



Enabling Grids for E-scienceE

## EGEE-II Status

*Bob Jones – Project Director - CERN*

*EGEE-II final EU Review (CERN)  
8-9 July 2008*

[www.eu-egee.org](http://www.eu-egee.org)



- **General Status of the project, providing an overview of:**
  - Review Agenda
  - Project Objectives
  - Activities
  - Management Structure
  - NA1 activity 2nd year achievements
  - Deliverables/milestones, contract status
  - Financial status
  - Manpower levels

## Tuesday

Status of the project  
 Technical Status

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Applications  
 Dissemination (scientific & business)

Operations  
*Interoperability (incl. ARC, UNICORE)*

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Demos  
 Quality Assurance  
 Networking Support

## Wednesday

Middleware Re-engineering  
 Integration, Testing and Certification  
*Software process metrics*

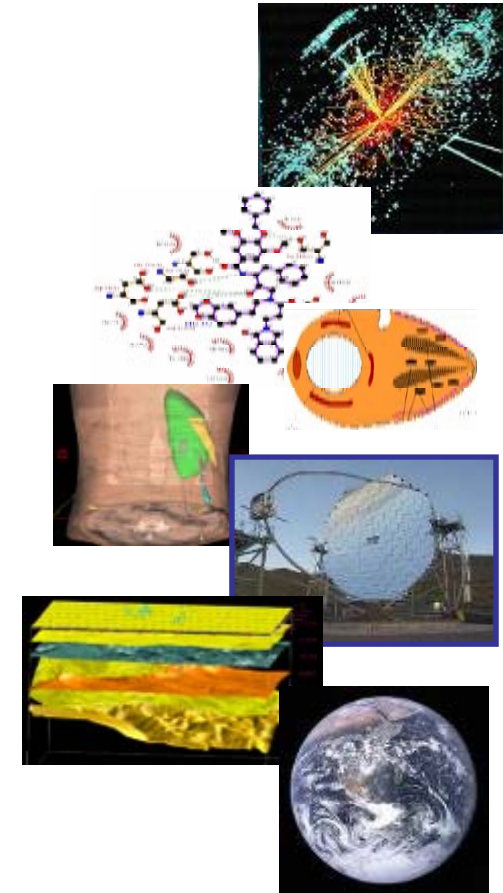
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Training  
 Policy & Collaboration  
 Plans for the future (EGEE-III, EGI)  
*General discussion*

Closed session  
 Feedback from reviewers  
 Cocktail

The follow-up of recommendations from the 1st year review is documented in the periodic report (DNA1.2.2) and are implicitly covered in the presentations

- **Infrastructure**
  - Manage and operate production Grid for European Research Area
  - Interoperate with e-Infrastructure projects around the globe
  - Contribute to Grid standardisation efforts
- **Multitude of applications from a growing number of domains**
- **Forge links with the full spectrum of interested business partners**
- **+ Disseminate knowledge about the Grid through training**
- **+ Prepare for sustainable European Grid Infrastructure**



## Networking

- NA1: Project Management
- NA2: Dissemination, Outreach and Communication
- NA3: Training and Induction
- NA4: Application Identification and Support
- NA5: Policy and International Cooperation

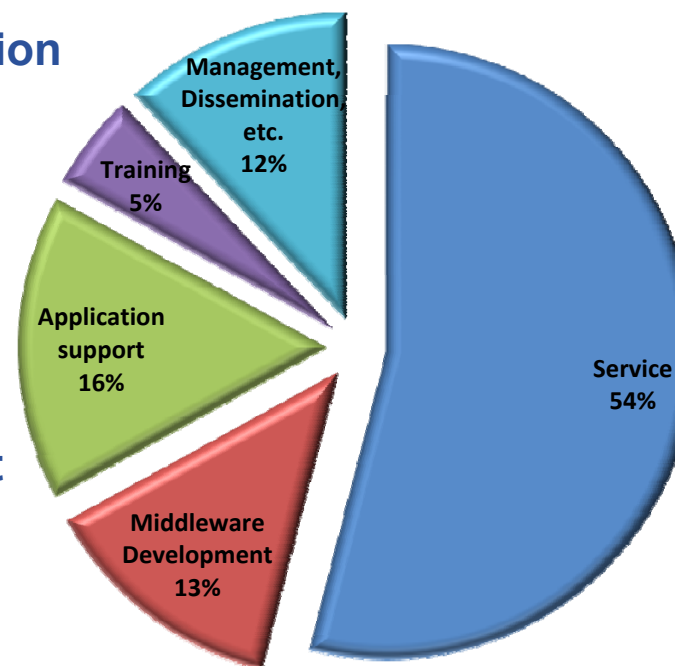
## Services

- SA1: Grid Operations, Support and Management
- SA2: Networking Support
- SA3: Integration, Testing and Certification

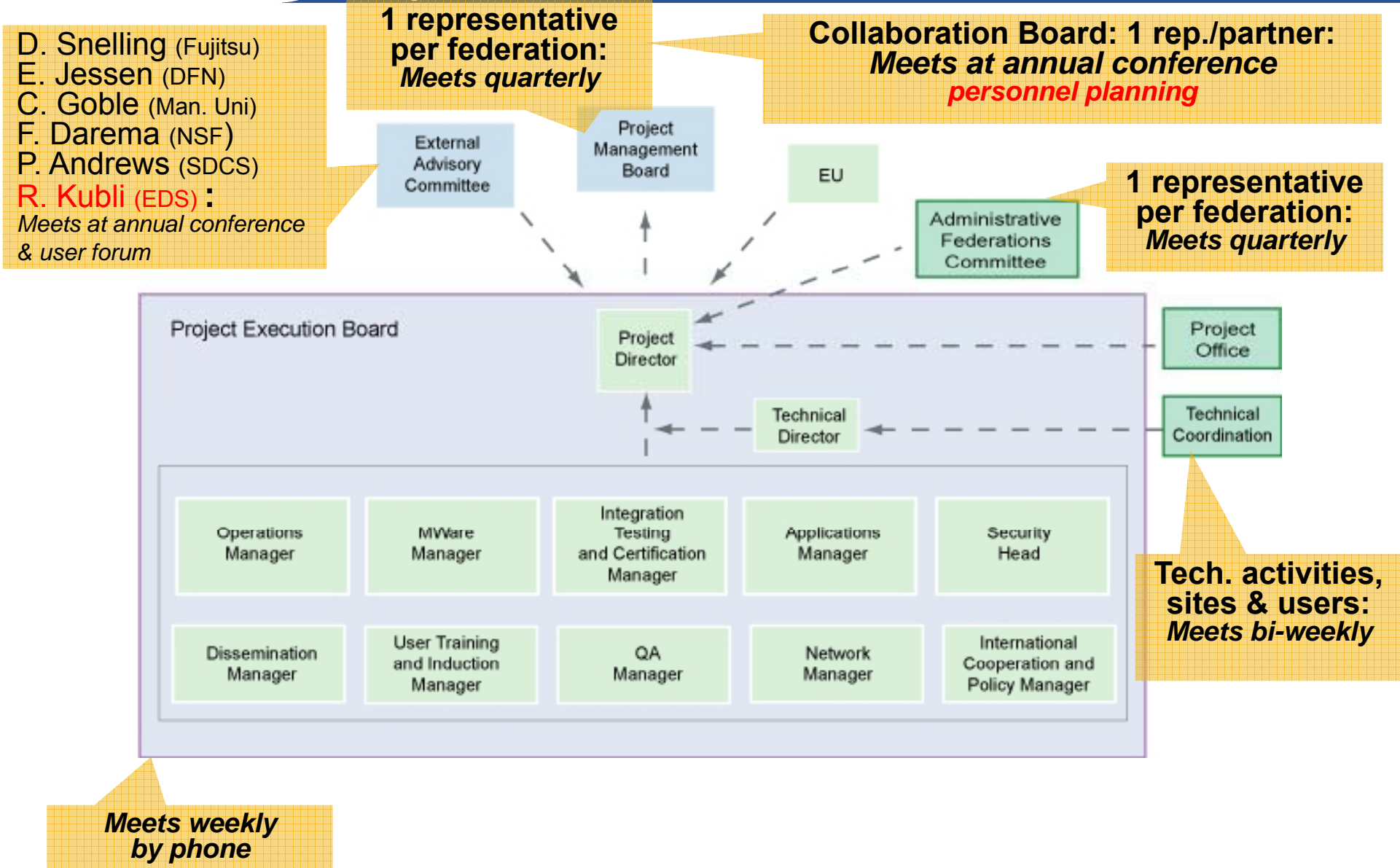
## Joint Research

- JRA1: Middleware Re-engineering
- JRA2: Quality Assurance

EGEE Project Activities



Enabling Grids for E-science



- **3<sup>rd</sup> contract amendment**
  - Changes to legal status for Datamat to Elsig-Datamat
- **4<sup>th</sup> contract amendment**
  - Request extension for 1 month
  - Add partner Trust-IT to consortium, from 1 January 2008 (NA2)
    - Agree division of tasks and costs with Metaware
  - Replace CS Systemes d'Informations SA with BT Infrastructures Critiques
- **In all cases the same personnel continued to work on the project**
  
- **All activity meetings**
  - July 2007: Prepared actions and initial responses to the recommendations given at the 1<sup>st</sup> year review, plans for the 2<sup>nd</sup> year
  - Jan 2008: Prepare activity transition for EGEE-III
  
- **Gender Action Plan**
  - 2 Grids for kids days held (CERN & STFC)
  - 1 shadowing day held (CERN)
  
- **Sustainability**
  - EGEE has been the driving force behind the EGI Design Study project

Scheduled = 21539  
Running = 25374

## EGEE is THE largest multi-disciplinary research Grid infrastructure in the world

### Built a scalable operations model:

- 2x users
- 2x applications
- 4x cores
- 6x CPU usage

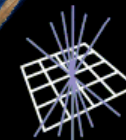
### Scientific Impact:

- Drug discovery
- Earth science
- Fusion

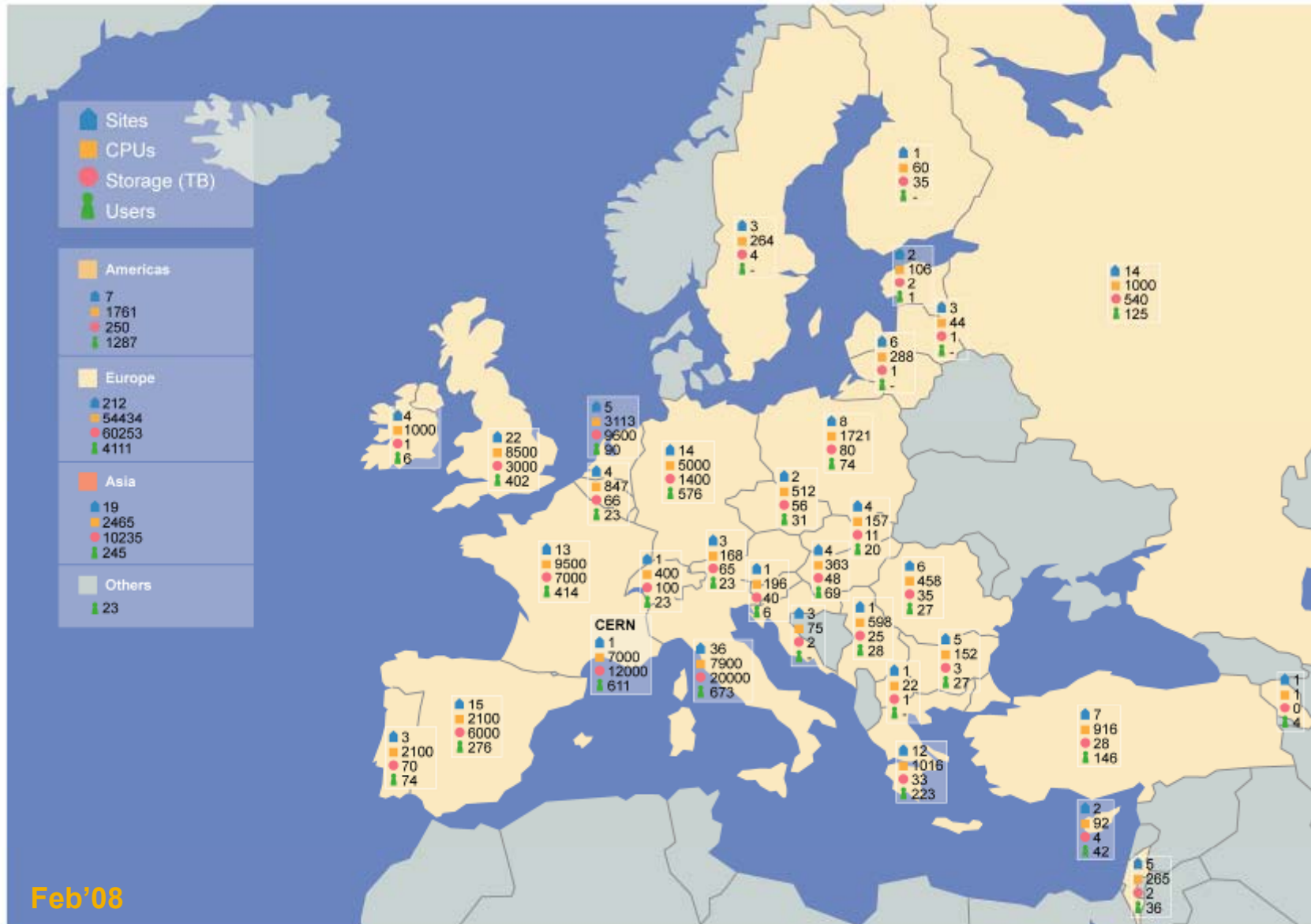
- ### Network of collaborations:
- 10x increase in visits to website/month
  - 3x increase in business contacts
  - Trained > 3000 people

- Interoperation with OSG (USA) and NDGF (Nordic countries)
- Excellent involvement of Asian partners

**21:13:50 UTC**







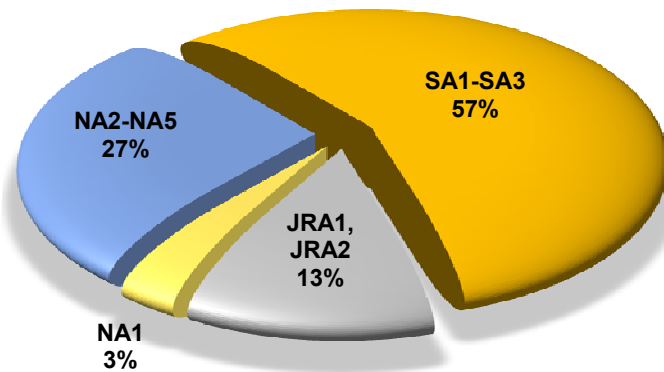
Feb'08

- **Effective review procedure in place (JRA2)**
  - Activity → nominated reviewers → PEB → PMB
- **All PM13-PM25 deliverables submitted**
  - “lessons learnt” section added to 15 deliverables
  - All milestones achieved and documented by the end of the period
- **The recommendations from the 1st year review have been addressed and documented (DNA1.2.2)**

## 104 Form C's received so far (out of 119)

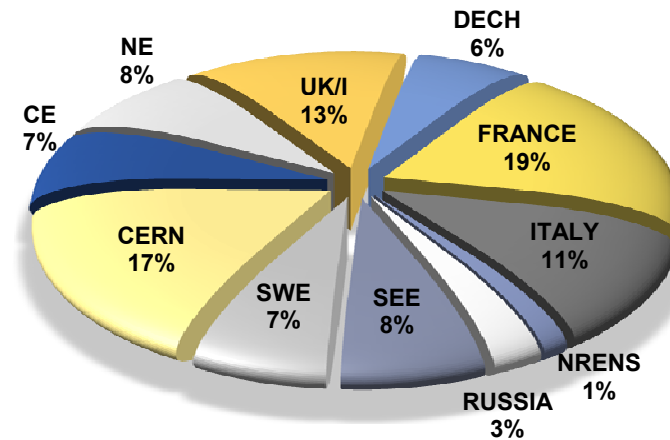
- **Total Costs: 55,588,637 EUR** (*excluding cost of computing resources provided by partners → estimated at 50 million EUR*)
  - 24,161,421 EUR - Period 1
  - 31,427,216 EUR - Period 2
    - 2.98M EUR over total cost budget (5.7%)
- **Total Requested Contribution as shown on the partners' Form C's: 38,509,048 EUR**
  - 16,530,669 EUR – Period 1
  - 21,978,378 EUR – Period 2 (including 1 month extension)
    - 1,537,684 EUR over budgeted Max. EC Contribution (4%)
- **Personnel is 91% of total costs**
- **All costs and effort are cross checked against work performed**

## EGEE-II Total Project Costs by Activity



NA1: Project Management  
 NA2: Dissemination, Outreach and Communication  
 NA3: Training and Induction  
 NA4: Application Identification and Support  
 NA5: Policy and International Cooperation  
 SA1: Grid Operations, Support and Management  
 SA2: Networking Support  
 SA3: Integration, Testing and Certification  
 JRA1: Middleware Re-engineering  
 JRA2: Quality Assurance

## EGEE-II Total Project Costs by Federation



CERN includes NA1 (3%) + USA & Asia Collaboration costs

CE: Austria, Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia  
 NE: Belgium, Denmark, Finland, Netherlands, Norway, Sweden  
 UK/I: United Kingdom & Ireland  
 DECH: Germany & Switzerland  
 NRENS: National Research and Education Networks  
 SWE: Portugal & Spain  
 SEE: Bulgaria, Cyprus, Greece, Israel, Romania, Serbia, Turkey

Asia (Korea & Taiwan) & USA: No funded effort only travel money

## Most overspending partners

	Budget Consumption	Overspent by (k EUR)
CNRS	126%	1,505
STFC	124%	983
CGG Services	165%	329

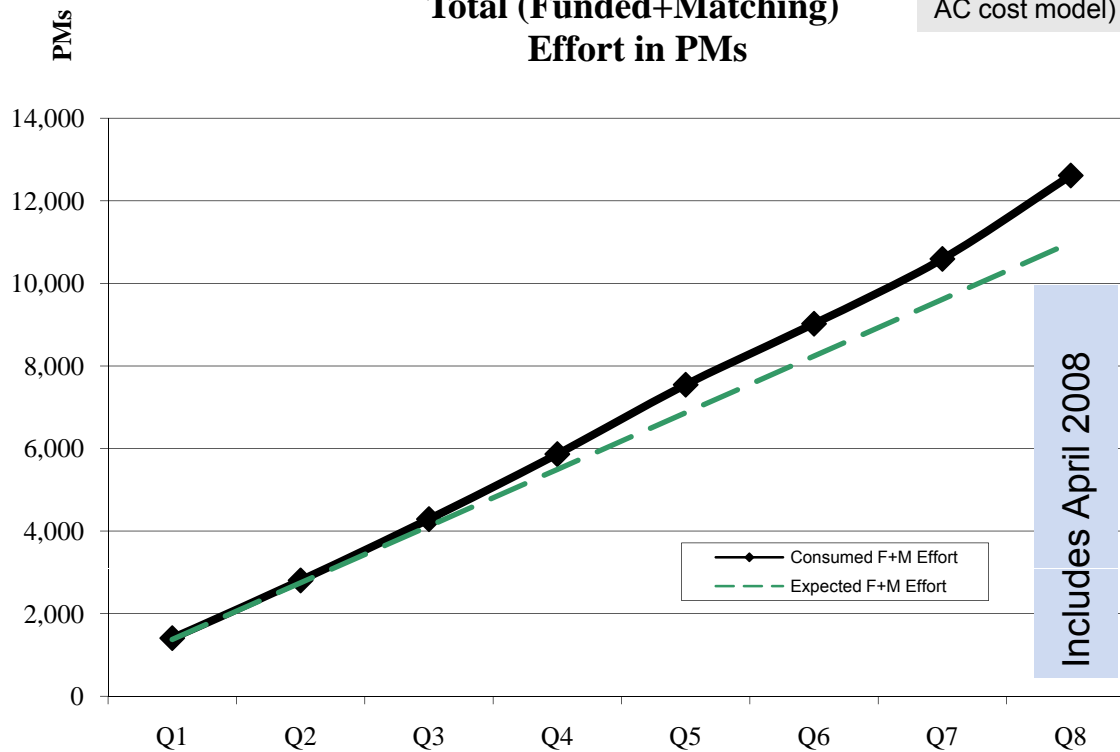
## Most under-spending partners

	Budget Consumption	Under-spent by (k EUR)
ICI	62%	224
FZK	90%	168
GSI	69%	137

- 1419 members registered
- 526 FTEs (115% of total PMs budget)

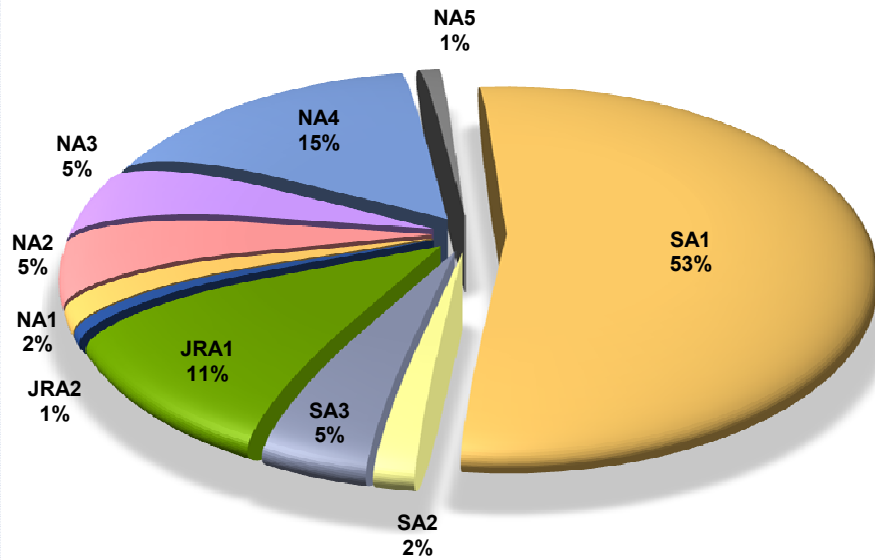
	Budgeted PMs	Actual PMs	Difference	% Consumption of budget
Funded	8106	9288	1182	115%
Matching (partners with AC cost model)	2879	3324	445	115%

**Total (Funded+Matching) Effort in PMs**

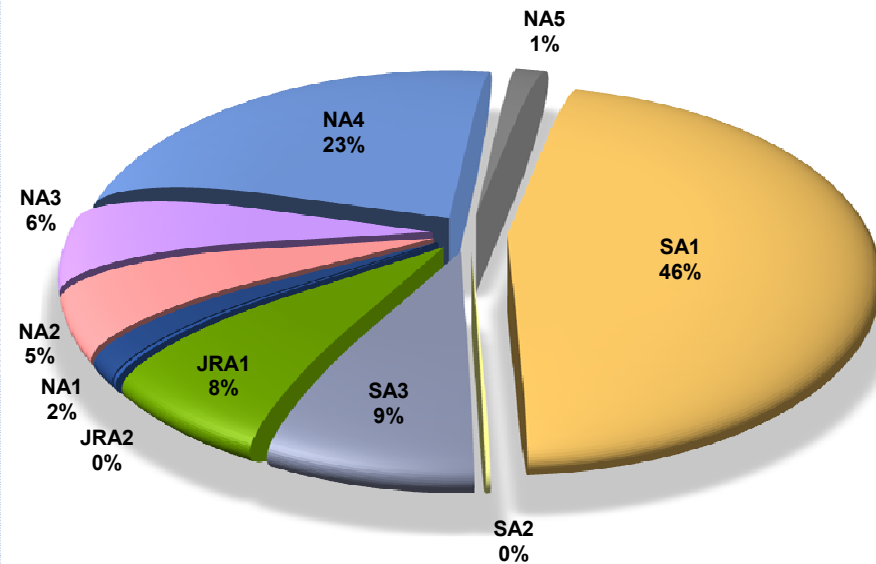


- Legend:**
- F: Funded effort
  - M: Matching effort
  - PM: Person Months
  - FTE: Full time equiv.

### Funded Effort by Activity (in PMs)

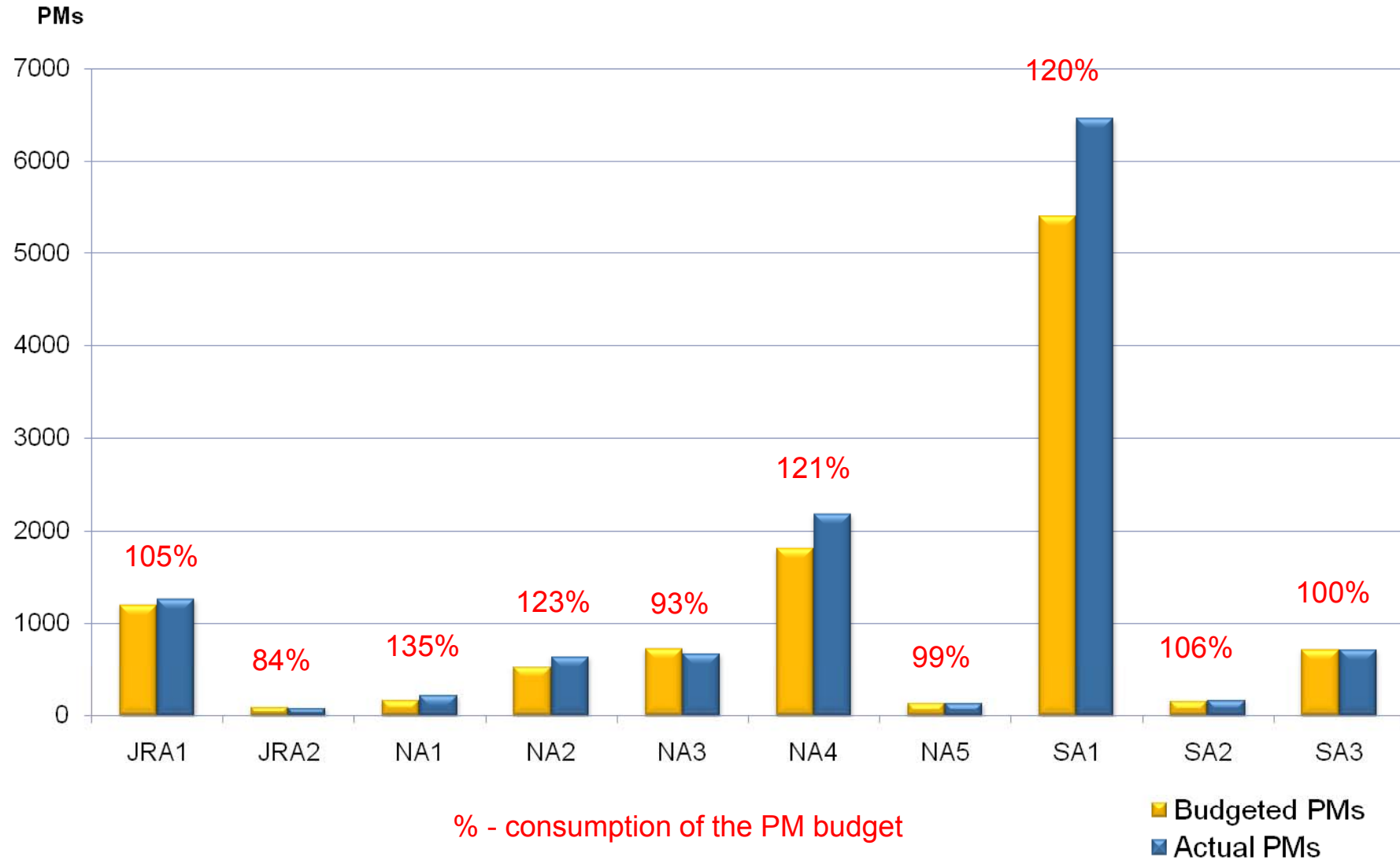


### Matching Effort by Activity (in PMs)



NA1 includes additional matching effort from CERN on tool support and from CNRS for user registration

# Total Effort by Activity





- **Manpower**
  - High turnover (short term contracts): issues of staff retention
    - Partially addressed via the Collaboration Board for the future
  - 7 out of 10 activities changed manager during the 2<sup>nd</sup> year
    - In some cases this was in preparation for the transition to EGEE-III
- **Consortium Size**
  - Financial reporting difficult to achieve in short timeframe
    - Internal quarterly cost estimates provided early indications
    - Provisional financial statement provided at this review
  - Difficult to monitor tasks of ALL partners in ALL activities
    - Partner/activity reviews have helped to reduce this issue

**Activity-specific issues are addressed in the corresponding presentations**

- **EGEE-II has completed successfully and has produced important results**
  - All deliverables have been produced and milestones met

Metrics	Targets at end of Year 1	Targets at end of Year 2	Status at the end of the project
Number of users	1750	2100	>9000
Number of people benefiting from the existence of the EGEE infrastructure	4000	5000	10000s
Number of application domains making use of the EGEE infrastructure	7	8	10
Number of organisations making use of the EGEE infrastructure	75	100	~140
Number of languages in which material is available	10	12	Up to 15
Number of attendees trained	750	1500	3079
Dissemination events in which EGEE-II is represented	200	400	622

Metrics	Targets at end of Year 1	Targets at end of Year 2	Status at the end of the project
Peak number of jobs running simultaneously	9000	12000	46000
Number of sites certified as production quality	180	200	255
Percentage of sites certified as production quality	60%	80%	90%
Number of countries connected to the EGEE infrastructure	40	45	<b>49</b>