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Enabling Grids for E-sciencE

EGEE-II and Business

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EGEE-II 1st EU Review (CERN)
15-16 May 2007

www.eu-egee.org

Information Society
and Media

- **EGEE-II focuses its efforts to:**

1. Formulate strategies to improve the uptake of EGEE-II in Industry

2. Recruit new industry users of the Grid (and possible future financial supporters of a sustainable Grid infrastructure in Europe)

3. Support and Attract Business Applications using gLite

4. Attract industrial stakeholders to the opportunities available within EGEE-II

5. Identify and target new user communities from Industry & suggest means to overcome the obstacles industry face when adopting Grid technologies

6. Facilitate a fruitful, dynamic exchange between current Grid users and potential new industry Grid users

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- **Principal structures, activities & achievements with Industry**

Structures

- Business Partners
- EGEE-II Business Associates
- Industry Task Force
- Industrial Stakeholders
- Industry Forum
- Community Members

Activities

- Plan for Industrial Involvement
- Business Applications
- Industry Days
- Dedicated Business Track at EGEE'06 & '07 Conferences
- EGEE User Forum 07

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Delivery Date	Deliverable N°	Name	Responsible Author
M03	DNA2.4	Plan for Industrial Involvement	MTW
M11	DNA2.5.1	Annual Report of the Industry Forum	MTW
M23	DNA2.5.2	Annual Report of the Industry Forum	MTW

- **DNA2.4.1**
  - Plan for Industrial Involvement
    - Laid out a roadmap with clear metrics with progress indicators and specific strategies

- **DNA2.5.1-2**
  - Annual Report of the Industry Forum
    - Reports on progress made of Industry involvement, results achieved and allows to identify areas of improvement and update strategies for future actions

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Start of EGEE-II	Current Status	Second year emphasis
Industry and SMEs	Industry and SMEs (also those not using Grid)	Government
Early Grid Users	Petroleum (TOTAL, UK)	Telecommunications
Industry Grid Users	Bioinformatics (Medicel)	Pharmaceuticals
	Automotive (SIEMENS)	Automotive & Aerospace
	Finance (FinPro, Monte dei Paschi)	Media
	Current Grid Users	Energy
	Independent Software Vendors – ISVs (NICE, GridwiseTech)	

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Signatories of the project contract with responsibilities in EGEE-II

- **CEA (France)**
  - Working with the Fusion community

- **CGGVeritas (France)**
  - Seismic Imaging and Reservoir simulation – BEinGRID (BE18)

- **CRSA (France)**
  - Finance - Risk Management in Finance – BEinGRID (BE11)

- **CS-SI (France)**
  - Responsible for Q.A. and Technology Transfer to SMEs
  - Support Large enterprises

- **DATAMAT (Italy)**
  - gLite middleware development & testing

- **Metaware (Italy)**
  - Dissemination and outreach to Businesses and Industry
  - Leads the Industry Forum and organises Industry Events

- **TID (Spain)**
  - Telecoms

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- **Provides opportunities for companies to engage in technical work in collaboration with EGEE, such as:**

  – Coordinated technical developments

  – Market surveys

  – Exploitation strategies

  – General transfer of know-how and services to industry

- **First year of EGEE-II**

  – 3 EGEE Business Associates

    ▪ GridwiseTech

    ▪ Nice

    ▪ Platform

- **GridWiseTech**

  - Developing Grid tutorials to Industrial Mgt.

  - Outreach to Business

    - Established contact with **PHILIPS**

- **NICE**

  – Developing EGEE compatible GENIUS Grid portal and EnginFrame Framework

- **Platform Computing**

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

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- **Both companies potential as an EBA is an outcome of the Pisa Industry day (Jan 07)**
  - Negotiations about to start

- **Avanade**
  - IT Consultancy
    - Help to make EGEE infrastructure more commercially viable

- **Excelian**
  - UK-based Grid Consulting Company for Finance and Energy
    - Bring know-how and technical expertise
    - Aid in adapting EGEE infrastructure to meet needs of the Finance sector

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- **Comprised of 11 representatives from:**

  – EGEE-II industrial partners
  – participants from EU-funded Grid projects
  – external companies running applications

- **Mandate:**

  – Assess gLite in industrial contexts
  – Define EGEE technical requirements for industry
  – Support channel for commercial and technical requirements for industrial take-up external to EGEE
  – Liaise with IF and TCG
    ▪ Technical direction of EGEE-II and business needs
    ▪ Ensure Business Applications have equal status to Scientific App.
  – Support gLite Business Applications

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- **BEinGRID**
  - 3 different applications
    - Earth Sciences – seismic imaging & reservoir simulation
    - Earth Observation – atmospheric retrieval parameters
    - Finance and Insurance – Risk Management
- **SMEs**
  - OpenPlast project - Develop and deploy Grid platform for plastics industry
  - Cambridge Ontology - Ported gLite application and GridPP sites
- **Health**
  - Health-e-Child – Biomedical information platform for Paediatrics
  - WISDOM – using EGEE infrastructure for drug discovery
- **Energy**
  - TOTAL, UK - Ported application using GILDA testbed
- **CERN Openlab**
  - Collaboration between CERN and industrial partners to develop data-intensive Grid solutions

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- **Second year of EGEE-II**

  - Increase involvement of ISVs

  - Identify new Industrial gLite pilot applications

  - Gather and analyse Business requirements
    - Expected requirements from BEinGRID - Spring

  - Address barriers for potential adoption (i.e. Licensing, security, standardisation, etc.)
    - Licensing prototype with The MathWorks
    - Security Analysis by cnes
    - Making contacts with FLEX*lm*

  - Qi3 Limited

    - Technology Evaluation of EGEE
    - Market Survey Feasibility of EGEE Commercial Training
    - Potential EU Business Competition (EGEE supported, hosted by CERN)

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- **Platform and dissemination tool designed to give Industry:**
  - Opportunity to learn about EGEE and its benefits
  - Find out how their Industrial Applications can be deployed on EGEE using gLite middleware

- **110 New members - totalling 285**

- **Commercial EGEE Partners within the IF:**
  - 39 EU-funded research infrastructure & grid projects contacted for Industrial collaborations
    - 12 interested in synergies with EGEE

  - Key role in organising
    - EGEE'06 Business Track – Sept 06
    - Enterprise Requirement Workshops at OGF20/EGEE User Forum – May 07
    - EGEE'07 Business Track – Oct 07

- **Organise Industry Days**

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- **Platforms to enable current and potential adopters of grid technology to:**
    - Interact with EGEE project
    - Understand gLite
    - Exchange knowledge and experiences
    - Benefits for the up-take of grid by industry
    - Discuss technical and non-technical barriers
    - Download agenda, PDF presentations and evaluation reports

    - Guidelines:
        - Federation-based
        - Frequent, 1-2 Months
        - Short, one-day format
        - Interactive – panel discussions with a max of 50 participants
        - Sector specific to tailor presentations and have focused audience
        - Media coverage

www.eu-egee.org/egee_events/industryday

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Venue	Date	Topic	Participants
Paris, France	27 Apr 06	Launching ID	70
Cambridge, UK	16 May 06	SMEs	20
Ischia, Italy	12 Jul 06	Data grids	50
Catania, Italy	26-27 Oct 06	SMEs	100
Helsinki, Finland	24 Nov 06	Bioinformatics	50
Pisa, Italy	24-26 Jan 07	Finance	50
Budapest, Hungary	23 Feb 07	Large Enterprise	48
Madrid, Spain	1 Mar 07	Joint EGEE/EELA	30

- **8 Total Industry days in 12 months across 6 Federations**

- **Average of 50 Participants**

- **Covering 4 of 8 under-represented areas**

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- **Total UK**

  – Attended the industry day in Paris

  – Ported application to GILDA testbed

  – Presented the results of their work in the EGEE'06 Business Track

- **Cambridge Ontology**

  – 2 person startup company attended Industry day in Cambridge

  – Ported gLite application - Content Based Image Retrieval System

  – Support from Qi3 and EGEE - awarded mini-PIPSS funding grant by UK's PPARC

  – Now growing and attracting private funds

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- **Potential EBAs**
  - Avanade (IT, NL)
  - Excelian (U.K.)

- **Community Members**
  - Increase in specific vertical markets
  - Increase in Industry Forum members
  - Brought in involvement in ISVs and experts

- **Speakers and participants**
  - Large enterprise and SMEs
  - EU-funded projects
  - EGEE representation

- **EGEE Stakeholders**
  - Increase involvement/awareness in under-represented sectors

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- **Lessons Learnt**
  - More end-users in audience
  - Sector specific
  - Local Organisers
    - Apply to Industry Forum Chair
    - Reviewed by Industry Forum Steering Committee
    - Topics based on relevance of Grid adoption in the region
  - 50 participants is effective
  - Increase success stories and case studies in presentations

- **Output**
  - Challenges in adopting gLite or EGEE-II Infrastructure
    - Through post-event surveys and round table discussions
  - Documented through Post-event Reports

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- **Future Industry Days**
  - Paris, France, November 07 – Grid and Finance
  - Under discussion (2007-2008)
    - Austria
    - UK
    - Greece
  - Cover remaining under-represented areas of EGEE-II

- **1st International Grid School for Industrial Applications**

  - INFN – Catania, Italy – 30 Jun – 7 July 07

  - Allow Industrial players to run an actual application on live portals

  - Ultimate platform to show, teach and allow Industrial technicians to try out what has been deeply discussed and presented

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- **EGEE'06 Conference**
  - Dedicated Business Track
    - 1 half-day and 1 full-day with 3 morning parallel sessions
    - Gave sponsors a commercial platform as well as offered presentations – Plenary and Keynote
      - *Intel, Oracle, HP & Sun Microsystems*
      - *Oracle – Closed room Workshop*
    - 25-150 attending Business Track

- **EGEE'07 Conference**
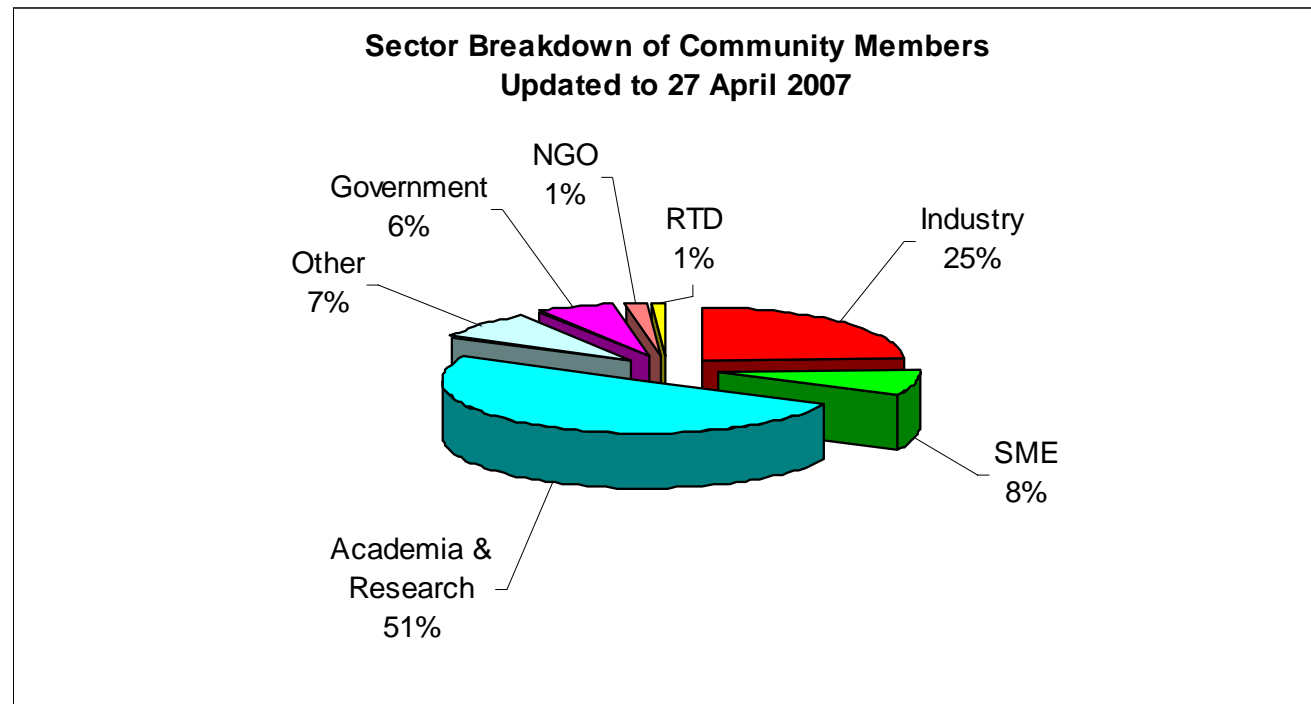 - Second Business Track
    - ITF and IF - Programme Committee
      - *Sponsors*
      - *Training Tutorial and Demos*
      - *Present results of past 12 months*
      - *EBAs and Business Applications*
      - *Parallel sessions on specific vertical markets*
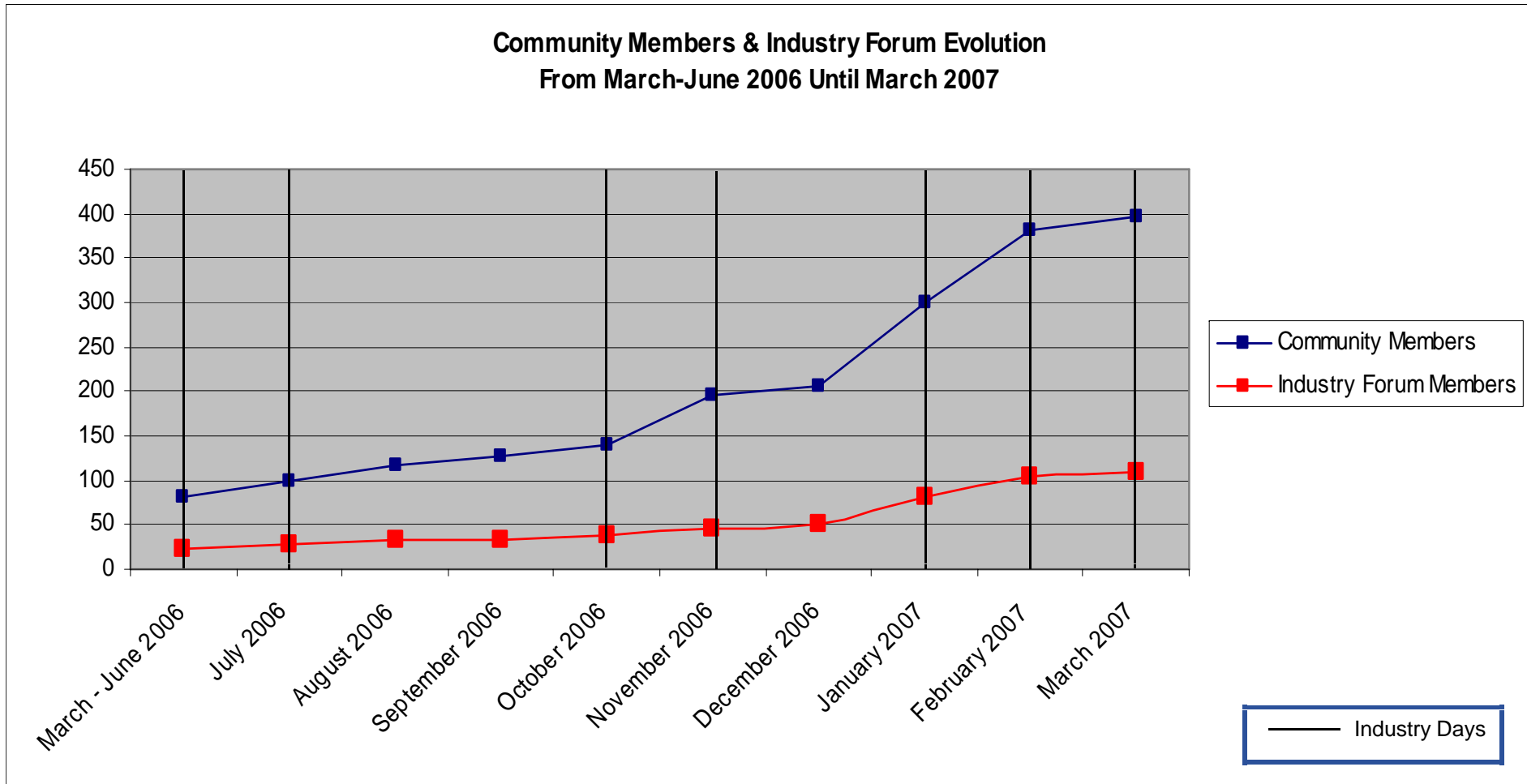
EGEE User Forums

- **Geneva, Switzerland – 1-3 March 06**
  - Hosted by CERN
  - Provided an important opportunity for innovative applications to establish contacts with EGEE and with other user communities
  - Attracted some 250 attendees and 90 technical contributions

- **Manchester, UK – 9-11 May 07**
  - In conjunction with OGF20
  - More than 900 registrants
    - Over 200 Enterprise representatives
  - Combined event aimed:
    - Further strengthen the links between EGEE and OGF
    - Bring users and standards bodies together - establish key standards
  - Industry Forum co-hosted Enterprise Requirement Workshops
    - Financial Services, Pharma, Automotive and Aerospace, and ending in Cross Industry Issue discussion

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- **EGEE-II boasts a progressive increase in Community Members from Industrial sectors**

  – More than 400 Community Members

  – 100 Representatives from the Industry sector + 34 SMEs

Sector Breakdown of Community Members
Updated to 27 April 2007

- NGO 1%
- Government 6%
- Other 7%
- RTD 1%
- Industry 25%
- SME 8%
- Academia & Research 51%

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Community Members & Industry Forum Evolution
From March-June 2006 Until March 2007

- Community Members
- Industry Forum Members
- Industry Days

•Steep peaks in registration directly correspond to Industry Days

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- **Community Member on-line survey**

  - Identified:

    - Benefits
    - 89% would recommend becoming a C.M.
    - Desired information on public portal
    - Improvement to on-line discussion forum

  - Action:

    - NA2 is drafting requirements on extending the public website to include more technical information and include a search function
    - On-line Discussion Forum
      - *Creating a more flexible approach that is user-friendly by opening up new topics for debate*

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- **Industry Plans**
  - More end-users
  - Sector specific Industry days
  - Increase success stories presented

- **Barriers for adoption**
  - Security – control/secure access to data/applications as well as "privacy" for sensitive data with sensitive applications
  - Standards & Policies – to encourage long-term investment
  - Training – need to offer training tailored to businesses
  - Software license management – how users access commercial packages & how ISPs generate revenue
  - Networking – costs of network services is prohibitive

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Business Models: Qi^3 Considering Not-for-profit structure to support gLite	Standards: OpenGridForum OPEN FORUM | OPEN STANDARDS Push for interoperability to allow free choice of middleware	Security: cnes Analysis completed
Licensing: The MathWorks licensing prototype	Networking: Contacting various telecommunication companies	Training: Qi^3 Commercial survey

- **EGEE-II to build on initial successes with business in the context of European 7th Framework**

- **Foster relations with businesses based on targeted approach**
  - Targeted sectors
  - More attention on SMEs and ISVs

- **Set the way for commercial exploitation of EGEE technology**
  - Provide solutions in challenges for grid adoption by Industry
  - Prepare the future for commercial exploitation of EGEE

- **Create self-sustainable EGEE Grid/e-Infrastructure Competence Centres "for Industry"**

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- **Gaining experience on how to approach, involve and recruit Industry**

- **Databases that cover specific sectors are increasing in numbers that will help in the recruitment in future events**

- **Extended EGEE to numerous vertical markets**

- **Significant increase in the number of Industrial focused applications running on EGEE technology and the uptake of EGEE in various business circles**

- **These results clearly show that EGEE-II is headed in the right direction and lay out specific challenges and lessons learnt that will help guide a more productive future and solidify the scope of Industry involvement**