

IBERGRID

www.ibergrid.eu



*A joint Journey
from the Grids to the Clouds.*

a tribute to the legacy of Gaspar Barreira

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IFCA-CSIC,

Ibergrid Coordinator in Spain



Inspired
Spring 2012

European Grid Infrastructure
News from the EGI community

- How to build a grid // page 1
- Stories from the Grid - the premiere // page 2
- EGI infrastructure: figures and trends // page 3
- Envisioning the Future // page 5
- Gateways for science // page 6
- IberGrid: A Tale Of Two Countries // page 7**
- Desktop Grids as middleware // page 8
- EGI Customer Relationship Management - Hows and Whys // page 9
- Technical Forum 2012: It's time to submit your abstract! // page 10
- Upcoming events: Summer schools // page 10

IberGrid: A tale of two countries

This is a profile of the operations center that brings Portugal & Spain together.

On the western edge of Europe, on the Iberian Peninsula, sit Spain and Portugal. The two countries have many things in common and one of them is their grid infrastructure. Since the early days of the European grid they have shared responsibility for the infrastructure, combining expertise to provide the best support to their users. In 2007 they officially created IberGrid to formalise the arrangement and five years on they are still going strong.

Back in 2007 both Portugal and Spain had built up a lot of experience and expertise in providing resources through the grid infrastructure. Throughout they had worked very closely together offering advice and help to each other when necessary. Launching a joint plan for providing



Optimising resources: Spain & Portugal join forces to make the most of what they have (Illustration: the Iberian peninsula as published in Robert Wilkinson's General Atlas, circa 1870)

“The two countries have many things in common, one of them is their Grid Infrastructure”

EGI is a federation of over 200 computing and data centres spread in Europe and worldwide

EGI delivers services for computing and data-intensive science

47 Countries

61,000 users

1,700 Open Access

12 Integrated e-Infrastructures

31 large-scale research collaborations

Publications in 2018

The Nobel Prize in Physics 2013



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François Englert
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Peter W. Higgs
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The Nobel Prize in Physics 2017



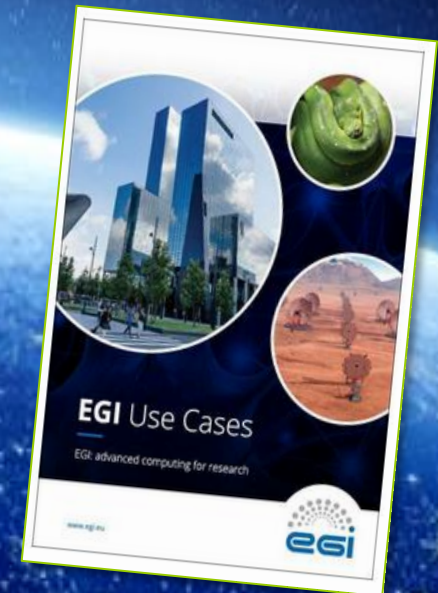
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LHC Collaboration

LIGO-VIRGO Collaboration



The EGI Federation (2019)

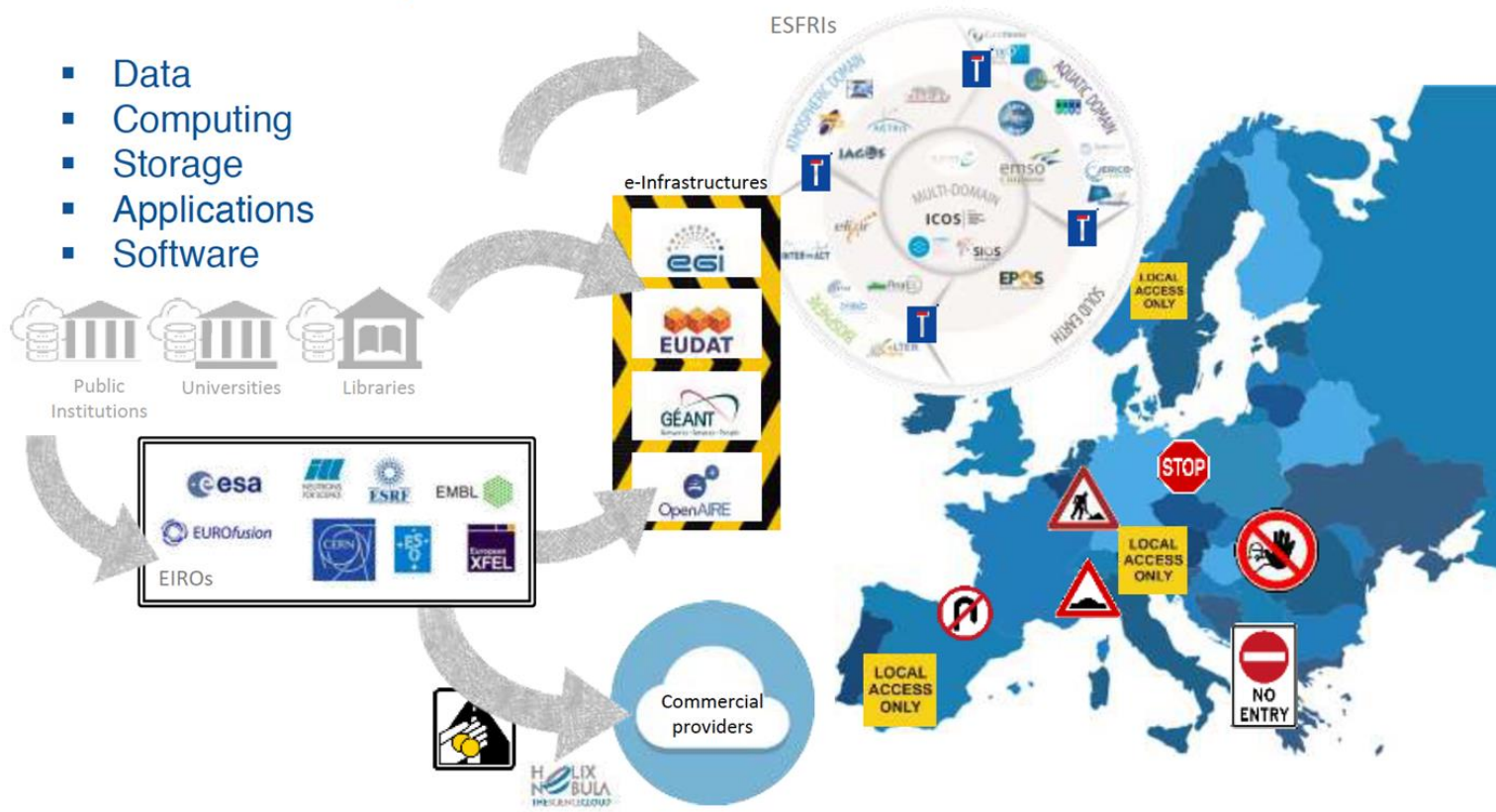




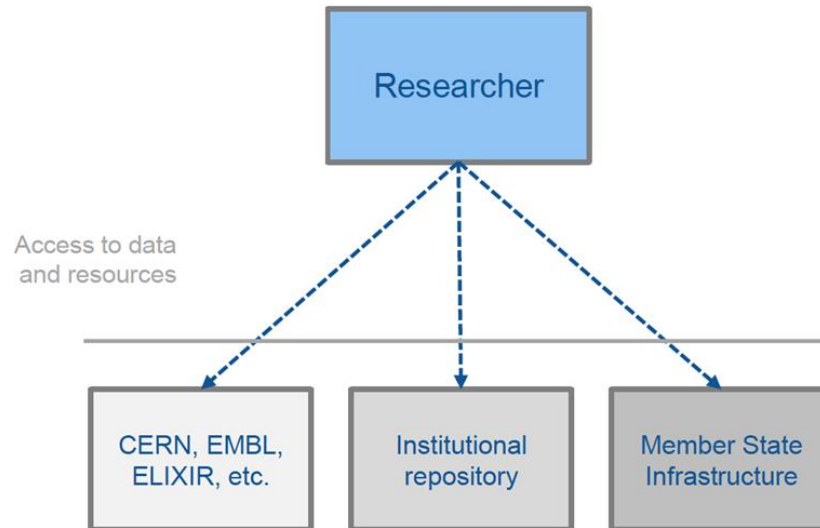
**EUROPEAN OPEN
SCIENCE CLOUD**

Harmonizing E-infrastructures in Europe

Under the current model, fragmentation and uneven access to information would prevail



A. European researchers face data fragmentation and unequal access to quality information sets



- Fragmented access (across scientific domains, countries and governance models; varying access policies)
- Limited cross-disciplinary access to data sets (i.e. interdisciplinary research)
- Non-interoperable services and data
- Closed data

Limited and limiting access for an ordinary European researcher

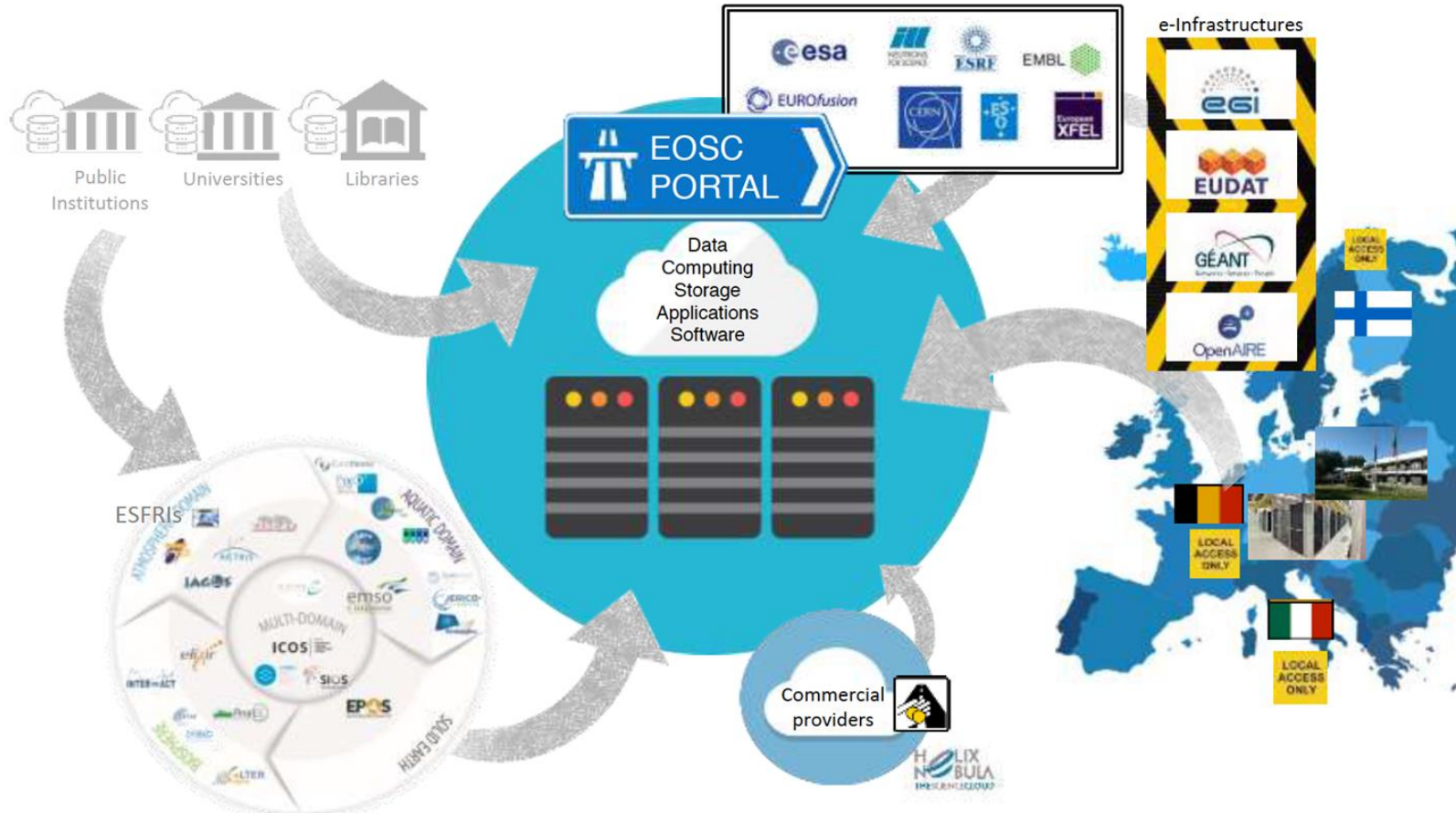


European Commission Digital Single Market (DSM)

April 2016: European Cloud Initiative COM(2016) 178
as part of the 'Digitizing Industry' package

- **EuroHPC**: European Strategy on High Performance Computing
- Widening access and building trust: **Open Science**
- European Open Science Cloud: **EOSC** as the instrument to support **Open Science**

A totally centralized system (e.g. 'EU Google') would not be realistic nor accepted by Member States



European
Commission

Under the federated model, access to data would be universal,
building on a strong legacy



What is the EOSC?

A trusted and open virtual environment for the scientific community with seamless access to services addressing the whole research data life cycle.

EOSC

Is potentially available to 1.7m EU researchers and over 70 million professionals in science

Leverages on past infrastructure investment (10b per year by MS, two decades EU investment)

EOSC Services and Resources eosc-portal.eu



Networking



Compute



Storage



Sharing &
Discovery



Data
Management



Processing &
Analysis

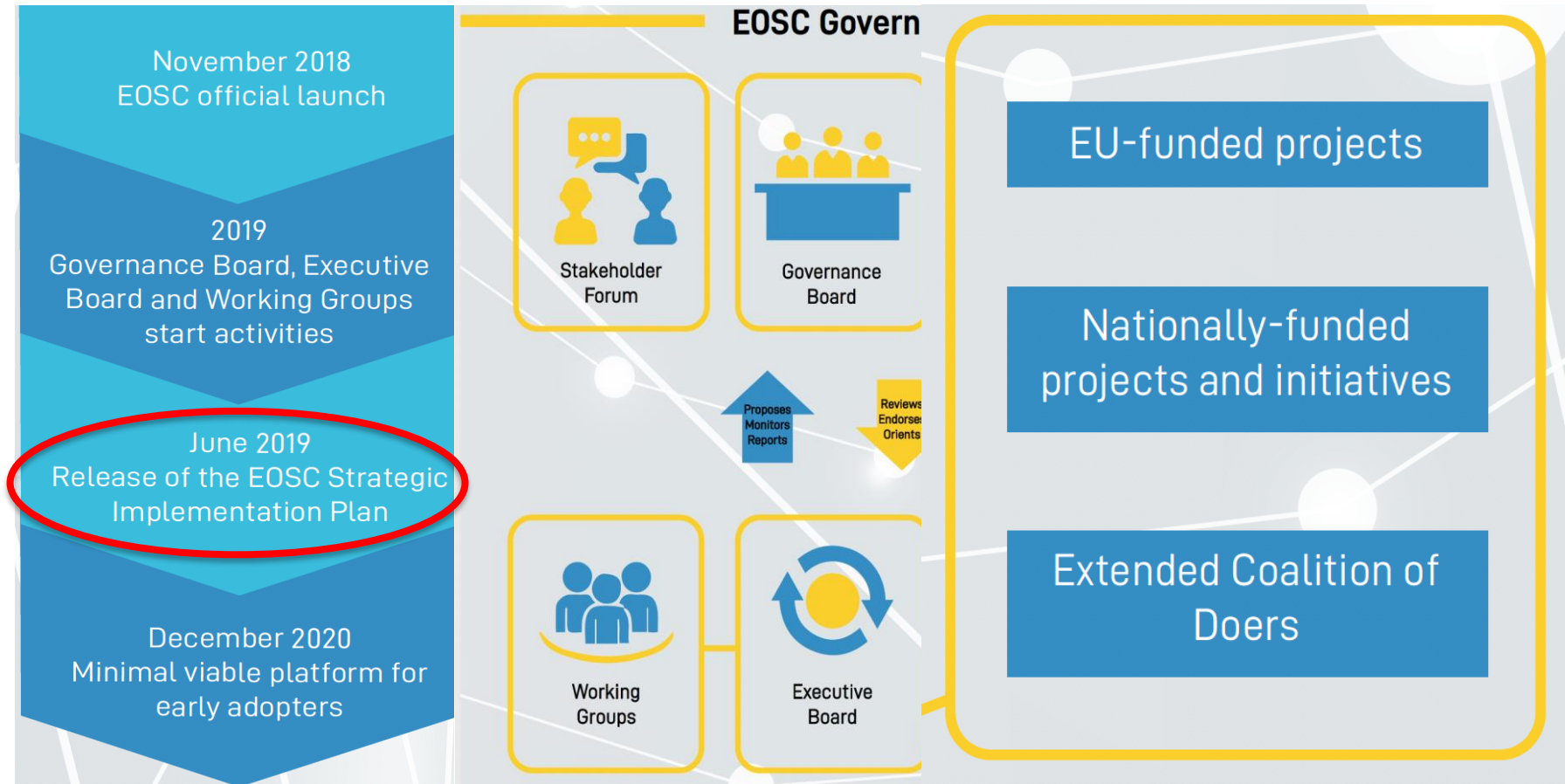


Security &
Operations





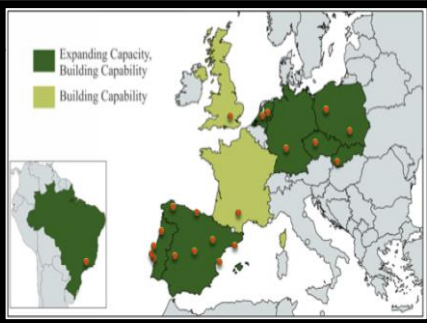









Training &
Support

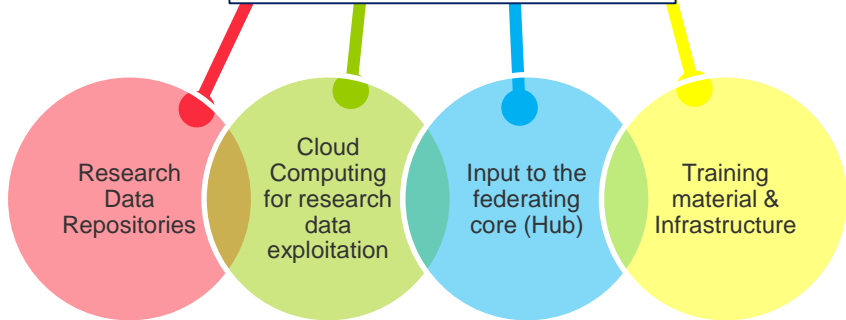
Organization and Roadmap



EU Funded Projects to implement EOSC

Acronym				
Region				
Coordinator				

- The EC has funded 4 projects to organize EOSC harmonization activities across Europe
- In the period 2019-2022 will work together to implement the EOSC vision.



Data Archiving and Networked Services





Design Study



EGI Design Study, D4.4 “EGI Blueprint” (2009)

...”the National Grid Initiatives elected as Chairman of the EGI Board Prof. Gaspar Barreira, and as Vice-chairman Prof. Michal Turala. The board will discuss the bylaws of EGI and instantiate EGI.org, after which the EGI Board will be transfer into the EGI Council”

NGIs. Each NGI declared their support for the **EGI Vision** (<http://www.eu-egi.eu/vision.pdf>) and the EU Project EGI_DS, and nominated up to two representatives for the EGI AB. At this point in time, 38 countries are collaborating via their NGI to the work of EGI_DS.

Meanwhile, the NGIs assembled in the EGI AB evolved into the EGI Policy Board (**EGI PB**), where a chairman (Prof. Barreira, Portugal) and a vice-chairman (Michal Turala, Poland) have been elected. Currently, the EGI PB discusses the EGI PB Bylaws, which describe the collaboration within the EGI PB. Upon installing the EGI model and instantiating EGI.org, the EGI Policy Board is expected to transfer into the EGI Council, which is the sole governing and decision making body for EGI.

The following chapters describe the EGI model in more detail, focusing on the high-level description of its components and the environmental effects and requirements, such as a necessary funding model.

Michal Turala,
Institute of Nuclear Physics,
Kraków

“The work with him was always very pleasant, as he was a nice person but also constructive and able to compromise”

