EGEE Project Review

Information Society

European Commission

Fabrizio Gagliardi
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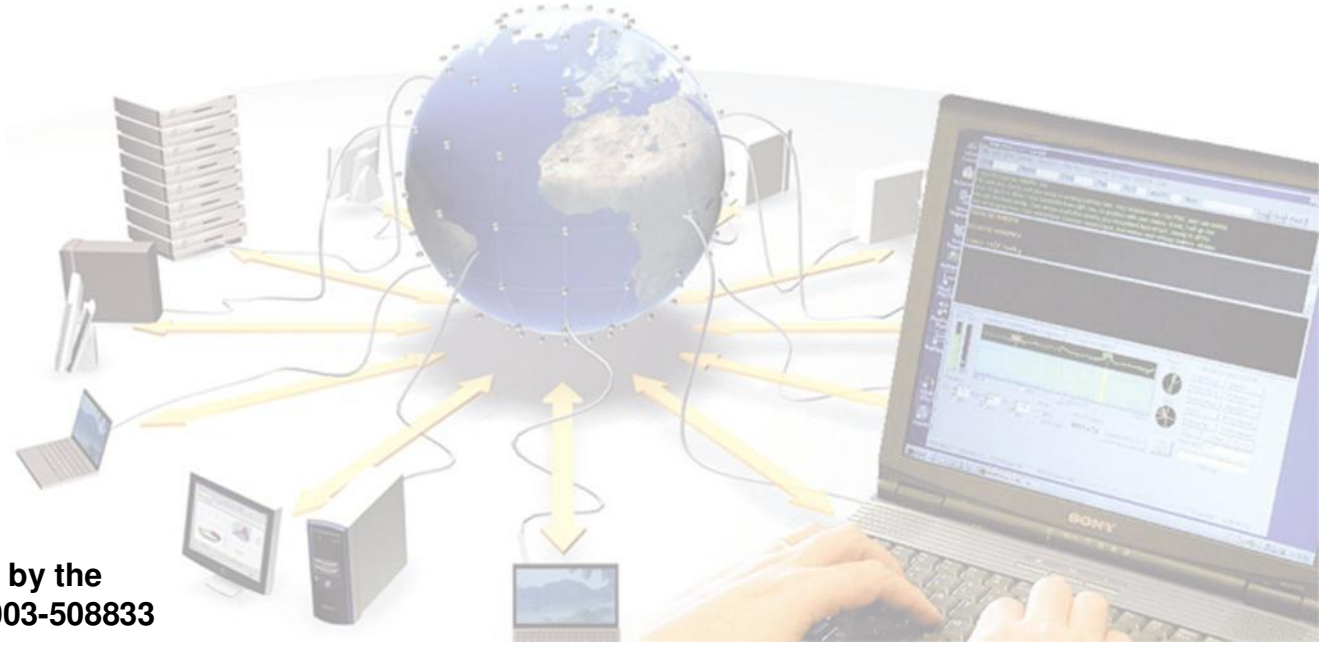
Enabling Grids for E-science in Europe



EGEE is proposed as a project funded by the European Union under contract IST-2003-508833

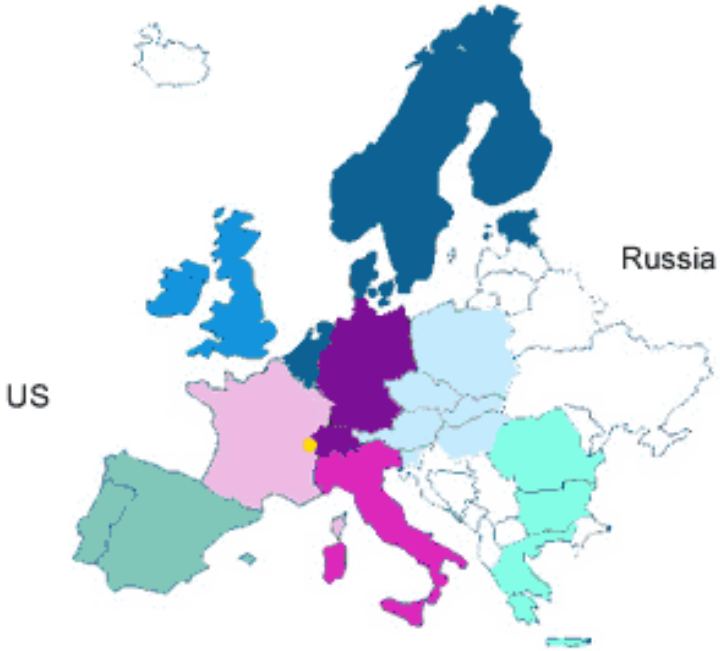
Status of Technical Annex

Enabling Grids for E-science in Europe

- The Technical Annex is the description of the EGEE programme of work
  - (available from: https://edms.cern.ch/document/400278)
  - more info from Bob Jones in the next talk
- Built on the basis of the original proposal (submitted on May 6, 2003) and on the basis of the EU comments and guidelines
  - Maximum EU contribution for 2004-5: 31'867 K €
- Basic points: build on existing Grid projects and activities, close synergy and exchange of responsibilities with LCG, structure a very wide (70 partners) infrastructure into Grid national/regional federations, define a process for support of multiple scientific communities and VOs

EGEE Partner Federations

- Integrate regional Grid efforts
- Represent leading grid activities in Europe



- CERN
- Central Europe (Austria, Czech Republic, Hungary, Poland, Slovakia, Slovenia)
- France
- Germany and Switzerland
- Ireland and UK
- Italy
- Northern Europe (Belgium, Denmark, Estonia, Finland, The Netherlands, Norway, Sweden)
- Russia
- South-East Europe (Bulgaria, Cyprus, Greece, Israel, Romania)
- South-West Europe (Portugal, Spain)

Network Activity

- NA1: Management
  - Overall management of the project
- NA2: Dissemination and Outreach
  - Operate the dissemination Web site, support mail lists and web base collaborative tools, organize presentations, visits, 2 project conferences and showcases per year, publication of dissemination material
- NA3: User Training and Induction
  - Produce training and course material. Deliver on-site courses and support distributed courses in the project.
- NA4: Application Identification and Support
  - Support of HEP and Bio pilot applications. Identification of early users. Introduction of new user communities. Definition of common application interfaces and tools. Creation of an Industry Forum.
- NA5: International Cooperation
  - Cooperation with US NSF Cyberinfrastructure. Active collaboration with other EU projects and activities (SSA Sugar, FP5 GRIDSTART, Complex Problem Solving Middleware projects). Establish Grid Policy Forum in Europe. Participation to GGF activities. Collaboration with US and Russia.

Service Activity

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- SA1: European Grid Support, Operation and Management
  - Core infrastructure services. Grid monitoring and control. Middleware deployment and resource induction. Resource and user support. Grid management.

- SA2: Network Resource Provision
  - Definition in collaboration with RN Geant and NRENs of SLRs, Modelling, SLSs, SLAs, Policies.

Joint Research Activity

- JRA1: Middleware Re-engineering and Integration
  - Implement production quality Core Grid services by re-engineering existing Middleware and by completing missing functionality. Integration of middleware components. Testing and validation. Establish and run an overall architecture team.
- JRA2: Quality Assurance
  - Project-wide quality assurance. Quality assurance in EGEE is the planned and systematic set of activities that ensure that processes, products and operation services conform to EGEE requirements, standards, procedures, and to the required level of services.
- JRA3: Security
  - Enable secure operation of a European Grid infrastructure. Develop security architectures frameworks and policies. Includes requirements cycle, definition of incident response methods and authentication policies. Consistent design of security mechanisms for all core Grid services. Production needs of resource providers with regard to identity integrity and protection.
- JRA4: Network Services Development
  - Develop interfaces to the network control plane to allow Grid middleware to make immediate and advance reservations of network connectivity specified in terms of bandwidth, duration and quality of service.

EGEE Middleware Activity

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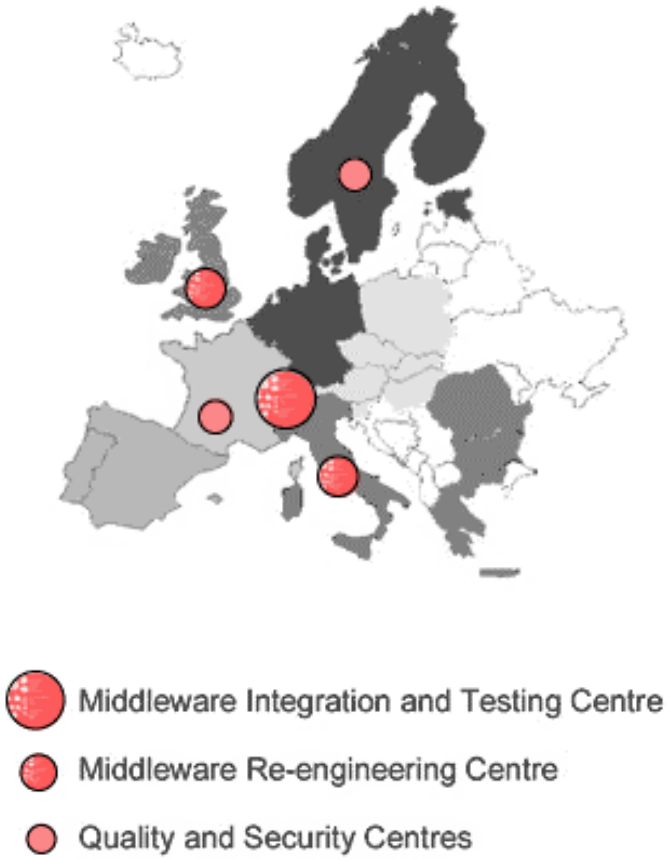
- Hardening and re-engineering of existing middleware functionality, leveraging the experience of partners
- Activity concentrated in few major centers
- Key services: Resource Access
  - Data Management (CERN)
  - Information Collection and Accounting (UK)
  - Resource Brokering (Italy)
  - Quality Assurance (France)
  - Grid Security (Northern Europe)
  - Middleware Integration (CERN)
  - Middleware Testing (CERN)



EGEE Activities and resources

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NA1	NA2	NA3	NA4	NA5	**All NA**	SA1	SA2	**All SA**	JRA1	JRA2	JRA3	JRA4	**All JRA**	***Total expected***	***Total requested***
2145	1702	1953,2	5781,8	1194	**12776**	21715,5	437	**22152,5**	7194	800	1390	995	**10379**	***45307,5***	
2145	1202	1578,2	3608,3	597	**9130,5**	14431,5	237	**14668,5**	5882	400	1190	596	**8068**		***31867***

Highlights from first EU negotiation meeting

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NO SHOW STOPPERS, several points to clarify, basic programme of work agreed

Clarify the resources and access policy for user communities to EGEE infrastructure

EGEE will start the middleware re-engineering activity by providing an initial set of components based on the selection made by the LCG project at the end of 2003.

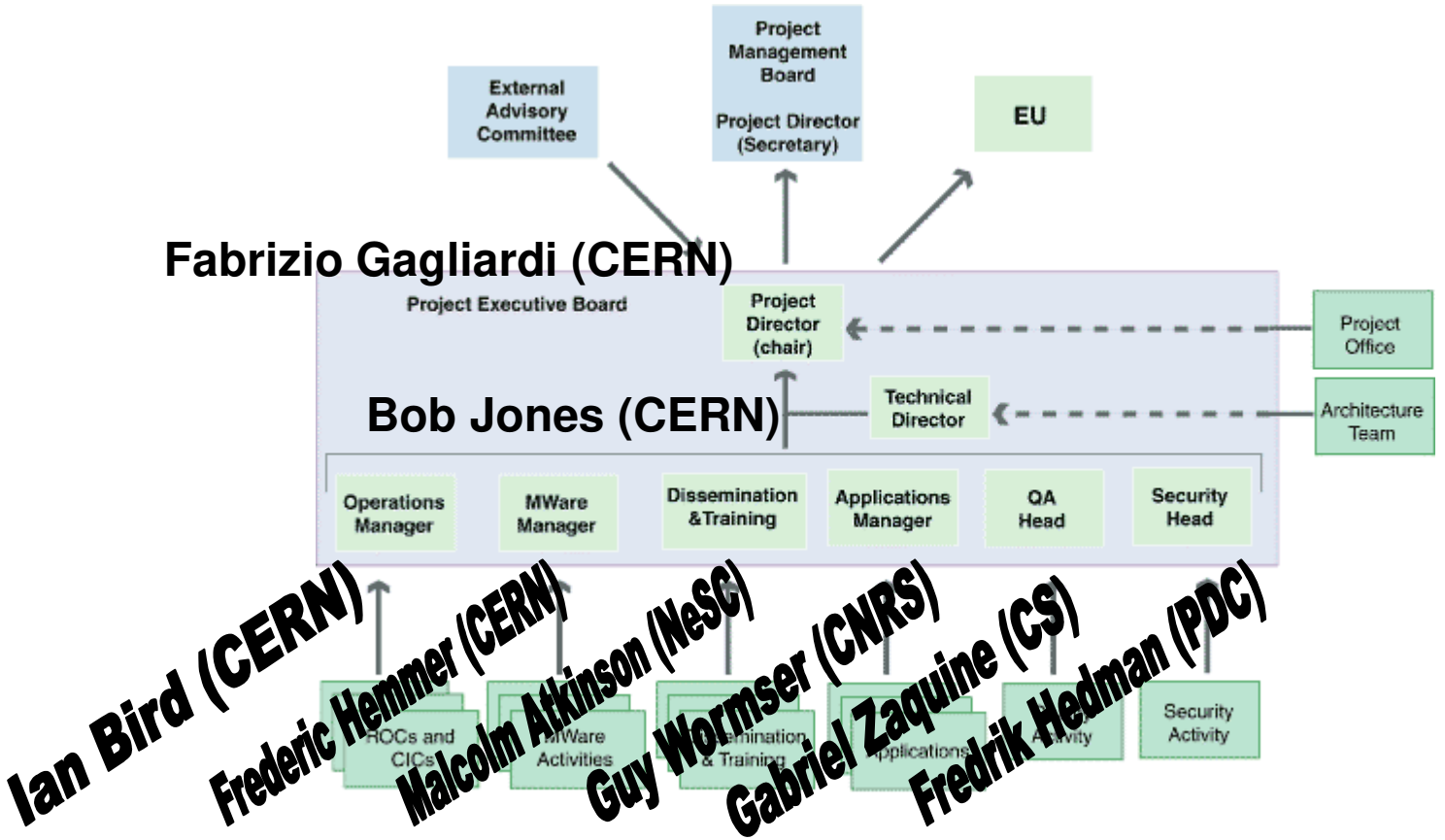
The currently deployed LCG middleware includes modules from the US (Globus, Condor) and the EU DataGrid project (data management tools, resource broker, VO organisation tools, fabric management tools).

Grid middleware is evolving rapidly in anticipation of the forthcoming OGSI standard and EGEE partners are tracking these developments frequently.

The functionality and scope will be at least comparable to that provided by the final versions of the EU DataGrid project software.

Evaluation Summary Report – point 4

All details about the individuals in key management roles should be available at negotiation stage.



Evaluation Summary Report – Overall Remarks

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EC financial contribution for US partners within EGEE is not recommended. The panel expects that the US developments currently proposed to be funded will continue without any EGEE contribution. Collaboration on an equal level should be encouraged. EGEE is contributing a lot of development effort and provides a large production testbed.

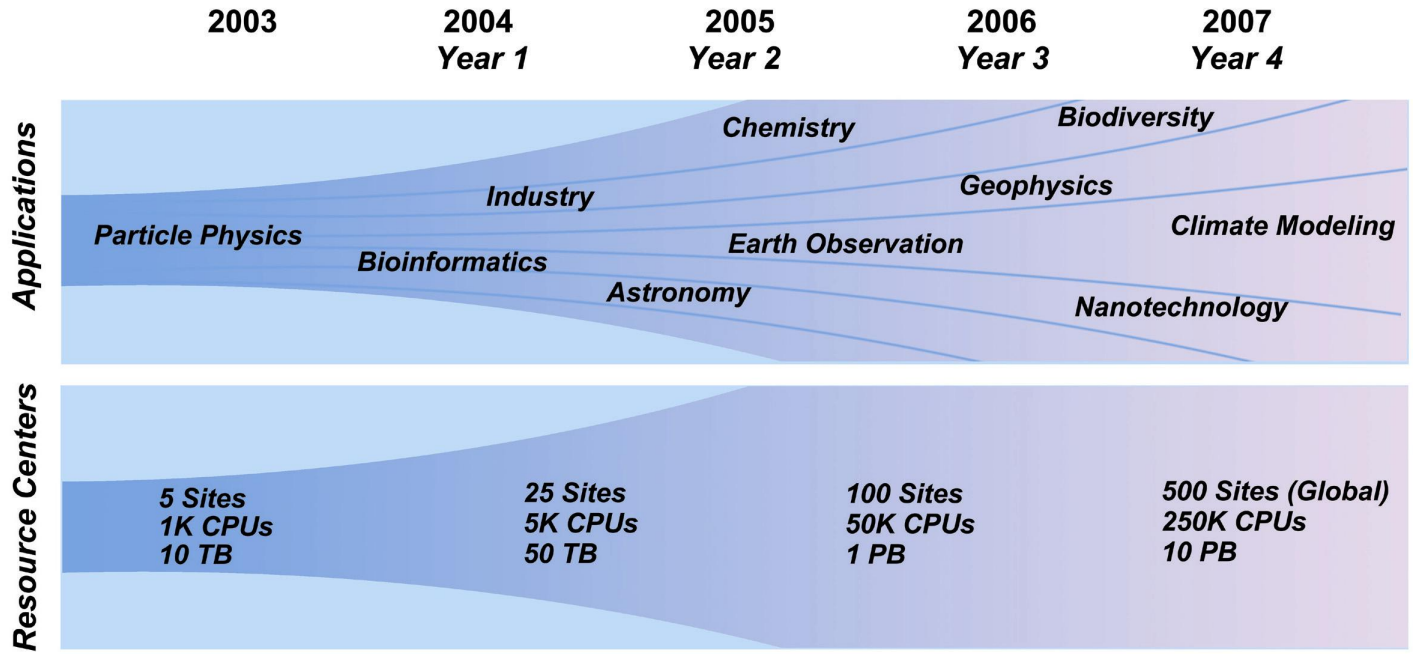
Our US partners are currently seeking funding in order to support their activities in EGEE. Initial discussions have taken place between US institutes and EGEE in order to formalize the support of certain middleware components, such as those distributed by VDT (e.g. Globus Toolkit, Condor) and joint development of higher-level services. We expect to provide more information in subsequent versions of the document as the negotiations with the US proceed.

EC financial contribution for Russian partners within EGEE is recommended up to a maximum of 1 MEuro, based on a reduction of 50% to the service staff and removal of the middleware re-engineering effort. In addition, written evidence of the matching support from Russian sources should be provided at negotiation stage.

The Russian contribution has been reduced to 1MEuro.
Russian institutes are not involved in the JRA activities.

EGEE Timeline

- **May 2003**: proposal submitted
  EU budget of 32M€ over 2 years
- **July 2003**: proposal accepted
- **September 2003**: start negotiation
  1st meeting 8th Sept
  2nd meeting 26th Sept
  Final meeting 17th Oct
- **April 2004**: start project
  Existing EU DataGrid and DataTAG projects extended to this date



Timeline 2

- EGEE Industry Forum at CERN on October 7th
- EGEE Collaboration Board meeting (one representative nominated by each partner) at CERN on October 9th
- Federation administrative meeting at CERN on October 10th
- Final version of TA by October 10, discussion and last possible negotiation meeting with the EU on October 17th
- Contract signature early next year
- Official start of the project on April 1st 2004