THE JOINED UP WORLD OF E-RESEARCH

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Overview

• Examine e-Research Coordination Committee assumptions and expectations

• Explore the ecology of repository management

• Identify main challenges in responding to e-Research agenda
VISION FOR AUSTRALIAN e-RESEARCH

Researchers will be able to achieve and disseminate through the use of advanced information and communication technologies world-class research endeavours and outcomes
ICT AS THE ENABLER

• Make it easier to access, diffuse, communicate and manipulate huge quantities of data information and knowledge

• Facilitate flexible new collaborative working relationships

• Allow international collaboration

• Provide appropriate opportunities to transform research practices
e-RESEARCH CAPABILITY

*e-research requires the capability to:*

- Discover knowledge whether held in digital or physical form
- Access data as well as the software pools that are being made available to manipulate and analyse this data
- Synthesise, curate and disseminate new knowledge effectively
- Facilitate interactivity and research collaboration allowing researchers to work seamlessly from desk to desk within and between organisations
ACCESSIBILITY FRAMEWORK

**AIM:**
- To manage publicly funded research data, infrastructure and resources so they are discoverable, accessible and shareable, to facilitate improvements in the quality and impact of the research to reduce unnecessary duplication and to better manage research activities and reporting
- Government regards publicly funded research as a public good

(continued)
ACCESSIBILITY FRAMEWORK (continued)

• Accessibility refers to the process by which data should be made available for others to access, in which forms and under what conditions
• Not all research is available to the wider community
• Timing and release depends on IP environment, nature of industry collaboration and the individual strategic requirements of researchers and organisations producing data
ACCESS TO DATA

*Principal issues:*
- Data management to ensure that data is in a fit state for use
- Curation to ensure that data is described and maintained to be discoverable and accessible for current and future use
- Storage to ensure that data is kept so that it is accessible
- Security to ensure access to data with an agreed access rights regime
- Access to ensure researchers have transparent access to the data they need
- Standardisation to ensure that data can be transmitted seamlessly across systems
STRATEGIES TO IMPROVE ACCESS

• Framework for best practice data curation
• Research into long term sustainability of repositories
• Development and adoption of common data related standards for the management of and access to data
• Universal authentication and authorisation scheme to simplify access to repositories
• Development of federated digital data repositories
• Development of policies for the protection of intellectual property, privacy and confidentiality for repositories
• Development of a system of scholarly communication and research dissemination based on the open access principle
POLICY ISSUES

- Many different stakeholders in e-research space
- No consensus on how to build systematic infrastructure across different e-research communities and across the selected domains of teaching and administration
- A variety of interpretations and understandings of information and data management
ECOLOGY OF REPOSITORY MANAGEMENT

• Repository management a complex issue
• Need for an ecology of repository management that covers the full spectrum of stakeholders
• Life cycle management of digital resources a key factor
“Cosmic” View of the Repositories Space

A "Cosmic" View of the Repositories Space
(Wheel of Fortune)
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Institutional repository of published research
A "Cosmic" View of the Repositories Space
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CHALLENGES

• To find ways of improving the communication process within research communities
• To develop an ecology of repository management that embraces disparate e-research communities
• To address in a systemic fashion the underpinning issues of authentication, authorisation and auditing
• To conceive further demonstrator projects in e-research subject domains which inform the development of systemic infrastructure
• To find a consistent way of describing technical infrastructure
Thank you

Questions?