National Programs
Panel Session

Chair : Dr. Ann Borda - VeRSI-VPAC
Panel: Paul Sherlock (representing David Toll) – AAF
Dr. Ross Wilkinson – ANDS
Prof Glenn Moloney – NeCTAR
Paul Sherlock – NRN
Dr. Nick Tate -RDSI
Introduction

• National Programs have been funded
  – Australian Access Federation
  – Australian National Data Service
  – National eResearch Collaboration Tools and Resources
  – National Research Network
  – Research Data Storage Infrastructure

• They are complementary but separate
  – What do they do?
  – How will they coordinate?

• This public forum provides an important opportunity for these lead agencies to come together in a joint Q&A
The Session

• Brief Introduction of each program’s objectives

• Directors’ Comments and Q&A
  – NRN – Paul Sherlock
  – AAF – Paul Sherlock for David Toll
  – ANDS – Ross Wilkinson
  – NeCTAR – Glenn Moloney
  – RDSI – Nick Tate
National Research Network
www.NRN.edu.au

• $37 m investment - UniSA is the lead agent
• 9 “network building” projects ranging in value from $1.4m to $8m
• Closing the “gaps” in the national research and education network (AREN)
• Each project is governed by a steering committee comprised of local stakeholders
• 2 projects complete and 6 underway
National Research Network

- Project #1 - Improve on island connectivity for Tasmania (completed)
- Project #2 – Build a medical research network for Melbourne and Geelong (completed)
- Project #3 – Build a fibre optic network (3 rings) in metropolitan and western Sydney (April 2013)
- Project #4 – Build fibre tails to connect Cairns, Townsville, Mackay, Rockhampton and Gladstone to the Sunshine Backbone (June 2013)
National Research Network

• Project # 5 – Extend AARNet optical backbone across the Nullabor to Perth (March 2013)
• Project # 6 – Connect the SKA site to the Pawsey Centre (March 2013)
• Project # 7 – Build fibre optic network in Perth (June 2013)
• Project #8 – Extend fibre network in suburban Brisbane (May 2013)
• Project #9 – Build dedicated high speed inter-node network for RDSI
The AAF

www.AAF.edu.au

• The AAF
  – Develops policies and technical standards
    • For a common authentication framework
    • For a secure authentication framework
  – Provides services to over 1 million end users
    • Who can use institutions credentials
      – To access AAF-enabled web-based eResearch resources
      – To access AAF-enabled services
  – Operates a shared service
    • Institutional, not user or individual
The AAF

- **Status**
  - 66 subscribers
    - all Australian universities
    - CSIRO
    - Other research institutions
  - 105 discrete services are offered

- **Key Future Developments**
  - AAF-hosted Virtual Home Registry (VHR)
    - For small institutions not having membership
  - Identity Assurance Register
    - Supporting higher levels of authentication security

- **Aims to support All Research Groups to underpin and enable a common authentication system**
ANDS enables transformation of:

Data that are:  
- Unmanaged
- Disconnected
- Invisible
- Single use

To Structured Collections that are:  
- Managed
- Connected
- Findable
- Reusable

so that Australian researchers can easily publish, discover, access and use research data.

Enablers:
- Research Institutions central to success
- Shared desire to change
- Professional services – research data analysts, research data carers, professional programmers
- Changed status of research data

The Australian Research Data Commons connects:
- 40,000 collections
- 50 contributing institutions
- 6,000 researchers
- All disciplines
NeCTAR
NECTAR.org.au

• A $47M Super Science eResearch Infrastructure project to support research collaboration:
  – **Collaborative Research Software Infrastructure**:  
    • Virtual Laboratories and eResearch Tools  
  – **eResearch Platforms**:  
    • Research Cloud and National Servers Program

• Highly collaborative sub-projects selected through two Requests for Proposals (RFPs)
  – Up to 40 sub-projects across the NeCTAR programs  
  – Substantial co-contributions from Australian research institutions and eResearch organisations  
  – Many presenting here at eResearch Australasia
NeCTAR

• NeCTAR VL & RT projects build on existing capabilities from the eResearch Sister Projects:
  – RDSI for data storage and access
  – ANDS for data management and discovery
  – NCI and Pawsey for HPC needs
  – AAF for single-sign on and authentication
  – NeCTAR Research Cloud for hosting and computation

• Research Cloud coordination with RDSI via:
  – Co-location of Research Cloud and RDSI Nodes
    • Creating improved value for Australian researchers

• Working on:
  – Authorisation and other common requirements
  – Streamline resource allocation processes: RDSI, NCI, Pawsey, ...
  – Improving communication, Others – suggestions welcome...
Researchers will be able to use and manipulate significant collections of data that were previously either unavailable or difficult to access.
Big Data
RDSI Programmes

- Node Development (NoDe) $10m
- Research Data Services (ReDS) $28m
- Data Sharing (DaSh) $7m
- Vendor Panel (VePa)
RDSI Nodes Announced

**Primary Node**
- 6 participants
- 11 participants
- 5 participants
- 15 participants

**Additional Node**
- 7 participants
- 4 participants
- 4 participants
• QUESTIONS TO PANEL

THANK YOU!