

From EGEE to EGI

Status of the EGI infrastructure,
results and roadmap

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- From ROCs to NGIs
- Utilization
- Availability/Reliability statistics
- QR1 accomplishments
- Roadmap

Infrastructure: Central Europe

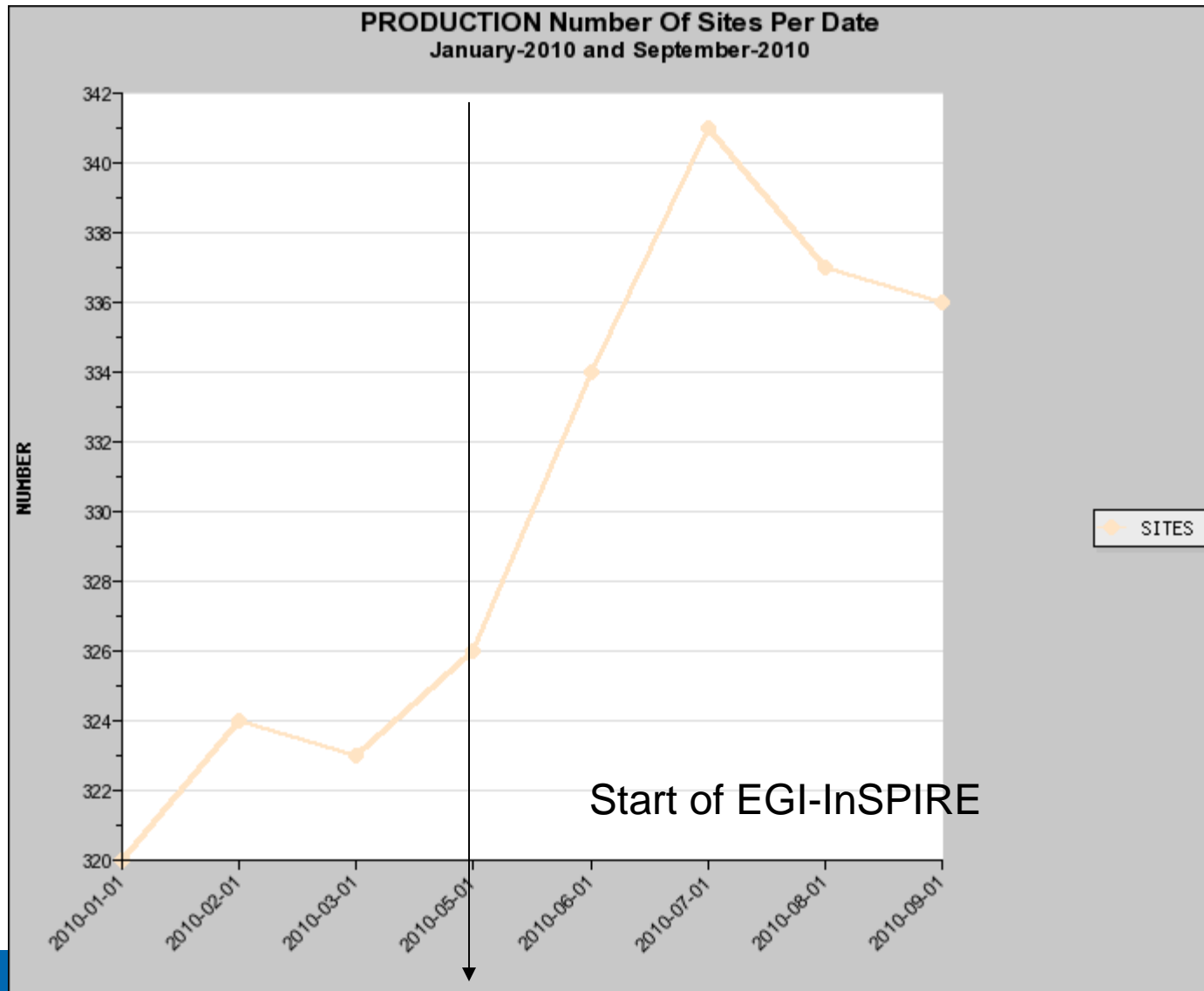
- Stop of operations of **Central Europe regional operations centre** in August 2010. The respective NGI become operational independent:
 - May 2010: Poland
 - June 2010: Slovenia, Croatia, Slovakia and Czech Rep.
 - July 2010: Belarus and Hungary. 2 Austrian sites under the operations of NDGF

Infrastructure: South East Europe

- Apr 2010: SEE-Grid-SCI countries joined the South East Europe ROC
 - Albania, Armenia, Azerbaijan, FYR of Macedonia, Georgia, Moldova, Montenegro South East Europe
- New independent NGIs
 - Apr 2010: Greece
 - Jun 2010: Serbia
 - Turkey, Bulgaria, Armenia, Israel and Romania entered this process

- **Asia Pacific** (Australia, China, India, Japan, New Zealand, Malaysia, Philippines, South Korea, Taiwan, Thailand)
- **Canada** (Canada, China)
- **ROC IGALC and ROC Latin America**
- **NDGF**: Austria, Danmark, Estonia, Finland, Latvia, Lithuania, Norway, Sweden, Switzerland (1 site)
- **IberGrid**: Portugal and Spain → South West Europe decomissioned
- **Belgium-The Netherlands**
- Still existing but planning to stop operations by the end of 2010
 - **Germany/Switzerland**
 - **UK/Ireland**
- More countries interested in joining the infrastructure (Mediterranean basin and Africa)

Number of resource centres Jan-Sep 2010



-From 290 to 336
15.8 % increase

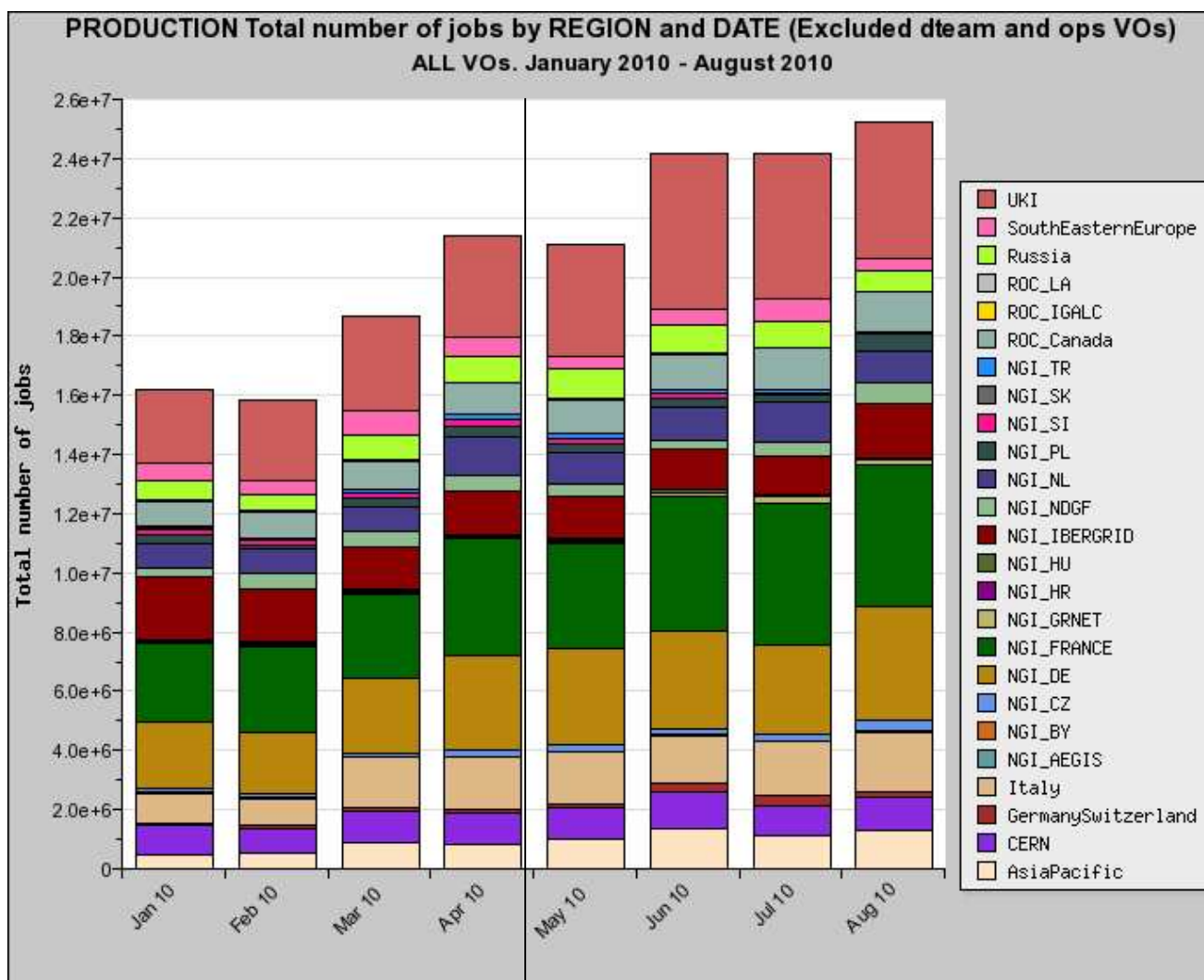
-From 52 to 59
countries

EGI-InSPIRE start

Grid oversight

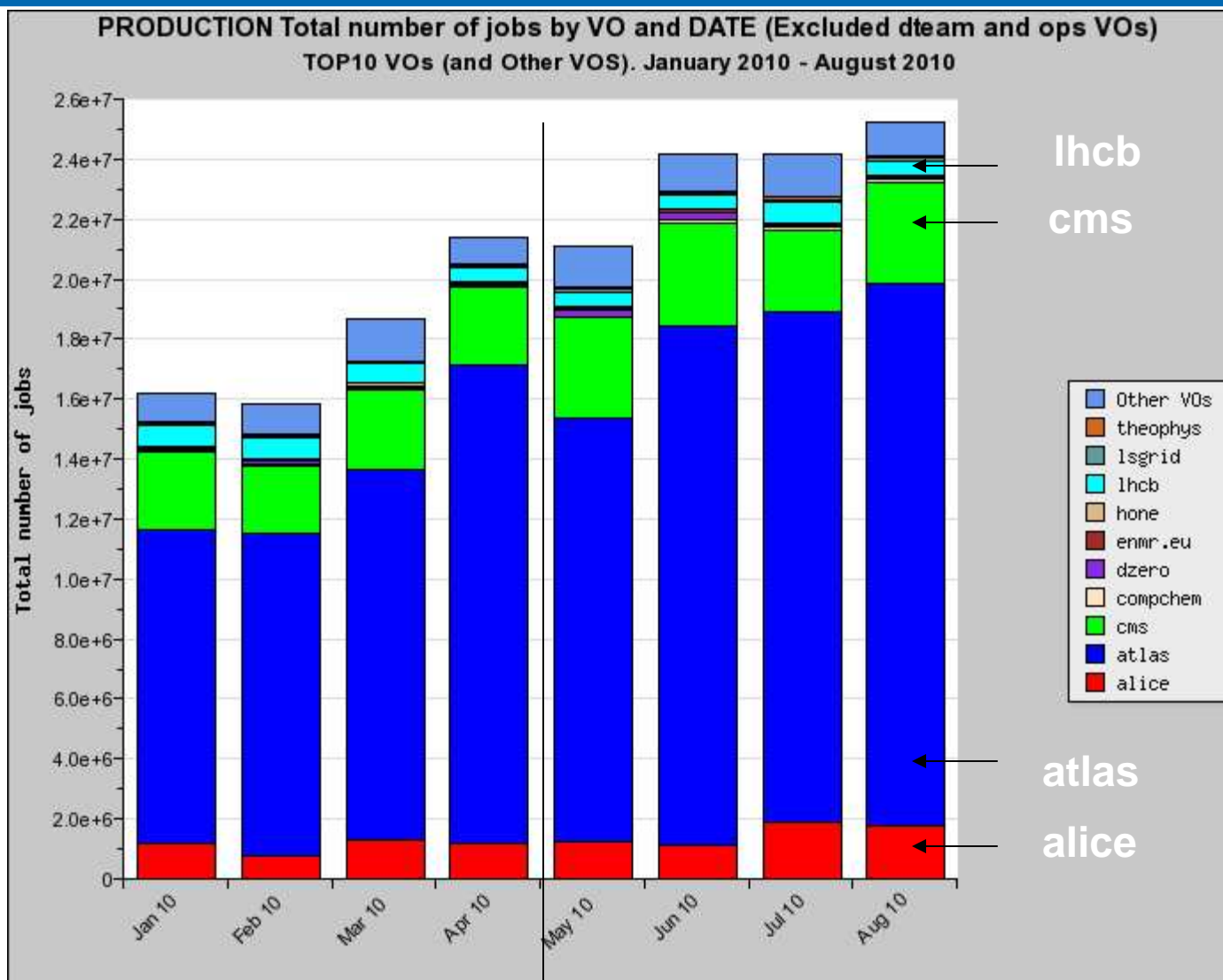
- During QR1 the grid oversight workload (aka COD workload, i.e. number of operational issues requiring central attention) has been varying a lot but was not affected by the increasing number of NGIs

Num jobs Jan-Aug 2010



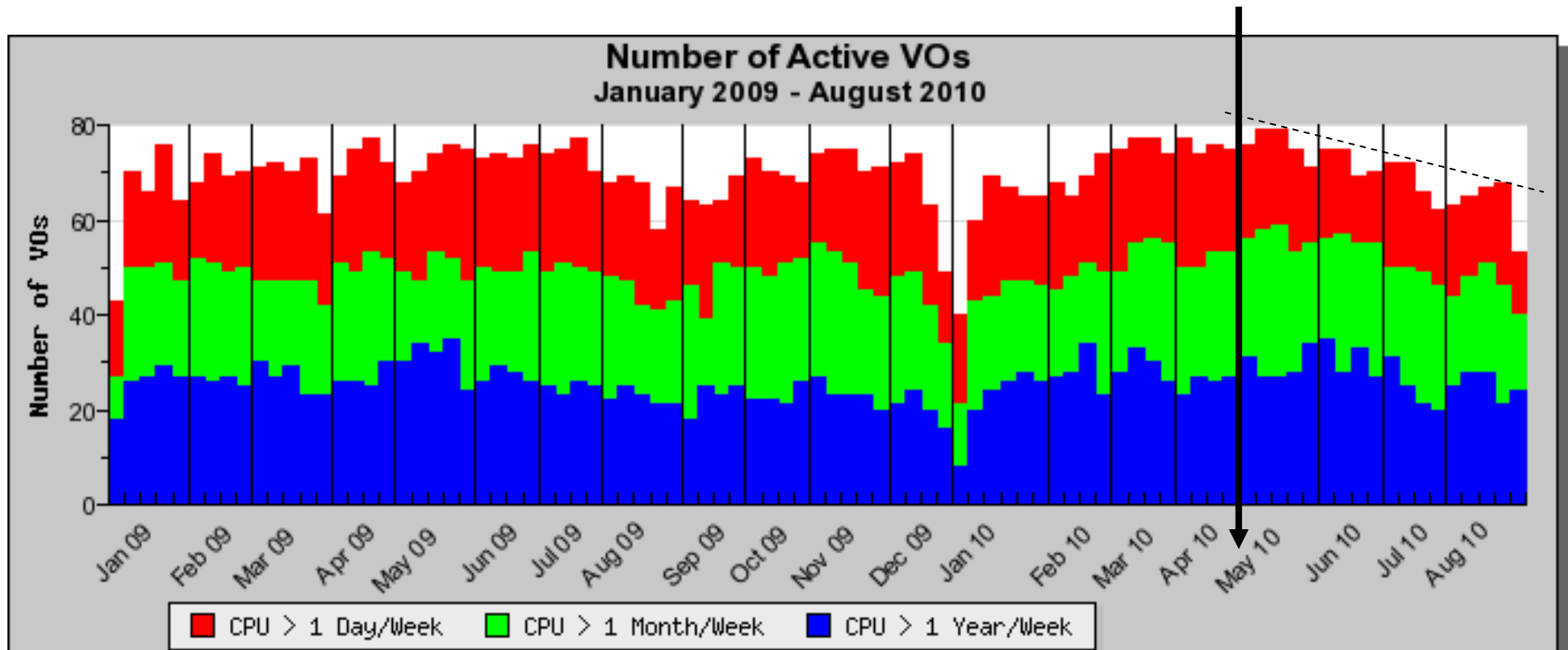
↓ EGI-InSPIRE start

WLCG user community



EGI-InSPIRE start

Active VOs Jan-Sep 2010



RED Low activity week (CPU > 1 Day/Week)

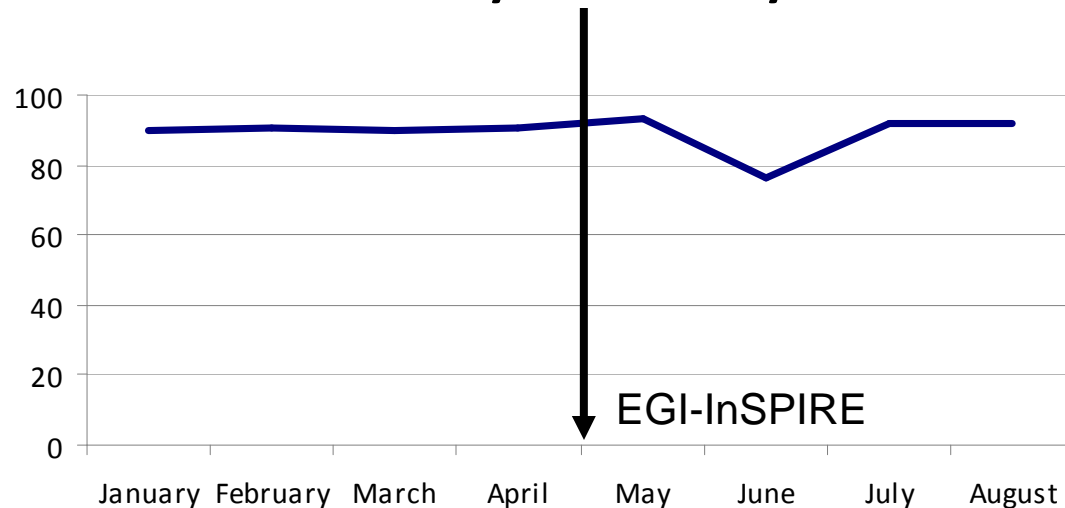
GREEN Medium activity week (CPU > 1 Month/Week)

BLUE High activity week (CPU > 1 Year/Week)



Monthly availability/reliability

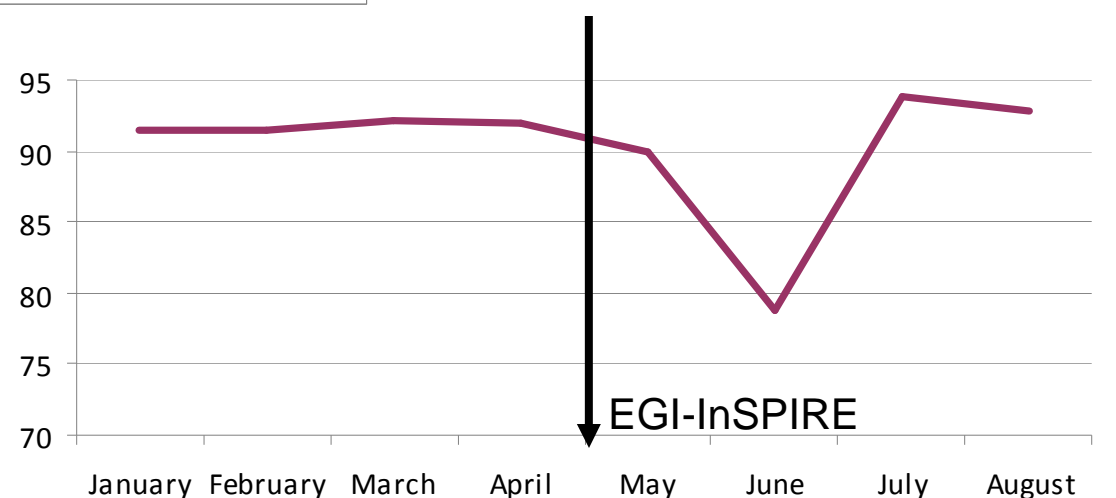
Monthly Availability



Arithmetic average of the NGIs/ROCs weighed availability and reliability

- **June 2010.** Overall statistics Affected by one NGI having low performance (9%) because of no HEPSPEC published.
- **Algorithm** needs improvement to handle the case of uncertified sites entering production

Monthly Reliability



Courtesy of D.Zilaskos

EGI-InSPIRE RI-261323

Accomplishments

- **NGIs and site managers** continuing their commitment to grid operations
- **Commitment of EGEE ROCs** who have been assisting NGIs during their creation process
- **Global services** well established thanks to early start of the transition during EGEE-III
 - Reassignment of responsibilities where needed
 - Increasing commitment of COD in followup of availability issues and suspension
- **Operations infrastructures:**
 - Transition to **Nagios-based monitoring** and distributed deployment almost finalized
 - Started migration of **messaging** for distribution of **accounting** usage records

What changed: governance

- Operations Management Board (OMB)
 - Leading the evolution of the operations infrastructure
 - Members from **all** EGI-InSPIRE partners, WLCG, and external infrastructure providers (ROC Canada, IGALC, Latin America etc.)
 - Meeting regularly on a monthly basis since May 2010

What changed: procedures

- EGI adopted all EGEE procedures and policies
- but various changes introduced
 - New [availability/reliability statistics](#) followup procedure defined and approved
 - New procedure for [NGI creation and integration](#) defined and approved
 - New procedure defined for [2nd line/3rd line](#) middleware support, implementation ongoing → relying on the EGI “Deployed Middleware Support Unit”
 - New procedure for [middleware rollout](#) to the infrastructure
 - Ongoing:
 - comprehensive [site registration and certification](#) procedure
 - [NGI/ROC decommissioning](#) procedure

What comes next 1/2

- Infrastructure
 - Consolidation of new NGIs
 - Integration of new infrastructure providers (e.g. ROC Africa), definition of Infrastructure provider MoU
 - Case studies of integration of new DCIs and heterogeneous middleware stacks
- Plans and requirements
 - Transition plan from gLite 3.1 to gLite 3.2
 - Deployment plan of regionalized operational tools
 - Accounting requirements to lead development in EGI-InSPIRE JRA1 and EMI
- Middleware deployment
 - More sites and NGIs involved in middleware staged rollout
 - Establishment of the Technical Coordination Board to implement reporting channels to the middleware developers (requirements and deployment issues)

What comes next 2/2

- Support
 - revision of existing GGUS Support Units and related membership
 - definition of 2nd and 3rd line middleware Support Units
 - definition of network support infrastructure
- Update of existing [documentation](#) made available at the [EGI wiki](#)
- Availability statistics
 - Report generation needs to be streamlined
 - Improvement of availability calculation algorithm
- [Operational Level Agreements](#)
 - Extension of existing ones (ongoing)
 - Understanding of impact on tools