CERIC

Central European
Research Infrastructure
Consortium

Roadmapping Distributed Research Infrastructures in Europe

The CERIC Research Infrastructure – An update

CERIC-ERIC
Central European Research Infrastructure Consortium

About CERIC

A **distributed RI consortium** with one single entry point to some of the most advanced analytical facilities in Central and Eastern Europe (over 60 instruments and support labs), for multidisciplinary research in all fields of **advanced materials, biomaterials** and **nanotechnology** (with focus on **energy** and **life science**)

Opening new possibilities
CERIC introduced **open access** in facilities that did not have it, and promoted **multi-technique** experiments in those that had open access, to a single facility or instrument. Also, open access to offline instruments e.g. in synchrotrons.

CERIC Partner Facilities

Facilities	Location	Ownership
Synchrotron beamlines (Elettra and SOLARIS)	Trieste (IT) – Krakow (PL)	AT – CZ - IT – PL
NMR	Ljubljana (SLO)	SLO
Ion beams	Zagreb (HR)	HR
HRTEM, EPR	Bucharest (RO)	RO
Cryo-EM (SOLARIS)	Krakow (PL)	PL
Neutrons	Budapest (HU)	HU
Mid-scale instruments for material characterisation (light and X-Ray scattering, spectroscopies and imaging)	Graz (AT) – Prague (CZ) - Trieste (IT)	AT, CZ, IT

CERIC Associated Facilities

- The **X-ray Absorption Spectroscopy beamline** LISA@ESRF in France
- **Mass Spectrometry Laboratory** at the University of Salerno in Italy
- **HoloTEM** at the University of Salento in Italy
- **Next generation sequencing** @ LAGE laboratory for genomics and epigenomics in Trieste
- EU's **Joint Research Centre**: Nanobiotechnology Laboratory, Battery Testing Laboratory & Fuel Cells Testing Laboratory in Petten (The Netherlands)

CERIC-ERIC: background

CERIC is an ERIC* (European Research Infrastructure Consortium), having the purpose to establish and operate a **distributed Research Infrastructure** on a non-economic basis

It was set up in **June 2014** by the European Commission (EC Implementing Decision n. 2014/392/EU) upon the proposal of six countries: Austria, Czech Republic, Italy, Romania, Serbia and Slovenia, followed by Poland and Hungary (2016), and Croatia (2017)

*Council Regulation (EC) No 723/2009

CERIC-ERIC: 10 years of a distributed ERIC

The ERIC proved to be the right legal form to create a distributed research infrastructure, offering sustainable, centralised services

Established with a unique business model that lasted for 9 years (in-kind contributions).
From year 10, financial contributions are required, but 90% goes back to the facility through joint or strategic activities of the ERIC.
Focus on user friendliness: the single entry point allows researchers and companies to benefit from all the services of the ERIC, regardless of where they are or who offers them.

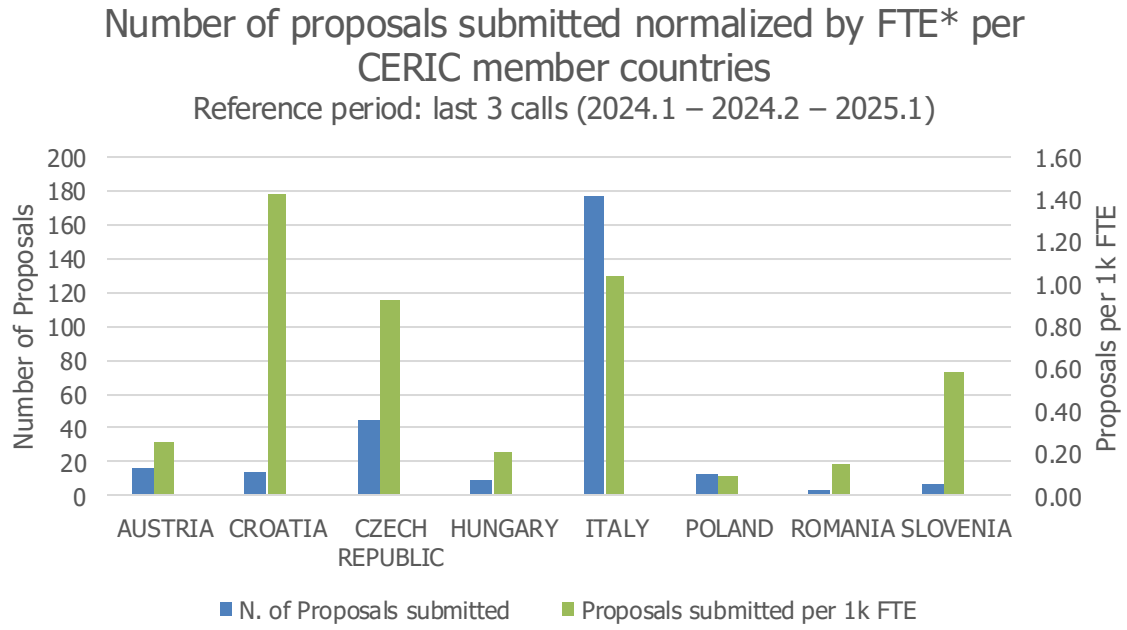
Stable organisation that can grow and develop steadily (optimal use of resources).
Sustainable services, supported by the governance of the ERIC

CERIC-ERIC: 10 years of a distributed ERIC

Members committed to maintain facilities operating at their best

Strongly based on in-kind contributions, members support the operation of facilities. The host member supports mobility expenses for researchers, to provide fair chances for access, based on excellence.

Researchers from 42 countries applied to CERIC in 2024 and I.2025
Members' communities are well represented
Specific activities to outreach to communities of interest



CERIC-ERIC: 10 years of a distributed ERIC

Quality control: facilities are evaluated periodically

Through a periodic evaluation, involving our ISTAC and external experts, we get recommendations on how to improve and maintain facilities attractive for researchers. Users also provide feedback on their experience. The evaluation committee provides recommendations for the member, for CERIC and for the facilities and their Representing entities. New process for some facilities.

Facilities are constantly upgraded and the service improved.
CERIC can help them to find and manage adequate resources (internal or external).
A proper level of investment attracts excellent users, that increase the impact on science and technology (again, optimal use of resources).

CERIC-ERIC: 10 years of a distributed ERIC

Sharing of best practices between facilities

Each CERIC member and facilities contribute with their expertise. This creates a synergic effect by which facilities that have less expertise in some areas benefit from most advanced partners. This is reflected in projects, industrial liaison, access, data management, etc.

Facilities have access to new opportunities and develop in-house competences. They become more attractive, and as a consequence, better networked

CERIC-ERIC: 10 years of a distributed ERIC

Integration: joint development of science and technology

Each CERIC member and facilities contribute with their expertise to the solution of a problem. Facilities become better integrated, they know each other and work together. This creates a synergic effect where the total is more than the sum of the parts. For example, joint development of compatible sample holders for several techniques, joint development of beamlines, complementary instruments, etc.

Facilities explore new areas of science and technology. They become more competent and attractive, alone and combined with other facilities, enabling complex science and innovative developments.

CERIC-ERIC: 10 years of a distributed ERIC

Critical mass and pan-European relevance: new opportunities

CERIC, as a single distributed infrastructure, achieves a critical mass that makes it an attractive partner. This is evident in European projects, where consortia need to remain small, in associations, partnerships, etc., where the single facilities, especially the small ones, could not have access, particularly important for countries that don't have large research infrastructures.

Facilities can participate in initiatives through the ERIC. This improves their capacity to contribute to challenges and increases their chances of participating in competitions to attract external funding. Doing so, they become better networked.

CERIC-ERIC: 10 years of a distributed ERIC

In summary:

Becoming an ERIC is not a simple task, but it is worth the effort.

The positive effects of Distributed ERICs are evident in their own results, outputs, outcomes and impact, but also in the facilities that participate.
Members can count on the maximum return on investment.

CERIC-ERIC: 11 years…and beyond

Implementation of the new business model, circulation of knowledge and people, better integration, and response to challenges

- New cash contributions from Members will contribute to better integration and new capacities (internal projects)
- Activities to increase the exchanges between scientific and technical personnel from facilities and share best practice
- Engagement activities in CERIC members (and others) to inform and attract their scientific community
- Advancing a European contract for personnel managing and supporting research
- Co-ordinated and pro-active strategy for attracting external funding
- Strategy on Life Sciences (following the successful strategy for Energy Materials, developed in 2019)
- Identification of further scientific challenges where CERIC is well - positioned to contribute particularly through a multi-technique approach