

Assessment of Operations Support Model and Future

“where we are and where to go”

by

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- **Understand (regional) operations support model**
 - particularly: how model implementation in region serves the work
- **Identify problems, how to avoid them**
- **Evaluate model for EGI era**

- **Agenda**
 - Quick reminder on core model factors
 - Model metrics from Jul – Dec '09
 - Discussion
 - Followed up by “where do we go” by Ron and Luuk

- **Model depends on timely actions**
 - first 24h – time for site & technical support team
 - [24,72) - time for ROD to clear the problem OR record it in GGUS
 - [72,∞) - model malfunction, COD comes into the game
 - ticket not handled on time (expiration date passed) → COD
 - ticket not solved in 30 days → COD
- **Metrics aim: indicate problems with operating model**
 - items not handled on time
 - items not handled according to procedures
 - assess workload on ROD & COD teams

An „item” in the dashboard is either alarm or ticket that the relevant party (COD, ROD, 1st line) should take action upon.

Description	Number of items appearing in COD dashboard indicates the amount of work that the operator has to deal with. It could also be used to assess the quality of support process . There should be no items in COD dashboard if the support process is working in a timely manner.
What is measured	Number of items in COD dashboard that needs immediate action, appearing on a given day. Items not done on a given day will be counted again the next day.
Purpose	To estimate the amount of daily work of COD operator and quality of support process.
Source of data	COD dashboard

An „item” in the dashboard is either alarm or ticket that the relevant party (COD, ROD, 1st line) should take action upon.

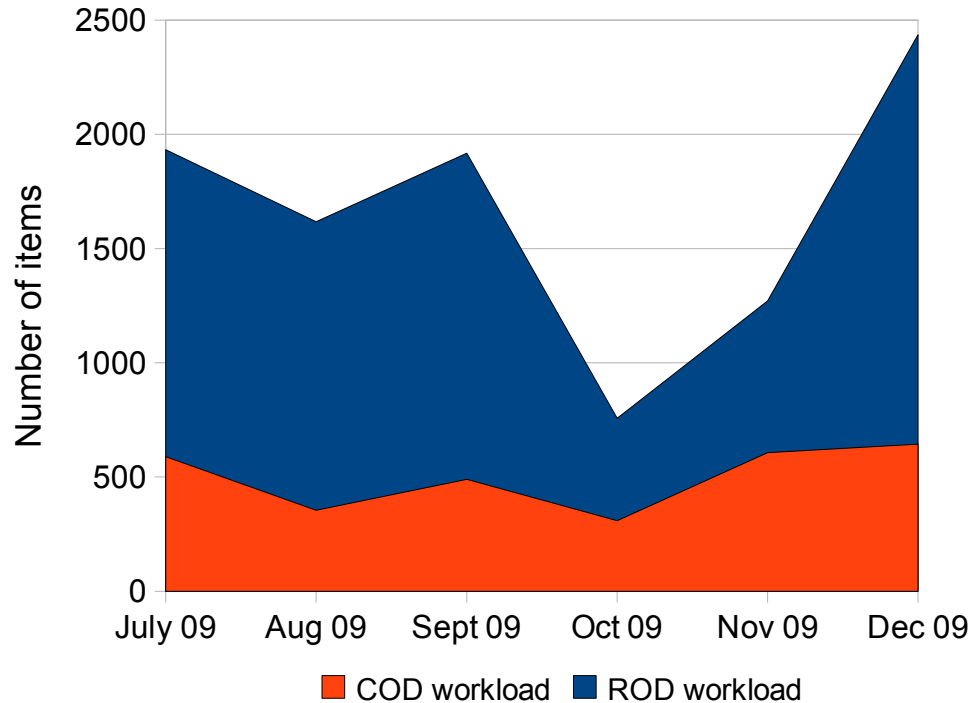
Description	Number of items appearing in ROD dashboard indicates the amount of work that the operator has to deal with. In general it cannot be used to assess the quality of support process.
What is measured	Number of items in ROD dashboard that needs immediate action, appearing on a given day.
Purpose	To estimate the amount of daily work of ROD operator.
Source of data	Regional dashboard

Metric = (alarms_closed_with_OK/alarms_closed_in_total)

<p>Description</p>	<p>Regional ops. support staff can close an alarm if the actual state of the service is OK or some ERROR state. In general they should fix problem and close alarm only if the actual service state is OK.</p>
<p>What is measured</p>	<p>Fraction of alarms closed with OK status over some time period e.g. 1 month.</p>
<p>Purpose</p>	<p>Assess regional support quality, make sure model time rules are followed.</p>
<p>Source of data</p>	<p>Regional dashboard</p>

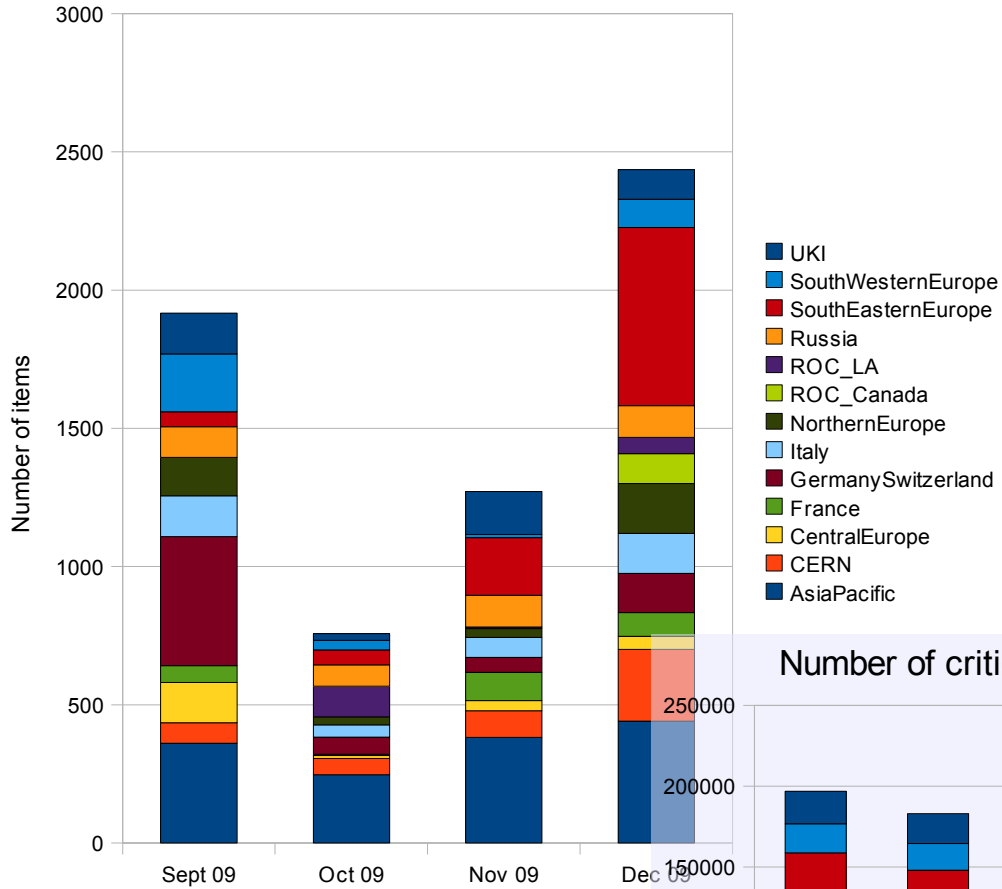
ROD & COD workload monthly

Jul - Dec 2009

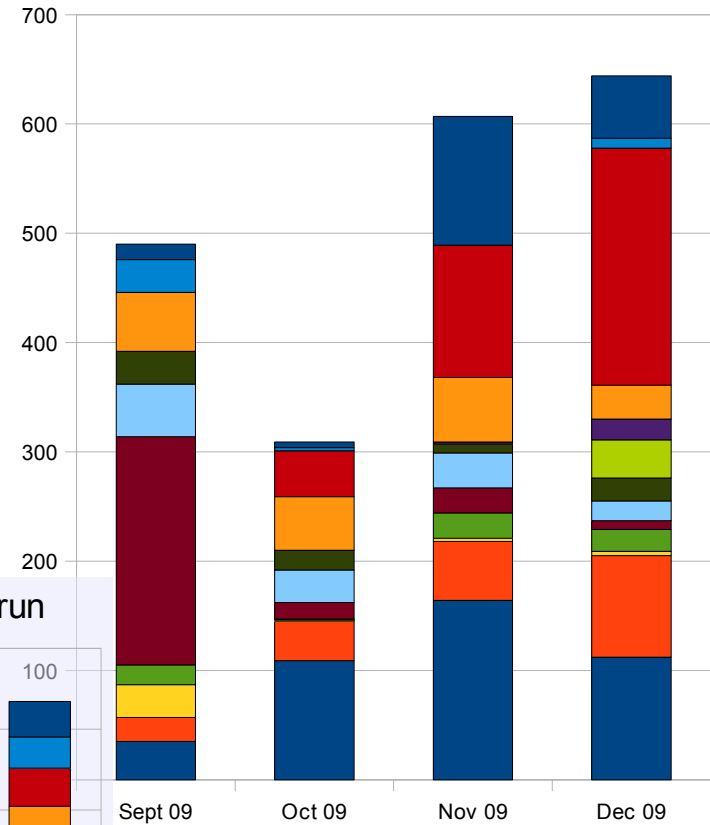


- Intermittent problems with operations tools in Sept.
- EGEE'09
- Introduction of Cream-CE on 7.12.09
- Christmas period
 - less staffed
 - alarm ageing not sync. with
- **Conclusions**
 - RODs do a lot of good job
 - Thanks that... COD workload is stable
 - Alarms should not age on bank holidays

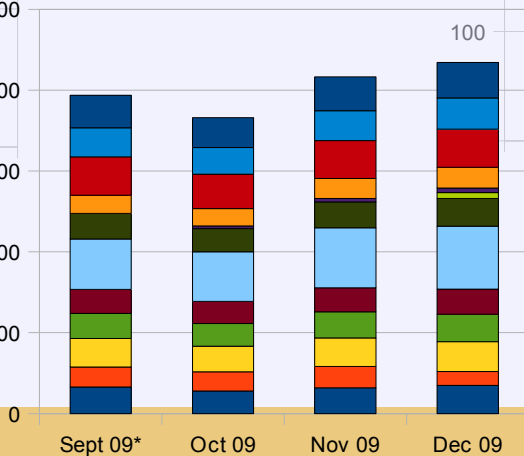
ROD workload

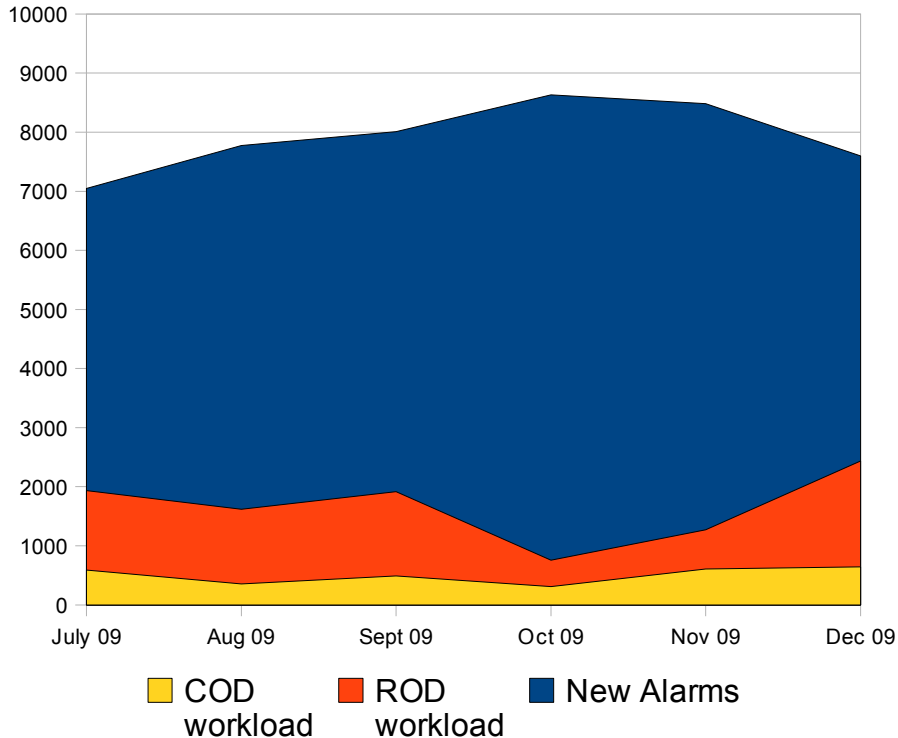


COD workload

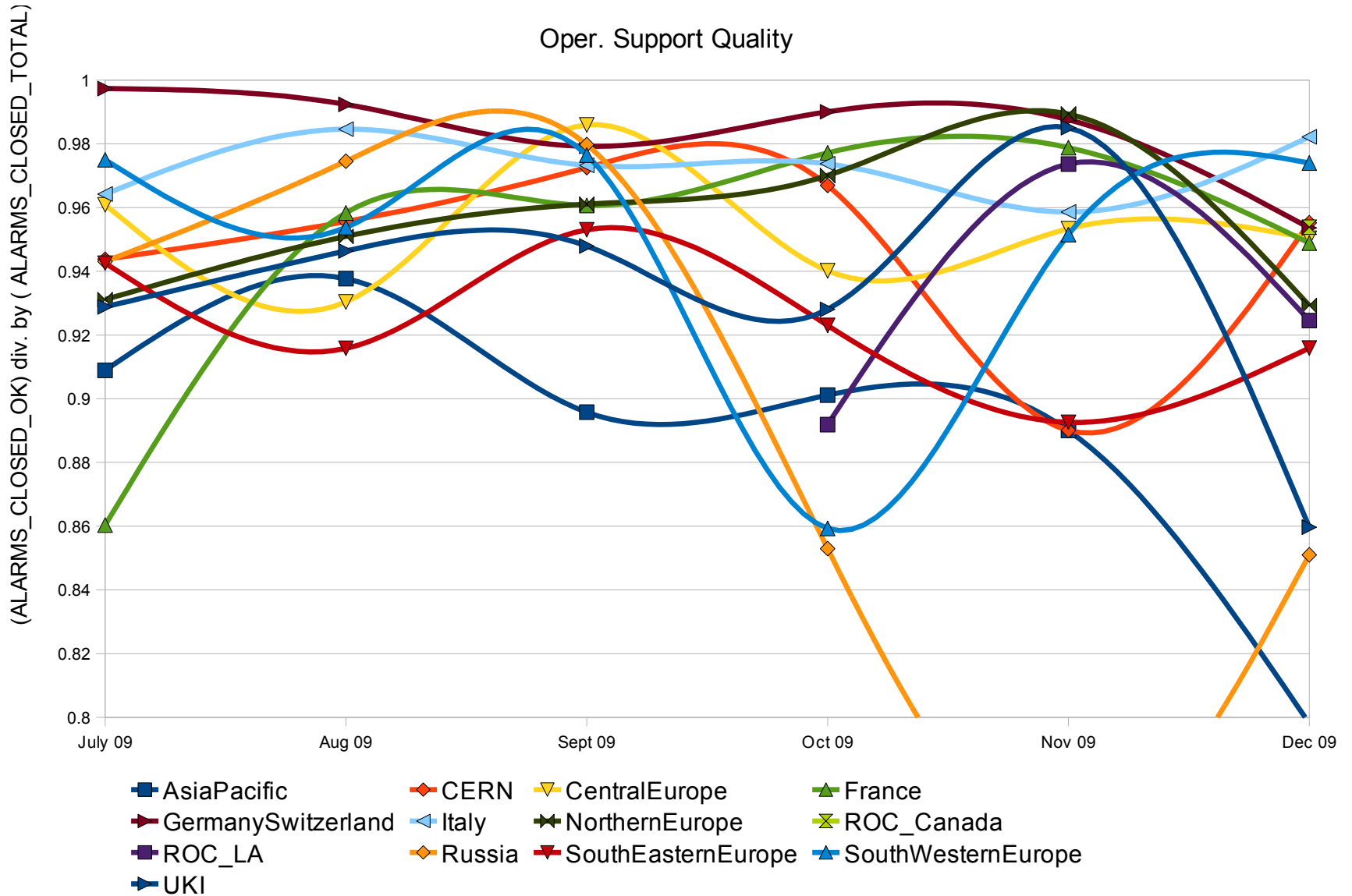


Number of critical tests run

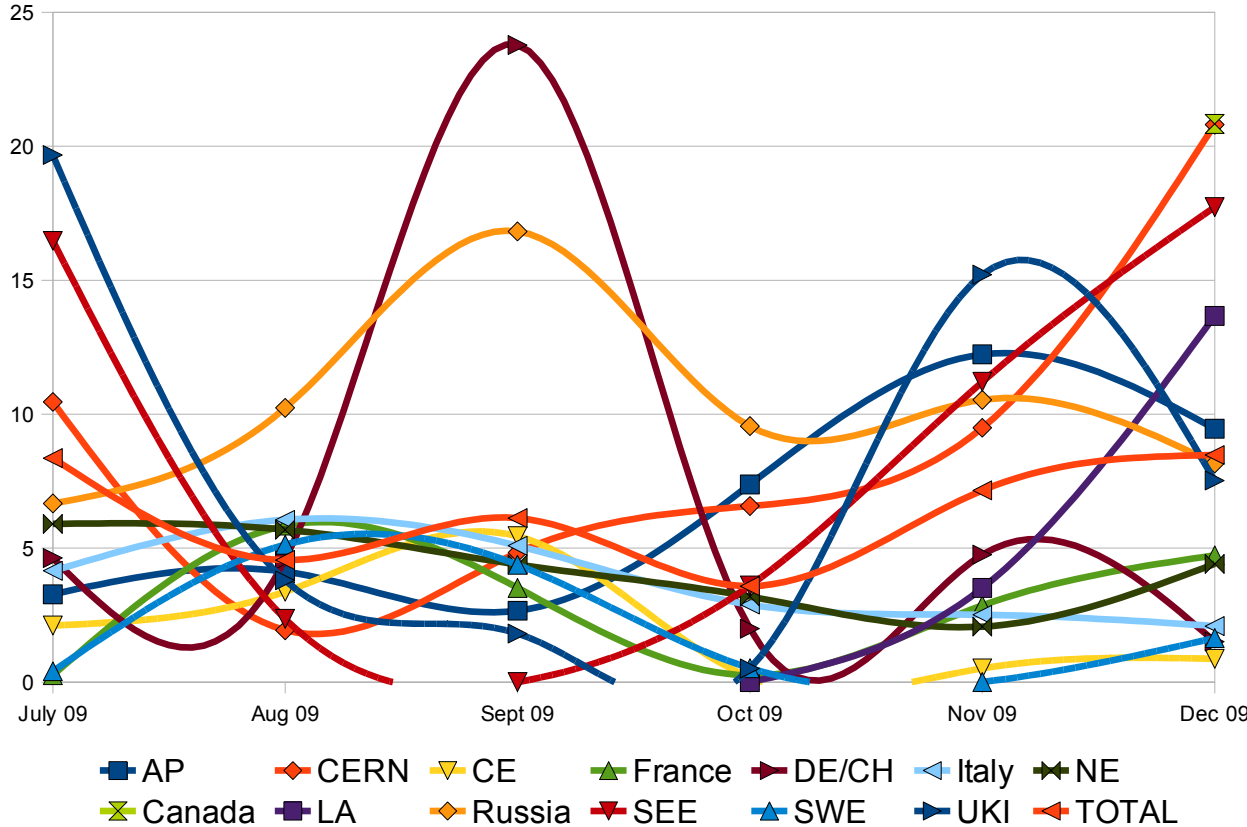




- **Note**
 - ROD/COD workload items are counted each day again until handled
 - Alarms (blue area) not cumulative
- **Making Cream-CE test critical**
 - 16.11.09 – request to add Cream-CE to critical tests
 - 7.12.09 – treshold of 75% passing, Cream-CE made critical
 - number of new alarms did not raise



Fraction of items passing to COD



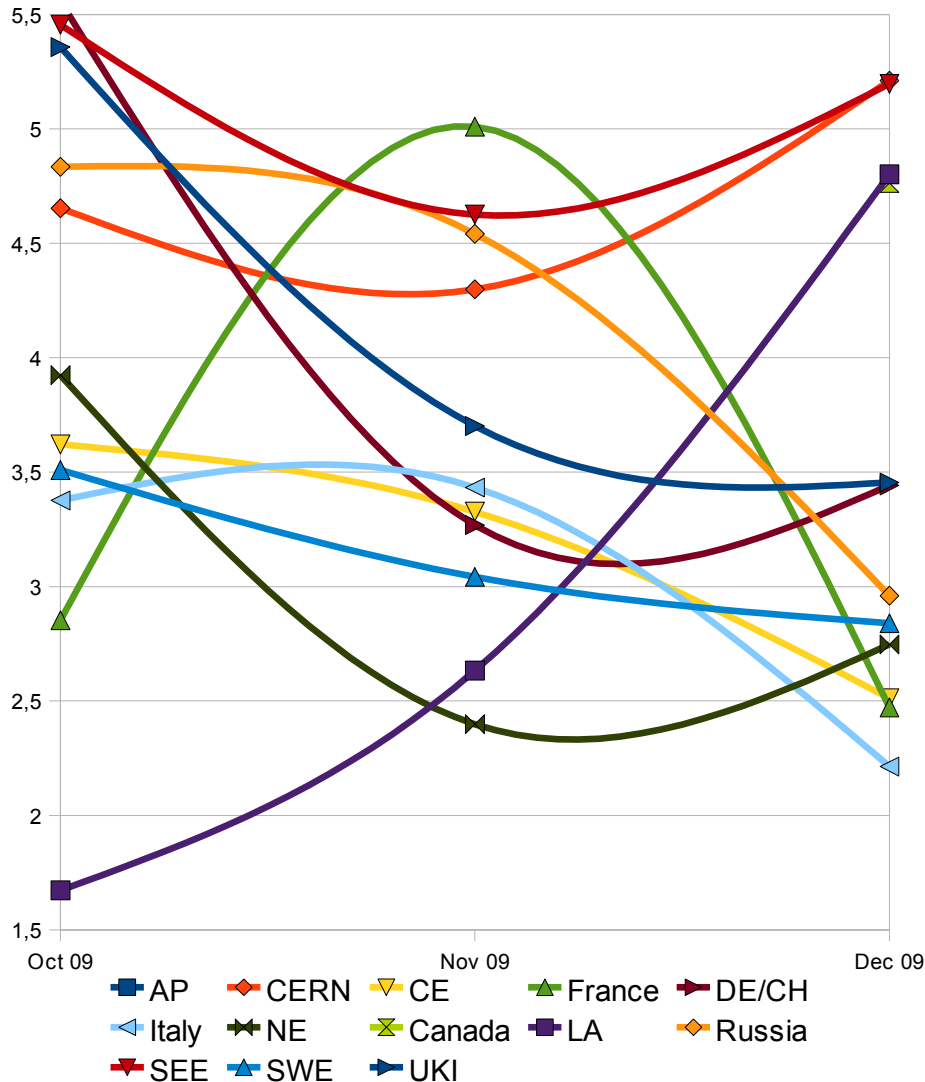
Y axis

— $(\text{COD_items}/\text{New_alarms}) * 100$

Interpretation

— percentage of alarms resulting as items on COD dashboard (2 means that 2% of alarms resulted in items on COD dashboard)

Alarms/Critical Tests Ratio



- **Y axis**

- $(\text{New_alarms}/\text{Number_of_Critical_tests}) * 100$

- **Interpretation**

- how many alarms are generated from each 100 runs of critical test
 - difference between 2,5 and 5 means that services fails 2 times more often

- **Sensitive for**

- outages in monitoring system (less chances for new alarms)
 - excessive use of SAMAP ;)

- **DE/CH, Italy**
 - any hints on which specifics of your model implementation in the region helps you to achieve ~99% in quality metrics
- **NE, SWE, CE, Italy**
 - how to make infrastructure as stable as yours, FR – you too but what happened in Nov? ;-)
- **Italy, SWE, NE, FR, DE/CH**
 - how to make “support net” killing alarms so efficient (almost nothing reaches COD)
- **Any other hints to understand these charts welcome!**

- 1. NON_OK alarms – identify cases in which closing alarm in NON_OK status is necessary and avoid them**
- 2. Need understanding why items are appearing in COD dashboard**
 - should be there to indicate problems not solvable at regional level but -> not so many of such kind
 - ideas: collect reasons from RODs (as an item of weekly reports)
 - indicate in ROD dashboard that an item managed to become “visible” in COD dashboard
- 3. Model suitability for the EGI era**
 - ~40 RODs: scalability in all aspects
 - unexperienced teams: training
- 4. Which model parameters could be part of EGI-NGI SLA**

... and Future

“ where to go ”

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Ron Trompert and Luuk Uljee

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- **Where to go after EGEE-III?**
 - In the transition to EGI two transitions can be identified:
 - § From ROCs to NGIs
 - § From central to regional tools

• **Issues:**

- From ROCS to NGIs

- § In a number of regions the work by one ROC will be taken over by multiple NGIs who where never involved in SA1 activities. Are these NGIs ready, do they now what to do? When are they going to do it? (see Michaela's questionnaire)
 - *Education is of new ROD teams is necessary and should be done soon: "What is an alarm and where does it come from?"*
 - *RCs who are unsure that their NGI will take up the ROD tasks and perform them adequately*
 - *Should we encourage NGIs with a small number of sites to cooperate?*
 - *Will probably not go at the same pace in all regions. There will be some period of time where ROCs are dropping out and NGIs are coming in. Will probably not be completed on May 1st 2010 in all regions. ROCs are responsible for the transition of the ROD and 1st line support to NGIs in their region*

- **Issues:**

- From central to regional tools

- § Deployment plan highly volatile

- *Plan is being reassessed after recent test of Ops portal dashboard and nagios and evaluated on a weekly basis. But what do we tell the (new) ROD teams?*

- § Need education for new ROD teams on the tools.

- § Maybe need to leave central SAM-based monitoring running for a while but since the funding and the funding model of EGI differs from EGEE, then for how long are the service providers willing to do this?

- **TODO**
 - Come up with a plan describing how to do both transitions without adversely affecting the oversight of the production infrastructure
- **Other important issues that need to be discussed.**
 - Forum topics
 - Cooperation O-E-5 and O-E-13
 - Mailing lists, wikis
 - Interfaces to other EGI entities