



Science & Technology
Facilities Council

JISC e-Infrastructure Programme

**Developing the UK's
e-Infrastructure**

**Supporting World Class
Research**

Neil Geddes

Director, e-Science



JISC Vision

- Ubiquitous and reliable access to electronic information for every user
 - world-class technologies
 - support for learner, researcher, teacher and administrator
- underlies the JISC Strategy 2007-09



The primary objectives for JSR over the period 2007-2009 are:


- To have in place robust sustainable central services supporting the processes of research and which facilitate high quality research.
- In collaboration with the Research Councils to provide a robust, trustworthy, secure, interoperable and scalable infrastructure for the transmission, storage, sharing, accessibility and dissemination of research data and outputs
- To provide the infrastructure and tools to allow research communities to create multidisciplinary research environments which enhance cross-discipline research and to facilitate research collaboration within and between institutions.

UK e-Infrastructure

Users get common access, tools, information, Nationally supported services, through NGS



HRCx + **HECtoR**

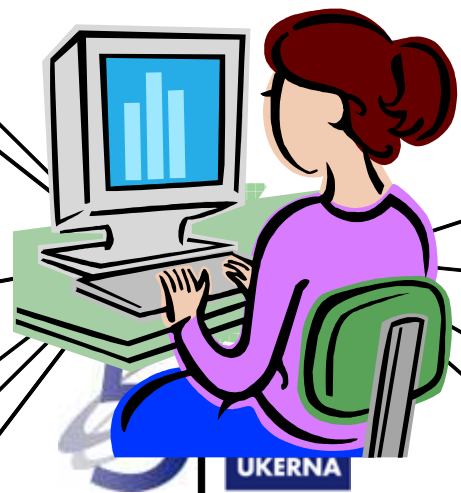
ScotGRID

Regional and Campus grids

 **GridPP**
UK Computing for Particle Physics
 **eMinerals**
BRIDGES
Community Grids

 **EMBL-EBI**
European Bioinfo
JISC
VRE, VLE, IE

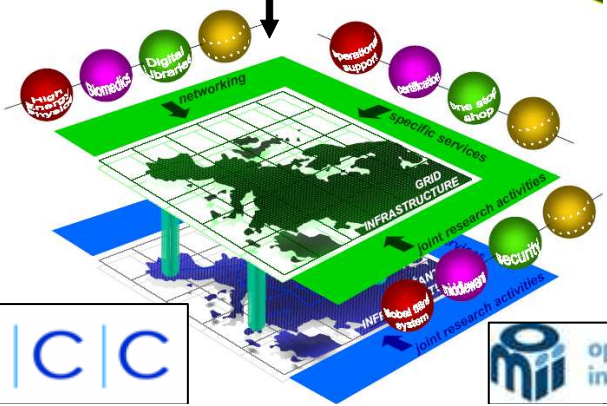
EDINA
MIMAS


 **D|C|C**

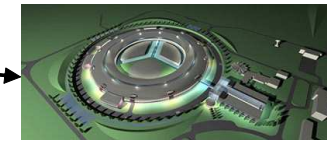



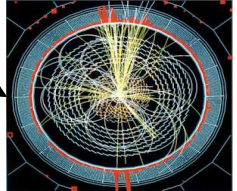
UKERNA

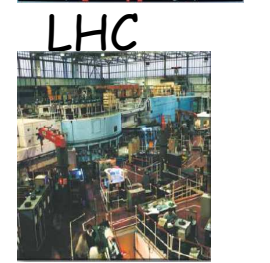
Integrated internationally



VISTA

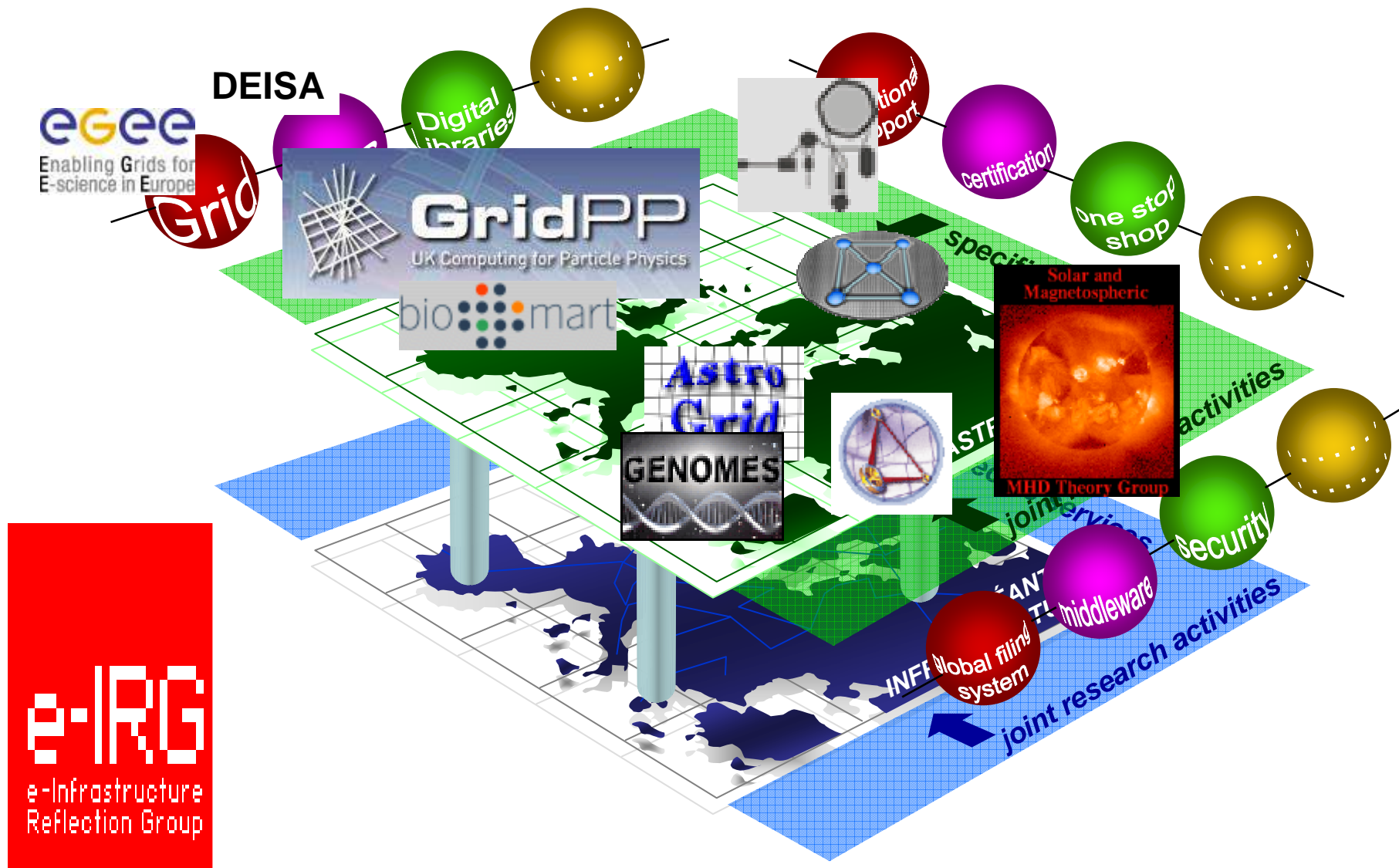
 **diamond**




ISIS TS2

 **open middleware infrastructure institute**

e-Infrastructure in Europe

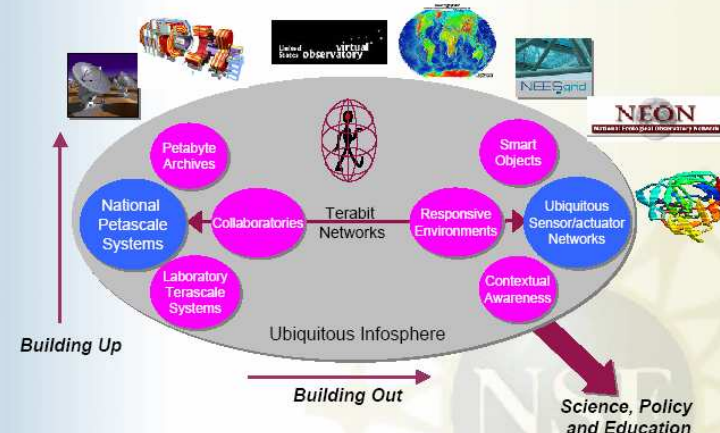


CYBERINFRASTRUCTURE VISION FOR 21ST CENTURY DISCOVERY



National Science Foundation
Cyberinfrastructure Council
March 2007

Futures: The Computing Continuum



HASTAC

HUMANITIES, ARTS, SCIENCE, AND TECHNOLOGY ADVANCED COLLABORATORY

http://www.nesc.ac.uk/documents/OSI/report.pdf - Microsoft Internet Explorer

File Edit Go To Favorites Help Links

Developing the UK's **e-infrastructure** for science and innovation

EXCELLENCE

WEALTH CREATION

INVESTMENT

KNOWLEDGE TRANSFER

SCIENCE

INNOVATION

GLOBAL LEADERSHIP

Report of the OSI e-Infrastructure Working Group

Done 75% 1 of 15 Unknown Zone



JISC e-Infrastructure Programme Vision

- Build upon the initial five year investment in the UK e-Science Infrastructure.
- Work with other partners to expand the uptake and effective use of e-infrastructure from early adopters and researchers across disciplines.
- Two elements:
 1. To have enhanced and consolidated the current technologies.
 2. To have established sustainable communities of use.



JISC e-Infrastructure Programme Outcomes

- The anticipated outcomes of the programme are to:
 1. Broader & more effective use of the e-infrastructure;
 2. Enhanced security for the UK infrastructure;
 3. Increased capability, expertise and effective use of the National Grid Service;
 4. Production level capabilities for the UK e-infrastructure;
- An additional item from Community Engagement and Support strand which is also relevant to this context:
 5. Support for new capabilities and research practices underpinned by UK e-infrastructure services and/or service functions.



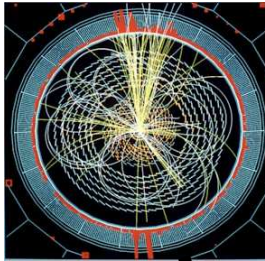
Science & Technology
Facilities Council

The Aim



ISIS TS2

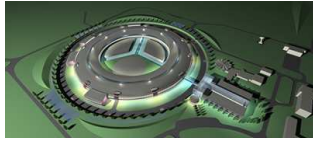
EDiNA[®]



LHC



HPCx + HECtoR



MIMAS

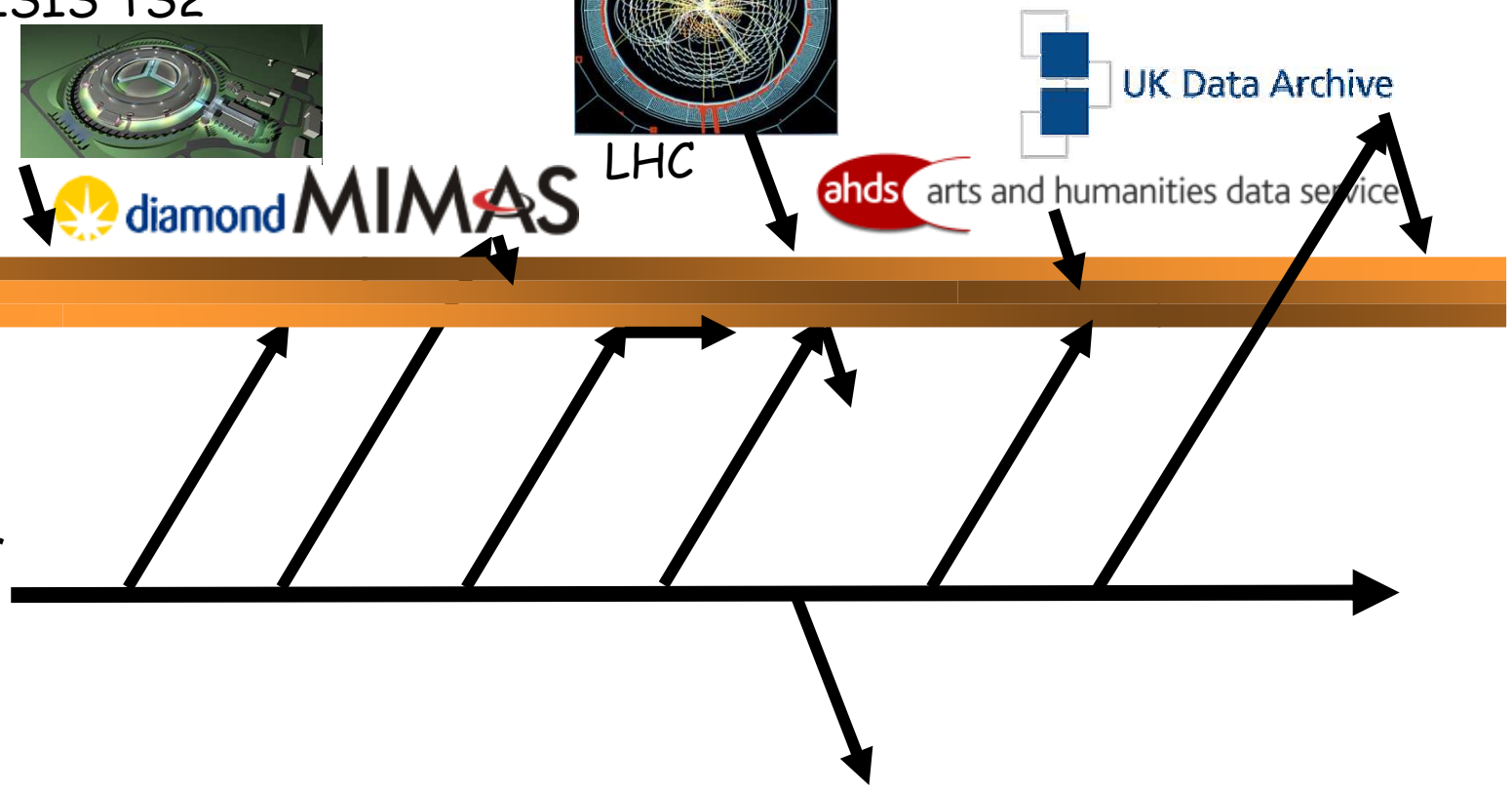


arts and humanities data service



UK Data Archive

Stakeholder
Funding





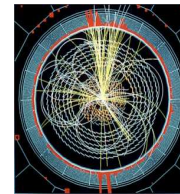
The Risk



HPCx + HECtoR



ISIS TS2

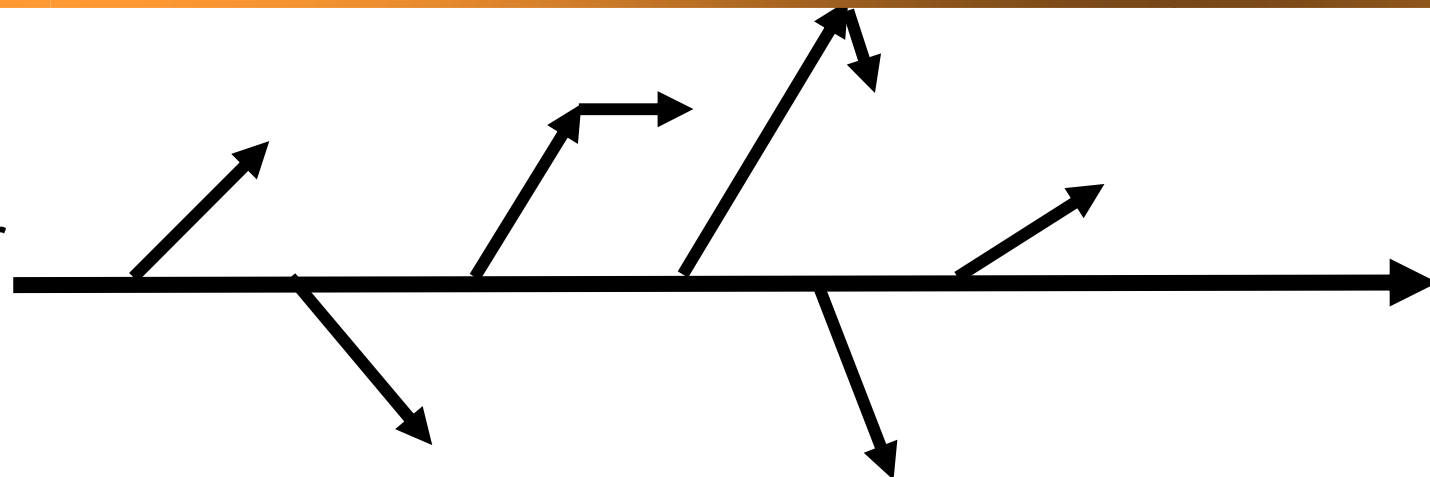


LHC

EDiNA®

MIMAS

Stakeholder
Funding





JISC e-Infrastructure Programme

Key Constraints

- Liaising with NGS, OMII and OSS-WATCH is a conditional requirement of funding. - Why ?
 - Need to take into account deployment and sustainability of tools in development and/or adoption.
- The clue is in the name
 - Infrastructure
 - Delivery the key
 - Maintain UK lead
 - Real opportunity to influence this infrastructure
 - Remember infrastructure is for a purpose (users)



The Opportunity

- Framework and components of a national e-Infrastructure exist
- This programme offers the opportunity to
 - Enhance the infrastructure
 - Expand the user base
 - Exploit the investment
- To define, develop and deploy a shared vision