

Research Infrastructures collaboration: a new avenue for development and achievements

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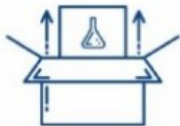
Research Infrastructures: What are they?

Research infrastructures are organisations that **enable** the **research community** to **use** specific **facilities, resources** and **services** in order **to accelerate scientific achievements** and **promote sustainable research**.



Research Infrastructures: What do they do?

MAKE SCIENCE HAPPEN
& DELIVER BIG RESULTS



SHARE KNOWLEDGE & RESOURCES



PROVIDE OPPORTUNITIES &
PROMOTE INNOVATION



PROMOTE SUSTAINABILITY



TACKLE SOCIETAL CHALLENGES



FOSTER COLLABORATION

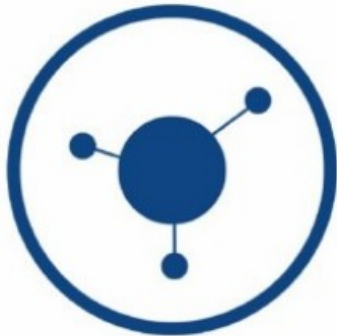


BREAK BARRIERS

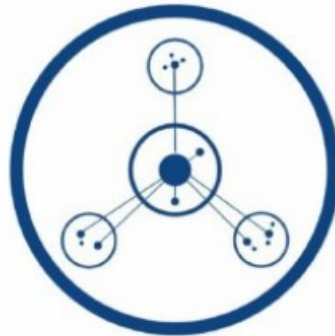


Research Infrastructures: How are they organized?

Different types of Research Infrastructures:



**SINGLE SITED
RESEARCH
INFRASTRUCTURES**



**DISTRIBUTED
RESEARCH
INFRASTRUCTURES**



**E-SCIENCE
RESEARCH
INFRASTRUCTURES**

Research Infrastructures collaboration: Where to start from?

- Consilience and synthetic knowledge
- Trading zones: interfaces for common development and investment
- Cross-domain research and development avenues

Research Infrastructures collaboration: Topics of common interests

- Data standards, annotation, ontologies, catalogues – FAIR Data
- Facilitation of Data mobilization (e.g. Catalogues; LifeBlock)
- Vertical and Horizontal Composability of services (e.g. Tesseract)

Research Infrastructures collaboration: Major challenges

- Scientific communities collaborating on common topics – major societal challenges
- Align practices and tools
- Ways of thinking

Research Infrastructures collaboration: Ways of collaboration

- Identification of the topic – societal demand (e.g. covid-19, Climate Change)
- Working hypothesis(es) (e.g. “what if” questions)
- Data and services
- Integration (composability)
- Analysis(es) through workflows
- Interpretation of results into knowledge

Research Infrastructures collaboration: Current EU policies

- Co-design and co-development by the RIs: e.g. **EOSC Future** project, towards development of a EU platform for cross-domain research
- Access to resources by multiple research communities (e.g. **ENVRI FAIR**, **EOSC Life**, etc.)
- Building on the commonalities of the RIs: e.g. **ERIC Forum**
- Effective funding models to promote the sustainability of their operation: e.g. **ERIC Forum**
- Environment to promote RI collaboration: e.g. **EU Green Deal**, **Digital twins**, **Missions**

Thank you for your attention

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