



Enabling Grids for E-science

# Related Grid Projects

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*Deputy Project Director*

The EGEE logo and text are displayed on a dark blue background. The logo consists of the letters 'e', 'G', 'e', and 'e' in a stylized font, with the 'G' in yellow and the others in white. Below the logo, the text 'Enabling Grids for E-science' is written in white, with 'E-science' in yellow.

EGEE  
Enabling Grids  
for E-science



**4th EGEE Conference**

Pisa

24-28 October 2005

[www.eu-egee.org](http://www.eu-egee.org)



INFSO-RI-508833

- **Aim of EGEE:**

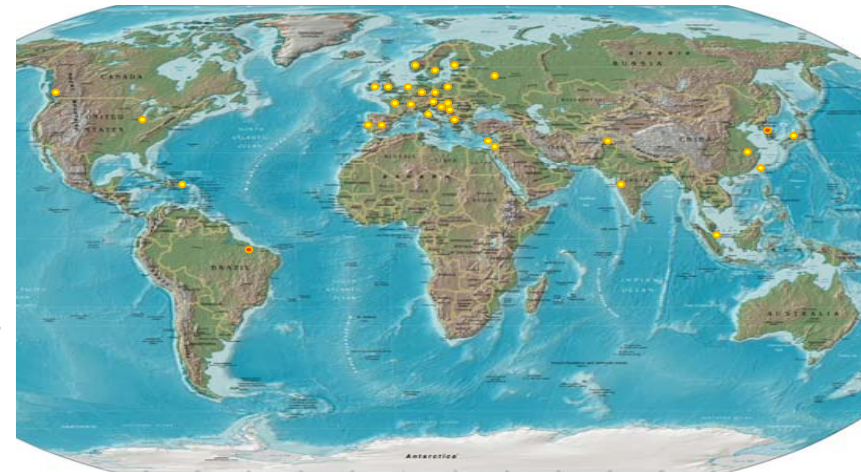
*“to establish a seamless European Grid infrastructure for the support of the European Research Area (ERA)”*

- **Achievements of EGEE:**

- Exceeding almost all final goals
- Scope expanded beyond Europe

- **Transition EGEE → EGEE-II**

- EGEE conceived as first two years of four-year plan
- Services continuously available



- **EGEE-II start:**

- Full capacity from day one
- Large-scale, production-quality infrastructure
- Supporting a wide range of applications
- Staff with extensive knowledge of Grid technology



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# EGEE Infrastructure

**More than 170 Sites  
connected to EGEE Infrastructure**



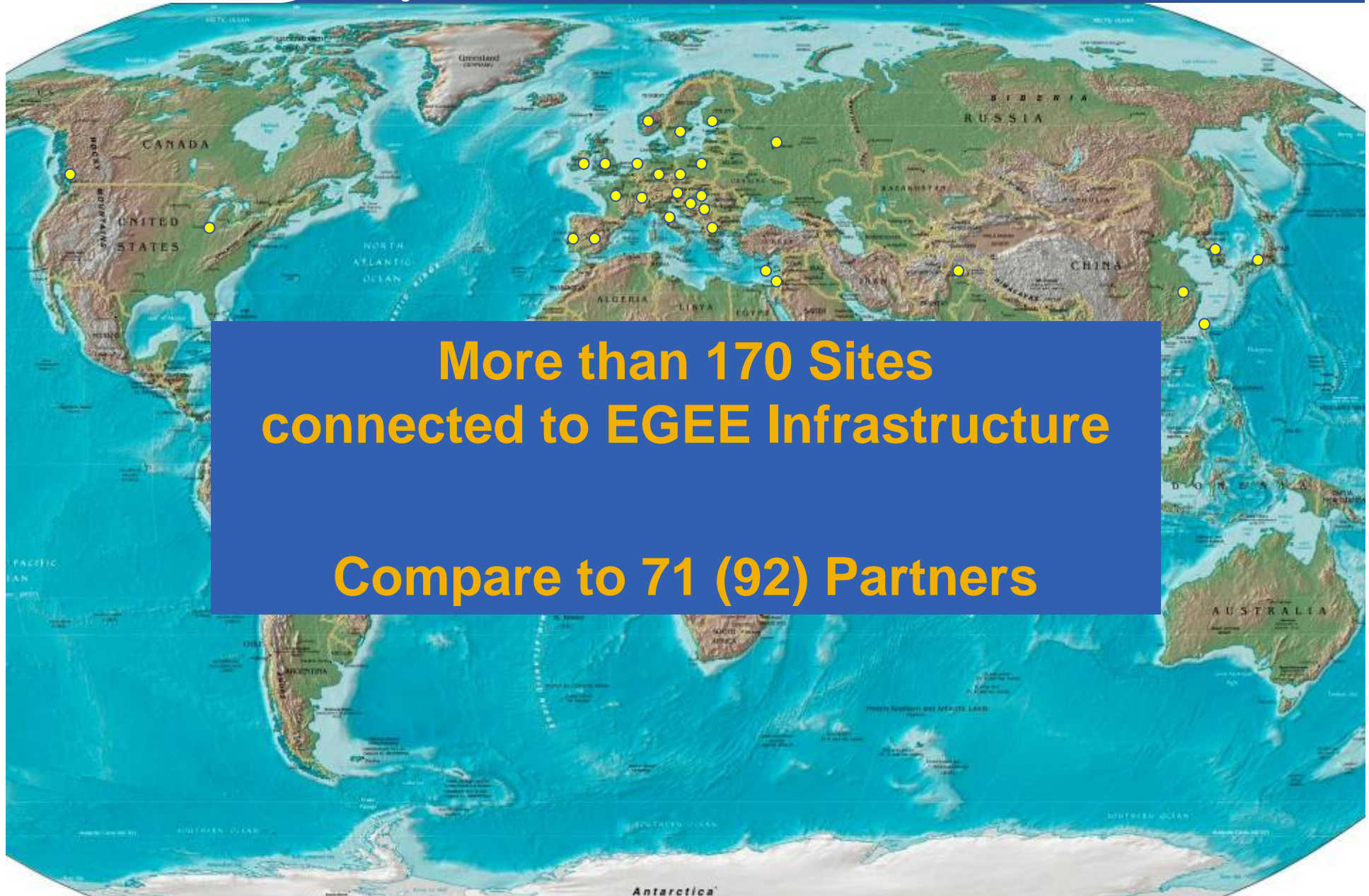


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# EGEE Infrastructure

**More than 170 Sites  
connected to EGEE Infrastructure**

**Compare to 71 (92) Partners**



## Different kinds of relations:

- **Partners of EU Project EGEE / EGEE-II**
- **(Voluntary) Contributors to the EGEE Infrastructure**
- **Independent EGEE Infrastructure Providers**
- **National/Regional Grid Projects  
building on or connecting to EGEE**

# Sample of National Grid Projects

- Austrian Grid Initiative
- DutchGrid
- France:
  - e-Toile
  - ACI Grid
- Germany
  - D-Grid
  - Unicore
- Grid Ireland
- Italy
  - INFNGrid
  - GRID.IT
- NorduGrid
- UK e-Science
  - National Grid Service
  - OMII
  - GridPP project
- Greek HellasGrid



Action Concertée Initiative [ACI]  
Globalisation des Ressources Informatiques  
et des Données [GRID]



Grid.it  
project



National Grid Service  
core production computational and data grid

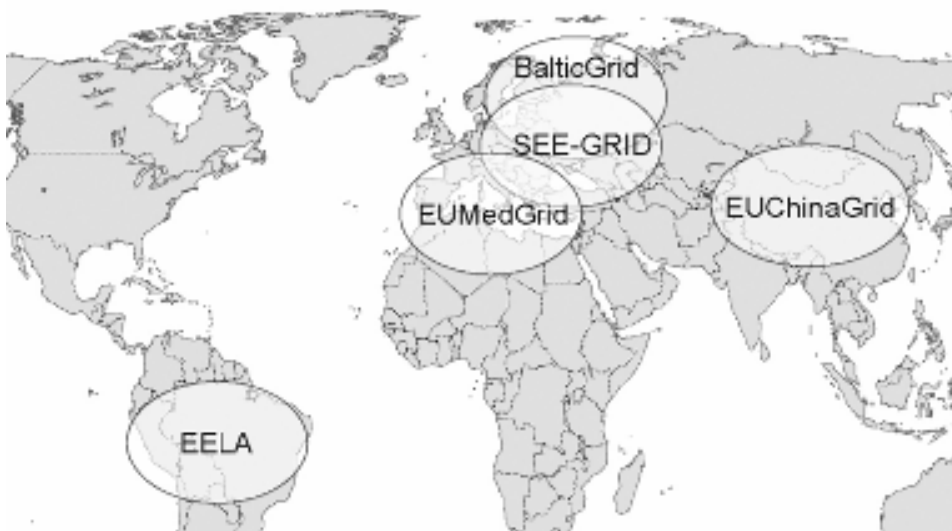


open middleware  
infrastructure institute

## Different kinds of relations:

- **Partners of EU Project EGEE / EGEE-II**
- **(Voluntary) Contributors to the EGEE Infrastructure**
- **Independent EGEE Infrastructure Providers**
- **National/Regional Grid Projects  
building on or connecting to EGEE**
- **Independent Grid Infrastructure Projects**
- **Related Projects:**
  - Infrastructure Projects
  - Application Projects
  - Support Projects

- **Infrastructure Projects**
  - DEISA, SEEGRID
  - **New:** BalticGrid, EELA, EUChinaGrid, EUMedGrid, ...





- **Application Projects**

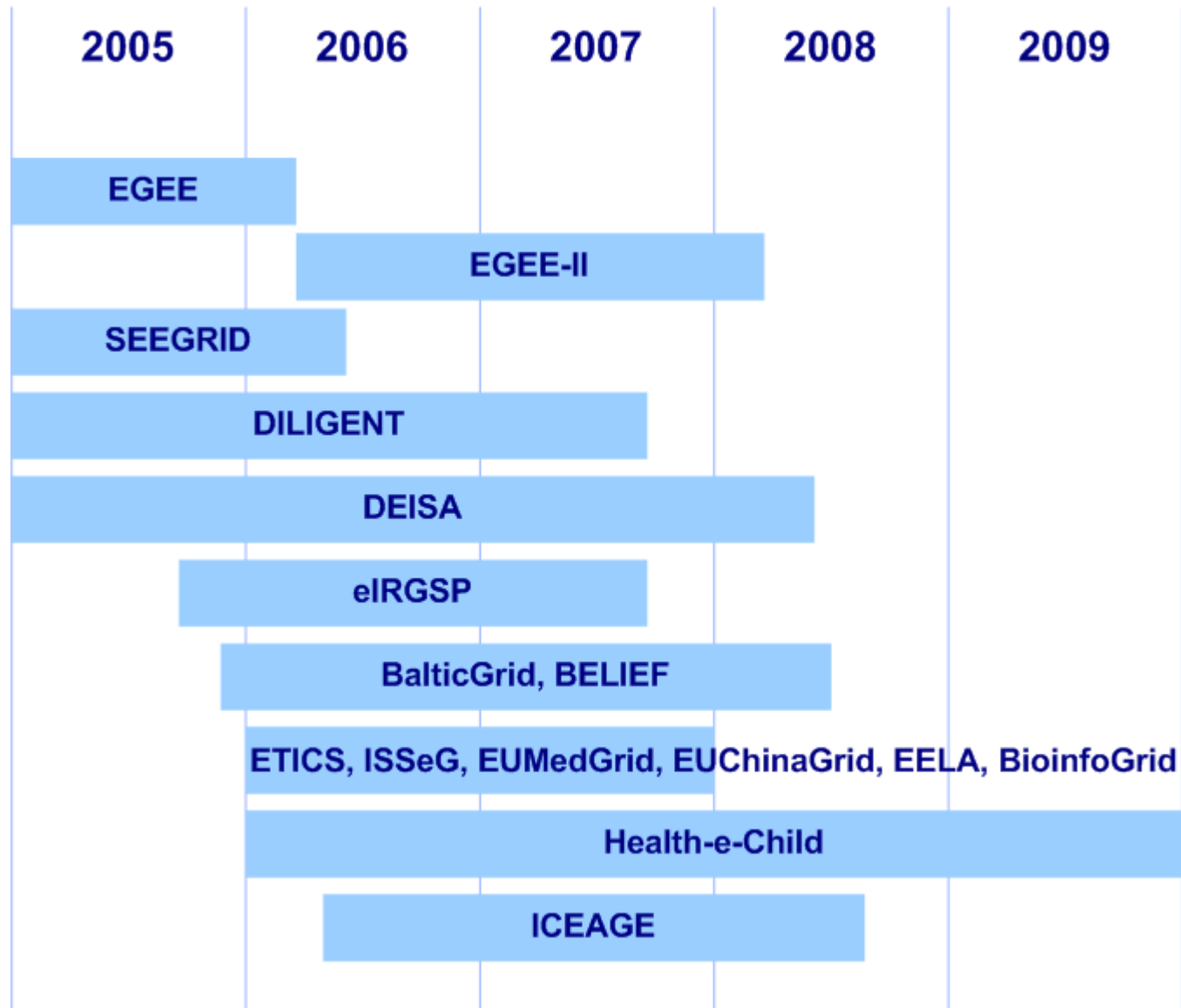
- DILIGENT
- **New:** BIOINFOGRID, Health-e-Child, ...

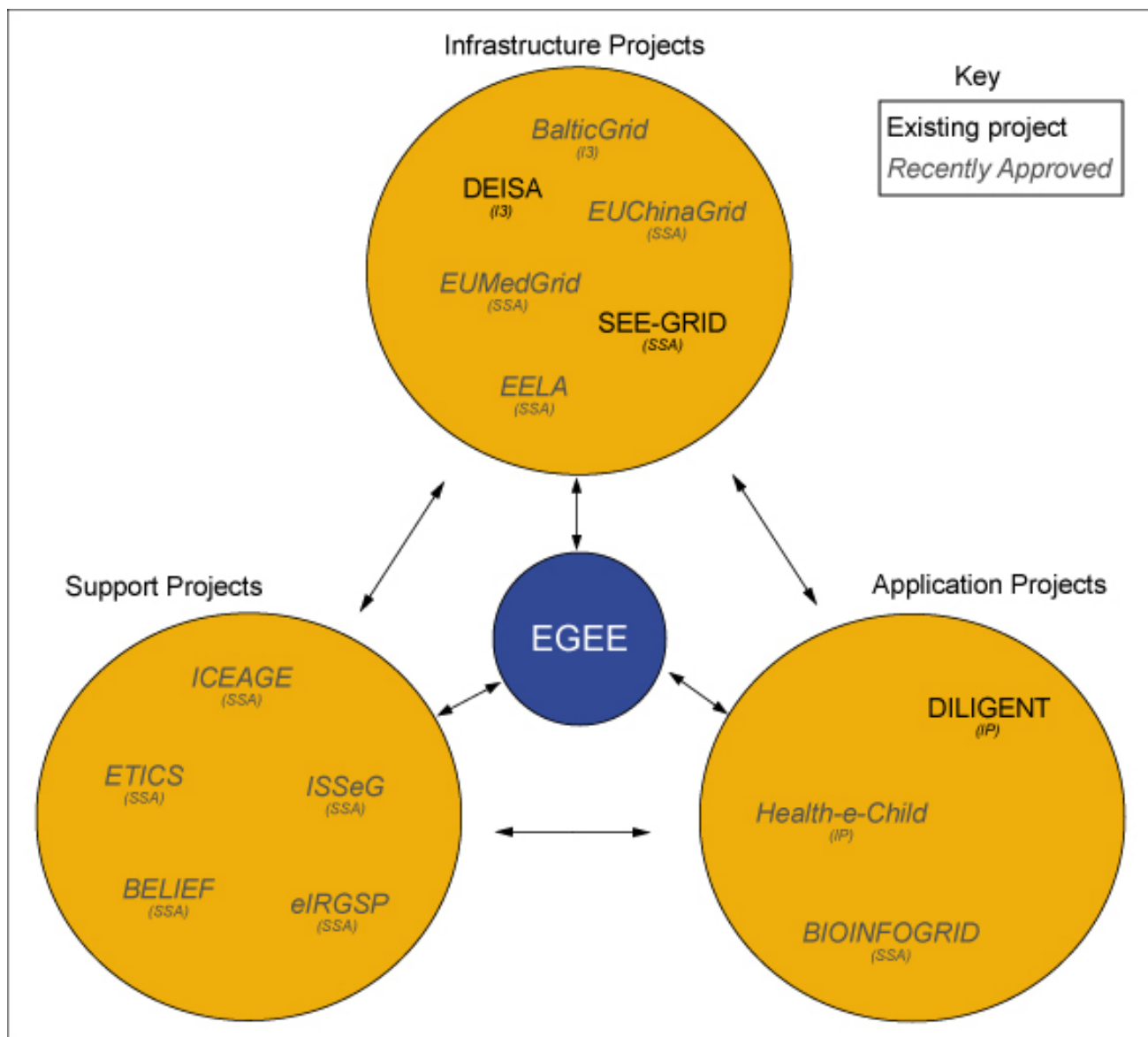


- **Support Projects**

- **New:** BELIEF, ETICS, eIRGSP, ICEAGE, ISSeG, ...





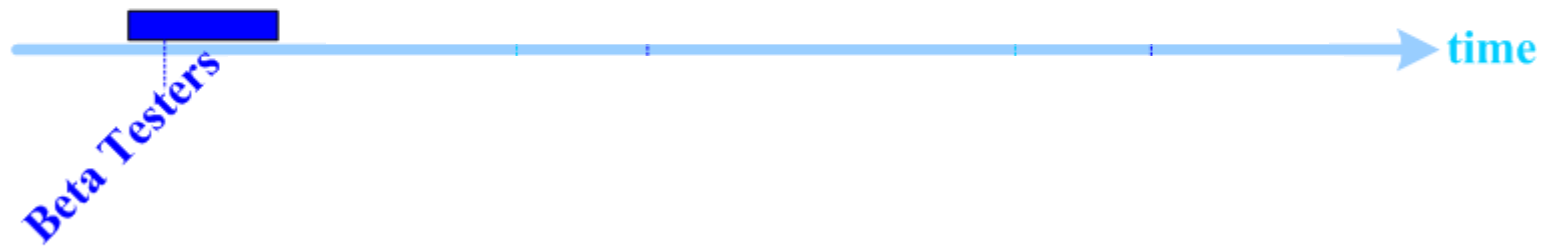




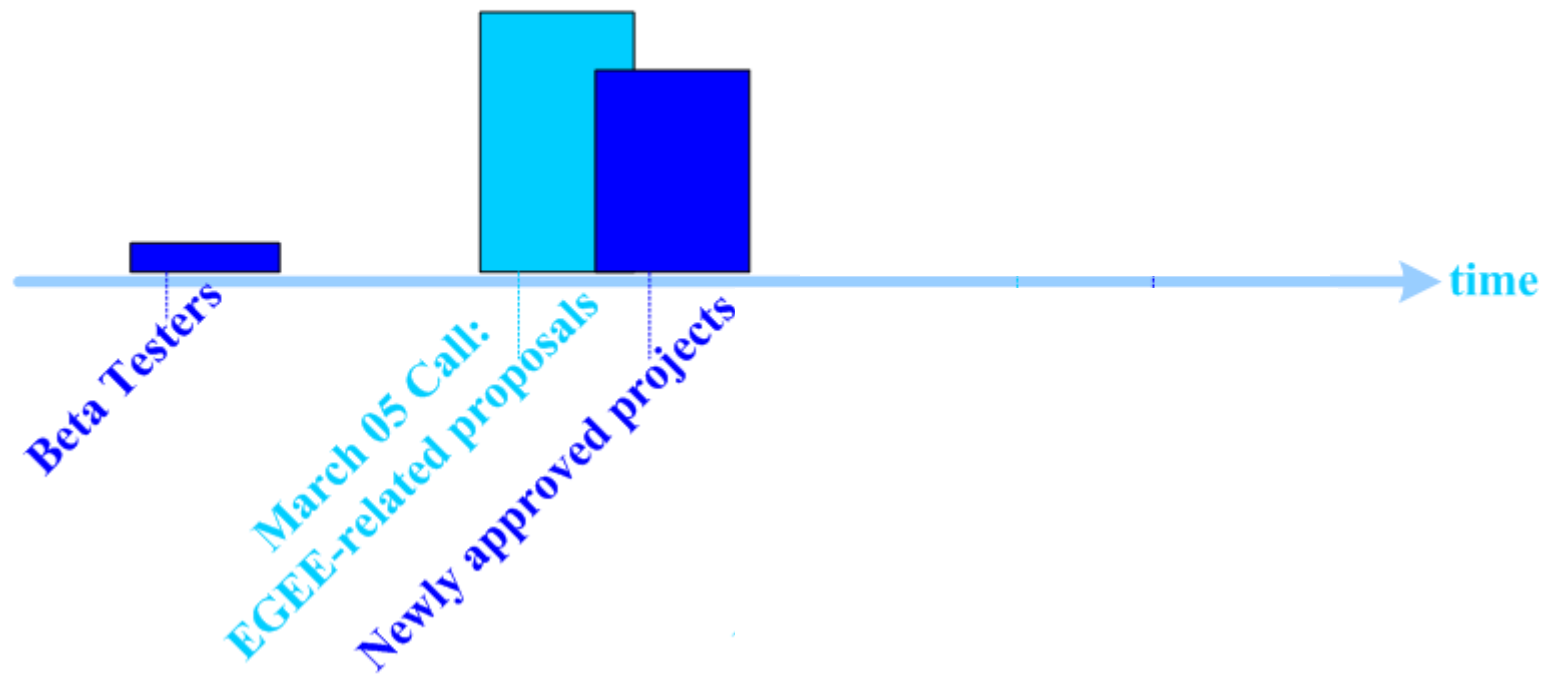
- **Cooperation between projects is important**
  - To detect and exploit synergies
  - To interoperate in different areas (expertise, services, ...)
  - To best serve science in Europe and World-wide
  
- **Possible areas of cooperation with EGEE**
  - Infrastructure related
    - exchanging or using facilities such as computing, storage, networks, ...
    - other areas such as operations, user support, ...
  - Middleware
  - Applications
  - Training
  - Dissemination and Policies.

- **EGEE NA5 – International Cooperation**  
(Activity Manager: Fotis Karayannis)
- **Dedicated Meetings at 4th EGEE Conference**
  - Tue am: Plenary Talks of Related Projects
  - Tue pm: External Projects Session incl. **Discussions**
- **eConcertation Events**
  - Next Event: December 14, 2005, Bordeaux, France during Broadband Europe <http://www.bbeurope.org/>
- **Contributions to eIRG Workshops and White Papers**

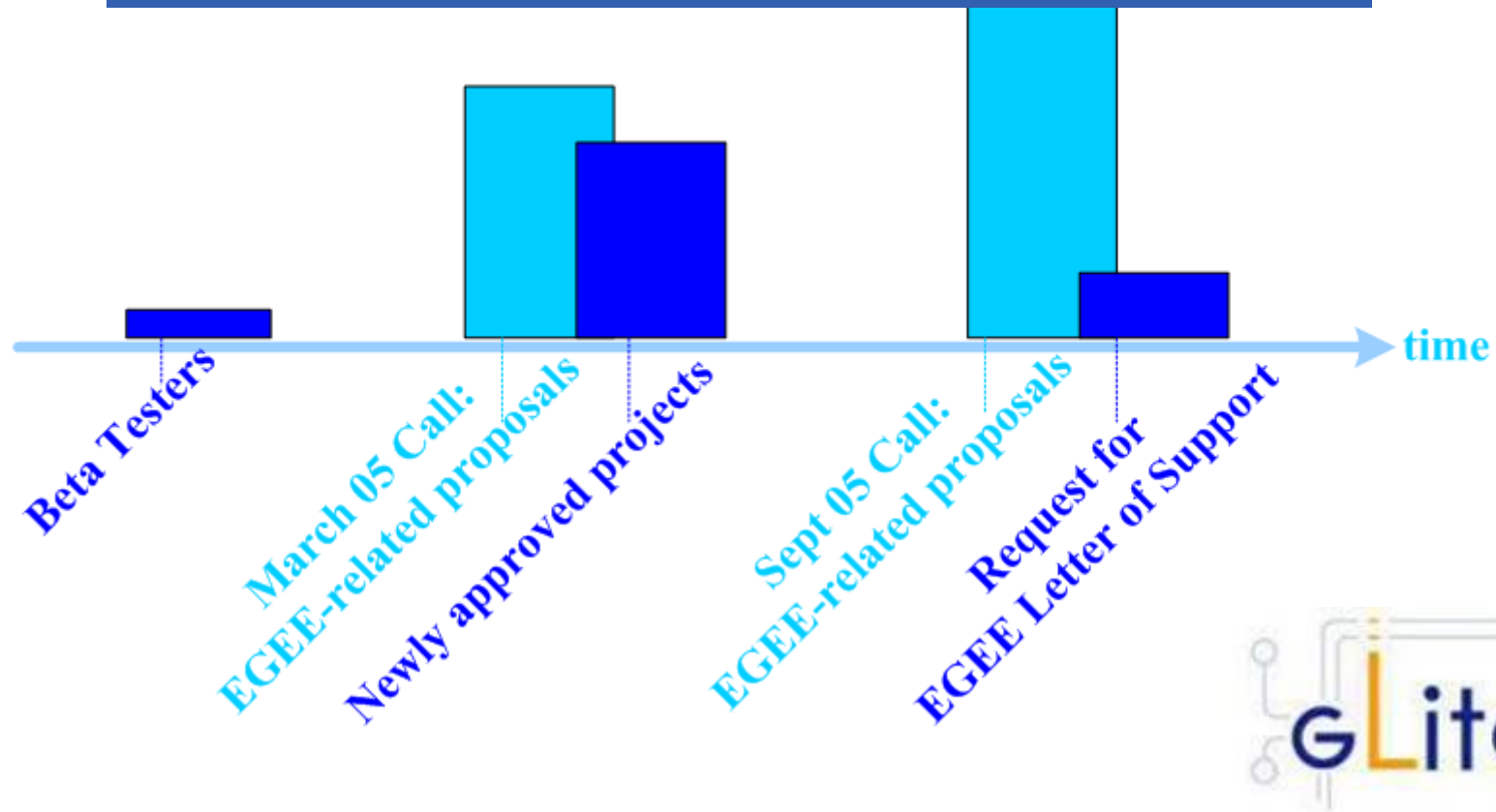
- EGEE is taking its role as “**Incubator**” very seriously
- EGEE understands and accepts its **responsibility** and tries hard to live up to these expectations







**EGEE is being accepted  
as robust, reliable grid infrastructure and  
as a matter of course**



- EGEE is taking its role as “**Incubator**” very seriously
- EGEE understands and accepts its **responsibility** and tries hard to live up to these expectations

- **We need from you:**

*Your ideas, input and feedback  
for better cooperation and  
to further exploit synergies*

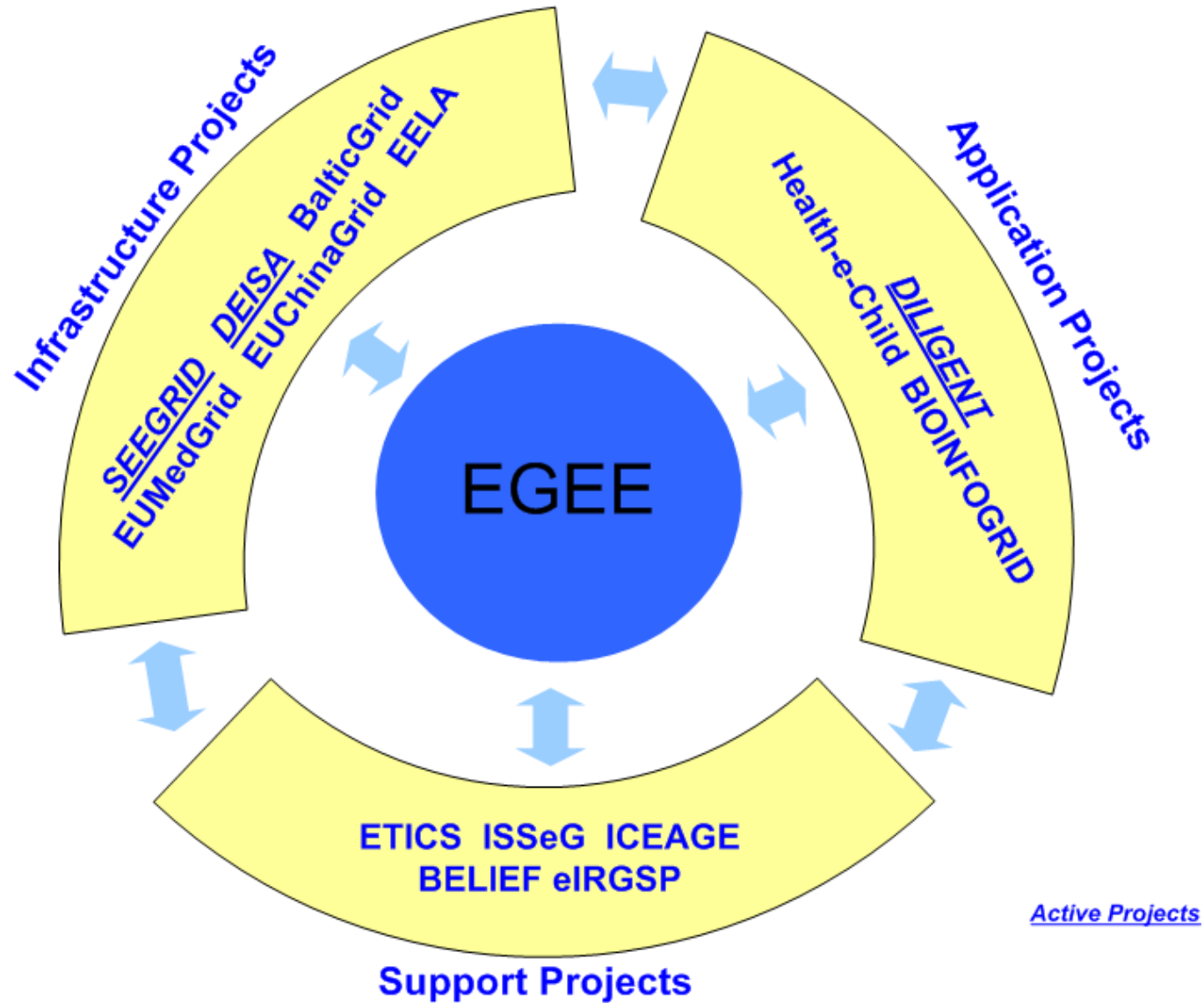
- We are aware that cooperation is difficult
- **Success is mandatory** in order  
*to build the future environment for serving and advancing  
European and world-wide Science*
- Synergies and cooperation is key for all of us

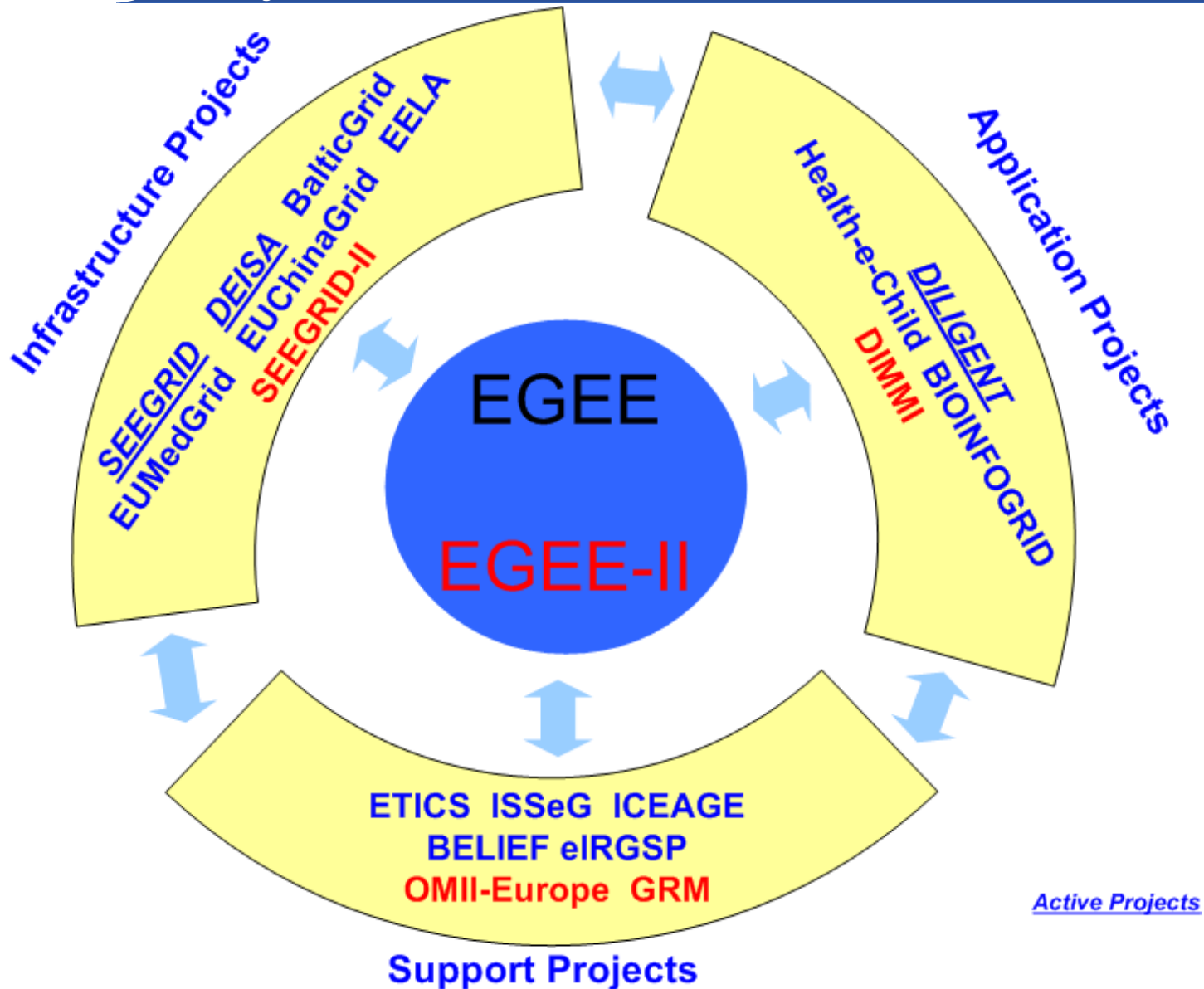
**Failure is NOT an option**



**Grid is about people working together!**







- **Active Project**
  - *DILIGENT*
  
- **New Projects**
  - BIOINFOGRID
  - Health-e-Child



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# Application Project: DILIGENT

*Aim: To integrate Grid and Digital Library technologies to create an advanced test-bed to allow secure and coordinated sharing of knowledge.*

**Coordinator:** *ERCIM, France*

**Start date:** *September 2004 for 36 months*

<http://www.diligentproject.org>







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# Application Project: BIOINFOGRID

**Aim:** *To combine bioinformatics services and applications for molecular biology with the Grid Infrastructure to provide ubiquitous and seamless access throughout Europe for the Bioinformatics community.*

**Coordinator:** *CNR-ITB, Italy*

**Start date:** *January 2006 for 24 months*



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# Application Project: Health-e-Child

**Aim:** *To provide an integrated healthcare platform for European pediatrics.*

**Coordinator:** *Siemens, Germany*

**Start date:** *January 2006 for 48 months*

- **BELIEF**
- **ETICS**
- **eIRGSP**
- **ICEAGE**
- **ISSeG**

**Aim:** *To build and promote an effective communication network platform through which international outreach and industry engagement may be achieved.*

**Coordinator:** *Metaware, Italy*

**Start date:** *November 2005 for 24 months*



**Aim:** *To establish an international and well managed capability for software configuration, integration, testing and benchmarking for the scientific community.*

**Coordinator:** *CERN, Switzerland*

**Start date:** *January 2006 for 24 months*

***Aim: To provide a solid basis for the work of the e-Infrastructure Reflection Group (e-IRG) and increase its impact.***

***Coordinator: NCF-NWO, Netherlands***

***Start date: October 2005 for 24 months***



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# Support Project: ICEAGE

**Aim:** *To establish a world-wide initiative to inspire innovative and effective grid education.*

**Coordinator:** *UEDIN, Scotland*

**Start date:** *March 2006 for 24 months*

**Aim:** *To contribute to the consolidation of the European Grid infrastructure in the field of computer security.*

**Coordinator:** *CERN, Switzerland*

**Start date:** *January 2006 for 24 months*



- **Active Projects**

- DEISA
- SEEGRID



- **New Projects**

- BalticGrid
- EELA
- EUChinaGrid
- EUMedGrid



**EUMEDGRID**

**Aim:** *To build and operate a distributed tera-scale supercomputing facility.*

**Coordinator:** *IDRIS-CNRS, France*

**DEISA is a consortium of leading national supercomputer centres in Europe**

*IDRIS – CNRS, France*

*FZJ, Jülich, Germany*

*RZG, Garching, Germany*

*CINECA, Italy*

*EPCC, Edinburgh, UK*

*CSC, Helsinki, Finland*

*SARA, Amsterdam, The Netherlands*

*ECMWF (European Organization), Reading, UK*

**Start date:** *May 2004 for 48 months*

<http://www.deisa.org/>





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# Infrastructure Project: SEEGRID

**Aim:** *To provide specific support actions to assist the participation of South Eastern European states to the pan-European Grid initiatives.*

**Applications:** *HEP, Biomedical, Earth Science, Regional: 3D imaging, On-demand web crawling*

**Coordinator:** *GRNET, Greece*

**Participating countries:** *Albania, Bosnia-Herzegovina, Bulgaria, Croatia, FYR of Macedonia, Greece, Hungary, Romania, Serbia-Montenegro, Switzerland, Turkey*

**Start date:** *May 2004 for 24 months*

<http://www.see-grid.org/>





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# Infrastructure Project: BalticGrid

**Aim:** *To develop and integrate the research and education computing and communication infrastructure in the Baltic States into the emerging European Grid infrastructure.*

**Applications:** *HEP, Regional: Material Science, Bioinformatics*

**Coordinator:** *KTH, Sweden*

**Participating countries:** *Estonia (2 partners), Latvia (2 partners), Lithuania (2 partners), Poland (2 partners), Sweden, Switzerland*

**Start date:** *November 2005 for 30 months*



**Aim:** *To build a bridge between consolidated e-Infrastructure initiatives in Europe and emerging ones in Latin America.*

**Applications:** *HEP, Regional: Bioinformatics, Education, Climate*

**Coordinator:** *CIEMAT, Spain*

**Participating countries:** *Argentina, Brazil (5 partners), Chile (3 partners), Cuba, Italy, Mexico, Portugal, Peru, Spain (5 partners), Switzerland, Venezuela plus CLARA*

**Start date:** *January 2006 for 24 months*

<http://www.eela-grid.org/>





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# Infrastructure Project: EUChinaGrid

**Aim:** *To interconnect the Grid infrastructure in Europe and China for the benefit of e-Science applications.*

**Applications:** *HEP, Regional: Cosmic Ray Experiment, Biology*

**Coordinator:** *INFN, Italy*

**Participating countries:** *China (4 partners) Greece, Italy (3 partners), Poland, Switzerland*

**Start date:** *January 2006 for 24 months*

**Aim:** *To provide specific support actions to assist in the participation of the states of the Mediterranean region in the pan-European and worldwide Grid initiatives.*

**Applications:** *HEP, Biomedicine, Earth Science, Regional: Water Control*

**Coordinator:** *INFN, Italy*

**Participating countries:** *Algeria, Cyprus, Egypt, Greece, Italy, Malta, Morocco, Spain, Switzerland, Syria, Tunisia, Turkey, UK*

**Start date:** *January 2006 for 24 months*

The logo for EUMEDGRID consists of the text 'EUMEDGRID' in a bold, sans-serif font. The letters 'EUMED' are blue, and the letters 'GRID' are yellow.