ESFRI

European Strategy Forum
on Research Infrastructures

ESFRI

2nd Stakeholders Meetup

Report

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Overview

The second edition of the ESFRI Stakeholder Forum Meetup took place in Tenerife, focusing on three topics highly relevant to the various stakeholder communities – Funding, Access, Industry and interaction with Technology Infrastructures (TIs). Each session started with a panel discussion, followed by group discussions in three groups, where participants addressed relevant questions, also identified in consultation with stakeholders. There were two common questions posed for all three topics:

- How the next European Commission Work Programme 2025-2027 (HE WP) and the new Framework Programme (FP10) should include them.
- Any relevant needs regarding Access to RIs that would need to be highlighted in the ESFRI Landscape Analysis report currently in preparation?

This combined expert summary report collates discussions from the various groups on the topics of funding, access and collaboration with industry.

Regarding **Funding**, participants noted the varied needs between single-site and distributed Research Infrastructures (RIs), where funding for international coordination comes on top of the funding for the national nodes. They expressed concerns about the sustainability of funding, the complexities of navigating intertwined funding sources, the challenges of aligning funding strategies among multiple countries, and the risks associated with over-relying on a single funding source. They suggested a need for greater dialogue among stakeholders, increased cooperation between RIs, targeted funding for specific missions, and enhanced support for curiosity-driven research. Recommendations for the HE WP & FP10 include the creation of integrated funding schemes, a boost in transnational access (TNA) schemes, and a higher budget for RIs.

In the discussions about **Access**, the complexity of designing effective RI access strategies stood out. Participants emphasised the need to cater to diverse user requirements and the challenges brought about by changing and less experienced user communities. The rising demand for remote access and the subsequent need for specialised skills for both users and operators was also highlighted. Training was identified as a critical component, especially for new users. It was emphasised that TNA should be supported with long-term perspectives and cascaded grants Concerning the Charter for Access, the existing one doesn't sufficiently address issues related to data access, digital frameworks, or industry needs. The Charter would benefit from clearer definitions of different types of access. An inter-institutional platform to share expertise on access issues, best practices, and data management was advised, complementing the Charter for Access.

Lastly, when discussing **Interaction with Industry**, participants highlighted some issues limiting collaborations between RIs and the industry. The fragmented approach, arising from the distributed nature of RIs, was a primary concern. The group also noted the challenges of different stakeholder perspectives, business-driven concerns, ethical issues related to data sharing, the importance of trust of

industry in RIs, the lack of clear boundaries and the identification of common ground between RIs and Technology Infrastructures. Recommended actions include improving visibility and communication between RIs and the industry, addressing ethical concerns before initiating collaborations, and enhancing cooperation without jeopardising funding. For the upcoming HE WP & FP10, participants suggested streamlining procedures and having a more targeted focus on specific sectors. The ESFRI Landscape Analysis should consider industry needs and explore opportunities within other domains.

Funding of Research Infrastructures

The discussions across the three groups highlight the need for a more streamlined, collaborative, and comprehensive approach to funding RIs. It is evident that a balance between different types and sizes of RIs, clearer communication between stakeholders, and better alignment of national and EU-level priorities is essential.

Challenges:

Single vs. Distributed: There is a distinct difference in funding needs between single-sited and distributed RIs. Distributed RIs, especially those with smaller budgets, play a crucial role and their unique financing challenges must be addressed.

Sustainable funding of operations and upgrade: Operations should be sustainably funded, rather than relying on short-term project funding. Continuous upgrade must also be sustainably funded.

Complex Landscape: The intertwining roles and responsibilities of different funding sources (national, regional, EU) make it difficult to navigate the funding landscape. EC could help facilitate the alignment of different sources by promoting more concrete examples (complementary to the existing guide on synergies between HE and Regional Funds).

Alignment Difficulties: A significant challenge lies in aligning funding strategies with multiple countries, especially for distributed RIs, as they have different priorities, sources of funds, and administrative shifts, like elections.

Over-reliance on a single funding source: Over-reliance on a single funding source, particularly competitive sources such as EU funding, poses a risk.

Node Costs: The cost of nodes, especially the funding of European coordination, remains a big challenge.

Subsistence and travel costs: Many users require physical access to facilities, and travel and subsistence costs are barriers. EC-funded TNA, or national schemes, are needed to fund access of national users to external RIs.

Key Actions:

Stakeholder Dialogue: Engage in a dialogue between different stakeholders to manage access and the needs of diverse user communities.

Cooperation of RIs: Encourage funding that focuses on community development and fosters cooperation between RIs.

Missions: Targeted funding in response to missions enables RI actors to tailor their services better. **Curiosity-driven research**: Curiosity-driven projects need to be properly supported.

Operational funding: Consider co-funding from the EC funding programme to support longer-term sustainable delivery of services of the RIs to the European research community.

TNA Strengthening: Actions to facilitate cooperation and democratise access are needed.

Health Data: Address the complexities of health data, its regulations, and the need for suitable repositories.

Increased synergies of resources: Collaborate jointly between EU and national funding to sustain Europe's competitiveness.

Impact assessment: The methodology of the impact assessment of diverse RIs needs to be developed further.

Proposal management system: Each RI has a different proposal management system. The development of an open-sourced unified proposal system would be welcomed.

Collaboration within ERA: Joint efforts with the EU and national funding and appropriate funding instruments are needed to allow the technology development and keep the EU as the frontrunner.

HE WP & FP10 Recommendations:

Integrated Scheme: Create an integrated funding scheme for RIs, recalling the Integrated Infrastructure Initiative (I3) approach, which was more holistic.

Boost TNA: Boost the TNA schemes to promote cross-country collaboration and RI usage. Favour thematic (by technique) rather than challenge-driven TNA funding.

Dedicated Funding: RI budgets should not be reduced, but instead, dedicated funds for individual RIs should be allocated to improve their services and capacity.

Sustainability of Knowledge and Actions: Ensure the persistence of knowledge after the end of a project, and the sustainability of actions that are highly relevant for the ERA.

Co-funding System: Implement a co-funding system for access and promote the capacity of different RIs.

Meeting arising challenges: RIs need to adapt to the new environment and need to be supported by increasing EU funding to address the new challenges.

RI's inclusion across the FP: Extend the opportunities for RIs to contribute more to the Framework Programme Pillars across the programme.

Higher budget: Increase the budget for RIs within the Framework Programme.

SME access: Facilitate RIs' collaboration with SMEs by developing long-term access schemes with simplified procedures and better documentation for them.

ESFRI Landscape Analysis Suggestions:

Holistic View: The Landscape Analysis should reflect the entire landscape and ecosystems of RIs, identifying gaps and suggesting strategies to bridge these gaps.

Insights: Understand how different countries use the ESFRI Landscape Analysis to gain insights.

Future Tech: Identify technologies and methodologies for the future.

Bridging Gaps: Propose tools to increase capacity and bridge the gap between countries.

Industry Collaboration: Ensure collaboration with SMEs and industry and provide co-funded user access.

SDG Focus: Offer a summary comparison of total investments in RIs towards Sustainable Development Goals (SDGs).

Access to RIs

Designing appropriate access to RIs is complex, demanding a strategic approach, continuous training, collaboration with the industry, and forward-looking funding and policies.

User Needs & Access:

Diverse Requirements: There's a common consensus on the need to address the varied requirements of different user communities, ensuring a balance between excellence-based access and the access of industries. In addition, RIs are increasingly asked by their funders to be more strategic and foster their impact in specific areas, which calls for another access mode: "strategic or priority-based" access.

Changing user communities: An increase in the number of users of facilities, who are less expert in the technique, but with a relevant challenge requires changes in service provision. More support is required for the users, as well as dedicated training.

Remote Access Transition: A shift to remote access also mandates the development of specific skills for users and operators, intensified by the augmented time and costs for onboarding new users.

Training Imperative: The centrality of training is unanimous across groups, highlighting the need for integrated training mechanisms, especially for novice users. Yet, making every user an expert is not viable. Hence, supplemental services such as data analysis services should also be available. It was highlighted that students should also be motivated to access RIs, to train a skilled workforce and with a view to later potential careers in RIs.

Cross-disciplinarity: Its significance was accentuated, even if its real-world application might present hurdles.

Next-gen Engagement: It's essential to involve the younger generation, especially students, via targeted training as they signify the prospective researchers and RIs users.

Effective Partnerships: Bilateral/trilateral and major EU programs show promise in supporting a wide spectrum of communities.

User Forums & Budgeting: Recommendations revolve around establishing a platform for users across RIs to discuss access issues and ensuring access costs are factored into RI budgets.

Charter Revision & Industry Access:

Charter Shortcomings: The prevailing Charter is underdeveloped concerning access to data, digital frameworks, and the distinctive needs of industry access, prompting strong recommendations for its re-evaluation, a.o. a clear definition of different types of access.

Charter Development: The revision should be done with strong involvement of RIs, and across institutions.

FAIR Data & Industry Concerns: Crafting FAIR data is paramount. Addressing the industry's apprehensions regarding cost, IP, and collaborative research with RIs is essential. Working increasingly with RTOs and networks can help create the confidence of the industry in collaboration with RIs. RTOs or dedicated companies can act as intermediaries/brokers.

IP & Outreach: Practical steps encompass formulating IP protocols and initiating programs for industry outreach to mitigate access hindrances. Support for national access of SMEs needs to be incentivised.

Access Expertise Exchange: An inter-institutional platform to share expertise on access issues, best practices, and data management is advised, complementing the Charter.

HE WP & FP10 Recommendations:

Project-based Concerns: The pitfalls of the fragmented project-based approach and the general funding schema were spotlighted. A long-term funding programme approach for access should be envisaged, and FP10, with a new regulation, could be the opportunity.

EU Synergies & Knowledge: Suggestions emphasise the need to cultivate synergies between EU initiatives, focus FP10 on knowledge dispersion, and establish stronger links with the other parts of the FP, such as Marie Curie but also Pillar 2 and Pillar 3.

Emerging Technologies: The incorporation of fields like AI could possibly automate aspects of user assistance.

Ecosystems and fundamental research: Consider the evolution towards addressing problems through ecosystems. However, fundamental research needs continued attention.

ESFRI Landscape Analysis Suggestions:

Transnational Access: The LA should underline the value of cross-border access and the perpetual influx of new users necessitating guidance and support.

Quality Control: Ensuring quality and understanding of varied access modes for different RIs are paramount, also with respect to collaboration with industry.

RI Inclusivity: The ESFRI LA should encapsulate not just ESFRI RIs and ERICs but all RIs.

Visibility: The LA should make services of RIs visible, also to identify overlaps and reduce redundancy.

Interaction with Industry and Potential Complementarities with Technology Infrastructures (TIs)

The discussions raised many challenges in RI-Industry Collaboration, encompassing issues like lack of trust and visibility, fragmentation in approach, varied stakeholder views, business challenges, ethical concerns, and blurred lines between RIs and TIs.

Challenges and Actions for RI-Industry Collaboration:

Visibility: Lack of visibility limiting the industry collaboration with RIs. Understanding each other's needs and trust is essential for long-term cooperation, but it takes time to build it. In addition, industry is often insufficiently informed of what RIs can offer.

Distributed Nature of RI: A primary challenge is the fragmented approach to collaboration. Nodes act independently, and contracts may not be concluded directly with the ERIC.

Space Sector: European industries significantly lag behind their American counterparts in using RI services for space. Safeguarding assets and dealing with intellectual rights remain prime concerns.

Diverse Views: Stakeholders possess varying stances on RI-industry collaboration, ranging from complete support to reluctance. A model framework, which allows

sufficient flexibility and exchange of good practice, is required to address concerns, especially related to state-aid rules and proprietary use of open data. Also, clearer regulations in terms of public funding and funds received from industry are needed: RIs fear that increased income from industry may jeopardise their access to public support.

Business Challenges: Industries often lean towards short-term, bilateral projects, complicating the inclusion of such collaborations in business plans. This perspective contrasts the more long-term focus of RIs.

Ethical Concerns: Ethical issues must be resolved prior to establishing industry cooperation, especially concerning data sharing.

Cooperation with TIs: There are no clear distinctions between RIs/Tis from the user's point of view.

Key Actions:
- Boost visibility and cooperation between nodes and industry
- Improve information flow on what RIs can offer to the industry
- Training private sector staff to increase the knowledge about the benefits of RIs and foster mutual trust and effective engagement.
- Address ethical concerns and data-sharing frameworks ahead of collaborations.

Ensuring Complementarity of RI and TI:

Communication: A recurring theme is the need for enhanced communication. Workshops and knowledge exchanges can bridge the current gap and ensure that the industry is aware of what RIs and TIs offer.

Cooperation Framework: There are no clear boundaries between RIs and TIs- in several domains, they overlap. This needs to be observed in the process of roadmapping of both. There's a pressing need for models to promote cooperation without jeopardising basic funding or infringing state aid rules.

Collaboration Domains: The marine domain is cited as an exemplary sector for collaboration, indicating that domain-specific strategies might be effective. It's suggested that RIs and TIs should operate in unison, leveraging their strengths to meet industry demands.

Engagement with Other Entities: RIs might benefit from collaborating with entities like EIT KICs and other partnerships to explore market opportunities.

HE WP & FP10 Recommendations:

Simplification: A strong sentiment revolves around streamlining procedures. Both documentation and operational aspects should be simplified for efficiency.

Targeted Focus: For effective RI-TI collaboration under FP10, a narrower focus is advised. This could involve concentrating on specific sectors like batteries.

Funding & Support: Adequate financial support, especially during the initial phases, like tender preparations, is essential. The benefits of collaborating with RIs should be clearly conveyed to the industry.

ESFRI Landscape Analysis Suggestions:

Potential Areas: The analysis should spotlight domains with high industry cooperation potential (such as defence). However, this shouldn't pressure every infrastructure into forced collaborations.

Industry Needs vs. Scientific Domains: The LA typically aligns more with the scientific domain. A broader perspective incorporating industrial needs could be beneficial, potentially in domain-specific segments.

More Information

All sessions of the event were streamed, The videos are available on the ESFRI YouTube Channel.

The agenda of the event can be found here.