

# Background to the GRID Session

Chris Jones - CERN



# A Big Thank you to NeSC

- For hosting this special meeting of the PRISM Forum
- You will see why it is appropriate

# The PRISM Forum

## The Pharmaceutical Information Systems Management Forum

- **Scope**

- • The scope of the PRISM Forum embraces all informatics<sup>[1]</sup> of value, or of potential value, to the Life Science community<sup>[2]</sup>.

- **Mission, Membership and Meetings**

- • The mission of the PRISM Forum is to:
  - • share pre-competitive information and best practices concerning informatics supporting the Life Science community, with a focus on R&D but taking a wider view when necessary or desirable.
  - • define requirements for standards to support information exchange between and across the Life Science community.
  - • The PRISM Forum is open to individuals able to represent their organisations with respect to the above scope of PRISM by invitation.
  - • It meets normally twice a year, once in Europe and once in the USA.
  - • Special Interest Groups (SIGs) <sup>[3]</sup> may be organised on agreed issues of topical relevance and are normally scheduled to overlap with and report directly to PRISM Forum meetings.
  - • Special Events may be organised as appropriate.

# GRIDS and the PRISM Forum

- We have been discussing “GRIDs” since **October 1999 !**
- Twice a year, plus
- TWO PharmaGRID Retreats/Workshops

# The UK e-Science Initiative

- Had its roots back in early discussions in Autumn 1999
- (Sir) John Taylor (ex-HP Bristol Research Labs), Head of the UK Research Councils
- Early adopter of the “GRID Vision”
- And strong supporter with **NEW MONEY** in the Comprehensive Spending Review

# Which led to...

- Tony Hey as the UK e-Science Director
- NeSC
- e-Science Projects in all subjects
- Many of which have been presented at PRISM or PharmaGRID
- And overall the amount of money injected through this initiative and industry backing of the order of 250 million pounds?
- (and much more than this tiny summary...)
- (and this is just the UK...)

# CERN and the Large Hadron Collider, LHC

- And worldwide Particle Physics was and is an instant an obvious candidate for a GRID “par excellence”
- The scale of the LHC experiments is such that their data cannot be stored, processed nor analysed without a worldwide collaborative effort
- EDG and EGEE as EU Projects
- And many national projects all adding up to
- **LCG – Large Hadron Collider Computing GRID**

# PharmaGRID

- Two workshops, 2003, 2004 in “retreat” atmosphere
- One held appropriately at “The Node”
- And one in a castle on the Rhine in Switzerland
- Both has excellent and relevant speakers, excellent ambience and very useful discussion
- A success which people have asked us to repeat...



# BUT...

- Overall the contributions demonstrating GRID projects within the Pharma Industry could have been greater
- And could have had wider vision than the “instant hit” of cycle scavenging, and notably virtual screening
- Which is greatly LESS than **the Grand Vision of the GRID**
- And what it **COULD** accomplish for the Pharma Industry

# The GRAND Vision...

- Universal Distributed Computing...at last!
- Worldwide collaboration and information sharing...
- The availability to the decision maker of the greatest number of services and best possible information for the most knowledgeable decisions
- ...



# Using technologies...

- Web and web services
- GRID and GRID services
- “service oriented architectures”
- Semantic Web (and associated challenges from the O word to scientific management)
- ...

# Its all about

- Advancing collaborative worldwide working
  - enhanced or enabled by computers
  - Or...
- 
- In which case...

# The Vision and the Pharma Industry

- To which extent is this vision understood and shared by the Pharma Industry?
- To which extent are the technologies ready to be implemented by an industry under pressure to show RoI?
- What can the Pharma industry do today in this arena?

# This fits exactly into the e-Science Mandate

- Of this N-E-Science Centre
- And of Tony Hey
  
- And it may help us to answer the question of whether we should hold another PharmaGRID and if so when
- And above all it should help PRISM members to have a much better understanding