



The ERICs in the Physical Sciences and Engineering Cluster

a document prepared by the ERIC Forum 2 project

WHAT IS AN ERIC

An ERIC (European Research Infrastructure Consortium) is a legal form under EU law created to set up and operate research infrastructures of European relevance. ERICs are primarily non-profit organisations, although they may carry out limited economic activities directly related to their mission. They can own assets, employ staff, enter into contracts, and serve as a coordinated provider of research facilities and services for the European research community. Its members include EU Member States, associated countries, non-EU countries, and intergovernmental organisations. They can be single-sited, concentrated at one location, or distributed, with a central hub coordinating multiple national or regional nodes across different countries.

HOW ERICS ADD VALUE TO YOUR RESEARCH PROJECTS

1

Access to advanced research facilities and services you might not have at your home institution, including state-of-the-art equipment, digital archives, imaging, materials, or specialised labs.

2

Support for complex, interdisciplinary, or large-scale projects, from early-stage research to applied testing, prototyping, and validation across multiple techniques and disciplines.

3

Opportunities for international collaboration and resource sharing, enabling cross-border, multidisciplinary work and integration into broader European research networks.

4

Open and FAIR-access mechanisms, often through calls for proposals, giving researchers from any institution a chance to use top-tier infrastructure.

5

Boost the credibility and visibility of your research by linking your work to recognised European infrastructure, which can strengthen funding applications, publications, and collaborative efforts.

HOW AN ERIC TAKES PART IN RESEARCH PROJECTS



ERICs can act as a project partner/beneficiary in grant proposals or funded projects.



A distributed ERIC can also participate via one of its member institutions or national nodes rather than the central entity itself, or with both (having a central hub as a beneficiary and national nodes/facilities as Affiliated Entities).



ERIC can coordinate or manage project/ Work packages/ tasks, including coordination of multi-site, multi-country research efforts (especially relevant if the ERIC is distributed). Many have multiple EC projects experience.



For projects needing trans-national access or shared infrastructure use, ERICs are often explicitly encouraged or required as beneficiaries (or via their nodes) in calls under major European funding schemes.



PHYSICAL SCIENCES & ENGINEERING CLUSTER

Infrastructures for foundational research in physics and engineering disciplines — including astronomy, particle physics, materials, and space science — which underpin technological innovation and understanding of fundamental phenomena, while offering access to some of the most advanced facilities in Europe.

CERIC

CERIC is a European Research Infrastructure Consortium (ERIC) integrating and providing open access to some of the most advanced analytical facilities in Europe to help science and industry advance in all fields of materials, biomaterials and nanotechnology, with a focus on energy materials and life sciences.

www.ceric-eric.eu

CTAO

The CTAO ERIC oversees the construction and operation of the Cherenkov Telescope Array Observatory, which will be the world's largest and most powerful observatory for gamma-ray astronomy. With more than 60 telescopes across both hemispheres, the CTAO will be the first of its kind to operate as an open, proposal-driven observatory, advancing our understanding of questions in and beyond astrophysics.

www.ctao.org



ELI ERIC (Extreme Light Infrastructure ERIC) is a European Research Infrastructure Consortium established to provide access to world-class high-power and ultra-fast lasers for science and enable cutting-edge research in the physical, chemical, materials, and medical sciences, as well as breakthrough technological innovations.

www.eli-laser.eu



The European Spallation Source is a joint European organisation committed to building and operating the world's leading facility for research using neutrons.

www.ess.eu



JIVE, the Joint Institute for VLBI ERIC, is an international astronomy institute that provides support for users of the European VLBI Network (EVN).

www.jive.eu



LOFAR, the Low Frequency Array, is the largest and most sensitive radio telescope for low frequencies. Its network of antennas across Europe provides exceptional sensitivity and resolution, advancing research from studies of the Earth's ionosphere to the farthest corners and earliest moments of the Universe.

www.lofar.eu