

Perspectives on remote access to research infrastructures

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Content - Remote access to research infrastructures

- Research Infrastructures in Horizon Europe
- Challenges to open access to Research Infrastructures
- Some ideas for discussion
- Planned activities

RIs from Horizon 2020 to Horizon Europe – Main novelties

- A new **challenge-driven approach** complementing the science-driven one
- Emphasis on **customisation and integration** of (different) **RI services** to better support research addressing global challenges and political priorities
- IA instrument discontinued: support to **access provision** and **higher levels of integration** separated from research for the next generation of instrumentation
- (2023) Pilot **co-fund** of access provision
- New efforts to **consolidate** the existing landscape of European RI

Open access to RIs in the ERA – remaining challenges

- **Sustainable, international access programmes exist only in some communities** (analytical facilities, astronomy)
- **National funds have difficulties crossing borders** – limited access to RIs in other countries through national funding: many communities rely on EU-funded transnational access programmes
- **Limited EU funding available for RI networks:**
 - FP7 – around € 800 million for Integrating Activities out of € 1,8 bn
 - H2020 – around € 750 million for Integrating Activities out of € 2,4 bn
 - Horizon Europe – € 320 million for access provision calls (INFRASERV) in 2021-2024, possibly around € 500-550 million out of €2,4 bn during the entire programme
- **Few distributed RIs (incl. ERICs) have central access programmes integrated into operational budgets**

Open access to RIs in the ERA – remaining challenges

- **Need to find sustainable models for ensuring transnational access to RIs:**
 - Stimulating the creation of permanent access programmes at pan-European RIs
 - Formalising networks of national RIs providing access
 - Opening up national funding programmes
 - Reflecting on the role of EU funding – funding priorities, co-funding of access programmes, making a case for a broad European access programme
- **Evolving access models and user requirements** – increased remote and virtual access, broadening of the user base, including less-expert users (eg. industry)

Some ideas for Discussion – Access to RIs

- There has been an evolution towards non-expert users. Enlarges the user base but requires more support from the lab & more support in preparing a project
- Users increasingly access services remotely. Trend started before pandemic but has accelerated since. Equipment needs maintenance & people to support. Cost of on-line security may be an issue
- Users have become more diverse. Data & methods need to be interoperable
- Data sets are becoming too large to be taken away to process at home institutions. The processing & storage of data at the RI needs to be paid for.
- Members of RIs try to optimise processes by making sample holders interoperable so can move sample around & make different measurements

Some ideas for Discussion – Access to RIs

- The cost of access to RIs is not the only challenge. For population surveys the challenge is data & related costs.
- Remote access can result in an overload of work for technicians operating the instrumentation
- Lessons learnt from the COVID-19 pandemic for Access:
 - Increase flexibility to adapt access models
 - Better coordination among nodes of RIs and across RIs
 - Open science & sharing is key
 - Essential to maintain interactions with user communities
 - RIs should be considered in national management plans

Some ideas for Discussion – Access to RIs

- To stimulate broader access to RIs beyond core scientific users requires developing a further layer of services within & across different RIs & disciplinary clusters
- Need to give visibility to what RIs can offer but may need additional support
- Catalogues of RI services should be developed following a generic topology to give more visibility to general users on what is actually accessible from the RI
- In depth interactions between RIs & new users will create new research & innovation ideas in a circular process
- Stimulate interaction of ERC proposal writers with RIs to get better use of RIs within ERC grants

Some ideas for Discussion – Access to RIs

- European Charter for access to RIs could be updated to :
 - Introduce an integrated concept for access to RI and RI services & encourage RIs to connect their services
 - Introduce guidance for interactions with industry/innovation projects, i.e. IPR, ethics, confidentiality
 - Provide guidance on innovative digital access modes and remote access

Some ideas for Discussion – Financing of RIs

- In most RIs participating states fund routine operations via supporting scientific communities while RIs use competitive funding (national & EU) for projects to further develop & upgrade the RI
- This creates uncertainties & limits their future development. The model is implicit when setting up ERICs & in the ESFRI process as well as national roadmapping
- Strongly limits RIs from responding as an integrated system to pan-European & multidisciplinary access capacity addressing Horizon Europe objectives.
- Discuss the possibility for EU to co-invest (50/50%) in some selected unique development projects identified in the RI strategy that are strategic at EU level

Open access to RIs in the ERA – planned activities

- **ESFRI groups on RI access and funding** – analytical work, stakeholder consultations, comprehensive reports at the end of 2023
- Revision of the **European Charter for Access to Research Infrastructures** – proposal for consultation from the end of 2023
- Second **Strategic Plan for Horizon Europe 2025-27** – lessons learnt from 2021-24 (mid-term review), possible revision of approach to access funding
- **Broad stakeholder consultations** – contribution to H2020 final evaluation, HE mid-term review and orientations for the next Strategic Plan (deadline end of February)
- Spanish Presidency Conference on RIs – 25/26 September 2023
 - **Funding for RIs**, Environmental & Energy Challenge, Global Dimension RI & international co-operation
- Reflections on the **next Framework Programme**



For more info:

- Commission's website on Research Infrastructures:
https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/european-research-infrastructures_en
- Horizon Europe:
https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en
- European Strategy Forum on Research Infrastructures:
www.esfri.eu

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