The EGEE-III project

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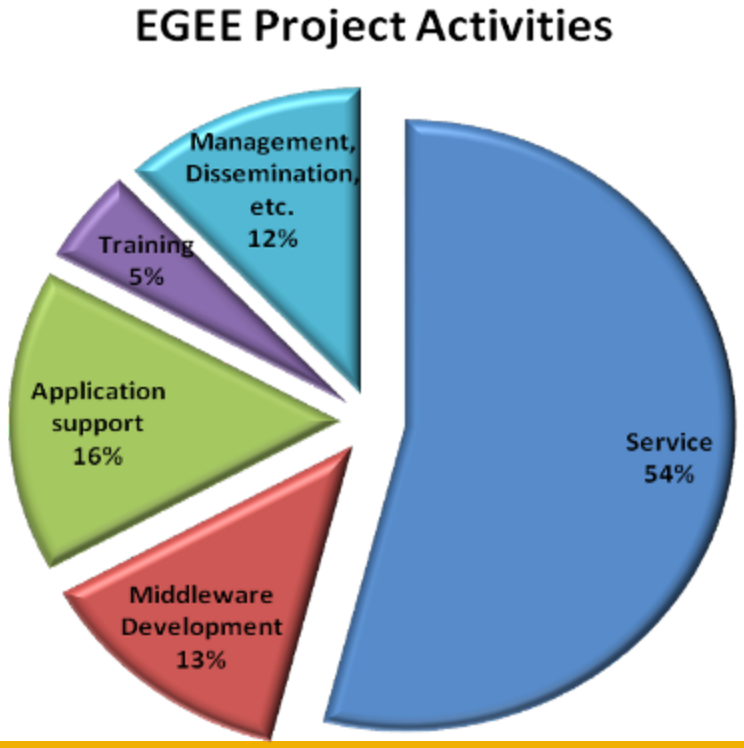
EGEE-II review successfully passed in May'07

"...having achieved an operational infrastructure delivering production services to a broadly distributed and diverse user community is a remarkable achievement."

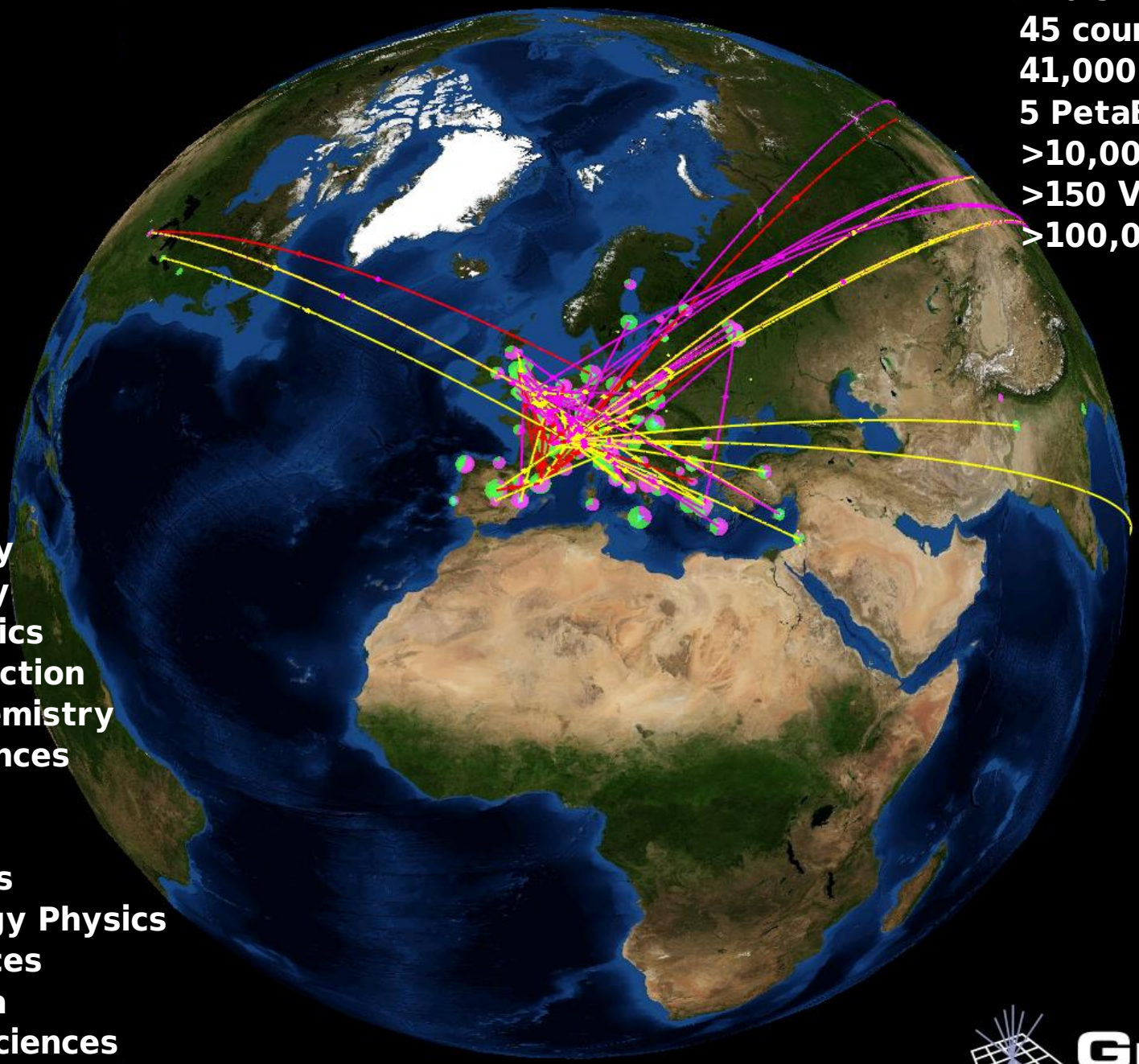
Flagship grid infrastructure project co-funded by the European Commission
Now in 2nd phase with 91 partners in 32 countries

Main Objectives

- **Operate a large-scale, production quality grid infrastructure for e-Science**
- **Attract new resources and users from industry as well as sciences**



Enabling Grids for E-sciencE



240 sites
45 countries
41,000 CPUs
5 PetaBytes
>10,000 users
>150 VOs
>100,000 jobs/day

Archeology
Astronomy
Astrophysics
Civil Protection
Comp. Chemistry
Earth Sciences
Finance
Fusion
Geophysics
High Energy Physics
Life Sciences
Multimedia
Material Sciences
...

GridPP
UK Computing for Particle Physics

EGEE User Forum 2007

www.eu-egee.org/uf2

Enabling Grids for E-sciencE

EGEE USER FORUM

9-11 MAY 2007 MANCHESTER (UK)

Next User Forum :
Clermont-Ferrand (France)
11-14 Feb'08

EGEE-II to EGEE-III

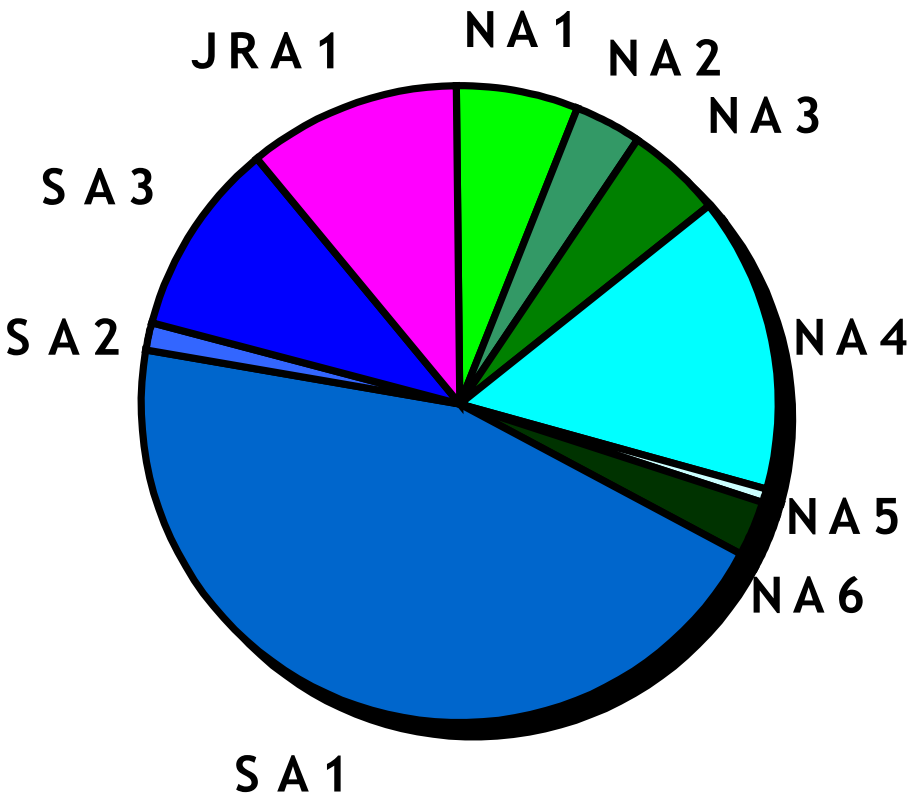
- **EGEE-III proposal submitted 20th September**
  - European Commission call INFRA-2007-1.2.3 e Science Grid Infrastructures
  - Also submitted in the same call: BalticGrid-2, EUMedGrid-2,EUChinaGrid-2, EELA-2, EUIndiaGrid-2, OMII-Europe2, ETICS-2, DEISA2 etc.

- **Key objectives**
  - Expand/optimise existing EGEE infrastructure
    - Include more resources
    - Support more user communities
    - Make the grid easier to use
    - Drive standards forward
  - Prepare migration from a project-based model to a sustainable federated infrastructure based on National Grid Initiatives
  - Executive Summary
    http://egee-technical.web.cern.ch/egee-technical/JRU/executive-summary.html

- **2 year period – spring 2008 to spring 2010**
  - No gap between EGEE-II and EGEE-III

EGEE-III activities

Networking activities	*Specific Service Activities*
NA1: Management	SA1: Grid Operations
NA2: Dissemination, Communication & Outreach	SA2: Networking Support
NA3: Training & induction	SA3: Integration, testing & Cert.
NA4: User Community support and expansion	
NA5: Policy & International Coop.	*Joint Research Activities*
NA6: Technology Transfer & outreach to Business NEW!	JRA1: Middleware engineering



9,997 person months, of which >4,500 contributed by the consortium from their own funding sources

(EGEE-II has ~11,150 person months)

EGEE-III consortium

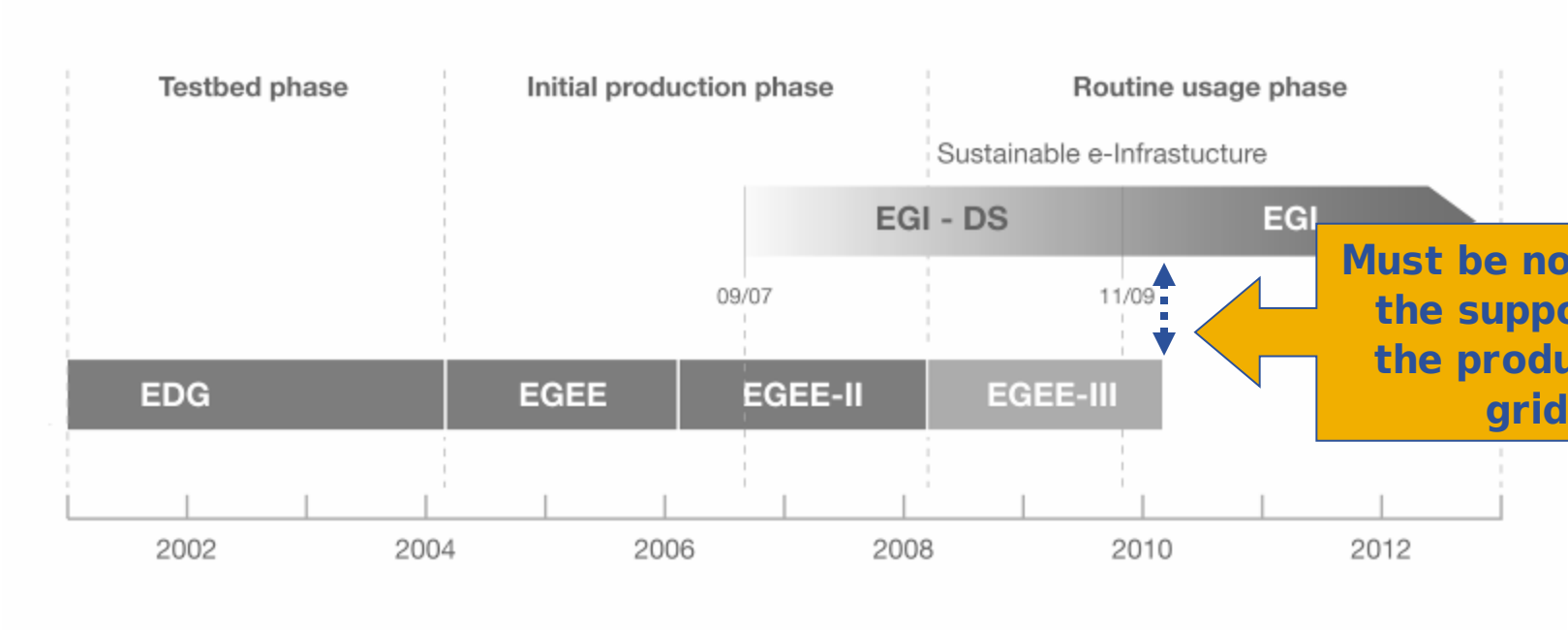
- **94 partners, academic & business, organised in regional federations:**
  - **Asia Pacific (Australia, Japan, Korea, Taiwan)**
  - **Benelux (Belgium, the Netherlands)**
  - **Central Europe (Austria, Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia)**
  - **France**
  - **Germany/Switzerland**
  - **Italy**
  - **Nordic countries (Finland, Sweden, Norway)**
  - **South West Europe (Portugal, Spain)**
  - **South East Europe (Bulgaria, Cyprus, Greece, Israel, Romania, Serbia, Turkey)**
  - **Russia**
  - **United Kingdom/Ireland**
  - **USA**
- **All EC co-funded countries group their academic partners on a national level via Joint Research Units or National Grid Initiatives**
  - **Single interface with the project per country**
- **Collaboration with additional countries**
  - **Asia Pacific: Brunei, China, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam**
  - **Commonwealth of Independent States: Armenia, Ukraine, Uzbekistan**

FP7 projects depending on EGEE-III

- **These projects will operate in the ~2008-2010 timeframe and want to collaborate with EGEE-III**
  - **D4Science**: *DIstributed colLaboratories Infrastructure on Grid ENabledTechnology 4 Science*
  - **DORII**: *Deployment of Remote Instrumentation Infrastructure*
  - **EDGeS**: *Enabling Desktop Grids for e-Science*
  - **e-NMR**: *Deploying and unifying the NMR e-Infrastructure in System Biology*
  - **EUFORIA**: *EU Fusion for ITER Applications*
  - **GENESI-DR**: *Ground European Network for Earth Science Interoperations –Digital Repositories*
  - **Life Watch (ESFRI):** *Science & Technology Infrastructure for biodiversity data & observatories*
  - **SEE-GRID-SCI**: *SEE-GRID eInfrastructure for regional eScience*

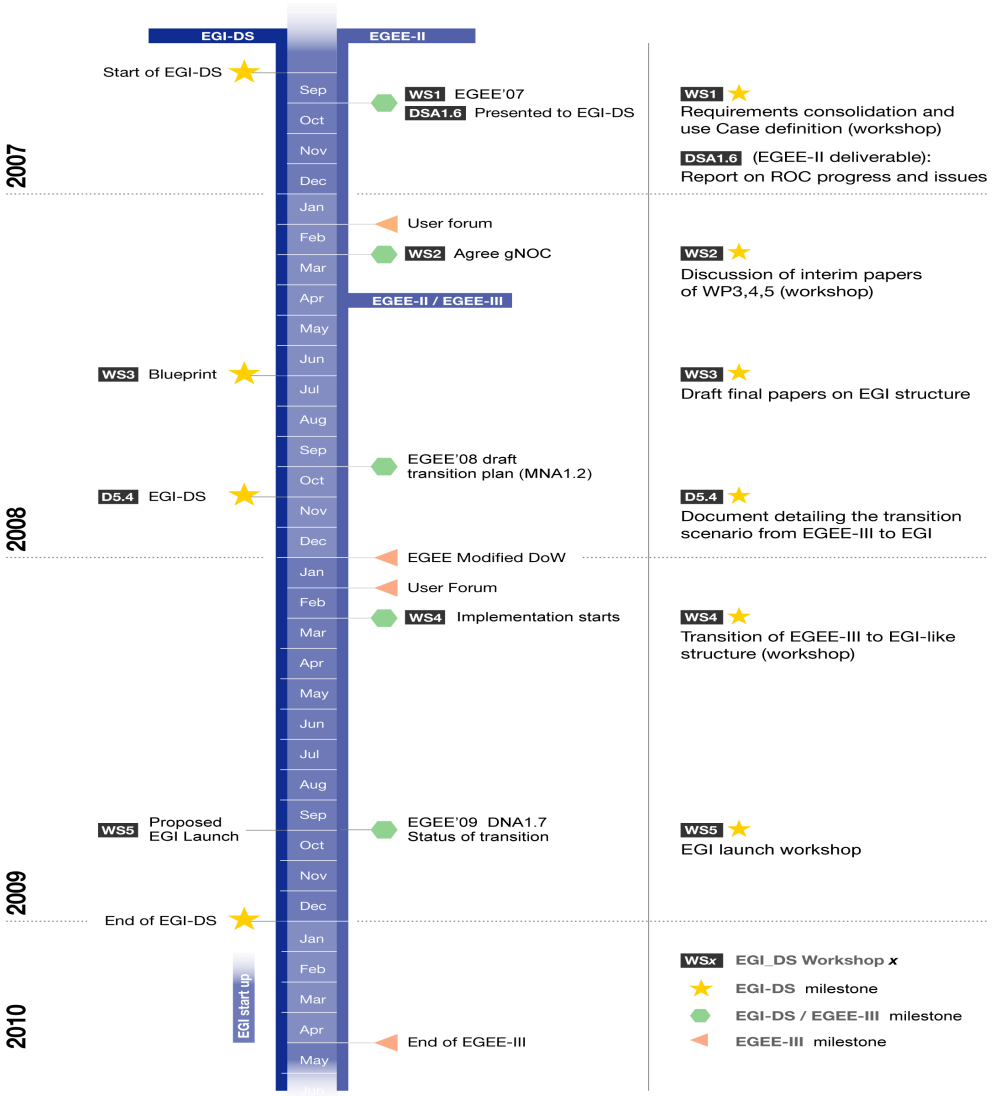
European Grid Initiative

- Need to prepare permanent, common Grid infrastructure
- Ensure the long-term sustainability of the European e-Infrastructure independent of short project funding cycles
- Coordinate the integration and interaction between National Grid Infrastructures (NGIs)
- Operate the production Grid infrastructure on a European level for a wide range of scientific disciplines



EGEE interaction with EGI

A plan has been made with the EGI Design Study project to ensure the knowledge and experience gained by EGEE is fed into the EGI planning process



EGEE'07 Conference

625 participants from 47 countries

86 sessions with 275 talks, 12 live demos and 39 posters

~50 collaborating projects/ organizations present

EGEE'08
Istanbul (Turkey)
22-26 Sept'08

Summary

- **EGEE infrastructure growth over next 18 months**
  - x2 resources
  - x5 increase in throughput
- **Many approved FP7 projects assume EGEE will continue in the 2008-2010 timeframe**
- **EGEE-III represents the transition point from project-based to sustainable e-Infrastructure**
  - Greater support from countries: EU requested contribution represents < 1/3 of cost
- **Clear planning made to transfer knowledge and experience to EGI**
- **If EGI is "late" we will need another mechanism for continued support of production grid infrastructure at the end of EGEE-III**
- **Interaction with ESFRI preparatory projects is essential**
  - ESFRI will be key future user groups of e-Infrastructure in the EGI timeframe