



Enabling Grids for E-science

# SA3 Tasks, Milestones, Status, Reporting

*EGEE-II SA3 All Hands Meeting*

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



- **Full description in:**
- <https://edms.cern.ch/file/746531/1/EGEE-IIDoWv6ApprovedbytheECon03042006Final2.pdf>
- **Integration, testing and certification**
  - Building working releases of middle ware stacks
- **Started with EGEE-II April 1st.**
- **But in addition:**

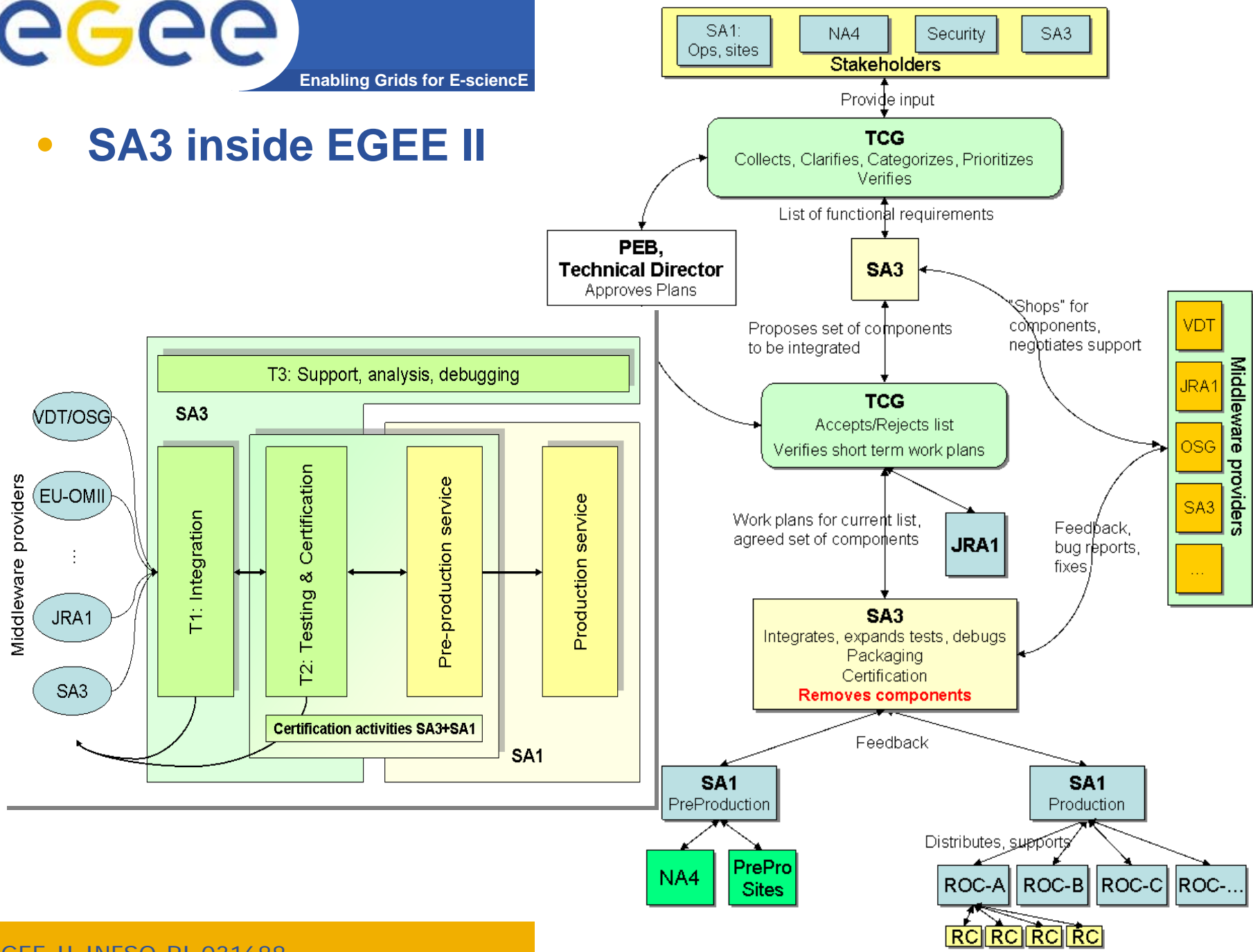
The SA3 activity **decouples** the production of deployable middleware **distributions from** the middleware **developments**. This is crucial at this point in the project, as the focus must be on making the infrastructure that now exists as reliable and robust as possible. Further middleware and services development will be **driven** by need and utility as determined by the users and operations group **via the technical coordination group**.

- **More:**

To this end the activity needs, as part of its team, staff capable of detailed software analysis, debugging, and fixing. The activity will **provide missing tools where appropriate** to its staffing level and negotiate with middleware providers, **both within** the EGEE- II project **and external** to it, to provide missing functionality and services.

The SA3 activity will lay out **explicit criteria** that software must comply with in order to be included in the middleware distributions. These criteria will include aspects of service management, security, documentation, installation, configuration etc. In addition, it must be clear between SA3 and the middleware providers what the support model for each component will be, and how the middleware providers agree to react to problem reports. **Components may be removed from an SA3 distribution if they do not satisfy these criteria and fail the certification tests.**

- SA3 inside EGEE II



- **T1: Integration and packaging**
- **T2: Testing and certification**
- **T3: Support, analysis, debugging, problem resolution**
- **T4: Interoperability**
- **T5: Capture Requirements**
  
- **Status:**
- **T1 and T2 gLite-3.0 release**
  - Integration of LCG-2 and gLite-1 process underway
  - Many problems have been encountered (some solved)
  - Postmortem:
    - See additional material on the agenda page and follow:
    - [postmortem](#)
- **T3 Ongoing activity**
- **T4 See Milestones**
- **T5 Not much done up to now.....**

- Execution Plan
- Setup of communication
- SA3 Web page
  
- CERN (I) had a very slow start on this due to gLite-3.0
  
- How to speed up?

- **Partners:**
  - CERN
    - Individuals:
  - PSNC
    - Instytut Chemii Bioorganicznej Pan W Poznaniu, Poznan,
    - **Poland**
    - **Individuals:**
  - TCD
    - The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin,
    - **Dublin, Ireland**
    - **Individuals:**
  - IMPERIAL
    - Imperial College of Science, Technology and Medicine
    - **London, UK**
    - **Individuals:**

- **Partners:**
  - INFN
    - Istituto Nazionale di Fisica Nucleare,
    - **Frascati (Roma), Italy**
    - Individuals
  - UKBH
    - Københavns Universitet
    - **Copenhagen, Denmark**
    - Individuals
  - UCY
    - University of Cyprus
    - **Nicosia, Cyprus**
    - Individuals



- **Partners:**
  - GRNET
    - Greek Research and Technology Network S.A.
    - Athens, Greece
    - Individuals:
  
  - CSIC
    - Consejo Superior de Investigaciones Cientificas, Madrid, Spain
    - Individuals:
  
  - PIC
    - Institut de Física de Altas Energias - PIC Division, Barcelona, Spain
    - Individuals:

- **Partners:**
  - **CESGA**
    - Fundacion Centro Tecnologico de Supercomputación de Galicia
    - Santiago de Compostela, Spain
    - Individuals:
  
  - **FZJ**
    - The Research Centre Jülich
    - Germany
    - Individuals:
  
- **And now we add other partners:**

- **Select middleware from **inside** and **outside** the project**
  - In line with TCG strategy
- **Run integration and build systems**
  - ETICS project plays a central role
  - More platforms than now (Linux distributions, Win....32/64)
- **Manage dependencies (**middleware, application area**)**
  - ETICS
- **Produce public distributions including deployment documentation**
- **Packaging the distribution for deployment**
  - Has to be easy to be used with existing fabric management systems
    - Lightweight, not a replacement for fabric management
- **Close interaction with SA1**
  - Deployment testing via SA1 pre-production service

- **Test and certify stacks**

- Coordinate and contribute to the development of test suites
  - Tests should come from all activities
  - Test Coordinator in SA3 (Andreas Unterkircher)
    - SA3, SA1, JRA1, NA4 and INTAS
- Interoperability and co-existence tests
- Tests on different platforms
- Security and vulnerability tests
- Testbeds at CERN and at at least 2 remote sites
  - Pre-production run by SA1----> Deployability
- Verification that requirements are met

- **Testbeds**

- Integration testbed (basic functional tests)
- *Application Preview (new functionality)*
- Certification and *test development test bed* ----> distributed
  - Deployment, interoperation, stress and other complex tests
-

- **Addresses problems seen in production**
  - In depth understanding of problems and their root cause
- **Coordinate solutions within or with middleware providers**
- **Team active in certification**
- **Members have a developer profile**
  - Have to dive into code (and better surface after a while)
  - Have to be experienced in distributed systems
- **Can provide ad-hoc solutions that are in the team's scope**
- **Negotiate through the TCG with providers solutions**

- **Work with other grid infrastructure projects (OSG, ARC..)**
  - Agree on **practical** “standards”
  - Together with SA1 make these “standards” visible and give feedback based on experience
    - GGF .....
- **Work on interoperability schemes for other stacks**
  - UNICORE, Naregi.....
- **Logical extension: Coordination of porting activities**

- Requirements are managed via the TCG
- Middleware requirements from SA1/SA3 are coordinated by SA3
  - At this stage we expect requirements to be based on:
    - **Practical** experience in usage, operation, deployment and integration

- Close link with “**CERN openlab for DataGrid applications**”
- Access to cutting-edge technology (storage, clusters, networks)
- Main activities
  - Interoperation
    - With commercial stacks
  - Soft and hardware optimization
  - Virtualization
    - First via software, later based on hardware
  - Testing and certification
    - On industry partners test beds
  - Porting
    - Already provide IA64 port
  - Feasibility studies of possible business models
    - Price models ???



- **PM1 (April) LATE!!!**
  - MSA3.1 Inventory of services and tools in use on the production grid
  - Gap analysis
- **PM 2 (May) LATE!!!**
  - MSA3.2 Definition of the SA3 release process
    - Criteria that new software has to met
  - Describe interactions with TCG, SA1 and middleware suppliers
  - MSA3.3 Plan for interfacing EGEE and UNICORE middleware
  - MSA3.4 Same for ARC
- **PM3 (June)**
  - MSA3.5 Test plans for services in MSA3.1
- **PM6 (September)**
  - MSA3.6 Publication of test suites to allow providers test before delivering
- **PM11 (January)**
  - DSA3.1 Report on the releases produced in the first year, status of interoperability, full release notes and documentation

- **PM12**
  - **MSA3.7** EGEE Developers' Guide
- **PM15**
  - **MSA3.8** Review of the testing and certification - follow up on process (MSA3.2)
  - Recommend changes for 2nd year
- **PM18**
  - **DSA3.2** Progress report on interoperations activities
  - **MSA3.1.2** Update of MSA3.1 (Inventory and gap analysis)
- **PM22**
  - **DSA3.1.2** Update DSA3.1
- **Other burning issues:**
- **SA3 Web page**
- **Starting to report: See slides from the [EGEE-II Transition Meeting](#)**
  - Especially Anna Cook's presentation is a good starting point

- **SA3 Internal communication**
  - Strike a balance between costs and benefits
- **Suggestions:**
  - Maybe:
    - Every 2nd week a phone conference
    - Every month short status report
      - *This will make it easy to produce the 3 monthly reports*
    - Phone conferences/Meetings on special topics as needed
      - *Testing*
      - *Porting*
      - *▪*

- Have to look at the fine grained activity list
- Each partner has to NAME individuals working on this

Task	Partner	Total PMs
TSA3.1 Integration and Packaging	CERN	120
	INFN	24
TSA3.2 Testing and certification		
TSA3.2.1 Functional and stress testing	CERN	48
	TCD	6
	IMPERIAL	12
TSA3.2.2 Security, vulnerability testing	PSNC	12
	TCD	6
TSA3.2.3 Operate certification and testing test beds	CERN	72
	INFN	24
	IMPERIAL	12
	TCD	7
	GRNET	24
	CSIC	12
	CESGA	12
	PIC	24
	UCY	24
TSA3.2.4 Project testing coordination	CERN	24
TSA3.3 Debugging, analysis, support	CERN	120
	INFN	12
TSA3.4 Interoperation	CERN	24
	FZJ	36
	UKBH	12
TSA3.5 Requirements capture	CERN	24
<b>Total</b>		<b>725</b>

- **TSA3.1 Integration and Packaging**
  - **CERN 120PMs**
    - **What**
    - **Who**
  
  - **INFN 24PMs**
    - **What**
    - **Who**

- **TSA3.2.1 Functional and stress testing**
  - **CERN 48PMs**
    - **What**
    - **Who**
  
  - **TCD 6PMs**
    - **What**
    - **Who**
  
  - **IMPERIAL 12 PMs**
    - **What**
    - **Who**

- **TSA3.2.2 Security, vulnerability testing**
  - **PSNC 12PMs**
    - **What**
    - **Who**
  
  - **TCD 6PMs**
    - **What**
    - **Who**

- **TSA3.2.3 Operate certification and testing test beds**
  - **CERN 72PMs**
    - **What**
    - **Who**
  - **INFN 24PMs**
    - **What**
    - **Who**
  - **IMPERIAL 12 PMs**
    - **What**
    - **Who**
  - **TCD 7PMs**
    - **What**
    - **Who**
  - **GRNET 24PMs**
    - **What**
    - **Who**



- **TSA3.2.3 Operate certification and testing test beds B)**
  - **CSIC 12PMs**
    - **What**
    - **Who**
  - **CESGA 12PMs**
    - **What**
    - **Who**
  - **PIC 24 PMs**
    - **What**
    - **Who**
  - **UCY 24PMs**
    - **What**
    - **Who**

- **TSA3.2.4 Project testing coordination**
  - **CERN 24PMs**
    - **What**
    - **Who**

- **TSA3.3 Debugging, analysis, support**
  - **CERN 120PMs**
    - **What**
    - **Who**
  - **INFN 12PMs**
    - **What**
    - **Who**

- **TSA3.4 Interoperation**
  - **CERN 24PMs**
    - **What**
    - **Who**
  - **FZJ 36PMs**
    - **What**
    - **Who**
  - **UKBH 12**
    - **What**
    - **Who**

- **TSA3.5 Requirements Capture**
  - **CERN 24PMs**
    - **What**
    - **Who**

- **KHALID Omer**
- **ABADIE Lana**
- **ALANDES PRADILLO Maria**
- **DEBRECZENI Gergely**
- **LEMAITRE Sophie**
- **QING Di**
- **FIELD Laurence**
- **FLAMMER Joachim**
- **FROHNER Akos**
- **HARAKALY Robert**
- **KEEBLE Oliver**
- **MCCANCE Gavin John**
- **PONCET Louis**
- **REALE Mario**
- **SCHULZ Markus**
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