REVIEW OF THE NEW RESEARCH AND DEVELOPMENT TAX INCENTIVE

26 OCTOBER 2009

1 Introduction and Overview

The Australasian Industrial Research Group (AIRG) is the professional body for managers responsible for technological innovation and R&D in public and private companies operating in Australia and New Zealand. Its affiliate members are from public research agencies, universities and service groups with interests in science and innovation.

The AIRG’s role is to improve the quality of research management in Australia and New Zealand by organising activities which stimulate greater understanding of the effective management of research and development as a force to drive economic, industrial and social activities.

In recent years AIRG members have maintained close contact with the Department of Innovation, Industry, Science and Research on the subject of innovation policy. The AIRG has had a representative on the R&D Tax Concession Consultative Group for many years. In developing this submission, the AIRG has attended recent briefing sessions on the new R&D tax incentive and has held internal meetings. This submission has 3 main further sections after the executive summary of Section 2.

In Section 3 of this submission we confirm that the AIRG fully supports all the principles underlying the new R&D tax incentive. With regard to principles 1 to 5 and the associated questions, we support the proposed amendments and have some constructive suggestion that may aid implementation. However, for principles 6 and 7 further careful analysis is required in order to have the right amendments that will fulfil the required principles.

Section 4 of the submission provides detailed analysis and recommendations with regard to the proposed changes in the definition of core R&D. There is a risk that some of the proposed changes will adversely affect groups such as SMEs and actually defeat the intended principle.

In Section 5 a detailed analysis and recommendations are provided with regard to the proposed changes in the definition of support activities.

Appendix 1 provides recommendations that could facilitate efficient and effective administration.
2 Executive summary

The AIRG supports the principles of the new research and development tax incentive. Most of the changes to the incentive presented in the consultation paper are logical steps towards fulfilling the principles on which the new incentive is based. However, some recommendations, while apparently resolving problems with the current R&D Tax Concession legislation will, if implemented, prevent fulfilment of the new principles, the AIRG believes.

Therefore, to address this, the AIRG has made the following suggestions:

i. Clearly define the term “innovation”. Definitions including those from the ‘Oslo Manual’ for Product Innovation and Process Innovation are suggested.

ii. Simplify treatment of supporting activities. Supporting activities should not be capped. A predominant purpose rule should be applied as well as net expenditure rules.

iii. Appendix 1 gives suggestions on how to improve certainty of eligibility or otherwise at the outset of a project, in a self-assessment context. This includes definitions of low technical risk and full dissemination of case law and definitions as they develop under the new definition.
3 The Principles of the New Incentive that are accepted by the AIRG with suggestions that may aid implementation.

The AIRG accepts Principle 1 that the new R&D tax incentive will be available to companies incorporated in Australia for R&D conducted in Australia. The location of ownership of the resulting IP will not be relevant. With regard to question 1, the view of the AIRG is that the allowance for any overseas R&D activities is not an important element of the incentive to be retained; the administrative burden outweighs the benefits.

The AIRG accepts Principles 2 and 3 with regard to the Standard R&D Tax Credit being available at a rate of 40 per cent for eligible R&D expenditure and that a refundable rate will be available to companies with a group turnover of less than $20 million at a rate of 45 per cent for eligible R&D expenditure.

Principle 3, suggestion 3.1 - Index-link the $20 Million cut-off. With regard to the $20 million group turnover cut-off, it is recommended that this have provision to be increased, by having it index linked, to reflect the general level of inflation, with the resulting adjustment to the cap being implemented at perhaps two year intervals.

With regard to questions 2 and 3, the AIRG has no objections to the proposed mechanisms for managing these points as set out in Item 41 and either of the options in Item 43.

Principle 4: the AIRG accepts this principle that legislation for the new R&D tax incentive will provide support for the scheme’s efficient and effective administration. In Appendix 1, the AIRG makes certain recommendations that could facilitate efficient and effective administration:

Principle 5 The AIRG accepts this principle that the new R&D tax incentive should target R&D that is in addition to what otherwise would have occurred; and that it provides spillovers. Through the years of meeting with AusIndustry representatives, AIRG’s R&D representatives who all have come from organisations involved in industrial R&D have emphasised that the existing concession was more a ‘reward’ for R&D activities that would have happened anyway, rather than a mechanism that actively changed the behaviour of companies.

With regard to the “spillover” objective, the AIRG notes that industrial R&D is typically aimed at, and if successful will achieve, the commercial introduction of new or better products or manufacturing processes. In these cases, the benefits will extend outside the company, to the company’s supply chain and, via its employees, to the community. It has been estimated that, typically, for every dollar of benefit captured by the company in such cases, there are two dollars of spillover benefit generated. On that assumption, in industrial projects, if the high technical risk and innovation criteria are met, spillover will be a natural outcome.

The AIRG also notes that for such spillover to occur, the R&D must either be in the industrial sector or be followed by R&D in the industrial sector; and if the definition of “innovation” proposed below is accepted, this test is much more easily met.

The next two sections focus on the Key Principles 6 and 7 where the AIRG considers that the new incentive needs to be carefully structured if it is to avoid unintended and undesirable consequences.
4 AIRG Recommendations to Fulfill Principle 6

The AIRG accepts Principle 6, with the following qualification.

Under Principle 6, the eligible R&D activity will be defined as systematic, investigative and experimental activity that:

(a) involves both innovation and high levels of technical risk…..

The AIRG is concerned that “innovation” in this context may be susceptible to a range of interpretations, and thus become a source of uncertainty or confusion; this would be very damaging to the objectives of the new incentive. It could have an impact far beyond the tax incentive to impact the entire research and innovation system across Australia, the AIRG believes.

It is useful here to reiterate the current definition of innovation as stated in section 3.1.3 of the current R&D Tax concession guide.

Activities do not involve innovation unless they involve “an appreciable element of novelty”.

• The element of novelty must be meaningful or significant in the context of the activities undertaken and there must be some development of the technology, or a new use of existing technology, for activities to involve innovation.

• Companies claiming activities as involving innovation should be able to identify what element of novelty in the form of new thinking or original ideas or inventive steps was introduced in the activities.

Principle 6, suggestion 6.1 - The AIRG proposes that the definition of innovation should be changed to reflect the conventions of Industrial R&D.

With this in mind, the AIRG universally agrees on a definition of “INNOVATION” that is commonly used in industry around the world. This is as follows:

“Innovation is the commercial introduction of a new idea, concept, or invention.”

Note that some definitions exist for particular segments of technological innovation. The AIRG believes that the R&D tax concession should only apply for “technological innovation” rather than for all innovation types.

In the USA and elsewhere the definition provided above is commonly held. At the heart of this, and of many other definitions, is the combination of newness and the achievement of its commercial application; e.g., Lars Eriksson “Invention + exploitation = Innovation”, or Peter Farrell “It ain’t innovation until they are signing cheques”.

The Organisation for Economic Co-Operation and Development's document "The Measurement of Scientific and Technological Activities, Proposed Guidelines for Collecting and Interpreting Technological Innovation Data", which his also known as the Oslo Manual, contains guidelines for collecting and using data on industrial innovation. This manual includes a list of the main types of innovation. A number of these innovation types do not align with the definition that
some in Australia have more recently used as a definition and, in particular, some definitions (e.g. marketing innovation) fall under the current exclusions list.

However there are two definitions for Product and Process Innovation that align with the discussion above and which are thus recommended for adoption. These are as follows.

(1) Product innovation definition: “A product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.”

(2) Process innovation definition: “A process innovation is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.”

With regard to any service innovation definition, the technological elements within any service delivery system will all fall into the category of either (1) Product innovation or (2) Process innovation. Hence the above definitions can be applied.”

No additional categories beyond (1) and (2) above are required for completeness, the AIRG believes.

(3) If a single, simple, overall definition is required, then the following is strongly recommended, as it is the common view of the AIRG and many others who are well practiced in technological, industrial innovation: “Innovation is the commercial introduction of a new idea, concept, or invention.”

The reason for the above recommendation is that the AIRG is concerned that the approach as proposed in the consultation paper will not lead to any reduction of uncertainty. In fact, uncertainty may be increased.

It is important to provide as high a level of certainty for eligibility as is possible for the crucial start up phase of an R&D project. Industrial development projects are generally organized on professional engineering principles and so will have a risk register. At the start of the project this register will identify in detail high (and low) technical risks. This provides some certainty as to the eligibility criteria for technical risk.

But unless there is equal clarity as to the application of the (technological) innovation criteria to a project, the intended incentive effect may be lost in a number of cases. This may apply, irrespective of project size, and it will impact upon SMEs as well as larger companies. It is the uniform view of the AIRG members who have participated in the development of this position paper, that the best way to achieve this is to have definition as stated above rather than to continue with the existing novelty-based definition.

**Principle 6, suggestion 6.2** - The AIRG proposes that an “innovation plan” replace the existing requirement for an “R&D plan”.

This suggestion assumes that a revised definition for innovation is adopted as is suggested above. Any requirement for an innovation plan should include an intent to achieve a commercial outcome, with a demonstrated level of high technical risk. An R&D programme without an effective innovation plan should be ineligible. This plan requirement will not exclude early stage
research, or activities such as manufacturing process improvement or the extension of existing
product lines.

This innovation plan could either replace or be part of, the existing R&D Plan – a requirement for
any other additional plans should be avoided, otherwise submission for the R&D concession
could become onerous.

5 AIRG Recommendations to Fulfill Principle 7 on Supporting R&D

The AIRG’s responses to Question 4 are as follows;

Question 4 (a) The AIRG does not consider that the supporting activities should be capped as a
proportion of expenditure on R&D. Activities towards the commercial end of the development
process will have a high ratio of supporting activities, activities that are important to achieve
spillover via commercial application. However, if the decision is taken that if a cap is to be
applied to supporting activities, then the following recommendation is made:

Principle 7, suggestion 7.1 - Reward supporting activities at a fixed ratio in relation to the
core, without requiring verification. This considers the case where the ratio of supporting
activities to core activities is fixed at a defined ratio. Since it is the AIRG’s view that nearly all
projects will find some way of justifying support activities up to the ratio cap, relative to the core
activities, why not simply ask the applicant to identify just their core activities? Then it is a
universal approach to only award the additional percentage credit for supporting activities without
requiring any further evidence. For a 1:1 ratio, as an example, this is equivalent to doubling the
tax credit percentage applied to core activities alone, with no reference to supporting activities at
all. This would simplify the claiming process considerably – although it may significantly under-
recognize appropriate supporting activities in a number of programmes. However, the AIRG
believes that the benefits of simplicity greatly outweigh to some extent the possible loss due to
any under recognition.

Question 4 (b) The AIRG does not consider that supporting activities should only be eligible
where they are for the sole purpose of supporting core R&D activity. “Sole purpose” would be
very hard to demonstrate. However the AIRG does support the suggestion of clause 63:

Principle 7, suggestion 7.2 - Predominantly supporting activity. The AIRG supports clause 63
of the consultation paper that requires that the support activity be required to be predominantly
for the purpose of supporting a core R&D activity.

Question 4 (c) With regard production activities and dual role activities, the AIRG considers that
there should not be an explicit exclusion. However the predominant purpose test should apply to
the activity. These are best addressed by the points of questions 4(b) and 4(d), including the
AIRG suggestions in these areas.

Question 4 (d) The AIRG agrees that supporting activities should only be eligible on a net
expenditure basis.

Principle 7, suggestion 7.3 – Net Expenditure. Any revenue ultimately gained as a direct result
of a supporting activity should be deducted from the eligible expenses. The AIRG believes that
this outcome could be achieved via an expansion of (for example) the current feedstock
provisions. This would see particular costs that are directly associated with the conduct of, for
example, a production trial, or the assembly of an item, being classified as feedstock input costs and offset against the value of the output. Only those costs above the value of the output would then qualify for concessional support. The AIRG acknowledges that this measure would impact ‘core’ as well as ‘supporting’ R&D activities. In the AIRG’s discussions, it was noted that production trials could run at a loss due to economic factors and not due to just technological factors associated with the trial. For example, there may be changes in the market price of a commodity output. However the AIRG believes that such economic factors should not increase the eligible concession.

Question 4 (e) The AIRG does not consider that supporting activities should attract a lower rate of assistance. The rate of assistance should be a constant; the cost, whether core or supporting, is necessarily incurred to allow the project to proceed. Therefore, there is no reason to differentiate in the AIRG’s view. The only exception is if the AIRG suggestion 7.1 above is adopted.

The AIRG’s response to Question 5

**Principle 7, suggestion 7.4 - Have an inclusion list as well as an exclusion list.** As well as exclusions, the AIRG believes that there should be named inclusions, for example activities in the science and engineering fields, for those fields where the government wants to encourage more R&D. Of course, activities in the ‘included’ technology fields would still need to meet the definition of R&D and be necessary for the purposes of innovation.

The AIRG’s response to Question 6 on software R&D.

**Principle 7, suggestion 7.5 - The UK approach appears to have merit.** As set out in Item 76 and Item 77, this would address the main issues in the current system.

Please refer to Section 2 for the executive summary.
Appendix 1

Recommendations that could facilitate efficient and effective administration

**Principle 4, suggestion 4.1 - Better customer education program.** There needs to be a better ongoing customer education program than that for the previous legislation. This would help to provide certainty as to the key boundaries (e.g. ‘innovative/not innovative, high risk/low technical risk, Core activity/support activity). This program could take the form of interpretative decisions similar to ATO IDs. These could be rendered anonymous. This guidance could be based on Tax Concession Committee rulings that are accepted by all parties and agreed negotiated outcomes. Confidential outcomes should be the exception, not the rule.

**Principle 4, suggestion 4.2 - The new incentive should use on case law and clear guidelines rather than rigid exclusions.** Question 5 asks about amendment to the list of exclusions. Rather than a use a rigid set of exclusions, the new incentive should be based on case law and clear guidelines that can develop and mature as the new incentive becomes a valuable part of the innovation landscape. This landscape itself is continuously changing as new technology directions emerge, making any prescriptive exclusions list rapidly dated. Therefore, the AIRG believes that its proposed approach is preferable to a rigid set of exclusions.

**Principle 4, suggestion 4.3 - Keep the number of changes to the legislation to a minimum.** In achieving all of the principles it is preferable that there are just a few major changes to the legislation, rather than many minor changes, if this is feasible. Both Commonwealth organisations and industry are familiar with the current legislation. Every change is likely to render the previous body of knowledge in that specific area as irrelevant. Time and effort will be needed on both sides to come to terms with the new interpretations and definitions – and how one new clause will affect the interpretation of other clauses. A few major changes that genuinely achieve the principles are preferable to many smaller changes.

**Principle 4, suggestion 4.4 - Avoid using the term ‘technical risk’ in an ambiguous fashion.** The consultancy paper is imprecise in the use of the term technical risk and this should be corrected in all further documentation. For example, in the paragraph directly after the definition of principle 6 makes the following statement:

……. *Government’s current intention is that the definition of core R&D will require SIE activities to be both innovative and technically risky*

This is ambiguous and confusing. ‘Technically risky’ could mean either low technical risk (and hence outside the definition of Core R&D) activities or high technical risk (and hence within the definition) activities. This ambiguity is repeated in the example box at the top of page 10 of the consultation paper.

It is suggested that reference is only made to either high technical risk or low technical risk. Use of the term technical risk without qualification should be only used where absolutely necessary.

**Principle 4, suggestion 4.5 - Definition of low technical risk** Some reviewers suggested that a clear definition of the term low technical risk would be an equally useful complement to the definition of high technical risk and help to provide certainty.