

# Australian Council of Deans of ICT Proposal for Research Performance Benchmarks

## ***Background***

Increasingly, academic staff, departments/schools, and faculties are being held accountable for their performance. Often, performance is assessed relative to some benchmark.

In the case of the information technology and communication disciplines, unfortunately the benchmarks used are often other disciplines that *prima facie* appear to be similar to the information technology and communication disciplines (at least according to the perceptions of the senior management of universities).

For instance, the performance of software engineering academics might be compared against the performance of electrical and computer engineering academics, and the performance of information systems academics might be compared against the performance of management academics.

Because the benchmark disciplines used often are fundamentally different from the information technology and communication disciplines, the conclusions reached on the basis of the comparisons are flawed. This can have a detrimental impact on both the disciplinary unit and on individual members of that unit such as when going for promotion.

If performance evaluations are to be valid and reliable, therefore, the information technology and communications disciplines need to develop their **own** benchmarks. This document outlines a proposal for ACDICT to establish such benchmarks.

***ACDICT will do this in a manner that ensures all specific institutional median data is kept strictly confidential to the ACDICT Executive Officer and no other members of ACDICT or external parties. The value of this effort is such that ACDICT hopes that members will recognise the need to move beyond past barriers to contribute to a mutually beneficial exercise.***

## ***Proposed Research Performance Criteria***

The attachment shows the proposed research performance criteria. They fall into three categories:

- *Impact Measures*: H-index and G-index
- *Activity Measures*: Publications; research grants and income; HDR supervision and completions

- *Esteem Measures*: Invited talks at conferences; service on editorial boards of leading conferences and journals; awards.

The criteria are likely to include those used by many universities to assess the research performance of academics.

### ***Proposed Research Performance Benchmarking Process***

In March each year, the Executive Officer of the Australian Council of Deans of ICT will send to each university representative on the Council a request to provide performance data by the end of April.

The performance data will be the *medians* for each research performance criterion shown in the attachment.

For each performance criterion, the medians provided by each university will be shown by academic level within information technology and communications sub-discipline.

The academic levels are the following: Level E (Professor); Level D (Associate Professor/Reader); Level C (Senior Lecturer); and Level B (Lecturer).

The information technology and communication sub-disciplines are the following: (a) computer science and software engineering; and (b) other (includes information systems, multimedia, games, library science, archives). ***In other words, only two sub-disciplines will be used.***

The performance data provided by each university will remain confidential to the Council's Executive Officer. The Executive Officer will ensure the data is kept securely and not released to any university or individual.

### ***Proposed Benchmarking Reporting***

By the end of June each year, the Executive Officer of the Australian Council of Deans of ICT will provide summary benchmark data to only those university representatives on the Council who have provided performance data for their own university.

The summary data will include the median for each performance criterion organised by academic level within information technology and communication sub-discipline.

The Executive Officer will ensure that the performance data for individual universities cannot be determined from the summary reports.

If it will preserve institutional unanimity, the summary data might also be organised by type of university (e.g., Go8, ATN, other).

## ATTACHMENT

### PROPOSED RESEARCH PERFORMANCE CRITERIA

Performance Measure	Brief Rationale
H-index	A measure of research impact. Reflects the extent to which peers cite an academic's research.
G-index	An alternative measure of research impact. Takes into account that an academic might have a few very highly cited papers. <i>Open for discussion as to its importance.</i>
Total weighted publications (WP) over most recent five years	$WP = 1.5(\text{No. of ERA A}^*\text{-ranked and A-ranked journal publications}) + \text{No. of A-ranked conference publications} + 0.5(\text{B-ranked journals and conferences}) + 0.05(\text{C-ranked and below journals and conferences})$ .
DIISR publication points	Annual DIISR publications points split pro-rata among the authors and dependent on type of publication (1.0 for E1, C1, B1; 5.0 for A1).
Number of new national competitive research grants obtained over most recent five years	Many academics (but not all) require research income to be able to undertake high-quality research. A lead indicator of the extent to which academics are likely to be able to execute their research. Also, a measure of the extent to which peers hold an academic in high regard.
Annual DIISR research income	Actual annual grant income split pro rata between the Chief Investigators.
Weighted HDR completions over most recent five years	The primary metric is weighted HDR completions, measured as follows: $WC = 1.5(\text{No. of PhD completions} \times \text{fraction of supervision}) + (\text{No. of Research Masters completions} \times \text{fraction of supervision})$ .
HDR supervision load	Annual load split based on fraction of supervision.
Invited talks	Number of invitations over the previous five years.
Journal editorial boards and conference chairmanship	Number of A and A* journal editorial boards on which the academic is a member + the number of A conferences of which the academic is a PC member over the past five years.