



Enabling Grids for E-science

Training and Dissemination

Malcolm Atkinson & David Fergusson

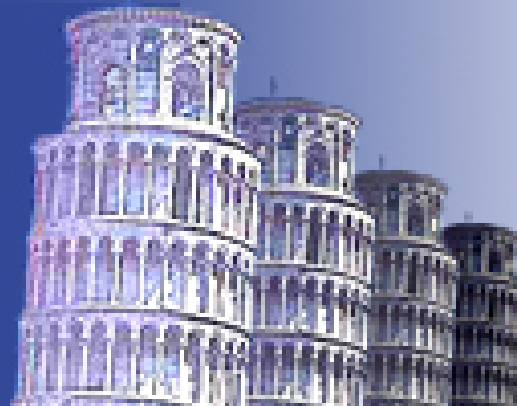
4th EGEE conference

Pisa, Italy

25th October 2005



EGEE
Enabling Grids
for E-science



4th EGEE Conference

Pisa

24-28 October 2005

www.eu-egee.org



Information Society



- **Dissemination**
 - Conferences
 - Presentations at other events
 - Websites
 - Media coverage
 - Printed material
- **Training**
 - Courses given
 - Summer Schools
 - gLite development
 - T-Infrastructure & e-Learning facilities
 - Requirements analysis
 - Outreach
- **Summary**



- **Dissemination & Outreach essential to**
 - Grow community
 - Grow multi-disciplinary use
 - Achieve sustainability by amortising over many users and uses
- **NA2 Mission**
 - To identify key audiences, actively promote and raise awareness of the EGEE project through clear, consistent and timely communications

- **Cork, Ireland – 300 delegates**
 - *Very rapid launch of project (3 weeks after start)*
- **Den Haag, Netherlands - 400 delegates**
 - Adjacent Concertation Meeting
- **Athens, Greece – 465 delegates**
 - Strong local engagement
- **Pisa, Italy – 400 delegates**
 - Growing industrial engagement
 - Related projects theme
 - Preparing for Phase II – Meeting new partners

- **EGEE has been presented and promoted at over 300 events worldwide (with help of wider EGEE community) including:**
 - Intelligent Systems in Molecular Biology
 - Computing for High-Energy Physics
 - Global Grid Forums
 - GEANT2 Launch in Luxemburg
 - IST in Netherlands
 - EuroPVMMPI in Italy
 - Chinese-European Networking Symposium in China
 - XX International Symposium on Nuclear Electronics & Computing NEC in Russia

- **More than 16,000 unique visitors a month log on to an EGEE website:**
 - Public website - <http://public.eu-egee.org/>
 - Technical website – <http://egee-intranet.web.cern.ch/egee-intranet/index.html>
 - Training website - <http://www.egee.nesc.ac.uk/>
 - <http://www.egee.be/> - EGEE in Belgium
 - <http://iaq.iucc.ac.il/> - EGEE in Israel
 - <http://www.egee.hu> and <http://egee.ik.bme.hu> - EGEE in Hungary
 - <http://www.lip.pt/computing/projects/EGEE> - EGEE in Portugal
 - <http://grid.ucy.ac.cy/egee/> - EGEE in Cyprus
 - <http://www.grid.bas.bg/> - EGEE in Bulgaria
 - <http://www.gup.uni-linz.ac.at/egee-> EGEE in Austria
 - <http://egee.cesnet.cz/cs> EGEE in Czech Republic
 - EGEE in Russia: <http://rus.egee-rdig.ru/> ; <http://www.egee-rdig.ru> ;
<http://www.gridclub.ru> ; <http://www.ihep.su/egee/> ; <http://egee.itep.ru> ;
<http://egee.pnpi.nw.ru> ; <http://www.impb.ru/egee> ;
<http://www.icbi.ru/prez/egee.sht> ; <http://egee.sinp.msu.ru> ;
 - <http://www.egee-see.org> EGEE-SEEGRID in Greece
 - <http://spin.fuw.edu.pl> EGEE in Poland
 - <https://gilda.ct.infn.it> – GILDA



- Over 230 press cuttings
- 5 Radio interviews
- 9 Television interviews
- More than €400,000 equivalent advertising
- Material available in many (>10) European languages



Grid computing was designed as a democratic, collective computer network paradigm, but the current crop of software is all the rave with research scientists, computer scientists, and the IT industry in general. We find out just what it means and explore some of the advantages.

BY RICHARD BERLICH



What is a Grid?

In 1996, the Foster and Kesselman published their book, "The Grid - Blueprint for a New Computing Infrastructure". This vision is viewed by many as the start of a new era in distributed computing (see Figures 1 and 2). Foster and Kesselman's vision was that of providing distributed resources for transparent public use, based on a standard interface. The idea was that people could access computational

resources in a way and manner that would be similar to the way that researchers use other types of Grid. The scenario that they have given us is a computer network that is shared across the entire planet, where every computer is connected to a Grid. Grid computing is not a new paradigm, it has been around for years. The idea of a Grid is not new, it is a natural extension of the computer network that we have today. The idea of a Grid is not new, it is a natural extension of the computer network that we have today. The idea of a Grid is not new, it is a natural extension of the computer network that we have today.



- EGEE video
- Glossy brochure
- 19 information sheets about different aspects of EGEE
 - Applications, gLite, GILDA etc
- Business cards, Folders, Stickers, Posters

- You can easily order EGEE material from NA2 by filling-in a simple webform: <http://public.eu-eggee.org/feedback/materials.php>
- All the templates you may need for EGEE branding is available here: <http://public.eu-eggee.org/internal/NA2-intranet/material.html> for more information
- Much of the publicity material is available to download from the public website (news releases, information sheets etc.) <http://public.eu-eggee.org/>

NA2 is currently managed by TERENA in Amsterdam:

Activity Manager – John Dyer

External Relations Officer – Joanne Barnett

Assistant External Relations Officer – Jim Buddin

TERENA works closely with the Project Office at CERN in Switzerland who have two dedicated NA2 staff:

PR Officer - Hannelore Hämmerle

will become NA2 Activity Leader in EGEE II

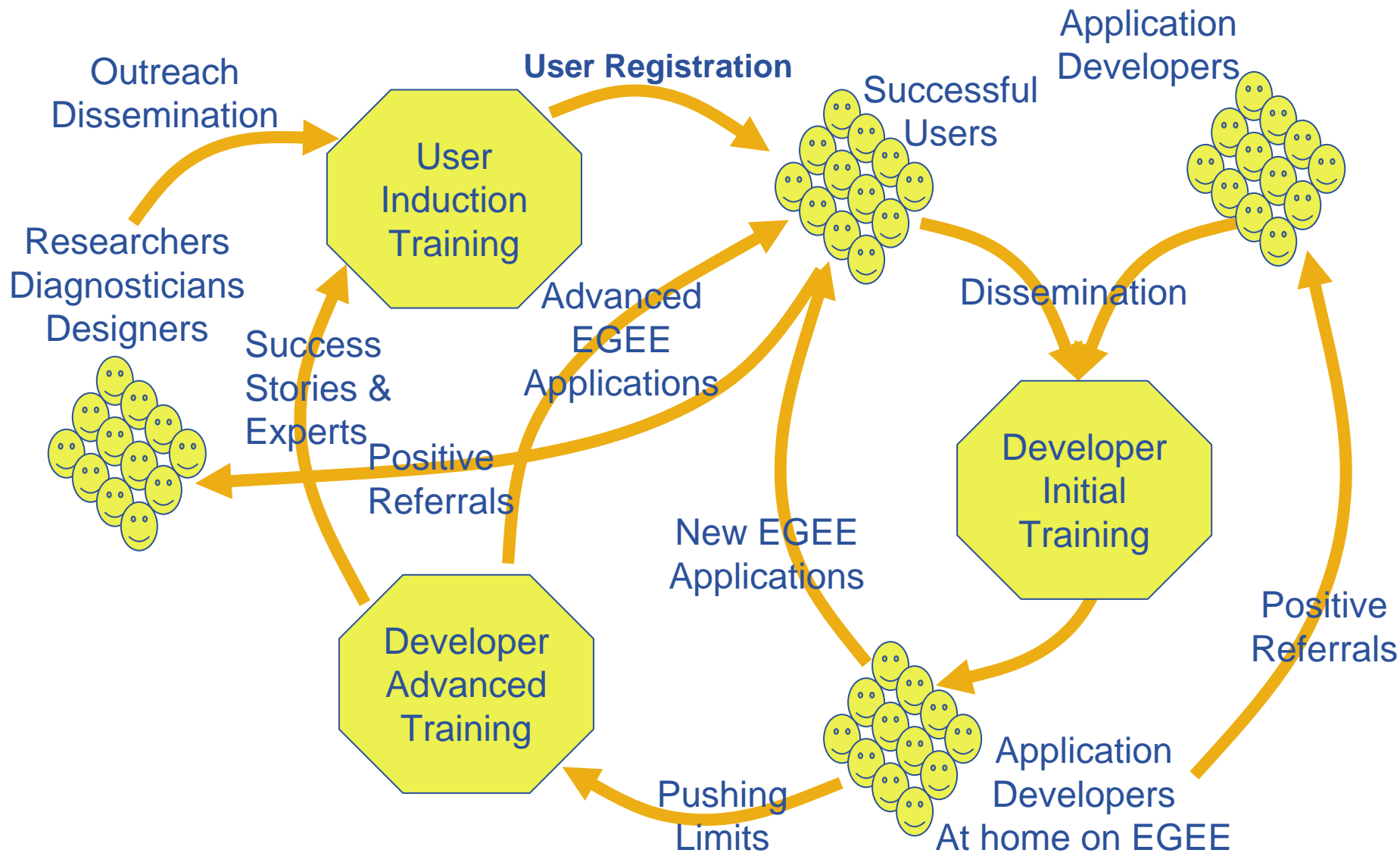
PR Officer - Owen Appleton

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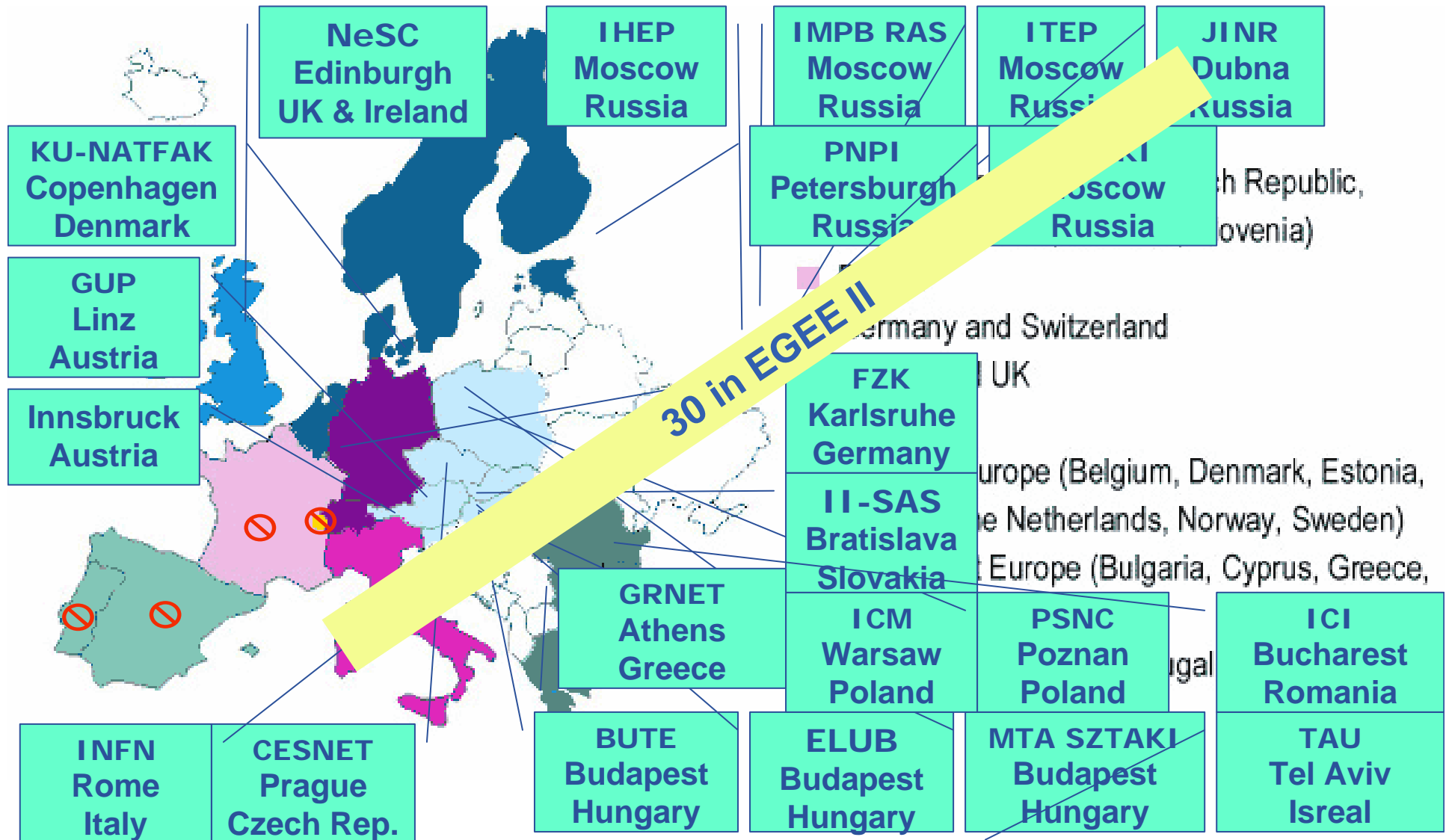
- **The EGEE training programme is built on a federation of 22 partners and close collaboration with other activities**
- **EGEE training has delivered well above planned targets**
 - raising grid awareness
 - gaining users
 - building teams
 - empowering developers

Trainers power Virtuous Cycles



That is just the start of building an active & happy user community → rest of EGEE

EGEE 22 Training Partners





NA3 produces courses based on commitments in the execution plan and training requests which have been received

- Induction
- LCG2 installation
- LCG2 APIs
- gLite preparation
 - Web Services
 - WSDL
 - WSRF
 - GT4

☞ from SA1, NA4 & NA2



Biomed Application Developers Course, Madrid



EGEE

- Organised & Presented
- Created Progressive Exercise
- Integrating Components
- Incremental Introduction of Features & Challenges
- Leading to Integrated Grid team challenge
- Generated Significant Interest
- Follow on in Edinburgh MSc
- ICEAGE

The event was attended by 65 *selected* advanced international students

- **Regional EGEE Summer School in Budapest, 11-16 July**
 - Induction Course mainly, but included an Application Developer Training Course, and Advanced Course on gLite
- **PPARC Summer School – Edinburgh**
- **CERN Summer Students School – September**
- **GridKA – October –**
 - Principles, User Induction, Developer APIs & Installation

- **Event between training and dissemination. In 2005:**
 - Participants from 10 nations
 - 6 courses
 - gLite introduction (x2)
 - ROOT/PROOF (x2)
 - Grid Appl. Development
 - gLite installation (based on Grid-in-a-box!)
 - 17 talks



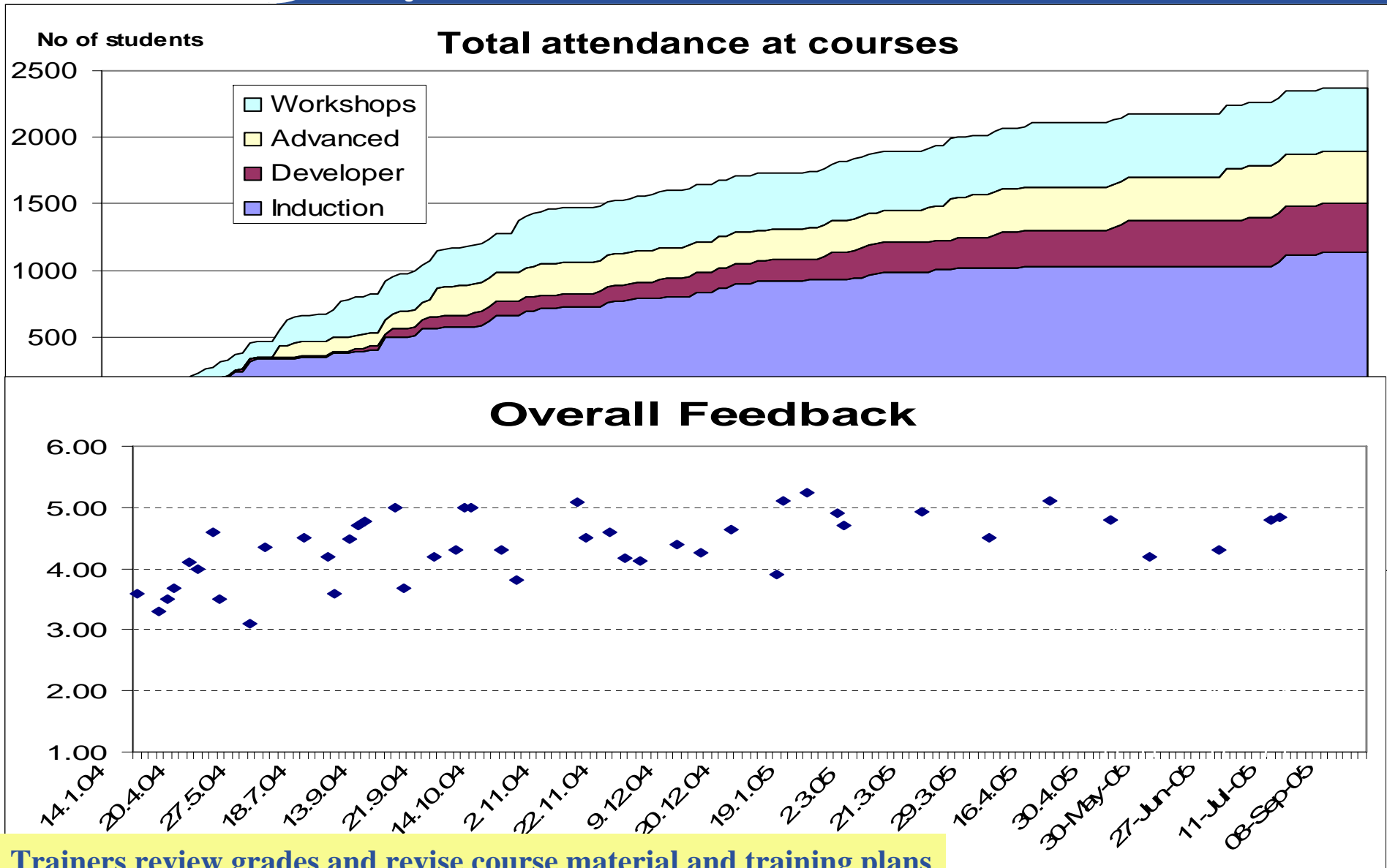
- Yearly event (now in its third year)
- On the left:: Picture from GridKa School 2004



- Training + 5 Talks in Australia and New Zealand
- EGEE talk at CSIRO
- Cooperation with GSI Darmstadt (Kilian Schwarz)

Examples

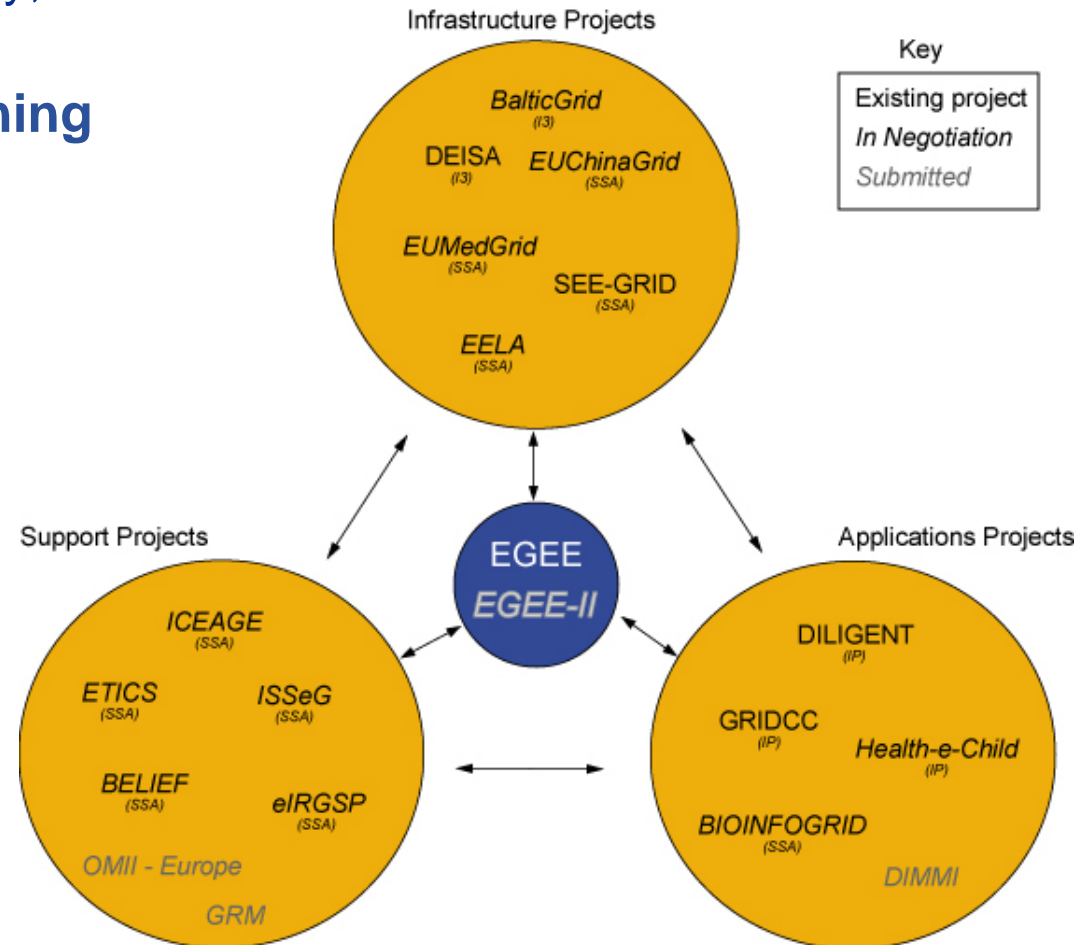
- *Upcoming: Information Management & Consulting - „Grid Computing: Von der Forschung zur Anwendung“*
- *Upcoming: „EGEE: Building a Pan-European Grid Training Organisation“ - Australian Comp. Sci. Comm’s*
- *UKUUG Conference 2005: "Xen: Scientific Use Cases and Performance Comparisons"*
- *Qual der Wahl – Article about Xen in Linux Magazin, Germany*
- *White paper: "Xen Grid Site - The Art of Consolidation"*
- *Australian Computer Science Communications - "Grid Computing in Europe: From Research to Deployment"*
- *Article Series about Grid Computing in Linux Magazin, Germany, also published in English in the UK*



Trainers review grades and revise course material and training plans

- **T-Infrastructure**
 - Gilda, hands-on facilities, Virtual Machines
 - Edinburgh, FZK, INFN & Russia developed gLite experience
- **Repository**
 - Approaching 3000 files – adding metadata & query access
- **E-Learning**
 - Phase one: digital library and content management system
 - Based on open source repository system - Fedora
 - Web Services API & W3C XForms user interface
 - Standard Metadata: Dublin core, Learning Objects, etc.
 - On track with timeline presented at Athens
 - Demonstration on Wednesday
 - Next: “wiki in e-learning” developments

- **Collaboration**
 - For scale, skills, geography, disciplines & cultures
- **Central tenet of EGEE training**
 - Within project
 - With EU projects
 - Internationally
- **Driven by**
 - Leadership
 - Established alliances
 - Summer Schools
- **Enabled by shared**
 - Planning & Thinking
 - Repository & Programme
 - E-Learning Portal



- **EGEE training**
 - Popular
 - Probably under-reported
 - Evolving & responding to new technologies & users
 - Developing an approach to Scaling
 - Repository, Training trainers, e-Learning
 - Collaboration with NA4
 - Via Rosia Badia & NextGRID with full breadth of EU Grids
 - Complementary effort in ICEAGE for Education
- **EGEE II**
 - 22 → 30 partners: Meet at the NA3 session tomorrow
 - Challenge to reach new communities in large numbers
 - Will need to structure into specialist teams
 - Regional, discipline or technology?