

CURTIN UNIVERSITY OF TECHNOLOGY

SUBMISSION TO THE *REVIEW OF KNOWLEDGE AND INNOVATION REFORMS*

SEPTEMBER 2003

Curtin University of Technology aspires to be a world-class university of technology. To achieve this aspiration, the university requires the capacity to allocate significant resources into strategic areas that will lead to the enhancement of its research output and impact both at the national and international level.

To assist in the preparation of an enabling environment supporting this aspiration, Curtin welcomes the opportunity to comment on the review.

In summary, the University supports the:

- **retention of the IGS and RIBG as block grants based on existing arrangements and formulas noting that a redirection of resources away from a block grant mechanism for funding universities – towards a project-linked or similar allocation mechanism – would seriously affect strategic investments by universities into capacity building, infrastructure development, and supporting and nurturing areas of research strength;**
- **restoration of the RIBG to 45 cents per NCGP dollar and its maintenance at least at that level over time;**
- **retention of the current formula for the allocation of the IGS while re-examining the role and scope of the publications component of the IGS and RTS;**
- **further increases to ARC funding to fund Chief Investigators' salaries;**
- **removal of any legislative requirement upon universities regarding the submission of RRTMRs given that all universities maintain comprehensive research management planning frameworks;**
- **retention of the RTS separations pool, but with separations calculated annually rather than on a semester basis and the RTS allocation based on a two year rolling average to smooth fluctuations;**
- **provision of flexibility in the maximum time for the completion of HDR programs to prevent a re-focusing of doctoral education away from more challenging projects towards projects providing an incremental advancement of knowledge;**
- **the continued inclusion of international HDR completions within the formula for distribution of RTS pool funding;**
- **gradual removal of the RTS and IGS caps effective from 2004 with a view to their complete removal by 2007; and**
- **quarantining of ARC funding for access by the higher education sector only but rejects any move to allow major publicly funded research agencies to access the ARC base through contestability.**

Curtin supports several of the recommendations made by the Australian Vice-Chancellors' Committee (AV-CC). Those areas that are supported are discussed in the following section.

1. Improving Research Funding Position

The reforms have established a funding mechanism that allows institutions to strategically invest in areas of existing and emerging research strength and – through the judicious allocation of resources – significantly improve performance ahead of the sector and hence improve the baseline funding position. Curtin's performance in IGS and RTS (pre-capping) illustrates this aspect due to the very significant growth in research income from industry and "other" public sector funding sources rather than National Competitive Research Grants (NCRG) programs. We support the AV-CC's position on retention of the IGS and RIBG as block grants based on existing arrangements and formulas.

Curtin acknowledges the recent growth in the RIBG pool available for allocation to the sector and supports the mechanism for its allocation in accordance with the proportion of NCGP income received per institution. It is noted that this increase has merely maintained the relative funding to the RIBG in line with increased funding to the Australian Research Council (ARC). Furthermore, in recent years the RIBG pool has not remained in proportion to the quantum of NCGP earned by the sector leading to a relative decline on the RIBG per NCGP dollar from more than 40 cents to the current level of 25 cents. Curtin fully supports the AV-CC position that the RIBG pool should be promptly restored to 45 cents per NCGP dollar and that it should be maintained at least at that level over time. This issue has been further supported in a submission to the *Research Infrastructure Taskforce* for the review of research infrastructure that is being undertaken simultaneously with this review.

The RIBG should remain a significant block grant scheme to sustain research infrastructure supporting research activities primarily funded through the NCGP. It is vital that this source of funding remains available in its current form to allow strategic investment in research infrastructure by universities.

2. Changes to the Performance-based Funding Allocation Formulae – IGS and RAE

Curtin believes the current formula for the allocation of the IGS is appropriate and should be retained, notwithstanding our concerns raised below regarding the publications collection. We do not support the introduction of an RAE style mechanism to allocate block grants unless and until it can be shown to be cost effective, does not discriminate against some high performing parts of the sector and can avoid the very serious consequences of the application of the system in the UK, particularly in relation to the negative impact of the movement of staff and research groups between institutions.

3. Research Funding

The increased funding for the NH&MRC and ARC announced in recent years by the Commonwealth provides a very significant boost to research project support across the sector through a competitive and quality assured system. There is clearly a need to further increase project funding and associated infrastructure support through the RIBG as noted above. Curtin recommends further increases to ARC funding to allow for more significant support for the salaries of Chief Investigators – beyond the impact of the various Fellowship programs – and for a major collaborative research program focussed on internationally competitive research conducted jointly by universities and major publicly funded research agencies (in particular the CSIRO). The priority for the allocation of additional resources should be to increase the RIBG as a continuing block grant to universities.

4. Attraction and Retention of High-performing Research Staff

The *Knowledge and Innovation* reforms support performance-based allocations and block funding that provides universities with the financial capability to strategically invest in capacity building and infrastructure development. The strategic allocations may also be made to support or nurture areas of research focus or strength that align with regional industry research needs or local nodes of research excellence. For example, Curtin's allocation of considerable discretionary university funding has allowed the development of its Nanochemistry Research Institute through the strategic recruitment of senior research personnel with international reputations. This has led to the development of world-class capability in nanochemistry and the subsequent positioning of the University to access major national and international research funding. A redirection of resources away from a block grant mechanism for funding universities, towards a project-linked or similar allocation mechanism, would seriously affect strategic investments by universities into capacity building, infrastructure development, and supporting and nurturing areas of research strength.

5. Research and Research Training Management Reports (RRTMR)

Curtin supports the AV-CC's position that the annual submission of RRTMRs should not be a legislative requirement upon universities. There is little evidence that there is quality feedback or analysis conducted arising from their submission and some data reported in Part B of the reports are duplicated in other data collection methods. Furthermore universities maintain very significant publicly available research management planning frameworks that obviate the need for RRTMRs.

There are several of the recommendations made by the AV-CC that Curtin does not support and these are discussed in the following section.

1. Research Training Scheme (RTS)

Curtin does not support the changes proposed by the AV-CC to the RTS. We believe that the removal of the separations pool is not consistent with the basic premise underlying the introduction of the scheme by the Commonwealth. Thus we do not support the move to a purely formula driven allocation incorporating a component based on historic load as proposed by the AV-CC.

We strongly support the retention of the RTS consistent with the current arrangements but with the allocation based on a two year rolling average to smooth fluctuations (this would address the major concern of the AV-CC). It is clear from Curtin's performance that it is possible to effectively manage the RTS system and separations. Table 1 below shows some initial modelling of the likely impact on various universities by the adoption of the AV-CC model as opposed to the similarly uncapped application of the existing formula.

The impact of this modelling is that high-performing universities under the current system, such as the University of Sydney, may be very seriously disadvantaged by the removal of the separations component. In the case of Curtin the impact is most significant with the uncapped RTS allocation reducing by almost \$1 million or 9%. Given that it can be argued that Curtin has effectively implemented policies and procedures that are consistent with the intent of the *Knowledge and Innovation Reforms* in BAA the change proposed by the AV-CC would be inconsistent with the broad thrust of government policy.

The RTS changes have influenced the allocation of HDR load within some universities as we consider the funding drivers and strategic management issues. The scheme has adequately balanced the performance drivers with an emphasis on completions.

Institution	RTS 2003 Under Current System a	RTS 2003 Under AVCC Proposal b	Difference \$ Under the Two Models b-a
The University of Sydney	\$56,382,905	\$53,267,299	-\$3,115,606
University of Wollongong	\$13,144,367	\$11,075,379	-\$2,068,988
University of Tasmania	\$15,244,646	\$13,184,975	-\$2,059,671
Macquarie University	\$12,038,027	\$10,547,980	-\$1,490,047
The University of New England	\$8,717,896	\$7,383,586	-\$1,334,310
University of Western Sydney	\$8,190,309	\$6,856,187	-\$1,334,122
The University of Adelaide	\$28,188,234	\$26,897,349	-\$1,290,885
Victoria University of Technology	\$5,758,771	\$4,746,591	-\$1,012,180
Curtin University of Technology	\$11,540,706	\$10,547,980	-\$992,726
Griffith University	\$11,951,756	\$11,075,379	-\$876,377
The Flinders University of South Australia	\$11,245,296	\$10,547,980	-\$697,316
Central Queensland University	\$2,606,606	\$2,109,596	-\$497,010
University of Technology, Sydney	\$8,909,598	\$8,438,384	-\$471,214
Deakin University	\$7,805,687	\$7,383,586	-\$422,101
La Trobe University	\$13,567,829	\$13,184,975	-\$382,854
University of Southern Queensland	\$2,300,281	\$2,109,596	-\$190,685
Murdoch University	\$8,570,353	\$8,438,384	-\$131,969
The University of Queensland	\$51,221,653	\$51,157,703	-\$63,950
Royal Melbourne Institute of Technology	\$12,088,960	\$12,130,177	+\$41,217
Edith Cowan University	\$4,140,231	\$4,219,192	+\$78,961
Swinburne University of Technology	\$4,373,413	\$4,746,591	+\$373,178
University of Canberra	\$2,698,958	\$3,164,394	+\$465,436
James Cook University	\$7,474,090	\$8,438,384	+\$964,294
The University of Western Australia	\$27,460,883	\$28,479,546	+\$1,018,663
Queensland University of Technology	\$9,244,721	\$10,547,980	+\$1,303,259
Monash University	\$35,902,214	\$37,445,329	+\$1,543,115
The Australian National Univ (incl IAS)	\$25,046,104	\$26,897,349	+\$1,851,245
University of South Australia	\$6,500,987	\$8,438,384	+\$1,937,397
The University of Newcastle	\$10,259,539	\$12,657,576	+\$2,398,037
The University of NSW (incl ADFA)	\$41,606,539	\$44,301,516	+\$2,694,977
The University of Melbourne	\$52,388,328	\$56,959,092	+\$4,570,764

Table 1: Comparison for selected Universities of 2003 RTS \$ allocation *before* capping under (i) the current system and (ii) model proposed by the AV-CC. (All \$ figures are in 2003 prices).

We propose that the separations be calculated annually rather than on a semester basis and that the funding be averaged over two years to moderate some fluctuations in annual allocations.

There is an argument that the move to limit funding for a doctoral student to a maximum of four years could lead to a re-focusing of doctoral education away from more challenging projects towards projects providing an incremental advancement of knowledge. It is too early to assess the validity of this argument however some flexibility in the maximum time to completion should be considered.

It is the view of the University that international HDR completions should remain a valid component of the HDR completions data used to determine the allocation of funding.

2. Research Publications

Curtin believes that the publications component of the IGS and RTS should be reconsidered as: (i) the audit costs associated with the collection of publications data are unjustifiably high; (ii) there is clear evidence that research income is a reasonable proxy for publications and (iii) there is no acceptable quality filter that could be applied to the collection without significant overhead compliance costs.

However, a decision to remove the component may create the unwanted impression that research output does not impact research funding and may also compound the concerns that researchers in the Arts, Business, Social Sciences and Humanities areas have regarding the earlier reduction in the number of publications categories. Further, as many institutions drive out IGS and RTS funding on the basis of the formula that allocates the funding to the institution, this may lead to a further devaluation of publications output. There is also a very real need for universities to collect information on an auditable and comparable basis related to research *outcomes*, rather than simply outputs, to justify investment by the Commonwealth.

Combined, these concerns provide grounds for the issue to be the subject of more widespread debate across the sector in the near future.

3. Capping

Curtin, as outlined above and in relation to the RTS below, supports the continuation of the current performance-based allocation of funding through the IGS and RTS. On this basis we support the gradual removal of the cap effective from 2004 with a view to its complete removal by 2007. Clearly any change to the basis for allocating either IGS or RTS funding that may emerge from this review would need to be based upon detailed modelling and the impacts over a further 3-5 year period should be carefully managed through a continuing capping arrangement. There is a clear need to avoid further disruption to the system by widespread changes (either through changes to formulas or by policy changes) over the next several years.

There are several views held by Curtin that are not directly related to the express recommendations made by the AV-CC. These issues are discussed in the following section.

1. Regional Support Package

Curtin was not supported in this regard despite our significant number of regional campuses and activities. The University has no comment on its effectiveness.

2. Contestability of funding for the IAS

For the University to respond in a wholly informed capacity to this issue would require data from the ARC which are not presently available. There is no strong indication of greater collaboration between the IAS and the sector following this change although it appears that the IAS has been a net winner of funding. The move to widen the ARC base through contestability – including to major publicly funded research agencies – is not supported in principle and is rejected outside of a significant expansion of the ARC's funding base.

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