



EGI Council Participant: Gauß-Allianz

Participating in EGI Impact Report

Germany_

www.egi.eu

2025

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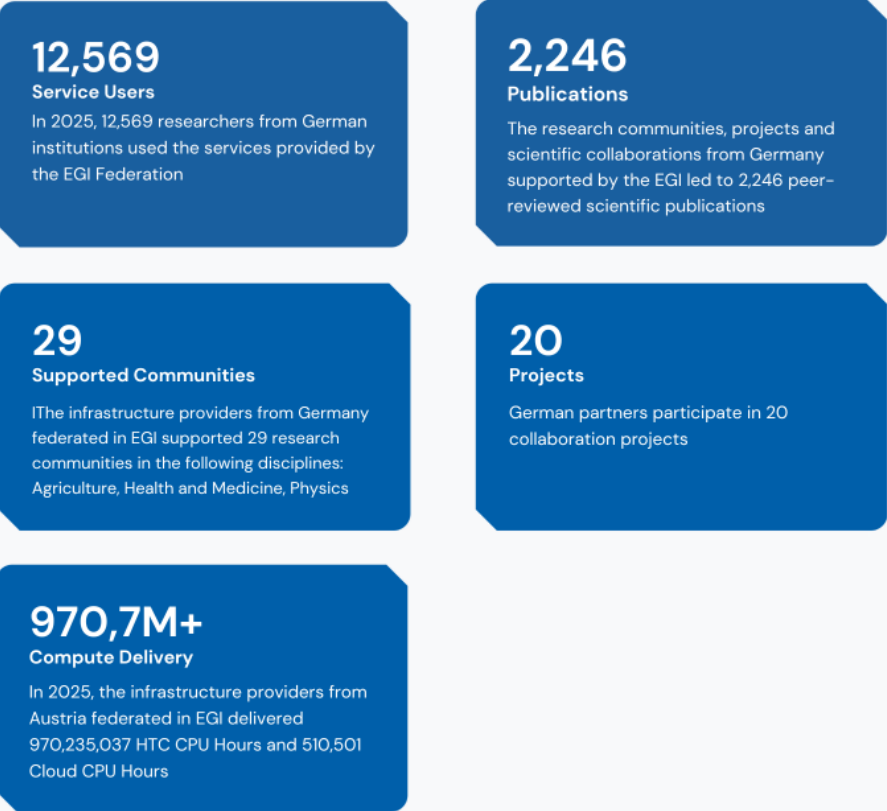
Overall EGI Impact

10

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

Infographic_

Germany_



Country Overview_

Number of supported publications	2,246
Number of total service users	12,569
Scientific Communities supported	29
Data Centres contributing to the Federation	16
Collaboration projects	20
Total HTC CPU hours	970,235,037
Total Cloud CPU hours	510,501

About EGI_

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.

The EGI Federation brings together national and international service providers to deliver the computing and data services that research teams rely on across Europe. Working as a coordinated federation, EGI enables research communities to access advanced capabilities in computing, data analytics, and artificial intelligence, while also supporting research and development that pushes the frontiers of digital innovation for science.

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

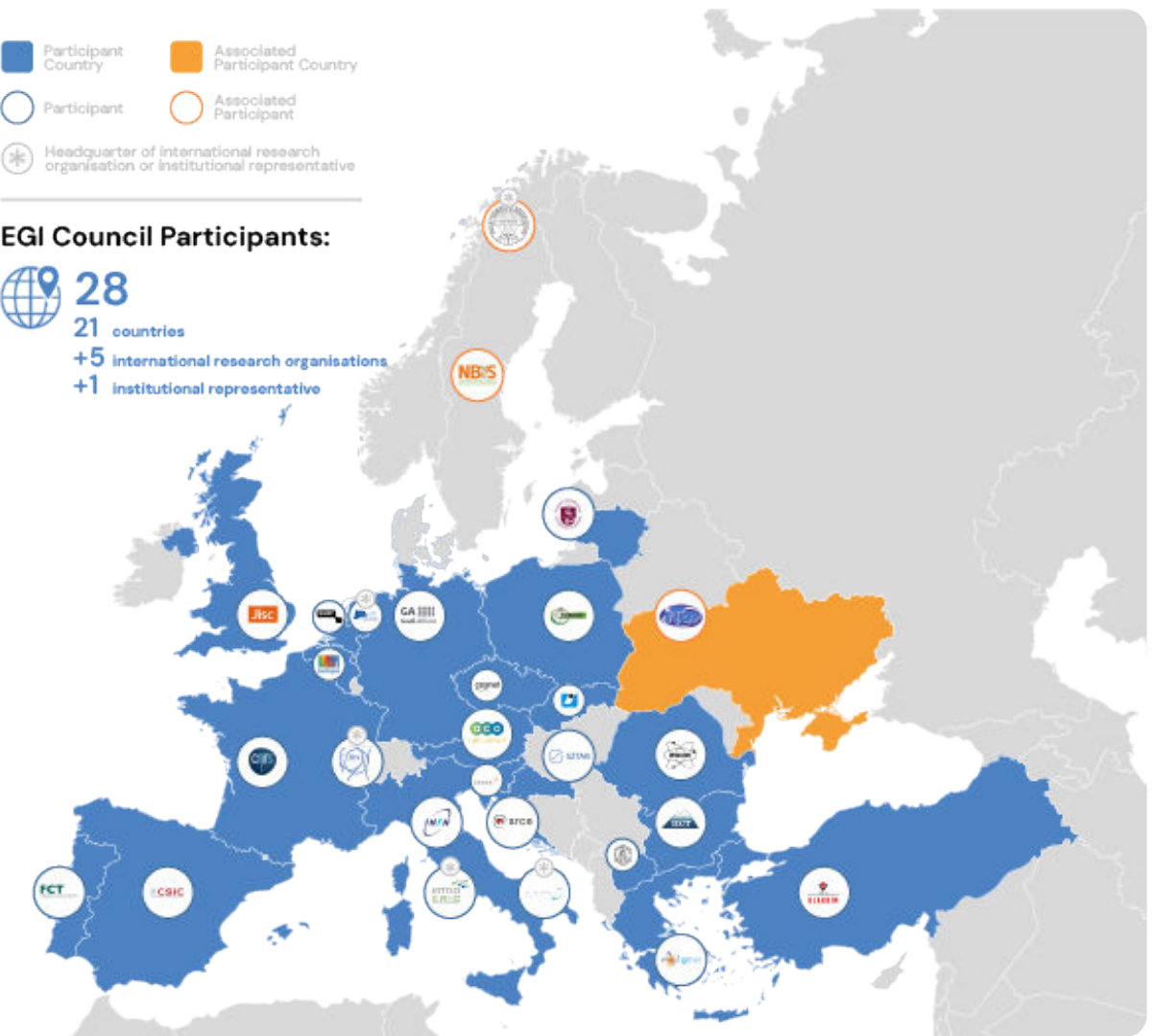
across disciplines, countries, and funding cycles to benefit from ongoing digital innovation. At the same time, the federated infrastructure and its associated R&D activities generate impact across all fields of science, from physics to the humanities, fostering new discoveries and novel research approaches.

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.



EGI Council Participants:

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



Council Participant Gauß-Allianz_

About Gauß-Allianz

The Gauß-Allianz was funded to promote research and development in the field of HPC and to coordinate the HPC related activities in Germany. A further important goal is to increase the visibility on an international level by bundling the expertise of the participating centres. Gauß-Allianz coordinates the NGI-DE, the national grid initiative for Germany, whose goal is to provide reliable and secure e-infrastructures for Germany.

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 Germany

Gauß-Allianz coordinates the German participation to the EGI Federation, representing the NGI-DE (National grid initiative for Germany). Gauß-Allianz promotes research and development in the field of HPC, and coordinates the HPC related activities, in Germany. This report provides an overview of the activities of Gauß-Allianz in EGI, and the impact that was achieved thanks to this participation. The annual membership fee contributed by Gauß-Allianz 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 12,390 researchers from Germany over the year. The estimated annual scientific output produced by research communities, projects and scientific collaborations from Germany and supported by the EGI Federation in 2025 is estimated to amount to over 2,240 peer reviewed scientific publications. The EGI Federation is currently working with almost 50 Research Infrastructures, 30 of which include German partners. These EGI-enabled research infrastructures, their German members and their scientific output (publications) are detailed in the following pages of the report.

German Research Collaborations in EGI

AMS-02 (Particle Physics)

- RWTH Aachen University
- KIT, Karlsruhe Institute of Technology
- University of Kiel

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

German Research Collaborations in EGI

ALICE (High Energy Physics)

- Rheinische Friedrich-Wilhelms-Universität
- TU Darmstadt
- GSI Helmholtzzentrum für Schwerionenforschung
- Johann-Wolfgang-Goethe Universität (various institutes)
- Ruprecht-Karls-Universität
- Fachhochschule Köln
- TU München

- Westfälische Wilhelms-Universität
- Eberhard-Karls-Universität Tübingen
- Fachhochschule Worms

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)

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German Research Collaborations in EGI

ATLAS (High Energy Physics)

- Humboldt Universität zu Berlin
- Universität Bonn
- TU Dortmund
- TU Dresden
- Albert-Ludwigs-Universität Freiburg
- Justus-Liebig-Universität Giessen
- Georg-August-Universität Göttingen
- DESY

- Ruprecht-Karls-Universität Heidelberg
- Universität Mainz
- Ludwig-Maximilians-Universität München
- Max-Planck-Institut für Physik
- Universität Siegen
- Bergische Universität Wuppertal
- Julius-Maximilians-Universität Würzburg

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, procedures, innovation of tools)

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

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German Research Collaborations in EGI AUGER (Astronomy) - Bergische Universität Wuppertal - Karlsruhe Institute of Technology (various institutes) - RWTH Aachen University - Universität Hamburg - Universität Siegen - Experimentelle Teilchenphysik	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
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German Research Collaborations in EGI BELLE (High Energy Physics) DESY	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
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German Research Collaborations in EGI Comet J Parc (Physical Sciences) TU Dresden	EGI Supported Activities and Services The collaboration with EGI started back in 2015. The services from the EGI federation that the experiment uses include: - EGI HTC services from 7 EGI federated sites from FR 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)	5 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI COMPASS (Physical Sciences) - Ruhr-Universität Bochum - Universität Bonn - Universität Freiburg - Universität Mainz - TU München	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
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German Research Collaborations in EGI CTA (Astronomy) - Humboldt University Berlin - TU Dortmund - DESY - Universität Tübingen - Ruhr-Universität Bochum - Universität Würzburg - Universität Potsdam - Universität Heidelberg - Max-Planck (various institutes)	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
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German Research Collaborations in EGI CLARIN (Linguistics) CLARIN-D Uni of Tübingen	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
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German Research Collaborations in EGI CMS (High Energy Physics) - Universität Hamburg - DESY - RWTH Aachen University - KIT	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)	135 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI ELI-BEAM (Physical Sciences) • HZDR • Institut für Optik und Quantenelektronik Jena • Universität Hamburg • DESY/CFEL • Max Planck Institut für Quantenoptik	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
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German Research Collaborations in EGI ELI-NP (Nuclear Physics) • TU Darmstadt • Universität Köln • Friedrich Schiller Universität Jena • Justus-Liebig Universität Giessen • GSI Helmholtzzentrum für Schwerionenforschung GmbH • Helmholtz-Zentrum Dresden-Rossendorf	EGI Supported Activities And Services 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 • TU München • TU Darmstadt	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.	90 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI EMPHASIS (Agricultural Sciences) • Forschungszentrum Jülich • IPK • HMGU	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 Cloud Compute • EGI Online Storage • EGI DataHub • Technical support • Software integration and piloting)	EGI Cloud Compute EGI Online Storage EGI DataHub Technical support Software integration and piloting)	0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI FUSION (Fusion) • Forschungszentrum Karlsruhe (FZK) • Max Plank Institute for Plasma Physics	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	EGI Cloud Compute EGI Online Storage	0 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI HESS (Astroparticle Physics) • Max-Planck-Institut für Kernphysik • Universität Hamburg • Humboldt-Universität zu Berlin • Universität Erlangen-Nürnberg • DESY	EGI Supported Activities And Services The HESS experiment has been using compute resources from EGI partners for more than a decade. The services from • Universität Potsdam • Universität Heidelberg • Universität Tübingen	the EGI federation that HESS uses include: • EGI HTC services from 3 EGI participant countries (DE, FR, 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)	212 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI IceCube (Neutrino Observatory) • DESY • Friedrich Alexander Universität Erlangen-Nürnberg • Humboldt Universität zu Berlin • KIT • Ruhr-Universität Bochum • RWTH Aachen, Aachen • TU Dortmund • TU München • Universität Münster	EGI Supported Activities And Services The IceCube experiment has been using compute 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 3 EGI participant countries	(BE, DE 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
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German Research Collaborations in EGI ILC (High Energy Physics) • DESY • Universität Hamburg • Max-Planck-Gesellschaft	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
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German Research Collaborations in EGI JUNO (Neutrino Observatory) • Eberhard Karls Universität Tübingen • Forschungszentrum Jülich (various institutes) • Universität Hamburg • Johannes-Gutenberg Universität Mainz • RWTH Aachen University • TU München	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
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German Research Collaborations in EGI KM3NET (Neutrino Observatory) - Friedrich-Alexander-Universität Erlangen-Nürnberg - Universität Würzburg - Universität Erlangen - Universität Münster	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
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German Research Collaborations in EGI LOFAR (Radioastronomy) - Universität Bielefeld - Universität Bochum - Universität Bonn - Universität Köln - Universität Dortmund - Max-Planck-Gesellschaft (various institutes) - Jacobs Universität	- Bremen - Sternwarte Hamburg - Forschungszentrum Jülich - Leibniz-Institut für Astrophysik Potsdam - GEPRIS - Thüringer Landessternwarte - Universität Würzburg - TU Dortmund	EGI Supported Activities and Services LOFAR has been supported by EGI partners in the EOSC-hub project in the setup and validation of a data access and transformation workflow on High Throughput Compute (HTC) resources.	105 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI LHCb (High Energy Physics) - RWTH Aachen University - Universität Dortmund - MPI für Kernphysik - Physikalisches Institut Heidelberg	EGI Supported Activities and Services LHCb has been supported since 2012 as part of the EGI - WLCG collaboration, formally agreed in an 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
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German Research Collaborations in EGI LSST (Astronomy) - Zentrum für Astronomie de Universität Heidelberg - DESY - Leibniz-Institut für Astrophysik Potsdam - Ludwig-Maximilians-Universität - Max-Planck-Gesellschaft (various institutes)	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
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German Research Collaborations in EGI NA62 (High Energy Physics) Johannes Gutenberg Universität Mainz	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
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German Research Collaborations in EGI SeaDataNet (Oceanography) Alfred-Wegener-Institut für Polar- und Meeresforschung	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
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German Research Collaborations in EGI SKA (Radioastronomy) - NHochschule für Technik und Wirtschaft Berlin (HTW) - Universität Bielefeld - Ruhr-Universität Bochum - Universität Bonn - Max-Planck-Gesellschaft (various institutes) - TU Dortmund - Universität Hamburg	- Zentrum für Astronomie Heidelberg - Forschungszentrum Jülich - Universität Köln - Ludwig-Maximilians-Universität München - Astrophysikalisches Institut Potsdam (AIP) - Thüringer Landessternwarte Tautenburg (TLS) - Universität Würzburg	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
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German Research Collaborations in EGI SNO+ (High Energy Physics) TU Dresden	EGI Supported Activities And Services The SNO+ experiment has been using compute resources from EGI partners since 2011. The services from the EGI federation that the Snoplus experiment uses include: EGI HTC services from 3 EGI federated sites from DE, 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) 2 SCIENTIFIC PAPER(S) PUBLISHED IN 2025
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German Research Collaborations in EGI

VIRGO (Astrophysics)

- TU Darmstadt
- Max Planck Institute for Gravitationalphysik
- Friedrich-Schiller-Universität Jena

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)

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German Research Collaborations in EGI

WeNMR (Structural Biology)

- TU BERLIN
- MDC BERLIN
- Fraunhofer IZI-BB
- Albert-Ludwigs-Universität Freiburg
- Hamburg Advanced Research Centre for Bioorganic Chemistry
- EMBL
- Universität Münster

- Martin-Luther-Universität Halle-Wittenberg
- Karlsruhe Institute of Technology
- Helmholtz Zentrum München
- Humboldt-Universität
- Universität Bonn
- Goethe-Universität Frankfurt
- Universität Wuppertal
- Universität Marburg
- and many others

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

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German Research Collaborations in EGI

XENON (Dark Matter Physics)

- Albert-Ludwigs-Universität Freiburg
- Johannes Gutenberg Universität Mainz
- Max-Planck-Institut für Kernphysik
- Universität Münster
- Karlsruhe Institute of Technology

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



Participated Projects

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

- iMagine (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 German 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.



interTwin



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

- Fraunhofer-Gesellschaft
- Deutsches Forschungszentrum für Künstliche Intelligenz

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

- Forschungszentrum Jülich GmbH
- Karlsruher Institut für Technologie
- GWDG
- DAASI International GmbH

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

- Alfred-Wegener-Institut forscht in den Polarregionen und Ozeanen
- EMBL

Project Title



Scope of Collaboration

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.

Participating beneficiaries from the country

- Georg-August-Universität Göttingen
- Max Weber Stiftung
- Technische Informationsbibliothek
- Freie und Hansestadt Hamburg

Project Title



Scope of Collaboration

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.

Participating beneficiaries from the country

- Fraunhofer-Gesellschaft
- FIR e. V. an der RWTH Aachent
- International Data Spaces EV
- ECLIPSE Foundation Europe GMBH
- Deutsche Institut für Normung e.V.

Project Title



Scope of Collaboration

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..

Participating beneficiaries from the country

- Fraunhofer-Gesellschaft
- FIWARE
- International Data Spaces EV
- ACATECHILVO

Project Title



Scope of Collaboration

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.

Participating beneficiaries from the country

- Fraunhofer-Gesellschaft
- Media Solution Center
- Baden Württemberg e.V.
- Deutscher Museumsbund e.V.
- Time Machine Organisation

Project Title



Scope of Collaboration

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).

Participating beneficiaries from the country

- EMBL

Project Title



Scope of Collaboration

EGL is contributing to the architectural design and implementation of open distributed software to ensure that AI4Europe evolves as a distributed ecosystem. EGL 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

- Charité
- German Electron Synchrotron
- German Cancer Research Center
- TU München
- Universitätsklinikum Aachen

Project Title



Scope of Collaboration

EGL 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

- Albert-Ludwigs-Universität Freiburg

Project Title



Scope of Collaboration

EGL conducts environmental impact assessments across the EGL 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. EGL also provides training, consultancy, and communications support.

Participating beneficiaries from the country

- TU München

Project Title



Scope of Collaboration

EGL 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

- Karlsruher Institut für Technologie
- Forschungszentrum Jülich GmbH
- Helmholtz-Zentrum für Umweltforschung
- Deutsche Klimarechenzentrum DKRZ
- Senckenberg Gesellschaft für Naturforschung
- GESIS – Leibniz-Institut für Sozialwissenschaften

Project Title



Scope of Collaboration

EGL supports research into sampling, analysis, quantification techniques, new materials, and models to evaluate plastics' environmental interactions, enabling mitigation measures and informed management decisions..

Participating beneficiaries from the country

- Bundesanstalt für Gewässerkunde
- Helmholtz-zentrum für Ozeanforschung Kiel (Geomar)
- Leibniz-Institut für Ostseeforschung Warnemünde
- BASF Se

Project Title



Scope of Collaboration

EGL 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

- Kaasa Solution GmbH

Project Title



Scope of Collaboration

EGL 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

- Forschungszentrum Jülich
- Rheinische Friedrich-Wilhelms-Universität Bonn
- UFZ – Wissenschaftlerinnen und Wissenschaftler

Project Title



Scope of Collaboration

EGL supports defining interoperability standards with EOSC and the broader landscape, while leading the design of sustainable services beyond the project lifetime. It delivers a federated cloud environment and EGL Notebooks for scalable

workflow development, data analysis, and sharing within the PITHIA e-science centre.

Participating beneficiaries from the country

- Deutsche Zentrum für Luft- und Raumfahrt e. V.
- GFZ-Helmholtzzentrum

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 - Fraunhofer-Gesellschaft - Gottfried Wilhelm Leibniz Universität Hannover
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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 - Constructor University Bremen - DFKI
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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 - Fraunhofer-Gesellschaft - International Data Spaces EV - eco - Verband der Internetwirtschaft - VISARIGHT GmbH
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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 - NEC Laboratories Europe - Universitätsklinikum Heidelberg - Karlsruher Institut für Technologie - Universitätsklinikum Heidelberg - Universitätsklinikum Schleswig-Holstein - Deutsche Krebsforschungszentrum
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Infrastructure Contributions

The EGI Federation offers two complementary compute capabilities: the High-Throughput Compute (HTC) federation and the Cloud federation. 16 German data centres contribute to these federations:

HTC Federation:

- DESY-HH (DESY)
- GSI-LCG2 (GSI Helmholtzgesellschaft für Schwerionenforschung GmbH)
- FZJ (Forschungszentrum Jülich GmbH)
- FZK-LCG2 (KIT)
- GoeGrid (Georg-August-Universität Göttingen)
- LRZ-LMU (LMU LCG Tier-2)
- mainz (German HEP ATLAS Tier3, Universität Mainz)
- MPPMU (Rechenzentrum der Max-Planck-Gesellschaft)
- RWTH-Aachen (RWTH Aachen University)
- UNI-BONN (Rheinische Friedrich-Wilhelms-Universität Bonn)
- UNI-FREIBURG (Albert-Ludwigs-Universität Freiburg)
- NI-SIEGEN-HEP (Experimentelle Teilchenphysik; Department Physik; Naturwissenschaftlich-Technische Fakultät; Universität Siegen)
- wuppertalprod (Bergische Universität Wuppertal Fachbereich C – Physik)

Cloud Federation:

- GoeGrid (Georg-August-Universität Göttingen)
- SCAI (Fraunhofer SCAI)

The data centres provided 16 service endpoints and delivered 970,235,037HTC CPUhours and 510,501 Cloud CPUhours in total to EGI communities over the year. With the help of the EGI Security Vulnerability Group, the German sites avoided 49 critical vulnerabilities in

foundational software systems during the year.

The most active international user groups of the country compute resources were:

- ATLAS 49.35%;
- CMS 22.19%;
- ALICE 18.10%;
- LHCb 7.72%;
- BELLE 2.4%

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

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 EGI Foundation

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