

# EGI Federation Strategy 2020-2024



Advanced  
Computing  
for Research





[www.egi.eu](http://www.egi.eu)

# EGI Federation

## Strategy 2020-2024

The EGI Federation is an international e-infrastructure that provides advanced computing and data analytics for research and innovation.

This publication showcases the strategy for 2020-2024.



## Table of contents

EGL Federation today	1
Strategy at a glance	2
Vision and mission	3
Main target groups	4
Our offering	5
Strategic goals	6
Core values	7
Glossary of terms	8

---

# EGI Federation today

The EGI Federation is an international e-infrastructure providing advanced computing and data analytics for research and innovation.

For more than a decade, the federation has been delivering large-scale data analysis capabilities to thousands of researchers covering many scientific disciplines.

The EGI Federation provides **technical and non-technical services**, including integrated and secure distributed highthroughput and cloud computing, storage and data management services, consultancy and support, training and co-development.

The **supported research** is diverse, examples include finding new tools to diagnose and monitor diseases such as Alzheimer's, the development of complex simulations to model climate change or the search for the Higgs boson at the Large Hadron Collider particle accelerator at CERN.

The **benefits** of the EGI Federation for research communities are:

- > Facilitating access to general & specialised ICT resources at pan-European scale and beyond
- > Enabling faster production of scientific results through collaboration across boundaries
- > Accessing expert support teams spread across Europe
- > Improving digital research skills with training or shared knowledge
- > Stimulating effective use of resources in different administrative domains
- > Promoting open and collaborative science and ensuring open access to shared resources and expertise
- > Facilitating open innovation opportunities.

## EGI in numbers

EGI Council:  
**22 countries + CERN**

High-Throughput Compute:  
**1,100,000 cores**

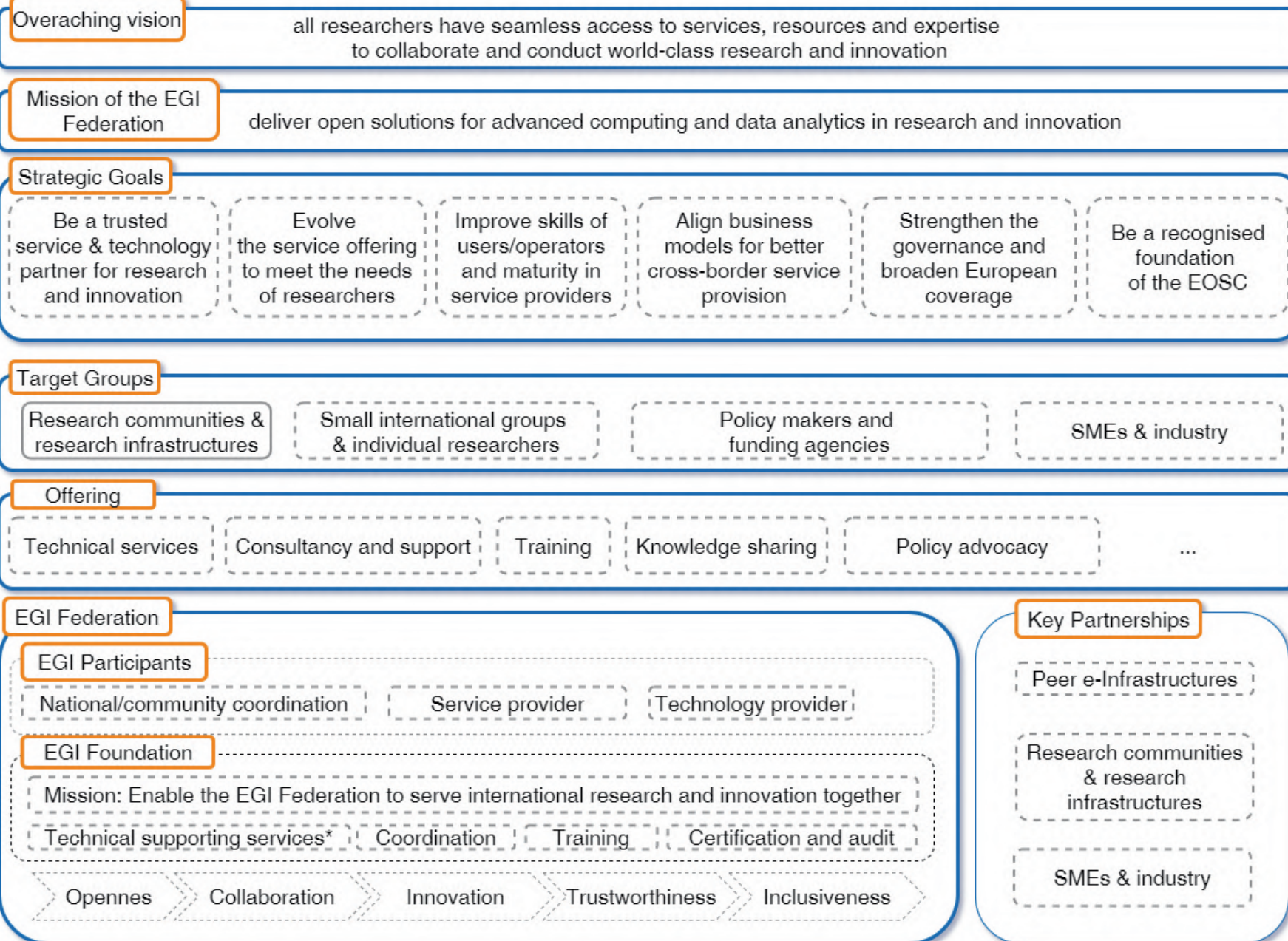
Cloud Compute: **21 providers**

Online Storage: **450 Petabytes**

Archive Storage: **380 Petabytes**

Supported Research  
Infrastructures: **40**

# Strategy at a glance



\* services provided in collaboration with some EGI Council Participants

# Vision and mission

## Vision

The EGI Federation believes that all researchers should have seamless access to services, resources and expertise to collaborate and conduct world-class research and innovation.

## Mission

The federation's mission is to deliver open solutions for advanced computing and data analytics in research and innovation. This mission is pursued by coordinating and provisioning an international federated infrastructure that pools together service providers from both the public and private sector in Europe to develop, integrate and deliver digital services for compute- and data-intensive research and innovation. As an open initiative with a global outlook, the EGI Federation also connects service providers beyond Europe following the collaboration needs of the served communities.

# Main target groups

The main target groups of the EGI Federation are:



> **Research communities** and **research infrastructures** (e.g. ESFRIs): we provide both services and expertise to develop community-specific services that they deliver to their user base. The EGI Foundation acts as main contact point with the head organisations, while the EGI Participants engage via the national contacts.

The EGI Federation also supports:



> **Small international groups** and **individual researchers**: they are usually less experienced in advanced computing or lack resources and support. The approach is to connect them to the most suitable service providers through a common platform and engagement framework;



> **Policymakers** and **funding agencies**: we provide expert advice for shaping policies and funding programs to help them implement their policy priorities. The focus is also on informing them about trends and potential developments;



> **SMEs & industry**: we help them to exploit services and resources for compute-/data-intensive research and innovation.



# Offering

For the identified target groups, the EGI Federation offers:

- > **Technical services** from horizontal or thematic service providers; they cover areas such as compute, storage, data, platforms, applications, or security;
- > **Consultancy & support**, to support the researchers in building platforms on top of the existing capabilities, or to build high-level services that rely on general building blocks; for larger communities, this is achieved by creating competence centres composed of experts from both the user side and the provider side;
- > **Training**, to help research communities in developing the digital skills they need for modern IT and data use; EGI creates and delivers baseline and tailored training programs (e.g. online or face-to-face) and material, it also facilitates the sharing and access;
- > **Knowledge sharing**, through events and online forums to share knowledge, best practices and solutions for advanced computing among an international network of users and developers;
- > **Policy advocacy**, by mobilising the community to understand the main trends and needs in science and technology in order to advise policymakers and funders on the future directions to take.



# Strategic goals

For the period 2020-2024, the EGI Federation identifies the following strategic goals:



> **Be a trusted service & technology partner for research and innovation:** improve promotion and engagement with target user groups to further solidify the EGI Federation as trusted long-term partner;



> **Evolve the service offering to meet the needs of researchers:** focus on innovation and harmonisation of services by working with user communities and with peer e-infrastructure organisations towards reliable research-enabling services;



> **Improve skills of users/operators and maturity in service providers:** deliver dedicated training and consultancy to increase the knowledge and quality of work of users and operators; align service management and delivery across the federation to best practices and standards;



> **Align business models to better support cross-border service provisioning:** increase the efficiency in translating the needs of services and support from the target user groups to service providers of the EGI Federation in alignment with the national and community policies and business models;



> **Strengthen the governance and broaden European coverage:** ensure that the EGI Federation governance remain effective in the changing environment and grow the relationships with current and future EGI participants;



> **Be a recognised foundation of the EOSC:** position the services and expertise of the EGI Federation as key assets for the EOSC, especially for the Federating Core.

# Core values

All our activities and relationships are underpinned by five key **core values** that support the overall vision, shape culture and serve as a basis for the decision-making:

**Openness** > communicate clearly and with integrity; ensure transparent governance structures and pursue an open infrastructure through adoption of open standards and open licenses;

**Collaboration** > strive to provide ongoing opportunities to cooperate, communicate and partner with others in the community to advance goals and objectives;

**Innovation** > listen to and understand the needs of stakeholders and users; look for ways to improve operational performance, processes and services; promote an attitude of continuous learning;

**Trustworthiness** > be good stewards of resources and uphold the faith and confidence of stakeholders and research communities have placed in it;

**Inclusiveness** > strive to be inclusive and open to all countries and research communities including those with limited resources.

# Glossary of terms

**EGI Foundation (or EGI.eu or Stichting EGI)** > The legal entity whose objective is to coordinate and develop, in collaboration with its Participants, the EGI infrastructure that provides long-term distributed compute and storage resources for performing research and innovation activities.

**EGI Executive Board** > Board of the EGI Foundation accountable to the EGI Council. It is composed from minimally five and maximally nine members appointed for a maximum period of two years.

**EGI Foundation Participants** > Participants and Associated Participants can be NGIs, EIROs, ERICs and such other legal entities, in their own capacity or as representative of a consortium, that contribute to the objective of the EGI Foundation.

**EGI Council** > Supervisory authority consisting of Participants and Associated Participants of the EGI Foundation.

**EGI Federation** > EGI Foundation, EGI Foundation Participants and Associated Participants, their linked organisations (e.g. service and resource providers) represented within EGI Foundation that contribute to the objectives of the foundation.

**EGI infrastructure** > The federated e-infrastructure composed national and intergovernmental computing and data centres from the EGI Federation providing advanced computing services for research and innovation.

**EGI community** > The EGI Federation plus the served research communities, the technology providers or any other organisation linked via an agreement with the EGI Foundation and contributing to the mission of the EGI Federation.

**EGI** > Can be used as a short version of “EGI Infrastructure” or “EGI Federation”.

**e-Infrastructure** > An environment to share research and educational resources (e.g. network, computers, storage, software, data) so that these resources can easily be accessed and used by researchers as required.

**Research community** > Diverse networks of interacting researchers working on particular scientific fields, they can perform interdisciplinary or cross-institutional activities.

**Research infrastructure** > Facilities, resources and services used by the science community to conduct research and foster innovation





