



# SMALL & MEDIUM SIZE ENTERPRISE ENGAGEMENT WITH CRCs

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working together

This Guide is part of a series of Guides aimed at industry, including small and medium enterprises, and others who are new to the CRC Program.

## INTRODUCTION

Cooperative Research Centres (CRCs) are engines of innovation for Australia.

An initiative of the Australian Government, CRCs bring together the best minds from research and industry to work as a team.

Together, and driven by the needs of private, public or community end-users, CRCs turn research results into products, services and technologies and address national priorities within a local and global context.

This Guide has been developed by the CRC Association to help interested parties, both current and potential CRC partners, plan and implement their engagement with small and medium enterprises (SMEs) that employ up to 200 staff. It is part of a series of CRC Association Guides focused on providing useful information about the CRC Program to industry and other end-users, including small and medium enterprises and organisations unfamiliar with the CRC Program.

## RATIONALE AND REQUIREMENTS

The CRC Program Guidelines require CRCs to undertake 'SME strategies that build their innovation and R&D capacity'. It is up to a CRC's participants to decide on the approach which best suits their particular industry or sector.

The CRC Program Guidelines allow for participants to join and depart a CRC during the life of a CRC, as long as this does not adversely affect the CRC's capability to deliver results.

### WHY INVOLVE SMEs IN A CRC?

- small and medium enterprises are a major pathway for innovation because of their flexibility in taking up new opportunities; this flexibility can lead to an important role in commercialising or utilising the research outputs of a CRC
- SMEs are a significant part of the national economy; there are approximately 2 million active small and medium businesses in Australia, representing 99.7% of all businesses<sup>1</sup>
- SMEs are willing and able to engage with CRCs: during the 2007-08 reporting period some 800 SMEs were directly involved with CRCs, with many more involved through companies or associations established to facilitate their participation in CRC activities<sup>2</sup>
- the Australian Government has emphasised better engagement with SMEs as a priority for CRCs and the CRC Program Guidelines establish the link between this and competitiveness in the CRC Program selection process

<sup>1</sup> ABS Counts of Australian Businesses, Including Entries and Exits, June 2003 to June 2007 – 8165.0, Table 13 p18

<sup>2</sup> CRC information: MDQ Aggregated Data by CRC Type 2007-08

# BENEFITS OF CRC ENGAGEMENT WITH SMEs

## FOR INDUSTRIES AND SECTORS

- SMEs can enable innovative services or technologies to be provided on a common basis to the whole sector
- SME involvement from the early stages of research and/or utilisation/adoption of research outputs potentially builds the competitiveness of the industry or sector because of their crucial role in the supply chain

## FOR SMEs

- involvement with a CRC can be a cost-effective way to participate in and benefit from research that might otherwise be beyond their reach
- increases opportunities to network with key players in industry and in research institutions
- can offer a wider understanding of cutting edge technology/new developments in a particular field
- increases opportunities for training and professional development to facilitate the adoption of new processes, new technologies, new management practices
- enhances prospects to take market advantage of new developments, improve productivity, competitiveness and access to global supply chains

## FOR RESEARCHERS

- CRCs provide stable structures to enable researchers to engage with SMEs and to better understand their needs
- provides opportunities to engage with innovative commercial perspectives and see the results of the implementation of research outcomes

## FOR AUSTRALIA

- the engagement of SMEs in CRCs helps to build a culture of innovation, and therefore increased productivity and global competitiveness through all levels of Australian industry



## MODELS OF CRC ENGAGEMENT WITH SMEs

Successful CRC engagement strategies with SMEs are usually built around relationships and structures that suit SMEs' roles in markets and supply chains. While it can be difficult for SMEs to contribute significant cash resources to the work of a CRC, they contribute resources in a variety of other ways.

The following models, while not exhaustive, describe some of the approaches that have been used by CRCs to harness the innovative capacity of SMEs and to involve them in the work of CRCs:

- SMEs as participants
- SME clubs or consortia
- industry associations
- research & development corporations (for example, in the agriculture sector)
- spin-off companies – including when they are created by one CRC and become a participant in another CRC
- seminars, conferences, market days, professional development opportunities

Some CRCs have used more than one approach to facilitate SME engagement.

### SMEs AS PARTICIPANTS

SMEs are participants in CRCs and engage with CRCs at different levels. In some situations, SME participants have been able to make a significant contribution and commitment to the CRC, in line with the level of engagement of other participants.

More commonly, SMEs have been engaged on a smaller scale level, becoming involved with individual projects or for limited periods of time without taking on a major commitment to the broader governance and management of the CRC. SMEs can be research project service providers, research end-users, or a combination of both.

The CRC Program STAR Awards provide examples of high level achievement in CRC engagement with SMEs. One awardee, o.d.t. Engineering Pty Ltd took on a contract research project in 1998, then became a core participant of the CRC for CAST Metals Manufacturing in 2001. It is now a core participant of the new CAST CRC, launched in 2005. As a result of their involvement with CAST, o.d.t. has gone from being an importer to an exporter of leading edge technology. This involvement has also given o.d.t. a new dimension as a technology supplier and assisted in marketing their technology both in Australia and overseas. More information about the CRC STAR Awards is available on the CRC Program website [www.crc.gov.au](http://www.crc.gov.au) under 'Publications, events & media'.

## CLUBS OR CONSORTIA

CRCs can have minimum requirements for participant contributions that are greater than an individual SME can meet. In this circumstance, a CRC can establish a new structure to engage with SMEs such as a club or a consortium. For an annual fee, which is generally in the order of a few thousand dollars, SMEs get access to information about world-class research and technology. For example, a regular newsletter may include updates on CRC research, copies of recent publications, discounted contract services and the opportunity to access valuable new intellectual property generated by the CRC, on negotiated terms. In addition, the consortium can commit to the CRC for its full life, but individual SMEs can retain flexibility about the time period for which they will be involved. The following examples are CRCs that use this approach:

- the goal of the “SME Club” in the CRC Mining is to engage with a wide range of small and medium enterprises working in the mining technology sector, to inform them about the activities taking place within the CRC, and to give SMEs the opportunity, where appropriate, to participate either in the research work, and/or in the commercialisation of a technology
- CRC for Spatial Information had a large number of SMEs who wished to be involved in the research of the CRC, but the CRC required a minimum contribution to access different levels of benefit. This CRC formed an umbrella company called 43P/L to represent their interests, as originally

they had 43 SMEs who wished to engage with the CRC (the number of SMEs involved is now in excess of 50). SMEs get access to a range of benefits from the CRC including assistance and facilitation services to increase and enhance engagement with the CRC through a dedicated position provided by the CRC

## INDUSTRY ASSOCIATION AS A CRC PARTICIPANT

In this model, an industry association becomes a member of the CRC. It becomes the conduit through which the transfer of research problems and outputs between the CRC and SMEs is undertaken. By engaging with the industry association, the SME is able to access the latest research or present problems needing solutions.

An example of an industry association interacting with a CRC is the relationship between the Australian Construction Industry Forum (ACIF) and the CRC for Construction Innovation. ACIF is Australia’s peak construction industry consultative organisation with almost 200 000 members. This strategic alliance between the CRC and the ACIF enables them to jointly engage in setting research directions, become partners in technology transfer, leverage applied research for industry benefit and share their communication networks.



## RESEARCH AND DEVELOPMENT CORPORATIONS (RDCs)

In the agricultural sector, the needs of SMEs are represented by research and development corporations which become participants in a CRC. RDCs<sup>3</sup> commission and manage targeted research and foster uptake by thousands of SMEs – farmers and other businesses in the sector. Participation of RDCs in CRCs provides a stable structure enabling SMEs to benefit from engagement with the CRC and provide an important route for technology transfer back to the SMEs.

The interaction between the CRC for Beef Genetic Technologies (Beef CRC) and Meat and Livestock Australia is an example of collaboration between an agricultural CRC and an RDC. The Beef CRC undertook research into the “Critical Control Points” of beef production that impact on palatability. This led to the development of a beef grading system – Meat Standards Australia (MSA) beef – which, depending on how the beef is cooked, guarantees tenderness and eating quality. The industry now has a premium domestic market with MSA beef, depending on the grade achieved, and beef producers have benefited. They get an average premium on all meat graded MSA of at least 10c per kilo.

## SME SPIN-OFF COMPANIES AS CRC PARTICIPANTS

As part of a CRC’s commercialisation and utilisation activities, a company may be created or spun-off from a CRC to commercialise new intellectual property. If this commercialisation process is successful and creates a revenue stream, the spun-off SME company may see value in itself becoming a CRC participant.

The Pest Animal Control (PAC) CRC established Pestat Pty Ltd (Pestat) as a spin-off to hold and commercialise the CRC’s intellectual property (IP) assets. During the CRC’s life, while waiting for the IP to be confirmed as commercially-relevant, Pestat established a project management business, providing services for the CRC and collaborating entities. When the PAC CRC evolved into the Invasive Animals CRC bid, Pestat Ltd joined as a member of that bid. The close association of bidders allowed Pestat to ‘rub shoulders’ with other contributors and develop positive links to like-minded groups. Pestat now has projects and IP of its own but still contributes to CRC projects and is an “end-user” of certain Invasive Animal CRC’s IP.

See also the Guide on ‘Exit Strategies and Spin-off Companies’ in this series.

3 [www.ruralrdc.com.au](http://www.ruralrdc.com.au)



## SEMINARS, CONFERENCES, MARKET DAYS, PROFESSIONAL DEVELOPMENT OPPORTUNITIES

In some industries or sectors, and for many SMEs, it may be more appropriate to engage SMEs at the point of take up. CRC sponsored industry seminars, workshops and market days are some of the strategies that CRCs have employed to engage with SMEs more broadly. CRCs or their participants also conduct or sponsor professional development opportunities to disseminate and encourage the adoption of new processes, products, technologies and/or management processes.

Data extracted from the *National Survey of Research Commercialisation 2005-2007* and the CRCs themselves shows that over the five year period between 2003-04 and 2007-08, there has been substantial growth in vital 'knowledge exchange' activities with increases in the number of training courses (up 55%), conferences (up 53%), publications (up 28%), postgraduate placements in industry (up 35%) and reports provided to end-users (up 9%).



## POINTERS FOR NEW APPLICANTS

- CRCs can draw on one or more approaches to engage effectively with SMEs
- use the flexibility of the CRC Program to develop a structure for engaging with SMEs that meets the innovation needs of the relevant sector, whether this means interacting with a few or many SMEs
- understand the needs of the SME and identify how these can be addressed within the constraints of the CRC's operations
- liaise with other CRCs or industry associations in the sector to understand and learn from their experiences
- don't underestimate the benefits of involving an SME in your CRC

## POINTERS FOR SMEs

- use the CRC Directory as a starting point to identify CRCs relevant to your business
- the CRC Association is another good source of information, and can also assist with putting you in touch with CRCs
- use the flexibility of the CRC Program to suggest ways for your SME to interact with a CRC that is working in a field of relevant interest

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## FURTHER ASSISTANCE

CRC Association

02 6270 6524

[www.crca.asn.au](http://www.crca.asn.au)

CRC Program

02 6213 7177

[www.crc.gov.au](http://www.crc.gov.au)



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