

COOPERATIVE RESEARCH CENTRES PROGRAM

Comments on the Submission to the National Innovation Systems Review

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Declaration of Personal interest

I had some 20 years experience at SES level in the APS in science program policy and management, and was the General Manager (Branch Head) responsible for the CRC Program from 1996 to 2000. I have maintained a strong interest in the program since then. I have provided consultancy services to a number of CRCs.

General comment

For brevity, I use the term 'industry' to cover the range of research users across the private and public sectors.

I welcome the positive view of the program expressed in the report, and offer the following comments in the hope of adding some constructive value to the discussion.

In reading this and previous reviews, I get a sense that the CRC Program is the subject of some unrealistic expectations in some quarters, particularly in terms of the level of commercialisation of research outputs, and that it should somehow magically solve the problem of the relatively low level of involvement of Australian Business Expenditure on R&D (BERD), which remains down the bottom of the OECD table. In turn, these expectations have led to unrealistic expectations of CRCs becoming self-funding. These issues were the drivers of the Stocker Mercer review, which confirmed the unrealistic nature of those expectations.

In my view, the expectations on the program should be that in the annual expenditure of \$140 million produces $(1+\Delta)$ times \$140 million worth of quality research, together with the flow-on benefits, where Δ represents the incremental value derived from the cooperative nature of the research structure within the CRC. The maximisation of Δ should be the focus of the guidelines ultimately adopted.

One general comment is that the term end-users is used frequently, but appears to have somewhat different meanings in different contexts. For instance in Recommendation 2, it clearly means the user partners in a CRC, but in other contexts, appears to relate more to

the users down the chain, for instance, the individual farmers who might benefit from research outputs developed in an agriculturally focussed CRC.

Recommendation 1

Additional government funding into the research environment is critically urgent, and the CRC Program provides an ideal vehicle to deliver that funding in a transparent and contestable environment.

While annual funding rounds seem attractive, I wonder whether a research issue that appears as a national challenge would materialise from nothing over a year. In many CRCs, the industry issues have been brewing for decades, and it has taken some years to form a coalition of industry and other partners to begin the process of addressing those issues.

Recommendation 3

I suggest care is necessary with a proposal to introduce flexible funding periods.

The seven-year commitment that the Commonwealth offers is a precious resource, and provides a strong incentive for participants to focus on long term strategic research. It is true that companies have some difficulty with such a long term commitment, and that concern is usually addressed through the centre agreement allowing a participant to withdraw with, say, a year's notice.

I understand that with ICT companies particularly, a shorter withdrawal period is often sought. It may be appropriate to introduce the concept of short-term CRCs to address more short term challenges. However, I think such CRCs would necessarily be limited in scope and participation, and more focussed on short-term problem solving, rather than pre-competitive research related to major national 'challenges', which raises the question of whether the CRC Program is the appropriate vehicle for those groups.

To preclude the option for participants in an existing CRC to re-group in a new application seems unrealistic. Questions about the 'newness' of such applications, and other issues can be evaluated by the committee against the selection criteria.

Recommendation 5

The exhortation to encourage SMEs to participate in the program has been part of the rhetoric from the beginning of the program. However, as noted in the review report, as well as previous reviews, SMEs do not have the resources to join as major partners, and their participation is necessarily limited typically to involvement at a project level, rather than in longer-term pre-competitive research. The report does not offer any guidance on how this situation might be addressed.

Nevertheless, the requirement for a strategy to engage SMEs should be part of the selection criteria, with the committee able to balance the relating merit of applications against all the criteria.

Recommendation 6

The requirement that industry participants provide 50% of the cash funding for the CRC is unrealistic. Ten rounds of competitive CRC grants have not produced anything like that level of contribution. The disinclination of Australian industry to invest in R&D of any kind has been lamented by governments for decades, and a host of essentially bi-partisan measures over that period has not produced a great shift in the level of Business Expenditure on R&D (BERD), which remains down the bottom of the OECD table. Even under the strongly commercially focussed guidelines following the Howard Partners' review, the target is not reached.

Some CRCs have been able to increase the relative level of industry cash funding through a greater emphasis on short-term problem solving research.

I question the notion of 'international best practice' as it relates to the 50% target. In my experience, the CRC Program is unique, particularly in relation to the multi-research provider, multi-industry participant, long-term commitment, strategic research focus nature of the program. Overseas programs involving cooperative arrangements between industry and universities tend to be more down the end of single industry-single university, short term problem-solving operations.

I welcome the recommended return of an emphasis on pre-competitive strategic research. I believe that a strategic objective of the program should be to develop a culture in Australian industry more attuned to investment in longer-term strategic research.

I recommend that the level of industry cash contribution simply be factor in the competitive selection process. The fact that different industry sectors will have different levels of capacity to provide research funding will be an additional factor in those considerations.

Recommendation 7

I support the reversion to a simple two stage selection process, involving a written application, with an interview for short-listed applications. The system involving a two stage written application process simply did not work, as the pressure to produce a competitive first stage application obviated the intention of it being some sort of 'preliminary' business case.

John S Boyd

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