



Enabling Grids for E-science

EGEE and Collaborating Projects

Erwin Laure
EGEE-II Technical Director
Erwin.Laure@cern.ch



www.eu-egee.org



Information Society
and Media



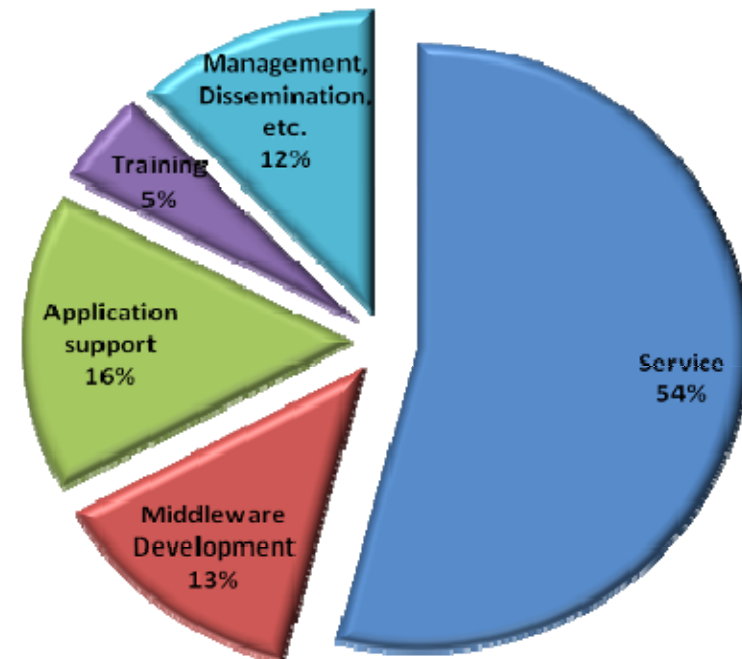


**Flagship grid infrastructure project co-funded by the European Commission
Now in 2nd phase with 91 partners in 32 countries**

Main Objectives

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

EGEE Project Activities

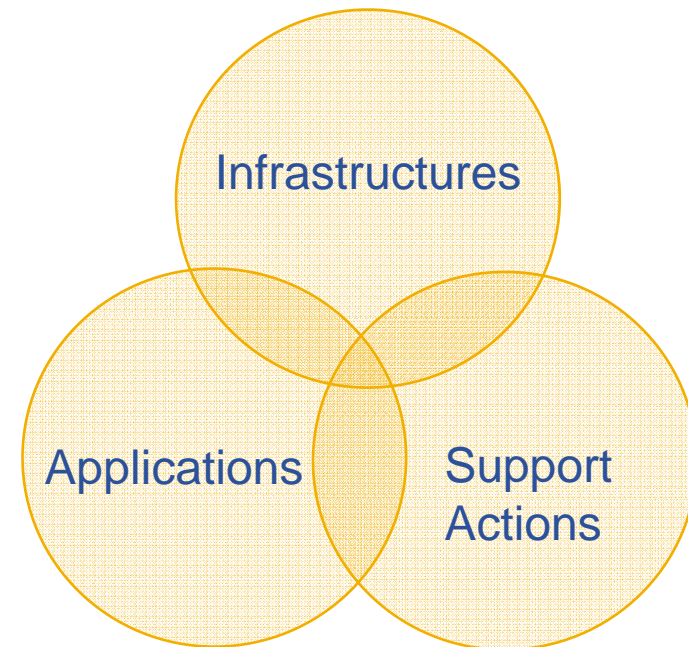


- **SA1 – Grid Operations, Support and Management** (<http://egee-sa1.web.cern.ch/egee-sa1/>)
 - Leader: Ian Bird
 - Key activities:
 - Grid Operations
 - *Regional Operations Centers (ROCS)* - <http://egee-sa1.web.cern.ch/egee-sa1/roc.html>
 - *CIC on Duty*
 - *CIC Portal* - <http://cic.in2p3.fr/>
 - *Global Grid User Support (GGUS)* - <http://ggus.org/>
- **SA3 – Integration, Testing, and Certification** (<http://egee-sa3.web.cern.ch/egee-sa3/>)
 - Leader: Markus Schulz
 - Key activities:
 - Build, integrate, test and certify gLite releases
 - Provide documentation
 - www.gLite.org
- **JRA1 – Middleware Re-engineering** (<http://egee-jra1.web.cern.ch/egee-jra1/>)
 - Leader: Claudio Grandi
 - Key activities:
 - Maintain and improve the EGEE provided gLite services

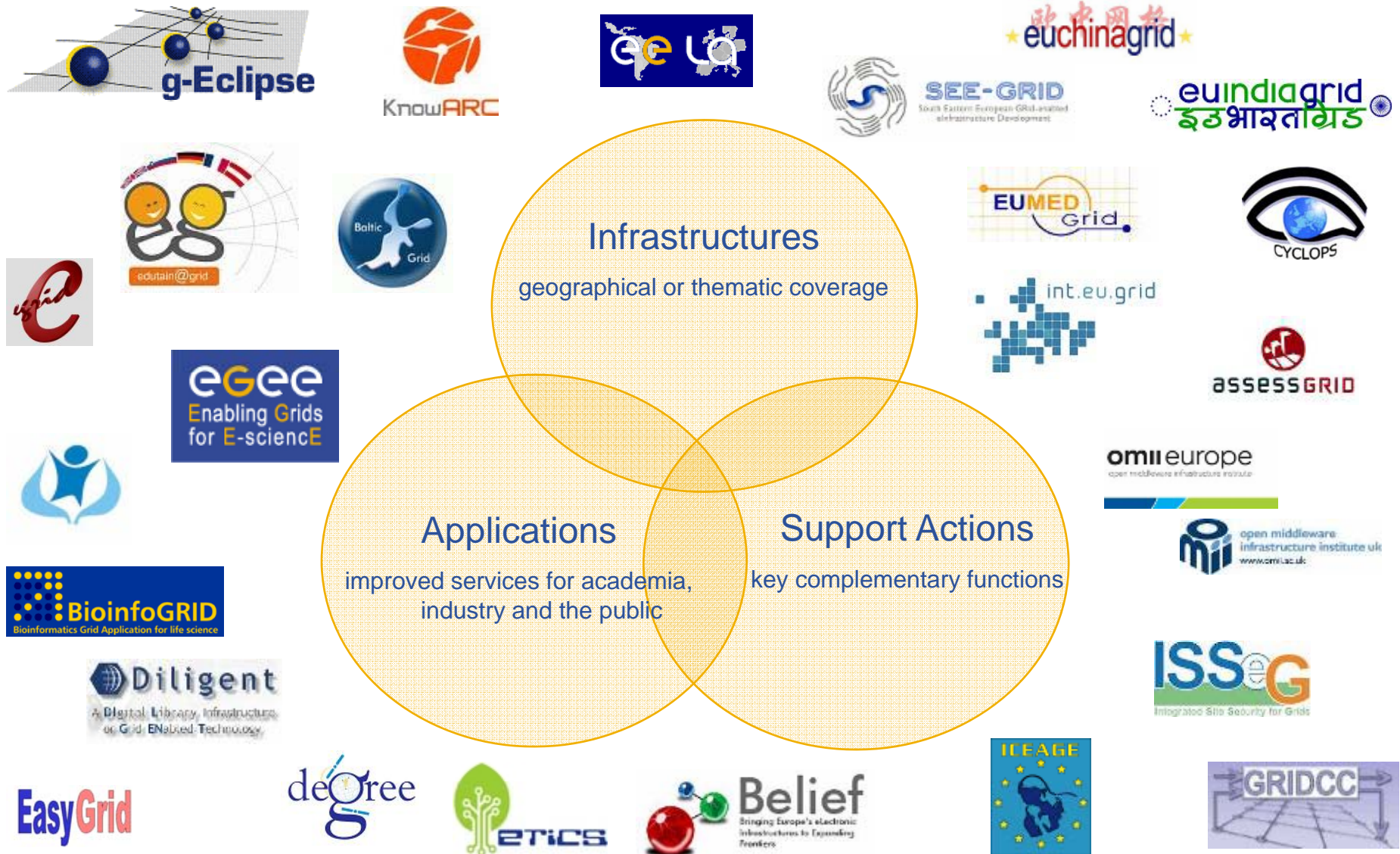
- **NA4 – Application Identification and Support** (<http://egeena4.lal.in2p3.fr/>)
 - Leader: Cal Loomis
 - Key activities:
 - Support applications in using the infrastructure
 - Negotiate resource usage (via the Operations Advisory Group – OAG)
 - VO managers group
- **SA2 – Networking Support** (<http://egee-sa2.web.cern.ch/egee-sa2/>)
 - Leader: Mathieu Goutelle
- **JRA2 – Quality Assurance & Security Coordination** (<http://egee-jra2.web.cern.ch/EGEE-JRA2/index.html>)
 - Leader: Gabriel Zaquine
 - Security Coordination: Ake Edlund
- **NA2 – Dissemination, Outreach & Communications** (<http://egee-na2.web.cern.ch/egee-na2/>)
 - Leader: Sarah Purcell Nolan
- **NA3 – Training and Induction** (<http://www.egee.nesc.ac.uk/>)
 - Acting leader: David Fergusson
- **NA5 – Policy & International Cooperation** (<http://egee-na5.web.cern.ch/egee-na5/>)
 - Leader: Panagiotis Louridas
- **NA1 – Management**
 - Leader: Bob Jones

- **We have common objectives to foster Grid technologies**
 - Expansion of infrastructure
 - Expansion of user base/applications
 - Improvement of middleware
 - Provision of specific services

- **Success comes through collaboration**



25 projects have registered as of September 2007: [web page](#)



- **The Collaborating (Related) Projects Liaison Office**
 - Florida Estrella, Roberta Faggian Marque, Linga Kalinde
- **Role in EGEE:**
 - complement the action of the Policy and International Cooperation Activity (NA5)
 - ensure appropriate links between EGEE and collaborating projects
 - act as main contact point
- **25 projects now registered:**
 - <http://egee-technical.web.cern.ch/egee-technical/related-projects/list-projects.htm>

- **Extension of infrastructure:**
 - Ideally using same middleware stack as EGEE
 - Given the current status of standards interoperability is for the time being a labor intensive one-to-one activity; contributions to best practices via OGF-GIN highly welcome
 - Use standard SA1 procedures
 - Liaise with regional ROC or set up you own ROC
 - Procedures described on the SA1 webpage:
 - <http://egee-sa1.web.cern.ch/egee-sa1/participate.html>
 - <https://twiki.cern.ch/twiki/bin/view/EGEE/OperationalDocumentation>
- **Application using the EGEE infrastructure:**
 - Either join an existing VO or set up a new VO
 - Procedures described on the NA4 webpage:
 - http://egeena4.lal.in2p3.fr/index.php?option=com_content&task=view&id=16&Itemid=32

- **Middleware**

- gLite focuses on core “foundation” middleware
 - following a strict software engineering and integration process
- Evolution is requirements based
 - from applications and operations
 - decided by the EGEE Technical Coordination Group (TCG)
- In general, evolution is quite conservative and we don't expect too many new components being added
- Collaboration on selected topics welcomed, but needs to be a real commitment following a strict work-plan
 - See <https://edms.cern.ch/document/816743/> for a detailed description of the ongoing work
- If you wish to collaborate, contact the JRA1 activity managers, Claudio Grandi or John White

- **Middleware Cont'd**

- Apart from the core gLite distribution there are many useful tools applications can use on the EGEE infrastructure
- NA4 set up the RESPECT program to make these more visible
 - Recommended External Software for EGEE CommuniTies
 - http://egeena4.lal.in2p3.fr/index.php?option=com_content&task=view&id=71&Itemid=63
 - Software needs to be recommended by an application community!
- Contact the appropriate discipline representative on the NA4 Steering Committee to propose packages to add to the RESPECT list.

- **Specific technological issues**

- The TCG is sponsoring working groups that are open to everybody wishing to contribute
- Current active groups are: Medical Data Mgmt, Short Deadline Jobs, Message Passing, Job Priorities, Portals, WN Resources
- If you want to contribute contact the WG chairs
 - <http://egee-intranet.web.cern.ch/egee-intranet/NA1/TCG/Workinggroups.htm>

- **Other potential interactions**
 - If you want to collaborate on other areas (dissemination, training, policies, integration, etc.), please contact the relevant activity manager

- **EGEE Business Associates Program**

- GridWiseTech

- Developing Grid tutorials to Industrial Mgt.
- Outreach to Business



- NICE

- Developing EGEE compatible GENIUS Grid portal and EnginFrame Framework



- Platform Computing

- Making gLite middleware better in exploiting the LSF local resources management system



- Avanade

- IT Consultancy
 - *Interface gLite with MS Windows based AGA software*



- Excelian

- UK-based Grid Consulting Company for Finance and Energy
 - *Aid in adapting EGEE infrastructure to meet needs of the Finance & energy sectors*



- Hitachi Sophia-Antipolis Laboratory

- French based technical lab
 - *Integrate gLite data management with INCA middleware*



Projects with sessions/
exhibiting at EGEE'07