



Enabling Grids for E-science

ROC FR - On the way to the NGI structure

R. Rumler, CNRS/IN2P3

Pre-GDB meeting CERN, 2009-05-12

Derived from a presentation given in Catania, 2009-03-04

www.eu-egEE.org



- **Current situation after DataGrid and 5 years of EGEE**
 - French NGI, initial structure
 - Staffing and Equipment
 - Considerations on Non production grids
- **Production Grid Plans**
 - Organisational considerations
 - Staffing and Resources
 - Tools
 - Future of currently assumed project wide functions
- **Conclusion, concerns, issues**

- **The “Institut des Grilles” (IdG) of CNRS as a basis of the French NGI**
 - French Production Grid recognised by French government as of same importance as the French tier-1 and the IDRIS (“TGIR”)
 - NGI Steering committee, members: Research Ministry and seven research organisms and all universities, namely CNRS, CEA, INRA, INRIA, INSERM, CPU, RENATER (very large majority of non HEP science)
- **IDG**
 - Head: Guy Wormser, assisted by directors for research grids, Mrs. Donzeau-Gouge, and for production grids, Mr. Dominique Boutigny.
 - A “virtual” institute: no headquarters, no dedicated buildings
 - Authority for French international grid relations, especially for EU projects
 - Combines CNRS work on production and research grids, as well as research on grids
- **IDG was charged by the Ministry to conduct in 2008 a national prospective exercise on the usefulness of grids in all scientific domains**
 - Working groups by
 - Scientific domain (8)
 - “Transversal activity” (6)
 - A “White report” is now available (in French)



- **All NGI personnel attributed to their laboratories, only one (1!) temporary central position for administration**
 - NGI-tagged researchers (1 in 2008), engineers, postdocs, PhDs
- **People from participating laboratories who work already in the grid area also contribute to IdG**
 - 85 people are working on the French production grid for ~50 FTEs
- **Many temporary positions, significant progress expected soon, see next slides**
- **No own equipment (hardware belongs to thematic funding agencies such as IN2P3, INSU, Life Sciences,...)**
 - Seed money provided to launch new grid nodes
- **However, there's a budget which is distributed to participating laboratories in order to promote the grid work**
 - Training
 - Dissemination
 - National and international work for grids, not covered elsewhere

- **Large and small experimental and research grids exists**
 - Own middlewares
 - Different security contexts
 - Own resource managements
 - Various funding bodies
- **The IdG is meant to provide a bridge from production grids to the non production ones**

- **Current situation after DataGrid and 5 years of EGEE**
 - French NGI, initial structure
 - Staffing and Equipment
 - Considerations on Non production grids
- **Production Grid Plans**
 - Organisational considerations
 - Staffing and Resources
 - Tools
 - Future of currently assumed project wide functions
- **Conclusion, concerns, issues**

- **“Regional” grids exist or are coming up for several geographical areas in France**
- **Some sites aren’t part of such grids**

- **The current model is to base the operational infrastructure on this:**
 - “Regional” grid with contact points for operations, security, training, management
 - “Isolated” sites have to provide those contacts, too
 - Operations tools and NGI operational procedures should take this into account
- **The gNOC will be distributed, with the majority of the staff at the LCG tier-1 at Lyon**

- **The IdG has been invited by the Ministry to present hiring and investment plans**
- **19 permanent positions requested**
 - Vast majority required to stabilize experts currently on temporary positions (eg EGEE contracts)
 - All activities, not only Operations
 - Hiring in 2009 and 2010. 2+2 positions already opened in 2009
 - Subject to public hiring rules, i. e. open for everybody
 - Grid expertise requested corresponds to those of people currently in EGEE at various sites in France
 - The principle of the plan has been agreed. Whether it can be implemented at the required speed remains to be seen
- **Budget of 18.5 M€ requested**
 - Distributed over the next 5 years
 - Mainly for the creation of mid size centres
 - Objective is to attract currently “white spots” in grid terms

- **Currently available tools are supposed to continue to be so after the end of EGEE-III**
 - Includes GOCDB, GGUS, accounting/CESGA
- **gNOC is responsible for production quality, consequently:**
 - Tools must allow for gNOC's control over the acceptance of participating sites resources
 - Tools must allow for gNOC's control over which sites participate in EGI activities and which ones stay national
- **gNOC is responsible for security coordination**
 - Tools must allow for this. This point is important also for acceptance by government.
 - Hosting of CSIRT distribution lists will continue (depending on availability of central GOCDB)

- **The French ROC continues working until EGI/NGI is in place**
 - Depending on attributed staff (see slide 8)
- **This includes the project wide functions currently assumed**
 - COD coordination (restrictions after end of EGEE-III)
 - CIC portal maintenance and development
 - Is also an NGI task, supported in any case
 - Development speed reduced, whether EGI or not
 - CIC portal hosting of central instance
 - If no EGI, hosting slows down development speed further
 - Oversight of VO creation requests (RAG activity)
 - If no EGI, only maintenance, no new VOs
 - EGI Network Support Center (ENSC) hosting (successor of EGEE's ENOC)
 - Restriction to WLCG needs if no EGI
- **Tasks will be supported as long as necessary during the transition; beyond if required and attributed by EGI, or at least the continued support will be considered.**
 - Reasonable delays in the transition process are ok

- **The NGI operation will be based on:**
 - An asymmetric rotation of regional COD (r-COD) responsibilities
 - Tier-1 and some tier-2s, perhaps help from national LHC VO staff
 - A regional view or regional instance of the CIC portal
 - Consequently, the French NGI will continue to do necessary developments and maintenance - but with much less people
 - A regional view or regional instance of the GOCDB
 - Depends on the needs of the NGI and of the functions of the GOCDB implemented at the end of EGEE-III
 - Use of GGUS
 - A “regional” ticketing system exists. The current technical solution has either to be deployed at all sites or has to be replaced by another one, interfaced to GGUS in all cases.
 - Support staff is in place, mainly at the tier-1

- **I'm optimistic about the switch to the French NGI structure**
 - Even if a concrete transition plan still has to be elaborated
- **It is not clear though to which extent it will be possible to have a common operational infrastructure for the LHC VOs and the other ones**
- **Without EGI the risk of having parallel communities HEP versus non HEP is even higher**
 - Will the GDB be sufficient to coordinate operations?
 - Will a successor to the EGEE SA1 coordination meetings be necessary?
- **The situation for the persons with temporary contracts is still uncertain, even if there's some hope to be able to propose permanent ones to most of the key people**