

Developing the NCeSS Research Agenda

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Overview

- The beginning:
 - Scoping studies
 - The Grid and eSocial Science vision
- Evolving the research agenda:
 - Demonstrator projects
 - Coordinating the nodes
 - Collaboration with social science research programmes and facilities
- Realising the research agenda:
 - Collaboration with eScience programme(s)

The Strands

■ Applications:

- Substantive social science research problems
- Enhancing existing areas of research and defining new ones

■ Social shaping:

- Influences on the design, development, uptake and use of Grid technologies
- Standardisation
- Socio-economic impact

The Grid Vision

"A software infrastructure that enables flexible, secure, coordinated resource sharing between dynamic collections of individuals, institutions and resources" Foster et al.

The eSocial Science Vision

- Seamless access to distributed datasets:
 - Longitudinal studies
 - More complex models of human activity
 - Shortening the modelling cycle, encouraging iterative approaches
 - Collaborative analysis

The eSocial Science Vision

- Seamless access to scalable, on demand computational resources:
 - Larger scale and/or more fine-grained models
 - Complex, multi-stage analyses
 - More robust models

The eSocial Science Vision

- Seamless access to Grid-enabled services and tools:
 - Real-time, computer-aided analysis of video data
 - Data mining and visualisation
 - Computational mechanisms for resource discovery
 - Tools for real-time collaboration

The eSocial Science Vision

- Linking ubiquitous, low cost mobile devices, ambient technologies:
 - Collection of new forms of data and on an unprecedented scale
 - Real-time tracking of people and objects, making possible the analysis of the dynamics of social processes

The eSocial Science Vision

- Standards and tools for annotating data and curating archives:
 - Mechanisms for disseminating research findings and their re-use; e-publishing
 - Facilitating collaboration both within and between research communities

The Current Picture of eSocial Science

- Demonstrator projects have begun to explore what eSocial Science might mean in a range of research domains and created proof of concept services:
 - Quantitative modelling
 - Qualitative data analysis
 - Integrating datasets
- Grid-enabled services are coming on stream:
 - Data archives
 - Text mining
 - Data visualisation

The Challenges

- Exploring further the benefits for existing research practice:
 - Quantitative
 - Qualitative
- Innovating research practice:
 - Integrating quantitative and qualitative research
 - Forming new research communities and networks

The Challenges

- Mechanisms for facilitating sharing of data and services:
 - Ontologies for resource description
 - Data curation, provenance
 - Workflows
 - Protocols for sharing
 - Widening the range of grid-enabled services

The Challenges

- Supporting 'virtual' research communities:
 - Collaborative environments and 'collaboratories'
 - Understanding collaborative practices in social science research
 - Trust in people and the tensions between collaborative and competitive research; IP

The Challenges

- Trusting the Grid:
 - Security and confidentiality
 - Authorisation, defining and policing access policies
 - Statistical disclosure risks
 - Meeting ethical standards

The Challenges

- Identifying the necessary methodological and technical skills for eSocial Science:
 - Learning from practice
 - Creating appropriate training materials and programmes

The Challenges

- Collaborating with the Grid community:
 - Usability issues, both at individual researcher, organisation and community level need to be thoroughly explored
 - Ways of forming effective working partnerships with Grid developers need to be established

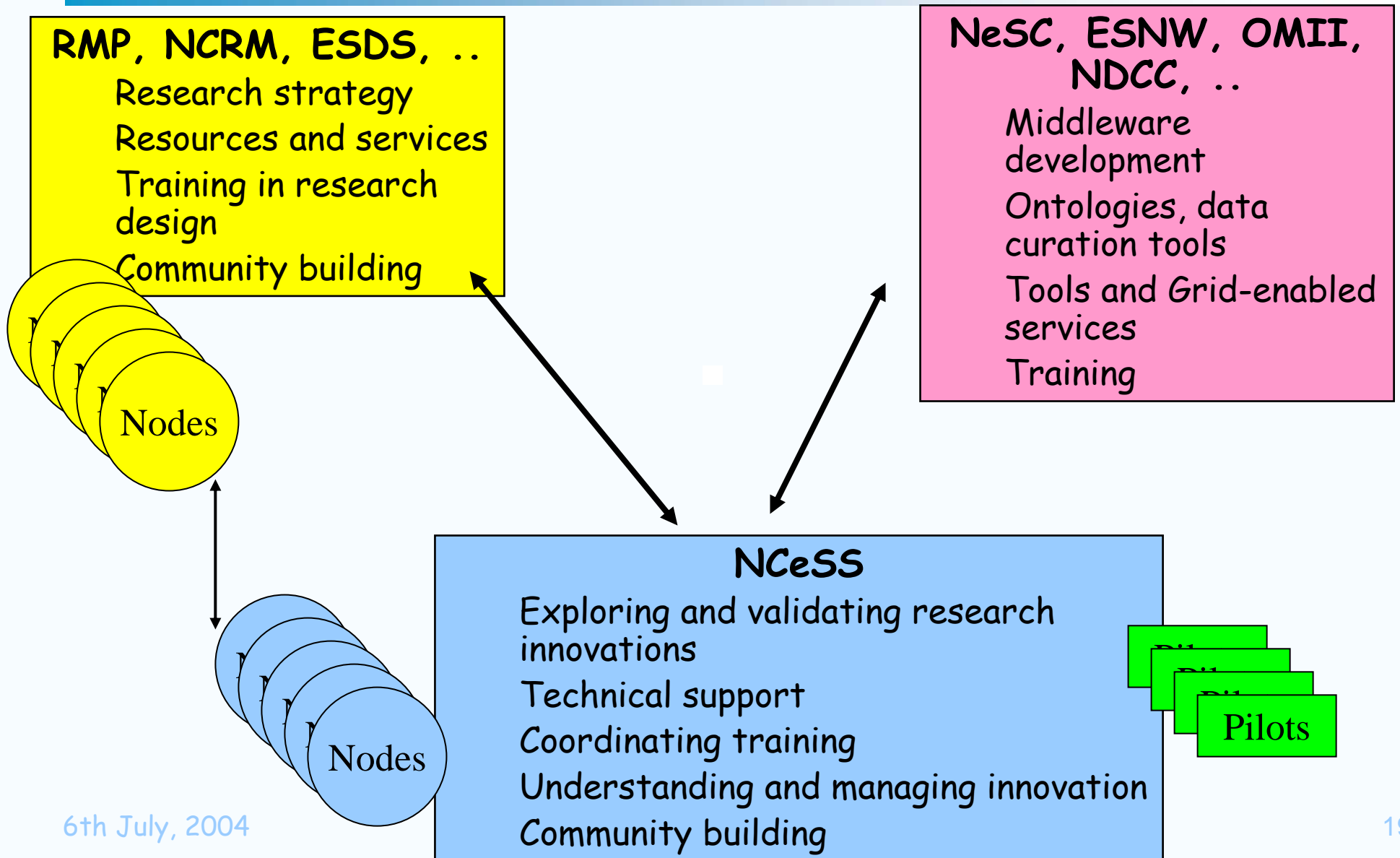
The Challenges

- Bootstrapping ...
- Embedding the Grid in multiple contexts of use - making it at 'home in the world'
- Adaptability in the face of organisational and technical changes
- Protecting users from uncertainty in technical developments
- Sustainable supply - trustable suppliers
- Making the Grid 'disappear' ..?
- Is eSocial Science an evolution or a revolution?
- Building eSocial Science as a collaboration

Evolving the Research Agenda

- Nodes
- Social Science Forum
- AHM
- Postgraduate summer school
- Joint workshops
- Special Interest Groups
- Visiting fellowships scheme

Realising the Research Agenda



Creating the eSocial Science 'Virtuous Circle'

