Research Infrastructures: the contribution of ESFRI

The establishment of the European Research Area (ERA) in 2000 marked a significant advance in integrating research efforts within the European Union. This initiative emerged as a strategic response to the existing fragmentation of Europe's research and innovation landscape. Its impact was especially pronounced in the field of research infrastructures (RIs), particularly the very large ones in physics and astronomy that had previously struggled with the absence of a pan-European coordination framework. In its absence, international RIs such as CERN, Institute Laue-Langevin and the European Synchrotron Radiation Facility were established through ad-hoc engagement of various countries.

Within a mere few months following the European Commission's proposal of the ERA concept, a conference to deliberate on developing a cohesive EU-centric approach to RIs was convened in France.

These efforts led to the founding of the European Strategy Forum on Research Infrastructures (ESFRI) in 2002 and the unveiling of ESFRI's first European Roadmap for Research Infrastructures in 2006. This roadmap catalysed the harmonisation of European infrastructure development, ensuring an aligned vision for priority settings and investments across member states, and supported by the European Commission's funding calls. The results of this integration were far-reaching, with the vast majority of EU Member States embracing the road-mapping strategy on a domestic scale and self-organisation of the research communities across Europe to establish RIs in their domains. Perhaps most strikingly, the collective endeavours of the ESFRI Member States and the European Commission over the past two decades have fostered a robust ecosystem of European RIs, with the establishment of 41 ESFRI Research Infrastructures and the progression of 22 RI Projects into their preparatory stages. The collective investment in these often-unique facilities is set to surpass 20 billion EUR. Yet the work of ESFRI goes well beyond roadmapping, for which it is best known. Its policy coordination of the domain of research infrastructures, addressing topics such as financing, energy and supply challenges, and cooperation with industry, has far-reaching effects on the development and functioning of Europe's research infrastructure landscape.

Although impressive, RIs are resources which only achieve their aims when used by scientists to accomplish their research aims. To this end, I warmly welcome the special issue of Europhysics News, which highlights some of Europe's top RIs, their capabilities and potential, promoting the use of the RIs among its vast readership.

I extend my gratitude to Europhysics News for continuously emphasising the topic of research infrastructures, and look forward to our future collaborations. ■

by Jana Kolar
ESFRI Chair – **DOI: 10.1051/epn/2023503**