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Enabling Grids for E-sciencE

Status of the Project

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EGEE 1st EU Review

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**www.eu-egee.org**

Information Society

- **General Status of the project, providing an overview of:**
  - NA1 accomplishments
  - Overall issues and concerns
  - Financial status
  - Manpower levels
  - Deliverables and milestones status
  - Plans for the next period

    - Grid operations screens are available

- **NA1: Management of the Project**
  - EGEE successfully negotiated: budget of 32M € over two years
  - All management structures set up and running to coordinate the project (PMB, PEB, AFM, EAC, CB)
  - Contract, Consortium Agreement signature coordination
  - First Contract Amendment:
    - After the addition of RED.ES and the withdrawal of UCL, the project still counts 70 partners, and approximately 35 non-contracting participants
  - Software license
  - Dissemination activity in the PO: presentations worldwide by the Project Management

- **The scale of the project**

- **The distributed structure of the project**

- **Limited resources available in the NA1 project office**

- **New FP6 rules and guidelines for reporting**

- **Partner issues (catch all for the rest of the project)**

- **Difficulties in dealing with a real production infrastructure (HEP)**

- **Production of new middleware**

- **Support of other projects and user communities**

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- **EGEE: budget of 32M € over two years**
  - 8,149M € for CERN (coordinator), 2.8M € spent in 2004

- **Provisional Cost Claim to December 2004: 33% spending of the overall maximum EC contribution after 9 months of operation**

- **Expenses are as follows**
  - Personnel: 91%
  - Travel and Subsistence: 7%
  - Other Costs: 2%
  - Audit Costs are not accounted for as audits have not yet been performed.

- **AIS at CERN: help to implement PPT tool to monitor project effort consumption (timesheets)**
  - 850 people registered around Europe and Russia

Total (F+UF) Effort in PM
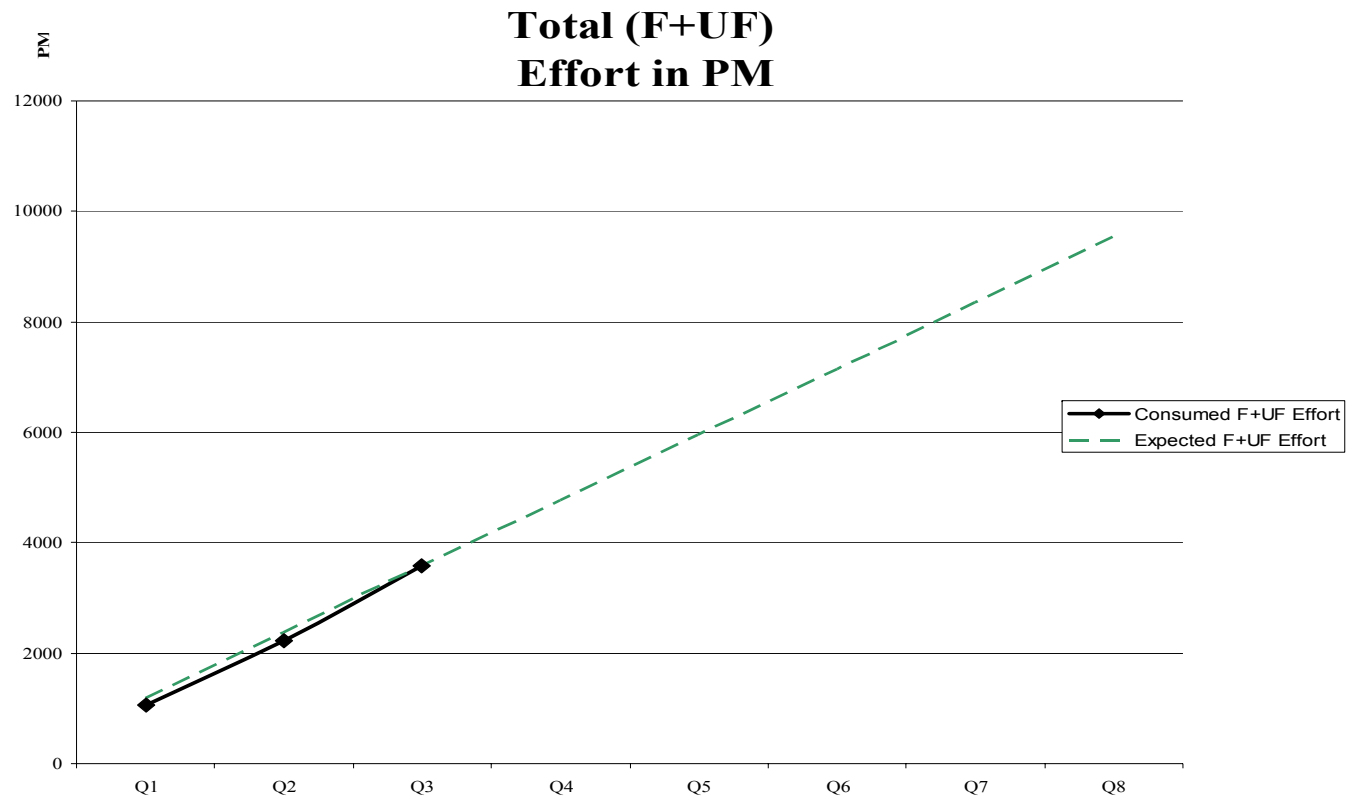
Id	Deliverable / Milestone title	Nature[1]	Lead partner	Original Delivery date[2]	Revised delivery date[3]	Status[3]
DNA1.1.1	First Quarterly periodic report	R	CERN	PM3	PM3	Pending EC review
DNA1.2	Gender Action Plan	R	CERN	PM3	PM3	Pending EC review
DNA1.1.2	Second Quarterly periodic report	R	CERN	PM6	PM6	Pending EC review
MNA1.1	Successful completion of first review		CERN	PM9	PM9	Pending EC review
DNA1.1.3	Quarterly periodic report	R	CERN	PM9	PM9	Pending EC review
DNA1.3.1	Periodic report	R	CERN	PM9	PM9	Submitted on January 24th

[1] Nature = **R** = Report   **P** = Prototype D = Demonstrator   **O** = Other, Deliverable id: for Milestone attached to a deliverable
[2] Dates are expressed in project month (1 to 24). For the "revised delivery date", please note the revised delivery date if a significant delay is foreseen.
[3] Status = Not started – In preparation – Pending internal review - Pending EC review - Accepted

- **Ensure that:**
    - successful project reviews are carried out
    - all deliverables and milestones are met and reported correctly according to the original programme of work
    - Should any changes be required to the aforementioned programme of work, the management activity will coordinate contract amendments when appropriate with the European Union
    - Close liaison with the dissemination and outreach activity to coordinate the remaining two project conferences and all dissemination tasks
    - The maintenance and update of the technical pages section of the website will be pursued to ensure the project members are accurately informed

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Activities Major accomplishments and issues identified

- Public Website with over 4000 visitors a month designed and written from scratch
- A wide-range of publicity material (information sheets, fact sheet, folders, templates for presentations, posters, word documents etc)
- Organised 2 successful EGEE conferences
- Have over 90 media cuttings and 2 radio interviews worldwide about EGEE
- EGEE has been presented and/or promoted at over 100 different events across the world so far.

- **Issues**
  - A main issue is that the majority of activities are involved exclusively in technical activities and as such do not automatically know or realise what is newsworthy.
  - Monthly communication of metrics by NA2 partners to TERENA is not automatic
  - NA2 partners have to ensure that their dissemination activities fit in to the overall strategy for NA2.

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- The establishment of an effective and federated collaboration for training across the whole of the EGEE geographic area
- Significantly exceeding our first year goals in the provision of training and induction
- Identifying the requirement for e-Infrastructure and pioneering its provision with GILDA and the shared training material repository

- **Issues**
  - Sustaining high-quality training throughout the region for as long as required
  - Experts are needed to inform planning, preparation and delivery of new courses
  - The demand for training is growing rapidly and the breadth of requirements expands with each new community and operational advance.

- – The successful deployment of several biomedical applications
- – The successful outreach to new generic communities through a well established process, providing education and application migration using GILDA and GENIUS as tools, for the new application areas selected by EGAAP
- – The demonstration of a prototype analysis system using gLite for all 4 LHC experiments

- **Issues**

- – The provision of management and support structures for the integration of multiple user communities, and taking into account the significant increase of the number of EGEE active users
- – The planning and execution of the migration to gLite of applications, both HEP and non-HEP, currently deployed on LCG2
- – The availability of security-enhanced services for data manipulation and job execution

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- Development of the eIRG white paper process (support functions, delegation of responsibility in scalable manner etc)
- Concertation event planning and follow-up (together with NA2!)
- Providing part of the continuous push for starting and maintaining momentum behind the Den Haag eIRG White Paper work

- **Issues**
  - The NA5 activity has been concentrating on external to the project actions. This has meant that the activity has been somewhat isolated inside EGEE
  - Limited and late availability of dedicated resources
  - Scope and goals of the activity redefined

- Functioning production grid infrastructure in place with 110 sites in 31 countries (10 countries and 18 sites outside Europe), providing more that 10,000 cpu; exceeding all of the project milestones in this respect.
- Support of the extensive and intense LHC experiments' data challenge activities during the whole of 2004, which used more than 1 Million SI2k-years of cpu, with peaks of 4000 jobs in parallel for a single VO; other VO's are now being deployed successfully on the production services
- Operations support infrastructure in place and managing the grid operation in a daily routine manner, with problem management, escalation, and incident response procedures in place.

- **Issues**
  - Improving the quality, reliability and efficiency of the operations to a true production quality, and understanding how to approach "24x7" global operations.
  - Continuing to develop the user support aspects in order to build a trusted, reliable and usable user support infrastructure
  - Introducing and deploying new VOs is still much too heavyweight, significant effort needs to be invested to improve this situation, to understand what a new VO needs, who will provide resources, and how this interaction between NA4 and SA1 can be improved.

- Coherent progress in the work from the "Application requirements" to the Network SLAs
- The proposed models in the SA2 documents (DSA2.1, MSA2.2) were well received by the networking community (EGEE/JRA4, GN2, TNLC)
- To have initiated a QoS experimentation for an EGEE application to get a real use-case.

- **Issues:**
  - Network support at the middleware level
  - The diversity of the site connectivity and the associated network services can make the network user support more complex
  - The fact that GN2 began six months after EGEE adds a difficulty for the EGEE networking activities

- Produced gLite Architecture and Design documents
- Software processes in place (prototyping, design, re-engineering, build, integration, testing,...)
- Software being made available

- **Issues**
  - Software being made available (people disagree on what is made available)
  - Staffing in Testing/Integration (currently under extreme pressure)
  - Communication with software clusters not optimal (difficult to follow

- **QA organisation is in place**

- **Main procedures, metrics and tools are in place**

- **Follow-up and feedback will continue to verify the project does deliver according to the agreed quality levels**

- **No issues identified**

- **Producing a Global Security Architecture document (DJRA3.1), well received from the community**

- **The same applies to the Site Access Control Architecture document (DJRA3.2)**

- **A number of security modules, of which four will be added to the RC1, and more have been produced by the JRA3.**

- **No issues identified**

- The NPM prototype (DJRA4.2) demonstrated that, through the interfaces we defined as the main task of the deliverable, we can collect and publish Network Performance data from heterogeneous sources

- The top issue for JRA4 is to do with the deployment of mainly NPM and also BAR services on the EGEE fabric. JRA4 is currently short-listing available NPM tools to be deployed on the fabric. There is currently no provision in the EGEE contract for the maintenance or deployment of these tools. JRA4 will collaborate with JRA1 to substantiate the need and location for the deployment of these tools and also with SA1 for their deployment.

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- **We have exceeded contractual commitments in many areas**

- **We are the largest and probably the only unique production infrastructure which implements Grid technology**

- **We are early adopters of emerging standards (GGF, WS-RF etc.)**

- **We are exposed to dedicated and demanding communities this is both a strength and a weakness**

- **We need to develop and work for a long term sustainable plan (as also demanded by our EAC and funding agencies)**

- **This review will help us to assess our progress and plan for the future**