Excellence in Research for Australia

ERA 2010 and beyond
Deakin University
1-2 June 2011
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.
ERA Development 2008-2010

• Several major rounds of consultation
• Indicator Development Group (specialist sub-groups)
• Ranked journals and conferences consultation
• Discipline specific indicators
• Full trial in 2009 of PCE and HCA
  – test of systems, processes
  – feedback from sector, RECs, peer reviewers
• Esteem indicators
• First full ERA evaluation in 2010
The ERA Unit of Evaluation

- The **baseline** - the Discipline in an institution = Four-digit Field of Research Code (ANZSRC) eg., 2101 Archaeology
- The **higher perspective** – the division in an institution = Two-digit Field of Research Code (ANZSRC) eg., 21 History and Archaeology
- The ERA Unit is **not** about the department nor the individual researcher
ERA 2010 Process Overview

<table>
<thead>
<tr>
<th>Volume &amp; Activity</th>
<th>Ranked Outlets</th>
</tr>
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<tbody>
<tr>
<td>Citation Analysis</td>
<td>Esteem</td>
</tr>
<tr>
<td>Research Income</td>
<td>Applied Measures</td>
</tr>
</tbody>
</table>

Peer Review

International Benchmarks

Research Evaluation Committees
Why a matrix approach to indicators?

• Not all indicators are suitable for all disciplines
• Pick and choose what is right for each discipline
• The indicator suite must ensure comparable quality across a range of indicator types
ERA 2010 Reviewers

• Expert review and specialist disciplinary knowledge were essential – not a mechanical process
• 8 Research Evaluation Committees
• 149 Australian and international REC members
• 500+ Peer Reviewers from Australia and overseas
• REC members also conducted peer review
Stages of evaluation

• Every UoE evaluated by at least three REC members (plus peer reviewers)
• Independent evaluation in the first instance followed by exchange of views
• All evaluations were advice to the full Committee
• All UoEs discussed at the final evaluation meeting
• All final ratings decisions of the Committee as a whole
## The ERA 2010 Rating Scale

<table>
<thead>
<tr>
<th>Rating</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The Unit of Evaluation profile is characterised by evidence of outstanding performance <strong>well above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>4</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>3</td>
<td>The Unit of Evaluation profile is characterised by evidence of average performance <strong>at world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>2</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>1</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>well below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
</tbody>
</table>
ERA 2010 at a glance

• All 41 eligible institutions participated

• 2435 units of evaluation assessed at the two- and four-digit level

• Over 330,000 research outputs and 55,000 researchers represented
ERA 2010 outcomes: context

• ERA is a **retrospective** evaluation of research performance: 2003-2008 for research outputs, 2006-2008 for other data

• The ERA unit of evaluation is the discipline within the institution, **not** individual researchers or institutional units

• ERA does not rank institutions or units; each UoE is evaluated on its merits against the rating scale
Reading the national results

86% of assessed UoEs received a rating at or above world standard (i.e. rating of 3 or above).

Of all assessed UoEs at the four-digit FoR code level (58 UoEs), the average rating is 3.4. See Section 1 for two-digit FoR code average rating.

<table>
<thead>
<tr>
<th>Mathematical, Information and Computing Sciences</th>
<th>01 Mathematical Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>% assessed UoEs rated at or above world standard</td>
<td>86%</td>
</tr>
<tr>
<td>FTEs</td>
<td>880</td>
</tr>
<tr>
<td>Research outputs</td>
<td>8,659</td>
</tr>
<tr>
<td>Research income $</td>
<td>104,624,740</td>
</tr>
<tr>
<td>UoEs assessed</td>
<td>58</td>
</tr>
<tr>
<td>Esteem count(s)</td>
<td>106</td>
</tr>
<tr>
<td>Patent(s)</td>
<td>1</td>
</tr>
<tr>
<td>Research commer. Income $</td>
<td>22,368,469</td>
</tr>
<tr>
<td>Average National Rating</td>
<td>3.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution:</td>
<td>1</td>
<td>7</td>
<td>25</td>
<td>16</td>
<td>9</td>
<td>58</td>
</tr>
</tbody>
</table>

There were seven UoEs which received a rating of 2.

A total of 58 UoEs were assessed for Mathematical Sciences at the four-digit FoR code level.
ERA 2010 submissions

• Institutional data submission smoother than Trial
• Institutional repositories generally functioned well
• Definition of research – still outputs being submitted which did not meet the definition in the view of the Committees; these are not eligible and should not be submitted
• Selection of peer review items – breadth of work in the 20%
• Supporting statements for NTROs and Portfolios
Beyond ERA 2010

• Extra SRE funding was contingent upon ERA 2010 participation
• ERA 2010 results have informed mission-based compact negotiations between the Government and institutions
• Several rounds of consultation on journals, indicators, processes
• ARC has reviewed feedback from the sector and from ERA 2010 reviewers
Consultations for ERA 2012

• ERA Public Consultation (11 March to 7 April 2011) – open consultation on issues including reporting, indicators, eligibility, discipline matrix
• Outreach sessions with institutions and peak bodies
• Detailed feedback from ERA 2010 REC members and peer reviewers
• Feedback from institutions on submission processes
Changes for ERA 2012

• Refined journal and conference indicator for ERA 2012 – ranks will not be used, instead outputs profiled by most frequent journals and conferences in the UoE, with drilldowns available as in 2010

• ARC will still produce journal and conference lists – will not include rankings but will include FoR codes

• Journal articles with ≥66% content in a discipline can be apportioned to that discipline
Changes for ERA 2012 (cont.)

- Low volume threshold for PR disciplines raised to 50 apportioned weighted outputs (maintaining the 5:1 weighting for books)
- Fractional staff: minimum 40% appointment at census date, with ability for those below 40% to submit where affiliation is shown (e.g. through use of a by-line)
- Patents, plant breeder’s rights and registered designs assigned to individuals now eligible for submission
Further information

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- Hotline:  02 6287 6755