egee

Enabling Grids for E-sciencE

EGEE Technical Coordination

Erwin Laure, Technical Director, CERN
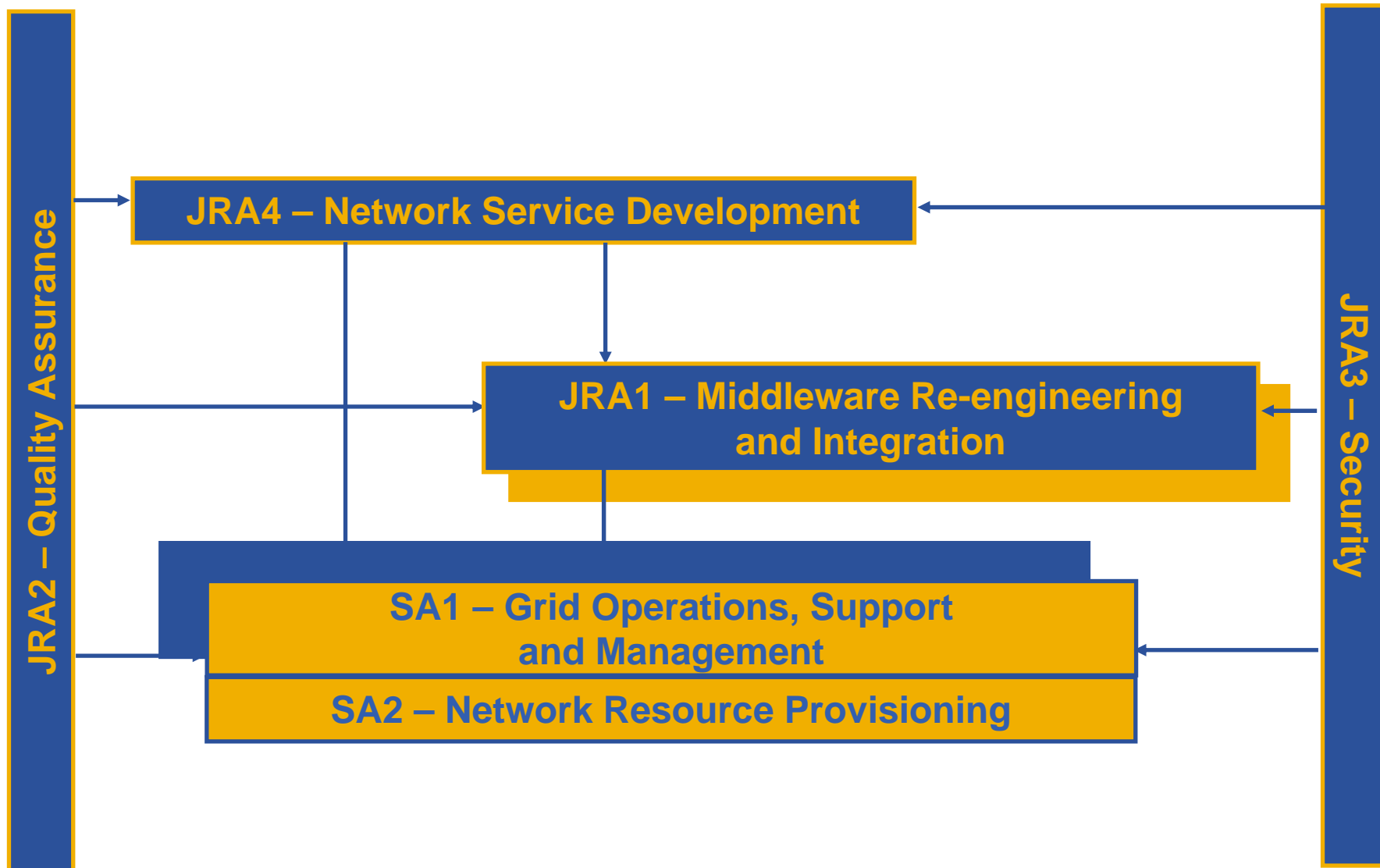
EGEE 2nd EU review
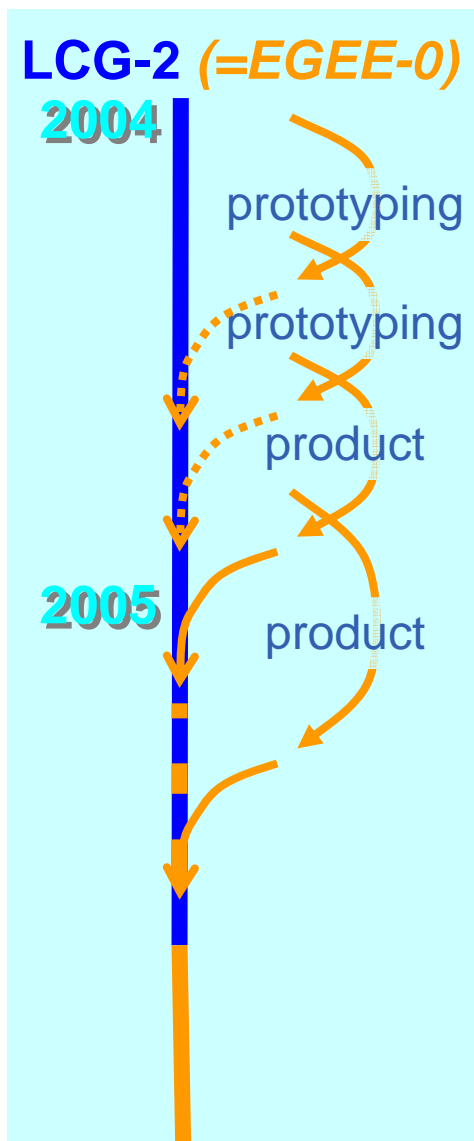
6-7/12/2005

www.eu-egee.org

Information Society
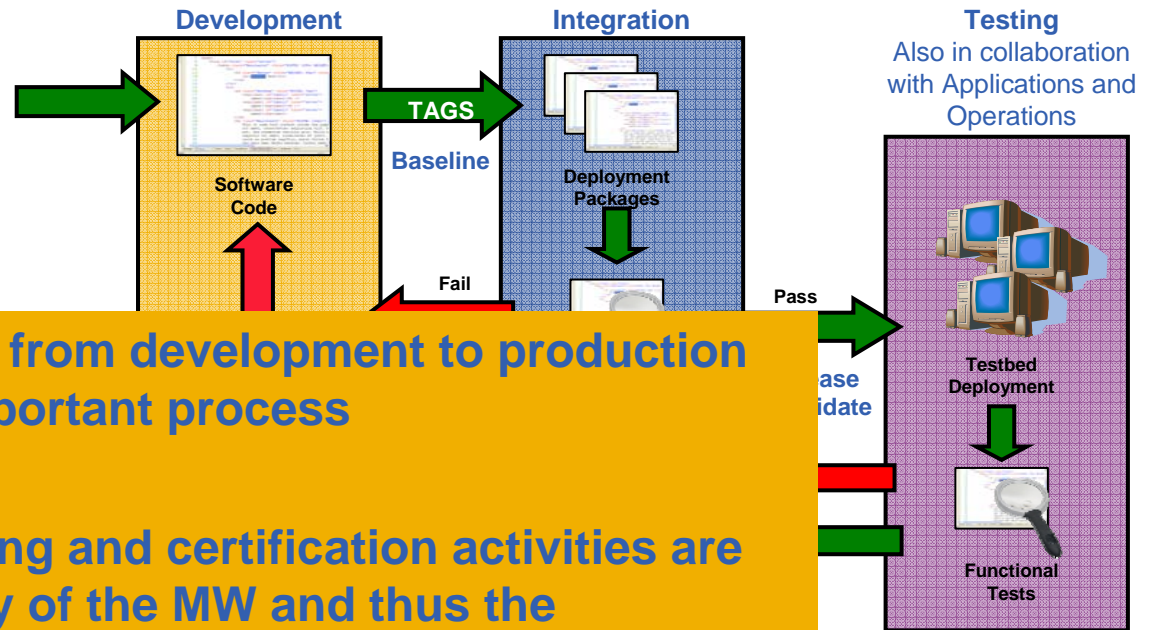and Media

Enabling Grids for E-sciencE

- **Focus of the review is on Service and Joint Research Activities**
  - SA1, SA2, JRA1, JRA2, JRA3, and JRA4
  - Interplay among these activities

- **From middleware re-engineering to large scale deployment**
  - Application involvement in the process
  - Convergence of EGEE distributions

- **Streamlining for next phase**

JRA2 – Quality Assurance

JRA3 – Security

JRA4 – Network Service Development

JRA1 – Middleware Re-engineering and Integration

SA1 – Grid Operations, Support and Management

SA2 – Network Resource Provisioning

LCG-2 *(=EGEE-0)*

2004

prototyping

prototyping
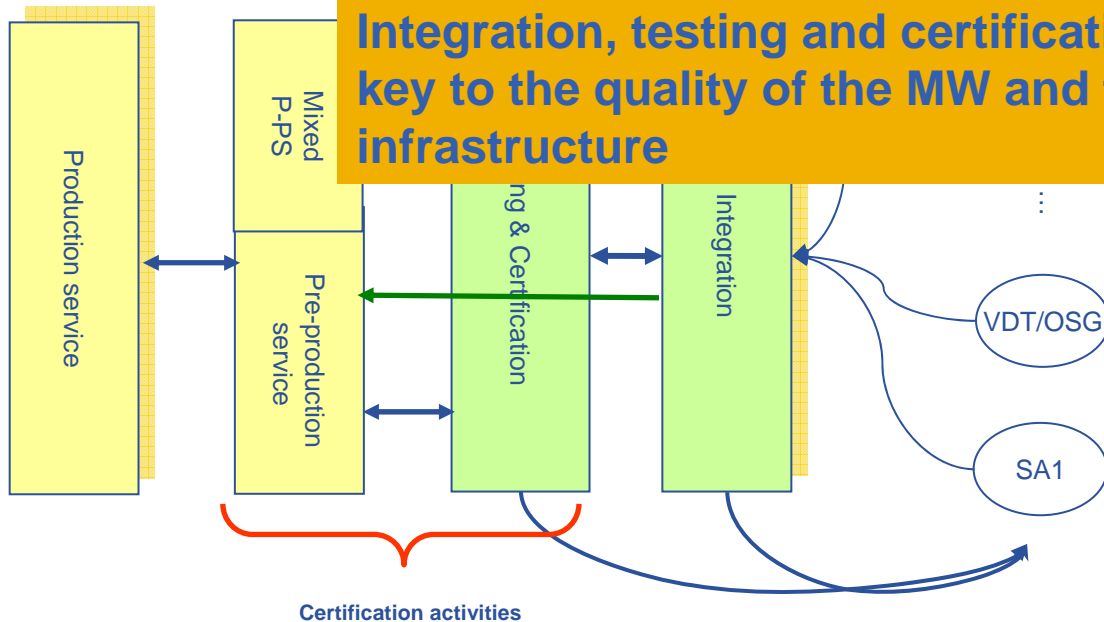
product

2005

product

- **EGEE started with the existing LCG-2 distribution**
  - Allowed to have a large scale infrastructure from the very beginning
  - Maintained and supported

- **In parallel, (mainly) JRA1 re-engineered and developed MW services**
  - Distributed as gLite releases
  - Emphasis on integration and testing

- **After certification, gLite components are deployed on the infrastructure through the LCG-2 distribution**

Development

Integration

Testing
Also in collaboration with Applications and Operations

JRA1

TAGS

Baseline

Software Code

Deployment Packages

Fail

Pass

ase idate

Testbed Deployment

Functional Tests

Moving services from development to production is a long, but important process

Integration, testing and certification activities are key to the quality of the MW and thus the infrastructure

Production service

Mixed P-PS

Pre-production service

ng & Certification

Integration

VDT/OSG

SA1

SA1

⋮

Certification activities

Enabling Grids for E-sciencE

- **Applications involved in all stages of the process**

- **Application requirements through database and task forces**
- **Review of JRA1 architecture, design, and planning**
- **Evaluate service functionality on JRA1 prototypes**
- **Evaluate service reliability and performance on pre-production service**
- **Use the services on the infrastructure**

- **Feedback to JRA1 and SA1 at all stages**
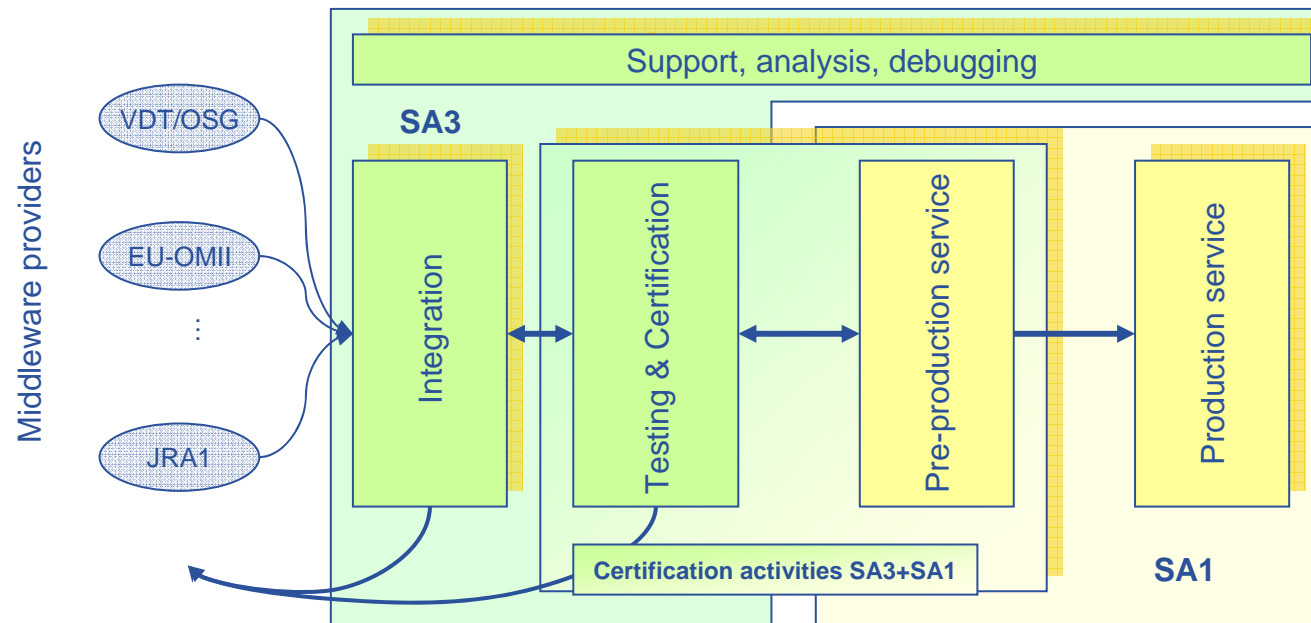 - Applications tests being integrated in standard test suites

egee
Enabling Grids for E-sciencE

- **Main gLite services:**

  - **Computing Element (CE)**
  - **DGAS accounting system**
  - **Workload Management**
  - **Logging & bookkeeping**
  - **Job Provenance**
  - **File Transfer Service (FTS)**
  - **File Placement Service (FPS)**

  - **gLite-I/O**
  - **FiReMan catalog**
  - **Hydra keystore**
  - **AMGA metad**
  - **R-GMA I** **Monitoring**
  - **VOMS**

- **All gLite 1.4.1 (secure) c** **available on the Pre-Production Service (**
- **FTS, VOMS and** **deployed on production service**
- **Planning for** **production distribution:**
  1. Workloa **ment service (WMS, L&B, CE)**
  2. Data man **ment services (FPS, FiReMan, gLite-I/O, Hydra, AMGA)**
  3. Others depend on progress of certification

Schedule depends on application priorities and readiness and quality of the services

egee
Enabling Grids for E-sciencE

- **Will join the JRA1 and SA1 integration and testing teams**
  - Better focus valuable resources
  - Exploit synergies on currently overlapping task
  - Will create a new activity SA3 in EGEE-II

Enabling Grids for E-sciencE

- **Since**
  - more gLite components in the production distribution
  - joint integration and testing team
- **converge on a single EGEE distribution named gLite by spring 2006**

- **Ensure all parties' participation in decision making process for new releases**
  - **Technical Coordination Group (TCG)** set up in November 2005
    - As follow-up of the Project Technical Forum (PTF)
  - Lead by Technical Director, members from operations, integration/testing, networking, middleware re-engineering, security, and application groups
  - Task: review and prioritize requirements, identify services to be included in upcoming releases, define workplan for re-engineering activities

- **SAs and JRAs are closely interworking**

- **Processes defined and operational**

- **After 18 months of experience now is the time to further streamline the processes**

- **More details will be given in the following presentations**