1. ERA Overview
Objectives of ERA

- Establish an evaluation framework that gives government, industry, business and the wider community assurance of the excellence of research conducted in Australia’s institutions;

- Provide a national stocktake of discipline-level areas of research strength and areas where there is opportunity for development in Australia’s higher education institutions;

- Identify excellence across the full spectrum of research performance;

- Identify emerging research areas and opportunities for further development;

- Allow for comparison of Australia’s research nationally and internationally for all discipline areas.
General ERA Principles

1. Unit of Evaluation is the four-digit ANZSRC Field of Research code (ie. 157 Units of Evaluation); also evaluation at two-digit level
2. Evaluation by Research Evaluation Committees in discipline clusters; 8 Clusters in total
3. Minimum level of output to be considered ‘research active’ for evaluation
4. Evaluations informed by a ‘dashboard’ of discipline-specific indicators
5. Some peer review of outputs accessed through institutional repositories
# Clusters

<table>
<thead>
<tr>
<th>Cluster 1</th>
<th>Physical, Chemical &amp; Earth Sciences</th>
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<tbody>
<tr>
<td>Cluster 2</td>
<td>Humanities and Creative Arts</td>
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<tr>
<td>Cluster 3</td>
<td>Engineering and Environmental Sciences</td>
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<td>Cluster 4</td>
<td>Social, Behavioural and Economic Sciences</td>
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<td>Cluster 5</td>
<td>Mathematics, Information and Communication Sciences</td>
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<td>Cluster 6</td>
<td>Biological Sciences and Biotechnology</td>
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<td>Cluster 7</td>
<td>Biomedical and Clinical Research</td>
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<td>Cluster 8</td>
<td>Public and Allied Health, and Health Sciences</td>
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The ERA Unit of Evaluation

• The **baseline** - the Discipline in an institution = Four-digit Field of Research Code (ANZSRC) eg., **1901 Art Theory and Criticism**

• The **higher perspective** – the division in an institution = Two-digit Field of Research Code (ANZSRC) eg., **19 Studies in Creative Arts and Writing**

• The ERA Unit is **not** the department nor the individual researcher
ERA Process Overview

<table>
<thead>
<tr>
<th>Metrics Profile 1</th>
<th>Metrics Profile 2</th>
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<tbody>
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<td>Metrics Profile 3</td>
<td>Metrics Profile 4</td>
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<td>Metrics Profile 5</td>
<td>Metrics Profile 6</td>
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</table>

Peer Review

Note - There are no weightings!

Research Evaluation Committee

Final report
The ERA “Dashboard”

- Quantitative profiles presented as proxies of quality and for context.

- Where relevant – Peer Review – access to outputs via repositories or provided by institution to the ARC for the reviewer.
Low Volume Thresholds

• For disciplines where citation analysis is used:
  – 50 or more indexed journal articles
• For disciplines where peer review is used:
  – ERA Trial: 20 or more outputs
  – ERA 2010: threshold raised to 30 outputs
• In cases of low volume at the four-digit level, analysis can still occur at the two-digit level if it reaches the threshold.
• Note books weighted 5:1 for threshold calculation, not for evaluation
Ranked Journals

• Only one of a number of indicators on the “Dashboard”
• Required for development of discipline-specific benchmarks for citation analysis
• Note discipline-specific practices CMP/Nursing
Peer Review

- Peer review is an example of an indicator used for specific disciplines
- In 2010 peer review is identified as an indicator for HCA, SBE, parts of EE and MIC
- Peer review is one “indicator” on the Dashboard
- Institutions identify 20% of outputs for the peer review pool
- REC Members undertake expert review of the Dashboard including peer review of research outputs.
- Peer Reviewers only evaluate research quality based on peer review outputs, and their reports go back to REC Members
2. ERA Trial 2009
ERA Trial 2009

- Two clusters were selected for trial for the breadth of information the trial could provide
- PCE metrics based
- HCA combination of metrics and peer review
- RECs formed
  - HCA chaired by Professor Graeme Turner from the University of Queensland (22 members)
  - PCE chaired by Professor Mark von Itzstein from Griffith University (17 members)
Summary of the 2009 Trial Submissions

• Cluster 1 (Physical, Chemical and Earth Sciences)
  – 39 out of 41 institutions submitted data
  – Just over 40,000 research outputs were submitted

• Cluster 2 (Humanities and Creative Arts)
  – All 41 institutions submitted data
  – Just over 47,000 research outputs were submitted including 7,000 creative works
Indicators for 2009 Trial

- **Volume and Activity**
  - Staffing & Research output Profile
- **Citation Analysis (PCE)**
  - Relative Citation Impact (RCI) against world and Australian institution benchmarks.
- **Peer Review (HCA)**
- **Ranked Journals**
- **Research Income**
  - Broken down into categories and profiled against field average and full-time equivalent (FTE) staff numbers
- **Applied**
  - Patents sealed & Commercialisation income
What was reported from the Trial?

- Institution reports (only to each institution):
  - Ratings for each assessable Unit of Evaluation, plus Committee comments
  - Feedback to institutions about their submission, repositories, data integrity etc.

- National report
Some issues from the Trial

• Data integrity and validation
  – No FTE data
  – No information about authors, or partial author lists
  – No Background Statement
  – Incomplete Research Statement
  – Duplication of some output data
  – Incorrect EID tagging of outputs

• Does the output meet the ERA definition of research?

• Repository access and access to non-repository items for peer review
Some issues from the Trial – for the Creative Arts

- Considerations of research component of research outputs – the statement
- Incomplete ‘bibliographic’ information for creative works
- Selecting a variety of outputs for the 20%
- Trial – Banded Publishers – Curated Events
- Evaluation – peer review of creative works, and research income
Addressing the issues from the Trial

• Trial RECs provided advice to the ARC in light of their experience
• ARC will continue to provide support to improve the quality of institutional repositories for ERA purposes
• Submission Guidelines and SEER documentation released for maximum notice to the sector
Addressing the issues from the Trial (cont.)

• ‘Soft close’ for submission to allow time to correct errors in 2010
• Portfolios – eg non-traditional outputs, with attached research statement
• Apportionment – outputs apportioned by institutions into FoR codes up to 100%
• Peer review – institutions able to nominate preferred FoR in which output is to be reviewed
• Research statements will remain at 250 words
3. ERA 2010
ERA 2010 Timeframe

• Full ERA process in 2010 (will include PCE and HCA again)
• Submissions open 1 June 2010
• All eight clusters evaluated simultaneously
Discipline-specific indicators

• Indicators for ERA evaluation are discipline-specific
• Discipline Matrix released with Submission Guidelines details which are applicable for each discipline
• Varies within cluster, not just between clusters
• Expert reviewers will use indicators taking into account discipline-specific knowledge
Ranked Journals for 2010

• What is happening with the journal ranking process for 2010?

• What do the next steps involve?
Esteem Indicators

• Esteem Indicators Group convened in June 2009 and submitted their report to the ARC
• Limited number of potential esteem measures, including some discipline-specific
• Framework for non-publication outputs with esteem indicators embedded in data collection
• Consultation with the sector on esteem, together with draft indicator Matrices for all Clusters
• There is a limited list of Esteem indicators addressed in Submission Guidelines for full ERA process in 2010
ERA 2010 Submission Guidelines – frequently asked questions

• Background statements – more detail on requirements in 2010 guidelines
• Research themes not mandatory
• Portfolios – example included in sample xml files released in December
What Next?

- Submission Guidelines and Technical Specifications were released in Dec 2009
- Finalise journal lists
- Work with institutions on repositories
- Setting up for ‘Big Bang’ (8 committees)
- Further system development (SEER)
Further information?

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