The Tax Laws Amendment (Research and Development) Bill 2010

Response to Second Exposure Draft

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Contents

1. Executive Summary

The announcement of the new Research and Development (R&D) Tax Credit (the Credit) in the May 2009 Federal Budget (the 2009 Budget) heralded the replacement of the complex and outdated R&D Tax Concession (the Concession) with a simplified and enhanced R&D tax incentive.

Michael Johnson Associates Pty Limited (MJA) welcomed many of the reforms contained in the announcement. These included higher base rates of support, the introduction of foreign-owned Intellectual Property (IP) into the program and the abolition of the Incremental Concession and the International Premium.

The need for improved Government support for Business Expenditure on Research and Development (BERD) was a crucial element in the Federal Government's (the Government) paper "*Powering Ideas: An Innovation Agenda for the 21st Century*" (*Powering Ideas*) which accompanied the 2009 Budget. *Powering Ideas* was the Government's response to "*Venturous Australia*" (also known as the Cutler Report, a report resulting from the 2008 National Innovation System (NIS) Review.

During the evening of the Wednesday before Easter, the Federal Treasurer and the Minister for Innovation, Industry, Science and Research (IISR) released the second Exposure Draft (ED) legislation and Explanatory Materials (EM) to introduce the new Credit. This followed the first ED and EM released just before Christmas. This "Easter" draft was required because the "Christmas" draft was all but universally condemned by businesses small and large, by industry groups, research organisations, universities and, politically, by unions and the Opposition. The consensus was virtually unanimous that if the Christmas draft became legislation then it would reduce government encouragement of BERD by at least 70%, rather than the original policy intention of the changes being revenue neutral. Unfortunately, the Easter draft leaves many of these problems unanswered and introduces brand new concerns.

The objectives of the Christmas draft legislation, as identified by the two Ministers in their media release of 18 December 2009 on the ED and EM, are to replace the current Concession with a new Credit that:

1. Is more generous with better incentives;
2. Is more predictable with more certainty for businesses;
3. Is less complex with reduced Government red tape;
4. Implements part of the broader Government agendas on productivity and innovation, particularly Powering Ideas;
5. Enables Australian companies to invest with certainty knowing that they will be able to claim an R&D tax offset; and
6. Has been prepared in a way that takes on board the views of stakeholders.

These objectives remain in the Easter draft. In the words of Senator Carr;

> "In light of the feedback received on the exposure draft legislation released in December 2009, the Government has adopted a range of changes to make the legislation clearer and align more closely with the stated intent of the policy."

MJA recognises that the Easter draft has made a range of changes in response to the abysmal reception afforded the Christmas draft. However, MJA submits that the changes have, in fact, made the legislation less clear and, despite some moves in the right direction, is clearly still misaligned with the

stated intent of the Government's policy. The Easter draft still fails to achieve any of the first five objectives and we note that there are increasing real concerns surrounding the consultation process.

The failings of the Easter draft are so pervasive that we believe that the proposed measures constitute a much larger reduction in support for BERD in Australia than those associated with the 1996 changes to the Concession made by the Coalition Government. This ED will result in a similar but more pronounced effect than the 1996 changes in discouraging Australian BERD, along with business investment and job creation in Australia. It will do nothing to assist businesses to become more competitive or to meet the challenges of fundamental technical problems such as climate change and globalisation. Ultimately, this has the potential to seriously affect future economic growth, government revenues and will lead to Australian research being commercialised overseas. Contrary to the views expressed by the Treasurer in the press release announcing the Easter draft, dramatically reducing what is encouraged as R&D under the Credit compared to R&D encouraged by the existing Concession can only discourage investment in R&D and reduce productivity across the Australian economy.

The Easter draft fundamentally alters the nature of the R&D tax benefit available by the replacement of long standing and understood concepts with new and, prior to this draft, completely unheralded ones. This is a serious philosophical change.

This change is apparent from the very first provision of the proposed legislation. All the promotional objectives contained in the Objects clause of the current Concession have been replaced with one restrictive Object in the new program (s355-5), confining the Credit to only those R&D activities that reflect additionality and spillover.

The Easter draft introduces new concepts and removes well understood criteria such as technical risk, innovation and novelty, thereby severely limiting the program to just supporting research. The new Object provision and the definition of Core R&D Activities (s 355-25) apply to only to the "Basic Research" and "Applied Research" parts of the OECD definition of R&D (the Frascati definition). This withdraws all encouragement and support for the largest and most critical aspect of BERD - the systematic work, drawing on the knowledge gained from the research, that is directed at the production of new materials, products or devices, the installation of new processes, systems and services, and the improvement of those already produced or installed. This "Experimental Development" phase of R&D has long been recognised as the step that Australia is poor at and as being the critical phase in securing the benefits of R&D for the Australian economy. Withdrawing support for this phase can only encourage more commercialisation of Australian research overseas and ensure the failure of the program to deliver the objectives detailed above.

It seems that those responsible for drafting the new Credit are having difficulty reflecting the Government's announced policy. As we have submitted on two occasions previously in this process, the draft Credit continues to adopt the views of the Productivity Commission (the PC) expressed back in 2007. The PC advocated a scrapping of the base Concession for all but the smallest companies thereby leaving most to access an incremental-only Concession, a restriction of government support to only R&D that reflected additionality and spillover, and a definition that was narrower than Frascati and which largely eliminated experimental development.

Since the PC, the Cutler Report has recommended the polar opposite – a boost of the base Concession and a scrapping of the incremental option. This is what was announced in the May 2009 Budget. The PC recommendation was not followed. Cutler also talked about extending the concept of

eligible R&D in some ways and Government-commissioned reports including *Powering Ideas* appeared sympathetic to that view.

Yet, since the release of its September 2009 Consultation Paper, the Treasury has continued to pursue a rewriting of the principles of R&D eligibility along the lines of the PC citing the Budget's announcement of "tightening" of eligibility criteria to support "genuine R&D" as its mandate to do so. The rewritten definition has been almost universally opposed in the consultation process and we see no reason why the Easter draft will allay any of the previously-expressed fears.

The Treasury also claimed that it was delivering a revenue neutral package and a new R&D definition more in line with Frascati. Given the refutation of these arguments at previous stages in the consultation process, we are unsurprised that neither of these claims are now been made with respect to the Easter draft. Such claims could simply not be sustained.

The process to create this new program commenced in January 2008. The plan was for the Credit to commence thirty months later in July 2010. The fact that the Easter draft introduces major new and unheralded concepts regarding eligible R&D in the final three months of that process is alarming. That these changes fundamentally change the program to only supporting business research and not development is worse. That the changes are still not modelled and interested parties are expected to adequately review the new legislation in ten working days in a period that includes the 2010 Easter break and school holidays in several states is deplorable.

Recent indications that the subsequent application of the new legislation is dependent on the preparation of sectoral guidelines by AusIndustry raises concerns of increased uncertainty and horizontal inequity, particularly given the harsh treatment meted out to the resources industry in the examples provided in the Easter draft. The fact that none of these guidelines will be available to taxpayers on 1 July heightens these concerns.

In addition to the abandoning of support for R&D in favour of just research, the Easter draft is critically incomplete and has failed to adequately take into account the virtually unanimous concerns raised by knowledgeable interested parties on the practical application of the legislation and processes by the administrators.

For example, the augmented feedstock rule, one of the crucial flaws in the Christmas draft, has been dropped but not yet replaced. Instead, we have a promise to keep the current feedstock offset concept. However, the wording in the EM can be read as an indication of the legislative intent to expand what is excluded from being eligible R&D expenditure under the feedstock offset. The current legislation excludes certain materials and goods that are the "subject of" R&D activities that transform or process these inputs into marketable outputs and the energy consumed to do this. The Easter EM states that the feedstock exclusion will apply to any materials, goods or energy that is merely "used" in an R&D activity whether or not they are feedstock.

The Easter draft has failed to adequately take into account critical errors in the Christmas draft despite advice from knowledgeable interested parties. The replacement of the "Guaranteed return to investors" exclusion with the "Expenditure not at risk" exclusion opens up the potential for changing the R&D tax incentive from a largely guaranteed upfront concession at the time R&D expenditure decisions are made to an after-the-fact compensation measure for research that fails.

MJA fully supports the introduction of the Credit as a replacement for the Concession. However, appearing in the last few months of the lengthy replacement process, the Easter draft has introduced a series of fundamental conceptual and philosophical changes that are new and were not apparent in the

Government's policy announcements. There is widespread concern that this draft is now reflecting "policy on the run". The draft contains brand new definitions and support provisions that seriously change the whole nature of the program in a way that dramatically reduces encouragement for BERD and discourages achievement of the Government's goals. These changes need to be properly explored before this ED becomes a Bill.

We are not opposed to change on the basis of our vested interest as has been inferred in some of the public debate surrounding the Credit. We have always declared our business interest in the R&D tax incentive. We do not blindly support the status quo. In the past, we have advocated for the closure of aspects of the Concession that we believed were detrimental to its operation even when we were deriving consulting fees from these aspects. The most recent example is the Incremental Concession which we opposed from its inception. Another example would be our campaign in the early 1990s to close retrospective claims. We offer our submission based on a consideration of all viewpoints and a desire to secure the best outcomes for the Australian innovation system.

We support the basic design of the Credit and we understand the need to ensure that the benefits are available on an equitable basis. To allay concerns about large, expensive R&D projects, we have been party to suggestions around the review of the exclusions list and the idea of liming consolidated group claims in some way. However, the administrators will not be drawn on these options. When we have asked whether cost control is the aim of the eligibility criteria review, we do not receive an answer. What the Easter draft has made crystal clear is that a broader agenda around the restriction of support for private sector R&D on a changed philosophical basis is apparently being pursued. The Government needs to be certain that this is actually what it is asking of those responsible for writing this vital new package.

It is now clear that this is a new program with a limited carryover from the existing Concession. If the twenty-five years of institutional understanding is to be dispensed with, as has been indicated to us in direct talks with the Government, the reasons for doing so must be clear, fully analysed and discussed and, above all, consistent with announced policy. With respect to the Easter draft, none of these benchmarks have been anywhere near met.

We are gravely concerned that the Credit has been written according to the PC worldview and that this is not the policy intention of the Government. The PC view of business R&D is one that has been shown by Cutler and others to be out of step with international precedents. To move to the PC view of eligible R&D places the achievements and legacy of the Concession in a situation of immediate peril.

MJA submits that more time is needed to properly absorb and analyse the new concepts and allow the Senate, business, industry groups, service providers, AusIndustry, the Australian Taxation Office (ATO) and other stakeholders adequate time to plan and prepare for the changes. Previous initiatives in the Concession, such as the R&D planning requirements, have been introduced after the originally-proposed time once it was recognised that there was no transition phase provided to enable taxpayers to adjust appropriately. The same circumstances apply here with respect to the proposed commencement date of 1 July.

Time is now so short that the prudent thing for the Government to do is to announce a delay in the introduction of the Credit of one year. This will allow all interested parties to work together to design and deliver a workable Credit that will help secure Australia's innovation future.

2. History of the R&D Program

The process to create the Credit has moved greatly. In the beginning, Government, business and business advisors with expertise in R&D were all in agreement and seeking to work together. Today, businesses, advisors, researchers, universities, unions and the Opposition are fighting the Government departments in the hope that the Credit will not be just a small fraction of the size of the Concession. In short, stakeholders are expressing their concerns that the Credit will not be philosophically oriented to just supporting blue-sky knowledge research by withdrawing all encouragement for development to occur in or for the benefit of Australia. They are also fighting an explosion in uncertainty, inequity and compliance costs that may render the whole program impotent. MJA's response to the outcome of the National Innovation Review, *Venturous Australia*, was to applaud it as we saw it as a tremendous opportunity. We supported the Government's response to the National Innovation Review, *Powering Ideas*, and the May 2009 Budget announcement whilst retaining concerns about lack of consultation and the potential for the announced tightening of eligibility criteria being too aggressive so that the economic benefits would not be achieved. We were, however, largely happy.

To understand why this has all changed, it is necessary to review how we got here. The Concession was introduced as an important plank of Senator Button's industry reform agenda under the Hawke Government in 1986 to overcome a shortfall in investment in new technologies. At the time with a 49% company tax rate, the program equated to a credit of 73.5% on all costs including feedstock and on accelerated depreciation over three years. It has remained as a critical tool to overcome market failures in business investment strategies. That is, businesses generally will not invest sufficiently in innovation so as to sustain growth in the future economy without additional incentives. This is despite the studies that show that "innovation is universally regarded as the most important source of productivity growth over the long term"[1].

With the change in Government in 1996 came a conservative contraction of the program with the rate of support reduced to the current 37.5% and some R&D expenditures became ineligible. Notably, this included raw material and energy feedstock inputs and the closing of Government authorised R&D syndication structures. Syndication structures and similar financial arrangements had already been limited by the introduction of "guaranteed return to investors" provisions in 1990.

By 2001, the Howard Government realised that the changes had damaged the integrity of the program and that corrective action was required. They introduced the 175% incremental premium (equivalent to a 52.5% benefit) to encourage increases in R&D activity and the R&D Tax Offset for small businesses (equivalent to a 37.5% refundable tax credit). In the period from 2001/02 to the last year before the Global Financial Crisis (GFC) in 2006/07, BERD eligible for the concession rose 102.3%. However, at the same time, Government revenue from companies rose 111.4%. Growth in BERD was an unquantifiable contributor to the Government's revenue growth; nevertheless, BERD has remained too low in Australia compared to our OECD neighbours.

Part of the 2001 changes included a proposal to redefine R&D to limit the amount of R&D expenditure that was eligible for the concession. This redefining required R&D activities to involve both high levels of risks in technology and be innovative with appreciable novelty (previously companies only needed to establish just one of these). Even though the objective of the 2001 changes was to expand the program, this proposed contraction was supported by more conservative elements in the Government.

[1] Department of Industry, Tourism & Resources, "How R&D assistance influences company behaviour"

Ultimately, it was defeated following the Senate Economics Legislation Committee's conclusion that the intent of this change was to reduce eligibility rather than "clarify" the existing definition of R&D.

In March 2006, the PC was asked to review the effectiveness of Government support for science and innovation. The resulting March 2007 report, "Public Support for Science and Innovation: Research Report", sought to restrict government encouragement of BERD to only higher levels of research that "might not otherwise be conducted" "in cases where the knowledge developed is likely to benefit the wider Australian economy." Despite the widespread rejection of this paper, discussed below, these concepts of "additionality" and "spillover" respectively survive in the Easter draft in s 355-5(1) although the terms do not explicitly appear. Understanding the impact of these concepts is crucial to comprehending why the Easter draft will be so damaging to Australian innovation and the economy if enacted as is – it is based on experimental research to gain knowledge not BERD.

Despite the PC's advice to restrict support for R&D, its report cites a number of studies that all agree that the Concession delivered a net benefit and there is no study that supports a contraction to reduce its cost. At the same time as the PC Report was delivered, the Department of Industry, Tourism and Resources, now the Department of Innovation, Industry, Science and Research (IISR), produced a report "How R&D assistance influences company behaviour". This report found that more than 70% of businesses did more R&D as a result of the Concession. This was either by:

- encouraging businesses to undertake new R&D projects;
- introduce new technologies faster than they otherwise would have; and/or
- by adding more new technologies to existing projects than they could have done.

It also found that 98% of businesses registering for the Concession benefited from behavioural additionality. "The estimated benefits [as a proxy for increased taxable income] from [behavioural additionality] are of the same order of magnitude as the cost of the R&D Tax Concession" and that these "are in addition to those arising from the main function of the program of inducing additional R&D". In other words, between the PC and the Department, there was acceptance that the program pays for itself more than twice over.

The Rudd Government NIS Review started in January 2008 and was headed by Dr Terry Cutler. *Venturous Australia was* released in September 2008. It rejected the PC's report to the previous Government. Instead of eliminating the base support for R&D and keeping the incremental benefit as advised by the PC, *Venturous Australia* recommended the elimination of the incremental benefit and increases in the base rate. It also recommended the expansion of R&D support to include more software R&D and, if possible, more services based R&D. The only caveats were to ensure that large one-off mining and construction projects received no more than proportional support and that the Credit support genuine R&D activities. These reports were generally very well received by industry and those with a vested interest in ensuring Australia's future.

In announcing the new Credit in the 2009 Budget, which adopted the Cutler recommendations with some variations, the Government emphasised that it was introducing a system that provided certainty and simplicity for businesses seeking to invest in R&D. It also announced that it was redistributing support in favour of SMEs and that this would be principally achieved by providing a higher rate of credit (to companies with annual group turnover of less than $20 million), along with access to a generous refundable component to those eligible companies in tax loss. There was no mention that the proposed review of genuine R&D would result in the reduction to supporting research only, excluding

development, nor that this cut in what is considered genuine R&D would be far larger for all taxpayers than the increase in the rate of the credit.

It was also announced that foreign-owned IP was to become claimable in a meaningful way. The costly and complicated Incremental Concessions were also to be removed, drawing a curtain over a mechanism that delivered questionable value at best.

The value of the package in the next four years was to be held at $1.4 billion thereby characterising the policy as revenue neutral.

The Budget announcement was supported by *Powering Ideas* which stated that, while profit opportunities and competition motivate most business innovation, governments can support innovative businesses by reducing impediments and providing incentives to address specific market failures. With this in mind, the Government declared that it was aiming to increase the proportion of businesses engaging in innovation by 25 per cent over the next decade and to increase the number of businesses investing in R&D over time. This was to be fuelled by the introduction of the new Credit, which would double the tax incentive for small-business R&D and lift the base tax incentive for R&D undertaken by larger firms. This recognition that Australian businesses fail to invest adequately in R&D and that it is the role of Government to seek to redress this is philosophically different to any proposal to reduce support to encourage R&D to only those activities that meet the PC's "additionality" and "spillover" requirements (as have appeared in sections 355-5 and 355-25 of the Easter draft).

Then things started to change. Treasury released a discussion paper in September 2009 and the first draft of proposed legislation just before Christmas 2009. The definitional measures in these documents were clearly based on the rejected PC report's wording and on its intent to restrict the R&D Tax Credit to only supporting experimental research and not BERD. These were both all but universally rejected with such ferocity that Government intervention was required to bring the legislation back to its intent. With the Easter draft, this has not occurred.

3. Our Concerns with the Easter Draft

MJA always appreciates the opportunity afforded by the Government to make public submissions regarding the design and operation of R&D tax incentives.

MJA still believes that the proposed Credit offers an exciting opportunity to revitalise broad-based government support for Australian business R&D. We were pleased by many of the aspects announced in the 2009 Budget and looked forward to assisting Australian industry with understanding and implementing these positive changes.

MJA has acted as a service provider to Australian companies with respect to the Concession since 1985 and has been an active participant in all the program reviews since that time. We have always believed that out interests are coincident with the Government and our client companies in that all parties are interested in ensuring the appropriate level of support is provided to the companies eligible to receive it.

As such, we see ourselves as a selling agent for the Government. We have the time and opportunity to spend greater time than the administrative bodies can afford to explain Government programs to Australian companies, assess their suitability to various business undertakings and to assist in the making of compliant claims.

However, at a fundamental level, we must first determine whether a particular Government offering is saleable. Does the program make sense to Australian companies? Does it add value to their business operations? Do the returns justify the costs of compliance?

It was hoped that Treasury would have taken the concerns of business, industry groups, advisors, researchers, universities, unions and the Opposition in reworking the Christmas draft so that it achieves the Government's aims as set out in *Powering Ideas*. Unfortunately, instead we have a few steps forward and some backwards and the draft Credit still does not reflect the announced policy.

The removal of the attack on software related R&D is welcome. Software R&D support will benefit from the elimination of the multiple sale test and the allowance in the EM that core R&D activities can include experiments on software for plant and equipment. This only leaves R&D on "own-use" MIS, ERP and business application software as excluded core activities. Unfortunately, the other inadequacies of the Easter draft apply to the software industry as much as any other industry.

The expansion of excluded activities to apply to supporting activities in the Christmas draft has been reduced but not eliminated in the Easter draft; however, they never should have been in the Christmas draft. It is still very possible that activities that are genuine R&D activities that are currently claimable under the Concession will be excluded from the Credit. This reduction in the level of support for R&D from the existing program is as a result of the addition of the new dominant purpose test that must be met before expenditure can be included as a supporting R&D activity. This test increases compliance costs. It is not being introduced because of any mischief and will do nothing to encourage more R&D for the benefit of Australia. Other than these minor improvements, in the Easter draft;

- There is a promise to not impose the "augmented feedstock" provisions but no provisions to demonstrate that this will occur, nor is there any promise that the new provisions will not be a further contraction. Instead the EM suggests that the feedstock exclusion will be augmented to cover more materials and goods than it currently covers.

- There is a new requirement to split R&D activities between:
    - Core R&D activities,
    - Directly related Supporting R&D activities, and
    - Supporting R&D activities subject to the new dominant purpose test.

  These will add markedly to the business compliance costs and the deadweight loss of the program. Current participants in the program will need to assess whether these added costs outweigh the reduced benefit of the program. This is especially so for smaller businesses.

- The "Guaranteed return to investors" provision has been replaced with the "Expenditure not at risk" provision opening up the possibility that the provision may apply in ways that the current legislation does not. It will penalise R&D that is directly or indirectly commercially successful which is exactly the type of R&D that should be encouraged to meet the Government's objectives.
- The enhanced administrative powers are a serious concern as they will reduce certainty and increase the likelihood of administrative disputes contrary to self-assessment principles and the Taxpayer s Charter. They also herald the possibility of different treatments for different sectors of the economy. This possible horizontal inequity would transform the entire nature of general R&D encouragement if AusIndustry or the Government is able to target preferred industries through sectoral guidelines thereby reducing certainty for business.

Having looked extensively at the Easter draft in the very short time allowed, we have concluded that it would not prove to be saleable in the Australian marketplace. We have consulted with our clients, other claimant companies and various peak industry groups. The message is consistent. The new package does not add real value to businesses and it does not serve Australia's BERD interests and, as such, it should be rejected. Further, in this submission, we have identified a small number of changes that, if made, could restore the integrity of the program and achieve the Government's goals.

Regular consultations, especially since January 2010, with the Treasury and IISR have done nothing to allay the fears expressed above. MJA submits that the resulting package goes way beyond anything that could be described as a tightening of eligibility criteria. We also submit that these reductions will result in a program that is worth far less than the revenue neutral commitment beginning at $1.4 billion.

The overall result is a package that fails to meet the policy aims of the Government, the philosophy of *Powering Ideas*, and the declared objectives of the Credit.

The Credit is a new program

Given the above, it is worth demonstrating as briefly as possible why we believe that the Government is seeking to legislate a brand new program, rather than a reform of the old one, thereby leading us to conclude that the timetable to convert this draft package into legislation is simply too rushed and likely to involve unintended consequences and outcomes.

Since the consultation process began in earnest, all the Treasury releases have been headed "The **new** research and development tax incentive". Recent consultations with Government officials have reinforced the idea that the R&D Tax Credit (the Credit) is being treated as a **new** program by outlining a different style of administration built upon industry sector-specific guidelines and a compliance framework that will be built from the ground up.

The Government's emphasis on the fact that the program is a new one stands somewhat in contrast to the policy announcements in last year's Budget which referred to a tightening of eligibility criteria of the current Concession to better support "genuine R&D". There was a sense that there would be a significant carryover of the concepts and principles from the Concession and the Budget announcement reinforced this notion.

It is now clear that this is not the case. The fact that this is a very new world is even more starkly set out in the Easter package than with the Christmas draft

To demonstrate this, take the new definition of core R&D activities as an example.

The Treasury's consultation guide to the Easter package refers to a clearer definition of core R&D activities by its use of clear language in the place of ambiguous concepts such as 'considerable novelty' and 'high levels of technical risk'. What they should go to say is that the intended definition is fundamentally different to the very stable definition that has been in place since 1985.

Eligible activities have been separated into two categories – core and supporting – with separate qualification tests. As Treasury has indicated, the new definition of core R&D requires taxpayers to be seeking new information (to solve problems or develop new or improved products and processes) and to need an experiment to uncover that knowledge.

The concepts of systematic, investigative, innovation and technical risk have all been dispensed with. These are concepts that have proved very useful to taxpayers in qualifying their R&D activities and are well understood as opposed to ambiguous as they have been characterised in the Easter draft. Further, ten of the current technical objectives – the creation of new or improved products, processes, devices, material and services – have been eliminated and subsumed into the new knowledge objective.

This is an unequivocal narrowing of the definition of core R&D compared to the current Concession and, in fact, to the one contained in the Christmas package. Add the four new classifications of supporting R&D activities and the new restrictive Object clause and you end up with a very different concept of eligible business R&D. The Credit is seeking to institute a scientific definition of R&D that gives voice to the PC's world view of what is "genuine R&D". Yet that view was not the one put forward in the Cutler Report, *Powering Ideas* or the May 2009 Budget announcement.

The September 2009 Treasury Consultation Paper stated that the Government was altering the definition to bring it more in line with the Frascati definition. They could no longer credibly maintain that this is the case. The proposed definition reflects the first two elements of Frascati – basic and applied research – but experimental development has been removed.

The new EM confirms the narrowing of the definition. In paragraph 2.16, it indicates that it is not enough to be doing experimental activities if they "merely confirm what is already known". As displayed in the example projects provided, the suggestion is that the taxpayer will need to be able to prove in a retrospective assessment that the knowledge did not exist anywhere else. Not only is this highly impractical, it also flies in the face of encouraging an innovation system where several companies in an industry pursue the development of new and improved products and processes and the associated knowledge in parallel.

The guidance given to taxpayers as to how to interpret the definition is very open-ended. The EM indicates that qualifying the eligible purpose of the activities is a question of fact based on the overall circumstances of the conduct of the work (paragraph 2.32), without detailing what the key determining

criteria might be. It appears as though the Government is seeking to preserve as much discretion as possible when assessing claims. This is apparent from the statement in paragraph 2.32 that says that "…it is possible that activities that are similar in appearance might qualify as supporting activities in one context but not in another." One could imagine that this thinking applies equally to core R&D activities.

Overall, the definition of core R&D has not been made clearer in the Easter draft as is maintained in the Treasury's March 2010 Consultation Guide. It has been fundamentally changed in the same way that the attempt to change the 'innovation or high levels of technical risk' requirement to the 'and' version was correctly identified as a change, not a clarification, by the Senate Economics Legislation Committee back in 2001.

Going on to consider the raft of other changes contained in the Easter draft, including the introduction of new concepts such as "production" and "internal administration" software, proposed redrafting of the feedstock provisions and the introduction of sectoral public position statements by AusIndustry regarding eligibility, the Easter draft represent a clean break from the Concession and has offered only a few days to have the implications of this considered.

When the Budget announced a tightening of the eligibility criteria of the current Concession, it could not have been foreseen that the result would be legislation that effectively puts an end to the concepts and operating principles of that well-established and successful program.

Achieving revenue neutrality

The 2009 Budget announced that the program would be designed on the basis that it will be revenue neutral for the next four years. There is still no modelling of the effects of the raft of changes associated with the proposed Credit. Neither the Christmas nor the Easter draft was accompanied by the customary Revenue Impact Statement. This is despite the fact that Treasury did model the more generous recommendations in *Venturous Australia* and found them to be "affordable" within the NIS Review's constraint of being revenue neutral.

Given the serious concerns expressed by virtually all interested parties and in the media about the markedly adverse impact of the announced changes in the Christmas draft on BERD, it is reasonable to expect that the Easter draft would have detailed exactly how the new program and the amendments could achieve its stated aims within its budgetary constraints. This is still missing. To properly model this and overcome the criticism, Treasury should have modelled the impacts of the cost-saving measures against the cost of new stimulus measures and made these models and their methodology public. This modelling would have needed to consider key factors such as:

7. the impact of the removal of the Incremental Concession and the International Premium;
8. the projected BERD if the existing Concession continued at the base concessional rate of 125% with no other changes to the program; and
9. the additional cost of the rate changes less the revenue savings of each of the proposed definitional changes of the Credit.

MJA believes that the first two considerations can and should have been modelled to identify whether the final considerations – the restrictions on activities and expenditures - were necessary to maintain revenue neutrality.

It is also worth noting that there has not been any attention given to the additional economic returns generated by successful R&D projects including increased taxation revenues. This is despite the object of the Credit being to provide additionality and spillover for the benefit of the Australian economy. Any

comprehensive assessment of ultimate program costs would surely need to take this factor into account.

In the absence of Treasury modelling, MJA has undertaken an analysis of the announced changes by modelling the revenue impacts of the first two considerations above using publicly available material. While a number of assumptions have been made, we believe our calculations provide conservative estimates of both the cost savings of the removal of the Incremental Concession and the impact of the GFC on BERD.

The details of our modelling are provided in Appendix 1 to this submission.

The analysis shows that the removal of the Incremental Concession coupled with the anticipated drop in BERD (as a direct result of the GFC), will alone ensure that the new Credit achieves a revenue neutral outcome.

Specifically, our modelling shows that

- the likely saving from removing the Incremental Concession would be $467 million per annum over the four year period commencing 2010/11 if the level of BERD remains the same (i.e. the estimated average cost of 175% for 2007/08 and 2008/09 income years as per Table 2 in Annexure A)
- since the introduction of the Incremental Concession, BERD has increased at similar rates to company tax payments
- BERD is likely to drop in a similar way to the Treasury 2009/10 Budget Papers forecasts on company tax payments due to the impact of the GFC with some lag as a result of pre-committed expenditure.
- a conservative estimate of BERD and, therefore, the cost of the 125% Concession (if it remained unchanged over the four year period commencing 2010/11), would be $3.852 billion (i.e. the sum of estimated 125% costs for income years 2010/11 to 2013/14 as per Table 3 in Annexure A)
- therefore, there is already a $1.75 billion saving without any changes to the definition or restrictions on expenditure eligibility as a result of the removal of the Incremental Concession and the drop in BERD. (Note this modelling assumes a conservative estimate of the cost of the current Concession of $5.6 billion for the four year period commencing 2010/11. In the recent consultation sessions, the Government estimated the Concession would cost $1.4 billion for the 2010/11 year but expected year-on-year increases. Our conservative estimate of $5.6 billion does not take into account any year-on-year increases.)

Given that this modelling has been provided to Treasury and has not been challenged nor countered by Treasury modelling, there appears to be no case for any reform to the definition of R&D or concepts of eligible expenditure based on the need for maintenance of budget neutrality.

Not only is the Treasury modelling missing, where even Senator Carr has not seen it, the consultation guide accompanying the ED and EM is deceptive in that it promotes the increase in the base rate from 37.5% to 40 or 45% without mentioning that this is at the expense of the 52.5% premium (175% times 30%). These rate increases are small when compared to the Concession at its peak when R&D was encouraged at an equivalent credit rate of 73.5% of expenditure including all feedstock and an accelerated depreciation of assets over only 3 years. There is no modelling of any of the changes either from the current position or between the Christmas and Easter drafts despite models that show

that the removal of 175% will fund the base rate increases. There is no attempt to demonstrate that the changes will not very significantly reduce support for BERD despite acceptance by all interested parties outside of the Government that the changes will reduce the encouragement for R&D causing it to fall to a small proportion of the current total. Whilst the objective was to ensure that “one-off” large-scale mining and construction projects only get proportional support, these changes will hit manufacturing and small businesses just as hard as these large projects because there has been no investigation as to whether these large projects are a problem or how to fix any discovered problems.

4. Analysis of the Examples in the Easter Draft

The concerns that we detail above are amplified by our analysis of the example projects discussed in the EM.

Overall, our analysis concludes that the examples mischaracterise key concepts such as the scientific method leading to confusing and inconsistent results. Further, there is too great an emphasis on describing ineligible work, particularly in the mining examples, without enough material on what does qualify. We believe that some of the examples of ineligible projects are already ineligible under the Concession thereby limiting the usefulness of the discussion.

The key omission is the failure to do a comparative analysis between projects and activities that would qualify under the current Concession and under the proposed Credit. Whilst we have highlighted that the Easter package is seeking to implement a new program with a number of first-time principles, it is inevitable that taxpayers want a detailed understanding of how their projects fare in the new regime in comparison to the current provisions. The fact that the examples fail to do so is a major shortcoming of the EM.

Turning to the specific examples:

1. EcoStartup

Examples 2.1 and 2.2 examine the application of the proposed exclusion of production activities that are considered to be supporting activities and the classification of activities as part of the experimental core activities. This example shows the limitations of the Credit compared to the Concession. The Credit seeks to restrict the definition of R&D to just experimental activities to gain new knowledge and required supporting activities that do not have a dominant purpose of production or are excluded activities. This excludes any work to actually complete the R&D by developing processes and products. That is, the eligible costs of R&D under the Credit cease before they may have ceased under the Concession.

Example 2.1 seeks to apply a very narrow definition of core activities that is unrealistic. The experimental activities in 2.13 are hypothesis to experiment, observation and evaluation leading to logical conclusions. The activities that are not considered to be experimental activities clearly include activities that are in the list in 2.13. Hypothesis is part of the experimental process and the hypothesis developed is whether C23 is a suitable replacement for K32. However, costs to develop this hypothesis are considered to be only supporting costs. Experimental costs such as preparing the fuel and fuel additive and the equipment that will measure the results are not considered part of the experimental costs. Development of the evaluation method is also excluded. The justification for these is that these activities do not lead via logical progression to experimental results. This is both illogical and incorrect. It does not affect this simple example but if used on a real world example where the development of a hypothesis and the type of experimental and evaluation costs had a different dominant purpose then these genuine experiment costs could be excluded.

Example 2.2 allows R&D activities that are also production activities that are not for a dominant production purpose to be included as R&D. This will be a much smaller quantity of R&D activities because it will exclude product and process development R&D activities beyond the experiments to develop new knowledge.

2. Smartread

Example 2.3 continues the exploration into R&D activities that are also production activities. Where core experimental activities are performed on normal production lines, these will be considered supporting activities. This is because the definition of R&D is restricted to only the knowledge creation research subset of the OECD Frascati definition of R&D.

Under the Concession, this project would be the development of the new tyre compound. As this program supports the development of new products or materials as well as new knowledge, the manufacturing experiments would be considered core activities. In this simple example, the tyres were not sold so the manufacturing costs are included as R&D. In most real world examples the production output would be sold, or re-worked. The proposed legislation would exclude these activities as having a production dominant purpose.

This example is driven by the erroneous assumption that if a business does something for a financial gain then it is not R&D. This is a mixing of the concepts of expenditure and revenue. There is no causal link between the incurring of R&D expenditure and revenue from sales. Genuine R&D expenditure is a cost. Ultimately, revenue creation is the objective of all business R&D. It is the goal of government as much as business. With some R&D, the revenue comes simultaneously with the R&D activities, sometimes subsequently. It is a horizontal inequity if one business gets full support for their R&D because they get revenue subsequently, whilst another business doing equally valid R&D is punished because their revenue is received simultaneously.

3. Boulevard Mining

In Example 2.4, *Boulevard Mining I*, the EM states the application of the scientific method is required to address the knowledge gap on how the new truss design interacts with various tunnel widths and shapes on an unmined fork in a coal seam at the Evans Range mine. However, in this example, the tunnelling of the various shapes and widths in the coal seam has been inexplicably classified a *supporting activity* when it clearly meets the definition of a *core R&D activity* as defined in point 2.11 of the EM. In this example, tunnel shape and width are unquestionably the variables under test as per the hypothesis for which the causal relationship is being sought by way of experimentation. Therefore the tunnelling to specific shapes and widths forms a key element of the experiment itself. Point 2.11 acknowledges this test may take place in a range of settings including an otherwise normal production scenario as is the case in this example.

Boulevard Mining II (Example 2.5) is used to illustrate the distinction between what are considered experimental activities conducted for the purpose of producing knowledge versus what is considered subsequent customised applications of knowledge gained from prior experimentation. The EM argues that although “trial and error that is systematically conducted and monitored is required” the activities undertaken by *Boulevard Mining II* do not constitute R&D activities because they do not demand the application of the scientific method. The technical justification for this distinction is wrong and demonstrates a complete misunderstanding of what constitutes the scientific method. The scientific method is regarded as containing an element of trial and error in its formulation and testing of hypotheses. Trial and error is a universally accepted scientific problem solving technique that is particularly advantageous in scenarios where the aim is to find a single solution to a single problem. Scientists routinely adopt this technique as it does not require the experimenter to have detailed knowledge of the problem at the outset. In this example, where current knowledge and/or practice are deemed inadequate, then experimental activities (eg. the systematic trial and error of potential solutions) *will be* required to achieve the desired outcome. To argue this is not R&D on the basis that it does not warrant the application of the scientific method is totally misguided.

Furthermore, it is hard to see how the *Boulevard Mining II* example is any different from the example in *Boulevard Mining III* (Example 2.7). In *Boulevard Mining III*, the company was unsure whether the truss design could be used to significantly increase widths in "crumbly coal" seams. In both examples, the company was unsure of the answer to the technical questions hypothesised and therefore was required to undertake experimental activities as per the scientific method to resolve the knowledge gap (ie. acquire new knowledge as opposed to merely applying knowledge as asserted in the example).

Boulevard Mining IV (Example 2.8) concerns the eligibility of road, access tunnel construction and construction of "a lengthy railway spur line to the mine and coal train loading facilities". Insufficient information has been provided to establish an argument as to how these activities would be eligible under the existing Concession where only a direct nexus needs to be established to satisfy the definition of such supporting activities. Furthermore, it is unclear how the road and supply of light and ventilation would not need to satisfy the dominant purpose test given these activities should be classified as production activities if the logic in the earlier examples is followed. Therefore this example provides very little in the way of meaningful illustration of the application of the proposed Credit regime and provides a contradictory application of the definition.

4. Mimic Mining

The *Mimic Mining* (Example 2.6) example states that "in the knowledge that the technique is feasible, Mimic Mining replicates the experiments undertaken by Boulevard Mining". This example goes on to conclude that these do not constitute eligible R&D activities as they are not undertaken for the purpose of generating new knowledge. This example is of particular concern as it suggests that if certain knowledge exists, any activities to develop additional knowledge by conducting one's own experiments fail the test for eligible R&D despite the fact this "additional information" will be new. Most notably, in a commercial environment, a rival company may not be willing to on-sell the knowledge gained through R&D activities in order to maintain a competitive advantage. Furthermore a claimant company may be totally unaware that any particular knowledge or process may exist at the time of the R&D as the results may not have been publicised. Notwithstanding, even if the results were commercially accessible, the experimentation related to the application of the new truss design in the *Mimic Mining* scenario may need to be significantly different to what was conducted at Boulevard's mine sites due to local circumstances such as prior mine history (eg. proximity of old workings), ore body orientation, mining methodology, equipment and numerous geotechnical factors. In fact, the example acknowledges unique circumstances will be faced by *Mimic Mining* but provides no rationale for the argument that resolving to apply a known technology in this context will not, of itself, constitute R&D activities. This is an illogical interpretation of the facts as the problem requires the implementation of the scientific method to generate further new knowledge for the potential application of the truss technology in this environment. This is comparable to *Boulevard* applying the technology to a crumbly coal seam in the *Boulevard Mining III* example, an example which is considered claimable. If these activities were not necessary to resolve technical issues then the need for costly and time-consuming experimental activities would be superfluous and not undertaken. Whether this is viewed as producing new knowledge or resolving inadequacies within the current realm of understanding is a matter of semantics and should not be a basis for eligibility.

5. Grandheap Mining

The example provided in relation to *Grandheap Mining* (Example 2.9) illustrates a preoccupation with the cost of the activities as a basis for eligibility rather than the correct application of the scientific method to solve a problem in order to gain new knowledge. This example examines the application of innovative ground vibration sensor technology to assist in optimising slope angles for overburden heaps. The EM states "that the results obtained and the statistical rationale for the number of the trials would be relevant factors in considering whether the state of knowledge had reached a point where the

experimentation had tested the hypothesis in relation to the new sensor technology". This approach is consistent with the application of the scientific method and is a valid test of experimental length and authenticity. However, the example then goes on to suggest that "regard for the business case (in terms of future savings) for prolonged costly experiments could also be a key consideration in determining whether the activities were primarily for other than the purpose of acquiring knowledge." This is a dramatic and troubling divergence from the scientific method which the new tax incentive has adopted as the key framework for eligibility. In drawing a valid conclusion to an alternate hypothesis, the scientific method does not in any way consider the cost of current or future experimentation. Any attempts to assess the eligibility of an experimental activity based on cost would be contrary to the scientific method. An ongoing substantial cost may lead to the discontinuation of an experimental program but will never be used to circumvent the rigour of the scientific process in drawing valid conclusions.

6. Hayk Hockey Stix

Example 2.13 explores the core / supporting split in a manufacturing example. Unlike the *Smartread* example, the core experiments are accepted as including the production runs. This is a process development whilst the tyre project was a product development but this is not relevant. Both experiments were undertaken to determine whether useable products could be made on production equipment.

Otherwise, this example is consistent with current practice. Whilst ever R&D activities are necessarily performed on normal production equipment, the cost of this production process is a genuine cost of R&D. Had the activities been classified consistently with *Smartread* then these costs would have been excluded as supporting activities with a production dominant purpose.

7. Tabby Marine

Examples 2.14, 2.15 and 2.16, *Tabby Marine*, illustrate the application of the definition to activities to manufacture a catamaran with a novel combination of steering rudder and propeller screw as a marketable product.

An objective reading of these examples would lead to the logical conclusion that the *Tabby Marine* examples are analogous to the mining examples of *Boulevard Mining*, *Mimic Mining* and *Grandheap Mining* in that *Tabby Marine II* and *Tabby Marine III* are interested in applying technology in a different way to acquire new knowledge. Whilst such an application for the mining examples (eg *Boulevard Mining II* and *Mimic Mining*) was seen to be ineligible, in *Tabby Marine* this application of known technology was seen to be eligible. No explanation is provided on what distinguishes the two sets of examples. This inconsistent application renders much of the *Tabby Marine* examples meaningless.

It is also concerning that the *Tabby Marine* examples (as is the case for most of the examples in Chapter 2 of the EM) define directly related supporting activities as requiring, *inter alia*, a "close and relatively immediate relationship" with eligible core R&D activities. There is nothing in the ED that indicates the need to demonstrate a location and/or temporal proximity to a core R&D to establish that the supporting activity is directly related. All of the examples in Chapter 2 infer there is a requirement for this location and timing nexus; a nexus that is not made clear in the draft legislation. This further demonstrates the lack of clarity associated with the new definition.

The application of the supporting activity definition is confusing in the *Tabby Marine* examples. In *Tabby Marine I*, the dominant purpose is apparently satisfied based on the outcome rather than the original intention of the activity of fabricating the rudder-screw assembly. Because the outcome of the trials was a failure, and there was no possible commercial use for the assembly, the conclusion is

reached that the fabrication of the rudder-screw assembly was not a production activity. However, it is argued that, in the same way it was for the fitting out and construction activities, the dominant purpose at the outset of the trial of the rudder-screw assembly would have been to assist completing the boat for eventual sale and would therefore constitute a production activity. This focus on the outcome rather than the intention is at odds with the interpretation applied to the dominant purpose test in other examples (eg. the mining examples). In addition, in *Tabby Marine III*, the example completely overlooks the requirement to establish the dominant purpose for the production activity of constructing the modified monohull. Given this contradictory application, the *Tabby Marine* examples cannot be seen as providing a reliable illustration of the R&D tests.

8. Whist Construction

The *Whist Construction* example provides a contradictory interpretation of the definition of R&D to a fact scenario involving the development of an innovative approach to anchoring a bridge into a type of rock with known weaknesses.

In *Whist Constructions*, the development and finalisation of the design, the installation, the load testing and the monitoring of the initial anchors meet the definition of core R&D yet the tunnelling of the various shapes and widths in *Boulevard Mining I* was not seen to meet the definition. There is no explanation as to why there is a distinction between the installation of anchors and tunnelling material underground. It would seem the two are analogous yet the examples illustrate a varied application of the definition of core R&D.

In applying the supporting activity definition, the construction of the bridge and the fabrication and sourcing of the anchors (excluding the initial anchors) are logically considered to be production activities and fail to meet the dominant purpose test. Yet, no mention is made as to why the fabrication and sourcing of the initial set of anchors is not a production activity. It appears both the initial and subsequent anchor fabrication and sourcing are both undertaken for the same dominant purpose: the construction of the bridge and not the R&D. This contradiction of the application within the same example also renders the *Whist Construction* example not useful.

9. Two Wheels, EC Plus and Sanctuary

Examples 2.18 (*Two Wheels*), 2.19 (*E C Plus*) and 2.20 (*Sanctuary*) are all meant to provide an illustration of the application of the definition to software development activities. However, as with the examples elsewhere, they represent puzzling applications of the definition.

In *Two Wheels*, the software activity is logically concluded not to be a core R&D activity. However, when assessing whether this activity is an eligible supporting activity, no explanation is provided as to why the software development activity isn't seen as a *production* activity given the software development is part of the development of the new gearboxes that will be intended to be sold. Given the interpretation of the production in the other examples, it would follow that the software development activity in this example would be considered a production activity and would also fail the dominant purpose test. Yet the example states the activity would be an eligible supporting activity.

In *Sanctuary*, the activities relating to customer accounts are not eligible supporting activities because the dominant purpose of those activities is a commercial one. However, additional modification made to customer accounts systems to test the new payments system is eligible because the dominant purpose is apparently the R&D and not a commercial one. There is no explanation as to what the distinction is between the two. We contend that both sets of activities would be undertaken for the dominant purpose of a commercial activity to manage customer accounts.

5. Our Proposals to Improve the Easter Draft

Ultimately, MJA's and the Government's goals are the same – that the R&D program needs to encourage more businesses to do more genuine R&D to improve productivity for the benefit of the Australian economy and that the program needs to provide certainty and equity, both horizontal and vertical, in an efficient way to give value to taxpayers. To that end, and given time is short, we submit the following changes as necessary to achieve the joint goal above.

The process needs time to properly consider the implications of the new concepts especially those introduced for the first time in the Easter draft

The Easter draft is based on a significantly different concept and definition of research and development than has ever been used before. It replaces 25 years of understanding, guidance, rulings and determinations as well as institutional knowledge within R&D companies, AusIndustry and the ATO. The new Object provision and the new definition of core R&D activities were first created for the Easter draft and were unheralded in any prior papers, reports or consultations since this process began more than two years ago. They come 11 months after the Government responded to *Venturous Australia*. The new definition and concepts also bear no relationship to any groundswell of opinion expressed through the consultation phases.

Yet we are being asked to respond to these fundamental changes over a single fortnight over the Easter and School Holiday periods. After this truncated and unfortunately timed consultation phase, the ED will need to be updated, completed, tabled as a Bill, reviewed by Senate Committees, passed and implemented with sectoral guidelines prepared by AusIndustry all before 1 July 2010. This is just unrealistic. The Credit is now considered an entirely new program, not a development from a pre-existing program. It is a very poor process to introduce legislation for a new program on the fly like this without proper review. Business and government bodies need time to prepare for the new program once the measures are settled. Time is needed to develop and implement transitional and planning requirements. This is not just a tax measure change that will only impact head office and taxation advisors. Researchers, engineers, operations managers, production planners, project managers and other technical staff will need to be retrained and refocused in addition to the taxation and accounting staff. Capital budgets and R&D projects will need to be recalibrated as a result of the changes.

All taken together, the only sensible solution is to delay the introduction of the R&D Tax Credit by 12 months so that these and other issues can be properly considered.

Adopt the third part of the Frascati definition - with restrictions in line with current exclusions

The new Object provision and the new definition for "core R&D activities" are clearly based on the research components of the OECD definition of R&D (the Frascati definition), which defines R&D as:

1. "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and
2. the use of this stock of knowledge to devise new applications."

The first part is the research phase and is further broken down into:

a. **Basic research** is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view.

b. **Applied research** is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective.

The Object provision s 355-5(2) states “this object is to be achieved by providing a tax incentive for industry to conduct, in a scientific way, experimental activities for the purpose of generating new knowledge or information in either a general or applied form”. The purpose of generating new knowledge is analogous with part 1 of the Frascati definition whilst the general form is in line with **Basic research** and applied form is in line with **Applied research**. Historically, statistics have shown that research accounts for no more than 30% of R&D by business (5% Basic and 25% Applied).

The definition of Core R&D activities in s 355-25(b) continues this research-only focus: “Core R&D activities are experimental activities that are conducted for the purpose of generating new knowledge (including knowledge about the creation of new or improved materials, products, devices, processes or services).

What is missing and causing consternation among those interested in seeing a workable and effective R&D incentive program is that the new definition in the Easter draft ignores 70% of R&D, the development phase in part 2 of Frascati. This contraction is brand new and unheralded. The development phase is further defined in the Frascati definition as:

c. **Experimental development** is systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or devices, to installing new processes, systems and services, or to improving substantially those already produced or installed. R&D covers both formal R&D in R&D units and informal or occasional R&D in other units.

All these aspects of R&D are completely excluded from the new Easter draft definition. The current legislation broadly encourages both research and development but only a subset of the total Frascati definition. It does not include R&D where the core activity is an excluded activity, is otherwise an ineligible expenditure or where the R&D is on business systems or an application of generally understood practical experience. It is, however, much broader than the conduct of basic or applied research in order to acquire new knowledge.

The very significant contraction of R&D eligibility to exclude all systematic experimental development work that draws on the knowledge acquired is a serious blow to the integrity of the system for two reasons;

1. The objective of the new program is to encourage more businesses to do more R&D. As “Experimental development” makes up the majority of BERD, its exclusion removes far more from the program than the relatively minor increases in the rate of support. Clearly, if you are going to support far less than half the current supported R&D activities and only increase the base rates by the announced margins then most R&D activity will receive less support than is currently the case. When you also consider that in addition to the elimination of support for development, the Credit also removes the premium rate which is worth on average 46% of the base rate then this will not encourage more R&D at the macro level.
2. The economy benefits more from this third aspect of R&D than from the other two – and it is this aspect that Australia struggles with. Australia has a world-class record of achievements in basic and applied research and a poor record in development and commercialisation. The Object clause seeks to encourage the types of R&D we already do well at the expense of the

types of R&D that we are poor at, when it is the type of R&D that we are poor at that is the one that adds value to the economy.

This new definition is counter to Government's stated objective in *Powering Ideas* and it excludes around 70% of business R&D. It is also counter-intuitive – supporting R&D has been found by all the studies cited by the PC and IISR as being a net positive for the economy and for Government revenue. Supporting only research as opposed to development will result in a net cost.

MJA submits that the objective and definitions in the Easter draft need to abandon the rejected philosophy of the PC in order to achieve the Government's stated goals in the Budget and *Powering Ideas*. This change in philosophy will result in an R&D Credit instead of an 'R but not D' Credit. This change will require redressing other provisions, especially the dominant purpose test, the feedstock provisions and the expenditure not at risk provisions. It will also impact on the administrative practices and guidelines.

Remove the dominant purpose test

The Easter draft persists with the notion of the need to introduce a dominant purpose test to qualify supporting R&D activities. Four categories of supporting activities have been identified and the taxpayer needs to identify which category its supporting activities belong to – if the activity is on the exclusions list, production or (somewhat bizarrely) directly related to production, the dominant purpose test applies; if not in any of these categories, then the directly related test applies. The introduction of production is a first-time concept for the R&D tax incentive and has wide-ranging implications that the Easter draft does not fully explore.

Under the current definition of R&D activities, all activities qualify under the 'systematic, investigative and experimental' (SIE) test or the 'directly related' test. No distinction is made. Under the proposed Credit, the taxpayer needs to split activities into core or supporting and then establish which of four tests the supporting activities applies to. As discussed earlier, these decisions will be based on the overall circumstances of the activities without the EM providing any definitive guidance as to how circumstance relate to the law.

These changes are bewildering and will place taxpayers under enormous pressure to successfully unravel these complexities in the face of a compliance regime that confers powers on the administration to change these elections unilaterally, which would force the taxpayer into formal appeals mechanisms from the outset of the claim review process.

The addition of the dominant purpose test was identified as a serious problem with the Christmas draft. As a result, Treasury has proposed a more constrained version in the Easter draft. However, by constraining it so that essentially eliminates production-based R&D, the vast majority of the identified problem remains. In fact, it is difficult to think of many supporting activities that don't fall into one of the three dominant purpose categories, given that any activity directly related to production is captured.

The test has the potential to eliminate and therefore discourage great quantities of R&D in areas as diverse as manufacturing, small business and mining. This test, and the focus on research only, actively discourages R&D in fields such as process development and environmental technologies.

Many R&D projects involve R&D on existing processes. These projects may aim to substantially increase efficiency or reverse adverse impacts on the environment by reducing factors such as greenhouse gases or water consumption. The *research only* focus and the discrimination against R&D activities that are also production activities will create a distortion in the economy that favours R&D in other areas. Business decision-making processes and capital budgeting processes will be influenced

by Government policy to invest less in process efficiency and environmental R&D projects because the after tax cost hurdle for other projects will have been lowered by a greater extent than process and environmental R&D projects.

The restriction on genuine R&D activities just because they are also production activities introduces many complexities and the possibility for horizontal inequities. The determination of when an activity has a dominant purpose is frequently a matter of subtle degree and arbitrary interpretation. This is clear from the court decisions on the dominant purpose test in Part IV A. Under the current legislation, the test for the inclusion of a supporting activity is purely on the basis of whether it is directly related to the SIE R&D activities. That is, no production that is not necessarily required to do the R&D is able to be included as if it were R&D. A similar position should be included in the proposed legislation. This can be better managed with easier and more consistent compliance by the inclusion of better guidance as to what is considered a directly related activity. This could include whether the taxpayer is able to prove that the R&D activity that involved production included heightened monitoring, smaller production runs, adverse impacts on production planning, and monitoring activities that provided feedback or otherwise contributed to the successful operation or otherwise of the R&D activities.

Under the current definition, production runs that are R&D are frequently SIE R&D activities. However, with the contraction of the definition to research only, these activities are likely to be considered supporting activities in the vast majority of cases. This is exacerbated by the increased powers of AusIndustry to reclassify activities and to provide sectoral-based guidelines. This could easily see industries discriminated against by having their core R&D activities reclassified as supporting and then eliminated by the dominant purpose test whilst another favoured industry is able to treat similar activities as allowable core R&D activities. This is the inevitable result of the vast discretions afforded in the EM in previously-discussed paragraphs such as 2.16 and 2.32. Unlike the feedstock or the expenditure not a risk provisions, this exclusion is absolute. Even if the business makes a loss on the R&D activity, it will still be required to eliminate the entire activity from its claim.

This test is a major reason for the necessity to split activities and associated costs between the core and supporting categories. If the test for inclusion of an R&D activity that is also a production activity was that the R&D purpose should be verifiable as systematic or experimental work as per the Frascati definition, then this would greatly simplify the process. The elimination of the requirement to split activities and costs would be a major improvement as discussed below.

MJA submits that the dominant purpose test will adversely impact on R&D by any taxpayer seeking to improve areas such as productive efficiency or environmental gains. This type of R&D is crucial for Australia to meet the challenges of pressing issues such as climate change and water management. The Credit's bias against production-related R&D will adversely impact on manufacturing and small business as well as other industries. The test should be removed and replaced by recognition that R&D, especially development, requires activities that are also production activities that can qualify as eligible R&D activities.

Legislate feedstock so that it is genuinely in line with current practice

One of the greatest issues with the Christmas draft was the proposal to introduce the new "augmented feedstock rule". The proposed provisions would have eliminated most product-based R&D projects and all process-based R&D projects. These provisions have been removed with a promise to replace these with something else later. As at the closing date of this submission, the promised 'something else' has yet to appear.

As a critical part of the legislation, it is unacceptable that these provisions are not in the ED. Instead, all we have is paragraphs 2.43 to 2.46 in the EM. These show a marked change from the current law. Currently, the law only reduces or eliminates expenditure on feedstock that is processed or transformed by the R&D activities into marketable outputs – "the subject of" test. If the new legislation is based on paragraph 2.45, then the reduction will apply to any goods, materials or energy used in the R&D activity regardless of whether it is feedstock.

We are aware of attempts by the Commissioner of Taxation (the Commissioner) to expand the application of the current law to include materials and goods that are clearly not feedstock. These have been documented in the Inspector General of Taxation report, "Review into delayed or changed ATO views on significant issues, March 2010". If Paragraph 2.45 guides the wording or application of the unseen legislation then this will result in this U-turn becoming law and the augmented feedstock will be largely back by stealth.

As there is already scant time for business and the Parliament to consider the new and unheralded concepts in the Easter draft, there is no time to practically consider changes in this area.

Eliminate instances of added complexity and potential inequities

The Easter draft includes a new requirement to split R&D activities and costs between;

- Core R&D activities.
- Supporting R&D Activities subject to the new dominant purpose test.

  These activities are those to produce, or are directly related to producing, goods and services or are contained in the exclusions list in s 355-30.

- Supporting R&D activities that are subject to the directly related test.

  In other words, activities not production related or on the s 355-30 exclusions list.

The current legislation only requires that R&D activities be identified as a single group and they are all ineligible if the core activity is on the exclusion list. They do not need to be separately costed and are never treated differently depending on the business sector of the taxpayer as is likely to be the case with sectoral position statements. To do so would be poor legislation with high deadweight losses and would run the risk of introducing a horizontal inequity discriminating against taxpayers purely on their industry. Business has no certainty because this proposed discriminatory practice will have unknown impacts for an extended period of time after the legislation commences.

MJA submits that the inclusion of this additional compliance requirement will act as a large disincentive to businesses to participate in the new program. This will especially apply to small businesses. The increase in compliance costs may eliminate any remaining benefit under the Credit after all the above contractions. As it serves no purpose other than the ill-conceived exclusion of supporting activities that are also production, it is easily removed. As a stated goal of the Government is to reduce compliance costs and complexity, its removal will assist in aligning the Credit with its goals.

Restrict expenditure not at risk to financing arrangements to fund R&D and not have it apply to normal commercial returns directly or indirectly from the output of the R&D

The provision preventing a taxpayer from receiving a benefit for investing in another person's R&D when the taxpayer has a "guaranteed return from that investment" is proposed to be replaced by s355-405, the "Expenditure not at risk provision". The proposed provision is far broader than the current version. Expenditure on otherwise eligible R&D activities will be potentially excluded if someone could

reasonably be expected to be able to receive consideration sometime in future as a result of that R&D expenditure. This expectation is after having regard to anything that has, or is likely to happen sometime in the future, so long as the receipt of the consideration is not dependent on the results of the R&D expenditure and the reasonable expectation existed when the expenditure was incurred. The consideration need only be received as an indirect result of the R&D and need only be receivable by an associate. This is amazingly broad and can be used to exclude a wide range of R&D activities that are not excluded by the current s 73CA provision.

The EM on this new provision (s355-405) mistakenly considers that the Commissioner will be constrained to apply the new provision in line with how the old provision is currently being applied. The Commissioner is never constrained in this way without specific legislation to tie the new provision's application to the old provision's wording and this is not present. The example in paragraph 3.132 of the EM is a clear indication that the Commissioner will not be constrained in this way because it envisages a situation that would not trigger the current exclusion. There are many situations where a business has, or is likely to enter, a fixed price contract to acquire a good or service that is related, at least indirectly, to R&D activities being performed by the supplier. Receipt of consideration under these contracts will frequently be irrespective of the outcome of the R&D activities – the R&D activity may be a process improvement, an environmental project or not critical to the determining the consideration under the contract. Such a contract is not currently considered to be providing a "guaranteed return to an investor" under s 73CA by the Commissioner but could be captured by this proposed provision.

MJA submits that this rule is not necessary as s355-205 requires that the taxpayer receiving the tax credit must be the one that owns the intellectual property, controls the R&D and bears the financial burden of the R&D and subdivision 355-G prevents a taxpayer from getting both an R&D recoupment and a tax credit.

Maintain the self-assessment regime backed by extending the Taxpayer's Charter to cover AusIndustry reviews

The proposed changes to the administration of the Credit compared to the Concession include a significant increase in the powers for AusIndustry to review, reclassify and reject registrations. These include the technical possibility of rejection of R&D projects without AusIndustry having to meet with the taxpayer. This will result in more disputes that are not of the taxpayer's making. Feedback from the Government bodies on this issue is that they do not believe that AusIndustry would do this. This is an unsatisfactory response to unsatisfactory legislation, especially given the current performance of AusIndustry and the Innovation Australia Board (the Board) in administering the current Concession. There is emerging evidence that the performance of AusIndustry in administering the current Concession may be in question. Many reviews are believed to be taking an inordinate amount of time. Decisions by the Board are being made contrary to advice from AusIndustry and by the Government-appointed independent experts which unequivocally support the taxpayer's claim. These concerns need to be responded to as we believe that current levels of confidence in the Concession compliance framework are at an all-time low amongst the business community.

Under these circumstances, the expansion of AusIndustry's powers, particularly with respect to registration, is counter-intuitive to the goal of providing more certainty to taxpayers. Further, the ability of AusIndustry to create potentially differing sectoral guidelines introduces the possibility of horizontal inequities. A taxpayer in one industry may be disadvantaged compared to a comparable taxpayer in a more favoured industry. A perception is rapidly emerging that the administration would like to control the level of benefits conferred in different sectors by use of the position statements which will move the program away from one of entitlement that can be planned for with confidence to one that reflects the

views of administrators as to what is “genuine R&D” resulting in something akin to a merits-based grants program.

MJA submits that the administrative powers need to properly reflect the principles of self-assessment. If AusIndustry is able to create guidelines then these must not create horizontal inequities and AusIndustry must be held to the Taxpayer’s Charter. The right of a taxpayer to self-assess eligibility of R&D projects that will be reviewed equitably and consistently against published guidance that it gives the same protection as a binding public ruling is critical. Where the guidance is merely the opinion of AusIndustry, it must be recognised as such with an appropriate independent dispute settling procedure that recognises the rights of the taxpayer.

6. Conclusion

Despite the overwhelming expressions of concern regarding the shortcomings of the Christmas draft, the Easter draft remains a disaster for encouraging R&D by Australian business. It excludes large amounts of R&D currently supported by the Concession. It will do it in a way that encourages research not development. In doing so, it will enhance, not overcome, the problems in Australia of bringing our research to commercialisation in a manner that benefits Australia.

In short, the Easter draft will not achieve the goals espoused by the Government in May 2009 in the Budget and *Powering Ideas* because it is a restriction in support for R&D to research only and it will be harder and more costly for business to participate. The end result will be more businesses doing less R&D, a fall in BERD and a loss of the full economic benefits from innovation that our economy has enjoyed over the last 25 years.

Appendix 1 – Modelling Revenue Neutrality

The ED and EM were delivered without the customary Revenue Impact Statement. MJA has been able to undertake some analysis of its own regarding the issue of revenue neutrality and it is presented in this Annexure.

In order to assess the revenue impacts of the Budget announcements prior to introducing new eligibility restrictions, the first thing to consider is the impact of the abolition of the Incremental Concession.

Effect of the elimination of the Incremental Concession and estimated BERD for 2010/11 to 2013/14

Table 1: Company tax payments compared to R&D Expenditure (actual)

	2000/01	2001/02 (1st year 175%)	2002/03	2003/04	2004/05	2005/06	2006/07
Company Tax Payments(A)		28,439,000,000	35,079,000,000	37,503,000,000	44,570,000,000	50,978,000,000	60,131,000,000
% Increase			23.3%	6.9%	18.8%	14.4%	18.0%
R&D Expenditure(B)	5,266,000,000	6,116,000,000	6,381,000,000	6,936,000,000	8,258,000,000	9,733,520,000	11,594,730,000
% Increase			4.3%	8.7%	19.1%	17.9%	19.1%
Difference			-19.0%	1.8%	0.2%	3.5%	1.2%
Previous 3 yr Average				5,921,000,000	6,477,666,667	7,191,666,667	8,309,173,333
Increase				1,015,000,000	1,780,333,333	2,541,853,333	3,285,556,667
175% Amount(C)				976,000,000	1,711,926,437	2,444,186,062	3,159,313,603
% of *175% Amount* over the increase of the 3 year average(D)				96.2%	*96.2%*	*96.2%*	96.2%
Cost of 125% Concession(E)					520,200,000	619,350,000	730,014,000
Cost of 175% Concession					146,400,000	256,788,966	366,627,909
Cost of Program(F)					666,600,000	876,138,966	1,096,641,909

(A) Source: Company tax payments ABS, *55060DO001_200708 - Tax Revenue, Australia, 2007-08*. This includes PRRT
(B) Source: IR&D Board / Innovation Australia's *Annual Reports* and The Australian Government's *New Elements of the R&D Tax Concession: Evaluation Report* June 2007
(C) Source: IR&D Board / Innovation Australia *Annual Reports* and The Australian Government's *New Elements of the R&D Tax Concession: Evaluation Report* June 2007

(D) As information on the *175% Amount* is only available for 2003/04, this assumes the same percentage for the 2003/04 period applies in subsequent years
(E) This assumes there are no (or negligible) 100% amounts included in (B)
(F) This assumes the *Cost of the Program* impacts the Budget performance the year after the R&D Expenditure is incurred

Table 1 models the data available from the Board against the income tax payments made by companies from the latest ABS Survey on BERD. This data shows that R&D expenditure changed at similar rates to company tax payments. On the basis of the June 2007 review following the introduction of the Incremental Concession and the Tax Offset, it was identified that approximately 96% of the increase in the prior three years average of total R&D expenditure by all registrants results in 175% claims.

Table 2: R&D Expenditure estimates based on modelling in Table 1

	2007/08	2008/09
Company Tax Payments(A)	66,661,000,000	59,550,000,000
% Increase	10.9%	-10.7%
R&D Expenditure Estimate(B)	13,046,954,087	11,872,445,551
% Increase(C)	12.5%	-9.0%
Previous 3 year Average	9,862,083,333	11,458,401,362
Increase	3,184,870,754	- 414,044,188
175% Amount(D)	3,062,496,409	398,135,101
Cost of 125%(E)	869,604,750	978,521,557
Cost of 175%(F)	473,897,040	459,374,461
Cost of Program(G)	1,343,501,790	1,437,896,018

(A) Source: *Budget Strategy and Outlook: Budget Paper 2009-10*, Statement 9: Budget Financial Statements
(B) These estimates are based on changes in tax payable
(C) These estimates are based on the correlation between company tax payments and R&D Expenditure shown in Table 1 and adjusted by an average difference
(D) These estimates are based on data from IR&DB / Innovation Australia *Annual Reports* and *New Elements of the R&D Tax Concession: Evaluation Report* June 2007
(E) This assumes no (or negligible) 100% amounts are included in (B) (e.g. Feedstock Expenditure, Core Technology Expenditure)
(F) Refer to the modelling in Table 1 in relation to the % of *175% Amount* over the increase of the 3 year average
(G) This assumes the *Cost of the Program* impacts the Budget performance the year after the R&D Expenditure is incurred

Table 2 models the application of the findings in Table 1 to the latest complete years based on the figures from the 2009 Budget. This modelling shows that of the approximately $1.4 billion cost of the program in terms of Federal revenue forgone, the Incremental Concession accounts for about $0.465 billion. This means that for the new Credit to be a revenue neutral replacement for the Concession, the elimination of the 175% would

fund about a 50% increase in the base credit before any tightening in the eligibility criteria is required (i.e. the average cost of the 125% Concession is around $935 million and with a 50% increase in rate this equals the $1.4 billion). From the information contained in the latest Board Annual Report, more than 20% of registrants have turnovers of greater than $20 million. These registrants will get less by way of the increase in the base rate than the amount they have funded by giving up the Incremental Concession. The latest Annual Report also highlights that those businesses making claims of more than $10 million represent less than 3% of all registrants but approximately 55% of the total expenditure claimed. This indicates that the top 20% of claimants who are most likely to be restricted to the 40 % credit (33.3% improvement) will make up the vast majority of the total claimed.

This modelling is conservative in its estimate of the cost of the Incremental Concession and therefore understates the savings by its elimination. It is based on the only publicly available figures for the 2003/04 year from the Australian Government's June 2007 *Elements of the R&D Tax Concession: Evaluation Report*. The 2003/04 year occurred relatively soon after the introduction of the Incremental Concession and the Tax Offset and the program uptake was still ramping up. The latest Board Annual Report provides figures for 2006/07 year that show an 85% increase in registrants for the Incremental Concession against an 8% increase in registrants only claiming the 125% Concession or Tax Offset over the same time period. Also, the average value of a claim including the Incremental Concession increased 39% whilst the average value of 125% Concession claims (i.e. those registrants without an Incremental Concession) only increased by less than 13% over the three years. This would seem to indicate that the Incremental Concession represents much more than a 50% increase over the base cost of the program and that its elimination will also fully fund a 100% increase over the base cost for SMEs. These SMEs represent less than 20% of the total R&D Expenditure claimed (less than $2 billion of the R&D Expenditure claimed) and the 45% credit would cost less than $100 million – well within the potential savings generated from the elimination of the Incremental Concession.

Table 3: R&D Expenditure - forward estimates based on Budget forecasts

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14 (est.)
Company Tax Payments[(A)]	66,661,000,000	59,550,000,000	56,700,000,000	57,450,000,000	63,960,000,000	68,860,000,000	74,135,390,869
% Increase	10.9%	-10.7%	-4.8%	1.3%	11.3%	7.7%	7.7%
R&D Expenditure Estimate[(B)]	13,046,954,087	11,872,445,551	11,501,947,601	11,845,624,818	13,385,180,878	14,633,520,101	15,998,282,916
% Increase[(C)]	12.5%	-9.0%	-3.1%	3.0%	13.0%	9.3%	9.3%
Previous 3 year Average	9,862,083,333	11,458,401,362	12,171,376,546	12,140,449,079	11,740,005,990	12,244,251,099	13,288,108,599
Increase	3,184,870,754	- 414,044,188	- 669,428,945	- 294,824,262	1,645,174,888	2,389,269,003	2,710,174,317

175% Amount(D)	3,062,496,409	398,135,101	100,000,000	100,000,000	1,581,961,272	2,297,464,578	2,606,039,540
Cost of 125%(E)	869,604,750	978,521,557	890,433,416	862,646,070	888,421,861	1,003,888,566	1,097,514,008
Cost of 175%(F)	473,897,040	459,374,461	59,720,265	15,000,000	15,000,000	237,294,191	344,619,687
Cost of Program(G)	1,343,501,790	1,437,896,018	950,153,681	877,646,070	903,421,861	1,241,182,757	1,442,133,694

(A) Source: Budget *Strategy and Outlook: Budget Paper 2009-10*, Statement 9: Budget Financial Statements
(B) These estimates are based on changes in tax payable
(C) These estimates are based on the correlation between company tax payments and R&D Expenditure shown in Table 1 and adjusted by an average difference
(D) These estimates are based on data from IR&DB / Innovation Australia *Annual Reports and New Elements of the R&D Tax Concession: Evaluation Report* June 2007
(E) This assumes no (or negligible) 100% amounts are included in (B) (e.g. Feedstock Expenditure, Core Technology Expenditure)
(F) Refer to the modelling in Table 1 in relation to the % of *175% Amount* over the increase of the 3 year average, This also assumes a nominal $100,000,000 *175% Amount* for the GFC reduced years
(G) This assumes the *Cost of the Program* impacts the Budget performance the year after the R&D Expenditure is incurred

Table 3 extends Table 2 using Treasury forecasts from the 2009 Budget Papers. It also provides a contrary view to the Treasury position that R&D claims under the current legislation will keep on increasing without regard to the economic performance of Australian business. The table shows the potential impact of the GFC on BERD eligible for the Concession. This modelling shows that if nothing changes to the Concession it is likely to only cost $4.46 billion over the four year period from 2010/11 to 2013/14. With no Incremental Concession over that four year period, the Concession is likely to cost $3.85 billion. This is in contrast to the minimum figures discussed by Government of a cost of $1.4 billion annually or $5.6 billion (plus any year on year increases). This difference of, at least, more than $1 billion is more than enough to fund all the increases in R&D support proposed without any eligibility changes being required.

This modelling assumes that R&D Expenditure increases will be similar but slightly ahead of increases in tax payments as is the case in most years. This is conservative in that, since the year the Incremental Concession was introduced, company tax payments have increased by 111% from 2001/02 ($28.439 billion) to 2006/07 ($60.131 billion). At the same time, R&D Expenditure has only increased 90% ($6.116 billion to $11.595 billion).