



#### Enabling Grids for E-sciencE

# NA5 – Policy and International Cooperation

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#### Introduction

NA5 working on policy and international cooperation

#### Agenda Overview

- NA5 activity
  - Since Athens conference
  - In the future
- Plans for NA5 in EGEE-II
  - Introducing the old and new partners
  - NA5 questions and responses for EGEE-II hearing
- AOB & Open Discussion (Concertation activities etc.)

#### Requests for Any Other Business



#### The work of NA5

#### NA5 = Policy and International Cooperation

#### Policy-related activities



- Mostly focusing on backing the eInfrastructure Reflection Group (www.e-irg.org) "supporting the creation of a framework for the easy and cost-effective shared use of electronic resources in Europe"
  - Pursued mainly through a series of policy related White Papers and Roadmap documents, along with related Workshops

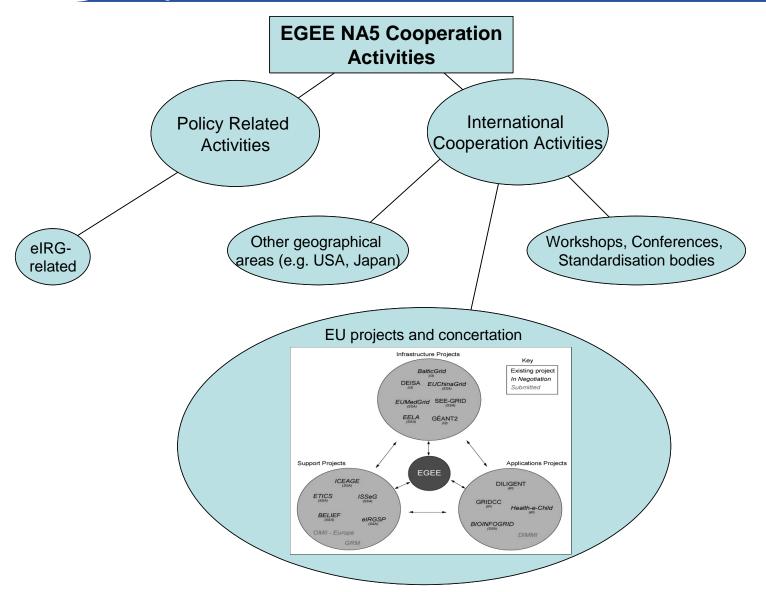
#### International Cooperation activities:

- With other projects including "concertation" activities (i.e. interacting with a cluster of related projects – forum of exchanging ideas)
- With other geographical regions (North America, Asia Pacific, Russia, South America)
- With standardisation bodies (GGF et al)



#### **NA5** structure

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#### NA5 - since Athens (1)

## New CERN NA5 management

- Fotis Karayannis is NA5 Activity Leader, based at GRNET, Athens
- Joanne Lawson is NA5 Support Officer, based in the EGEE Project Office at CERN
- Most of the work is summarised on the corresponding deliverable
  - Deliverable DNA5.3-4
    - Report on International Cooperation Activities and Project Synergies
      - https://edms.cern.ch/file/653319/2/EGEE-DNA5.3-4-edmsId-v1-4.doc
      - Please read and provide your feedback!



#### NA5 – since Athens (2)

## Policy related activities

- Cooperation with and support to the eIRG
  - EGEE coordinated the Technical Support Group which became the so-called e-IRG "virtual office"
    - Leading the publication of the white papers and roadmaps
    - Sitting on committees to define the programmes for the workshop meetings
    - Keeping notes and minutes for the different meetings and events
    - Co-organising the different e-IRG events
    - The virtual office corresponded to at least 3 half time persons including the NA5 activity leader.
  - Policy and technology experts from EGEE contributed to e-IRG documents, often as sub-editors.
  - EGEE experts participated in the e-IRG workshops, several as rapporteurs or area leaders.
  - The EGEE project director presented the project's views to the e-IRG community as an observer in the eIRG meetings.



## NA5 – since Athens (3)

## International cooperation activities

- Cooperation with other EU projects and initiatives (bilateral or as part of concertation activities)
  - The <u>projects</u> can categorised as follows:
    - Infrastructure projects such as GN2, DEISA, BalticGrid, EELA, EuChinaGrid, EUMEDGRID, SEEGRID
    - Application-related projects such as BIOINFOGRID (Bioinformatics), DILIGENT (Digital Libraries), GRIDCC (Real time control and visualisation of instrumentation), Health-e-Child
    - Other support projects and initiatives such as eIRG-SP (e-IRG support), ETICS (Software/Middleware centric), BELIEF (dissemination repository), ICEAGE (education), ISSeG (inter site security), NextGrid



#### NA5 – since Athens (4)

#### "Concertation activities"

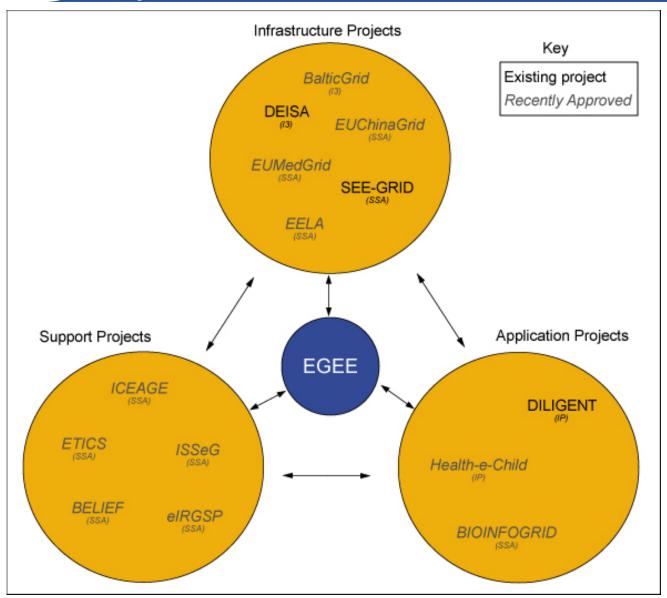
2 concertation groups formed: Security and generic

- project-eu-egee-concertation-security-gp@cern.ch, project-eu-egeeconcertation@cern.ch
- Successful EGEE/LCG/OSG working groups extended to other projects:
  - MiddleWare Security Group (MWSG): by invitation <u>project-eu-egee-middleware-security@cern.ch></u>
  - Joint Security Policy Group (JSPG): Next meeting this Thursday! joint-securitypolicy-group@cern.ch
- Participation and contributions to the **Grid Technology days** events Grid Research (Grid Technologies Unit – F2)
- EGEE 3 conference, Athens, April 2005:
  - Plenary talks by SEEGRID, DILIGENT, NEXTGRID
  - Joint EGEE/DILIGENT training
  - EGEE gLite training for other projects
  - Ad-hoc meeting: Computer Resource Meeting: EGEE, Condor, Globus, Unicore middleware stakeholders
  - Demonstrations including other projects: CROSSGRID was the project getting the award!
- EGEE 4 conference, Pisa
  - EGEE-related projects session!



## **Related Projects**

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#### NA5 – since Athens (5)

#### Participation to the TERENA NREN-GRID workshops, Amsterdam

- The first workshop took place in May 2005, the second in October.
- Two of the main objectives of the first session were 1)
  reaching common understandings about the likely impact of
  Grids on NRENs and future requirements and 2) investigation
  of organisational and political issues
- Topics such as AAI and Reservation of Networking resources for Grids



#### NA5 – since Athens (6)

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- Cooperation with other geographical areas such as US, AsiaPacific, and their elnfrastructure projects.
  - US
    - Participation of US partners in the project: Univ. of Chicage, USC, Un.of.Wisc (US PMB federation). Cooperation in multiple areas:
      - Operations (cooperation with SA1, where a series of joint operations workshops took place)
      - Middleware (joint meeting in EGEE
      - Policy / security mainly in the two related security groups, the Middleware Security Group (MWSG) and the Joint EGEE/LCG Security Policy Group (JSPG)
      - Project director instrumental interface with US and its funding agencies

#### Asia-Pacific

- Sites from countries such as Japan, Taiwan, India, China, Pakistan and Singapore have been integrated into the EGEE computing and/or storage infrastructure.
- Tutorials given in Taiwan and Japan.
- Japanese Grid representatives such as NAREGI, the Japanese national research grid initiative, were invited in EGEE and e-IRG events. The project director and other senior members visited Japan in different occasions.
- For China and Taiwan, collaboration has been established including training and dissemination events (resulting in separate specific support action proposal, EUChinaGrid).



#### NA5 – since Athens (7)

## Participation in major international conferences and workshops

- GN2 launch event
  - The GN2 project launched GEANT2 in Luxembourg
  - The EGEE project was also represented by a high-level delegation during the event following the eIRG meeting.
  - Interfaces have been accomplished with other areas of the world, such as India and South Africa in order to establish international Grid efforts.
- OECD Global Science Forum in Sydney, Australia
  - focused "on Issues Related to Grid and Basic Research Programmes"
  - discussions highlighted that the area of policies which in Europe are handled by the e-IRG and supported by EGEE NA5 – should be emphasised more at a global level
  - Europe seems to be leading this area.



#### NA5 – since Athens (8)

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#### Internet2 event in Philadelphia

- NSF Middleware Initiatives activities presented, aiming to create a national interoperable middleware infrastructure for education and research
- Different tools for VO management and security were presented (GridShib, MyVOCS)
  - Might be useful in EGEE-II, since EGEE will be working on integration and interoperability with other Authentication and Authorisation frameworks.
- Besides the Middleware initiatives, US efforts in the area of advance reservation and accessing networking resources were presented, similar to the EGEE JRA4 ones.

#### iGrid2005 and GLIF meeting

- Mainly related to networking aspects (e.g. reservation) and advanced applications including impressive visual demos!
- In addition, new US cyberinfrastructure plans presented:
  - High Performance Computing, Data Analysis and Visualization,
     Collaboration, Communication and Remote Access, Education & Workforce Development
- A lot of discussions about EGEE networking activities (SA2/JRA4 issues) such as e2e connections, SLAs, advanced reservation, interaction between Grid middleware and networking layer etc.



#### NA5 – since Athens (9)

#### Participation in major standardisation efforts

- NA5 has initiated at attempt to create an inventory of EGEE members' participation in standardisation work
- Please help us to fill in our template:

| Standardisation<br>Body | Area               | Working<br>Group | EGEE<br>contributor       | EGEE contributor's role | EGEE contributor's institute and country |
|-------------------------|--------------------|------------------|---------------------------|-------------------------|--|
| GGF                     | Grid<br>Operations | CAOPS-<br>WG     | Christos<br>Kanellopoulos | Chair                   | AUTH/GRNET, Greece                       |



## NA5 – future plans (1)

#### Plan for the December review

- Issues previously raised by reviewers
  - Encouragement to "fulfill and take advantages of its responsibilities" to the Grid community
    - Higher visibility in scientific conferences!
    - Direct links from EGEE to initiatives outside EU
  - Recommendation: more standardization work
    - Encourage people to attend, chair groups, help write standards.
- But proposed topics for NA5 for the review included:
  - Brief to focus only on what concerns the Asia-Pasific collaboration
  - Asia-Pacific is not NA5 strong areas!
- So probably have to focus on final review



## NA5 future plans (2)

- Policy related plans
  - eIRG
    - UK
      - EGEE has an 'eIRG White Paper' deliverable due end of December 2005
        - Probably to be postponed for Austrian presidency
    - Austria takes on EU presidency in 2006
      - eIRG workshops and meeting planned for early 2006 in Austria
        - Linz, Wien Dieter Kranzlmueller



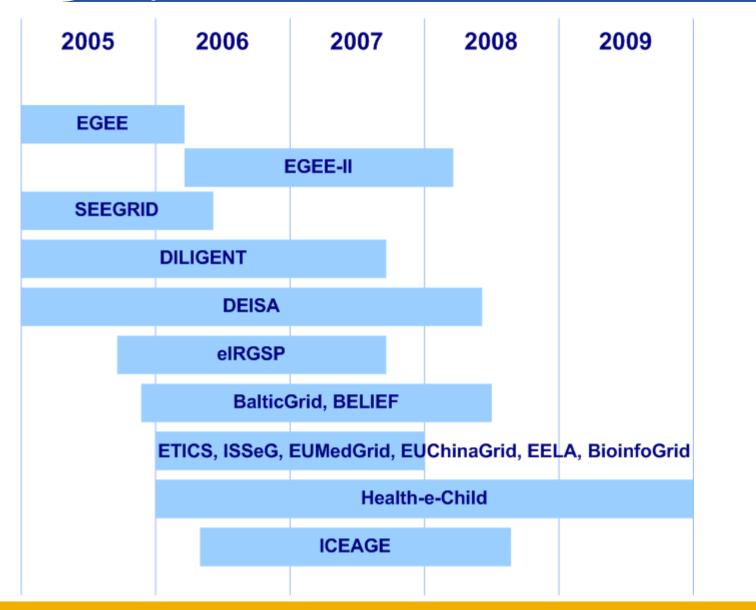
## NA5 – future plans (3)

- International cooperation plans
  - EGEE related projects <u>timeline</u>



## Time scales (thanks to D. Kranzlmueller)

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## NA5 – future plans (4)

## International cooperation

- EGEE related projects <u>timeline</u>
  - Focus on specific areas identifiying priorities
    - Training and standards were amongs others
  - Working groups are a good solution for many areas but not for all
    - Other forms of collaboration is needed (e.g. discussion groups or bilateral cooperation)
  - Summary of the event will be prepared and follow up after the meeting
  - User forum event in March (1-3, Geneva)



## NA5 – future plans (5)

## International cooperation

- Next concertation event organised by DANTE
  - Likely to be held alongside the BBEurope conference in Bordeaux, December 2005
  - Clashes with e-IRG meeting! (14 December)
  - Agenda likely to include....



## **Potential Concertation Agenda**

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#### 1. Monitoring & Performance Optimisation

- Multi-domain monitoring
- PERT
- End-to-end services and last mile issues
- Definition of operational procedures in case of a fault

#### 2. Resource Management / Allocation

- Reservation tools
- Job prioritisation (between grid and non-grid jobs and between grid-jobs)
- Routing and scheduling for dynamic bandwidth control
- BoD
- Developments in lower layer technology

#### 3. Interoperability Issues

- Among different grid infrastructures
- Coordination of network resources with other grid resources (eg CPU, storage)

#### 4. Security and AAA

Global inter-working AAI



## NA5 – future plans (6)

## International cooperation

- EGEE User forum event: 1-3 March, Geneva (further info tba)
  - An event bringing together application users from different areas and other stakeholders
  - Possibly to be combined with the Austrian presidency's e-IRG workshop



## Any Other Business

– Concertation?