



The Tax Laws Amendment (Research and Development) Bill 2010

Response to Exposure Draft and Explanatory Materials

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Tax Credit (the Credit) in the May 2009 Federal Budget (the 2009 Budget) heralded the replacement of the complex and outdated R&D Tax Concession (the Concession) with a simplified and enhanced R&D tax incentive.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

On 18 December 2009, the Federal Treasurer and the Minister for Innovation, Industry, Science and Research (IISR) released Exposure Draft (ED) legislation and Explanatory Materials (EM) introducing the new Credit. This release was in response to the commitments made by the Federal Government (the Government) in its 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*", a report resulting from the 2008 National Innovation System (NIS) Review.

The objectives of the 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.

MJA submits that the proposed Credit fails to achieve any of the first five objectives and notes that there are real concerns surrounding the consultation process to date.

This failure is so pervasive that we believe that the proposed measures constitute a much larger reduction in support for Business Expenditure on Research and Development (BERD) in Australia than those associated with the 1996 changes to the Concession made by the Coalition Government. The 1996 changes were a deliberate action by that Government to wind back support for BERD by halving the benefit and reducing eligible expenditure. It resulted in a sustained fall in R&D activity and required corrective action five years later. This ED will result in a similar but more pronounced effect and will discourage 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 challenges such as climate change and globalisation.

The ED fundamentally alters the nature of the R&D tax benefit available by the introduction of the 'augmented feedstock rule' and related expenditure provisions (including the 'expenditure not at risk' provision and the 'on own behalf' rules). The ED changes 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 R&D that fails partially or totally. The calculation of the expenditure adjustments is complicated and open-ended and the available benefits can only be determined after the market value of the R&D can be assessed. Given that companies will plan for

most of their R&D to generate a valuable output, they will therefore intend in most cases to not access the Credit, rendering it as a form of relief that will only be considered after the R&D has been completed.

This fundamental change occurs irrespective of the applicable definition of R&D. However, the ED goes on to severely restrict what qualifies as eligible R&D and radically alters the compliance regime. These changes combine to render the program largely irrelevant in the commercial R&D marketplace. The Credit actually rewards failure and has no apparent role to play in successful mainstream R&D.

MJA believes that the introduction of the Credit will reduce government support for R&D to somewhere between \$300-400 million per annum, which would see the current support reduced to about 20-30% of its current size. This result is not consistent with the Government's announced policy.

In summary, the proposed Credit transforms the R&D tax incentive from a planning tool based on relative certainty to a compensation package for failed R&D based on uncertain after-the-fact tax calculations. This is due to the combined impact of a series of features including a new augmented feedstock rule, extremely broad integrity provisions, a dramatically narrowed definition of R&D and widely expanded administrative powers.

MJA submits that the draft legislation will result in a more complex and less predictable R&D tax program and that:

- The draft legislation is not consistent with the Government's commitments in terms of announced R&D policy and revenue neutrality
- The package has a disproportionately negative impact on small to medium enterprises (SMEs)
- The changes will have an immediate negative impact on Australia's international competitiveness and BERD
- The Government will significantly reduce R&D support at the very time that corporate Australia is being asked to lift its R&D effort in areas of vital national significance such as the development of low emissions technology and the National Broadband Network

Our review of the issues suggests that the main design features of the Credit – higher base rates; introduction of foreign-owned R&D – can be introduced in a revenue neutral manner given the cost savings associated with the abolition of the Incremental Concession and the follow on impact of the Global Financial Crisis (GFC). As such, the target of revenue neutrality can be achieved with no changes to R&D definitions, expenditure provisions or administrative arrangements.

2. Does the draft legislation reflect announced policy?

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

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 our 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 administration 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?

Having looked extensively at the proposed Credit, 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.

Consultations in January 2010 with the Treasury and IISR have done nothing to allay those fears. The package in its current form is simply unworkable.

The direct consequence of this conclusion is to return to the Government's policy announcements and determine whether the proposed legislation is an accurate reflection of that policy. If this proves not to be case, the case for returning the legislation to the Government for reconsideration is greatly strengthened.

Origin of the policy – the NIS Review

As described above, *Venturous Australia*, otherwise known as the Cutler Report, provided a platform for the development of *Powering Ideas* including the design of a new R&D tax incentive. In terms of the R&D tax program, the Government-appointed Expert Panel (the Panel) recommended a new R&D Credit along the lines of that which was subsequently announced in the 2009 Budget. It also recommended a closing of the Incremental Concession provisions of the Concession and this was also reflected in the 2009 Budget announcement.

Much of the discussion focused on extensions to Government support that might be introduced into the R&D tax incentive. In addition, one issue of concern was raised.

In Chapter 8 of the paper, the Panel discussed its concerns about the extent to which large “one-off” risky and innovative R&D projects in areas such as mining and civil engineering could be claimed under the current Concession and suggested that this area could be looked at in more detail by the Government.

The Panel went on to suggest that control measures should be taken to protect revenue and ensure ongoing program viability and that they could include the following:

- refining the definition of R&D
- developing more comprehensive administrative guidelines
- establishing ceilings on projects of a particular scale
- limiting the nature and extent of ‘directly related costs’ able to be claimed against eligible R&D activities

Critically, the Panel was unable to satisfy itself in the time available as to how best to deal with this perceived problem.

MJA submits that the Panel actually recommended a review of a series of possible approaches and that it did not call for an immediate tightening of eligibility criteria.

The 2009 Budget

The proposed move to the Credit from 1 July 2010 was announced in the Federal Budget in May 2009.

Powering Ideas was released simultaneously and it 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 (restoring it to pre-1996 levels) and lift the base tax incentive for R&D undertaken by larger firms.

In announcing the new Credit in the 2009 Budget (which adopted the *Venturous Australia* Panel's 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.

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.

Clearly stimulated by the Panel commentary described above, the Government also announced that eligibility criteria would be tightened to ensure that the Credit supported only “genuine R&D”, albeit without defining the meaning of that term.

MJA submits that the resulting package goes way beyond anything that could be described as a tightening of eligibility criteria. The Analysis sections of this submission will highlight the major

changes introduced in the draft legislation and this will underline that this is something much more than a “tightening” exercise.

The overall result is a package that fails to meet the policy aims of *Powering Ideas*, the declared objectives of the Credit and will deliver a level of support to the market well short of \$1.4 billion.

Does the ED reflect a different policy agenda?

As will be discussed in further detail in the section concerned with the analysis of the Object clause, the ED appears to draw heavily on the reasoning contained in the Productivity Commission’s *Public Support for Science and Innovation: Research Report* of March 2007 (the PC Report) which advocated a severe curtailing of government support for commercially-focused R&D.

A key recommendation of the PC was the legislation of a narrower definition of R&D consistent with the approach that has now been adopted with the Credit. It also advocated the abolition of the base R&D Tax Concession for large companies, defined at that time as having an annual group turnover of greater than \$5 million, and replacing it with an incremental-only version.

MJA submits that neither of these recommendations is reflected in the policy announcements described above.

The NIS Review dealt squarely with the PC’s viewpoint and concluded the polar opposite – increase the base incentive and discontinue the incremental premiums along with a consideration of the possible refining of other eligibility criteria and improvements to administrative guidelines.

The 2009 Budget reached the same conclusions with some variation. The Budget Night press release referred only to a tightening of eligibility criteria to ensure only genuine R&D was supported.

Yet, in the face of the fact that the NIS Review’s position was clearly adopted by the Government in its 2009 Budget, the draft legislation has proposed wholesale changes to the well-established and well-understood definition of business R&D and the nature of the benefits conferred.

Claims that these changes reflect Government policy simply do not stack up. The ED is clearly consistent with the PC Report but the approach of the PC did not survive the NIS Review and it is not expressed in the Government’s public policy statements.

The Credit reflects a different policy agenda and it should be revised to bring it in line with the appropriate policy framework.

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. The package was not 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.

To address the concerns of the business community about the impact of the announced changes on BERD, it could have been expected that the Credit legislation would have detailed exactly how the new program could achieve the stated aims within its budgetary constraints. To do this, the Treasury could have modelled the impacts of the cost-saving measures against the cost of new stimulus measures. Any modelling would have needed to consider:

1. the impact of the removal of the Incremental Concession and the International Premium;

2. the projected BERD if the existing Concession continued at the base concessional rate of 125% with no other changes to the program; and
3. 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. 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 Annexure A 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
- 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 this 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.

3. What are the likely impacts of the draft legislation?

In this section, we summarise the likely impacts of the implementation of the Credit in its current form on some key areas of interest.

Reduced level of support for R&D and program participation rates

The lack of any Treasury modelling makes the assessment of the value of support associated with the Credit a very difficult one to undertake.

We have held discussions with various companies and industry groups on this matter. The responses put the reduction in support anywhere from 50 to 90% of current levels. MJA suspects that the net result might be around the midpoint. We estimate that the Credit will deliver around 20-30% of current support levels i.e. \$300-400 million per annum.

The matter is complicated by the difficulty in assessing the likely impact on program participation rates. The 1996 changes saw Concession registrations plummet from over 4,000 to less than 3,000 in short order. This reflects the fact that companies conducting eligible R&D decided not to participate in the program as the perceived compliance costs and risks outweighed the available benefits. Given the wide range of shortcomings identified with the Credit, a similar reaction is likely to occur if the Credit became law.

As a result, the support actually delivered will be considerably lower than what might otherwise have been accessed by taxpayers.

Impact on SMEs

MJA believes that the proposed restrictions to supporting activities will disproportionately impact on the very SMEs to which the Government purports to be redistributing support.

It needs to be remembered that the changes to the program will apply to all taxpayers, big and small. It should also be appreciated that SMEs conduct R&D in exactly the same manner as large corporates. Theoretical advances are only translated into new and improved products and processes when they are proven to be technically available at a commercial scale. SMEs construct prototypes, build pilot plants and conduct production-based trials in exactly the same manner as their larger brethren. In fact, SMEs are less able to sustain the operation of dedicated R&D facilities and are perhaps more prone to be captured by the commercialisation provisions that have been attached to the eligibility of R&D activities and expenditure.

A further difference lies in the fact that the proportion of operating cost spent by technically-oriented SMEs and start ups is dramatically greater than in the large corporate sector. If you restrict the industrial nature of the definition, you end up hitting SMEs harder.

To demonstrate this point, MJA reviewed the last 3 years of registrations lodged with the Innovation Australia Board (the Board) on behalf of its clients. The results were as follows:

- 67 companies had a turnover of less than \$20 million (SMEs).
- 174 companies (not groups) had a turnover of greater than \$20 million (large companies).
- The average claim of the SMEs was \$625,000.
- The average claim of the large companies was \$7,890,000.

- The median total claim/turnover ratio of the SMEs was 26.87%.
- The median total claim/turnover ratio of the large companies was 1.22%.

The clear insight offered by these results is that any restrictions to the breadth of claimable activities will impact SMEs in a disproportionate way, even though more raw dollars would be saved from the large companies.

The Credit targets SMEs by offering a refundable option at a higher rate of benefit which becomes even more important in the absence of competitive grants such as Commercial Ready. However, the viability of these organisations, particularly in loss-making phases of growth, will be threatened if the access to that Credit is hampered by a significantly restricted program.

The impact of the changes is perhaps brought into even starker relief with the release of the conditions of the Commercialisation Australia grants program launched in January 2010. The main grants on offer are the Early Commercialisation grants which are repayable on defined “success”. This is a clear echo of the philosophy of the Credit which removes the benefit where the R&D has a direct market value.

It is well known within the innovation community that companies that treat innovation as a recoverable cost centre put themselves at risk in comparison to those who see it as a necessary investment in their futures. The Concession and Commercial Ready definitely reflected an attitude of investment with profits returning via the taxation system to the Government whereas the Credit and Commercialisation Australia appear to treat the government support as a directly recoverable cost based on immediate commercial circumstances. It seems that the Government is subscribing to the ‘innovation is a cost’ philosophy and is regarding its programs as subsidies rather than investments.

Finally, the complexities described in this submission will test the compliance resources available to SMEs to breaking point. Typically, all tax work is outsourced and the compliance costs associated with the Credit may lead many SMEs to conclude that their tax risk profile precludes them from investing in the support necessary to safely secure an R&D tax claim.

Global technical challenges and international competitiveness

A consistent message that has been relayed by stakeholders to MJA in the consultation process is the inherent contradiction in the apparent paring back of eligible R&D support at the very time that the Government is looking to Australian industry to help solve key social challenges in areas such as climate change and connectivity.

Initiatives such as the Carbon Pollution Reduction Scheme (CPRS) and the National Broadband Network make it clear that experimental development work is needed from Australian industry to meet the ambitious targets being set. Yet, at the same time, the main form of government support for the required R&D is being reduced.

Carbon reduction is a prime example. The key report in framing the Government’s policy response to carbon abatement has been the Final Report of The Garnaut Climate Change Review. At page 405, Garnaut had the following to say:

“Demonstration and commercialisation: The new knowledge generated by early research is applied to the real world through pilot, demonstration and first commercial-scale projects. These activities tend to be capital intensive in nature, requiring research bodies or firms to take on substantial risk since the technology is yet to be proven in the intended operating environment. Because the technology may not yet be cost-competitive (even after factoring the impact of a price on emissions), commercial returns are problematic. Projects must therefore rely on high-risk venture capital funding, government support,

niche market support or philanthropic patronage. Some studies have termed this phase 'the valley of death', where most technologies fail either technically or financially."

Yet these are the very types of activities that are squarely in the sights of the restrictions proposed under the Credit. Using the words of Garnaut, the new eligibility restrictions will make 'the valley of death' that much deeper.

The companies that have been speaking to MJA are confused by this very apparent contradiction. No doubt this point will be echoed in many of the submissions being made in response to the legislation.

In addition, companies are expressing their concern that the proposed reforms will continue a process that has seen Australia become a significantly less attractive place to do R&D in recent times. The international competitiveness of our private sector R&D system stands to be significantly eroded.

The fact that the Credit opens up the possibility of claims to foreign-owned IP will have little impact if most of the R&D performed does not qualify under a hampered program.

Impact on BERD

As detailed in the above discussion with respect to SMEs, the MJA large company claim/turnover ratio is 1.22%. This sits consistently with recent Australian Bureau of Statistics (ABS) figures regarding Australia's BERD/GDP ratios. In the period 2005-08, the ratio has averaged 1.18% and sees us currently ranked 16th in OECD nations. Large companies definitely spend most of our innovation effort and this is reflected in the figures. The higher comparative spend of SMEs gets washed out in the overall measure.

These figures reflect healthy rates of growth in the ratio in the mid-decade period when the Australian economy was growing rapidly and R&D spend was increasing as recognised in growing Incremental Concession claims.

Since that period, the GFC has occurred and R&D budgets are reported to be in retreat. Our inquiries indicate that cost pressures on the Concession associated with the Incremental Concession claims are easing. This adds to the concern that now is a particularly bad time to be restricting the basis of R&D support.

We have noted the disproportionate impact that the new eligibility restrictions would have on SMEs. However, the impact on Australia's overall BERD effort must also be considered in terms of the restrictions the changes will place on the R&D efforts of large organisations.

The ABS data shows that investments in R&D depend strongly on the size of the business. Most of BERD (70%) is contributed by larger sized businesses (> 200 employees). A relationship is also apparent between size and indicators such as innovative activity and information technology uptake in Australian businesses.

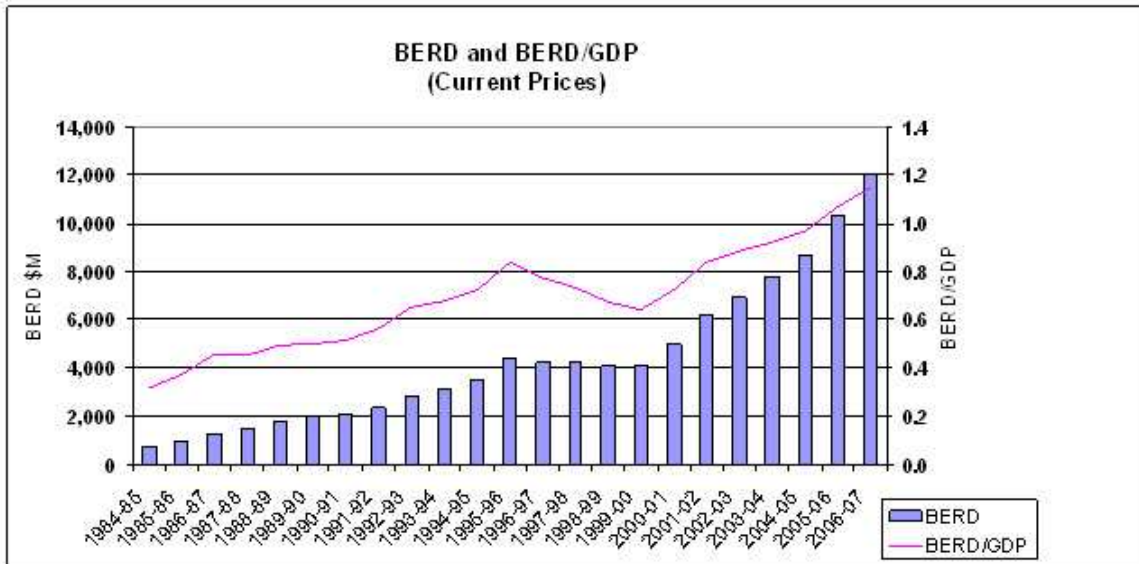
A recent ABS survey found that the proportion of innovation-active businesses increased significantly with the size of the business from 37% for businesses with 0-4 employees to 71% for businesses with more than 200 employees.

Restrictions on the types of projects conducted by large companies will immediately show up in overall BERD figures.

Finally, MJA has observed that most taxpayers complete their ABS forms based on their R&D tax returns. If the Credit restricts the extent of expenditure pertaining to supporting activities claimable as R&D, it is highly predictable that BERD reported to the ABS will fall concomitantly. As we have

seen, there is no evidence that the higher rates of credit or introduction of foreign-owned IP will in any way compensate for the impact of the new eligibility restrictions on all Australian companies.

We can expect a repeat of the impact that the halving of the Concession (along with the introduction of the feedstock offset and the closing of syndication) had on BERD in 1996 – a precipitous fall that took several years to arrest as demonstrated below.



Source:

<http://www.innovation.gov.au/Section/AboutDIISR/FactSheets/Pages/BusinessExpenditureonResearchandDevelopmentFactSheet.aspx>

MJA believes that this is a predictable impact of the proposed changes and is a risk simply not worth taking.

We move now to some detailed analysis of some of the main features of concern regarding the proposed legislation. Time and space prevents us from undertaking a detailed look, provision by provision. We submit that this is not a useful exercise given that we see the overall package as failing to meet the Government's policy directives and we feel that it should be comprehensively reconsidered by the appropriate government bodies.

4. Analysis – A new Object clause

The platform on which the Credit has been built is not a sound one.

This is evident immediately from the Object clause (s335-5). The EM suggests that the aim of the Credit is subsidise R&D that a firm chooses to not undertake "...because of technical uncertainty in cases where the knowledge generated would spillover to the benefit of other firms and the wider economy." (para. 1.9) The balance of the legislation then sets about attempting to incentivise this particular subset of overall business R&D, presumably on the basis that the balance of R&D is not worth supporting for a variety of reasons including that it occurs anyway, involves less spillover or generates a commercial return.

The resulting shortcomings will be looked at in length. At this point, MJA wishes to state that we believe that the Object clause is concerned with a fictitious category of R&D activity. In our experience, we have never encountered possible R&D that a company has chosen to not do for reasons of risk combined with spillover. Companies might plan to do something about spillover – industrial secrecy; intellectual property protection; rapid exploitation of first mover advantage – but we do not believe that it is ever put forward by companies as a reason not to pursue R&D.

As a result, the Credit takes its first step away from relevance to its customer base by addressing an issue that does not accord with the R&D behaviour of Australian companies. The series of new restrictive measures that follow in the Credit legislation all exacerbate this problem.

Again, it is worth reflecting on the derivation of the wording of the Object clause. The table below compares its wording with *Powering Ideas* and the PC Report.

Credit ED	<i>Powering Ideas</i>	PC Report
<p>355-5 Object</p> <p>(1) The object of this Division is to encourage industry to conduct *R&D activities that might otherwise not be conducted because of technical uncertainty, in cases where the knowledge gained is likely to spillover to the benefit of the wider Australian economy.</p> <p>(2) This object is achieved by providing a tax incentive for industry to conduct experimental activities that:</p> <p>...(b) involve considerable novelty and *high levels of technical risk;</p>	<p>Business innovation</p> <p>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 Australian Government will ...</p> <p>Aim to increase the proportion of businesses engaging in innovation by 25 per cent over the next decade.</p> <p>Aim to increase the number of businesses investing in R&D over time — fuelled by the introduction of a new R&D Tax Credit, which will double the tax incentive for</p>	<p>[The R&D tax concession should only] target activities that have two features: they generate high spillovers and they would not take place in the absence of that support. As such activity is likely to involve higher levels of novelty and technical risk, eligibility criteria determining access to support should to the extent practicable, reflect those features.</p>

	small-business R&D (restoring it to pre-1996 levels), and lift the base tax incentive for R&D by larger firms.	
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The similarities between the proposed Object clause and the wording in the PC Report are undeniable. It is tempting to speculate as to whether this legislation was first drafted in the immediate wake of the PC Report as the ED is labelled '2008-2009-2010'.

Equally undeniable is that the Rudd Government's agenda contained in *Powering Ideas* is different from the PC Report.

The Rudd agenda is about encouraging more innovative activity. It is about providing incentives to overcome specific market failures. The market failures identified in *Powering Ideas* range from education through to venture capital and commercialisation. In regards to BERD, the Government is seeking to encourage more businesses to innovate and invest in R&D. Two important aspects of the agenda are to ensure that the incentive goes to legitimate R&D and that the incentive be revenue neutral over the first 4 years. It is not about restricting the support available and making it harder to be eligible for the incentive.

The paragraph from the PC Report quoted above is from Page 422 and is in support of its Finding 10.1. This finding argued for the restriction of R&D incentives. To justify its position, the PC Report argued that the Australian definition of R&D is wider than the OECD Frascati definition and that the Frascati definition requires R&D to be both innovative and technically risky.

These assertions are incorrect. The Frascati definition is already wider than the Concession definition. It applies to a wider set of services and to the application of existing knowledge from practical experience – both of which are not supported by the Concession. Despite the PC Report specifically stating that "the Frascati definition requires R&D to be both innovative and involve technical risk" there is no such requirement in the Frascati definition. Of course, the Credit's definition of R&D is narrower again.

At Page XXVIII in its Key Points section, the PC Report advocated the following:

"More generally, a narrower definition of R&D *in line with international conventions* [emphasis added] should be considered, which requires eligible R&D to be *innovative and highly risky* [emphasis added] (rather than the present condition for R&D to be highly innovative or highly risky). If administratively feasible, this change has a higher chance of generating spillovers.

As noted previously, the increasing focus of some business programs on later-stage commercialisation, **rather than research** [emphasis added], runs the risk of supporting R&D that might have occurred anyway and of shifting support away from the stage of R&D where spillovers are most likely."

In other words, the PC was interested in driving support programs towards the research done by businesses at the expense of their commercially-oriented R&D programs, which is the work the Frascati definition of R&D describes under the heading of experimental development.

The Credit legislation has clearly adopted the same position as the PC. By all means, it argues, the Government should provide a more generous tax credit to the basic and applied research done by companies, which is known to be comparatively rare and low cost. However, whenever

corporates stray into their natural province involving the experimental development of new and improved products and processes, the support must be severely curtailed or removed altogether.

The net result is a new concept of business R&D eligible for support that is scientific rather than industrial in nature.

In its 25 years of operation, the Concession has sent a strong cultural signal to corporate Australia that R&D is not just 'white coats and foaming test tubes'. The proposed changes will rapidly reinstitute that debunked viewpoint. As was argued earlier in this submission, the impact on BERD will be immediate and the effects will be felt disproportionately by the very SMEs who are the intended target of the redistributed support offered by the Credit.

The proposed new definition of R&D activity is not aligned with Frascati and it will put Australia's competitive position and reputation as an innovative nation in peril internationally.

It is of crucial importance to note that the PC Report, in pursuit of its agenda, recommended the removal of the base Concession (currently 125%) and the switch to an incremental-only program (currently 175%). Both *Powering Ideas* and the 2009 Budget rejected this approach in supporting a base-only Credit as recommended in *Venturous Australia*. As such, it is impossible to reconcile the ED's appropriation of the PC Report's views in the design of the balance of the Credit's provisions in the context of the Government's announced policy position.

Venturous Australia and *Powering Ideas* both characterise government support for BERD as an investment for the future. In the context of R&D tax policy, "spillover" is mentioned only three times in *Venturous Australia* and on each occasion it does so when highlighting where the current definition of R&D is too restrictive and therefore cannot generate spillovers by encouraging some types of desirable R&D. It is mentioned twice in *Powering Ideas*, both times as an argument to continue and expand support for innovation.

The thrust of the PC Report was to redirect government support for innovation away from businesses to universities and other public research bodies and sees BERD support as a subsidy. The thrust of *Venturous Australia* and *Powering Ideas* in regards to BERD is to improve the support provided by the R&D tax program so it encourages more BERD and characterises the support as an investment.

MJA very much supports the latter approach which accords with announced Government policy. The philosophy contained in the Credit needs to be dramatically revised.

5. Analysis – A new set of expenditure provisions

As discussed earlier, the augmented feedstock rule fundamentally transforms the R&D tax benefit from something that can be planned for with comparative certainty to an open-ended after-the-fact tax calculation that prevents the Credit from acting as a real incentive to commercial R&D.

The 'expenditure not at risk' provision potentially goes further in denying the Credit to any R&D with a business dimension.

Augmented feedstock rule

The current feedstock offset prevents companies from claiming the Concession for the costs of materials and goods produced or acquired in processes undertaken prior to the R&D activities and the process energy inputs into these activities unless a loss is made on these costs. The augmented feedstock rule acts to exclude the costs of any R&D expenditure for which there is potentially a commercial return, with the exception of concept design expenditure, and therefore becomes a de facto commercial return clawback. This will eliminate a great proportion of legitimate R&D carried out by business. It will punish successful R&D and will arguably encourage R&D that is likely to fail. Of all the measures, this will have the biggest impact on reducing BERD in Australia. This measure is based purely on applying the PC's subsidy philosophy and runs counter to the *Venturous Australia / Powering Ideas* investment philosophy. It ignores the stated policy objectives of the Government and, by its implementation, it will conspire against the majority of the positive benefits for the economy sought by the Government. It is in fact a complete misnomer to call this a feedstock rule as the technical definition of feedstock (raw material required for an industrial process) does not form part of the new rule. The name of the rule is not an honest description of its operation.

MJA has been told by the administration that the rule needed strengthening to address shortcomings in the 1996 provisions that were introduced to deal with a "mischief" in the original Concession legislation. MJA wishes to use this submission to completely reject that characterisation of the reasoning behind the introduction of the 1996 feedstock expenditure offset.

In reality, the offset resulted from an approach from the then new Coalition Government to stakeholders seeking possible cost-savings measures to help deal with the \$8 billion deficit "black hole". After months of consultation, the result was the feedstock expenditure offset. All parties acknowledged that the offset was a distortion of the accepted distinction between tax expenditure, which the Concession sought to influence, and tax income, which returned dividends to the Government in the form of taxation payments. We can verify this account as we were directly involved in the consultations. There was never any thought expressed in the consultation sessions that the offset was to address a mischief. It was a measured exception to the principle of separation of expenditure and income in tax matters.

The augmented feedstock rule comes from a completely opposite viewpoint. It suggests that expenditure incentives should only be allowed where direct value is not generated by those expenditures. This means that companies will not be able to make decisions to increase R&D levels based on the prospect of gaining a tax Credit where there is any prospect that the R&D will generate an output of marketable value. It is evident that this will be the intention of most companies undertaking R&D. This is why the Government is hearing that this is no incentive at all.

It is critical to note that this reform, which alters the fundamental nature of the Government's support for BERD, will have the impact described above no matter what definition of R&D applies.

The restrictive impact of the augmented feedstock provisions will apply equally if the definition of R&D is widened from the current Concession version or remains the same.

The commercial return feedstock clawback proposed in the new legislation is highly complicated and affects all companies equally, whether they be involved in supposed 'whole of mine' projects or high-end biotechnology. It is reliant on establishing a market value of the feedstock output and it makes the valuation of R&D a head office ex-post tax calculation, divorced from the minds and the understanding of a taxpayer's operations personnel. The current legislation also suffers from this problem in that claiming the Incremental Concession requires head office ex-post calculations. The current 'raw materials and energy' feedstock exclusion is limited to the year of the R&D activity, whereas the examples in the EM demonstrate the potential for proposed augmented feedstock rules to impact on later years. Additionally, there has been no contemplation of the temporal issues involved in preparing claims where limits around net expenditure are in operation. R&D activities and projects routinely occur across financial years and the need to adjust claims at a later time that would be necessitated by these limits would result in a heavy compliance burden on taxpayers long after the expenditures have been incurred.

The proposed rules will also prove difficult to apply to complex long processing streams. Establishing a market value for an intermediate product at the time of its production can be problematic when the R&D activity does not produce a completed saleable product. Equally, the EM fails to be explicit in recognising and allowing for the existence of separate upstream and downstream sets of R&D activities. For example, the augmented feedstock rule should not exclude either R&D project where there is an R&D project in an earlier stage, e.g. mining or basic product manufacture, and another R&D project concerned with, e.g. ore processing or finished goods manufacture. In its application, the proposed augmented feedstock rules will disproportionately disadvantage R&D that must be done using existing processes and production facilities. Among the most disadvantaged will be SMEs who are unable to afford and use pilot plants or separate laboratories. Others affected include resource and manufacturing R&D projects that by necessity use large-scale assets. Process improvements to boost competitiveness, reduce carbon, water usage and other environmental impacts will be similarly discouraged.

The description of the incentive as a "subsidy" only applicable where the R&D results in a net loss raises many definitional questions and could be seen as incentivising failure only. An incentive is meant to have its impact at the time expenditure is incurred. It is not a form of compensation for economic loss. If a company understands that the Credit will not apply to its commercially successful R&D, where success will customarily be the company's intention at the outset of the project, then the incentive will have no impact on R&D investment decisions.

Expenditure not at risk

The replacement of the *Income Tax Assessment Act* 1936 (ITAA 1936) s73CA "Guaranteed Returns To Investors" provision with the much less constrained "expenditure not at risk" provisions (s355-405) opens up the possibility of the type of unintended consequences considered in a recent ATO discussion paper from 2008 on a proposed Taxation Ruling on s73CA (the 73CA paper). These unintended consequences were largely rejected on the basis of wording in s73CA that has been removed from s355-405. The wording of the new provision does nothing to clear up the confusion in the 73CA paper about who ultimately bears the risk and incurs the R&D expenditure with a sales contract for the output of R&D activities. We argue that there is no need for the inclusion of the 'expenditure not at risk' provision, given that the concept of 'on own behalf' has been retained.

The new provision removes the limitations that constrained the current provision to its intended purpose in practice. The apparent intended purpose of both provisions is to ensure that the R&D entity accessing the R&D incentive is the one bearing the commercial risk of undertaking the R&D activities. The aim is to prevent the establishment of syndication and other financial arrangements designed to enable investors in R&D, who will be compensated for the loss of investment funds, to access the incentive for expenditure that is therefore not at risk. This is a separate issue from

exploitation of the results of R&D and other normal commercial activities, receipt of a government grant or recoupment (yet to be drafted) and R&D activities performed on behalf of another entity.

The 73CA paper aggressively explored the boundaries of s73CA. It concluded that this provision applies to prevent an R&D entity from being entitled to the incentive because the expenditure is not at risk where it is expected that consideration in any form may be receivable in relation to activities that directly or indirectly include R&D activities and this consideration is not conditional on any R&D outcomes or results.

This suggested application by the ATO is too broad in that it can apply to exploitation of the results of R&D outcomes under normal commercial terms – an application excluded in the Explanatory Memorandum to the *Taxation Laws Amendment Act 1990* but not in the ED or EM to s355-405. The wording of s355-405 provides no argument against the aggressive interpretations made in submissions on the 73CA paper.

Standard contracts are often written for the sale of products or goods that will be the direct or indirect result of activities, including R&D activities, and such contracts can include performance requirements that will affect the value of consideration. The s73CA exclusion would not be triggered by such a contract if the R&D activities were entirely unanticipated at the time the contract was entered into and there was no variation clause or ability to renegotiate the contract. It would also not be triggered by R&D activities that were sufficiently unrelated to the performance of the contract. The application of s355-405 could result in a conclusion that the expenditure on R&D activities undertaken in the process of meeting contractual obligations is not at risk because the company *may* receive consideration via a property damage claim on the company's insurance policy or by a guarantee or warranty claim.

This results in the incentive becoming more like an insurance payout by way of partial compensation for losses made as result of undertaking R&D. The new provision has changed the title from “guaranteed return to investors” to “expenditure not at risk”. This changes the intent from preventing an investor seeking a R&D incentive on investment expenditure for which they were always guaranteed a return, to whether there might be a receipt of consideration by that entity or an associate as a direct or indirect result of the expenditure. If so, then that expenditure is not at risk and is ineligible for the R&D tax incentive.

There are too many unconstrained subjective criteria associated with this provision. In its widest interpretation, if there is a chance that some time in the future there might be a reasonable expectation that the most distant possible associate can reasonably be expected to receive consideration in any form that is indirectly related to R&D expenditure, then the company incurring the expenditure is not doing so at risk. This provision goes way beyond preventing financing arrangements that operate to provide a tax incentive for investor funds that are not at risk.

6. Analysis – a new definition of R&D activities

This section looks at the specific changes to the definition of eligible R&D activities. Annexure B to this paper looks more closely at some of the specific examples provided in the EM to demonstrate the operation of the new definitions and the augmented feedstock rule.

The spectre of additionality

Prior to considering specific aspects of the definitional change, MJA would like to address continuing feedback from the administration in the consultative process that the Concession is viewed as a “blunt instrument” and that there is a need to reform the definition so it more effectively targets “genuine R&D” or R&D that otherwise would not occur.

This viewpoint taps into what we call ‘the spectre of additionality’. It is a view that we find ourselves compelled to refute continuously. Administrators appear obsessed about designing an incentive that unlocks R&D that companies are choosing to forego based on their independent risk/return evaluations. The result of this approach can be seen in the Object clause of the Credit which identifies a class of R&D – R&D not done for reasons of risk and spillover – which we have submitted is the root cause of all the conceptual flaws with the proposed Credit.

MJA believes that an R&D tax incentive only works if it causes companies to do more of the R&D that makes sense in terms of risk and return – the R&D that they **were** going to do anyway. By reducing the upfront cost of all of the R&D involved with comparative certainty, you will deliver better R&D outcomes as more expenditure will be allocated to the R&D activities. If, in addition, the change the incentive makes to risk/return also leads to a previously marginal project to occur then that is an added benefit. However, it cannot be the rationale of program design as is the case currently with the Credit. If it is, you end up with an R&D definition that does not relate to the R&D plans and behaviours of Australian companies.

A shift in objectives

The purpose of the core R&D activities as described in the ED is that they must be to acquire new knowledge or information, including knowledge or information about the creation of new or improved materials, products, devices, processes or services (s355-25 (1)).

The Concession identifies a direct purpose around the creation of new and improved materials, products, devices, processes or services (s73B(1)).

MJA is concerned that the focus in the Credit on knowledge or information about the creation of the items may be an attempt to further restrict the Credit to situations involving basic and applied research at the exclusion of experimental development.

It reinforces a view that the Credit is about incentivising company research as opposed to company research and development.

Considerable novelty and high levels of technical risk

The September 2009 Treasury Consultation Paper raised the possibility of changing the definition of core activities from the current form so that they would need to involve both innovation and high levels of technical risk to be regarded as eligible. This change was overwhelmingly rejected in the subsequent consultation meetings and submissions. Only one public submission supported the change to “and” but only because all their projects have both innovation and risk.

This change had already been previously rejected by Parliament in 2001 in relation to the Coalition's Innovation Action Plan because of its potentially adverse impact on support for legitimate R&D. It is ironic that the Labor Party is now apparently advocating a change to the definition of R&D that it so vigorously opposed when it was in opposition in 2001.

The change was ultimately recommended against by the majority of the Coalition Government-controlled Senate Economics Committee as there could be no agreement on the extent of the restrictive effect associated with a change which was being sold through by the administration of the time as a 'clarification' of the original legislation's intent.

The same holds true today. The change is being pushed through by the Government with no guidance as to the potentially restrictive effect, either quantitatively or qualitatively. The new Credit is meant to be delivering certainty and simplicity. This change delivers neither. In contrast, it creates increased uncertainty, administrative complexity and compliance burden.

It may or may not save program costs in the Budget but it will definitely add costs to taxpayers. MJA is hearing this message again and again from all stakeholders with whom it has consulted.

The ED changes the definition of innovation – 'innovation involving appreciable novelty' becomes 'involves considerable novelty'. Considerable and novelty are poor replacements and they do not clarify the test. The replacement of innovation with novelty is inconsequential and inexplicable.

The change from appreciable to considerable is subjective and breaks the connection to understood definitions and legal precedent, especially the *Unisys* decision on the meaning of "appreciable" (*AAT decision N95/1263*). It is not clear from the ED or EM whether this change is meant to be the same, a greater or a lesser test of novelty. The Macquarie Dictionary defines "considerable" as "worthy of consideration", "important", "of distinction", "fairly large" or "great". It defines "appreciable" as "capable of being perceived or estimated", "noticeable" or "fairly large". The New Shorter Oxford English dictionary defines "appreciable" as, among other things, "considerable". Both are something less than "substantial" and are similar. As there is no measure of what considerable or appreciable novelty is and no way of accurately measuring degrees of novelty, these terms give no certainty and the change from one to the other without explanation further degrades certainty and may result in unintended consequences.

Splitting R&D activities into core and supporting activities

Supporting activities are currently included as part of the definition only if they are directly related to the core R&D activity. That is, they are necessarily undertaken as part of the R&D project. There is no need to separate the activities or to separately cost them because all are part of eligible R&D activities. Attempting to distinguish between the two sets of activities for claim purposes is very difficult and the problem is compounded in projects that go over an income year-end and by projects where an activity may be core during one set of experiments and supporting in another, all within the same R&D project.

As a result of the introduction of the dominant purpose test (discussed below), the changes proposed will prevent some worthwhile R&D activities from being included because they are performed for another purpose as well. Those that remain will need to be separately identified and separately costed.

These two changes will make the program less generous with more red tape without making the program better able to support R&D. The split will result in a massive increase in compliance costs for businesses. This will adversely impact equally on both large organisations responsible for complex technical processes and on single project SMEs. The additional red tape and uncertainty created by these changes will actively discourage businesses from participating in the program. The changes were soundly rejected in almost all of the public submissions to the September 2009 Treasury Consultation Paper.

Dominant purpose test for supporting activities

In addition to the added burden of having to split activities, those deemed to be supporting will need to pass another new eligibility test – a dominant purpose test. Where an activity is performed as a necessary part of a legitimate R&D project but also for another purpose that is held to be as more important, then these necessary R&D activities will no longer be eligible.

This measure is clearly driven by the subsidy philosophy rather than the investment philosophy. It will increase uncertainty because a taxpayer may self-assess an activity's dominant purpose differently from a Government assessor. This may put a well-intentioned taxpayer who may be ultimately proved correct in dispute with the administration in a way that is not currently possible.

A key factor to be remembered is that there is already a limit on R&D activities imposed by the operation of ss73B(2) of the ITAA 1936 that defines excluded activities. These are activities which might ordinarily be considered part of an R&D project, such as prospecting and market research, but are specifically excluded from being systematic, investigative and experimental (SIE) activities. These activities may qualify as directly related activities in certain circumstances but taxpayers shy away from the making of such claims.

Consequently, there has been a legislative distinction in place since the Concession began which limits the breadth of R&D activities that can be subject to the concessional treatment. Activities that do qualify can do so by either the SIE or directly related route but there is no legislative compulsion to separate them into two distinct categories in order to help oversee eligibility.

The EM claims to retain the distinction between core and supporting activities (para. 2.10). MJA submits that it is actually introducing a distinction of material significance for the first time. Under the Concession, the same concessional treatment applies irrespective of the class (SIE or directly related) to which individual activities may be best attributed. The Concession does not reduce or restrict the basis of support for those activities better seen as directly related. This is in accordance with the concept that an R&D project requires all of its activities to achieve its technical objectives and, hence, all necessary activities should be incentivised equally.

The separation into two groups has been required in administrative contexts in the past, such as registration and assessments but these exercises have had no basis in law.

The risk is that this is a legislative move to establish an audit technique known as “mosaicing” whereby activities are progressively defined in smaller and smaller increments, so they lose their core and/or supporting character and are subsequently disallowed.

MJA has always supported the way in which the current pluralistic definition of R&D activities equally incentivises SIE and directly related activities without distinction. Critically, the second class of activities requires a **direct relationship** to sustain eligibility. We are pleased that the concept of plurality has been preserved in the ED. However, we are disappointed about the introduction of the dominant purpose test.

As a result of the dominant purpose test inclusion we envisage an adversarial assessment environment where administrators challenge companies regarding documented purpose. An R&D activity should be incentivised because it contributes materially to a project irrespective of the weight of other operating purposes.

MJA recognises that business R&D often involves later stage activities such as prototyping, the construction of pilot plants and production-based trials and they often make up the majority of eligible costs in many claimable R&D projects. This is what business R&D actually looks like and is what the current pluralistic definition recognises. Under the Concession, if the relationship cannot be proven to be a direct one (i.e. necessary to the successful execution of the R&D project), these activities are simply not claimable.

Moving from this well-proven and well-understood definition of supporting activities would be another barrier for Australian R&D performers to overcome.

Expansion of excluded activities / changes to eligibility of software R&D

The excluded activities concept has been expanded to deny eligibility for the prescribed activities as either core or supporting activities. In addition, a number of types of software-related activities have been added to the list with little attendant explanation. The software limitations have been expanded rather than relaxed as recommended in *Venturous Australia*. Furthermore, a strengthened “multisale” test has been introduced.

The interaction between the bolstered multiple sale requirement and the expansion of the excluded activities list means that software-related R&D may now be virtually completely excluded from any R&D support. Previously, the Concession exempted software R&D conducted as a supporting activity from the multiple sale test. This is no longer the case with the Credit which apparently wipes out all software R&D that does not have a direct commercial purpose.

The proposal will eliminate a large proportion of software-related R&D by the two way expansion of the list of excluded activities. Firstly, the list of excluded core activities has been expanded to exclude any R&D activities involved in integrating any software or any computer software services. As in-house software R&D as a core activity was already excluded by the multiple sale test, this will impact mainly on software providers. The second expansion is the proposed application of the expanded exclusion list to supporting activities as well. This will exclude software development or any computer software service necessarily required to enable non-software R&D activities to occur. Many new process developments are dependent on the integration of off-the-shelf software and other computer software services in the same way that they are dependent on other activities and experimental methods that are not innovative or risky in their makeup. It is hard to understand why these changes have been proposed in an overhaul of a program in order to encourage more R&D by business in Australia.

In addition, it not clear how the proposed augmented feedstock, core technology and expenditure not at risk provisions will impact on whatever eligible software-related R&D activities remain. For example, to meet the multisale test, the taxpayer must demonstrate that the purpose of the supply is to make a commercial return from the supply. If the related R&D generates an output of direct market value, this value needs to be offset against the R&D costs involved. It might be argued that to be eligible for the Credit with respect to software R&D, you must intend to not access it as you are seeking a direct commercial return. This pushes the Credit from being uncertain in its application to the realm of the illogical.

Summary

Throughout the consultation process, MJA has argued vigorously that the continued stability of the concepts underpinning the definition of R&D activities is critical to the delivery of a simplified and predictable Credit.

We are not saying that the definition can never be changed. Past reforms such as the changing of the SIE requirement to “...and experimental”, the amplification of the meaning of innovation/high levels of technical risk and the introduction of the planning requirements were all successfully absorbed because they preserved the breadth of a definition that reflected the true dimensions of business R&D.

However, the proposed legislation would move the definition of R&D far away from what constitutes the vast majority of business R&D in practice.

7. Analysis – A new compliance regime

In general, the announced overhaul of the compliance measures is positive. The replacement of Part IIIA with the proposed Part III is not too dissimilar to the current system. The elimination of the overall planning requirement, whilst retaining a notion that the experimental documentation needs to demonstrate planning, should improve the process. This is dependent on the assessors accepting adequate planning processes in line with business practices, rather than seeking to perpetuate the current requirements and forms. In addition, the refocusing of documentation requirements back on registration is welcome.

The increased power to reject registrations is, however, a major concern. To allow the addition of a process that allows activities assessed by the taxpayer to be re-assessed purely on the contents of a submitted form is counter to the self-assessment philosophy. This is especially so since the reassessment will be made by assessors not required to meet the objectives of the ATO Taxpayers' Charter. The potential for rejection of reasonably-made assessments by taxpayers seeking to be compliant increases the uncertainty. This uncertainty can only be overcome by increasing the effort required to prepare registrations. This will increase the deadweight loss of compliance. The inclusion of processes to allow the Board to seek additional information before making such a re-assessment does not address this concern because this is not a required step. Once a registration rejection decision has been made under this proposed legislation, the taxpayer, ATO and AusIndustry are already in a form of dispute and this can be prior to any risk review, audit or meeting between the parties to determine if the difference in views are validly held.

The expansion of the registration process to split and cost R&D activities separately as core or supporting will add greatly to the compliance costs and deadweight loss of this proposal compared to the current program. Contrary to the two Ministers' stated objectives, this will see a substantial increase in red tape and uncertainty.

The operation of the review process once an assessment is in dispute is dependent on internal reviews by the Board. There is no requirement for this internal review process to be completed independently within the Board by people other than the team or individual who made the original assessment.

The proposed legislation also fails to give certainty to the taxpayer regarding the review processes. This is illustrated by a number of the proposed sections. Whilst a number of sections (eg. s27C(4)) of the proposed legislation set out rules in relation to review processes (including registration), the Board is not compelled to meet these requirements as non-compliance by the Board to these sections does not "affect the validity of the (Board's) decision or finding". Another illustration relates to the review process under s30D; Pursuant to that section the Board is required to make a decision within 90 days of a request to review a "reviewable decision". However, the Board is not compelled to review the decision at all in the 90 days, not even to confirm its original assessment in that period. After 90 days, if the taxpayer has not yet made an application to the AAT, the Board can still make a decision. The changes introduce an open-ended aspect to the review processes.

Furthermore, the new Advance Findings mechanism will be approached with a high degree of circumspection because of the historical experience of taxpayers with the Advance Registration rules in the current program, whereby applications were often treated poorly by the administration.

In fact, concerns regarding program administration have been heightened in recent years with respect to the operation of the overall compliance framework of the Concession. MJA has tangible evidence of recent decisions of the Tax Concession Committee of the Board that disallow activities

claimed under the existing Concession on the same basis that the EM indicates currently permits eligibility.

MJA is most alarmed by this occurrence and sees it as a stark example of why there has been a loss of confidence amongst our clients about the current administration of the program.

There is a marked lack of discussion of what constitutes effective administration of the Credit in the EM. MJA submits that effective administration is critical to the success of whatever program is legislated and the adding to regulatory powers (and the possibility of companies needing to pay fees to register!) does not add to confidence levels. An administrative charter would seem like an essential prerequisite to a successful launch of the Credit.

8. Analysis – Other issues

As highlighted earlier in this submission, MJA believes that the proposed legislation fails to achieve its overall policy objectives and needs to be reconsidered and redrafted by the Government.

As such, we have refrained from too much detailed analysis of individual provisions in the legislation. However, we would like to comment on four additional issues.

Core technology

Under the Concession, legitimate R&D activities performed by a business on acquired technology or core technology are rightly considered to be R&D. It is only the expenditure incurred on the core technology itself that may not be eligible for support. However, to preserve this under the proposed legislation will require adopting a narrow interpretation of s355-220. It would be beneficial if the ED legislation specifically stated that the exclusion does not apply to subsequent R&D expenditure on the acquired core technology.

The main issue with the proposed core technology exclusion is that there is no restriction in the Credit legislation on the definition of “acquiring”. This leaves open the possibility for a variety of unintended interpretations. It could be argued that where core technology was initially developed by a related party and brought in to the current R&D-performing entity that neither party may be able to make a claim for the Credit - the acquiree may be excluded by the ‘on own behalf’ provisions and the acquirer by the core technology provisions. It is also possible that the core technology exclusion may be triggered by corporate structural activity such as mergers, acquisitions and reorganisations.

Limited amendment powers

MJA is pleased about the proposal to introduce typical time limits around amendments to Credit claims applicable to all parties.

We wish to again call for this issue to be addressed immediately with respect to the Commissioner of Taxation’s unlimited powers to amend current Concession claims.

Tax consolidation

The current Concession is needlessly complicated in that it fails to recognise tax consolidated groups. The introduction of the Credit offers the opportunity to correct this. Providing suitable mechanisms that recognise tax consolidation will simplify the management, reporting and registration of R&D activities within a consolidated group.

Currently, each R&D company within a consolidated group must register with AusIndustry separately. However, under tax consolidation, there is only one recognised taxpayer - the head company or the nominated head company in a foreign owned Multiple Entry Group. Therefore, the R&D claim must be made in the head company’s income tax return.

A mechanism to enable registration of a consolidated group should be introduced. This would provide a means of dealing with a number of problems associated with the Concession:

- There are complexities associated with the ‘on own behalf’ rules. Where R&D is performed within a consolidated group by a number of members, the group currently has to split costs and activities for registration;
- The separate registration by each company creates the possibility that projects are broken up and activities performed by one of the companies may become ineligible. This

is a horizontal inequity where these activities would be otherwise claimable except for the artificial breakup by legal entity, especially when income tax law does not recognise this breakup; and

- Frequently, there is a necessity for financial transactions to transfer costs within a group that serve no other benefit than to meet the registration requirements. These transactions then have to be eliminated in the tax return to meet the consolidation law.

Facilitating the registration of tax consolidated groups would make a significant contribution towards the achievement of the simplification objectives of the Credit.

The consultative process to date

MJA wishes to make some comments about the consultative processes that have occurred to date around the Credit.

We look forward to continuing to work with the Government in delivering a workable and relevant package to the Australian business community and understand that we may well be involved in ongoing specific consultations.

However, we do need to relay the frustrations expressed to us by clients and other interested parties about the processes to date.

The public consultations around the September 2009 Treasury Consultation Paper involved clear assurances from the administrators that spillover was a design principle and that it would not be legislated. Yet it appears first up in the Object clause of the ED.

Attendees were also ensured that the draft legislation would not be released immediately prior to Christmas only to have the package appear on 18 December. In addition, the 5 February 2010 closing date for submissions has led to the expression of real concerns that the timing and timeframe of this stage of the process was designed to discourage feedback. MJA is aware of a number of organisations who would have liked to submit but have found the closing date too tight in the context of the Christmas/New Year break.

Finally, the overwhelming opposition expressed in the public responses to the September 2009 Treasury Consultation Paper appears to have had negligible impact on the program designers to date. By our reckoning, more than 160 of the 165 public submissions opposed changing the R&D definition. It cannot be denied that this consensus of opinion has been almost entirely ignored to date despite the Government taking on board the need to retain the concept of plurality of activities.

Again, we see this experience as a deterrent to those who might otherwise have submitted a response to the ED and EM.

9. Conclusion – A chance to deliver an effective package for Australia's BERD future

Despite the specific concerns and critiques raised in our submission, MJA remains excited by the possibilities opened up by the new Credit.

The 2009 Budget announcement built on the NIS Review's recommendations in a positive way. Higher rates of benefit were announced compared to the support offered by the Concession. A generous refundable component was made available to SMEs within realistic parameters regarding group turnover. The impact of the location of R&D was given its due by the introduction of foreign-owned IP into the scheme in a meaningful way. The expensive and complex Incremental Concession was thankfully abolished ending an instrument of questionable policy value.

We have demonstrated that the suite of changes allows the Government to introduce a new Credit that would remain revenue neutral over the next four years without any need to change definitions of R&D, introduce new expenditure concepts, establish overreaching integrity provisions or implement wider administrative discretions. Our voice has been one of many supporting this position to date.

Yet, to date, these submissions have been comprehensively disregarded and all the positive developments described above have been put in jeopardy by the proposed Credit legislation.

Rather than delivering a simplified and predictable Credit, the Government will be introducing unprecedented levels of complexity, uncertainty and compliance burden to R&D support at the very time when it is looking to the private sector to rebound from economic slowdown and to respond to the technical challenges of our time.

The history of the Concession shows us that program reform is always possible without changing the established and accepted definition of R&D activities and related expenditure concepts. That lesson is ignored at our collective peril.

We cannot support this ED and EM because it will significantly reduce support for BERD in Australia and will lead directly to a fall in BERD levels. The measures in the legislation do not match the Government's stated policy objectives in *Powering Ideas* and the 2009 Budget. By concentrating on limited direct spillovers outside of the R&D entity as suggested by the rejected PC Report, the new package seeks to severely restrict support for BERD to essentially only that R&D performed by altruistic companies for the benefit of others.

The net effect of the proposed Credit is to provide compensation after-the-fact for narrowly-defined R&D that fails to generate a sufficient market value. The planning value of such a Credit is negligible. The new Credit, contrary to Government pronouncements, will be vastly more complicated, awash in red tape and severely truncated in value.

As such, it fails to incentivise the traditional R&D benefits sought by the Government by encouraging more businesses to do more R&D to "help boost the competitiveness of the Australian economy". The legislation should be "about boosting investment in research and development, supporting jobs and strengthening Australian companies as they continue to seize new opportunities during the economic recovery."

The legislation needs to be recast to be in line with the objectives of the current Government even if this means delaying its introduction. The recent experience with Employee Share Plans legislation has shown that this is possible. To fail to do so will mean that these proposals will

have a dramatically greater negative effect on BERD than the changes made to the Concession in 1996.

In 2010, Australia cannot contemplate another collapse in BERD if it hopes to overcome the technical hurdles immediately apparent in our challenging future.

Annexure A – Is the budget announcement already revenue neutral?

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 (1 st 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 Innovation Australia Board (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).

Annexure B – Specific analysis of the examples in the EM

The EM provides a series of examples of the operation of the Credit when applied to R&D activities undertaken by various companies. This Annexure looks at the examples in some detail in terms of their reflection of R&D practice and the statements made in the EM regarding various aspects of eligibility.

EcoStartup

In Example 2.1 *EcoStartup* had tested the use of C23 as an additive to petrol to reduce greenhouse gas emissions. The EM contends that if EcoStartup was to sell a new product (i.e. a C23 additive) at a time after the R&D activities were completed, then that product would not be subject to the feedstock rules. This contention does not make sense. At the very least, the expenditure not at risk provisions would apply here because the production of a C23 additive product would be based solely on the experiments conducted as part of the R&D activities. Given this, it is impossible to see how EcoStartup could not have “reasonably ... expected to receive consideration as a(n).... indirect result” of the expenditure incurred on the C23 experiments. The ultimate purpose of these experiments was to produce a petrol additive for sale. Thus the indirect result of the R&D activities is the revenue acquired in the production of the subsequent products. (Note similar commentary could be provided in relation to *Smartread*, Example 2.2)

Furthermore, it is unclear how the EM can assert that revenue from the sale of the intellectual property (IP) rights in the use of C23 would not be subject to the feedstock rules unless this is specifically set out in the legislation. This assertion seems to suggest the nonsensical outcome that IP results of the experiments are not in fact results of the R&D activities. It is impossible to understand this assertion and therefore it is impossible to understand how the feedstock rules do not apply. Example 2.1 concludes by stating that had EcoStartup produced what is referred to as ‘marketable test batches’ then the feedstock rules would be relevant. It is hard to distinguish how this is any different to the sale of the IP rights in the use of C23. Both are a direct result of the R&D activities.

Boulevard Mining

In Example 2.3, *Boulevard Mining I*, the EM argues the output from the “normal’ bulk extraction phase” needs to be treated differently to the output from the “more considered fine extraction phase”. If, as this example states, both outputs are mixed and sold, it is unclear exactly how a company would calculate the value of these different outputs. Whilst the example states that each lump of coal is a separate output, in reality, no coal producer in the world can or will track each lump of coal excavated.

Boulevard Mining II (Example 2.4) is used to illustrate the distinction between what are considered experimental activities conducted for the purpose of producing knowledge as opposed to those that attempt to resolve problems in applying knowledge. The EM argues that, although “a degree of trial and error is required and further useful knowledge might be gained in the process”, the activities undertaken by *Boulevard Mining II* do not constitute R&D activities because they are purely the implementation of technology. The technical justification for this distinction is misguided and without precedent from a scientific perspective. Where current knowledge and/or practices are inadequate, then experimental activities *will be* required to achieve the desired outcome. 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 determining eligibility.

Furthermore, it is hard to see how the *Boulevard Mining II* example is any different from the example in *Boulevard Mining III* (Example 2.6). 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 proposed and therefore was required to undertake experimental activities to resolve the technical uncertainty.

Boulevard Mining IV (Example 2.7) concerns the eligibility of road construction, access tunnel construction and construction of “a lengthy railway spur line to the mine and coal train loading facilities”. The example provides two scenarios that leave the question of eligibility apparently revolving around the company’s “mainly envisaged” use which provides little guidance as to how the dominant purpose test can be applied to various fact situations. The example certainly contemplates a second scenario where such activities could be found to be supporting R&D activities without providing any detail of what such a scenario might involve.

Mimic Mining

The *Mimic Mining* (Example 2.5) example states that it “decides to conduct its own experiments, rather than purchase the knowledge from Boulevard Mining”. This example is of particular concern as it suggests that, if certain knowledge exists, any activities to develop such knowledge by conducting one’s own experiments fail the test for novelty. 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. Finally, the notion that Mimic could “purchase the knowledge” from Boulevard is a naïve one as mining companies do not customarily sell a mining process because of the limited circumstances in which a process can be applied in a different mining environment.

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 (e.g. proximity of old workings), ore body orientation, applicable mining methodologies, available equipment and numerous geotechnical factors. These differences would present a novel and technically risky application of the truss technology in a similar fashion to Boulevard applying the technology to a crumbly coal seam in the *Boulevard Mining III* example (Example 2.9) 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.

The uncertainty generated by the examples is underlined by the introductory wording attached to Examples 2.8 and 2.9.

Example 2.8 is held to be ineligible even though it can be seen as applying known technology in locations involving “unique circumstances...faced in different contexts”. Example 2.9 is said to be eligible as it involves applying known technology in a “fundamentally different” location. There may be an instance where “unique circumstances...faced in different contexts” does not equate with “fundamentally different” but we cannot articulate one.

Grandheap Mining

The examples provided in relation to Grandheap Mining illustrate a preoccupation with the commercial purposes of activities. The examples seem to ignore technical considerations and look to the commercial reasons for undertaking work as the determinative factor in assessing eligibility. These examples seem to contradict logic from the previous examples and also provide little illustration of how companies undertake R&D activities in a commercial environment.

In *Grandheap Mining I* (Example 2.11) the experimental activities and removal of the overburden are stated to be eligible primarily because there is no commercial purpose to any of the work. This example loses sight of the fact that there is an overriding commercial purpose to the activities; that

is to develop and implement, in a real world environment, ground vibration sensor technology to assist in optimising slope angles for overburden heaps. Companies would not undertake, nor commit any funding, to any experimental activities that did not ultimately have a commercial purpose. The apparent logic in stating that the activities (testing and overburden removal) are eligible in *Grandheap Mining I* is that these are undertaken in a spare abandoned mine and therefore there is no commercial purpose. The inference is that had there been a commercial purpose to the activities, the overburden removal would not satisfy the dominant purpose test because a commercial purpose would apparently always override a technical purpose. Furthermore, this example bears little resemblance to commercial reality. Mining companies do not have spare mine sites (that have not already commenced to be rehabilitated) where they could conduct such experimental activities.

Grandheap Mining II (Example 2.12) is undertaken in a live production environment and therefore the business case of the activities is “a key consideration in determining whether the activities were primarily for other than the purpose of knowledge/improvements”. This example applies the PKI test in a different way to its application in *Boulevard Mining I*. Just as extracting the coal forms part of the core experimental activity in making the tunnel to test the truss design, so does the overburden removal to test the vibration sensor technology to identify incipient heap instability. There is no rationale for proposing to treat these activities any differently.

In summary, these examples appear to suggest that the location of the R&D is the key determinant of how much of the project receives the Credit. A greater level of government support is said to be available for work done by companies in isolation from their productive capacity and assets. Given that innovation is commonly held to be the commercial application of ideas, this would seem to be a bizarre feature of the new Credit.

Matryoshkoala

Matryoshkoala I (Example 2.10) applies the proposed rules in a very inconsistent if not arguably erroneous way. Whilst it is stated that the testing of a fast drying polymer glaze (not developed by Matryoshkoala) on the Russian dolls involves “considerable novelty in the application of existing technology”, it is very difficult to understand exactly why merely applying a glaze developed by someone else to a doll involves considerable novelty. There is no commentary on whether Matryoshkoala were required to develop new processes to use the glaze or whether design changes were required to the manufacture or painting of the dolls prior to the application of the glaze.

Furthermore, it is unclear, based on the facts provided, how the manufacture and painting of the dolls used in the glazing experiment can be distinguished from normal production activities. No argument is provided to establish the dominant purpose for the manufacture and painting of the dolls used in the experiment.

However, the most curious part of this example is that somehow the dolls are apparently considered not to be new because they have been subject to considerable handling (it is unclear how these dolls are subjected to any further handling than the other dolls in the production run) and therefore the conclusion is made that these samples have negligible market value so the feedstock rule does not apply. This conclusion seems far-fetched and not an outcome that would mirror reality. It appears that the justification for the feedstock rule not applying is that the company made no revenue from the dolls. In reality, the feedstock rules or the expenditure not at risk provision would not be applied in this way. Therefore, it is difficult to see how this example illustrates “how the tests apply where experimental activities occur within a *normal* [emphasis added] production run” when the tests do not appear to have been applied correctly based on the fact scenario provided.

Tabby Marine

Examples 2.12, 2.13, 2.14 apply the feedstock rule to the manufacture of a catamaran with a novel rudder-screw assembly. These examples illustrate the uncertainty of the application of the proposed Credit legislation.

In the examples, the novel rudder-screw assembly design fails and the catamaran is refitted with a conventional rudder and then sold. Then, in later years, the technology is further developed and is successful. These examples demonstrate the significant complications associated with the feedstock rules in that Tabby Marine has no certainty on the feedstock clawback to be applied until such time as the ultimate fate of the rudder technology's use is known. At the time of the original experiments in *Tabby Marine I* the company cannot know the full extent of the feedstock clawback. This cannot be known until after the activities in *Tabby Marine II* and *Tabby Marine III*, potentially years after the original R&D activities, have taken place. As such, Tabby Marine would have no certainty whatsoever as to the value of its Credit entitlement (the so-called "subsidy") for the year of income in which the activities take place or other income years.

What this example really highlights is the lack of certainty or clarity in these apparently "more robust feedstock rules". If a company were to develop a successful R&D outcome, any Credit would be repayable. The augmented feedstock rule will be a disincentive for companies to invest in R&D and a disincentive to undertake compliance work associated with claiming the Credit. This is contrary to the stated purpose of the Credit.

Whist Constructions

Whist Constructions (Example 2.15) illustrates the use of the feedstock rules to provide a form of partial underwriting of the commercial risk in undertaking R&D activities. The facts of this example demonstrate that the proposed legislation does not provide a "public subsidy" to encourage spillovers that are beneficial to the economy as a whole and improve productivity. If successful, Whist's design will result in spillovers to the construction community and to Australia's competitiveness in the global construction industry, but the application of the feedstock rules will act to deny any access to the Credit. In fact, the Credit will only be achievable in the event of commercial failure. This example connects the concept of spillover with commercial failure but ignores the fact that spillovers are much more likely to be associated with commercial success. The Credit does not act to reward success but only provides partial insurance against failure. Once again this is contrary to the stated purpose of the Credit.