

**Submission on the second draft exposure legislation
and the explanatory memorandum of the
New Research and Development Tax Credit Scheme**

Prepared by

Dr Terry Freund

ph 0417229893

email freundconsulting@iprimus.com.au

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To General Manager
Business Tax Division
The Treasury
Langton Crescent
PARKES ACT 2600

1 Summary

The second version of the R&D Tax Credit Scheme is less generous, less predictable and more complex compared to the existing scheme and unintended consequences remain.

Major uncertainties and difficulties exist in the applying the narrow definition of core activities and the “dominant purpose test” that will apply to most “supporting activities”.

Revenue foregone may be 50% less compared to the existing scheme and therefore the commitments made by Ministers Carr and Swan that the new scheme will be revenue neutral may be dishonoured.

SMEs may find compliance difficult and more time consuming as a result of the new definitions of core and supporting activities and the need to separately identify and link core and supporting activities. This may add to the work load and technical difficulty in registering.

That the new scheme may not implement industry policy remains a major issues for the following reasons:

- The second objective of the scheme is to support the creation of new knowledge, but this does not directly result in spillover, exports or wealth creation.
- The new scheme directly supports innovation only when it falls within the narrow scope of the new definition of core activities. Thus many innovative based R&D projects may be excluded which directly conflicts with many statements by the current government on the importance of supporting innovation including the following –

“innovation is critical to the survival of manufacturing in Australia ...that is why Labor says that, in the 21st century, innovation policy is industry policy.”

and

“Australia has relatively few large firms so it is especially important that we lift the innovation performance of smaller firms”.

It is strongly recommended that the introduction of the new scheme be delayed and a detailed study be undertaken to ascertain whether the new scheme as proposed is practical and revenue neutral and meets Ministers Swan and Carr’s following commitment made on 18 December 2009

“to follow through on the Government’s commitment to deliver a more generous, more predictable, and less complex tax incentive by replacing the outdated and complicated R&D Tax Concession”.

Other reasons why its introduction should be delayed is that insufficient time has been provided to properly analyze the second exposure documents and the drawn out process is now creating uncertainty for industry since they do not know what R&D will be supported from 1 July 2010 which is only 2 months away.

2 Core activities – the proposed narrow definition

The definition of core activities is much more narrow in scope compared to the current definition. in that the option of the “core” activities involving innovation defined as an appreciable element of novelty has been removed and the purpose is now limited to new knowledge. Thus experimental activities, that involve developing a product, process etc based on a novel concept or are a novel outcome, may not satisfy the requirements of the new “core” activities definition..

Instead experimental activities to be eligible core activities will need to satisfy all of the following four tests: (ref EM 2.11 to 2.23):

1. Achieving the outcome is not deductible by a competent professional based on current knowledge, information or experience
2. There is significant risk that the experiments will not result in the desired outcome
3. Scientific method must be applied rather than knowledge discovery, problem solving techniques or trial and error.
4. The dominant purpose must be for generating new knowledge.

It is most likely that many R&D projects undertaken by SMEs will fail one or more of the above four tests. The problem will be compounded by AusIndustry staff, who are semi skilled in the relevant science/technology and the legal application of this legislation, demanding that SMEs demonstrate all four of the above requirements.

Some observations in relation to the core technology definition are:

- Test 1 is highly subjective and it is quite possible in contentious cases that one expert will be of the view that the outcome is deductible by a competent professional and the next will say that it is not. In making this judgment, it will be necessary to reconstruct what was the “current knowledge” at the time of the activity.
- With reference to test 3, experimental activities based on knowledge discovery, problem solving and trial and error may not be eligible.. It is noted that the dictionary meaning of “trial and error” is defined as a method of discovery based on practical experiments rather than on theory. This and problem solving is a characteristic of most R&D projects undertaken by SMEs
- The dominant purpose of few if any projects conducted by SMEs are for generating new knowledge (test 4)..

It is noted that many projects conducted by SMEs involve the design, construction and testing of prototypes and their modification based on feedback. Even where innovation is involved and proven, AusIndustry staff may consider that this to be trial and error.

An example of a projects that may be considered to be mostly trial and error in nature is the Smartread example in the EM which involves testing of various compounds. Another example of trial and error is Edison’s invention of the light globe which involved testing many materials before coming up with a suitable filament.

Test 4 may result in a very narrow interpretation of what is eligible.. For example, the technical objective of an R&D project may be to develop an engine which is 20% more energy efficient. As the project progresses, innovative concepts may be identified and developed and software for an engine management system developed, all of which collectively contribute to achieving the efficiency improvement. Thus it could be argued that new knowledge is being generated as part of achieving the technical objective. However, it is very much open to debate what is the dominant purpose and it is most likely that the dominant purpose of the experimental activities would be to develop an engine that is 20% more energy efficient.

Another example is the Nobel Prize winning research undertaken by Professor Florey and his group to develop a process for producing penicillin. Most considered that the purpose of this research was to save lives and reduce human suffering caused by bacterial infections and this was the most likely reason that this research received external funding. Florey subsequently claimed that the research was an “interesting scientific exercise”. Again, it is highly debatable and therefore uncertain what was the dominant purpose of the research activities.

The unintended consequence is that the proposed legislation in combination with the guidelines in the EM may be used to exclude most projects conducted by SMEs..

The uncertainty in applying and potential narrow legal interpretation of the definition of core activities will be compounded by SMEs who adopt a conservative approach since they do not wish to be exposed to penalties or time consuming audits.

It is strongly recommended that the definition of core activities be changed so that it is practical for SMEs to apply and does not have unintended consequences.

A final observation of if the new definition and its application in the EM is that there appears to be an over emphasis on proving (or disproving) hypotheses and that new knowledge be generated by this process. Industry R&D involves much more than is.

3 Supporting activities – dominant purpose test to apply in most cases

It is most likely that the dominant purpose test will apply to virtually all “supporting” activities undertaken by SMEs. Some of the reasons are:

- Almost all activities undertaken in projects where the objective is to develop a new or improved process or production plant, at the very least, directly relate to the production of goods and services. Thus the application of subsections 355-35(1) (a) and (b) means that the dominant purpose test applies to the supporting activities undertaken in such projects. Even fundamental research of the type undertaken in the penicillin example may involve making small quantities of penicillin and thus the dominant purpose test applies to any “supporting activities” such as the construction of a small scale lab plant.
- In most product development projects, best practice management technologies such “design for manufacture” and “concurrent engineering” are applied and this would probably mean that the dominant purpose test would apply to any “supporting activities” since they would be directly related to the production of goods.
- The dominant purpose test would apply to supporting activities such as the construction of prototypes even if they are not for sale since the “goods and services” referred to in S355-35 are not restricted to ones for sale.
- It is likely that dominant purpose test would apply to an activity involving the production of software code which is to be used to provide a service for the reason that the directly related test would apply.
- The dominant purpose test applies to all excluded activities, some of which apply broadly. For example, the exclusion - “associated with complying statutory requirements and standards” would apply to most R&D activities undertaken by the manufacturing sector meaning that virtually all “supporting” activities undertaken by this sector would be subject to the dominant purpose test.
- Most SME manufacturers carry out R&D in a production environment. This may result in the dominant purpose test applying to any ‘supporting activities’.

It may be unintentional that the dominant purpose test may apply to most “supporting” activities. The EM including the examples suggests that the dominant purpose test is to apply only when the activity involves producing goods for sale or provision of a service that results in income or the direct result of the activity (eg a road to a mine) will be used for income earning purposes.

The next issue is that SMEs are likely to find it extremely difficult to apply the dominant purpose test. The EM identifies two tests:

1. EM 2.30 states that “dominant purpose means the prevailing or most influential purpose”, but provides no guidance or methodology on how to apply this test.
2. Whether it would have occurred in any case, ie if the R&D project was not being undertaken.

In my previous submission, I attempted to develop “logical” methodology that involved identifying the purposes of the “supporting activity” and then determining which was the “the prevailing or most influential”. From this, I concluded that, many existing activities that currently qualify as supporting activities may be excluded when such methodology is applied, that the dominant purpose test may be impractical and may create considerable uncertainties for SMEs.

Other compliance difficulties for SMEs related to supporting activities are:

- Determining when to apply the dominant purpose test.
- Identifying and categorizing core and supporting activities including relating or linking supporting activities to the relevant core activities. The narrow definition of core activities (experimental activities that satisfy the 4 tests identified above) adds to the complexity of identifying core activities and may lead to a proliferation of the number of activities that need to be registered for the reason that many activities currently being registered are blend of what will be core and supporting activities under the new scheme.
- That the Innovation Australia Board may decline to register activities or parts of activities may mean that registrants may be required or feel the need to provide much more detail to ensure successful registration
- That the registration may be reviewed by Board staff only partly knowledgeable in the science or technology involved and only semi-skilled in the application of the R&D Tax Credit legislation and demand evidence such as demonstrating that “the outcome could not have been determined in advance”. I note that some staff acting on behalf of the Board do not appear to be able to apply the current legislation – only last week one claimed that “construction” was not eligible!

4 Will the R&D Tax Credit Scheme be revenue?

Minister Carr in a speech made on 24 February 2010 at the AusBiotech CEO Summit, stated that the new R&D Tax Credit scheme “*will be revenue neutral*” (in comparison to the current R&D Tax Concession Scheme).. This has been a continuing promise made by government ministers since the announcement of R&D Tax Credit Scheme.

Evidence has previously been supplied that merely abolishing the 175% premium may be sufficient to ensure revenue neutrality without otherwise tightening eligibility. Kris Gale of Michael Johnson & Assoc, using the limited public data available, demonstrated that solely abolishing the premium may be sufficient to balance the additional basic benefits for both small and large companies.

Modeling on this matter by the Commonwealth has not been made public or perhaps not undertaken. Therefore the question must be raised whether the Commonwealth will honour the revenue neutral commitment. In view of the Commonwealth being adamant that the new scheme will be revenue neutral, evidence needs to be released that this will be the case.

On the other hand, it may be that the revenue foregone may be much less compared to the existing scheme or the reasons that eligibility is significantly narrowed in a number of areas and access is more difficult and complex for SMEs. These reasons include:

- Compared to the existing scheme, the proposed R&D Tax Credit Scheme will not necessarily support innovation. This branch of the core activities has been removed and therefore projects that involve innovation and experimental activities, but do not satisfy all

of the four identified tests identified above required by the new core activity definition will not qualify. An unknown but probably significant proportion of core activities/projects will therefore be excluded.

- As argued above, most “supporting” activities will be subject to the dominant purpose test and a proportion of activities will be excluded for this reason.
- The list of excluded activities has been extended resulting in some activities eligible under the current scheme being excluded.
- The “not at risk” test has been tightened resulting in some projects being excluded.
- The feedstock rules are yet to be formulated and may lead to additional expenditure exclusions.
- As discussed above, compliance including registration will be more complex, time consuming and expensive and this will deter some potential SME registrants..
- That considerable uncertainty will be involved in applying parts of the legislation including the definition of core activities and the dominant purpose test. This may result in registrants, who claim conservatively since they do not want to be at risk of time consuming compliance actions or tax penalties, not claiming their full entitlement.
- The threat that registrants may be required to pay a fee

It is possible that when all these issues are factored in, introduction of the new scheme may reduce the revenue foregone by 50%. However the amount is impassable to estimate.

Therefore it is recommended that the proposed R&D Tax Credit Scheme be applied to a statistically meaningful number of live examples to establish:

- that the introduction of the new scheme will be revenue neutral
- what is proposed is practical
- the following commitment by Swan and Carr made on 18 December 2009 is being honoured

“The draft legislation follows through on the Government’s commitment to deliver a more generous, more predictable, and less complex tax incentive by replacing the outdated and complicated R&D Tax Concession”.

My view is that none of these commitments made by ministers Carr and Swan will be met. When the second version of the R&D Tax Credit Scheme is reviewed in some detail, one is forced to conclude that it is less generous, less predictable and more complex.