

**e-SOG**  
**Research Councils**  
**e-Science Operations**  
**Group**  
**Polaris House**  
**Swindon**

**Malcolm Atkinson,**  
**Anna Kenway,**  
**Dave Berry &**  
**John Murison**

**3<sup>rd</sup> March 2004**



# A wide variety of events ... and visitors ...



# Events Held

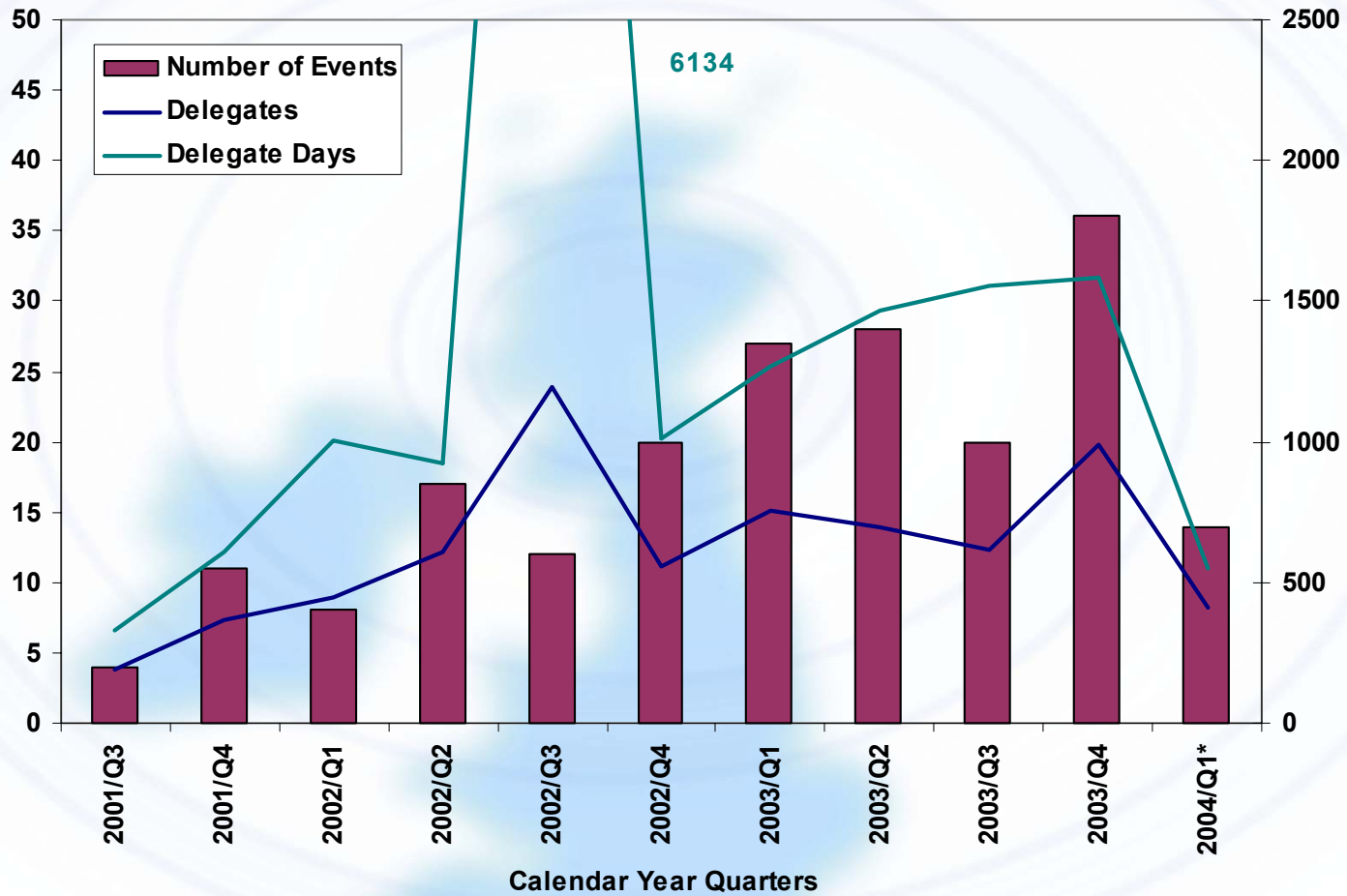
(from 1 Aug 2002 to 29 Feb 2004 - 31 months)

**We have run 197 events (just over 6 per month):**

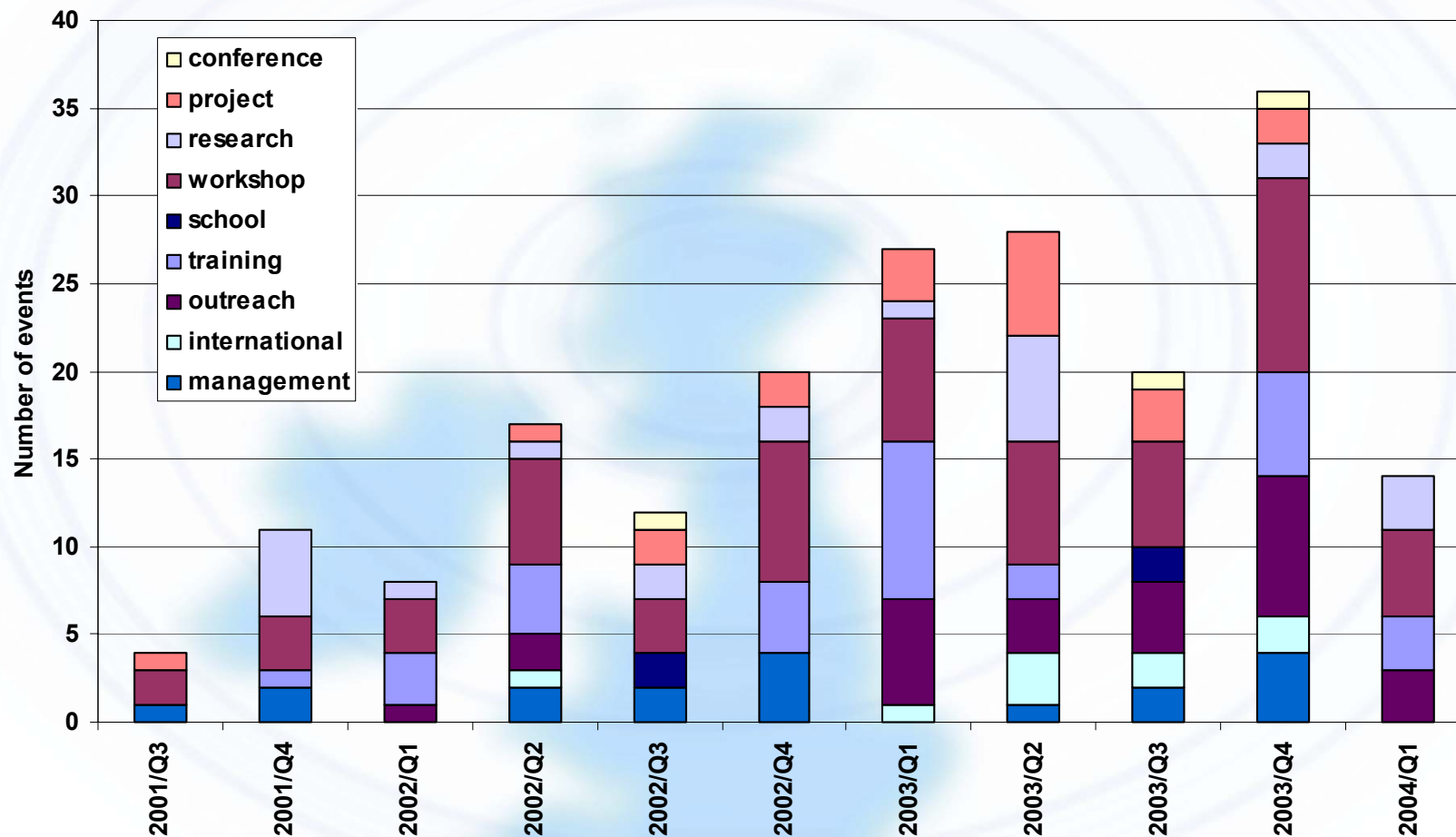
- 3 conferences (including GGF5 with 900 participants)
- 20 project meetings
- 23 research meetings
- 61 workshops
- 4 schools
- 32 training sessions
- 27 outreach events
- 9 international meetings
- 18 e-Science management meetings

*(though the definitions are fuzzy!)*

# Basic Event Statistics

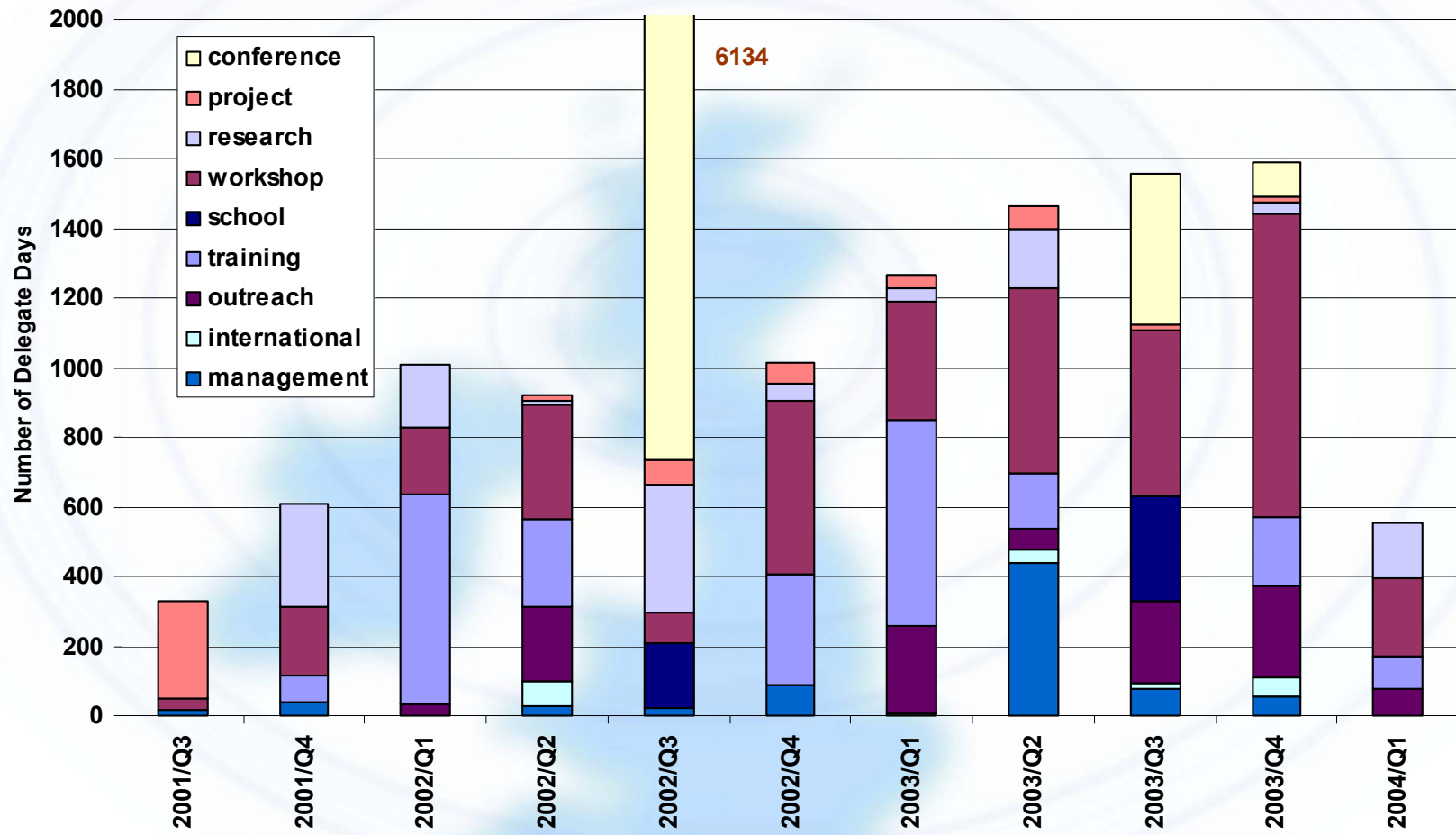


# Types of event (by frequency)



# Types of event

(by volume of delegate days)



# Summary Gross Figures

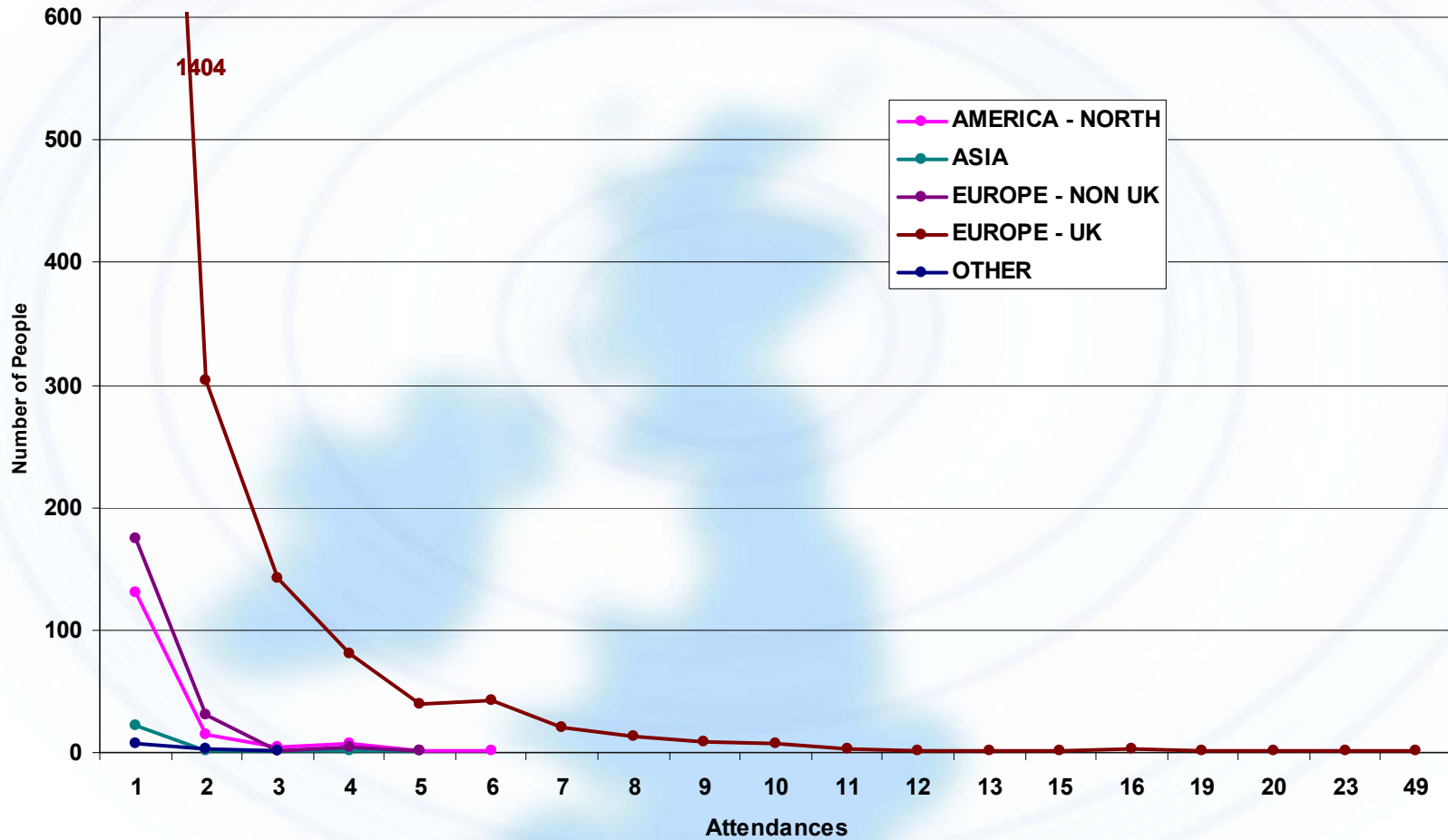
- 16,444 delegate days
- 197 events
- 6,825 delegates (many 'repeats' - see later slide)
- 339 event days (in ~ 620 working days)
- *Further statistics exclude GGF5, as we did not handle registration so cannot do a detailed analysis.*
- *Note also that 2004/Q01 is only part of that quarter (Jan-Feb)*

# Question 1

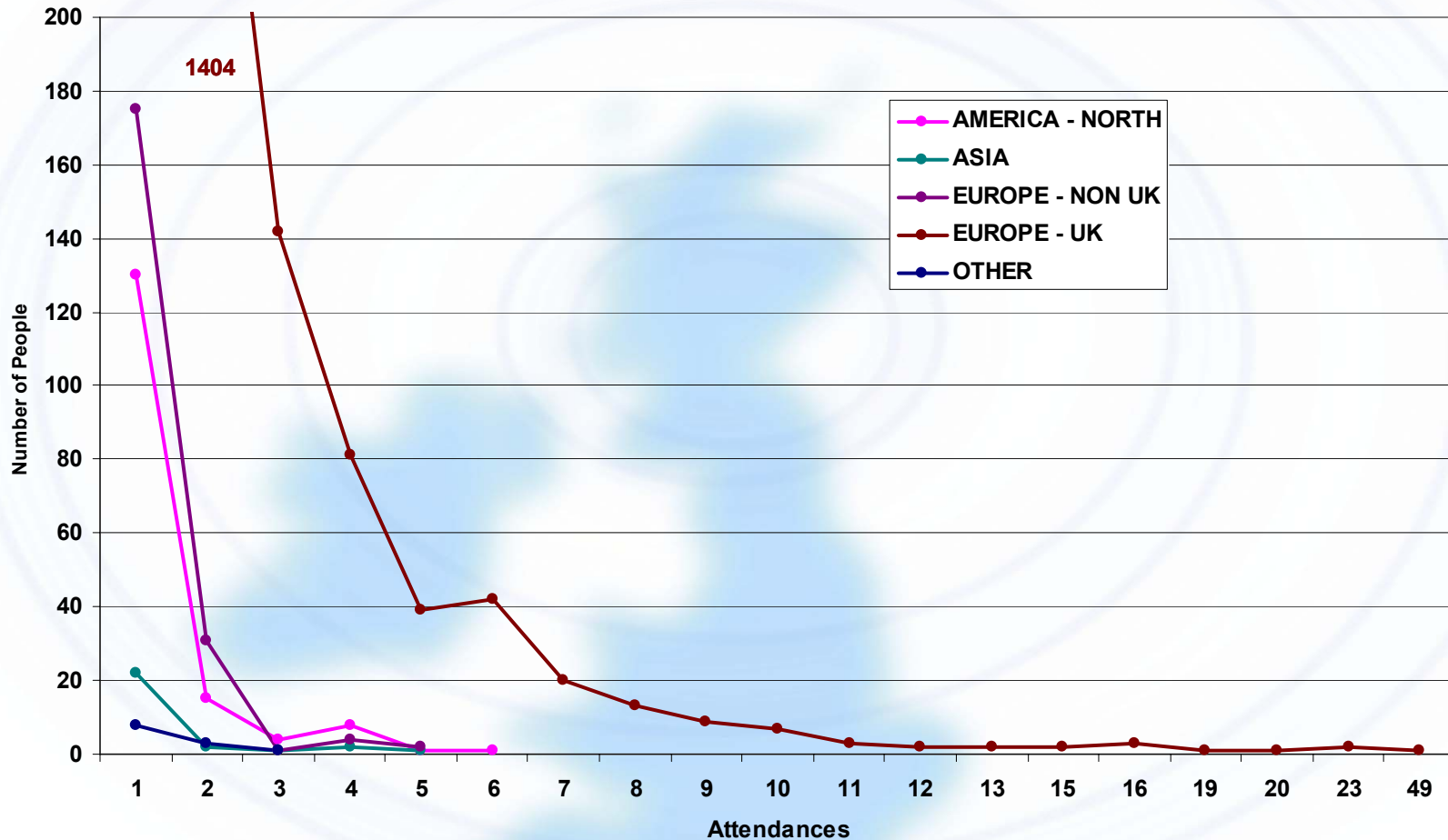
- **Is this what you want?**
  - Volume of events?
  - Distribution of kinds of event?
    - ▶ More training?
    - ▶ More workshops?
    - ▶ More / Fewer ... ?

**What do the Research Councils want eSI to do?**

# Frequent Flyers

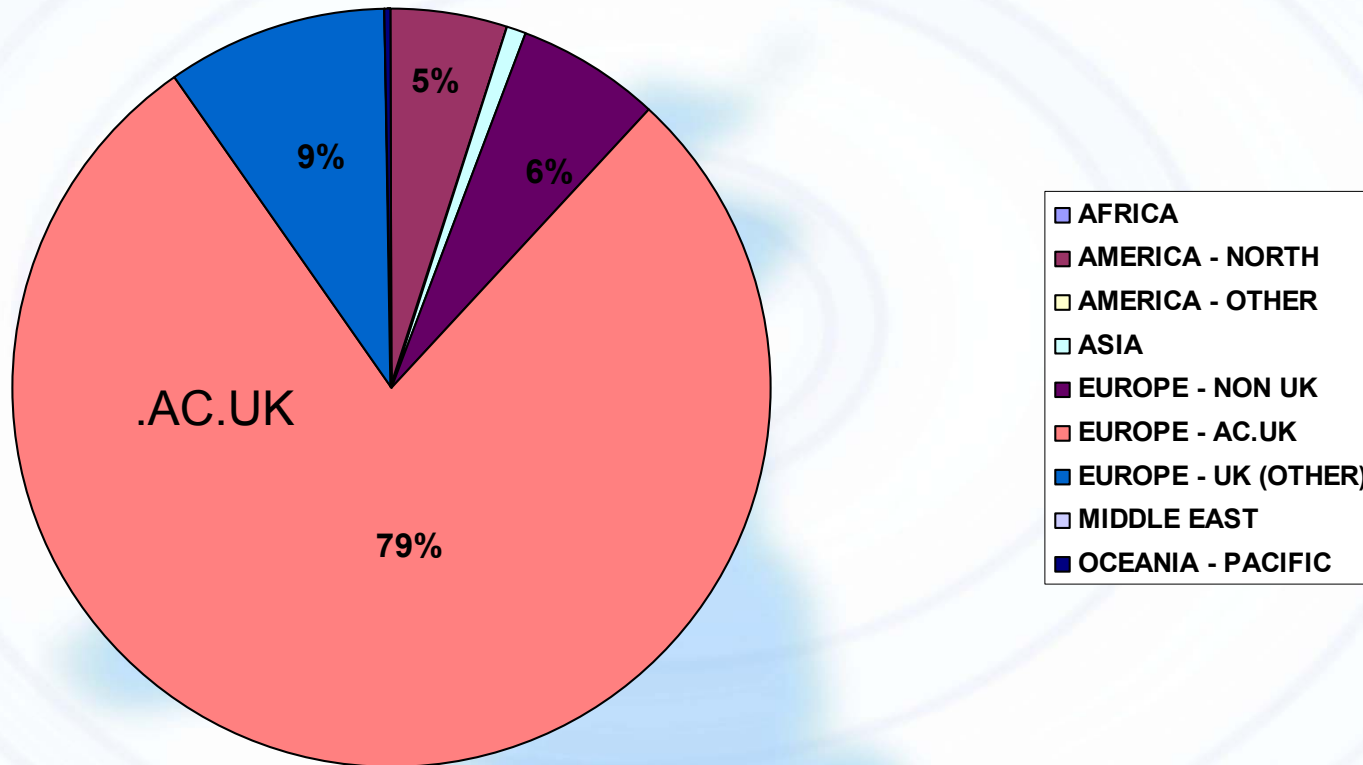


# Frequent Flyers



# UK Support

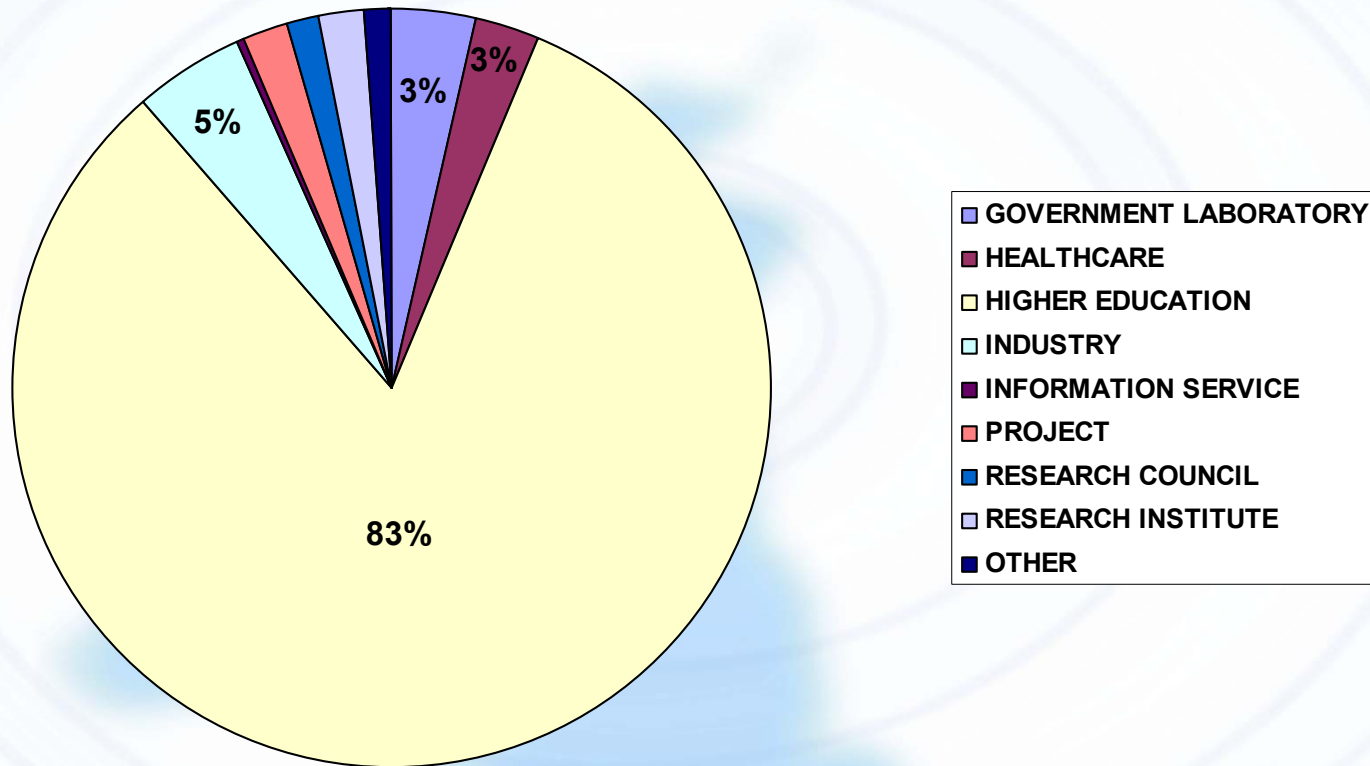
## Geographical origin of people attending events



3173 people have registered in our database ...

# UK Support

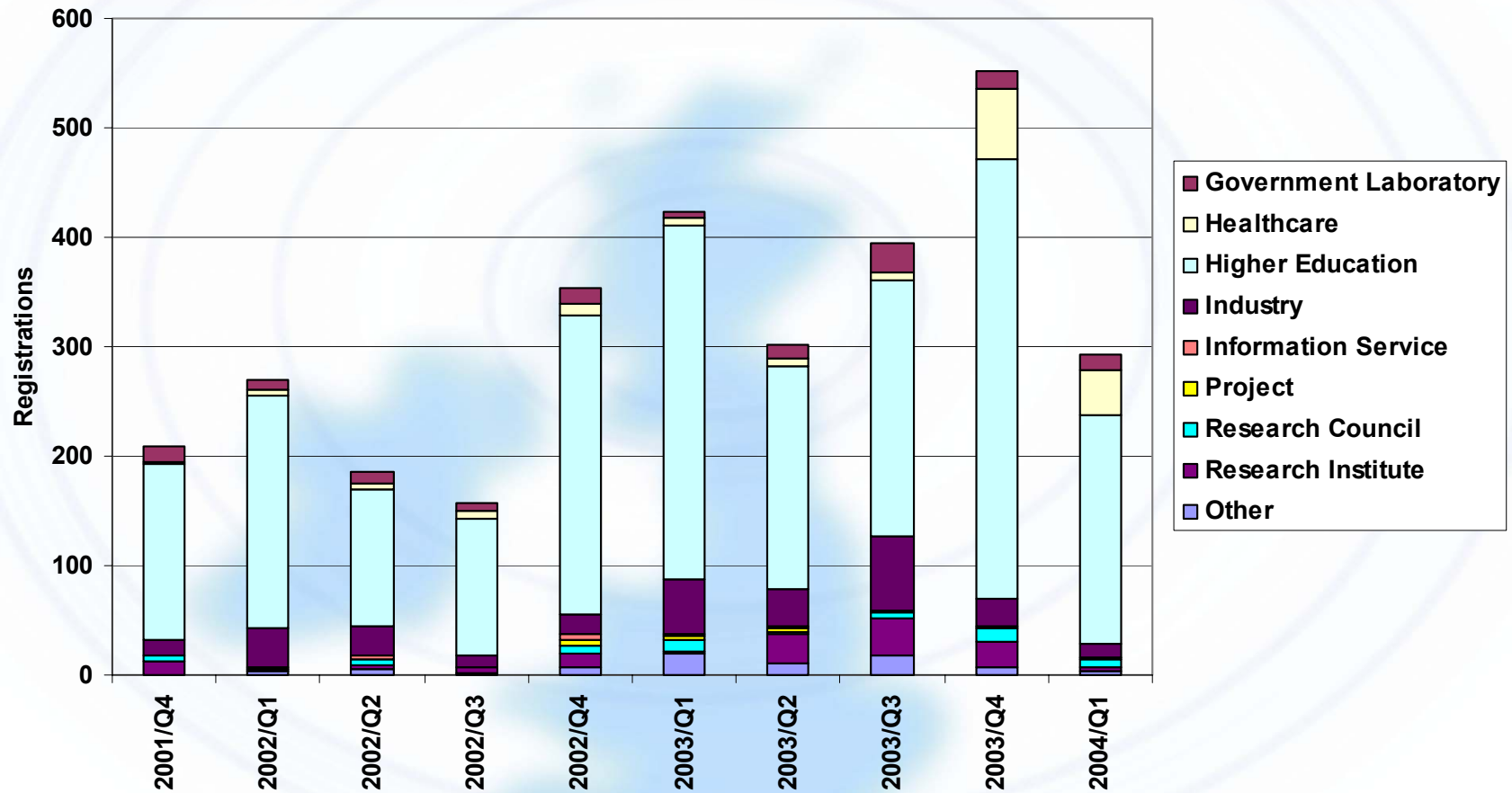
## Organisation type of UK people attending events



... from 813 organisations including 316 universities from all over the world and 213 companies

# Changing profile of people registering

*... we are having an increasing impact on the healthcare sector*



# Industrial Involvement

- 293 registered users from 213 companies
- 212 different delegates have attended events (284 event registrations) from 117 companies including not only
  - Apple, Cisco, Fujitsu, Hewlett-Packard, Honeywell, IBM (UK,EU & USA), Microsoft, Motorola, Oracle, Sun
- but also ...
  - Astra Zeneca, BAE, BASF, Genemedics, Glaxo-SmithKline, Organon, Pepper's Ghost Productions, Pfizer, Schlumberger, Siemens ...

# Exit evaluations

- For general events we started collecting delegate responses in August 2003. (Always collected for training events.)
- Use two different evaluation sheets for general events, and training events.

## General events

- 22% response rate - on a scale of 5 ('Excellent') to 1 ('Disappointing') the average score is 4.1.

## Training events

- 39% response rate - on a scale of 5 ('Excellent') to 1 ('Poor') the average score is 4.0
- About half of those who responded use our Internet Café or our WirelessLAN facilities

# Training Evaluation

- recent events

Title	Replies	Delegates	Overall	Materials	Exercises	Objectives	Knowledge	Presentation	Location	Lab Exercises
Condor Administrators Tutorial 23 October 2003	1	25	4.0	4.0	4.0	5.0	5.0	4.0	5.0	5.0
Data Mining with Ensembl (9 - 10 October 2003)	1	23	3.0	2.0	3.0	3.0	3.0	4.0	3.0	3.0
Globus 2 / Level 2 Grid connection training course (16 October 2003)	10	13	4.2	3.3	3.7	4.1	4.7	4.0	4.3	4.6
Globus 2 / Level 2 Grid connection training course (20 January 2004)	9	18	3.7	2.8	3.7	3.8	4.6	3.9	4.3	4.4
How to Build a Grid Service Using the Globus Toolkit 3 (14 October 2003)	13	25	3.5	3.5	4.0	3.3	4.2	3.5	4.2	4.7
How to Build a Grid Service Using the Globus Toolkit 3 (15 October 2003)	17	29	4.2	4.1	4.1	3.6	4.6	4.2	4.5	4.6
Introduction to Bioinformatics (6 - 8 October 2003)	9	20	3.3	2.7	3.3	3.3	4.7	3.3	4.7	4.7
	<b>60</b>	<b>153</b>	<b>3.8</b>	<b>3.4</b>	<b>3.8</b>	<b>3.6</b>	<b>4.5</b>	<b>3.8</b>	<b>4.4</b>	<b>4.6</b>

# Questions 2 & 3

- **Is eSI serving the “right” community?**
  - Origin of participants?
  - Role & organisation of participants?
- **Is eSI satisfying the participants requirements?**
  - Training exit poles - looks OK
  - Other event exit poles need refinement

**What do the people who send (pay) the participants think?**

# eSI Workshops

- **Space for real work**
  - Crossing communities
  - Creativity: new strategies and solutions
  - Written reports
- Scientific Data Mining, Integration and Visualisation
- Grid Information Systems
- Portals and Portlets
- Virtual Observatory as a Data Grid
- Imaging, Medical Analysis and Grid Environments
- Open Issues in Grid Scheduling
- Data Provenance & Annotation
- e-Science Workflow Services
- GeoSciences & Scottish Bioinformatics Forum

**Suggestions always welcome!**



# Technical Reports

- The Virtual Observatory as a Data Grid, *Bob Mann*, Sep 03
- UK Experience with OGSA, *Dave Berry*, Sep 03
- E-Science Gap Analysis, *Geoffrey Fox, David Walker*, Jun 03
- Scientific Data Mining, Integration and Visualisation, *Bob Mann, Roy Williams, Malcolm Atkinson, Ken Brodlie, Amos Storkey, Chris Williams*, Nov 02
- A Rough Guide to Grid Security, *Mike SurrIDGE*, Sep 02
- Multi-Site Videoconferencing for the UK e-Science Programme, *Stephen Booth, John Brooke, Kate Caldwell, Liz Carver, Michael Daw, David De Roure, Alan Flavell, Philippe Galvez, Brian Gilmore, Henry Hughes, Ben Juby, Ivan Judson, Jim Miller, Harvey Newman, Chris Osland, Sue Rogers*, Oct 02
- Database Access and Integration Services on the Grid, *Norman W Paton, Malcolm P Atkinson, Vijay Dialani, Dave Pearson, Tony Storey, Paul Watson*, Feb 02
- Research Agenda for the Semantic Grid: A Future e-Science Infrastructure, *David De Roure, Nicholas Jennings, Nigel Shadbolt*, Dec 01
- Databases and the Grid, *Paul Watson*, Dec 01

# Technical Reports

- **A Grid Application Framework based on Web Services Specifications and Practices**, *Savas Parastatidis, Jim Webber, Paul Watson, Thomas Rischbeck*, Aug 03
- **Grid Information Systems 2003 (Draft)**, *Rob Allan, Dharmesh Chohan, Xiao Dong Wang, Andy Richards, Mark McKeown, John Colgrave, Matthew Dovey, Mark Baker, Steve Fisher*, Dec 03
- **Towards tractable toolkits for the Grid: a plea for lightweight, usable middleware**, *Jonathan Chin, Peter Coveney*, Feb 04
- **Portals and Portlets 2003**, *Rob Allan, Chris Awre, Mark Baker, Adrian Fish*, Mar 04
- **IMAGE 03: Images, Medical Analysis and Grid Environments**, *Dave Berry, Derek Hill, Steve Pieper, Joel Saltz, Cécile Germain-Renaud*, Mar 04
- **Open Issues in Grid Scheduling**, *Alain Andrieux, Dave Berry, Jon Garibaldi, Stephen Jarvis, Djamila Ouelhadj*, Mar 04
- **Data Provenance and Annotation**, *Peter Buneman, Michael Wilde*.
- **E-Science Workflow Services**, *Matthew Addis, Dave Berry, Earl Ecklund, Carole Goble*

# Future Events

- 20 already in an advanced stage of planning through to July 2005
- Including...
  - Training on Level2 Grid, OGSA-DAI
  - EPSRC e-Science Meeting
  - Genes, Embryos and Birth Defects
  - Cross Research Council Conference for e-Science
  - Committed to supporting WWW conference in 2005

See [www.nesc.ac.uk/esi/](http://www.nesc.ac.uk/esi/)

Suggestions are always welcome.

# Question 4

- **Is the report series meeting reasonable goals?**
  - Does it reflect eSI activity?
    - ▶ All *workshops* we initiate
  - Does it reflect UK e-Science achievements?
    - ▶ Not as much as we wish it did
  - Does it provide a valuable information resource?
    - ▶ Frequent downloads
  - How can resources be found to do more?
    - ▶ Good reports require a lot of effort

**Are there resources to tap?**

**Are there was of attracting more contributions?**

# eSI Research Visitors

- **International Researchers**
  - Collaborate with UK research and development
  - Engage in and develop eSI event programme
  - Build bridges with your community
- **Diversity of disciplines**
  - Pre-established mutual interests
  - Complementary experience, knowledge and skills
  - We can help match interests and develop a plan
- **Funding for visits**
  - Between one week and six months
  - Typically covers travel and/or local living costs
- **Suggestions welcome**
  - Active researchers (not Ph.D. students)
  - Applications via our web site

# Visiting Researchers

David Maier	Oregon Health & Science University, USA	Jun/Jul- 02
Greg Riccardi	Florida State University, USA	Jun/Oct-02
Chip Watson	Jefferson Lab, USA	Aug/02
Dave Richards	Jefferson Lab, USA	Sep/02
Dave Abel	CSIRO, Australia	Sep/02
Roy Williams	Caltech, USA	Oct/02
Steve Tuecke	ANL, USA	Jan/03
Herb Budd	IBM Life Sciences	Mar/03
Geoffrey Fox	Indiana University, USA	Apr/03
Richard Thomas	The University of Western Australia	Apr/03
Stephen Hall	Lancaster University	May/03
Jim Gray	Microsoft Research	Jun/03
Alex Szalay	Johns Hopkins University, USA	Jun/Jul 03
Roy Williams	California Institute of Technology, USA	Jun/03
Greg Riccardi	Florida State University, USA	Jul/03
Arthur Nicewick	Center for Advanced Technologies, Virginia USA	Aug/03
Steve Tuecke	Argonne National Laboratories, USA	Aug/03
Peter Lamb	CSIRO Mathematical and Information Sciences, Australia	Aug/Sep-03
Beth Plale	Indiana University, USA	Aug/Sep-03

# ... and “Research Leaders”

- Richard Baldock (MRC)
  - Bob Mann (Inst. for Astronomy, Edinburgh)
  - Ewan Klein (Informatics, Edinburgh)
  - Colin Perkins (Computer Science, Glasgow)
- ... who have been/are 50% on secondment on the visiting researchers' programme.

# Duties of a NeSC Research Leader

- encouraging the uptake of Grid technologies in Astronomy and related fields
- encouraging visitors, with whom you have a research overlap, to visit Edinburgh and work with you and other local colleagues
- organising and running research workshops
- assisting with the development of new core Grid and scientific database technologies
- promoting NeSC within the Universities of Edinburgh and Glasgow through, for example, personal presentations and more widely at conferences and workshops.
- *...and all that in 0.5 FTE!*

Slide from Dr Bob Mann: 30 September 2003



UNIVERSITY  
of  
GLASGOW

# Question 5

- **Are the visitors' & research leaders' working?**
  - **Goals - for all disciplines**
    - ▶ To stimulate and inform UK research
    - ▶ To stimulate inter-disciplinary relationships
    - ▶ To promote UK international collaboration
    - ▶ To generate research results
  - **Mix of visitors?**                      **Research leaders?**
  - **Length of visits?**                      **Appointments?**
  - **Activities during visits?**              **Appointments?**

**Can the RCs encourage more visitors?  
Can they arrange visitor activity?  
Can they arrange long-term planning of visits?**

# Website

- Now 4 Gigabytes in size.
- Moved to our own servers on May 28, 2003
- Some redesign of appearance in the last few months
- Constant development and improvement of structure as our role develops

# The Website - a Resource

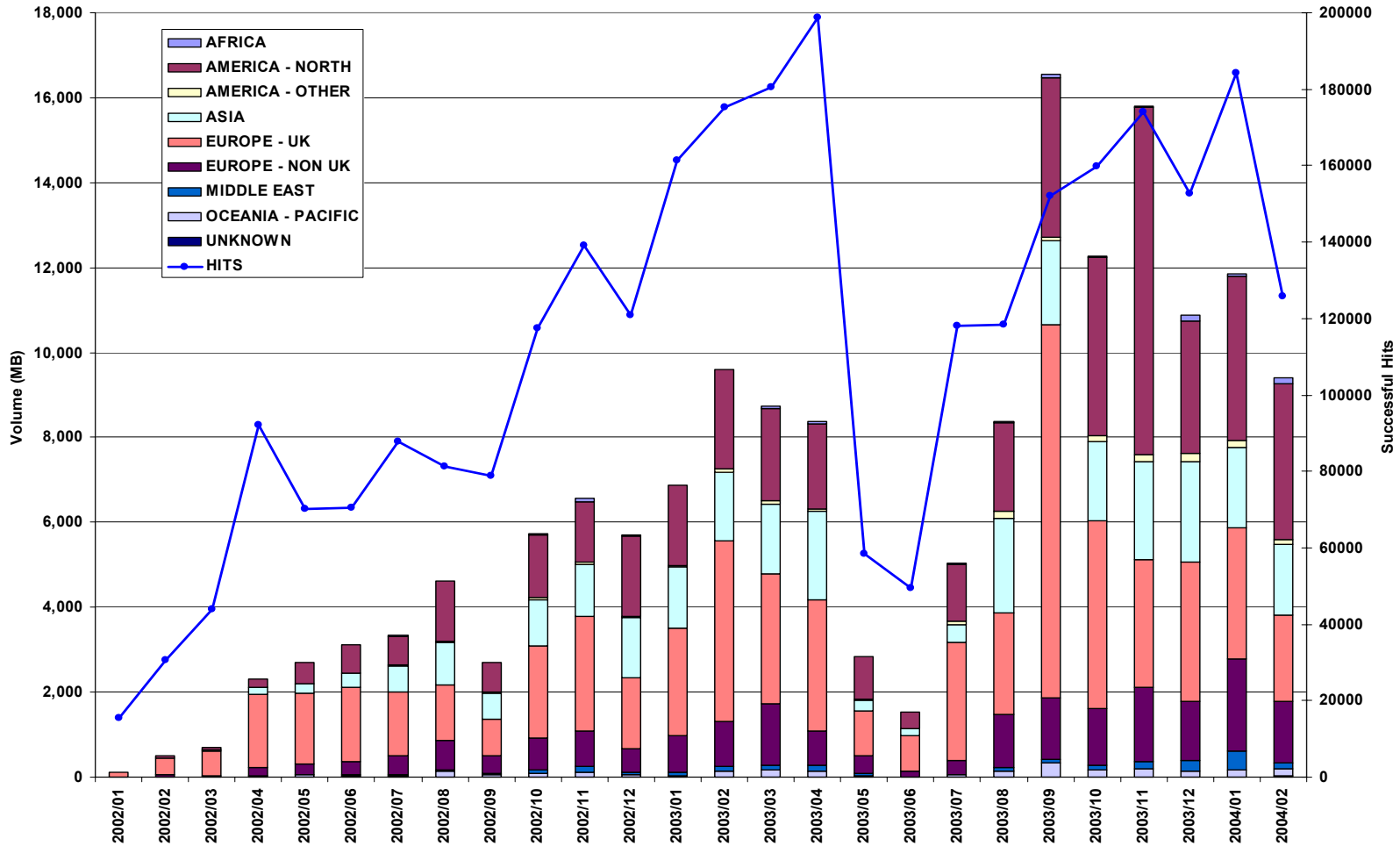
- **National e-Science Centre** <http://www.nesc.ac.uk/>
  - Mission, Background, Foundation, Locations, Staff, Resources, Projects
  - Register interest, Mailing lists, NeSCForge
  - Regional associations and Collaborations
  - News, Notices
  - Presentations and Lectures <http://www.nesc.ac.uk/presentations/>
- **National e-Science Institute** <http://www.nesc.ac.uk/esi/>
  - Mission, Events (Future and Past)
  - Register for Events, Visitor Programme, GridNet
- **UK e-Science**
  - Map and Index of Centres <http://www.nesc.ac.uk/centres/>
  - Technical Papers [http://www.nesc.ac.uk/technical\\_papers/](http://www.nesc.ac.uk/technical_papers/)
  - Index of >100 Projects <http://www.nesc.ac.uk/projects/>
  - Task Forces <http://www.nesc.ac.uk/teams/>
- **General Information**
  - Glossary, Bibliography, Who's who

# Basic Statistics 1

Since going 'live' in 2001 to 31 Jan 2004 (*figures in last week to 27 Feb 2004*)

- > 3.0 million successful requests ('hits') transferring 166 gigabytes of data (*2.20 GB*)
- Average hits per day 3237 (*5430*)
- Distinct files served 18,980 (*2821*)
- ... to 96,610 (*3705*) distinct hosts
- Average data transferred per day 182 MB (typical file size about 100 kB) (*322 MB*)

# Basic Statistics 2

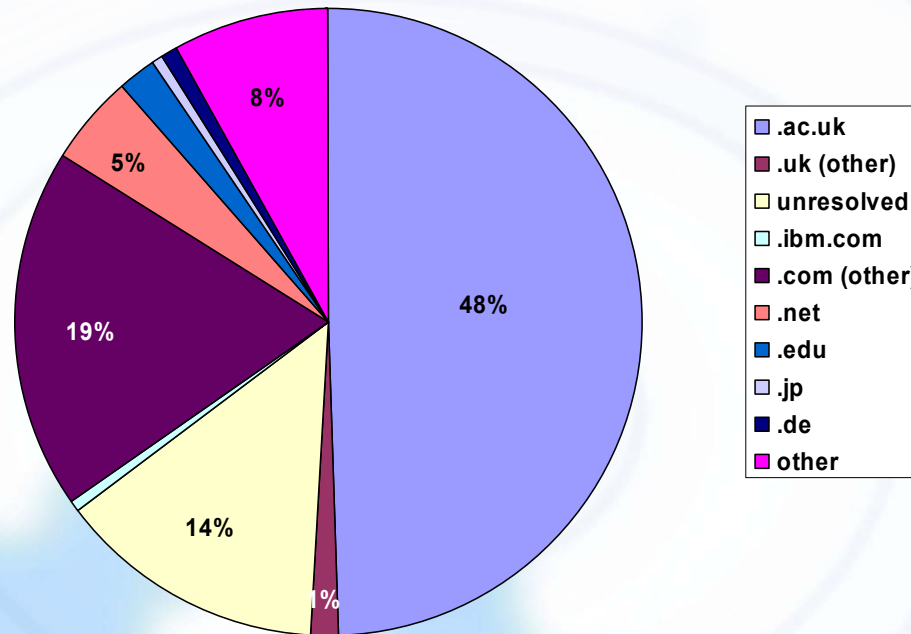


# Things to note:

- Drop in 2003 was due to serious hacking of Glasgow computer systems which took it off line
- Large proportion of volume downloads to:
  - North America (dominated by USA)
  - Asia (China, India, Japan)
  - UK
  - Europe - non UK (Germany, France, Italy)

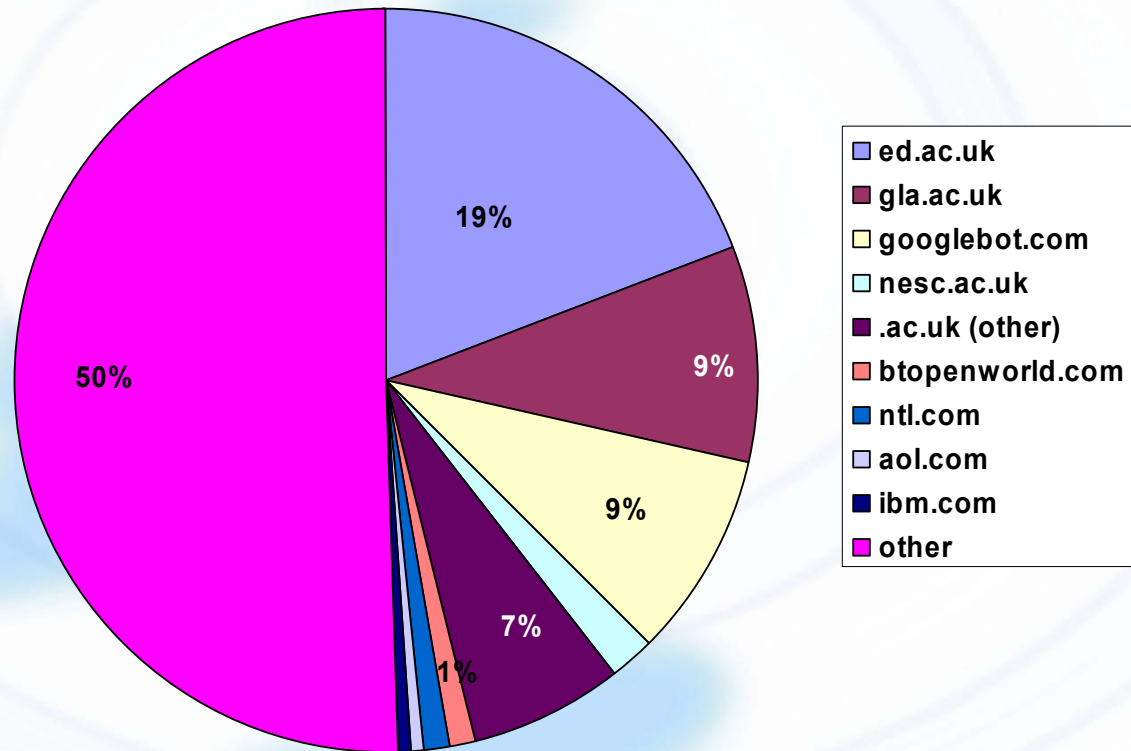
*Our website has a serious International presence!*
- Others:
  - Middle East (Iran, Israel)
  - Oceania - Pacific (Australia)
- Larger proportion of successful hits are UK - these are small volume downloads for event registration.

# Web Hits - Domain



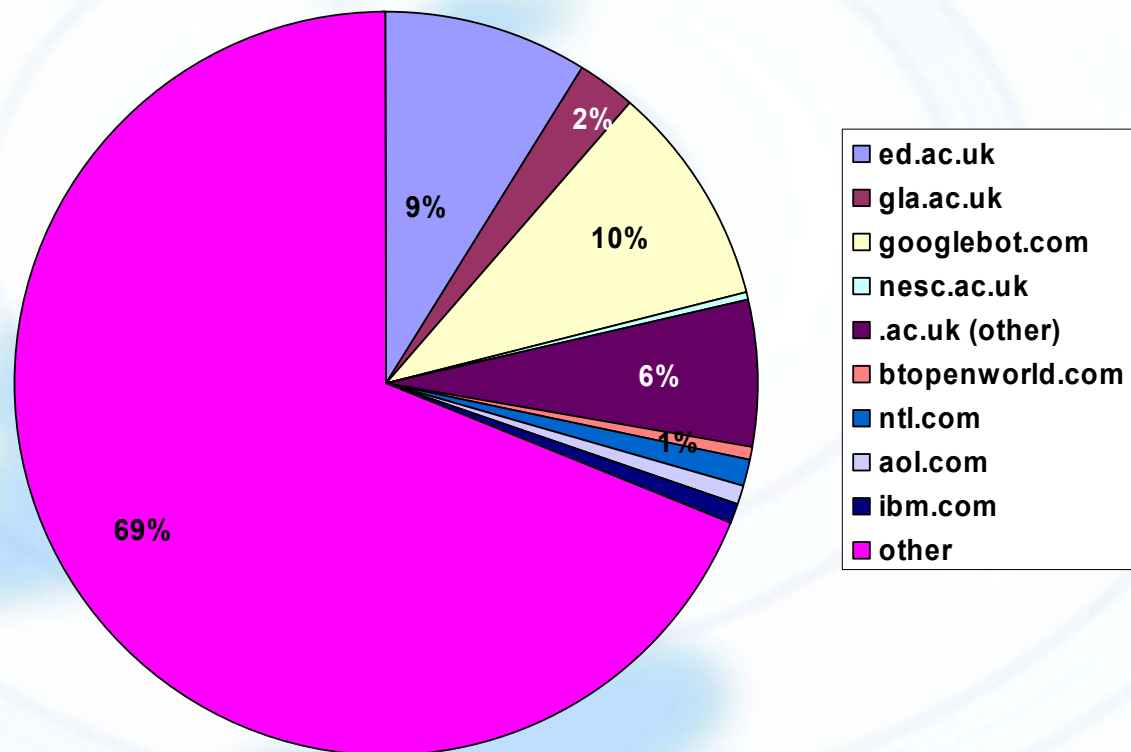
- Unresolved domains are a problem - requests from some countries are 'domain unknown' and we use tables of blocks of IP addresses to resolve these to country codes (e.g. 66,456 unresolved hits from China, compared to 2,836 resolved)

# Web Hits - Organisation



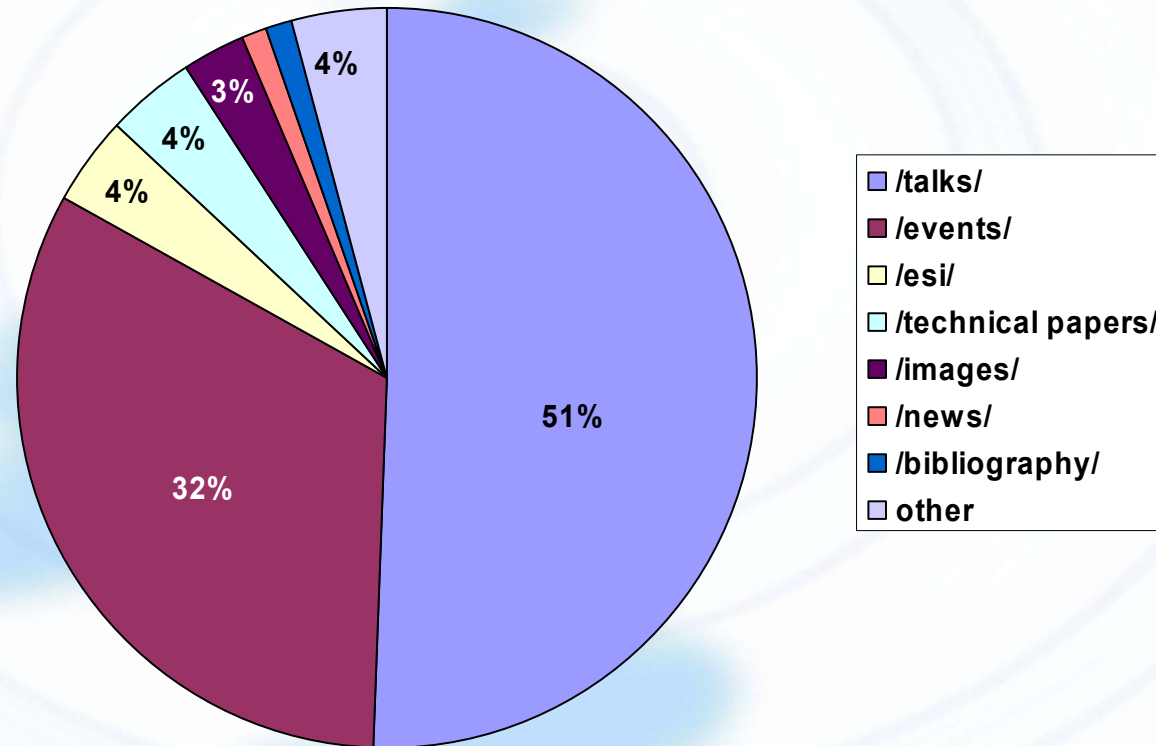
# Web Volume - Organisation

- A lot of 'local' requests are low volume registrations



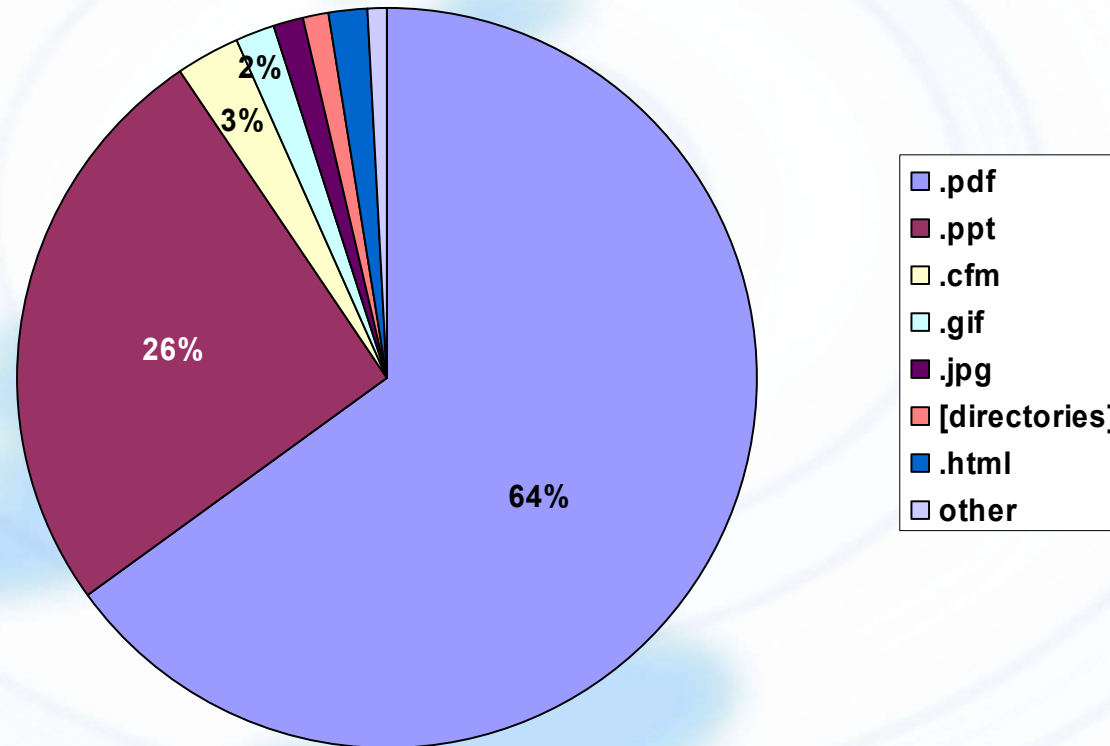
# Web Volume - Directory

(after move to NeSC servers)



# Web Volume - File type

- Most requests for downloads are talks and presentations



# Web Conclusions

- 50% of our requests are from the ac.uk domain
- 40% of our downloads are from the USA
- Almost 90% of requests are for .pdf and .ppt files i.e. talks and presentations

## Next Steps

- Implement a *mirror* at AN Other site (urgent)
- Improve visibility of Research area
- (Funded) indexed UK e-Science bibliography

# NeSCForge

- NeSC Forge used for collaborative development
- Provides full development system with
  - Versioning (via CVS)
  - Project web site
  - Tools for communication between development teams
    - ▶ Discussion Forums
    - ▶ Bug tracking
    - ▶ Support requests, patch submissions, and enhancement requests
    - ▶ Communication between project members using mailing lists
    - ▶ Sharing of documentation
    - ▶ Handling of to-do lists, tasks, etc
    - ▶ File uploads/releases
    - ▶ Posting of news
    - ▶ Code Snippets
    - ▶ Real-time messaging (through Jabber support)
- Currently used by several projects:
  - QCDgrid, ILDG, BRIDGES Geneview, EdSkyQuery-G, OGSA-DAI, Grid Access Data Service, PGPGrid, QCDOC OS Forum, Sattrack, UK OGSA Evaluation Project



NeSCForge:User guide added - Microsoft Internet Explorer

File Edit View Favorites Tools Help

NeSCForge

This forum Search Log In New Account

Home My Page Project Tree Code Snippets Project Openings NeSCForge

Summary Forums Tracker Lists Tasks Docs Surveys News CVS Files

Posted By: David McNicol  
Date: 2003-08-29 15:16  
Summary: User guide added

Latest News

User guide added  
David McNicol - 2003-08-29 15:16  
(0 Comments)  
[Read More/Comment]

Test project created  
David McNicol - 2003-06-24 21:22  
(0 Comments)  
[Read More/Comment]  
[News archive]

Discussion Forums: User guide added

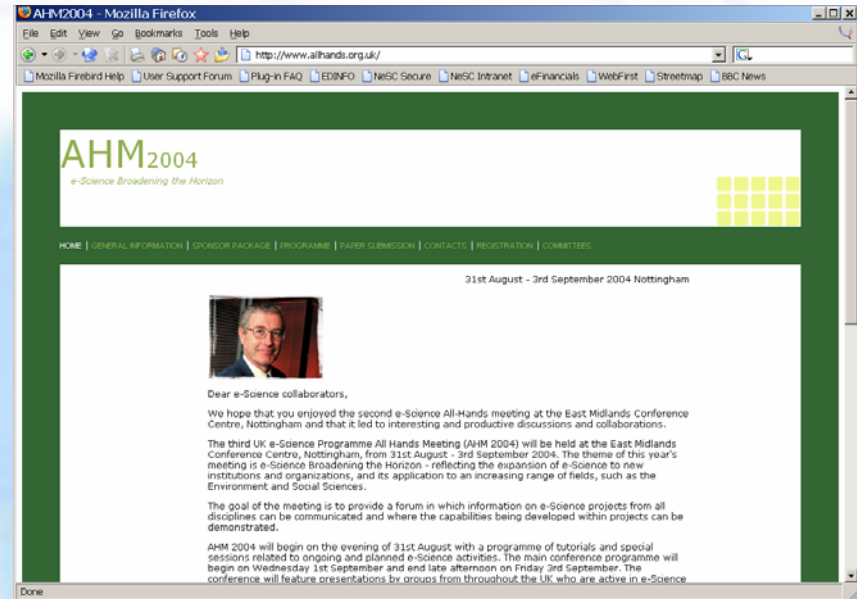
Start New Thread | Admin

Ultimate Show 25 Change View

Topic	Topic Starter	Replies	Last Post
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# eSI supports...

- All Hands Meetings - both by hosting & maintaining the website and with direct staff help at the event.
- W3C
- GGF10 Date Area Workshop



# Other services...

- WIKI's
  - IRC's using e-Science Certificate
  - SIG's
    - e-Science Data mining (Bob Mann)
    - e-Science Project Management (Tony Linde)
    - e-Science Visualisation (Ken Brodlie)
  - Contact [david@nesc.ac.uk](mailto:david@nesc.ac.uk)
- ... and we are always open to suggestions.
- Email lists - contact [anna@nesc.ac.uk](mailto:anna@nesc.ac.uk)

# Question 6

- **Does our web site serve well?**
  - Content relevance - all disciplines?
  - UK information source?
  - Is it up to date?

**What information would the research councils like?  
How can we get it?  
How can we keep it up to date?**

# eSI Training team

- John Murison appointed Training Manager in mid-November 2003.
- Team now being assembled:
  - 2 posts for 3 years from PPARC
  - 3 posts for 2 years from European project EGEE
- Appointments should be made w.e.f. mid-April.
- Looking for well-qualified, well-motivated trainers. If we don't get what we are looking for, we will try again later.

# eSI Training team

- One post taken by redeployment of 60% of Dr Dave Berry (NeSC Research Manager) w.e.f. mid-March.
- Re early start for EGEE, employing Dr Mike Mineter on short-term contract w.e.f. mid-March.
- First priority: continue schedule of training at eSI (32 sessions from 1st August 2002 to date).
  - This will entail developing tutorial material, in conjunction with NeSC staff and subject specialists.

# eSI Training team

- Also urgent: EGEE schedule of induction and tutorial sessions established. (Due to start late April.)
- Team will develop links with subject area participants to establish training requirements.
  - Team funded to train core Grid activities; will negotiate to develop and present other courses for specific groups.
  - Also seeking to make contact with new application areas: will develop "Introduction to the Grid" presentations.
- To make contact, please get in touch with  
**John Murison (email: [john@nesc.ac.uk](mailto:john@nesc.ac.uk))**

# eSI Training team

- Training team members will take part in NeSC development projects, to keep up-to-date with current technologies. Team will work closely with other NeSC groups.
- Team will coordinate with training efforts elsewhere in UK.
- Team will liaise with NeSC system staff in order to install and configure Grid technology required for training purposes.

# Question 7

- **What training would you like done?**
  - **What do the Principal Investigators want?**
    - ▶ Topics
    - ▶ Quantities
    - ▶ Frequency / Urgency

# Survey of Stakeholders

- Provide this information as background

Is other or more information required?

- Use the questions illustrated in this talk

Should other or different questions be asked?

- Ask the following stakeholders

- Research Councils, Centre Directors, eSCP Directors, e-Science project PIs, Attendees at eSI

Should other or different stakeholders be consulted?

- Collated Answers to TAG, eSOG & e-SSC

- By July 2004 to inform continuation programme & get comments

# Supplementary Question

- **What relationship should eSI have with**
  - Other specific RC e-Science Institutes / Centres?
  - Other Institutes in the UK?
  - Internationally?

# Summary

- **The e-Science Institute is thriving**
  - Averaging 6 events / month
  - Continuing supply of (returning) Participants
  - Range of activities
  - Report Series & Visitors
- **Web site in heavy use**
  - Major source of Information & Services
- **Conduct Survey of Stakeholder Requirements**
  - To influence operations from 1 August 2004
- **Long-term funding and operations required**

**Don't wait!  
Send your requests  
now!  
We will respond  
immediately**