## Senate Economics Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Industry, Tourism and Resources Portfolio

Budget Estimates 2004-2005, 31 May 2004 to 2 June 2004

## ADDITIONAL MATERIAL REQUESTED BY SENATOR CAMPBELL

(3 SETS PROVIDED)

Index of Material Provided

#### Commercial Ready Program

1. Commercial Ready Program Discussion Paper (Department of Industry, Tourism and Resources, May 2004)





# Commercial Ready Program Discussion Paper

May 2004

#### Foreword

Industry innovation is fundamental to Australia's continued prosperity. Business innovation, through the development of commercial products, processes and services, is a key driver of productivity, international competitiveness and economic growth.

The Australian Government's establishment of the new Commercial Ready program, which will provide more support to a greater number of small and medium-sized businesses than ever before, is an exciting step forward in assisting Australian businesses turn their good ideas into commercial reality. The Commercial Ready program will improve on, and replace, the existing R&D Start program, Biotechnology Innovation Fund and elements of the Innovation Access Program. It will offer industry a single entry point to competitive grants for research and development, technology diffusion, proof-of-concept activities and commercialisation and more flexible, streamlined access.

The Commercial Ready program is the major new measure in *Backing Australia's Ability—Building Our Future through Science and Innovation* package. The new innovation package provides an additional \$5.3 billion in support for the science and innovation system and takes the Australian Government's new investment in science and innovation to \$8.3 billion over 10 years. It increases the emphasis on commercialisation—so that we can take our good ideas to market and gain a return on our investment in R&D—and on collaboration between and within the private and public sectors.

Business will make significant gains from *Backing Australia's Ability—Building Our Future through Science and Innovation*. Over \$1 billion in funding is provided for the new Commercial Ready program, an additional \$100 million is provided for the COMET program, the new elements of the R&D Tax Concession—the R&D Tax Offset, the 175% Premium R&D Tax Concession and effective life treatment of R&D plant—will continue at a cost of \$390 million over five years (from 2006-07), and an additional \$77.9 million is being directed to the biotechnology industry. Importantly, businesses will be assisted in accessing these new programs through the extension of the AusIndustry Regional Office Network through to 2011 and an increase in the number of regional customer service managers.

I strongly encourage you to comment on this Discussion Paper, to help ensure that Australia maximises the value of its ideas, gains a return on its investment in R&D, and continues to capitalise on the potential of its innovative businesses.

The Hon Ian Macfarlane MP

Minister for Industry, Tourism and Resources.

14 May 2004

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## **Executive Summary**

Innovation is a key factor in determining the success of businesses and economies. The development of new products, processes and services is vital for improved productivity, job creation and the development of new industries, and helps existing industries to become more competitive and productive.

The new Commercial Ready program will stimulate greater innovation and productivity growth in the private sector by providing around \$200 million a year in competitive grants to small and medium-sized businesses between 2004-05 and 2010-11, to undertake research and development, proof-of-concept, technology diffusion and early-stage commercialisation activities.

The Commercial Ready program will improve on, and replace, the existing R&D Start program, the Biotechnology Innovation Fund (BIF) and elements of the Innovation Access Program (IAccP). It will offer industry streamlined access to innovation grants to support a range of activities. It will encourage the growth of innovative Australian businesses, increase business investment in R&D, and build commercialisation outcomes.

Commercial Ready was announced as part of the Australian Government's new *Backing Australia's Ability—Building Our Future through Science and Innovation* statement, and will be complemented by a range of other measures announced in the package. These measures include: new funding for the COMET program to assist small firms to have the services and skills to raise capital and take their products to market; continuation of the new elements of the R&D Tax Concession program—the R&D Tax Offset, the 175% Premium R&D Tax Concession and the effective life treatment of R&D plant—to ensure that firms can continue to invest in R&D over the long term with certainty and confidence; and new support for the biotechnology industry will ensure that this sector can continue its vital research, build critical mass and take new products to market.

Access to the Australian Government's programs will be facilitated by the continuation and extension of the AusIndustry Regional Office Network. Details of the *Backing Australia's Ability—Building Our Future through Science and Innovation* can be found at <a href="http://backingaus.innovation.gov.au">http://backingaus.innovation.gov.au</a>. Information about the development of the Commercial Ready program is available from <a href="http://www.industry.gov.au">www.industry.gov.au</a>.

The Australian Government is committed to ensuring that the Commercial Ready program facilitates commercial outcomes and jobs for Australia and has low delivery costs for customers, and so we are now seeking industry's views on its design.

This Paper provides information about the new Commercial Ready program and identifies some key issues on which the Government welcomes industry input. We seek your contribution to the design of the Commercial Ready program through written responses to this Paper and/or involvement in consultations to be held over the next five weeks. We invite public comments by 18 June 2004, so that the Commercial Ready program guidelines can be developed and the program launched by October 2004.

Commercial Ready Discussion Paper, May 2004 Department of Industry, Tourism and Resources

## Purpose of the discussion paper

#### Objective of this Paper

This Discussion Paper has been prepared by the Australian Government Department of Industry, Tourism and Resources to provide information associated with the establishment and operation of the Commercial Ready program. Written comments or submissions on the issues raised are invited from all interested parties and they will be used to develop a considered position on how the Commercial Ready program can best achieve its objectives.

#### What is Commercial Ready?

The new Commercial Ready program will encourage and support the growth of small and medium-sized innovative Australian businesses. The program will provide around \$200 million per annum to competitive industry applications from 2004–05 until 2010–11.

Business innovation, through the development of commercial products, processes and services, has long been recognised as a key driver of productivity, international competitiveness and economic growth. Commercial Ready will increase commercialisation outcomes from SMEs and stimulate business investment in research, and development (R&D), both of which were highlighted for action in the 2003 report on *Mapping Australian Science and Innovation*<sup>1</sup>.

#### Stakeholder Consultation

There are two ways for interested persons and organisations to present their views on the design of the Commercial Ready program.

- There will be a series of public consultations on the Commercial Ready program at key centres around Australia until mid-June 2004. Interested persons and organisations are encouraged to attend. Details of the consultations are available at <a href="www.industry.gov.au">www.industry.gov.au</a>.
- Written comments in response to issues raised in this Discussion Paper or on any other aspect of the Commercial Ready program can be sent to the Commercial Ready Taskforce. Comments can be submitted electronically in formats compatible with Word 2002 or Acrobat PDF format to <a href="mailto:CRTF@industry.gov.au">CRTF@industry.gov.au</a> or mailed to:

The Manager Commercial Ready Taskforce Innovation Policy Branch Department of Industry, Tourism and Resources GPO Box 9839 CANBERRA ACT 2601

Comments on the development of the Commercial Ready program are due by close of business 18 June 2004.

Australian Government, Mapping Australian Science and Innovation—Main Report, Australian Government, (2003)

Some key dates in the development of the Commercial Ready program are listed in Table 1.

TABLE 1 KEY DATES IN THE COMMERCIAL READY PROGRAM

Activity	Date
Commercial Ready program announced	6 May 2004
Information available on website	6 May 2004
Consultations begin	14 May 2004
Consultations close	18 June 2004
Launch of the program	October 2004

Information on the Commercial Ready program, including a Commercial Ready Fact Sheet, media releases relating to the announcement of the Commercial Ready program, and other information is available on the Department of Industry, Tourism and Resources' website <a href="https://www.industry.gov.au">www.industry.gov.au</a>. Further information can also be obtained by phoning the AusIndustry Hotline on 13 28 46 or by writing to the Manager, Commercial Ready Taskforce (see page 1). Information about \*Backing Australia's Ability—Building Our Future through Science and Innovation is available at <a href="https://backingaus.innovation.gov.au">https://backingaus.innovation.gov.au</a>,

Any submission to the Taskforce becomes, upon its receipt, a Commonwealth record. The Taskforce may use the submission to assist to inform its deliberations and for any directly related governmental purpose. If you would like you submission to be kept confidential, please state clearly in the covering note with the reasons as to why. The Taskforce will reasonably consider requests for confidentiality. If you have concerns about confidentiality, please discuss this with the Taskforce before making the submission (see above).

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## 2. The Commercial Ready program

#### 2.1 OVERVIEW

The Australian Government has announced the establishment of the Commercial Ready program specifically to boost Australia's commercialisation performance by providing small and medium-sized enterprises (SMEs) with support from 'concept to early commercialisation' through the provision of competitive grants.

The Commercial Ready program is expected to assist over 1 700 SMEs to become more commercially successful. It will do this by supporting research and development, proof-of-concept, technology diffusion and early-stage commercialisation activities. Commercial Ready will replace the existing R&D Start program (which funded research and development and early-stage commercialisation activities), the BIF (which funded biotechnology projects at the proof-of-concept stage) and elements of the IAccP (which funded access to global, leading-edge research and technologies). This streamlining of three existing programs into a single new program will: encourage more SMEs to more flexibly access Government assistance; assist with reducing compliance costs by industry (through a streamlined application process); and increase the potential of Australian businesses to innovate and contribute to national economic growth. The Commercial Ready program aims to build commercialisation outcomes and increase business investment in R&D, both of which were highlighted for action in the 2003 report on *Mapping Australian Science and Innovation*.

Businesses that have received or are about to receive support under the R&D Start, BIF or IAccP programs will not be affected by the introduction of the Commercial Ready program. It is anticipated that Commercial Ready will commence in October 2004.

At a glance—key facts about the Commercial Ready program

Commercial Ready is a new program with around \$200 million per annum of funding available from 2004-05 to 2010-11. The program will focus on SMEs.

Participation in the new program will be competitive, with applicants required to demonstrate:

- capacity to complete the research and/or commercialisation activity through submission of a detailed business plan;
- commercial potential of the project, capacity for product development and a strategy to fund commercialisation through presentation of a commercialisation plan; and
- a commitment of at least matching funding.

Proposed key features of the new program include:

- collaboration, between Australian businesses, with research organisations and international businesses:
- support for proof-of-concept activities for all industry sectors;
- incentives to encourage businesses to employ graduates; and

streamlined access to innovation grants to support a range of activities.

#### 2.2 PROPOSED VISION AND OBJECTIVES OF THE COMMERCIAL READY PROGRAM

The proposed vision of the Commercial Ready program is:

To increase Australia's sustainable economic growth through stimulating increased investment in innovation by small to medium-sized enterprises.

Accordingly, it is proposed that the objectives of the Commercial Ready program should be to:

- increase the level of R&D, proof-of-concept, technology diffusion and commercialisation activity undertaken by Australian SMEs;
- encourage the commercialisation of products, processes and services developed in Australia;
- encourage successful innovation by SMEs;
- foster greater collaboration within industry, and between industry and other institutions, both domestically and internationally; and
- generate national benefits for the Australian economy and wider community.

#### Issues for comment

1. Are the program objectives appropriate given the Government's intention that the Commercial Ready program should contribute to increased economic growth for Australia through commercialisation and innovation by SMEs?

## 3. Issues for consideration

This section identifies and discusses key issues that are being considered by the Government as part of the Commercial Ready program's design process. As noted in Section 1, comments on the issues, such as those raised in this chapter, are sought from all interested parties for the purpose of developing a considered position on how the Commercial Ready program can best achieve its objectives.

#### 3.1 WHOM WILL THE COMMERCIAL READY PROGRAM SUPPORT?

It is proposed that Commercial Ready program support will be available on a competitive basis for non-tax exempt Australian small and medium-sized businesses. The reasons behind this proposal are:

- given that the majority of Australian businesses are SMEs, providing incentives for SMEs to undertake more R&D, proof of concept, technology diffusion and early-stage commercialisation is crucial to enhancing economic growth; and
- due to the long lead times and high risk nature of technology development and commercialisation, SMEs often experience acute difficulty in accessing capital to take ideas to market.

Larger businesses, while not being able to access Commercial Ready program funds, will continue to be able to access other programs, such as the R&D Tax Concession.

#### Issues for comment

- 2. Is \$50 million turnover the appropriate measure for determining whether a business is an eligible SME? Other definitions of an SME that could be considered include a business with fewer than 200 employees, and/or a business with net assets less than \$200 million.
- 3. Can you identify any other issues that should be considered when determining whether a business should be eligible for support?

#### 3.2 WHAT ACTIVITIES WILL BE SUPPORTED?

#### Enhanced flexibility

The Commercial Ready program will be designed to be as flexible as possible. Through it, SMEs—with projects at any stage of pre-commercialisation development, from research to early-stage commercialisation—will be able to apply for Commercial Ready support for a variety of activities including:

- early-stage commercialisation activities;
- research and development with a high commercial potential;
- · proof-of-concept activities; and

• technology diffusion (see section 3.3).

In order to meet the diverse needs of innovative businesses seeking to produce commercial outcomes, it is proposed that SMEs would be able to apply for a grant for one or perhaps a combination of the above activities. For instance, an SME that has acquired intellectual property (IP) with high commercial potential could apply for a Commercial Ready grant to undertake the proof-of-concept activity related to the IP. Similarly, a business with a promising project could apply for a Commercial Ready grant to undertake the R&D and proof-of-concept work necessary to develop the product to a point at which it would be 'commercial ready'.

In this way, it is envisaged that the Commercial Ready program will be able to provide SMEs with a level of flexibility that has previously not occurred, and in so doing enable a greater number of SMEs to undertake more R&D and commercialise more new products and processes.

#### Need for funding

In order to ensure that the Commercial Ready program generates 'additionality' (see section 3.11), it is proposed that Commercial Ready grants will only be available for proposals that, without support, would not otherwise be undertaken.

#### Definitions of eligible activities

The terms 'research and development', 'proof-of-concept', 'early-stage commercialisation' and 'technology diffusion' are fairly broad in nature and could conceivably encompass a wide range of undertakings including, for instance, applied research, IP protection and management, product testing and development, experimental development or prototyping. As such, robust definitions of what constitutes an eligible activity will be crucial.

#### Research and development with a high commercial potential

Research and development activities could be defined as systematic, investigative or experimental activities that involve innovation, technology transfer into Australia or technical risk and result in new knowledge or new or improved materials, products, devices, processes or services.

Activities can be seen as innovative if they have an appreciable degree of novelty, such as:

- seeking previously undiscovered phenomena, structures or relationships;
- attempting to apply existing knowledge or techniques in a new way; or
- the results are expected to be patentable.

Similarly, activities involving technical risk may be expected to have reasonable uncertainty about:

- the results:
- · which of several alternatives is technically feasible; or
- whether the outcome will meet a desired technical specification.

#### Proof-of-concept

Proof-of-concept activity is concerned with the work necessary to establish the commercial and technical viability of a product or process. The proof-of-concept process can involve different activities depending on the particular area of technology involved and it is likely that there will be no standard procedure that all projects will follow. Proof-of-concept activities will, however,

primarily include validation and efficacy of the discovery, or demonstration of the applicability of the new capability.

Early-stage commercialisation activity

Early-stage commercialisation activity could involve a wide range of activities, including related product development and IP protection and management. Related product development is work undertaken to improve the performance or reduce the cost of a product, process or service. Included in such activity could be product testing and the development of prototypes.

IP is defined broadly as 'the tangible representations of intellectual activity'. It can be formally protected through patents, trademarks and registered designs available in Australia through *IP Australia* and through similar IP authorities around the world. IP can also be managed through trade secrets and other specific technological or commercial know-how retained within a business. Businesses may decide that management of IP in this way is a more effective way to exploit the benefits of business-generated technological knowledge to achieve competitive advantage than through formal protection.

However, in some industry sectors, such as biotechnology, IP protection via the patenting system is generally regarded as a necessary business strategy given the long lead times to commercialisation. In other sectors, however, there can be effective non-patent means of protecting a business's IP. It could also be argued that the protection of IP through patenting could inhibit technology diffusion and limit national benefits, contrary to the objectives of the Commercial Ready program. The Industry Research and Development Board (IR&D Board), which currently administers the R&D Start program, has recently investigated these issues and has endorsed a policy on IP Management and Protection<sup>2</sup>.

#### Issues for comment

- 4. How should 'R&D with a high commercial potential', 'proof-of-concept', 'early-stage commercialisation activity' and 'technology diffusion' be defined? What activities should be supported?
- 5. Should some activities only be supported where linked to another activity, such as intellectual property protection and management?
- 6. What other activities could the Commercial Ready program support, for example, in relation to technology access and diffusion?
- 7. Are there any matters relating to the definition of the activities listed above that should be considered in the program development?
- 8. Is there a basis for having certain activities capped, for example:
  - (a) should there be a cap (a percentage of a grant or a fixed dollar amount) in relation to IP protection and management;
  - (b) should there be caps based on industry sectors; or
  - (c) are there other reasons to consider capping the maximum funding for certain activities?
- 9. Should certain conditions be established in determining whether a business can obtain more than one grant over time, if so, what conditions, and if not, why not?

The IR&D Board's IP Management and Protection Policy is available in the R&D Start Customer Information Booklet, available from the AusIndustry website, <a href="www.ausindustry.gov.au">www.ausindustry.gov.au</a>, Department of Industry, Tourism and Resources, 2004.

10. Do you have any other comments relating to the activities proposed to be covered by the Commercial Ready program?

#### 3.3 TECHNOLOGY DIFFUSION

It is generally recognised that around 98% of the world's science and technology developments occur outside Australia. Technology diffusion—the access to and adoption of new technologies and processes by industry which have the potential to facilitate innovation and increase competitiveness—is therefore critical to Australian businesses seeking to establish themselves as world leaders in emerging and high technology sectors and improve productivity and growth. This is particularly the case for SMEs, whose limited resources often mean that access to others' developments and technologies is limited, despite the fact that such access is often of equal, if not greater, importance than their own R&D capabilities.

#### Support for technology diffusion

In recognition of the essential role technology diffusion plays in facilitating innovation and enabling businesses to remain globally competitive, the Commercial Ready program will support technology diffusion.

A number of options exist to promote SME access to, and uptake of, new technologies and knowledge. Under the IAccP, for instance, a technology advisory service called Industry Techlink was established that provides direct business level technology advice assistance to SMEs through a free hotline and half-day visits.

An option for consideration is the establishment of a Commercial Ready program network of expert advisers who could coach SMEs through all stages of the innovation process. These expert advisers would be recruited for their scientific, technical and business expertise, and knowledge of the innovation process. Some of the services they could offer include:

- assisting SMEs diagnose their technology needs and identify opportunities to successfully leverage national and international research;
- linking SMEs with other key players in the commercialisation process including entrepreneurs, R&D institutions, venture capitalists and technology brokers;
- identifying opportunities for strategic partnerships and collaboration;
- providing referrals to other sources of expertise, support and information about other government programs; and
- informing SMEs about foreign government procurement programs.

#### Issues for comment

- 11. How should the Commercial Ready program support technology diffusion?
- 12. How can Commercial Ready be used to enhance the take-up of new and emerging technologies by SMEs?
- 13. If the Commercial Ready program were to provide an expert advisory service, what services should it offer?

#### 3.4 COLLABORATION

There is growing recognition of the importance of collaboration and linkages in facilitating innovation, because of:

- the increasing speed of scientific and technological change;
- the scale of science and the resources required to be leading edge;
- shortened product development cycles and more intensely competitive markets;
- interaction between different technologies and sectors in achieving competitive edge;
- the specialisation of knowledge;
- growing economic interdependence between companies located in different countries as an aspect of commercialisation; and
- integration into global supply chains for R&D, commercialisation, and product development.

#### Business collaboration

Formal and informal collaboration between businesses plays a crucial role in facilitating knowledge flows, technology diffusion and competence building. Indeed, collaboration is a key ingredient in many Australian businesses' competitive strategies and capabilities<sup>3</sup>. Collaboration has also been shown to contribute to the generation of national benefits. For example, a recent OECD report showed that increased collaboration among researchers and research users generally improved the translation of research outputs into economic, social and environmental benefits in Australia<sup>4</sup>.

There are, however, challenges in fostering science and innovation collaboration, especially between publicly funded research institutions and industry. The Mapping Australian Science and Innovation—Main Report<sup>5</sup>, found that collaborations between businesses and researchers need to be characterised by clearer communication and a better understanding by all parties of the culture of the other sector. There are also concerns about the capacity of Australian SMEs to connect with Australia's science, engineering and technology base<sup>5</sup>.

#### Supporting collaboration

Given the crucial role that linkages play in facilitating innovation and generating national benefits, it is proposed that the Commercial Ready program be designed to encourage linkages by establishing collaboration as an indicator under one of the program's merit criteria (such as national benefit, see section 3.9).

Ensuring Commercial Ready program funds remain directed at the private sector

Designing the Commercial Ready program to encourage collaboration raises the issue of how best to safeguard funding intended to support SMEs, often with limited financial capacity, and to establish linkages with research institutions without overlapping with government programs designed to support public sector R&D.

Australian Government, Mapping Australian Science and Innovation-Main Report, Australian Government, (2003), p. 265.

OECD, Public-Private Partnerships for Research and Innovation: An Evaluation of the Australian Experience, OECD, (2004), p. 34.

Australian Government, Mapping Australian Science and Innovation-Main Report, Australian Government, (2003), p. 252.

Accordingly, it is proposed that, while the Commercial Ready program will encourage collaboration between SMEs and research organisations and larger companies in Australia and overseas, only eligible SMEs can access grant money.

Consideration could also be given to capping the expenditure of Commercial Ready program funds on overseas activities as a percentage of the total grant (as is the case in the current R&D Start program) to ensure that the program primarily supports research being undertaken within Australia.

#### Issues for comment

- 14. Do you have a view about the extent to which the Commercial Ready program should support collaboration?
- 15. Is it appropriate to establish collaboration as an indicator under one of the program's merit criteria? Do you want to propose other ways whereby collaboration can be encouraged?
- 16. Do you have any comments about the capping of grants that involve work being carried out overseas?

#### 3.5 GRADUATE INVOLVEMENT

The R&D Start program has provided R&D Start Graduate grants to businesses to engage a graduate to undertake R&D related activities in collaboration with research institutions. R&D Start Graduate projects were intended to form or strengthen links between businesses and research institutions. The grant supported the employment of a graduate, who was not a current employee of the business, to work on a specific R&D related project designed to improve the business's performance. The graduate, in turn, was provided with valuable industry experience and the institution had the opportunity to collaborate with industry on market-oriented programs.

#### Supporting the engagement of graduates

Given that the *Mapping Australian Science and Innovation*<sup>6</sup> report found that linkages between publicly-funded researchers and industry could be further strengthened, and the Higher Education Review's<sup>7</sup> finding that there is scope for improving the number, nature and effectiveness of partnerships between universities and business, it is proposed that the Commercial Ready program be designed to encourage the engagement of graduates (from across all disciplines) through:

- establishing the involvement of a graduate on a proposed Commercial Ready project as an indicator under one of the program's merit criteria (such as national benefit, see section 3.9); and
- establishing the cost of engaging a graduate on a project as an eligible cost for grant purposes.

#### Issues for comment

17. Do you have further advice on how the program can encourage industry to engage graduates?

<sup>&</sup>lt;sup>6</sup> Commonwealth of Australia, Mapping Australian Science and Innovation—Summary Report, Australian Government, (2003), p. 32.

Commonwealth of Australia, <a href="http://www.backingaustraliasfuture.gov.au/review.htm">http://www.backingaustraliasfuture.gov.au/review.htm</a>, Department of Education, Science and Training, 2003.

- 18. What requirements should be attached to the engagement of graduates, for example, relevance of degree, time since graduation, industry expertise and relevance to the project receiving support etc?
- 19. Should encouragement of the engagement of graduates be applied to university graduates and graduates of other higher education institutions?

#### 3.6 GRANT LIMITS

Given the broad range of activities and projects likely to be eligible for support under the Commercial Ready program, consideration is currently being given to the maximum size of grants.

The total financial assistance available under current innovation programs such as R&D Start, BIF and IAccP varies between \$15 000 and \$15 million. BIF proof-of-concept grants are limited to \$250,000. In determining whether grants should be capped, it will be important to balance the costs of undertaking innovation activities against other factors. In particular, it will be important to ensure that Commercial Ready program funds are spread widely enough to ensure they are accessible to a wide target audience.

Issues for comment

20. What is the appropriate cap for a grant program for SMEs in relation to the various activities being supported?

#### 3.7 MATCHING FUNDING

Most Australian Government innovation programs, including BIF and R&D Start, provide funding on at least a matched contribution basis. R&D Start Core grants and BIF grants, for instance, are available for up to 50% of eligible project costs, with applicants expected to finance the rest of their project.

The reasons for providing funding based on at least a matching basis include:

- a matching contribution requirement tests the extent to which applicants are committed to a
  project, and ensures that businesses have a vested interest in achieving a successful outcome;
- 'risk-sharing' is appropriate given the benefits of the project that are likely to be captured by the recipient of the grant; and
- by offering grants for up to 50% of eligible project costs, the limited program funds can be distributed to a greater number of businesses.

Most government innovation programs that include a 'matching contribution requirement' also have policies in place to prevent applicants from receiving assistance from multiple government assistance programs for the same project. For example, the IR&D Board has stated that, in the interests of ensuring that businesses themselves have funds at risk and a vested interest in achieving a successful outcome, applicant contributions to a R&D Start project should not consist of monies acquired through other Australian Government or State government programs. Notable exceptions to this arrangement include BIF, the Pre-Seed Fund, the Innovation Investment Fund and the Renewable Energy Equity Fund.

#### Matching contribution requirement

It is proposed that Commercial Ready grants be available for up to 50% of eligible expenditure on a proposed project and that applicants should be expected to demonstrate that they are not financing their share of project costs via assistance from other Australian (Federal) or State government programs.

There may, however, be a case to allow applicants seeking proof-of-concept support to include monies acquired through State Government programs as part of the applicant's contribution, as is currently allowed in BIF.

Issues for comment

- 21. Should the program's coverage be increased to a greater number of businesses by encouraging greater private sector contributions?
- 22. What is the justification for allowing applicants seeking proof-of-concept support to include monies acquired through State Government programs, when other applicants will not be able to do so?

#### 3.8 GRANT DURATION

The maximum lifetime of a Commercial Ready grant needs to be determined. If the lifetime is too short, businesses may be unable to complete their projects within the specified period. Having grants with very long lifetimes raises issues about the capacity of the business to predict their expenditure profile and in turn impacts on administration of grants by the delivery agency. Long term grants might also limit the program's ability to manage funds to applicants, if funds are committed but remain unspent. Most R&D Start grants have been provided over a period of two years and BIF grants over 18 months.

Given the above, it is suggested that a Commercial Ready grant be limited to a maximum of three years duration.

Issues for comment

- 23. Is a maximum grant lifetime of three years appropriate for SMEs?
- 24. Under what circumstances should, for example, a two year Commercial Ready grant be extended to the proposed maximum grant lifetime of three years?

#### 3.9 NATIONAL BENEFITS

Investment by SMEs in R&D, proof-of-concept, technology access and diffusion, and commercialisation can benefit Australia in a number of ways, including by:

- Creating more competitive businesses and jobs;
- enhancing national productivity and economic growth;
- diffusing knowledge, skills and know-how to other parts of the Australian economy; and
- generating societal and community benefits.

In order to maximise the effectiveness of the Commercial Ready program, it must generate a benefit for the economy and broader Australian community that outweighs the opportunity cost of its funding.

#### Enhancing national benefit

Accordingly, it is proposed that Commercial Ready program support should be available for proposals that are likely to provide net economic benefits to the Australian economy and broader community. It is proposed that applicants be required to submit a 'statement of national benefit' with their application, identifying how their proposal is likely to deliver benefits to the Australian economy and broader community.

The IR&D Board has endorsed a policy on National Benefits<sup>8</sup>. This policy requires the Board to have regard to the national benefits likely to be generated by a project when dealing with applications and agreements. It would be expected that such policies would be incorporated within the Commercial Ready program.

Issues for comment

25. What requirements can be built into the Commercial Ready program to maximise national benefits?

#### 3.10 OVERSEAS COMMERCIALISATION OR TRANSFER OF IP

Local control and commercialisation of IP, where possible, is likely to maximise the net benefits to the Australian economy and community generated by a Commercial Ready project. Local research, development and commercialisation will therefore be preferred wherever possible.

In many cases, however, net economic benefits to Australia can still be derived from IP that is commercialised wholly or in part overseas, particularly in the development of products that have global markets or are part of global supply chains. Selling part of a locally owned business or its IP to an overseas buyer, for instance, may be the most effective means of acquiring the skills necessary to commercialise the IP or gain access to overseas markets. In such cases, the overseas sale or licensing of IP could result in the generation of national benefits (such as more local employment) and so deliver a net economic benefit to Australia.

However, sale of IP can result in all the commercialisation and national benefits occurring offshore to the extent that there is a net economic loss to Australia. For instance, if Commercial Ready supported the R&D and early-stage commercialisation work on a new product in Australia, and the company or its IP were sold overseas on terms that did not result in a substantial flow of income and other benefits to the Australian entity and the economy, the end result would be a transfer of wealth (in the form of a Commercial Ready grant) from the tax payer to the business (which receives the grant and any profits from the sale) and overseas buyer, and reduced national benefits for Australia.

Consideration of applications where overseas commercialisation of the project is planned

Given the above considerations, it is proposed that Commercial Ready applicants could be expected to specify in their applications whether they plan to sell or otherwise transfer control of a Commercial Ready project or its IP overseas. In considering applications where overseas

The IR&D Board's National Benefit Policy is available from the AusIndustry website, <u>www.ausindustry.gov.au</u>, Department of Industry, Tourism and Resources, 2004.

commercialisation of the project is planned, the IR&D Board would assess whether the proposed overseas commercialisation of the project is still likely to deliver a national benefit to Australia.

Controls if IP derived from a Commercial Ready project is sold overseas without the Department's endorsement

It is proposed that, where an applicant's original application does not include a transfer of control of a Commercial Ready project or its IP overseas, applicants considering selling or otherwise transferring control of their company, the project or its IP overseas should submit a request to the Department, which would be referred to the IR&D Board for its advice.

Where a transfer of control overseas occurs without the Department's endorsement, the Department could ask the IR&D Board to revisit the grant recipient's original application and assess if the recipient's claims concerning the national benefits to be delivered by the project have been met. If the IR&D Board determine that, as a result of the transfer of control, the recipient's original claims for national benefits from the project can not be realised, the recipient would be required to pay back part or all of the Commercial Ready grant (that is, the Department would 'claw back' the Commercial Ready grant). This would be consistent with the premise that Commercial Ready support is provided in exchange for the generation of national benefits.

Issues for comment

26. In what circumstances should a transfer of control of IP overseas be considered acceptable in the context of the Commercial Ready program?

#### 3.11 ADDITIONALITY

The Commercial Ready program aims to *increase* the level of investment in commercialisation and innovation by SMEs. In order to achieve this, the Commercial Ready program funds should *induce* R&D, technology diffusion, proof-of-concept, and early-stage commercialisation activity, not merely fund innovation that would proceed without government assistance. This will ensure that Commercial Ready program funds are used to generate outcomes *additional* to those that would occur without the funding.

Reasons why investment in commercialisation and innovation by an SME may not go ahead without some form of government support include:

- the total benefits to Australia are sound overall, but the private returns are insufficient;
- the investment is either too risky or there is too long a lead-time before commercial benefits are realised for a business to undertake the activity alone; or
- there is a market inefficiency or failure.

Behavioural additionality

As well as inducing additional outcomes, the Commercial Ready program should ideally also produce some *behavioural additionality*. That is, the program should induce businesses to behave in ways more conducive to successfully undertaking R&D and commercialisation activities than they otherwise would. For example, the Commercial Ready program could induce businesses to become more entrepreneurial, increase their employees' skills, or take greater advantage of networks and opportunities to leverage international and public sector discoveries.

#### Delivering additionality

Given this, it is proposed that Commercial Ready program support will only be provided for R&D, technology diffusion, proof-of-concept, and early-stage commercialisation activity that, without support, would not otherwise be undertaken.

Issues for comment

27. What are the criteria that could be used to maximise the additionality gained from the Commercial Ready program?

#### 3.12 APPLICATION AND ASSESSMENT PROCESS

The Commercial Ready program will be administered by AusIndustry, the program delivery arm of the Australian Government Department of Industry, Tourism and Resources, with the assistance of the IR&D Board. The IR&D Board is established under the *Industry Research and Development Act 1986*.

This arrangement would have the Department receive applications, process them and then refer them to the IR&D Board. The IR&D Board would be responsible for assessing applications against the program's merit criteria and then making recommendations to the Department concerning their relative merit.

Commercial Ready support to be granted on a competitive basis

Because funding is limited to around \$200 million per annum, it is proposed that Commercial Ready support be granted on a competitive basis.

Streamlining the application process

The new program should have streamlined objectives, and the intention at this stage would be to develop a single set of selection criteria. The Commercial Ready program will seek to minimise compliance costs for customers seeking to meet eligibility and selection criteria, whilst still ensuring compliance with financial management and accountability requirements. Compliance requirements will be carefully tested to ensure there is a demonstrable need for their inclusion in the program's design.

#### Merit criteria

Each of the existing competitive grants programs involves assessment of applications against identified merit criteria. The merit criteria for the Commercial Ready program will be developed after consideration of views expressed at the consultations and through submissions. However, based on the issues being explored in this Paper and existing merit criteria for programs such as R&D Start and BIF, they could be expected to include:

- the management capability of the applicant;
- the commercial potential of the proposal and the applicant's ability to exploit that potential;
- the technical capabilities and resources available to the applicant and the technical soundness of the proposal; and
- the extent to which the proposal will provide national benefits.

#### Meeting the merit criteria

The Commercial Ready program is directed at achieving commercial outcomes through providing assistance to SMEs. It is well recognised that achieving commercial outcomes can be facilitated through effective business and commercialisation plans, and so it is intended that plans will form an integral part of the application process. The Department would, however, welcome comments on how businesses structure such plans and whether more direction may be required in their development.

To enable a robust assessment of applications, it is intended that applicants will be expected to provide the following material when applying for a grant:

- a detailed business plan that demonstrates the applicant's ability to fund the project through to completion;
- a commercialisation plan:
  - demonstrating that a realistic market potential exists for the product, service or system being developed and identifying a strategy to fund commercialisation;
  - o including an IP management and protection strategy;
  - identifying the degree of risk associated with achieving the technical objectives of the
     project on time and on budget; and
  - showing that the applicant has the technical capability, staff and equipment to undertake the project; and
- a 'statement of national benefit' addressing how the proposal is likely to deliver benefits to the Australian economy and broader community that outweigh the cost to the tax payer of the Commercial Ready grant.

#### Issues for comment

- 28. Are there elements of the existing R&D Start, BIF or IAccP application processes that should be adopted to reduce application and compliance costs for applicants?
- 29. How can the Commercial Ready program application form be designed to make it as user-friendly as possible, and are there other options for reducing application costs?
- 30. Based on the issues being explored in this Paper, which merit criteria should apply to Commercial Ready program applications?
- 31. In the interests of streamlining access to the Commercial Ready program, is a single set of merit criteria appropriate for applications requesting support for a diverse range of purposes?
- 32. Do you have any comments on the material expected from businesses applying for a Commercial Ready grant? If so, explain why and identify alternatives.
- 33. Should the risk and potential benefits associated with a proposal be assessed, and if so, how?

#### 3.13 PROGRAM PERFORMANCE INDICATORS

Importantly, to assess the effectiveness of the Commercial Ready program, it will be necessary to establish a set of key performance indicators that reflect the program objectives and, ideally, are easily measured. The Australian Government is responsible for ensuring that it can measure the impact of its support on improved innovation outcomes.

Consideration is currently being given to this issue. Examples of possible program key performance indicators could include those used in the R&D Start program, such as the number of projects progressed to commercialisation (that is, from product to market), the amount of sales of new products, processes and services, and IP generated. Other performance indicators that could be required from firms supported under the program could include: impact of support on employment, skills development, new products, turnover, new markets etc.

Issues for comment

34. What performance indicators should be used to measure the Commercial Ready program's success?

#### 3.14 OTHER ISSUES

The Department would welcome comments from interested parties on any other issues that should be considered in the design of the Commercial Ready Program.

### Acronyms

BIF Biotechnology Innovation Fund

IAccP Innovation Access Program

IP Intellectual Property

IR&D Board Industry Research and Development Board

R&D Research and Development

SMEs small and medium-sized enterprises

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