

Innovative Research Universities Australia

Research Quality Framework: Assessing the quality and impact of research in Australia

Response to *The Preferred Model*

4th October 2005

INNOVATIVE **R**ESEARCH **U**NIVERSITIES **AUSTRALIA**

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The Innovative Research Universities Australia (IRU Australia) thanks the Expert Advisory Group for this opportunity to respond to the *The Preferred Model* paper. The IRU Australia wishes to place on record its appreciation to the EAG and the DEST RQAF Team for conducting the development of the RQF in such a transparent and logical manner.

On the whole, member universities of the IRU Australia are quite satisfied with the main thrust of the paper, particularly with respect to the proposed structures and administration arrangements outlined in Figure 2: The Preferred RQF Model. Some of the underlying details warrant further discussion and those attracting the attention of IRU Australia members are:

- Definition of Research (Section 1.2.3)
- Eligibility for Assessment in the RQF (Section 2.1)
- Context statements and validation information (Section 2.5)
- The RQF Rating Scales (Section 2.6)
- RQF Outcomes and Funding (Section 2.7 and 2.8)

The IRU Australia will concentrate its response on these issues, noting that individual members have addressed several other issues of concern in their institutional submissions.

The IRU Australia supports the following EAG recommendations as presented:

- Section 1.2.1 Quality and Impact
- Section 1.2.2 Scope
- Section 1.2.4 Underlying principles
- Section 1.2.5 Link to "Third Stream" activities
- Section 1.3 Development of the RQF: Progress to date on agreed features
- Section 2.2 Evidence portfolios for assessment
- Section 2.3 The RQF Assessment Panels
- Section 2.4 Research outputs for assessment
- Section 2.9 Developing RQF guidelines

The Minister's Foreword

The IRU Australia recommends that the EAG seek immediate clarification from the Minister concerning the statement contained in the Foreword to the Preferred Model paper about the development of a way in which the outcomes of the RQF will impact on the funding distributed by the Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC). This statement is being interpreted in several ways, most of which have a significant bearing on the position that stakeholders will take with respect to the RQF Preferred Model. The IRU Australia strongly cautions against any premature links being made between the RQF outcomes and the allocation of research council funding until the RQF methodology and outcomes are better understood.

The RQF Preferred Model proposed by the EAG is largely based on the assumption that the rigorous process for allocation of Australian Competitive Grants funded through the ARC and NHMRC will continue. If this were not the case then the IRU Australia universities would have some difficulty in supporting the Model. The retention of separate processes for the allocation of research block funding and competitive grants is critical if Australia is to have a well-rounded support system for research and innovation into the future. The IRU Australia supports the overlay of national research priorities in order to align the two processes but to then link ARC and NHMRC funding with RQF outcomes changes fundamentally the research funding mechanisms in Australia.

The IRU Australia has argued from the outset that research groupings produce the scale that is essential for the future international competitiveness of Australian research. The IRU Australia is however strongly of the view that the opportunity for individual researchers to pursue individual projects should remain if Australia is to enjoy a strong research and innovation climate especially in new and emerging areas in which groups have not yet formed. Failure to provide such opportunities could stifle innovation and lateral research thinking and institutionalise research that builds on existing research strengths which is by its very nature incremental. Even if the Minister's statement refers to a link between the RQF outcomes and consideration of applicants for funding for large aggregations such as Centres of Excellence then the IRU Australia would still remain cautious.

Finally, the RQF represents an approach to institutional research block funding based on assessments carried out at six-year intervals. To have competitive grant funding being influenced by assessments carried out up to six years ago might produce a stable research environment but hardly an innovative one. The view of IRU Australia members is that the two cycles – the RQF over six years combined with the annual award of competitive grants – will result in a better mix. In this respect, the RQF Preferred Model as presented should result in a more stable research funding environment than the current Institutional Grants Scheme, which is variable from year to year.

Section 1.2.3 – Definition of Research

The definition of research proposed in section 1.2.3 might require further refinement to ensure strong acceptance and understanding of the RQF by all researchers. Consideration might be given to adopting a broader definition that explains the nature of research outputs and sets the boundaries for what is included and what is excluded. The UK *RAE 2008* guidelines provide an example of an expanded definition:

'Research' for the purpose of the RAE is to be understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

The IRU Australia is not proposing adoption of this definition but suggests that key elements from it be considered such as:

- A short definition of research – key words are 'original investigation', 'knowledge' and 'understanding';
- A reference to possible end users of research and types of impact;
- Reference to some less traditional outputs; and
- Specific exclusions.

Members have also expressed concern about the Australia Bureau of Statistics definition of research, which considers creative work and performance 'insofar as they directly relate to original and applied research'. This link could be very hard to demonstrate. The definition used for the RAE is much less restrictive and does not insist upon linking the 'invention and generation of ideas, images and performances' with original or applied research.

Section 2.1 – Eligibility for assessment in the RQF

Level A Positions

The IRU Australia has concerns about the ineligibility of Level A positions apart from those funded through individual competitive research grants. This sends negative signals to 18% of Australia's academic workforce (almost 5,700 FTE) suggesting to many who have already gained their PhDs that they are 'disenfranchised' from participation in the RQF and that they are employed primarily to teach or to perform low level research underpinning the work of others. In the context of the rapidly ageing academic workforce, inclusion of all academic staff in a culture of research from the outset of their careers is essential if staff are to be encouraged to pursue an academic career. Confining the eligibility to post-doctoral fellows funded through competitive research grants would see the exclusion of many outstanding young scholars employed through rigorous internal processes of universities. Experience at the IRU Australia universities suggests that for every post-doctoral fellow position advertised there are 40 or more applications, indicating these are very competitive appointments.

It is therefore recommended that all academic staff whose employment terms include research be deemed eligible for inclusion.

Adjunct and Conjoint Staff

The IRU Australia is concerned about the unintended consequences of including adjunct and conjoint staff if this results in universities expending unproductive energy in appointing more adjunct staff particularly raising the possibility of double counting. It is recommended that the research output of adjunct and conjoint appointments be included in the RQF only if they satisfy two conditions:

- where they are not otherwise part of the RQF process through their employers (e.g. hospital-based clinical staff); and
- where the university is the main provider of their research infrastructure and related support.

This would enable the inclusion of adjunct staff whose research infrastructure and related support comes from the university while excluding those who receive primary support elsewhere (e.g. in medical research institutes for instance). The IRU Australia also argues that the research outputs of eligible adjunct and conjoint staff should be counted not only for the assessment of quality and impact to enhance the score of a nominated group, but also towards the FTE upon which funding would be based. To do otherwise would mean that universities would be unable to continue providing research support for these researchers, as they will not be receiving funding to do so.

Section 2.5 – Context statements and validation information

The IRU Australia strongly supports the requirement for research groupings to provide Context Statements providing a brief overview, information about the research environment, and other common information to assist panellists. In addition the Group would like to see more emphasis placed on strategic intent to allow assessment panel members to determine the extent to which a research grouping's strategic objectives align with the outcomes being assessed. Statements of strategic intent could well be useful to assessment panels in understanding why a research grouping adopted a particular quality-impact profile.

An expanded Strategic Context and Intent Statement would also prove useful for universities experiencing major growth in new discipline areas, by allowing them the opportunity to demonstrate what initiatives are in place to promote corresponding growth in their respective research profiles. The consequence of not recognising research groupings still under development might be to 'freeze' Australia's research groupings at a point in time, making it extremely difficult for new groupings to emerge. If the development of new groupings is not

recognised then this may stifle Australia’s capacity to develop new research capability, especially in new and emerging areas. The IRU Australia recommends that this be taken into account in both the assessment processes and funding outcomes.

Section 2.6 – The RQF Rating Scales

Rating Research Quality

The *Preferred Model Paper* (Section 2.6.1) states there is clear acceptance that the top ratings will be based on notions of “international excellence” – outstanding research achievements on an international scale. The IRU Australia supports this recommendation to a degree but stresses that excellent research can be that which is world leading in its field or that which makes an exceptional contribution in an area of particular significance to Australia.

There has been much discussion about the need to avoid ‘perverse outcomes’ as a result of the RQF and one risk is that if international excellence is deemed of paramount importance then scholars will shift the focus of their research to that which attracts the most international interest. This may influence international peer assessment and achieve higher citation rates for Australian research but could come at the expense of work that addresses critical research problems of national and regional interest but is of less international interest.

The best mechanism available to prevent this from occurring is to extend the ratings descriptors to include research in areas of particular significance to Australia. The IRU Australia therefore supports a variation of the assessment scale used by the Australian National University in the ‘ANU Capabilities and Performance Statement’ for the purposes of its quality review in 2004.

IRU Australia Proposed Research Quality Rating Scale

Rating	Descriptor
5	Outstanding – Top 10% Research that is world leading in its field or makes an exceptional contribution in an area of particular significance to Australia.
4	Excellent Top – 25% but does not fall within the Top 10% Research that meets world standards of excellence in its field, or makes an equally excellent contribution in an area of particular significance to Australia.
3	High Quality – Top 50% but does not fall within the Top 25% Research that is recognised as higher than average quality compared to all research in its field worldwide, or is recognised nationally for its significant contribution in an area of particular importance to Australia.
2	Acceptable Research that is recognised as lower than average quality compared to all research in its field worldwide or nationally but not in the bottom 20%.
1	Unclassified Research that is in the bottom 20% of its field.

Rating and Weighting Research Impact

The IRU Australia agrees with the recommendation that research impact should, at least initially, be less finely graded than research quality, but disagrees with the recommendation that a high score on impact may only make a modest difference to the aggregated score based on quality and impact.

The IRU Australia argues that, in the same way as does quality, impact can be assessed as reaching high standards on several dimensions in relation to scope at regional and national as well as international levels. The assessment of impact needs also to recognise differentiation with respect to type of impact (policy influence, economic, social and environmental effects, etc) and timeframe (short, medium or long-term). The proposed period for reporting research outputs of 2001-2006 may not be adequate for impact to be demonstrated and measured. The IRU Australia recommends that impact that has become evident during the period of assessment but which is not necessarily from research performed during that period should be considered.

Descriptors need to be crystal clear to allow institutions, researchers and end users to understand these multiple dimensions of impact. The IRU Australia would also like to see reference to the distinction between impact within and outside the academic community. An overarching preamble to the impact descriptors might be needed in the assessment panel guidelines, with specific indicators tailored for each discipline.

IRU Australia Proposed Research Impact Rating Scale

Rating	Descriptor
High	Research that has fundamentally altered policy or practice in a particular field or has achieved substantial and identifiable economic, social, technological or environmental impact, nationally or internationally, usually over a prolonged period of time.
Moderate	Research that has significantly altered policy or practice in a particular field, or which has achieved moderate and identifiable economic, social, technological or environmental impact, regionally, nationally and sometimes internationally, usually in the medium to long term.
Limited	Research that has achieved little or no identifiable change in policy or practice in a particular field, or has achieved limited economic, social, technological or environmental impact at any level.

Aggregation of Research Quality and Impact Ratings

The IRU Australia supports the range of quality (1 to 5) and impact (Limited to High) rating scales shown in Tables 2 and 3 and supports these being used to report on outcomes. The Group recognises the advantages of aggregating these ratings at some point, but is cautious about supporting the matrix shown in Figure 5 before clarity is reached about the relationship between adjusted scores and the funding model.

Following consultation with members, the IRU Australia has formed the view that detailed modelling needs to be done on the consequences of various funding formulae based on combinations of quality and impact ratings and discipline weightings before any final

decisions are made. Members of the IRU Australia have developed cogent arguments both in favour and against options canvassed for the treatment of quality and impact ratings ranging from significantly higher aggregated ratings for high quality, high impact outcomes through to total separation of quality and impact ratings.

The arguments in favour of upward adjustment of scores for moderate or high impact recognise that impact *per se* appears to have relatively little effect in the Preferred Model and that high quality research combined with high impact should logically be worth more than high quality research that has little impact beyond academia. Some also argue that applied research, which is specifically designed to achieve high impact and for which academic recognition may be a lower priority, should not be devalued against high quality basic research that does not achieve high impact. Failure by the RQF to adequately reward high impact research is likely to remove some of the incentive for researchers to perform such research. Fitness for purpose is a major consideration in the assessment of both quality and impact, and it is therefore reasonable to assume that research scoring highly on either quality or impact should be assessed and rewarded separately.

Those with reservations about the 'matrix' model argue that because impact lags the original research, commonly by years and sometimes decades, there is little logic in coupling quality and impact ratings, as they will inevitably apply to different bodies of work and even different groups of researchers. Somewhat in agreement with the 'fitness for purpose' principle expressed by those in favour of upward adjustment for moderate or high impact, it is argued that entire groupings of researchers in certain disciplines (those which are extremely theoretical or those which are heavily applied) might be placed in a position where they can never aspire to achieve the highest aggregated rating which is that based on a combination of high quality coupled with high impact. There is a clear argument in favour of total separation of quality and impact ratings, and possibly different funding pools for each. If Australia wants a research quality framework that informs international comparisons, then the quality ratings alone should satisfy this expectation.

The IRU Australia has floated amongst members several variations to the matrix proposed in Figure 5, including allowing each Assessment Panel to decide on the aggregation of quality and impact most appropriate for their discipline, but no model appears capable of satisfying the diversity in disciplinary requirements and in delivering Australia with a transparent RQF that will prevent simplistic comparisons being made between disciplines based on the aggregated ratings. This is not to say that the IRU Australia might not eventually support an aggregation of the quality and impact ratings, but reaching agreement has proved impossible in isolation from details on the related issues of disciplinary funding rates and the determination of the funding factors that will be applied to various ratings. Notwithstanding the arguments above, the IRU Australia supports the underlying objective of the matrix approach, which is to ensure that both quality and impact are appropriately recognised and rewarded within the RQF, and recommends that this principle be observed irrespective of the final solution.

Sections 2.7 and 2.8 – RQF Outcomes and Funding

The IRU Australia generally supports the recommendations contained in sections 2.7 and 2.8 – apart from section 2.8.1 relating to the funding of research training. Until the RQF formulae are well tested, the IRU Australia recommends that the RQF scores should be a determining factor in 'up to 50 per cent' of the allocation of research training resources funded under the current RTS formula.

On the issue of reporting RQF results, the IRU Australia proposes that the EAG should consider a 'multiple dimension' approach to reporting to ensure that the information provided in each report is available in a format that accommodates the needs of various users. End

users that will benefit from multiple reporting formats include governments, research policy makers in the public and private sectors, universities and other research organisations, research partners, research students, commerce and industry, and the broader community.

Therefore a variety of RQF reporting formats are proposed, providing detail at several levels:

- National 'snapshot' reports by discipline;
- Detailed Panel reports at the discipline level;
- Institutional level reports; and
- Research group reports.

The IRU Australia recommends that institutional level reporting be provided to each university on a confidential basis along the lines of the Institutional Assessment Framework portfolios. Only the discipline 'snapshots', panel reports and research group reports would be released publicly.



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