



NERC e-Science Meeting

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www.nesc.ac.uk
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Overview

- Past
- Present
- Future
 - Challenges
 - Behaviours
 - Commitment



What is e-Science?

- Goal: to enable better research in *all* disciplines
- Method: Invention and exploitation of advanced computational methods
 - to generate, curate and analyse research data
 - ▶ From experiments, observations and simulations
 - ▶ Quality management, preservation and reliable evidence
 - to develop and explore models and simulations
 - ▶ Computation and data at extreme scales
 - ▶ Trustworthy, economic, timely and relevant results
 - to enable *dynamic* distributed virtual organisations
 - ▶ Facilitating collaboration with information and resource sharing
 - ▶ Security, reliability, accountability, manageability and *agility*



What is e-Infrastructure - Political view



- **A shared resource**
 - That enables science, research, engineering, medicine, industry, ...
 - It will improve UK / European / ... productivity
 - ▶ Lisbon Accord 2000
 - ▶ E-Science Vision SR2000 - John Taylor
- **Commitment by UK government**
 - ▶ Sections 2.23-2.25
- **Always there**
 - ▶ c.f. telephones, transport, power

Science & innovation investment framework 2004 - 2014

July 2004



department for education and skills



Gordon Brown
Chancellor of the Exchequer

Charles Clarke
Secretary of State for Education and Skills

Patricia Hewitt
Secretary of State for Trade and Industry

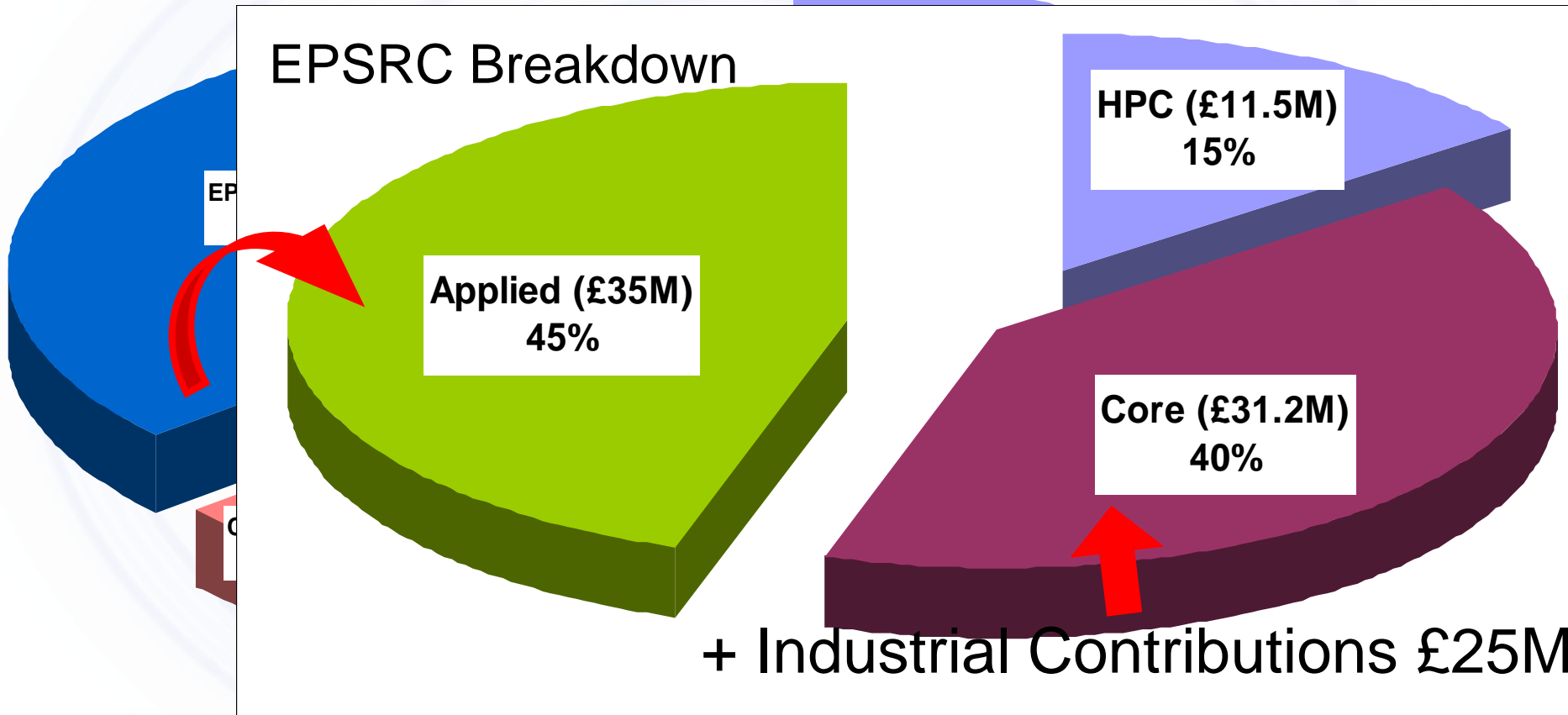




UK e-Science Budget (2001-2006)

Total: £213M + £100M via JISC

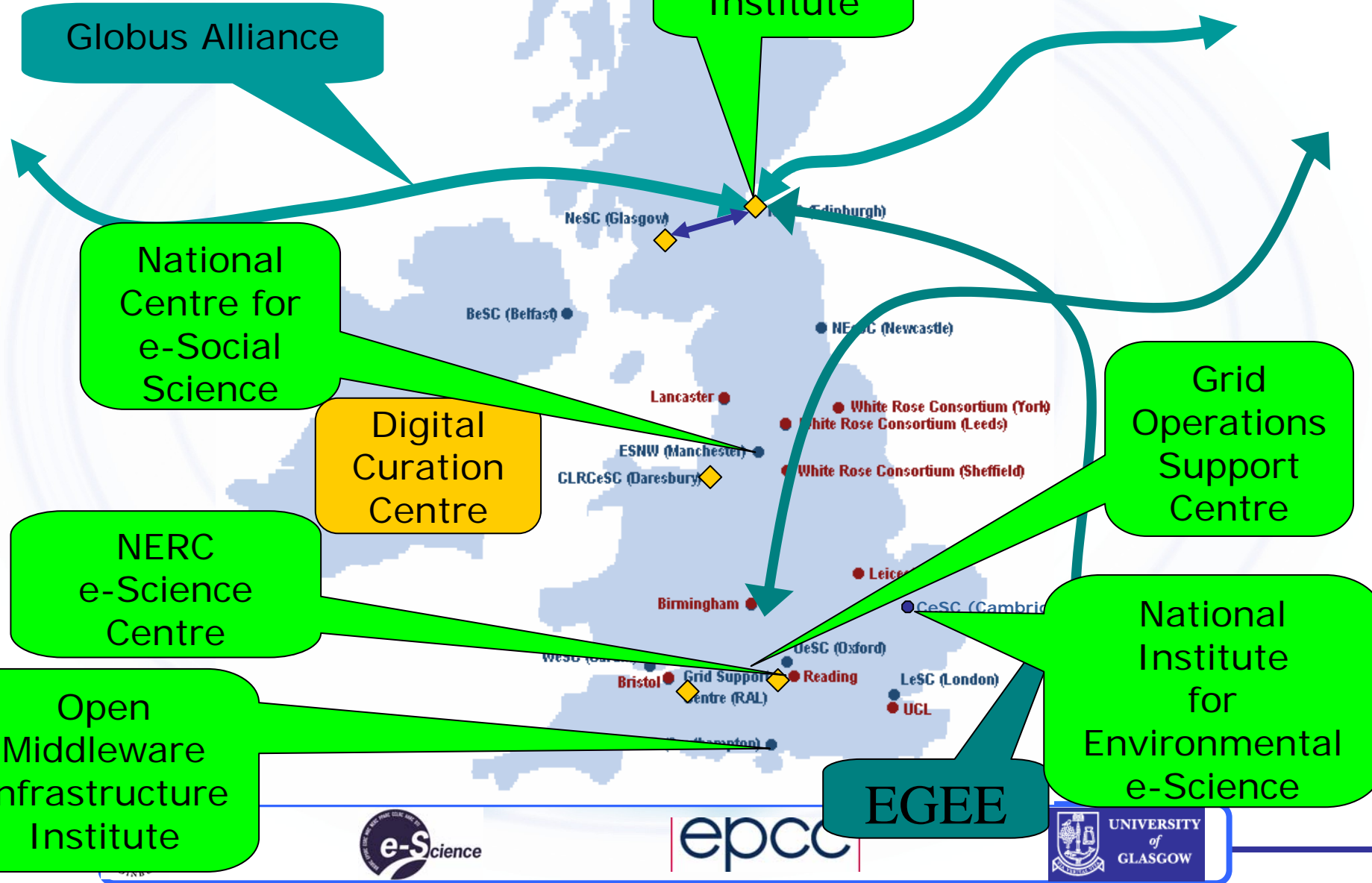
EPSRC Breakdown



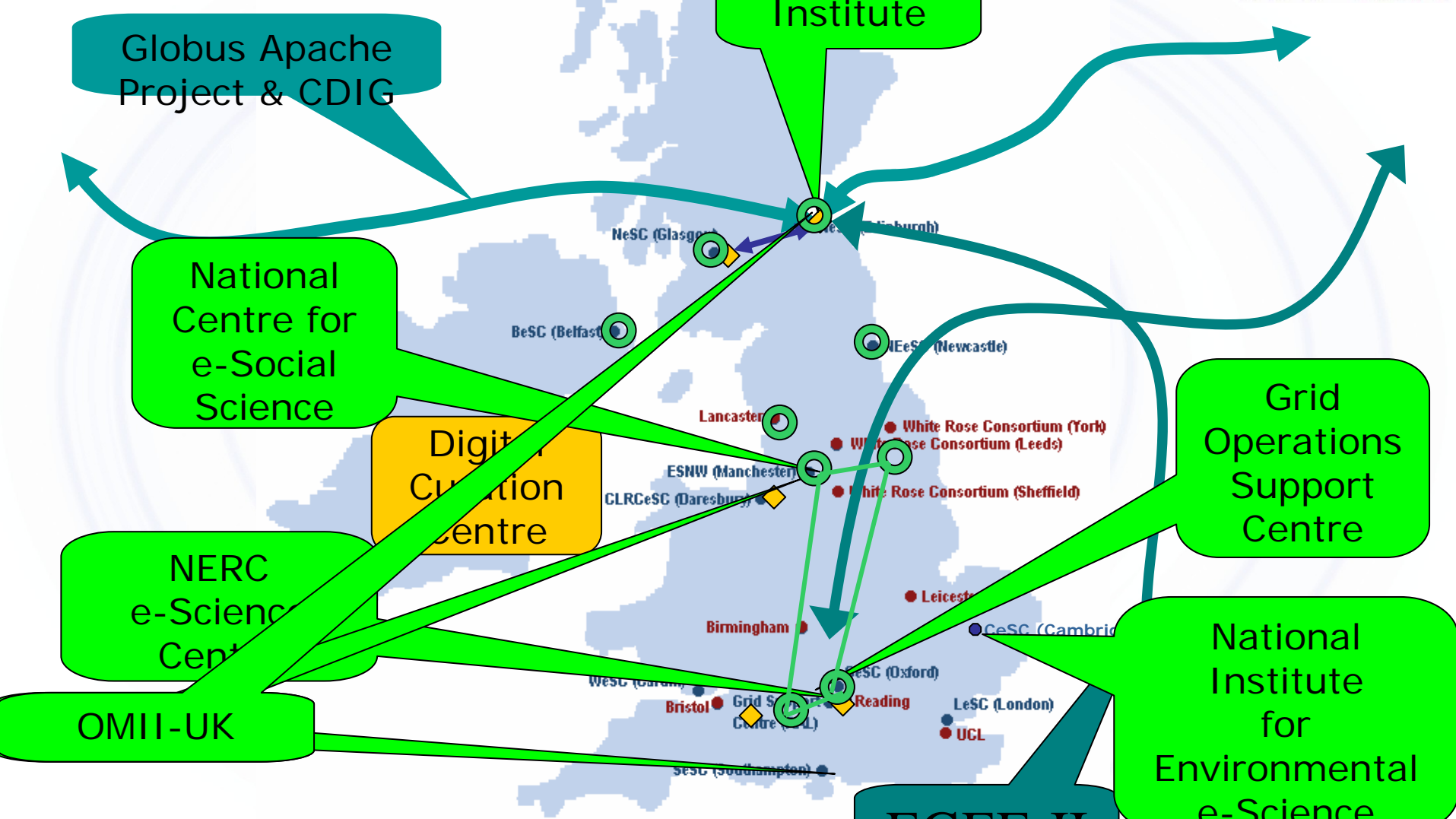
Source: Science Budget 2003/4 – 2005/6, DTI(OST)



The e-Science Centres



The e-Science Future





The Future

- Inter-disciplinarity
- Sharing and finding a common core of facilities & methods
- Recognition & values
- How do we make things easy enough to use?