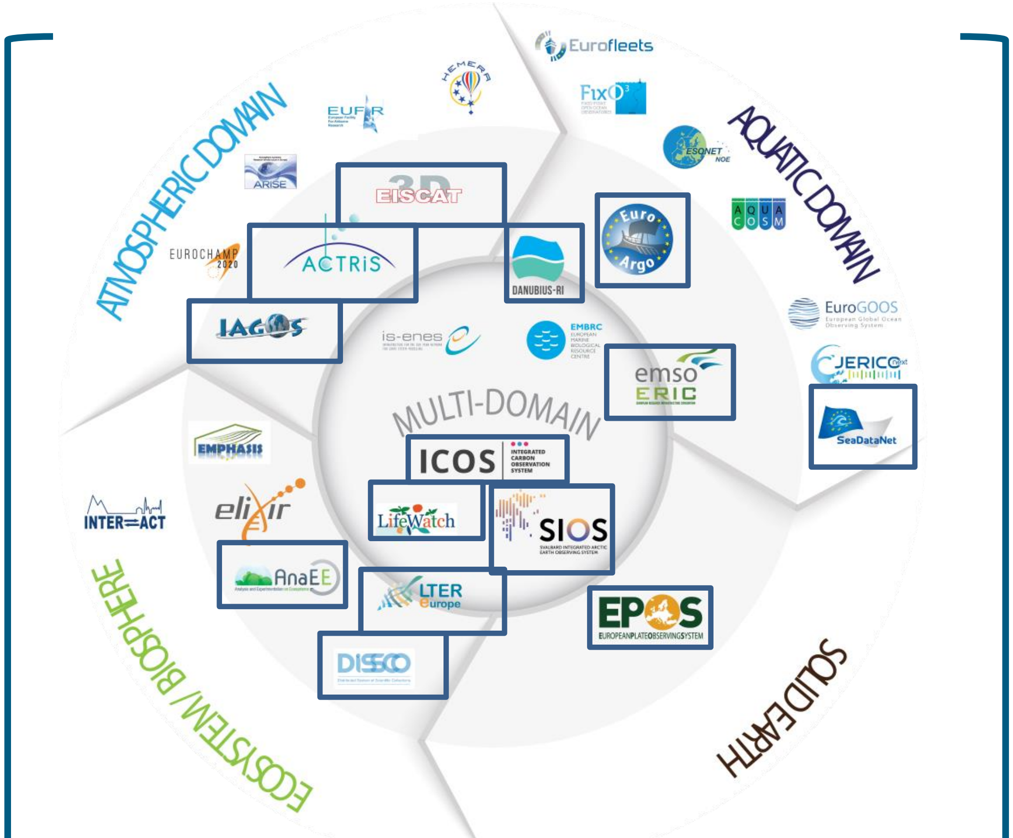
FAIR ENVRI

The Earth is our Lab

Europe's Environmental Research Infrastructures



13 ENV RIs | 37 partners | launch 01 January 2019 | envri-fair.eu

ENVRI mission

Share experiences and find common solutions to

- data sharing,
- accessibility,
- interoperability

Develop joint services

Expose services to EOSC

Prepare ENVRI-hub

EOSC

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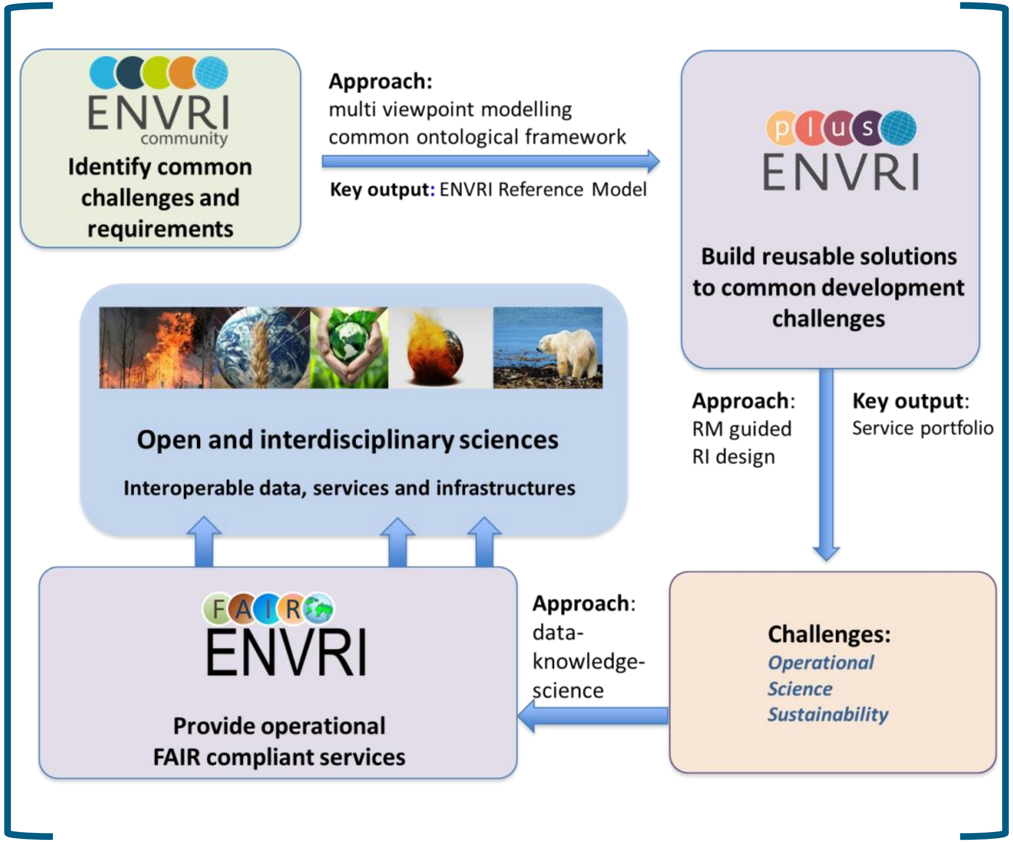

ENVRI history

ENVRI
Community Building
Common framework
ENVRI Reference Model

ENVRIplus
Common developments
Shared solutions for RI
Service portfolio

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

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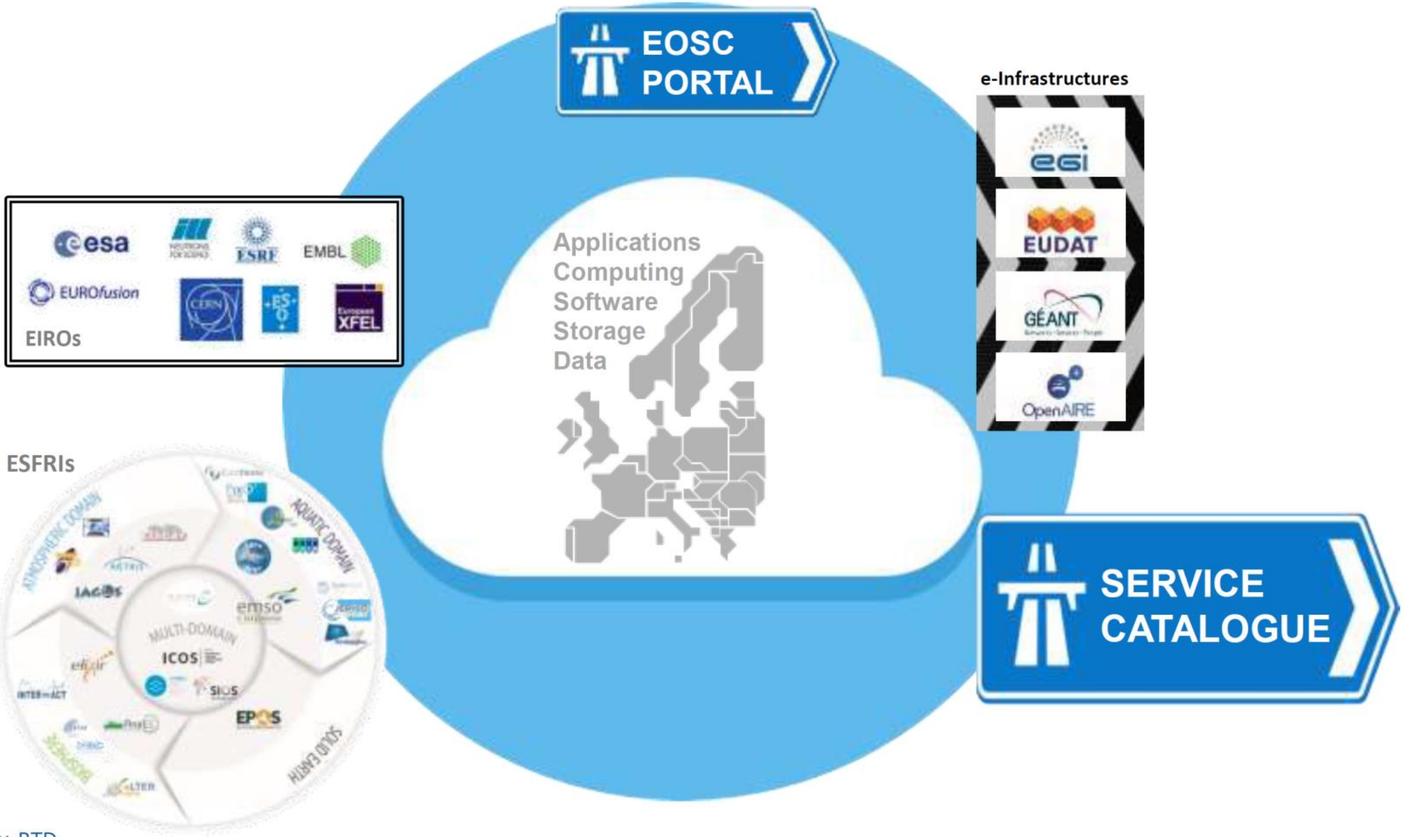
The Role of ENVRI in EOSC

EOSC Model - Architecture of the Federated Infrastructure



Source: RTD

taken from eosc_strategic_implementation_roadmap_short

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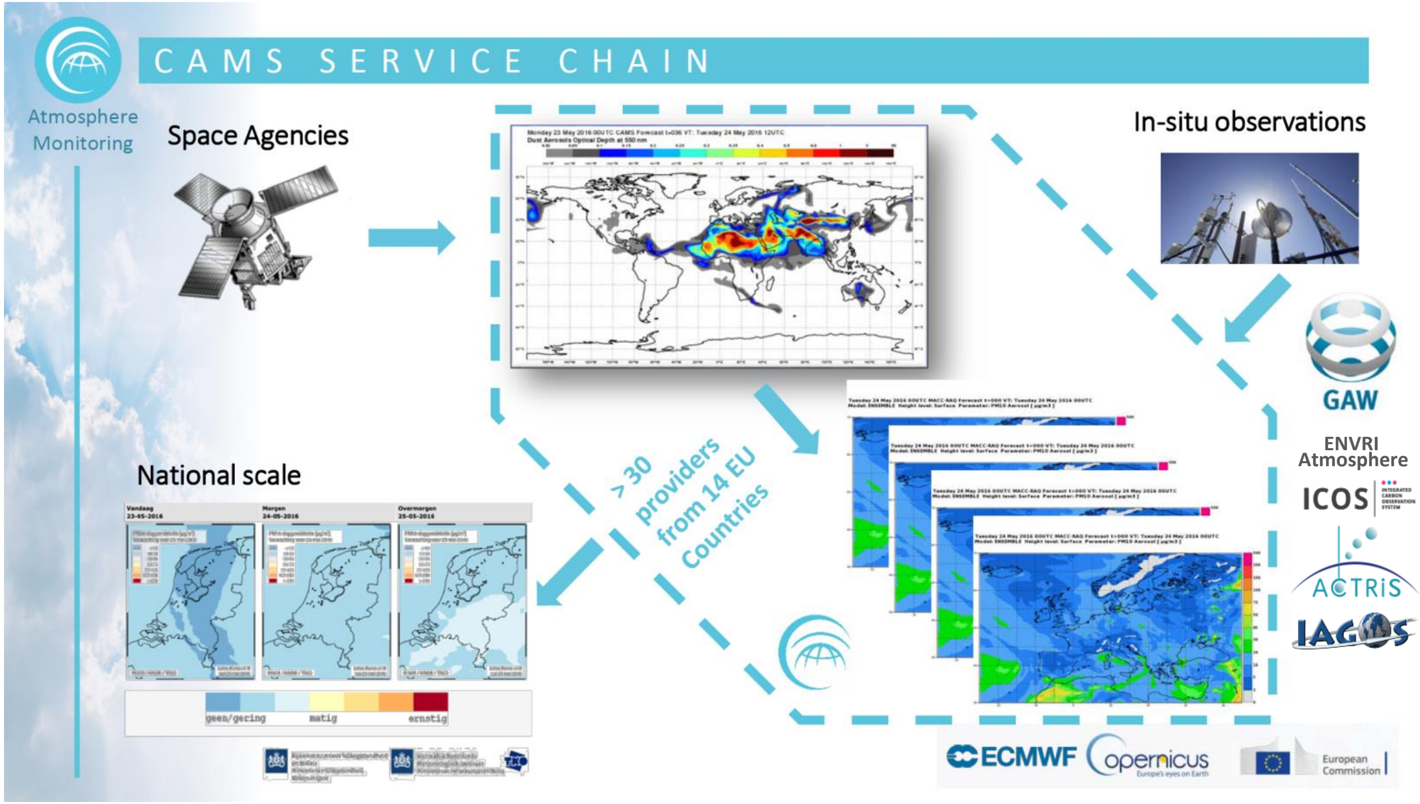
Europe’s Environmental Research Infrastructures

Joint Data Services and Products for the Society



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ENVRI-FAIR - Overarching Goals

At the end of this project, participating RIs have built a data service based on FAIR+R principles which enhances efficiency and productivity of science and society.

This requires:

- Well defined community policies and standards on all steps of data life cycles.
- Each participating RI will have sustainable, transparent and auditable data services, for each step of the data life cycle, compliant to the FAIR+R principles.
- Each data service is chosen based on rational and transparent assessments of costs and other aspects like, e.g., sustainability.

ENVRI-FAIR – The Workflow

Agree on common FAIRness
polices in ENV RIs

Train the RI staff
on standards and policies

Create common FAIRness
standards in ENV RIs

Enable ENVRI subdomains for FAIR + R principles
Atmosphere | Ocean | Solid Earth | Ecosystems

Implement ENV RI and subdomain services
for the EOSC

ENVRI-FAIR – Final Remarks

The main focus of ENVRI-FAIR is on the implementation and further development of 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 to move toward a shared approach to EOSC.

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

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Back-Up Slides

FAIR ENVRI

Findable
Accessible
Interoperable
Reusable

+

Reproducible

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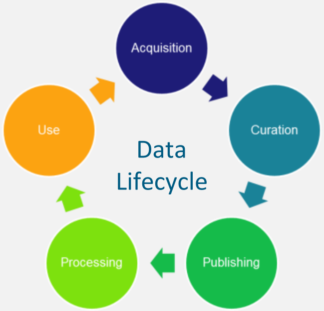
EOSC Declaration of the European Commission

Data culture and FAIR data

All researchers in Europe must enjoy **access to an open-by-default, efficient and cross-disciplinary research data environment** supported by FAIR data principles.

European science must be grounded in a common culture of data stewardship, so that **research data is recognized as a significant output of research**.

ENVRI-FAIR – Architecture



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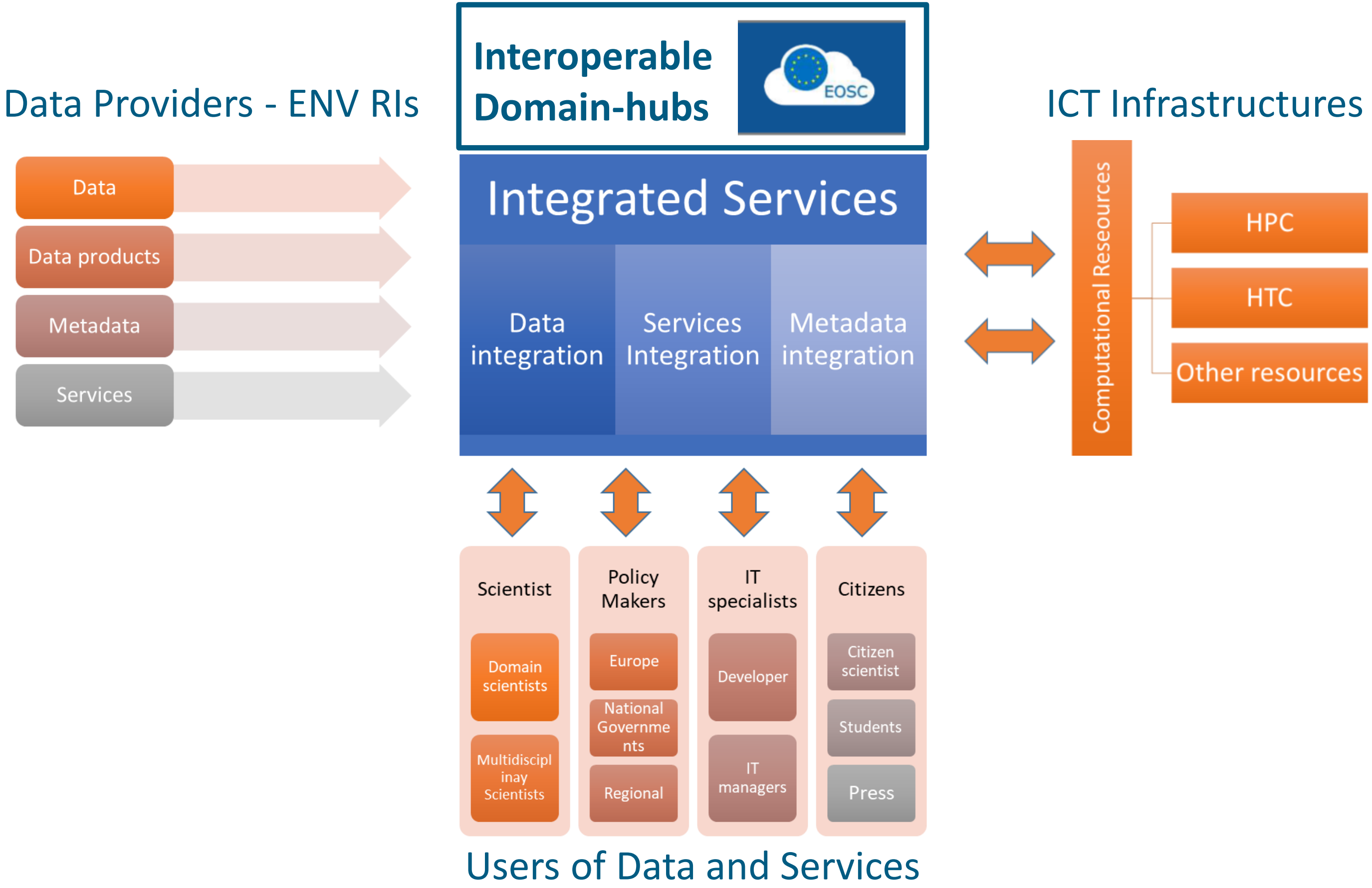

ENVRI

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ENVRI-FAIR – The Workflow

- Implementation by the research infrastructures themselves
  - 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 EU environmental RI domain
- Standards and implementation are hierarchical
  - Cluster level
  - Subdomain level
  - RI level
- All policies and standards are carefully considered with external stakeholders like global, different fields, user communities / services