

Introduction to EGI

Mission

Services

Governance

International collaborations

Contribution to DSM and EOSC



www.egi.eu

EGI-Engage is co-funded by the Horizon 2020 Framework Programme
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EGI: Advanced Computing for Research

EGI's mission is to create and deliver open solutions for science and research infrastructures by federating digital capabilities, resources and expertise between communities and across national boundaries.

Compute



Cloud Compute >

Run virtual machines on demand with complete control over computing resources



Cloud Container Compute >

Run Docker containers in a lightweight virtualised environment



High-Throughput Compute >

Execute thousands of computational tasks to analyse large datasets

Training



FitSM training >

Learn how to manage IT services with a pragmatic and lightweight standard



Training infrastructure >

Dedicated computing and storage for training and education

Storage and Data



Online Storage >

Store, share and access your files and their metadata on a global scale



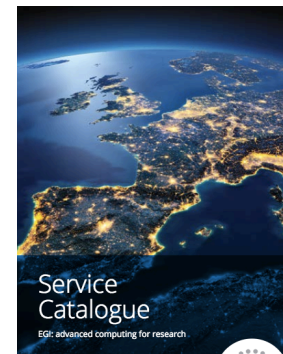
Archive Storage >

Back-up your data for the long term and future use in a secure environment



Data Transfer >

Transfer large sets of data from one place to another





www.egi.eu



<http://go.egi.eu/ServiceCatalogue>

The EGI Services are provided by the EGI Federation

-  **EGI Council participants:** national e-infrastructure providers and international research organisations (CERN and EMBL)
-  **Integrated e-infrastructure providers**



826,000
Cores of compute capacity



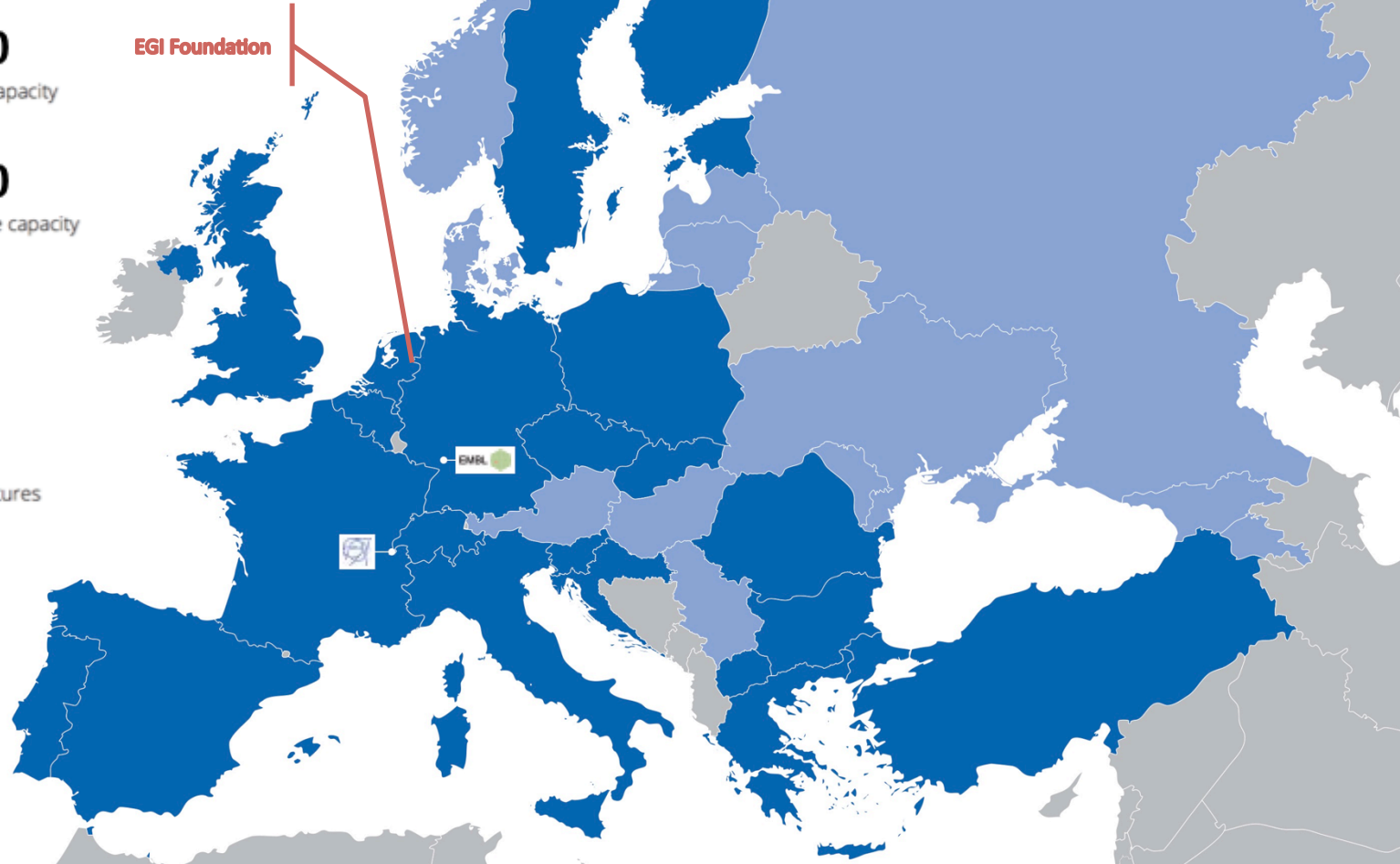
560,000
Terabytes of storage capacity



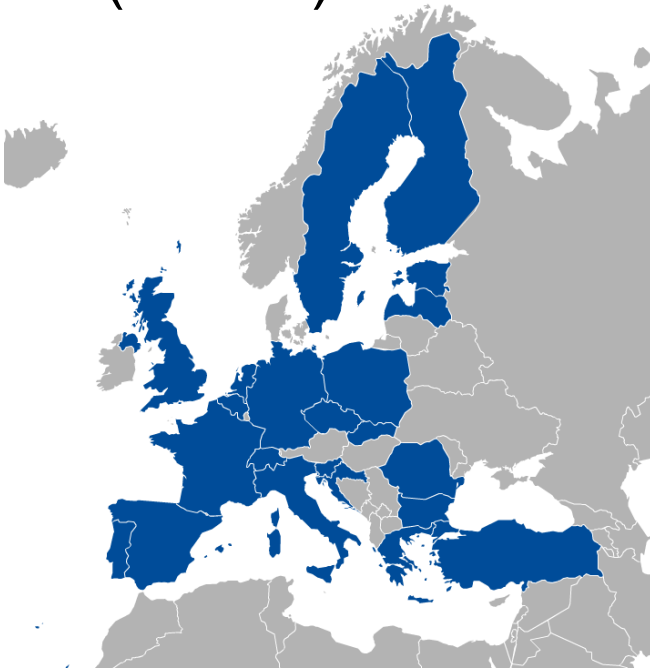
48,000
Users



15
Research Infrastructures integrated with EGI



- Major national e-Infrastructures: 22 NGIs
- EIROs: CERN and EMBL-EBI
- EGI Foundation
- (ERICs)

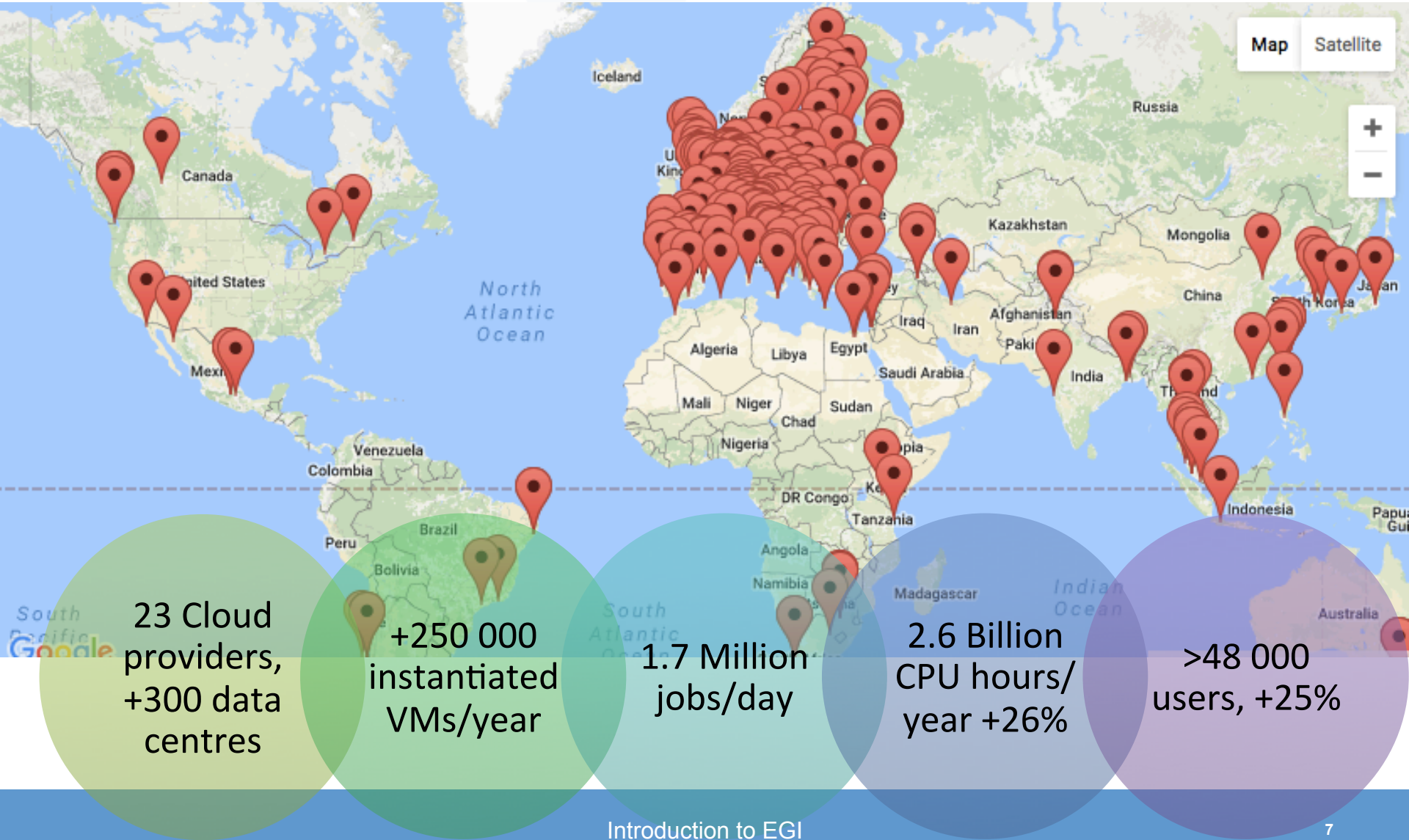


International Partnerships

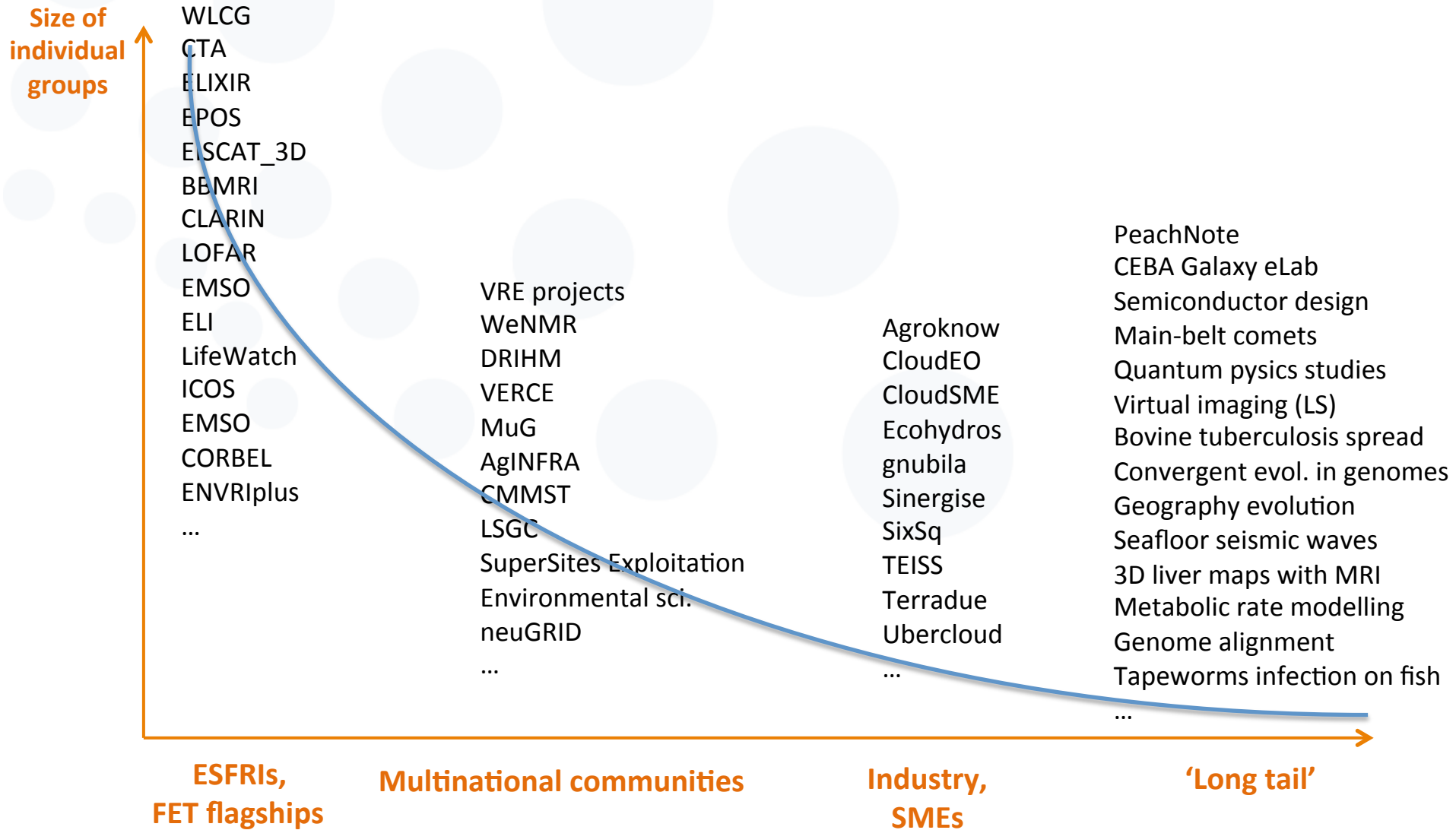


EGI Federation, 2016 QR3

The largest distributed compute e-Infra worldwide

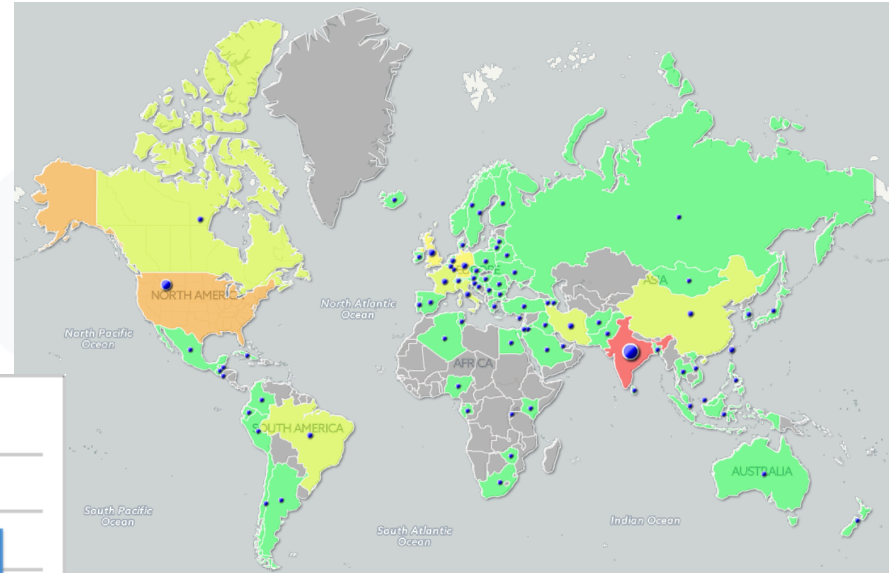
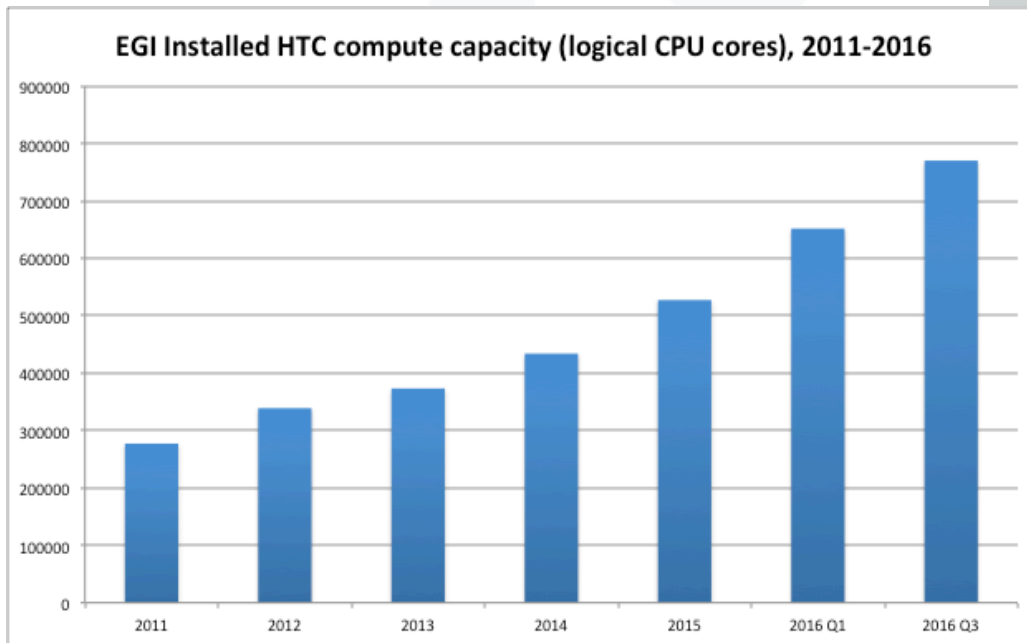


Serving researchers and innovators



Supporting international research communities and thematic services

Installed compute capacity trends 2011-2016

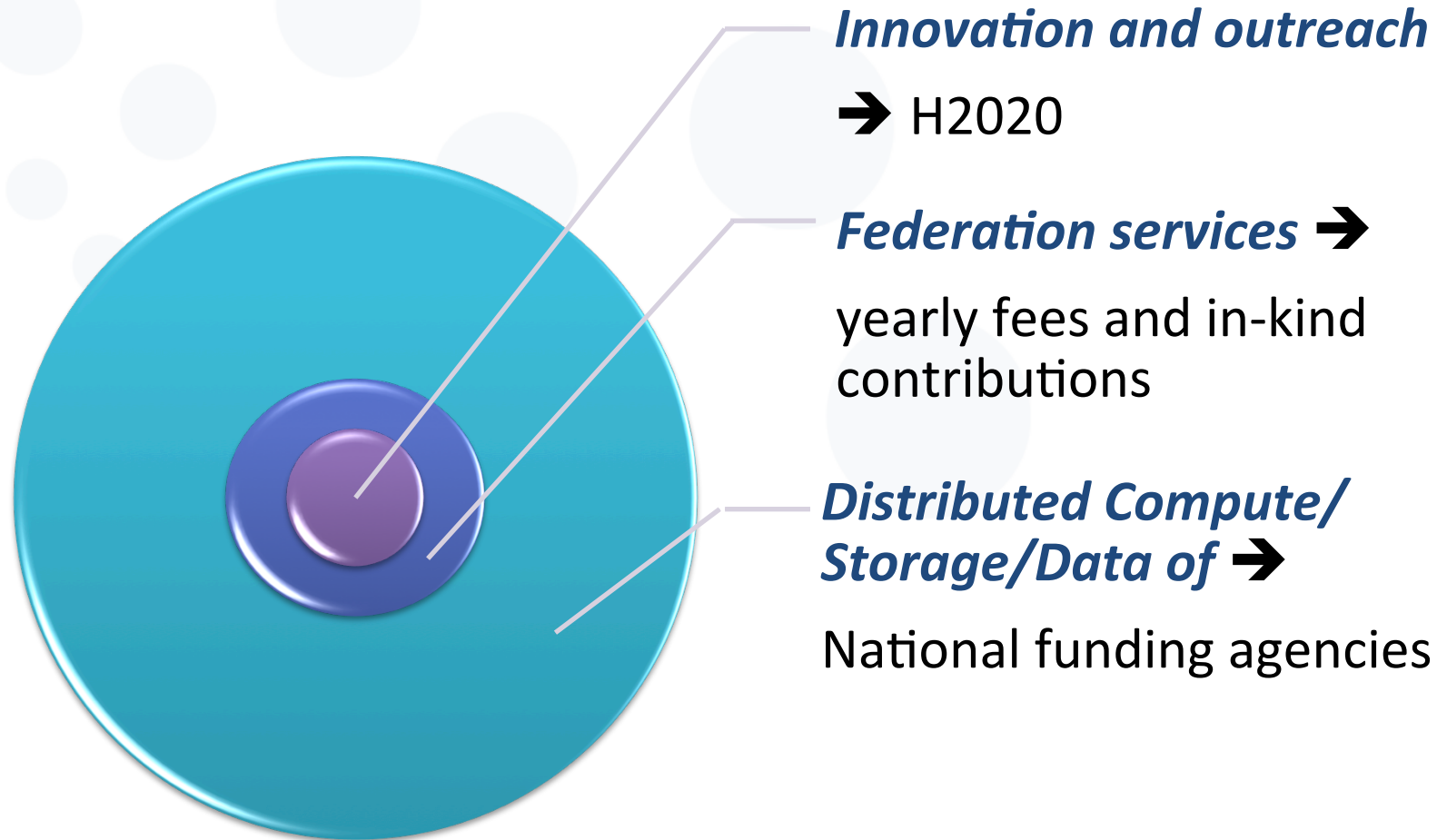


Structural Biology Distribution of users (2016, QR3)

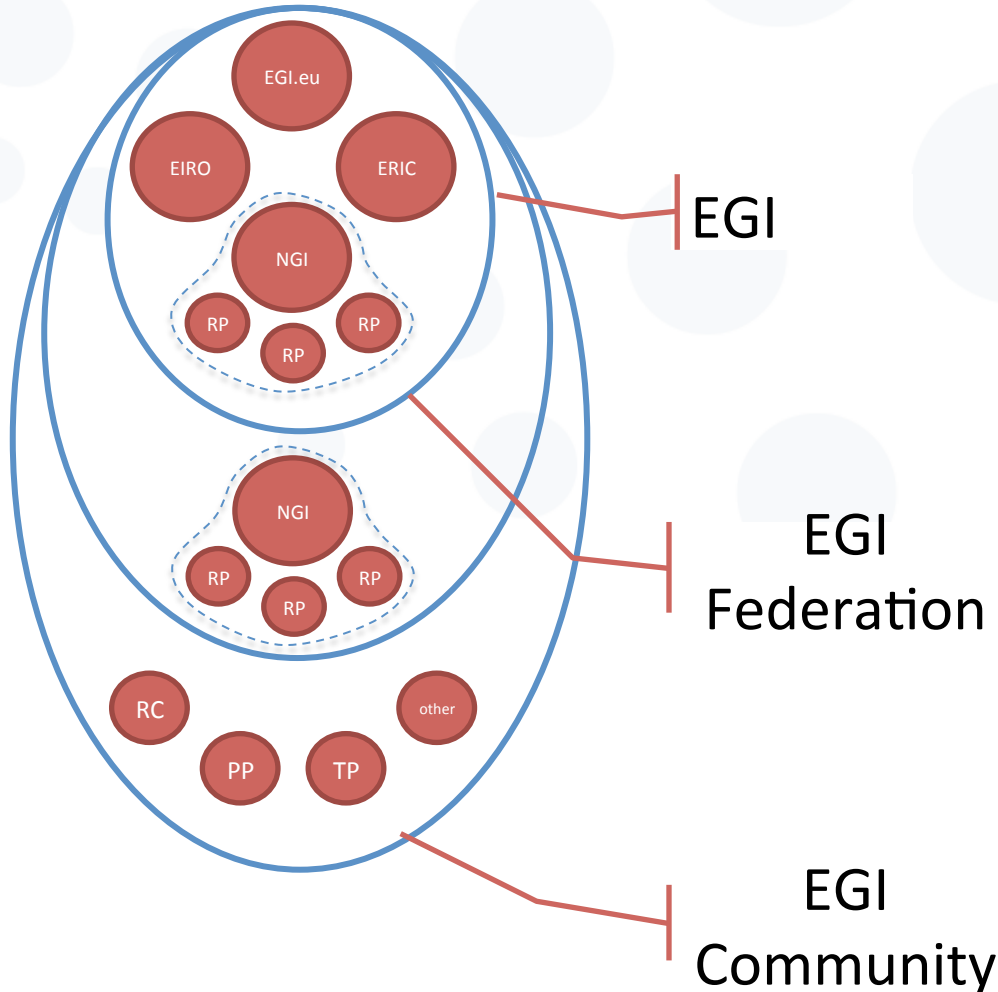
- 2700 users
- 81 countries

(credits: A. Bonvin, WeNMR)

Current Funding models



EGI → EGI Federation → EGI Community



Term	Definition
EGI	EGI.eu, the EGI.eu Participants and Associated Participants, their related organisations represented within EGI.eu that contribute to the objective of the foundation
EGI Federation	EGI Partnership plus all resource providers (RP) and representing organisations that established an MoU with EGI.eu
EGI Community	EGI Federation plus the served research communities (RC), the the technology providers (TP), partners in projects (PP) and all other organisations having agreements with EGI.eu

EGI access policies

http://www.egi.eu/services/access_policy/

- Policy-based
 - users are granted access based on policies defined by the EGI resource providers or by EGI.eu; such policies usually apply to resources being offered “free at point of use” to meet some national or EU level objective
- Wide access
 - users can freely access scientific data and digital services provided by EGI resource providers
- Market-driven
 - users can negotiate a fee to access services either directly with EGI resource providers or indirectly with EGI.eu
- EGI aligned with the [charter for access to RIs](#)

EGI contribution to EOSC and the Digital Single Market

- ✧ IaaS world-wide open standard-based federated provider; PaaS and SaaS from thematic partners
- ✧ Cross-border pooling of national e-Infrastructures, for sharing of compute/storage, research dataset, applications within and across scientific collaborations
 - ✧ Harmonization of national access policies through brokering
- ✧ Definition, implementation and adoption of open cloud standards
- ✧ Business programme for support of
 - ✧ Research performing private organizations
 - ✧ Suppliers of IaaS/PaaS/SaaS solutions
 - ✧ EO data reuse for business applications in the cloud

- An **Open Science Service Exchange** as partnership of public/commercial organizations and initiatives responsible for
 - Provisioning of wide set of services to researcher and innovators
→ consolidation of national e-Infrastructures, open standards, technical and business process integration among the suppliers (e-Infrastructures, Research Infrastructures etc.)
 - Platform integration for community-specific capabilities with coordinated outreach
 - Aggregation of demand for economies of scale, technical requirements translations, cross-border access via brokering and procurement, end-to-end operations
 - Development of human capacity
 - A “Digital innovation hub” to support innovation with industry/SMEs

Thank you for your attention.

Questions?



Acknowledgements

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