

Response to
The new research and development
tax incentive

Consultation paper

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By

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For the past 13 years Tracy-Jayne (T-J) has been one of Australia's leading small, independent R&D Tax Consultants, servicing over 50 small to medium manufacturing organisations from around Australia. Prior to starting her own business in 1997, T-J worked for the Australian Taxation office for 12 years in the Audit, Appeals and Review and Human Resource areas.

T-J holds a Bachelor of Laws from the Queensland Institute of Technology and a Master of Business Administration from the University of Queensland. Her clients have a deep commitment to innovation and quality and many are industry leaders in their field. Over the years that her business has operated, T-J has developed long-standing, genuine relationships with her clients based on her extensive understanding of the manufacturing sector and her ability to deliver results with competence and integrity.

THE NEW RESEARCH AND DEVELOPMENT TAX INCENTIVE

ELIGIBLE R&D ACTIVITY

Principle 5

The new R&D tax incentive should target R&D that:

- (a) is in addition to what otherwise would have occurred; and
- (b) provides spillovers – benefits that are shared by other firms and the community – that are large relative to the associated subsidy.

1. A public subsidy for R&D should generate additional R&D activity with benefits that spillover to other firms and the community. This ‘additionality and spillovers’ test applies to the new R&D tax incentive as a whole, rather than individual R&D activities.
2. In a broad based entitlement scheme that allows claimants to self-assess, administrators cannot practically assess whether individual activities provide spillovers and whether the R&D would have occurred in the absence of a subsidy. However, the principle of additionality and spillovers will underpin the design of the rules for what activities will be eligible for the new R&D tax incentive.
3. The Government appreciates that previous attempts at tightening the definition of eligible R&D activity under the current scheme were contentious and that some stakeholders are satisfied with the current definition. However, a new definition of eligible R&D activity is an essential component of the new R&D tax incentive package. Without it, the Government cannot afford to proceed with the incentive at the current rates and turnover threshold and would continue to leave the Budget exposed to lower value add claims.

At the information sessions the representatives were very clear that this principle would not require individual taxpayers to pass any “additionality and spillovers’ test.” We must ensure that this is carried through to the draft legislation as the burden of proof on individual businesses, especially small ones would be unbearable.

It is somewhat unclear as to why a new definition of eligible R&D activity is an essential component of the new R&D tax incentive package. The government could in fact afford to continue with the new incentive if for example they decided to cap total individual project claims at say \$2m per year or some other monetary cap. Similarly what does “continue to leave the Budget exposed to lower value add claims” mean??? Are you suggesting that the current level of R&D competence is below some threshold relating to value adding? How is this so? What evidence are you basing this assertion upon?

What is R&D?

4. Subsection 73B(1) of the ITAA 1936 separates R&D into core and supporting activities.¹ *Core activities* are systematic, investigative and experimental (SIE), of which experimental is the most significant element. SIE activities involve innovation or high levels of technical risk and are carried on for the purpose of:

- acquiring new knowledge (whether or not that knowledge has a specific practical application); or
- creating new or improved materials, products, devices, processes or services.

Supporting activities are carried on for a purpose directly related to carrying on core R&D.

Core R&D

Principle 6

Eligible R&D activity will be defined as systematic, investigative and experimental activity that:

- (a) involves both innovation and high levels of technical risk; and
- (b) is for the purpose of producing new knowledge or improvements.

5. The definition of core R&D will not alter the SIE or purpose requirements. However, the Government's current intention is that the definition of core R&D will require SIE activities to be both innovative and technically risky. These conditions go more to the heart of why a subsidy for R&D is warranted. The absence of either of these factors reduces the likelihood the activity will produce spillover benefits and be in addition to what would otherwise occur.

This assertion is actually incorrect. It is quite possible to get many spillover effects from an innovative product that may not have been particularly difficult in terms of technicality e.g. the Hills' hoist. Similarly there may be technically difficult issues that require a host of scientific activity and yet the end product is not particularly innovative for example solving the manufacturing or processual issues with creating an Australian version of an imported product where the details of its manufacturing process are unknown. Both of these types of projects provide obvious spillovers and additionality. The only real outcome of once again trying to make the definition an additive rather than an alternative is to reduce the fiscal burden on Treasury by disallowing access to greater benefits for what would otherwise be appropriate projects/activities.

6. Innovation is one of the ways in which companies seek to differentiate themselves from their competitors and improve profitability. There is a level of innovation that will occur in the absence of a subsidy. Similarly, companies routinely make commercial

¹ This definition is predominantly derived from the Frascati Manual which provides a methodology for collecting and using statistics about R&D in OECD countries.

judgements about undertaking activities that involve technical risk based on the probability of success, the benefits of success and the costs involved.

7. Subsidising an activity that is innovative but not risky may, at the margins, lead to additional R&D with benefits extending beyond an individual company. However, it is more likely to do no more than subsidise a company for doing what is already commercially sensible. Similarly, a subsidy for activities that involve high levels of technical risk but are not inherently innovative may lead to additional activity but is unlikely to deliver benefits beyond an individual company.

An illustration of innovative and technically risky activity

An Australian company faced a problem that was preventing them from growing their business. Current industry technology and expertise could not provide the solution from available knowledge. The company undertook a program of research and development and created a new device that solved the technical problem. The device was innovative because it was novel. The activities involved technical risk as a solution was not predictable from current knowledge.

The benefits from this innovation will 'spillover' to other companies, by demonstrating what is achievable and through staff moving on with knowledge of how to solve similar problems. However, the company would not have taken those benefits into account when deciding whether the benefits of success justified the risk and outlay in undertaking the R&D.

By subsidising the cost faced by the company, the R&D tax incentive encourages them to proceed with the R&D activities in the face of the financial risk involved, ensuring that the spillover benefits were enjoyed by the wider community.

8. A definition which requires that core R&D activities involve both innovation and high levels of technical risk means that the new scheme will better align with the Frascati Manual and international practice. Currently Australia has one of the broadest definitions of R&D (when compared to the Frascati Manual). Many countries, including the United Kingdom and the United States, take a narrower approach.

Whilst it is true that some the US and UK take a narrower approach it is also true that in this region many countries take the same approach as the current concession e.g. Singapore. By reducing the scope of our own incentive through narrowing the definition we could in fact ensure that some companies move offshore or simply do not locate here.

Supporting R&D

Principle 7

Supporting R&D will continue to be recognised under the new R&D tax incentive but claims will be subject to new limitations.

9. Companies will continue to be able to claim supporting (or non-core) activities under the new R&D tax incentive. This recognises that some supporting activities are required in order for a company to undertake core R&D. Whatever form it takes, any new approach to supporting R&D will be more stringent than the current rules.
10. Currently, a small amount of core R&D can trigger an entitlement to claim large amounts of supporting activities. These concerns are exacerbated where the amount of supporting activity being subsidised is also a significant part of the cost of a related commercial activity. Companies are not required to distinguish between core and supporting R&D in making a claim under the current scheme. However, it is understood that a considerable portion of the current R&D tax concession subsidises supporting rather than core activities.

11. In some cases, supporting activities could themselves produce additional spillover benefits in their own right. However, under the current rules, R&D activities involving large amounts of supporting activities can attract subsidies that are out of proportion to the public benefit.

This principle seems to be a further development of the ATO agenda to minimise the claims that they consider to be commercial in nature (as evidenced by the recent feedstock discussion paper). One could assume that Treasury believes that if the R&D is carried on the context of commerce then there should be definite limitation upon access to any incentive. This is indeed, I submit, a great mistake. Innovation in industry (and let's be clear here this is an *Industrial* R&D Tax incentive) is substantively incremental in nature and market driven. There would be very few organisations that would take on R&D activities simply "to create new knowledge," in isolation. The name of the game is profit (for the organisation) and hence greater tax payments (for consolidated revenue). By limiting the claims of supporting activities i.e. the manufacture of prototypes in the factory or first batches or modification costs/ materials in prototypes etc then the government is taking a great risk that the incentive will become irrelevant to many companies, resulting in a reduction in the Nation's overall R&D activities.

If it is indeed true that "under the current rules, R&D activities involving large amounts of supporting activities can attract subsidies that are out of proportion to the public benefit," then I might say that this phenomenon is not evident in small and medium enterprises. These organisation are inherently conservative in their R&D claims. I assert this after having worked in that sector for over 13 years in the R&D Tax Concession and grant arena. I submit the government's "out of proportion" assertion has come from the "whole of mine" issue that was raised in the Cutler Report and relates to large organisations.

If the Government goes through with any of the below mentioned supporting activity minimisation techniques, then all it will serve to do is strangle the incentive from the small and medium manufacturing sector. If the government wishes to limit the very large over the top claims, then they should be serious about it and simply come out and cap the projects using a definite dollar figure e.g. \$5m per project of \$2m per year etc which would allow the incentive to stay simple and to be far easier to administer and comply with, whilst at the same time allowing the government to stay within budgetary restraints. An even better improvement (see also Rashkin, M "Practical Guide to Research and Development Tax Incentives: Federal, State, and Foreign" CCH 2007,) would be to limit the incentive paid to large companies i.e. companies with a turnover greater than \$100m. This is due to the fact that these companies will generally not engage in additional high quality research and development as a result of receiving an incentive. This means that more can be paid to companies that would perform higher quality research and development with higher government incentives thereby satisfying the additionality requirement outlined above.

Question 4

Should supporting activities:

- (a) be capped as a proportion of expenditure on core R&D?
 - (i) If so, what would be the appropriate proportion (for example, 1:1)?
- (b) only be eligible where they are for the sole purpose of supporting core R&D activity?
- (c) exclude production activities or dual role activities?
- (d) only be eligible on a net expenditure basis?
- (e) attract a lower rate of assistance than core R&D?
 - (i) If so, what would be the appropriate rate be?

Capped as a proportion to core R&D

12. Capping eligible supporting activity expenditure at a percentage of core R&D expenditure would help address concerns about the relative size of claims for supporting and core R&D activity.
13. This approach would set a limit on claims in relation to supporting activity but a limit determined by the company's expenditure on core R&D. If adopted, an appropriate rate would need to be chosen. For example, claims for support activity could be capped at 100 per cent of core R&D expenditure (or some other rate).

Of all of the supporting activity minimisation techniques listed in Question 4 this is the most favourable but only if the proportion is much higher say 1: 15 or 1:10. I have looked at the project costs of many of my clients over 13 years and this would still allow a reasonable claim to make the incentive worthwhile to them. Clearly most of the core activities relate fundamentally to "mind activities" i.e. design, specific experiments which are closely examined by individuals, testing etc. The costs associated with core activities are first and foremost in most organisations, labour costs that is the cost of industrial creativity. So e.g. when the innovative concept design is completed (say core) a detailed design must be drawn up (supporting) and then the widget machine must be manufactured (supporting) sent out to the field (supporting) and tested (core). It doesn't work or breaks and so a new design modification (core) and detailed manufacturing design (supporting) new widget machine manufactured (supporting) etc. If the proportion is one to one well hopefully you can see how miniscule the R&D claim could conceivably be if the whole manufacturing costs were limited to equal that of the time to develop the concept and test the widget.

This is equally true when you consider how innovative concepts arise. Do you really think that a talented engineer is going to come up with an innovative concept by sweating it out over his desk in between production runs? Most small and medium organisations do not have the luxury of a separate R&D section so the average small business innovator is coming up with R&D on the run in between production jobs or perhaps in the relative sanctity of driving to work or after a cool drink on a Saturday afternoon. This is a creative process- and in my experience it is very difficult to get inventive individuals to cost it appropriately or even to own up that they come up with the idea in the shower or at a Trade Show in Munich. Some of the literature e.g. Arthur, W Brian: "The nature of Technology," Penguin Books UK

2009, state that "Rather, they (innovations) emerge in what we often tend to think of as a more mundane way, from something that Arthur calls "deep craft" — that is, from a really thorough understanding of the existing technologies and comprehensive knowledge of a domain. "What you really need in invention is a superb command of the pieces in a toolbox," he said. "What really counts is a mastery of some vocabulary." How do you effectively cost this?

By limiting the incentive to a factor of the core activities "costs" the government is failing to see that R&D is fundamentally a creative process combined with specific technical and scientific processes. Making the innovative widget machine work was and always will be expensive but absolutely vital if the idea is to come into fruition and provide organisational and national benefits. The government needs to incentivise the whole process appropriately.

Sole purpose test

14. A more direct approach would be to adjust the current definition of supporting R&D activities² from:
 - other activities that are carried on for a purpose directly related to the carrying on of [core activities];
 - to
 - other activities that are carried on for the sole purpose of supporting the carrying on of [core activities].
15. This would establish a positive test for activities to meet in order to qualify for the R&D tax incentive. Activities that are undertaken partly for non-R&D purposes — such as current production activities — would not qualify for the incentive.³
16. A variation on this approach would be to require that the support activity be 'predominately' for the purpose of supporting a core R&D activity (that is, something less than the sole purpose but still the leading purpose). This would make some allowance for supporting activities to serve an incidental production role.

These suggestions in 14 and 15 would effectively cause the tax incentive to be essentially irrelevant to small and medium enterprises. It's tough out there. Not much is undertaken without there being a corresponding commercial purpose that is, a dual purpose. These suggestions could be taken to indicate a fundamental misunderstanding of the motive for Industrial R&D. Business people are motivated by monetary success (which is good for the Consolidated Revenue), power and legacy, whereas Scientists are motivated by seeing their work realised in products used by people or in factories employing people and by status amongst their scientific peers. By limiting the production or commercial application of the R&D Tax Credit, the eligibility would greatly diminish, creating irrelevancy of the incentive in the decision making process and hence diminished risk taking.

2 Part of the definition of R&D activities at subsection 73B(1) of the ITAA 1936.

3 The fact that R&D is ultimately targeted at a commercial benefit from the new products or processes developed would not breach this sole purpose test.

If 16 was legislated then we have a whole subjective test situation creating difficult administration and substantiation procedures. Would this test be satisfied if an engineering company had a contract to design and develop an innovative and technically difficult new widget machine which was considered to be the first in the new line of products for the company and which they were receiving a contract price for? From my experience these projects often run at a loss, that is, the whole project costs more than they could appropriately bill. I put it to you that if that engineering company could not claim this whole project as an R&D project or could only claim the net loss (see below) then they would think twice about undertaking the contract and the inherent risks associated with it. Is this the effect in the economy that the government wants?

Excluding production and dual purpose activities

17. Rather than prescribe a sole purpose test, activities with a purpose other than R&D could be excluded. The United Kingdom and Canada use this approach, noting that they also have different administration arrangements.

Yes and the UK and Canada have larger economies and larger GDPs.

18. Production activities have the prospect of producing goods or services for supply to customers. This includes products such as saleable prototypes. Dual role activities have a role other than R&D, such as production or corporate services. These activities would not be considered R&D.

See above.

Historically the R&D that occurs in Australian industry often is generated due to the small (comparative) economy that we have, as well as the tyranny of distance that we suffer. Hence a good deal of the industrial R&D relates to e.g. the need to get one machine to do many things i.e. versatility. This is due to the fact that it is not economically viable in Australia to buy a new piece of plant for each individual activity (as is often the case in larger developed economies such as the US and UK) and then only run it for a few hours per week (as compared to 24/7 as would occur in USA or China for example). When such R&D is undertaken it is essentially a technological project, that is, the application of knowledge to useful objectives. The criterion for successful technology is usefulness and in this economic climate the activities are not undertaken in the overwhelming majority of cases unless the usefulness is backed up contemporaneously by the market and a market price. Businesses simply cannot afford to do it any other way.

Net expenditure only

19. A net expenditure or 'recoupment' approach identifies the net cost of an eligible R&D activity, to subsidise R&D in proportion to the company's effective rather than apparent outlay. This is consistent with the principle that core R&D should entail financial risk. Where a company can recover much or all of its R&D outlay directly from the outputs of the R&D process itself, the need for subsidy is reduced.
20. One option would be to apply a recoupment approach to supporting activities, in order to reduce leakage of support to activities that are profitable in their own right and so target activities more likely to be stimulated by the incentive.

21. A recoupment style approach already applies to feedstock expenditure, which receives limited concessional treatment. This could be applied more broadly to expenditure on supporting activity for all types of R&D activity, whether they be conducted in a manufacturing production line or processing environment, a natural product extraction or processing environment, whether they relate to the creation of custom-built trading stock for sale, contracted mechanical or civil engineering contract projects, or novel infrastructure contract projects.
22. Consideration could also be given to applying a recoupment approach to both core and supporting R&D – that is, a total recoupment approach. This would require rules to be developed, including around the extent of the expenditure to be recouped against and whether these rules should be different across industries.

The net expenditure suggestion will certainly reduce the burden on consolidated revenue. There will be hardly any R&D claims except by large organisations with massive projects. Small and medium organisations will not want to go through the whole taxation R&D costing and planning, application and registration effort and then be subjected to the possibility of AusIndustry monitoring visits and ATO Audits to get an incentive of a 9.9% cash/tax saving on the loss they made on a difficult project. If they are good businesspeople – which the state of our economy indicates many are, then there would be only a small loss, a break even or a small profit. Then to ask small businesspeople and entrepreneurs to go about talking and spending time and energy calculating and claiming projects they would consider being their pecuniary failures- well it just wouldn't happen. Is it possible that this 10% (approx) incentive is going to stimulate them to accept failure? Business people are motivated by positive pecuniary outcomes and will not be motivated to take technical and financial risks knowing the government is going to give them a 10% tax break when the costs are greater than the income. Ok they may make profits in the future from the activities but that's when they are going to want to concentrate on the outcomes and talk about it. Is this what the government wants i.e. an incentive that concentrates on business failures/losses instead of congratulating risk and ingenuity with a small tax break when it happens- motivating the economy and creating optimism and employment? Are you stimulated by going over your failures? Does this government want to be known as the government that introduced a tax incentive that only rewards R&D losses?

A lower rate of assistance for supporting activities

23. Supporting activities are not the specific activities that the R&D tax incentive seeks to target. It is additional core R&D activity which is expected to provide the highest social benefit from the public investment. Given that the social benefit expected to flow from expenditure on supporting activities is much less than core R&D, it may be appropriate to offer a lower credit for expenditure incurred on supporting activities, with the highest credit (either 45 per cent or 40 per cent) reserved for expenditure on core R&D activities.

Maybe. But not much lower.

"Supporting activities are not the specific activities that the R&D tax incentive seeks to target. It is additional core R&D activity which is expected to provide the highest social benefit from the public investment." This is a large value judgement. Why is core giving much greater social benefit than supporting? I hesitate to say that it is certainly not a given as is asserted above. Ok for example a company engineer designs an incredibly fantastic innovative widget machine (core). The company manufactures the prototype according to the engineer's design and adapts a manufacturing process in order to achieve the design outcomes (supporting) and the engineer tests it (core). Assuming the design is innovative/technically risky

wouldn't the social/economic benefits of manufacturing the machine, employing the staff to do it and purchasing the materials and components (preferably) from other Australian companies *in order to prove the efficacy of the design definitively* be of immeasurable value and crucial to the design itself?

Excluded activities

Question 5

Should the current list of activities excluded from being considered core R&D be:

- (a) amended in any way?
- (b) extended to exclude certain activities from being considered supporting activities?

24. A list of activities currently excluded from being considered core R&D is expected to be retained under the new R&D tax incentive. The current list is provided at Attachment C. The primary objective of these activities is considered to be to develop markets, do pre-production planning or to get production or control systems working smoothly. As such, these activities do not add as much benefit for society as core R&D activities. The Government may consider adding activities to the current list. However, this will depend on the response to other options in the paper.
25. Currently excluded activities can be undertaken as a supporting activity and thereby attract assistance. The Government is considering extending the application of the list so that no R&D tax incentive will be available for any activity included on the exclusion list either as core or supporting expenditure. However, taxpayers may still deduct such expenditure through other tax provisions (such as the general deduction provision or the capital allowance provisions).

See attachment C

Software

Question 6

How should the new R&D tax incentive treat software R&D?

26. The Government acknowledges that the treatment of software R&D is a complex area. How the new R&D tax incentive treats software, including the efficacy of the current multiple sales provisions, will require further consideration and consultation with industry. Stakeholders should take this opportunity to suggest alternative approaches to the current treatment of software as part of the new R&D tax incentive.
27. To be eligible for the current R&D tax concession, software activities need to meet a multiple sales test in addition to meeting the normal definition of eligible R&D activity. The multiple sales test was intended to limit government assistance for software R&D to claims where a firm sold the software that was produced, effectively excluding support for in-house software development.

28. However, it is important to note that when the multiple sale provisions were put into place some 20 years ago, the extent of development of e-commerce was not fully appreciated. The Government now considers that the current multiple sales test has become an outdated articulation of policy intent as it relates to software.
29. It is clear that the eligibility of software R&D requires review. The United Kingdom (UK) system may provide a useful starting point for developing a new general approach to software R&D. Under the UK system, software projects considered unlikely to be eligible for tax incentives include:
- the handling of interactions with users (for example, the development of user interfaces and development of data entry procedures);
 - using standard methods of encryption, security verification and data integrity testing;
 - the creation of websites or software using tools designed for that purpose; and
 - creating software that replicates an established paper procedure. That fact that a previously manual task has been automated does not in itself make it R&D.
30. In contrast, under the UK system, software projects that are considered likely to be eligible for tax incentives include:
- developing new operating systems or languages;
 - creating new search engines using materially new search methods;
 - resolving conflicts within hardware or software, where the existence of a problem area and the absence of a known solution have been documented;
 - creating new or more efficient algorithms whose improvements depend on previously untried techniques; and
 - creating new encryption or security techniques that do not follow established methodologies.

The UK system looks ok to me

SUMMARY

31. The new R&D tax incentive will provide more effective and predictable support for Australian companies conducting R&D in Australia. It will also be better targeted at the underlying rationale for public support so that taxpayers receive better value for money. The Government welcomes feedback and comments on the principles and questions outlined in this paper and summarised below.

Design principles

Principle 1	The new R&D tax incentive will be available to companies incorporated in Australia for R&D conducted in Australia. Location of ownership of the resulting IP will not be relevant.
Principle 2	The Standard R&D Tax Credit will be available at a rate of 40 per cent for eligible R&D expenditure and can be carried forward where a company's income tax liability is zero.
Principle 3	The Refundable R&D Tax Credit will be available to companies with a turnover of less than \$20 million at a rate of 45 per cent for eligible R&D expenditure.
Principle 4	Legislation for the new R&D tax incentive will provide support for the scheme's efficient and effective administration.
Principle 5	The new R&D tax incentive should target R&D that: <ul style="list-style-type: none"> (a) is in addition to what otherwise would have occurred; and (b) provides spillovers — benefits that are shared by other firms and the community — that are large relative to the associated subsidy.
Principle 6	Eligible R&D activity will be defined as systematic, investigative and experimental activity that: <ul style="list-style-type: none"> (a) involves both innovation and high levels of technical risk; and (b) is for the purpose of producing new knowledge or improvements.
Principle 7	Supporting R&D will continue to be recognised under the new R&D tax incentive but claims will be subject to new limitations.

Design questions

Question 1	Should there be any exceptions to the general rule that eligible R&D activity must be conducted in Australia?
Question 2	How should the new R&D tax incentive treat R&D expenditure that is currently deductible at 100 per cent?
Question 3	Should payments made to associate entities only be eligible for the new R&D tax incentive where they are paid in cash?
Question 4	Should supporting activities: <ul style="list-style-type: none"> (a) be capped as a proportion of expenditure on core R&D? <ul style="list-style-type: none"> (i) If so, what would be the appropriate proportion (for example, 1:1)? (b) only be eligible where they are for the sole purpose of supporting core R&D activity? (c) exclude production activities or dual role activities? (d) only be eligible on a net expenditure basis? (e) attract a lower rate of assistance than core R&D? <ul style="list-style-type: none"> (i) If so, what would be the appropriate rate be?
Question 5	Should the current list of activities excluded from being considered core R&D be: <ul style="list-style-type: none"> (a) amended in any way? (b) extended to exclude such activities from being considered supporting activities?
Question 6	How should the new R&D tax incentive treat software R&D?

ATTACHMENT A: EXAMPLES OF CONCERN WITH THE CURRENT SCHEME

Example 1: Blended core and supporting activities

A mining company develops a significant new resource project. The project is for the progressive implementation of new mine, mill and waste management processes over a period of 6 years. All of the activities described by the company are somewhat generic in nature and broadly represent project phases. Most activities are claimed to contain a blend of both core and supporting activities.

Taken together these activities account for a significant percentage of the total mining costs in any particular year. The actual cost of the core R&D activity within one of the blended activities is likely to be a small fraction of the total activity. The blending of core and directly related activities makes it difficult to distinguish core activities from supporting activities, or make appropriate expenditure allocations. The claim is expected to be in the order of \$30 million over the life of the project.

The claim illustrates how a small amount of core R&D can be leveraged into a large claim to subsidise a significant percentage of overall costs.

Example 2: Extensive and multiple repetition of trials

A heavy engineering company enters into a contract to develop a series of new transportation modules for a client. The contracted modules are required to meet certain specifications. Many are standard for that type of module, but some elements of the module push the boundaries of known technology.

The design, development and construction of the full series of modules are claimed under the tax concession on the basis that the performance of the modules in relation to the innovative aspects could only be properly tested in a series of completed modules. The supporting activities involved multiple identical trials being claimed after the core activities had been completed. The claim is expected to be in the order of \$200 million over the life of the project.

The claim illustrates how significant claims can be made in cases where the costs of R&D would already have been reflected in the agreed contract price.

Example 3: Software

A company in the finance industry undertakes to provide customers with an enhanced online experience and more simple use of the company's products. The business solution will provide customers with access to an extensive range of on-line facilities. The project provides a common platform for delivery of software-based services over the internet. The project involves internal software development and the integration of a number of existing on-line services with single customer sign-in.

All activities are claimed to involve both innovation and technical risk. The existing multiple sale test provision for software is deemed satisfied, because customers are 'licensed' to access a single sign-on integrated on-line environment. The claim is expected to be in the order of \$15 million over the 4 year life of the project.

This claim illustrates the weakness of the current multiple sale test and the high level of taxpayer subsidy available to activities which largely involve customisation and/or integration of existing systems.

ATTACHMENT B: IMPACT OF COMPANY AND IP OWNERSHIP

Location of ownership		New R&D tax incentive	
Company	IP	Standard R&D Tax Credit	Refundable R&D Tax Credit
Australian	Australian	Eligible	Eligible
Australian	Foreign	Eligible	Eligible
Foreign	Australian	Eligible	Eligible
Foreign	Foreign	Eligible	Eligible

Location of ownership		Current R&D tax concession		
Company	IP	125% R&D Tax Concession	175% Premium R&D Tax Concession	175% International Incremental Concession
Australian	Australian	Eligible	Eligible	N/A
Australian	Foreign	Ineligible	Ineligible	Eligible
Foreign	Australian	Eligible	Eligible	N/A
Foreign	Foreign	Ineligible	Ineligible	Eligible

Note: Assumes the company is incorporated in Australia and that the eligible R&D activity is conducted in Australia

ATTACHMENT C: EXCLUSIONS FROM THE DEFINITION OF R&D ACTIVITY

Subsection 73B(2C) of ITAA 1936 excludes the following activities from being considered core R&D:

- (a) market research, market testing or market development, or sales promotion (including consumer surveys);
- (b) quality control;
- (c) prospecting, exploring or drilling for minerals or natural gas for the purpose of discovering deposits, determining more precisely the location of deposits or determining the size or quality of deposits;
- (d) the making of cosmetic modifications or stylistic changes to products, processes or production methods;
- (e) management studies or efficiency surveys;
- (f) **research in social sciences, arts or humanities;**

Minister Carr has mentioned in recent speeches that this area may need further refinement. I agree. Why is it that an otherwise innovative program that is instituted in industry (I exclude the tertiary/services sectors) that increases productivity and has spillover effects across the economy cannot be claimed as a genuine R&D project? The “soft” sciences have under the R&D Tax Concession been specifically excluded with only core activities based on principles of physical, biological, chemical, medical, engineering or computer sciences considered to be appropriate for the incentive. This is extremely old fashioned and out of step with current advances. Technology is judged on the criterion of usefulness as defined in commercial military, social or medical terms. “The linear model that science creates technology in an orderly and predictable fashion is simplistic and wrong.” (See Boer, F Peter, “The Valuation of Technology. Business and Financial Issues in R&D.” John Wiley and Sons Inc 1999.) I submit that this exception should be deleted and the new incentive opened up to technological advances in the soft sciences as it applies to industry.

- (g) the making of donations;
- (h) pre-production activities such as demonstration of commercial viability, tooling-up and trial runs;
- (i) routine collection of information, except as part of the research and development process;
- (j) preparation for teaching;
- (k) commercial, legal and administrative aspects of patenting, licensing or other activities;

- (l) activities associated with complying with statutory requirements or standards, such as the maintenance of national standards, the calibration of secondary standards and routine testing and analysis of materials, components, products, processes, soils, atmospheres and other things;

I submit that this exception needs to be reconsidered in the light of increasing regulation in many areas especially as regards climate change, occupational health and safety, workplace reform, globalised industry standards, terrorism etc. If an activity is carried out e.g. due to changes in EU regulations which make the product exported to Europe no longer viable, why should that R&D be excluded from the incentive if there is innovation and/or technical risk in solving the problem? There is no common sense reason in today's regulated, problematical, globalised world.

- (m) specialised routine medical care;
- (n) any activity related to the reproduction of a commercial product or process by a physical examination of an existing system or from plans, blueprints, detailed specifications or publicly available information.