

EU-LIFE contribution to ESFRI Landscape Analysis

EU-LIFE, the alliance of independent research institutes in the life sciences is an active voice advocating for a strong research infrastructures landscape across Europe. EU-LIFE welcomes ESFRI's consultation on the strategic development of the Research Infrastructure (RI) landscape and provides hereby its contribution. An overview of EU-LIFE position and actions on European research infrastructures can be found here: https://eu-life.eu/research-policy/research-infrastructures.

1. What are your priorities regarding the European RI ecosystem?

A strong RI ecosystem is essential for Europe. Europe has overall excellent RIs at the European level and at national, regional and local levels. However, it is essential to raise awareness about the importance of RIs for advancing research, especially in those countries where this support is weak, in order to further promote innovation and foster the development of research across Europe¹. In addition, the recognition and support for RIs which cater to national, regional and/or local research communities should be stronger. In order to achieve this there should be more (financial) support for national, regional and/or local RIs.

In our opinion, the ESFRI Roadmap landscape – with over 60 Projects/Landmarks - is already quite elaborate and has become very complex and bureaucratic. We strongly advocate for simplification of the European approach to the support of RIs.

There is an important added value of a European dimension regarding standardisation and optimization of procedures and regulations to enable more agile national, regional and local RIs and interoperability of data across the different EU countries.

2. What are the gaps and needs for RIs and their services in each domain and across domains?

As indicated above, the main gap is the absence of (financial) support to national, regional and/or local RIs and the main need is for simplification.



In addition, we feel it is important that the EC and ESFRI give full clarity about what it is considered an RI and include in its definition not only ESFRI Roadmap Projects and Landmark collaborations between countries, but also larger and smaller international, national and institutional collaborations between organisations and facilities. This is of particular importance for applying for HEU-funding.

Furthermore, we think that the strategies to address the needs and gaps of RIs should be simple and less bureaucratic; the process is now so long that RIs cannot easily adapt to new technologies and crises.

Finally, there should be collaborations between RIs beyond the digital and the creation of new tools, i.e., bringing different RIs together to create ecosystems that support experimental procedures that require unique integrated pipelines from different scientific and/or technologic domains [(especially relevant for the life sciences). In due course, to think about alternative models where different RIs serving the scientific community (public and private) are clustered at institutional or local level.

3. How, in your opinion, could RIs best contribute to:

i. Finding solutions to the crises: RIs in support of crisis management but also their own increased resilience when faced with crises caused by natural and human-made hazards such as health, environment and energy

Agility is needed for RIs to respond to crises. This requires simple and fast procedures and standardised and open data. This can provide policymakers, researchers, and other stakeholders with timely and accurate information needed to make informed decisions and respond to crises effectively. And it allows RIs to redirect their focus when a crisis manifests itself. The corona pandemic has shown that RIs can make these essential contributions. Obstacles like the GDPR should be addressed.

ii. HEU Missions

The challenges identified in the HEU Missions require new knowledge that can only come from discovery research. RIs have a very important contribution to the HEU missions as they provide the technological and methodological basis for addressing the missions through discovery research. Through HEU funded research projects, researchers will use the RIs to address the challenges.



iii. Green and digital transition, also through their own transformation

RIs can transform to a more sustainable operation mode by reducing their own carbon footprint and resource consumption by adopting sustainable practices in their operations. This can include measures such as energy-efficient buildings, waste reduction and recycling, and sustainable procurement. However, this requires investments in people, buildings, infrastructure and equipment. The most important contribution of RIs is the centralisation of personnel and equipment which leads to better and more efficient research, which is optimal in a model where different RIs are clustered at institutional / local level.

RIs are also central to the digital transformation and the FAIR principles as the RIs become the main sources of data. Organising data in a FAIR manner should be done at the source and RIs can organise that provided they are supported adequately. RIs are also ideally suited to train the next generation of scientists for the use and management of digital data.

References

1. On the role and recognition of small and medium scale research infrastructures and its staff:

Institutional core facilities: prerequisite for breakthroughs in the life sciences

Acknowledging and citing core facilities

How tech-savvy employees make the difference in core facilities

Barcelona, 6th April 2023