



EGI Council Participant: INFN

Participating in EGI Impact Report

Italy_

www.egi.eu

2025

Table of Contents_

04

Infographic

05

Country Overview

19

**Service Level
Agreements**

20

**Participated
Projects**

06

About EGI

07

**About Council
Participant**

27

**Infrastructure
Contribution**

28

Methodology

08

Overall EGI Impact

10

**EGI Contribution
to the Country
Excellence in
Science**

Infographic_

Italy_

7,032

Service Users

In 2025, 7,032 researchers from Italian institutions used the services provided by the EGI Federation

1,985

Publications

The research communities, projects and scientific collaborations from Italy supported by EGI led to 1,985 peer-reviewed scientific publications

32

Supported Communities

The infrastructure providers from Italy federated in EGI supported 32 research communities in the following disciplines: Agriculture, Health and Medicine, Physics

27

Projects

Italian partners participated in 27 collaboration projects

682,5M+

Compute Delivery

In 2024, the infrastructure providers from Italy federated in EGI delivered 679,198,928 HTC CPU Hours and 3,359,438 Cloud CPU Hours

Country Overview_

Number of supported publications

1,985

Number of total service users

7,032

Scientific Communities supported

32

Data Centres contributing to the Federation

27

Collaboration projects

27

Total HTC CPU hours

679,198,928

Total Cloud CPU hours

3,359,438

EGI is a federation of providers delivering advanced computing, data, and digital services for research and innovation, while driving collaborative development and impact across scientific communities.

Through this collaborative model, EGI helps its members transform emerging technologies and approaches, such as big data, cloud computing, artificial intelligence, digital twins, and FAIR data, into reliable, environmentally and financially sustainable services for research and education. These services are designed to ensure continuity and stability beyond individual projects, enabling scientific communities

Coordinated by the EGI Foundation, the Federation operates through a shared IT platform that connects hundreds of providers with research groups across Europe and beyond. By aligning and aggregating national capacities with European and global priorities, EGI ensures that researchers can seamlessly access digital resources and expert support. Together, EGI and its members establish a strong and lasting foundation for open, collaborative, and data-intensive science, strengthening Europe's capacity for research and innovation.



 **28**
21 countries
+5 international research organisations
+1 institutional representative

Council Participant INFN_

About INFN

The National Institute for Nuclear Physics (INFN) is the Italian research agency dedicated to the study of the fundamental constituents of matter and the laws that govern them, under the supervision of the Ministry of University and Research (MUR).

It conducts theoretical and experimental research in the fields of subnuclear, nuclear and astroparticle physics. All of the INFN's research activities are undertaken within a framework of international competition, in close collaboration with Italian universities on the basis of solid academic partnerships spanning decades.

In the context of EGI, INFN has been collaborating with CNR, the National Research Council of Italy, under the premises of a bilateral agreement to support the EGI-ACE project (2021-2023).

Overall EGI Impact_

The EGI Federation is composed of e-infrastructure providers from national and community initiatives, forming one of the largest distributed computing infrastructures for researchers in the world, integrating about 1,243,400 CPU cores and over 1,4 Exabyte of storage space from hundreds of data centres.

In 2025, the EGI Federation served around 150,000 users (+29%). EGI users consumed 8 Billion HTC CPU hours (+8%), 43 Million Cloud CPU hours (-19%), ran over 351 Million computational jobs (-12%) and published over 2,300 open access publications.

As of the previous year, the research community with the largest number of users is Medical and Health Sciences, while the community with most extensive HTC CPU/h consumption is CMS.

From the scientific communities engaged in 2025, the one with most extensive Cloud CPU/h consumption is WeNMR.

Moreover, EGI engaged with 219 scientific communities, including SMEs and business pilots, and 41 Research Infrastructures

EGI Contribution to Excellence in Science in Italy_

INFN coordinates the Italian participation to the EGI Federation. INFN promotes the building and operation of a multidisciplinary national Distributed Computing Infrastructure open to all sciences and to developing countries in Italy. This report provides an overview of the activities of INFN in EGI, and the impact that was achieved thanks to this participation. The annual membership fee contributed by ES-NGI to the EGI Foundation in 2025 was 103,500 EUR.

EGI federates hundreds of resource centres that are located at participant countries, organizations and at collaborating e-Infrastructures worldwide. This federated infrastructure supports data- and compute-intensive research across Europe and the world. In 2025, our federation has been accessed by over 150,000 users.

Research Infrastructures and multi-national research collaborations are the largest adopters

of EGI Services, the main contributors of thematic portals, and operate community-specific compute, storage and data systems based on EGI federation capabilities.

The services of the EGI federation have been used by 7,032 researchers from Italy over the year. The estimated annual scientific output produced by research communities, projects and scientific collaborations from Italy and supported by the EGI Federation in 2025 is estimated to amount to over 1,905 peer reviewed scientific publications. The EGI Federation is currently working with almost 50 Research Infrastructures, 32 of which include Italian partners. These EGI-enabled research infrastructures, their Italian members and their scientific output (publications) are detailed in the following pages of the report.

Italian Research Collaborations in EGI

AMS-02 (Particle Physics)

- INFN
- University of Bologna
- IROE Florence
- University of Milano-Bicocca
- University of Perugia
- University of Trento

- ASI, Italian Space Agency
- Sapienza University

EGI Supported Activities and Services

The AMS-02 experiment on the International Space Station has been using compute resources from EGI for more than a decade. The services from

the EGI federation that AMS-02 uses include:

- EGI HTC services from sites in Italy and CERN
- Software Distribution Services (UMC, CMD, operations documentation)
- Operations Coordination (middleware deployment campaigns, procedures, innovation of tools)

- Security Services and Activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)

3 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI

ALICE (High Energy Physics)

- INFN

EGI Supported Activities and Services

ALICE has been supported since 2012 as part of the EGI - WLCG collaboration. Federated services delivered include:

- Software support
- Infrastructure and Operations Services (infrastructure catalogue,
- Software Distribution Services (UMC, CMD, operations

documentation)

- Operations Coordination (middleware deployment campaigns, procedures, innovation of tools)
- Security Services and Activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)

43 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI

ATLAS (High Energy Physics)

- INFN
- University of Bologna
- Laboratori Nazionali di Frascati
- University of Genova
- University of Salento
- University of Milano
- University of Napoli
- University of Pavia
- Università di Pisa

- University of Calabria
- Sapienza University
- University of Roma Tor Vergata
- University Roma Tre
- University of Trento
- University of Udine

EGI Supported Activities and Services

ATLAS has been supported since 2012 as part of the EGI - WLCG collaboration.

Federated services delivered include:

- Software support
- Infrastructure and Operations Services (infrastructure catalogue,
- Software Distribution

Services (UMC, CMD, operations documentation)

- Operations Coordination (middleware deployment campaigns,

Italian Research Collaborations in EGI

AUGER (Astronomy)

- Gran Sasso Science Institute
- Laboratori Nazionali del Gran Sasso
- INAF
- Politecnico di Milano
- Università del Salento
- Università dell'Aquila
- Università di Catania
- Università di Milano
- Università di Napoli "Federico II"

- Università di Roma Tor Vergata
- Università di Torino

EGI Supported Activities and Services

The Pierre Auger Observatory has been using compute resources from EGI partners for more than a decade. The services of the EGI federation that the Auger observatory benefits from

include:

- EGI HTC services from 9 EGI participant countries (CZ, DE, IT, FR, ES, NL, RO, PT, SI)
- Software distribution services (UMC, CMD, operations documentation)
- Operations coordination (middleware deployment campaigns, procedures,

- innovation of tools)
- Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)

12 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI BELLE (High Energy Physics) • INFN • Università di Napoli "Federico II" • Università. Roma Tre • Università di Padova • Università di Trieste • Laboratori Nazionali di Frascati • Università di. Perugia • Università di Torino	• Università di Pisa EGI Supported Activities and Services The BELLE experiment has been using compute resources from EGI partners since 2016. The services from the EGI federation that BELLE benefits from include: • EGI HTC services	• from 9 EGI participant countries (CZ, DE, IT, FR, ES, NL, RO, PT, SI) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services	and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution) 56 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
---	---	---	--

Italian Research Collaborations in EGI BIOMED (Life Sciences) • University of Verona • INFN • University of Ferrara • Az.Ospedaliero-Universitaria di Modena • Consorzio COMETA • IRCCS-FBF • Sapienza University • ICTP • ASP 3 Catania • University Hospital of	Verona • University of Bologna • Fondazione IRCCS • Ospedale Maggiore Policlinico of Milan • Neuropsicologia Alto Adige • Politecnico di Milano • CNR various institutes • Politecnico di Milano	EGI Supported Activities and Services The Life Science Grid Community has been supported by EGI for more than one decade, with a Service Level Agreement in place since 2016. The EGI Services used by the community include: • High-Throughput + Online Storage services • EGI Cloud services	• EGI Workload Manager During the Horizon 2020 Project EGI-ACE (2021-2024), the BIOMED community was one of the Data Space providers supported. 1 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
---	---	--	--

Italian Research Collaborations in EGI CLARIN (Linguistics) • CLARIN-IT	EGI Supported Activities and Services CLARIN thematic services has been supported by EGI since 2018. CLARIN has a Service Level Agreement with EGI, using the following services: • EGI Cloud (Compute + Online Storage) for hosting the Virtual Language Observatory	(VLO) • Technical support • Service integration	0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
--	--	---	---

Italian Research Collaborations in EGI CMS (High Energy Physics) • INFN	EGI Supported Activities and Services CMS has been supported since 2012 as part of the EGI - WLCG collaboration. EGI Federated services delivered include: • Software support (consultancy to users and system administrators, (software maintenance and validation)	• Infrastructure and operations Services (infrastructure catalogue, accounting repository and portal, helpdesk, monitoring, operations portal, AAI) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)	procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution) 135 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
--	---	--	--

Italian Research Collaborations in EGI COMPASS (Physical Sciences) • University of Trieste • University of Torino	EGI Supported Activities and Services COMPASS has been supported since 2017 as part of the EGI - WLCG collaboration, formally agreed in an MoU. Federated services delivered in the context of the WLCG MoU, including: • Software support (consultancy to users and system administrators,	(software maintenance and validation) • Infrastructure and operations Services (infrastructure catalogue, accounting repository and portal, helpdesk, monitoring, operations portal, AAI) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)	3 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
---	---	---	---

Italian Research Collaborations in EGI CTA (Astronomy) • IAPS • INAF • INFN • IUSS • Università di Bari • Università di Padova • Università di Siena • Università di Torino • Università di Udine	EGI Supported Activities and Services The CTA experiment has been using compute resources from EGI partners for more than a decade. The services from the EGI federation that CTA uses include: • EGI HTC services from 9 EGI participant countries (CZ, DE, IT,	• FR, ES, NL, RO, PT, SI) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT,	Software vulnerability group, international security coordination, policies, IGTF distribution) 0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
--	---	--	--

Italian Research Collaborations in EGI DUNE (Astroparticle Physics) • Gran Sasso Science Institute (GSSI) • INFN • Laboratori Nazionali del Gran Sasso • Laboratori Nazionali del Sud • Università di Catania • Università di Genova • Università di Padova	• Università di Pavia • Università del Salento • Università di Ferrara • Università di Pisa EGI Supported Activities and Services The DUNE experiment has been using compute resources from EGI partners for more than a decade. The services from the EGI federation that DUNE uses include:	• EGI HTC services from 6 EGI participant countries (CH, CZ, ES, FR, NL, UK) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools)	• Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution) 41 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
--	---	---	---

Italian Research Collaborations in EGI ELI-BEAM (Physical Sciences) • University of Messina • Laboratori Nazionali del Sud	EGI Supported Activities and Services ELI works with EGI since 2016 on exploring and validating approaches for off-site computing and data management. ELI-Beams setup a High Throughput Compute Service on EGI resources and works with EGI providers on	• Refining the user requirements and translating these to e-infrastructure requirements, and • Identifying and validating services from EGI that can be relevant for ELI (besides HTC and compute). • Mobilising already existing HTC compute, cloud	compute and storage resources from EGI for ELI piloting and demonstration activities. 35 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
--	--	--	---

Italian Research Collaborations in EGI	And Services	- Identifying and validating services from EGI that can be relevant for ELI (besides HTC and compute). - Mobilising already existing HTC compute, cloud compute and storage resources from EGI for ELI piloting and demonstration activities.	90 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
ELI-NP (Nuclear Physics) - Laboratori Nazionali del Sud - Elettra-Sincrotrone	ELI works with EGI since 2016 on exploring and validating approaches for off-site computing and data management. ELI-NP setup a High Throughput Compute Service on EGI resources and works with EGI providers on Refining the user requirements and translating these to e-infrastructure requirements, and		
EGI Supported Activities			

Italian Research Collaborations in EGI EMSO (Oceanography) INGV	EGI Supported Activities And Services The collaboration with EGI started back in 2017 when 4 cloud providers of the EGI Federation agreed to support the EMSODEV project during the design and implementation of the EMSODEV Data Portal. EMSO-ERIC set up the EMSO ERIC Data	Management Platform on the EGI providers in order to harmonise the data sets following Oceansites specifications, FAIR principles, and EOSC guidelines.	0 SCIENTIFIC PAPER(S)

Italian Research Collaborations in EGI EMPHASIS (Agricultural Sciences) - CNR - ALSIA AgroBios - CREA - Tuscia University - Marche Polytechnic University - University of Bologna	- University of Basilicata - SSUP - IAM-CIHEAM - University of Bari - University of Padova - Edmund Mach Foundation EGI Supported Activities And Services	EMPHASIS has been supported through the establishment of a Data Space in the EGI-ACE project. Since 2017 EMPHASIS using the following services from EGI: - EGI Check-in - EGI Cloud Compute - EGI Online Storage - EGI DataHub	- Technical support - Software integration and piloting) 0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
---	---	---	--

Italian Research Collaborations in EGI FUSION (Fusion) ENEA	EGI Supported Activities And Services The Fusion community has been using compute resources from EGI partners since 2018. The services from the EGI Federation used by the community include:	- EGI Cloud Compute - EGI Online Storage	0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI Icarus (Physical Sciences) - Laboratori Nazionali del Gran Sasso - Università di Padova - Università di Pavia - Politecnico di Milano - Università Federico II di Napoli - Laboratori Nazionali di Frascati - Università di Pisa	EGI Supported Activities And Services The collaboration with EGI started back in 2019. The services from the EGI federation that the experiment uses include: - EGI HTC services from 2 EGI federated sites from IT - Software distribution services (UMC,	CMD, operations documentation) - Operations coordination (middleware deployment campaigns, procedures, innovation of tools) - Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF	0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI IceCube (Neutrino Observatory) University of Padova	resources from EGI partners for more than a decade. The services from the EGI federation that IceCube uses include: • EGI HTC services from 8 sites of 4 EGI participant countries (Belgium, Denmark, Germany and UK) • Software distribution services (UMC, CMD, operations	documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)	EGI is currently expanding its resource pledge to IceCube with an increase of GPU capacity.	25 SCIENTIFIC PAPER(S) PUBLISHED IN 2025	
	EGI Supported Activities And Services The IceCube experiment has been using compute				

Italian Research Collaborations in EGI ILC (High Energy Physics) INFN	EGI Supported Activities And Services The ILC experiment has been using compute resources from EGI partners since 2004. The services from the EGI federation that ILC experiments uses include EGI HTC services from 27 EGI federated sites from	IL, DE, FR, ES, NL, PL, UK - Software distribution services (UMC, CMD, operations documentation) - Operations coordination (middleware deployment campaigns, procedures, innovation of tools) - Security services and activities (CSIRT, Software vulnerability group,	international security coordination, policies, IGTF distribution)	50 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI INSTRUCT (Structural Biology) Instruct Centre IT	EGI Supported Activities And Services Instruct-ERIC is a pan-European distributed research infrastructure making high-end technologies and methods in structural biology available to users. The collaboration with EGI ensures the reliable	hosting and operation of the ARIA and CRIMS production services on the EGI Infrastructure, providing a robust, secure, and scalable environment tailored to support researchers in the Health and Food domains.	50 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI JUNO (Neutrino Observatory) • INFN • Università di Ferrara • Università di Milano Bicocca • Università di Padova • Università Roma Tre	EGI Supported Activities and Services The JUNO experiment has been using compute resources from EGI partners for more than a decade. The services from the EGI federation that JUNO uses include: • EGI HTC services from 3 EGI federated sites from FR, IT and China. • Software distribution	• services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international	security coordination, policies, IGTF distribution) 66 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
Italian Research Collaborations in EGI KM3NET (Neutrino Observatory) • INFN • Università degli Studi della Campania • Università di Salerno • INGV	EGI Supported Activities and Services The Km3Net experiment has been using compute resources from EGI partners since 2013. The services from the EGI federation that Km3Net uses include: • EGI HTC services from 2 EGI federated sites from IT and PL • Software distribution	• services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international	security coordination, policies, IGTF distribution) 52 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
Italian Research Collaborations in EGI LifeWatch (Biodiversity and Ecosystem Research) • INFN • INGV • Anton Dohrn Zoological Station • Mediterranean Agronomic Institute of Bari • and others	EGI Supported Activities and Services The LifeWatch experiment has been using compute resources from EGI partners since 2018. The services from the EGI federation that LifeWatch uses include: • EGI Cloud services from 2 EGI federated sites from ES and PT • Software distribution	• services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international	security coordination, policies, IGTF distribution) 0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
Italian Research Collaborations in EGI LHCb (High Energy Physics) • Università di Bari • Università di Bologna • Università di Cagliari • Università di Ferrara • Università di Firenze • Università di Genova • Università di Milano Bicocca • Università di Roma Tor Vergata	• INFN EGI Supported Activities and Services LHCb has been supported since 2012 as part of the EGI – WLCG collaboration, formally agreed in a MoU. Federating services delivered in the context of the WLCG MoU include: • Software support • Infrastructure and operations Services (infrastructure	• catalogue, accounting repository and portal, helpdesk, monitoring, operations portal, AAI) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools)	• Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution) 51 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI LSST (Astronomy) • INAF	EGI Supported Activities and Services The LSST compute federation benefited from the following EGI services: • Software support • Infrastructure and operations Services (infrastructure catalogue, accounting repository and portal, helpdesk, monitoring, operations portal, AAI)	• Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability	group, international security coordination, policies, IGTF distribution) 20 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
Italian Research Collaborations in EGI MOEDAL-MAPP (Physical Sciences) • University of Bologna • INFN	EGI Supported Activities and Services MOEDAL-MAP has been supported since 2016 as part of the EGI – WLCG collaboration. EGI Federated services delivered include: • Software support • Infrastructure and operations Services (infrastructure catalogue, accounting	repository and portal, helpdesk, monitoring, operations portal, AAI) • Software distribution services (UMC, CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools)	• Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF distribution)urces. 23 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
Italian Research Collaborations in EGI NA62 (High Energy Physics) • INFN • Università Roma Tor Vergata • Università di Pisa • Università di Ferrara • Università di Torino • Università di Firenze • Università di Perugia • Università di Napoli	EGI Supported Activities and Services The NA62 experiment has been using compute resources from EGI partners since 2012. The services from the EGI federation that NA62 uses include: • EGI HTC services from sites in the UK, IT, BE and CERN • Software distribution services (UMC,	CMD, operations documentation) • Operations coordination (middleware deployment campaigns, procedures, innovation of tools) • Security services and activities (CSIRT, Software vulnerability group, international security coordination,	policies, IGTF distribution) 2 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
Italian Research Collaborations in EGI SeaDataNet (Oceanography) • ENEA • INGV • ETT SpA • OGS	EGI Supported Activities And Services Since 2021, the SeaDataNet community is represented in the EGI Council by MARIS.. The SeaDataNet community is consuming cloud compute resources through EGI from the INFN-Bari	site (Italy) since early 2022. The cloud compute delivery is secured with an EGI Service Level Agreement for SeaDataNet since November 2023	0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025

Italian Research Collaborations in EGI

SKA (Radioastronomy)

- INAF

EGI Supported Activities And Services

The Square Kilometre Array (SKA) is an intergovernmental radio telescope project being planned to be built in Australia and South Africa. 7 countries in SKA are also represented in the EGI Council (FR, DE, IT, PT, ES, NL and UK).

71 SCIENTIFIC PAPER(S)
PUBLISHED IN 2025

Italian Research Collaborations in EGI

VIRGO (Astrophysics)

- Accademia Nazionale dei Lincei
- CNR
- INFN
- Museo Storico della Fisica e Centro Studi e Ricerche "Enrico Fermi"
- various Italian universities

EGI Supported Activities And Services

The Virgo experiment has been using compute resources from EGI partners for more than a decade. The services from the EGI federation that VIRGO uses include:

- EGI HTC services from data centres in FR, IT, NL, ES and UK
- Software distribution

- services (UMC, CMD, operations documentation)
- Operations coordination (middleware deployment campaigns, procedures, innovation of tools)
- Security services and activities (CSIRT, Software vulnerability group, international

security coordination, policies, IGTF distribution)

23 SCIENTIFIC PAPER(S)
PUBLISHED IN 2025

Italian Research Collaborations in EGI

WeNMR (Structural Biology)

- CNR
- various Italian universities

EGI Supported Activities and Services

ThWeNMR is supported by EGI since 2011 and has a Service Level Agreement since 2016. The EGI Services used by the community include:

- High-Throughput, Cloud + Online Storage services from

- 23 EGI federated sites from NL, IT, FR, DE, PL, UK, the Asia Pacific region, IberGrid (Spain and Portugal), the Latin America region.
- EGI Workload Manager
- Trust and identity management with Check-in

10 SCIENTIFIC PAPER(S)
PUBLISHED IN 2025

Italian Research Collaborations in EGI

XENON (Dark Matter Physics)

- INFN

EGI Supported Activities and Services

The XENON experiment has been using compute resources from EGI partners for more than a decade. The services from the EGI federation that XENON uses include:

- EGI HTC services from 4 EGI federated sites from FR, IT, NL and IL.
- Software distribution services (UMC,

- CMD, operations documentation)
- Operations coordination (middleware deployment campaigns, procedures, innovation of tools)
- Security services and activities (CSIRT, Software vulnerability group, international security coordination, policies, IGTF

distribution)

5 SCIENTIFIC PAPER(S)
PUBLISHED IN 2025

Service Level Agreements

During 2025, INFN-CLOUD-BARI, INFN-LNL-2, INFN-BARI, INFN-CATANIA, INFN-PISA and INFN-ROMA3 supported 6 Service Level Agreements for international scientific communities via EGI, delivering Cloud Computing and Online Storage services.

Participated Projects

In the reference period, the EGI Foundation was leading seven Horizon Europe Projects, two of which started in 2025:

- iImagine (September 2022–December 2025)
- interTwin (September 2022–August 2025)
- ENVRI-Hub NEXT (February 2024–January 2027)
- EOSC Beyond (April 2024–March 2027)
- EOSC Data Commons (April 2025–March 2028)
- RI-SCALE (March 2025–February 2028)

- SPECTRUM (January 2024–June 2026)

Furthermore, the EGI Federation was involved in 6 additional projects, increasing the innovation potential of its participants.

The EGI Federation participates in Horizon 2020 and Horizon Europe projects together with Dutch institutions to facilitate the uptake and use of e-infrastructure services for science. A summary of these projects, the involved institutes and the scope of the collaboration is provided in the next table.



Project Title



Scope of Collaboration

EGI contributes research and development expertise to the architectural design and implementation of open, distributed software infrastructure for AI4Europe. This ensures the platform evolves as a scalable,

interoperable ecosystem. EGI also applies its deep knowledge of physical resources, usability, distributed systems, and emerging technologies to develop deployment mechanisms for AI tools across private and public cloud and HPC resources.

Participating beneficiaries from the country

- Università di Bologna

Project Title



Scope of Collaboration

EGI advances the development of innovative approaches for communication, dissemination, and exploitation management. It contributes technical expertise to the definition of the project's architecture and guidance

framework, supports the harmonisation of trust and interoperability policies, and participates in the validation process. EGI also contributes to the preparation of the Compendium and to formulating recommendations that inform the project's future directions..

Participating beneficiaries from the country

- INFN
- CINECA

Project Title



Scope of Collaboration

EGI provides advanced cloud computing, notebooks, applications-on-demand, file transfer, and data archiving services to support ANERIS's research infrastructure. It contributes technical expertise to EOSC integration processes

and the development of a sustainable business model. EGI leads key technical tasks including the computing continuum infrastructure, overall integration and EOSC synergies, and innovation management, while supporting virtual research environments for genomics analysis, imaging-biooptics, and

participatory sciences.

Participating beneficiaries from the country

- EMSO-ERIC

Project Title



Scope of Collaboration

EGI leads the research on Blue-Cloud VRE interaction with EOSC projects (WP5) and contributes technical expertise across multiple tasks. This includes developing and deploying sub-setting services at BDIs and BlueCloud Data Lakes (T2.3), tuning

data lakes with DTO developments (T2.4), evolving common VRE services (T5.1), federating multiple e-infrastructures (T5.2), ensuring EOSC core service interoperability (T5.4), and supporting communication, community dialogue, and exploitation planning (T6.1, T7.1, T7.2)..

Participating beneficiaries from the country

- CNR
- TRUST-IT Services
- NUBISWARE SRL
- CMCC
- CINECA
- OGS
- ETT SPA
- EMSO-ERIC
- INGV

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI coordinates the research and implementation of federated Single Sign-On access through its EGI Check-in service, enhancing secure and interoperable authentication across the project ecosystem.	UNITO

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI contributes to developing a detailed technical roadmap, conducting state-of-the-art analysis, and designing a modular architecture framework for data monetization. It supports the definition of KPIs for fair dataset	valuation, business cases for data sharing platforms, and pilots for framework deployment. EGI also advances non-monetary data value dimensions, validation testing, standardization activities, and coordination with the Data Spaces Support Centre. CINECA

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI advances the deployment and growth of common European data spaces by developing interoperable data sharing environments that enable secure reuse across sectors while upholding EU values and principles..	- CEFRIEL - MEDITECH

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI supports the research and integration of datasets, tools, and workflows from diverse sources into ECHOES's technical framework. It provides scalable, secure storage and compute infrastructure, alongside a federated authentication and authorisation infrastructure (AAI) for	seamless cloud access. EGI also contributes expertise to the project's long-term sustainability and open innovation strategies through private sector engagement. - CNR - ETT SPA

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI contributes multi-faceted research expertise across key work packages, including governance, funding models, and cost structures for EOSC sustainability (WP1). It plays a leading role in inter-project collaboration (WP4/	WP5), coordinating grants, technical alignment, and joint communications among Horizon Europe INFRAEOSC projects. EGI also supports effective project execution and coordination (WP9).. TRUST-IT Services

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EEGI contributes to expanding EOSC EU Node adoption through diverse use cases, cascading grants with EOSC Gravity, and roadmap improvements (T2.1). It supports the technical evolution and validation of the EOSC	Federation's architecture and AAI, delivering prioritised requirements and technical guidelines (T3.4). Minor contributions include synergies with Data Spaces (T4.3) and technical project management (T5.1). TRUST-IT Services

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI is contributing to the architectural design and implementation of open distributed software to ensure that AI4Europe evolves as a distributed ecosystem. EGI is also providing its expertise on physical resources, usability, development of systems, distributed	systems and new technologies to develop mechanisms for the AI tools to deploy/make use of private/public Cloud and HPC resources. Participating beneficiaries from the country - CNR - Gemelli University Hospital - Istituto Nazionale Tumori

Project Title	Scope of Collaboration	Participating beneficiaries from the country
	EGI collaborates on defining technical requirements, developing authentication and authorisation infrastructure, and supporting project services onboarding to the EOSC Marketplace.	- Photoconsortium - Museo della Carta Pescia

Project Title



Scope of Collaboration

EGI provides cloud compute and AAI services to enable execution of extended reality (XR) tools, while supporting project communications and stakeholder engagement.

Participating beneficiaries from the country

- Photoconsortium
- Software Engineering

Project Title



Scope of Collaboration

EGI contributes to developing an innovative, workflow-based Gateway connecting European scientists to computing and storage infrastructures, advancing operational FAIR data services within EOSC.

Participating beneficiaries from the country

- Università di Firenze
- CNR
- INFN

Project Title



Scope of Collaboration

EGI contributes research expertise to defining requirements, metrics, specifications, and validation pilots for assessing thematic services and platforms.

Participating beneficiaries from the country

- CNR
- UNIBO

Project Title



Scope of Collaboration

EGI conducts environmental impact assessments across the EGI Federation and partner ESFRIs, identifying sustainability best practices. It develops environmental metrics publication systems, energy-aware workflow

brokering for HTC/cloud/AI services, and self-assessment questionnaires for Research Infrastructures. EGI also provides training, consultancy, and communications support.

Participating beneficiaries from the country

- CNR
- CNIT

Project Title



Scope of Collaboration

EGI leads communication, dissemination, engagement, and exploitation efforts (WP1), including stakeholder mapping and service catalogue promotion. It develops climate risk training modules and provides access to training/computing infrastructure (WP3),

while contributing to FAIR frameworks, AAI analysis, and access policy alignment for integrated knowledge services (WP6)

Participating beneficiaries from the country

- CNR
- INFN
- ENEA

Project Title



Scope of Collaboration

EGI contributes to developing a data-driven risk prediction model for cognitive decline using big data analysis from cross-sectional and longitudinal datasets across four European clinical centres.

Participating beneficiaries from the country

- University of Perugia
- i2grow Innovation to Grow Srl
- extra Red Srl

Project Title



Scope of Collaboration

EGI co-designs and deploys AI models on edge resources, providing computational and storage capacity through its federation. It develops a two-tier e-infrastructure for validation and data processing, coordinates national funding for

sustainability, addresses data management challenges, and integrates with EOSC.

Participating beneficiaries from the country

- Centro di sperimentazione Laimburg

Project Title



Scope of Collaboration

EEGI leads WP6 on Services Provision, researching unified access policies and a single access point for distributed RI resources. It contributes to financial modelling and business cases (WP3), impact strategies (WP4), dissemination (WP5), and

the Italian central Hub (WP8).

Participating beneficiaries from the country

- Università di Pisa
- CNR
- SNS
- Università di Roma La Sapienza
- Università dell'Aquila
- Sant'Anna
- IMT Lucca
- SMARTEX

Project Title 	Scope of Collaboration EGI leads WP4 on Feasibility Assessment and Roadmap, developing realistic infrastructure upgrade scenarios and cooperation mechanisms documented in the AI in Science Roadmap. As WP8/WP9 lead, it drives communication, dissemination, engagement, the annual	AIS Summit, RAISE Secretariat setup, and stakeholder management Participating beneficiaries from the country CNR
---	---	---

Project Title 	Scope of Collaboration EGI contributes research to gap analysis, user requirements, system specifications, security frameworks, and self-sovereign identity management. It coordinates policy recommendations on distributed infrastructures, secure data exchange, and Data Spaces, while supporting dissemination activities.	Participating beneficiaries from the country - Poste Italiane SPA - ABI
---	---	--

Project Title 	Scope of Collaboration EGI advances stakeholder engagement and alignment while leading IT security management and software vulnerability assessment for the UNCAN.eu platform's federated infrastructure. It contributes to infrastructure federation, decentralised health research environments,	and impact assessment guidelines. Participating beneficiaries from the country - CHINO SRL - ISTITUTO EUROPEO DI ONCOLOGIA SRL
---	--	--

Infrastructure Contributions

The EGI Federation offers two complementary compute capabilities: the High-Throughput Compute (HTC) federation and the Cloud federation. 27 Italian data centres contribute to these federations: HTC Federation: - CIRMMP (Consorzio Interuniversitario Risonanze Magnetiche di Metalloproteine Paramagnetiche) - CNR-ILC-PISA - INFN-BARI - INFN-CATANIA - INFN-CNAF-LHCB - INFN-COSENZA - INFN-FERRARA - INFN-FRASCATI - INFN-GENOVA - INFN-LECCE - INFN-LNL-2 - INFN-MIB - INFN-MILANO-ATLASC - INFN-NAPOLI-ATLAS - INFN-PADOVA - INFN-PISA - INFN-ROMA1 - INFN-ROMA1-CMS - INFN-ROMA3 - INFN-T1 - INFN-TORINO - INFN-TRIESTE - RECAS-NAPOLI - TRIGRID-INFN-CATANIA - UNINA-EGEE (University of Naples Federico II)	Cloud Federation: - INFN-CLOUD-BARI (former RECAS-BARI) - INFN-CLOUD-CNAF (INFN) The data centres provided 10 service endpoints and delivered 679,198,928HTC CPUhours and 3,359,438 Cloud CPUhours in total to EGI communities over the year. With the help of the EGI Security Vulnerability Group, the Italian sites avoided 49 critical vulnerabilities in foundational software systems during the year. The most active international user groups of the country compute resources were: - CMS 39.23%; - ALICE 22.97%; - ATLAS 18.56%; - LHCb 13.51%; - VIRGO 3.29%; - BELLE 1.33%;
--	--

Methodology_

Data for this impact report has been collected from the following sources.

Users

EGI uses the following methodology to capture the number of EGI users who rely on EGI services

- EGI serves users in the form of 'communities', called 'Virtual Organisations' (VO in short). A VO's members can range from one to tens of thousands. Members of a VO benefit from and use EGI services in different ways (e.g., by using Services for Federation or Services for Research).
- EGI establishes knowledge about its VOs as part of the user community support lifecycle; therefore, baseline information about VOs is collected through the Customer Relationship Management process (CRM).

At the end of 2025, there were 196 VOs in EGI. EGI Virtual Organisations (VOs) can rely on different technical and non-technical mechanisms to manage

their own members. Depending on their choice, the EGI Federation coordinator (EGI Foundation) has to follow different, corresponding approaches to know the number of members in a given VO, and to obtain additional information about these members (e.g. their 'country'). The EGI Foundation uses the following mechanisms to obtain information about the VO users:

- Obtain user number statistics from the EGI Operations Portal for VOs, where the members register personally in a 'VO membership management' system that is either operated by EGI or can be accessed by EGI.
- Obtain user number statistics from Community VRE REST APIs for VOs that operate Virtual Research Environments (VREs) on top of EGI resources. Those VREs implement a specific API to report users (e.g., WeNMR, Virtual Imaging Platform (VIP), NBIS).
- Obtain user number statistics from interviews with VO coordinators for VOs coordinated by one person.

Publications

Publications are collected from each community's public repository, if existing. Additional details are checked with the VO coordinators during the interviews to complement this information. EGI also consults OpenAIRE services to countercheck the data. You can check the list of repositories for each VO here (requires login): <https://operations-portal.egi.eu/vo/#collapseVoListOther>.

Institutional members supporting research communities

EGI relies on the information on each community's website to list institutions supporting research communities at the national level. Additionally, EGI appreciates the feedback from its national representatives to refine and improve those lists.



EGI Membership Impact Report

EGI Foundation

Science Park 140
1098 XG Amsterdam
Netherlands

Connect With Us

Website:
www.egi.eu

Phone:
+31 (0)20 89 32 007

Email:
contact@egi.eu

[egiinfra.bsky.social](https://twitter.com/egiinfra)

EGI Foundation

EGI_einfra

