Parliament of the Commonwealth of Australia

SENATE ECONOMICS LEGISLATION COMMITTEE

CONSIDERATION OF LEGISLATION REFERRED TO THE COMMITTEE

TAXATION LAWS AMENDMENT (RESEARCH AND DEVELOPMENT) BILL 2001

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REPORT

Reference of Bill to the Committee

1.1 The Taxation Laws Amendment (Research and Development) Bill 2001 was introduced into the House of Representatives on 27 June 2001 and passed by that chamber on 8 August 2001. Following a report by the Selection of Bills Committee, the Senate referred the provisions of the Bill to this Committee on 8 August for examination and report by 17 September 2001.

The Committee's Inquiry

1.2 The Committee wrote to a number of interested parties inviting them to make submissions on the Bill, in addition to advertising the inquiry on the Parliament website and issuing a media release. The Committee received thirty submissions to the inquiry, details of which are provided at Appendix I.

1.3 The Committee conducted two public hearings on the bill, in Melbourne on 5 September and Sydney on 6 September. A list of those who gave evidence is provided at Appendix II.

1.4 The Committee thanks all those who prepared submissions and/or gave oral evidence to the inquiry at short notice.

The Bill

1.5 This Bill amends the *Income Tax Assessment Acts* 1936 and 1997 and the *Industry Research and Development Act 1986* in order to change and make additions to the Research and Development (R&D) tax concession. The explanatory memorandum that accompanies the bill explains that these amendments are designed to encourage investment in business R&D.

1.6 The main amendments include:

- the inclusion of an objects clause and some changes to the definition of R&D activities;
- an R&D tax offset, for small companies to have access to the cash equivalent to the R&D tax concession;
- a premium rate of 175% for 'additional' R&D;
- the removal of the 'exclusive use' test and the introduction of 125% effective life write-off for R&D plant; and
- a retrospective change made to the manner in which plant expenditure is claimed.

1.7 The changes to the definition of R&D activities and to plant expenditure are to apply from 12.00 p.m., 29 January 2001. The R&D tax offset and the 175% premium rate are effective from the first income year commencing after 30 June 2001. The retrospective changes to the claiming of plant expenditure are to apply from 1 July 1985 until noon 29 January 2001.

1.8 The retrospective changes to R&D plant were announced on 26 April 2001. The remaining measures were contained in the *Backing Australia's Ability* package announced by the Prime Minister on 29 January 2001.

1.9 The measures are expected to result in an additional cost to the revenue as set out in the following table:[1]

2001-2002	***2002-2003***	***2003-2004***	***2004-2005***	***2005-2006***
$15m	$16m	$8m	$37m	$62m

Overview of evidence

1.10 The evidence received during this inquiry showed a considerable divergence of opinion between, on the one hand, the majority of private sector witnesses and, on the other, those who represented Government agencies.

1.11 Private sector witnesses were supportive of significant aspects of the bill, identifying the premium concession rate of 175 per cent for companies that undertake additional R&D and the inclusion of a refundable tax offset to assist small businesses in a tax loss situation as particularly worthwhile and valuable initiatives. However, the majority of the private sector witnesses did not agree that the bill would be successful in meeting its objective of increasing expenditure on R&D. Several witnesses went so far as to suggest that the bill should be rejected.

1.12 Government and semi government agencies that gave evidence were more confident that the bill would meet its objectives. Agencies that gave evidence included representatives of the Industry Research and Development Board, the Australian Taxation Office and the Department of Industry, Science and Resources.

1.13 Other significant evidence supporting initiatives in the bill was also received from Mr David Miles, former Chair of the Innovation Summit Implementation Group (ISIG) and from Dr Robin J Batterham, the Chief Scientist. Both of these individuals were authors of independent reports that addressed, in part, the question of Australia's Research and Development effort.

1.14 The ISIG was established to prioritise recommendations developed by the National Innovation Summit of February 2000 and forwarded a report entitled *Innovation - Unlocking the future* to the Government in August 2000. The ISIG report expressed concern that without strong public and private sector funding for research and development, Australia was at risk of not being able to compete in a modern, knowledge based economy. Although Mr Miles indicated he was not associated with the drafting of the Bill or familiar with its detail, he supported the thrust of the legislation. Mr Miles advised the Committee that he :

> …was pleased by the way in which the Government's innovation statement *Backing Australia's Ability* responded to ISIG's proposed changes to the R&D tax

1 Explanatory Memorandum, p. 3.

> concession for incremental R&D and its recommendation of a rebate for small and medium sized enterprises.
>
> …
>
> The 175% premium tax concession…provides an excellent incentive to business to undertake additional investment in R&D.[2]

1.15 Dr Batterham's report*, A Chance to Change*, was submitted to Government in November 2000 and amongst other topics, also addressed Government support for industry R&D. Dr Batterham advised the Committee that his recommendations were consistent with, and in some cases overlapped, those of the ISIG Group. Like Mr Miles, Dr Batterham was also supportive of initiatives in the bill:

> The initiatives on the R&D tax concession provide a strong response to the issues raised in my report by providing for enhanced access to support for R&D. These measures provide a significant development in tax incentives for Australian companies…

1.16 Like Mr Miles, Dr Batterham also singled out the R&D tax rebate for companies in a tax loss situation; and the 175 per cent premium:

> …which goes to the heart of the concerns raised in my report about the need to increase the level of business R&D. The reward for incremental R&D effort will boost Australia's BERD performance and lead to a more competitive Australia. It is a significant part of an integrated package of incentives that will result in Australia becoming internationally competitive as a location for investment by industry in R&D.[3]

1.17 It is fair to say however that in respect of the other initiatives in the bill, the picture painted by many witnesses and submissions was less favourable. The major issues raised in the inquiry that the Committee has examined in this report include:

- Definition of research and development;
- Premium concession -establishment of history for eligibility;
- Changes to the treatment of R&D plant including prototypes;
- R&D tax offset for small companies; and
- Requirement for R&D plans.

What constitutes research and development?

1.18 The bill changes the definition of R&D activities so that eligible activities now have to include both innovation and high levels of technical risk.

1.19 According to the explanatory memorandum, 'Innovation' continues to mean an appreciable element of novelty, where novelty means 'something new or different'. 'High

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2 Submission No. 5, Mr David Miles, p.2.

3 Submission No. 12, Office of the Chief Scientist, p. 2.

levels of technical risk' continues to mean that activities will not involve high levels of technical risk unless there is uncertainty as to whether the technical or scientific outcome can be achieved, and this uncertainty can only be resolved through a program of systematic, investigative and experimental activities.

1.20 The definitional change in question was recommended to the Government by the Industry Research and Development (IR&D) Board. This board is an independent statutory body that administers specific Commonwealth Government programs to encourage and support innovation in industry and is made up of experienced people from the private and public sectors, selected for their expertise in R&D matters and in business. The Board's role is to use its expertise and experience to make decisions about the eligibility of activities as R&D, that is, whether the activities undertaken by a company are really R&D (as defined in section 73B of the Act).

1.21 The Board advised the Committee that it had recommended this change because of concerns that the integrity of the concession was being undermined as a result of recent Court and AAT cases allowing the pursuit of claims that cannot 'in the experienced and expert view of Board members, be described as R&D'.

1.22 The Board cited two such cases - the Coal & Allied and Fermenter and Distiller cases - where the Court's view showed the current definition to be an excessively low barrier. The Board advised that while there have been relatively few cases so far, this lowering of the eligibility hurdle by the Courts has the potential to seriously undermine the integrity of the R&D Tax Concession in future years.[4]

1.23 The Board also advised that the change of definition brought the Australian definition of R&D into line with the approach taken in the OECD's Frascati manual.[5]

1.24 However, several witnesses to the inquiry raised issues related to the definitional change. Broadly, these related to:

- whether the test was a higher barrier;
- whether the change was required; and
- the interpretation of newness in the significant innovation test

A higher barrier?

1.25 Several witnesses saw the new definition as excessively severe and a significantly higher barrier to eligibility for the concession than had previously existed:

> …the change in definition from 'innovation or a high level of technical risk' to 'innovation and high levels of technical risk' is a major raising of the eligibility requirement of a core activity.[6]

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4 Submission No. 14, IR&D Board, p. 3.

5 Submission No. 14, IR&D Board, p. 3. Frascati manual refers to the publication *The Measurement of Scientific and Technological Activities, Proposed Standard Practice for Surveys of Research and Experimental Development, Frascati Manual*, OECD, 1993.

6 Mr Jamie Munday, Deloitte Touch Tohmatsu, Evidence, p. 10.

1.26 The Ford Motor Company expressed similar concerns, arguing that the barrier set was higher than that set internationally:

> Our primary concern is with the fundamental restricting of the definition of eligible R&D activities to require **both** innovation and high levels of technical risk. The existing definition is already more restrictive than that given in the OECD Frascati Manual, or those used by many other countries, such as USA and Canada.[7]

1.27 Mr Munday of Deloittes gave examples of how he believed the change would adversely affect his clients:

> As has already been mentioned, the concern is that the activity has to contain both elements. Let us take the example of, say, the IT, medical or biotech industries. The project may be innovative in concept—and I would put that it is 'head stuff'—but it may not have any element of technical risk associated with it. Based on the current bill's definition, it would be ineligible as a core R&D activity.
>
> Similarly, the mining or manufacturing industry, being the old economy, may have a project which is an advancement of a mining process, using a known concept or an accepted methodology, but where the outcome is highly risky. It would have a high level of technical risk, but it would not be innovative in terms of that activity.[8]

1.28 Mr Duchini of Deloittes offered a highly pessimistic view of how the definitional change would affect his clients. He claimed that only five to 10 per cent of projects would have activities which would satisfy requirements for both innovation and high levels of technical risk. [9]

1.29 However, the IR&D board strongly disagrees with that view. The Chairman of the Board, Professor Anderson, assured the Committee that:

> The board does not agree with assertions that the proposed changes to the definition will have a major negative impact on the level of claims under the R&D tax concession or disadvantage particular sectors and has stated in public that, in its view, the vast majority of R&D claims will continue to be compliant. We would administer the amended definition in a manner that would minimise the risk of negative impacts through administrative and policy measures and information dissemination to ensure that the R&D tax concession rewards genuine R&D effort.[10]

1.30 The Committee noted evidence from both the IR&D Board and the Department that the new definition is in accordance with international standards. However, the Committee also noted that there is a difference between the definition adopted in the legislation and that used in the Frascati manual. Para 79 of the manual states that 'the basic criterion for distinguishing R&D from related activities is the presence in R&D of an appreciable element of novelty and the resolution of scientific and/or technological uncertainty'.

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7 Submission No. 1, Ford, p. 2.

8 Evidence, p. 13.

9 Evidence, p. 14.

10 Evidence, p. 47.

1.31 Ms Berman of the Department of Industry, Science and Resources assured the Committee that the IR&D Board's interpretation of the different terminology was the same and did not provide any higher hurdle to qualification for the concession than the Frascati definition:

> The basic criteria that Frascati has, and this was mentioned by the Senator this morning, is the resolution of scientific and/or technological uncertainty. The statement put on the table here was, 'That's not what you are talking about. You're talking about technical risk. It is not the same.' However, if you read and understand the interpretation of technical risk, it is exactly this: it is the degree of uncertainty. [11]

1.32 Ms Berman attributed the difficulties and misunderstandings about the interpretation to poor communication. She said that the Department had gone to some trouble to explain how the interpretation would operate through the placing of examples on the organisations website and had spoken to industry.

1.33 In the Committee's view this does not appear to have been wholly successful.It is clear to the Committee that the key point that the changes in the bill do not represent a tightening of the concession (except for a small number of marginal claims) has not been conveyed successfully. The Committee considers that concern about the definition might be reduced by aligning the language in the bill more closely to that used in the Frascati manual.

Recommendation

1.34 The Committee recommends that the Government give consideration to altering the definition of R&D in the Bill to:

> An appreciable element of novelty and the resolution of scientific and/or technological uncertainty.

Need for change - previous definition untested

1.35 Several witnesses questioned the need for the change, arguing that the court cases referred to by the IR&D Board were in respect of the pre 1996 legislation. The post 1996 definition had tightened the definition from 'technical risk' to 'high levels of technical risk'. They contended that the post 1996 legislation had not been challenged. For example, Mr Carew of the Taxation Institute of Australia told the Committee that:

> The new legislation has not been tested by a court to date, yet the Government has somehow been convinced that even the higher barrier to entry and the concession under the 1996 amendments would not be sufficient to exclude such a small number of marginal claims.[12]

1.36 Mr Frank Drenth of the Corporate Tax Association and others made similar assertions.

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11 Evidence, p. 95.

12 Evidence, p. 28-9.

1.37 Again, the IR&D board refuted these assertions, stating that it was the interpretation of innovation that was the critical issue, rather than the 1996 change to high levels of risk. Dr Hammond, a board member, advised the Committee that:

> It is true that the post-1996 definition has not had the judicial review that occurred with the pre-1996 definition. The changes that were made in 1996 essentially focused on introducing the notion of high levels of technical risk. We believe that, by itself, that is inadequate because without the conjunctiveness the activities can pass on the innovation test. We have had ample demonstrations through judicial decisions that innovation by itself is a very low hurdle. The courts have chosen to treat that as a very low hurdle.[13]

Innovation and newness

1.38 Mr Frank Drenth of the Corporate Tax Association, amongst others (including Ford) raised the final issue, the interpretation of innovation. Mr Drenth told the Committee that the Corporate Tax Association was somewhat concerned about whether 'this question of newness should be peculiar to the company, the industry, Australia or the world':

> You could be working on what you think is a unique problem that no-one has solved, but a scientist in one of the former Soviet republics may have invented something that solves the problem that is not widely known. What if the tax office or AusIndustry find out that this other information is available and therefore is not new—if you want to take a very extreme view of newness?[14]

1.39 Mr Drenth gave an example of the possible effect on the car industry where incremental changes were made for the development of new models. He acknowledged that 'the department has made some positive statements about it', but considered that there was uncertainty that needed to be resolved. He advised that his preferred option was that the innovation be new to the taxpayer.

1.40 Dr Hammond of the IR&D Board advised that the approach adopted by the board was non-prescriptive. He outlined the Board's approach:

> In a practical sense, we are not strongly prescriptive about what ‘newness’ means, because clearly you can think of cases where a company is claiming something is new, and it is new to that company because it cannot access information that is known elsewhere. It requires a non-prescriptive approach. Our view is that the test you apply is: could you have reasonably expected informed professionals in that company, in contact with their peer group, to have understood what the state of the art was and to have known existing approaches to removing uncertainty? That is the test and remember that test can be applied fairly exhaustively. You do not apply it to all companies; you apply it to a company in which a claim is being scrutinised, and you have the opportunity to debate, to understand what the company knew at the time it was doing what it was doing. [15]

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13 Evidence, p. 48.

14 Evidence, p. 6.

15 Evidence, p. 57.

Premium concession - establishment of history for eligibility

1.41 The Bill includes a 175 per cent premium tax concession (the Premium) designed to encourage additional investment in research and development. The ISR submission explains that the Premium is directed to providing a larger reward for undertaking a greater level of R&D investment. Because it is intended to stimulate additional investment, it can be referred to as an incremental tax concession.[16]

1.42 Eligibility for the premium benefit is determined on the basis of a 3 year rolling average of R&D expenditure.

1.43 Issues raised by witnesses in respect of the concession focussed on the complexity of the eligibility mechanism and the 3 year period required to establish eligibility history.

Complexity of the eligibility mechanism

1.44 Several witnesses expressed concern about the mechanism used to determine eligibility. The Australian Industry Group (AIG) submitted that it had welcomed a Government decision in May 2001 to simplify the design of the premium concession by removing a previous requirement to include turnover in calculations. However, the AIG expressed concern that the bill appeared to be at variance with the simplicity suggested in the May announcement:

> In its current form the Bill includes provisions for the calculation of adjustment amounts and an adjustment balance, which may affect the calculation of any premium deduction…the [AIG] is concerned that this aspect of the formula introduces a renewed and unnecessary level of complexity to the calculation of the premium element of the R&D tax concession and can lead to anomalous results…[17]

1.45 The AIG opposed the inclusion of any adjustment amounts or an adjustment balance and recommended their removal. The AIG contended that the inclusion of the adjustment mechanism is contrary to the Minister's announced position:

> We believe this inclusion is contrary to the Minister's announcement of 23 May and unnecessarily complicates the calculation of any entitlement, resulting in increased administrative and compliance costs for companies and increased uncertainty about the value of current and future entitlements. This is likely to undermine the effectiveness of the additional incentive.[18]

1.46 Other witnesses also expressed concern about this matter and indeed, the IR&D Board 'acknowledges concerns about the complexity of the premium proposal'.[19]

1.47 The Department of Industry, Science and Resources (DISR) told the Committee that that overseas experience in countries that also had an incremental concession system showed that there is a need to include such a mechanism to avoid exploitation by firms through manipulation of their R&D expenditure history; 'That is, companies could artificially

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16 Submission No. , ISR, p.2.

17 Submission No.7, AIG, p. 10.

18 Submission No.7, AIG, p. 12.

19 Submission No.14, IR&D Board, executive summary.

construct a lower R&D history to gain an increased Premium benefit'. The Department explained that:

> the adjustment mechanism operates to remove the effects of volatility from the Premium calculations. This is achieved by a partial reduction in entitlement to the Premium where the increase in R&D that has been achieved is in fact a recovery from a downswing in R&D that occurred in the prior three years.[20]

1.48 ISR also advised that the inclusion of an adjustment mechanism provision is consistent with similar incremental tax concession schemes in the US and France.[21]

1.49 The Committee acknowledges the Department's explanations of why the adjustment mechanism is seen as necessary. However, it is concerned about the element of complexity that the mechanism introduces, and requests that the Government reconsider this issue.

3 year history

1.50 Several witnesses also took issue with the requirement to establish a 3 year R&D investment history in order to qualify for the premium concession. Deloitte Touche Tohmatsu for example told the Committee:

> ...we think the requirement for a three-year consecutive registration history is onerous and, on occasions, discriminatory. Why is there the 20 to 80 split? Shouldn't we be trying to encourage as much incremental R&D investment here in Australia as possible?[22]

1.51 Deloitte illustrated its case by referring to the situations of a number of client companies:

> For example, a company in tax losses is spending considerable amounts on R&D but does not register or claim the additional deduction because the benefit cannot be used immediately. The company is in fact undertaking considerably more R&D than some companies that do in fact register and claim the concession.

1.52 Deloitte concluded, in the example given, that the company in the example is discriminated against because they have not claimed the concession in prior years, despite having increasing expenditure on R&D. Deloitte suggested that there are similar concerns in relation to start-up companies that do not have sufficient cash flow to apply for registration, yet do incur considerable expense in undertaking R&D; or because they have not been in business for a sufficient period.

1.53 Deloitte recommended that any company that has undertaken eligible R&D in each year since that of its incorporation date should qualify for the 175% premium rate.[23]

1.54 Vision Systems, while acknowledging the 175 per cent premium as a positive move, also considered that there are weaknesses associated with this approach:

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20 Submission No. 22, ISR, p.3.

21 Submission No.22, ISR, p.2.

22 Evidence, p. 10.

23 Submission No. 6, Deloitte, p. 5.

- it is a one year to one year approach to R & D programs that, in reality, most often take 2-3 years to complete;
- it rewards one year "blip" behaviour when long term and sustained R&D activity is what is required.[24]

1.55 The Academy of Science also cast doubt on the effectiveness of the premium R&D concession because R&D expenditure in firms does not necessarily follow a growth pattern that would allow firms to qualify:

> The arrangements for rewarding incremental innovation spending at 175% will not work for innovative firms that, after several research-intensive years with few sales, have reached the sales take-off stage. These firms typically experience more rapid growth in revenue than R&D spending (even with growth in the later) and will, therefore, not be eligible.[25]

1.56 The Committee is somewhat concerned that the barriers to qualifying for the premium deduction may be too high and requests that the Government examines the possibility of reducing the qualifying period of history to two years.

Changes to the treatment of R&D Plant

1.57 The bill makes a number of significant changes in relation to the treatment of R&D plant. These include:

- The "exclusive use" tests are removed from the definition of R&D plant and the operation of the plant provisions;
- Pilot plant (non-commercial experimental models of plant used in R&D) is retrospectively made exempt from capital gains tax;
- An "effective life" write off provision is introduced for plant built or contracted after 29 January 2001, replacing the current 3 year write off. The rate of deduction is 125 per cent where R&D expenditure exceeds $20 000, or 100 per cent where expenditure is less than $20 000.
- R&D plant can include trading stock used in R&D activities. These are not included in the general depreciating assets regime; and
- When R&D plant is sold, lost or destroyed, there are special rules that align in principle with the general treatment of depreciating assets. Where the disposal value of the plant is less than its depreciated value, the difference is claimable as a deduction at 125 per cent to the extent that the asset has been used for R&D activities. Where the reverse applies, the difference is assessable as income on a similar basis.

1.58 The bill incorporates feedstock offset provisions that deal with commercial returns from the sale of output from productive R&D plant. According to the explanatory memorandum for the bill, where use of the R&D plant contributes to the production of a

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24 Submission No.8, Vision Systems, p. 1.

25 Submission No. 3, Australian Academy of Science.

saleable product, part of the deduction relating to that use, which would otherwise have received a 125% deduction, may only receive a 100% deduction. The part that only receives the 100 % deduction is the amount by which the feedstock output exceeds the feedstock input, where such an excess exists.[26]

1.59 The DISR explained that the underlying principle for the new provisions is that claims in respect of assets used in R&D activities should reflect the value of the asset consumed in the R&D process.

1.60 The Department advised the Committee that the Government recognises that plant initially constructed with the intention of undertaking R&D activities may also be used for commercial purposes. Accordingly, it has decided to allow pro-rata concessional deductions for R&D plant. The Department argues that this provides a more equitable treatment, as plant only partially used for R&D and plant wholly used for R&D for part of its life, will both now qualify for a partial concession, and plant with shorter effective lives will not be disadvantaged compared to longer-life plant. This change is considered to be of benefit to businesses that do not or cannot afford to undertake R&D activities with dedicated R&D plant.[27]

1.61 It is important to look at the effective life depreciation provisions in conjunction with the removal of the exclusive use provisions. While the effective life depreciation provisions appear to be a measure that adversely affects companies, the old rule under which plant could be depreciated over three years was subject to stringent exclusive use provisions. This is no longer the case, and the removal of the exclusive use provision moderates the effects of the slower write-off and extends the availability of the concession to a broader range of plant, particularly that in smaller enterprises.

Issues relating to the plant provisions

1.62 A number of the submissions and witnesses raised issues in relation to the plant provisions. The removal of the exclusive use provisions was recognised by many as a worthwhile initiative. For example, in the words of Mr Paul McMullan, Partner, Tax and Legal Services, Pricewaterhouse Coopers;

> The proposal is to relax the first limb of the exclusive use test, which is that, if you just use plant for an initial period, you can get a deduction at 125 per cent in the year, so there is a three-year write-off. And that is a quite generous deduction for companies that do R&D, particularly those that do dedicated R&D which have to spend a lot of money to put together those facilities.[28]

1.63 However, others expressed concern about aspects of the provisions. The two major concerns related to:

- the inclusion of trading stock in the definition of R&D plant; and
- the requirement to offset eligible plant expenditure against feedstock profit.

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26 Explanatory Memorandum, para 2.15.

27 Submission No. 22, ISR, p.7.

28 Evidence, p. 22.

1.64 At its fundamental level, the concerns about the plant provisions appear to be that companies that conduct successful R&D, for example by developing prototype plant and processes to the point where they achieve a good commercial return, derive considerably less benefit from the concessions than those who are unsuccessful. Mr Paul McMullan of Pricewaterhouse Coopers summed up the argument for many:

> Most of the bill promotes a clawback of tax concessions, unless R&D assets and materials are consumed in the process. If R&D is undertaken and produces successful outcomes, be it a machine or a material or a service that can be exploited quickly, then it seems to me that most of the act will claw back the R&D. On the other hand, if you fail in your attempts to do that, you can get a deduction. I am not saying that you should not get a deduction for taking the risk, but there is risk in both cases and to remove the beneficial deduction from companies that are successful, particularly those that are successful the first time around, seems to me to be against the objects of the act.[29]

Inclusion of trading stock in the definition of R&D plant (deeming)

1.65 Mr Munday of Deloittes and others expressed concern that the inclusion of trading stock in the definition of R&D plant could significantly reduce the amount of eligible R&D expenditure that a company can claim if the item is later sold. Mr Munday argued that this could have a major negative impact on future large eligible R&D projects as they will be deemed to be R&D plant and not R&D revenue expenditure.[30]

1.66 In its submission, the Taxation Institute of Australia also extensively addressed this issue. The TIA submitted the proposed amendments fundamentally change the way in which the tax deductibility of trading stock, including prototypes, that are used in R&D projects is treated. The Association strongly disagreed with the proposed treatment of trading stock:

> Trading stock is not plant and the mere fact that it is used in an R&D activity does not transfer it to plant. Trading stock does not have the enduring character of plant and therefore should not be treated as such. Trading stock is likely to be the "object" of the R&D activities, ie. the purpose of the R&D activities will be the development of a new product, or is evidence of development of a new process.

1.67 The Association argued that as a result of the changes, only stock that is rendered useless or destroyed during R&D activities will actually be eligible for the concessional deduction, as any successful development will be offset by the balancing adjustment for R&D plant.

1.68 The Association also took issue with the treatment of prototypes. They argued that prototypes, in general, do not serve any purpose other than for refining and evaluating the design, functionality and performance of the product and many companies retain them for destructive testing or future product development. They claimed that the amendments would serve to discourage manufacturers from refining their products through continuous evaluation of their current designs.[31]

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29 Evidence, p. 22.

30 Evidence, p. 10.

31 Submission No. 20, TIA.

1.69 A submission by Geoff Stearn Management Ltd also questioned the provisions, arguing that they could adversely affect companies investing in new technology:

> The plant recoupment and claw-back provisions appear to adversely effect companies looking to use new technology, where they have to risk investing in new plant; if subsequent events go against them they may be forced to sell, or refinance through sale and lease back but then they may be subject to claw-back. This is thus no encouragement to the introduction of new technology and once again this appears to be against the aim to encourage investment in R&D.[32]

1.70 Evidence provided by Mr Webb of Business Strategies International pointed towards a significant diminishing of the value of the concessions which in their previous form, were considered to be of greater assistance when competing against larger international companies:

> The R&D plant provisions have the ability to cut away up to 90 per cent of the value, particularly if they use the items for their own use, once they have experimentally developed them, if you like. And there are the deeming provisions, in respect of trading stock. I have one client who is making rolling stock. They are competing against overseas companies like ADTRAN who can take a loco off the shelf. They are being innovative just to keep up but, because that is trading stock, those prototypes are gone under this legislation.[33]

1.71 Several witnesses and submitters advocated excluding trading stock from the definition of plant and equipment.

1.72 The Committee sought advice from the IR&D board about the proposal to remove trading stock from the definition of plant. Dr Hammond, an IR&D Board member, advised the Committee that while the definitions with respect to plant has, essentially, not been in the board's purview, the changes continue to reward investment in plant:

> Our view is that the changes to plant do continue to reward investment in plant. The fact that there is consistency in the treatment of plant now across the board is an advantage to the system.[34]

1.73 According to the DISR, the general principle underlying the new plant provisions is that they correctly allow for the value of the asset consumed during the course of the R&D project. DISR submitted that as part of the balanced approach to dealing with depreciating assets used in R&D activities, trading stock is to be treated in the same manner as other assets for the period of time it is used in R&D activities. This is achieved by deeming the trading stock item to be an asset while it is used for R&D purposes; and when the R&D use has been completed, the asset reverts to its trading stock status at an appropriate value.

1.74 DISR argued that this is a fair and balanced mechanism for allowing companies that use trading stock in their R&D projects to claim the Tax Concession to the extent that the value of the trading stock is affected by its use in the R&D activities.[35]

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32 Submission No. 2, p. 4.

33 Evidence, p. 70.

34 Evidence, p. 48.

35 Submission No. 22, ISR, p.8.

1.75 The Committee is somewhat concerned that the inclusion of trading stock in the definition of plant does have the potential to significantly reduce the value of the R&D tax concessions. It also had some difficulty coming to terms with the reasoning behind the provisions in the relatively short time available for the inquiry. The Committee requests the Government to reconsider this issue with a view to determining the potential financial impact of removing the provision and whether it would create significant equity issues between different classes of companies undertaking R&D activities.

Feedstock offsets

1.76 Several submissions, including that of the Australian Industry Group (AIG), also questioned the requirement to offset eligible plant expenditure against eligible feedstock profit. The AIG expressed concern that the provision undermines the effectiveness of the R&D concession as it applies to future expenditure on plant. The AIG claims that the amendment goes against the Government's stated policies to ensure that companies will be able to claim the "full value" of expenditure on plant for R&D purposes; and runs contrary to the purpose of most business R&D:

> …the Bill seeks to dilute the incentive for R&D that leads to the creation of a saleable product. The benefits of the R&D tax incentive are likely to be greatest when it encourages investment in R&D activities that ultimately lead to a commercial return.

1.77 The AIG recommended that the bill be amended to remove the requirement that companies must offset eligible plant expenditure against an eligible feedstock profit, in cases where use of plant for R&D purposes also creates a saleable product. [36]

1.78 Several submissions and witnesses argued that the requirements should be removed.

1.79 In response to arguments about the feedstock issue, the DISR advised the Committee that the IR&D Board had become aware of its concerns with situations where organisations had been making large commercial returns of saleable outputs either produced from an R&D plant or from the sale of the outcome of R&D activities, while claiming the full cost of inputs as R&D expenses. The new provisions were designed to ensure that the taxpayer does not subsidise normal production processes or any other non-R&D activity. The provisions address cases where companies claim the R&D Tax Concession for experimental activities involving plant and also receive significant commercial returns for operation of the plant at the same time.

1.80 Information provided by the ATO was also useful in understanding the reasoning behind the feedstock offset provisions. Mr Ian Cooper of the ATO explained how successful experimental plant, towards the end of trialing, often produces significant quantities of saleable output. While there may still be some minor adjustments to processes, the trials may be virtually equivalent to normal production runs. As such, the distinction between R&D and normal production begins to blur, making it questionable whether the feedstock costs are legitimately related to R&D. Mr Cooper explained:

> Without a special rule for the eligibility for depreciation, the full amount of depreciation would continue to attract the 125 per cent concession during this

36 Submission, p. 8.

> period, despite the fact that there is considerable revenue being generated by the R&D activity itself. So the rule that has been introduced endeavours to ensure that only the net cost of conducting the R&D activity in any year attracts the concession. In other words, there is an offset of any profit on feedstock against the amount of plant depreciation, which would otherwise attract the 125 per cent concession.[37]

1.81 Mr Cooper advised the Committee that the provision restores equity between those firms that are in early stage trialing with high net costs and those who are deriving significant revenue from their R&D activities or whose overall activities are self-funding.

1.82 The Committee accepts that some companies may see the feedstock offset provisions as reducing R&D incentives. However, there is clearly scope for the provisions to be abused and where R&D has lead to successful and profitable processes that are beyond the R&D stage, the Committee believes that it is reasonable for feedstock offsets to be made. The Committee recommends that the provisions remain as proposed in the bill.

Treatment of prototypes

1.83 Although the term 'prototype' does not occur in the legislation, a number of witnesses drew attention to what they saw as problems with changes to the taxation treatment of what they called 'prototypes'.

1.84 Ms Claire Gill, Adviser, Innovation Segment, ATO, explained that 'prototype' is an expression used very loosely to refer 'to any number of experimental types of item that might be produced out of an R&D activity'.[38]

1.85 According to Ms Gill, the existing treatment for prototypes varies according to whether or not it can be called 'plant'. A prototype that is going to be destroyed as part of the R&D activity is not plant, and currently gets an immediate write-off. A car produced for the purposes of destructive testing is an example of that kind of prototype. Under the bill, that treatment would continue.

1.86 On the other hand, a prototype oil tanker that cost $20 million to develop and is used to test R&D success, but which then may be used in the company's business, is plant. If that meets the 'exclusive use' tests under the current law, then it will get depreciation under the current law. However, if the plant does not meet the exclusive use tests then, at the moment, it is not entitled to any concessional treatment. Under the bill, that prototype will now attract some concessional treatment, proportional to its use in R&D activities.

1.87 Finally, a third category of treatment relates to the oil tanker that is developed specifically for sale to a customer. Ms Gill said:

> You develop your prototype for $20 million, and as soon as it is successfully developed you receive the proceeds – $25 million, perhaps – from that sale. The way the law currently works, you will get an immediate deduction for that $20 million to develop that tanker, plus 25 per cent. When the proceeds are received

37 Evidence, p. 83.

38 Evidence, p.83.

> from the sale of that oil tanker, there is no adjustment to that concession whatsoever.[39]

1.88 From the ATO's point of view, the problem with these variations is the inconsistent treatment of different types of taxpayers. For example, if someone is operating an experimental processing line which produces saleable items from that line, the feedstock provisions require him to offset those proceeds against his costs, whereas the tanker producer is not required to offset his proceeds against his costs. The change is designed to ensure that all prototypes attract concessions to the extent that they are used in testing the success of R&D activities, but that profitable use over and above that should be off-set against the concessions.

1.89 The main objection to this change is that it reduces the bonus that companies would receive, in the oil tanker scenario, from developing a successful prototype. That is, if a prototype is unsuccessful, in the sense of being not saleable, the company receives full concessional treatment. Currently, if the prototype is successful, the company receives full concessional treatment plus commercial profit. The change proposes that the profit must be off-set against the concession, so that the 'bonus' for success is reduced. A number of witnesses argued that the proposed change thus reduces the incentive to be successful and does not encourage innovation and risk-taking.[40]

Research and Development Tax Offset

1.90 Schedule 3 of the Bill provides for a new tax rebate. Called the 'R&D tax offset', it is intended to assist small companies, particularly those in a start-up phase and tax loss situation, by giving them access to a cash equivalent of the R&D tax concession. According to the Explanatory Memorandum:

> The tax offset gives eligible small companies, in cases where the company is not yet profitable, the benefit of the R&D tax concession earlier. It could provide a cash flow when they most need it.[41]

1.91 Eligible companies can elect to choose either the tax offset or the tax concession deductions. The tax offset is to be paid at the rate of 30 cents for each dollar of deduction that would otherwise have been available. In the case of a company opting for the tax offset instead of a deduction of 125 per cent of expenditure, the tax offset would be 37.5 per cent of expenditure. In the case of a company giving up the deduction for 175 per cent of expenditure, the tax offset would effectively be 52.5 per cent of expenditure.[42]

1.92 A company is eligible for the tax offset if it satisfies the following criteria:

- Its aggregate R&D expenditure exceeds $20,000 for the year;

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39 Evidence, p.84.

40 See Evidence, pp.26, 67, and 70. See also Corporate Tax Association, Additional Information, 12 September 2001, pp.1-2.

41 Revised Explanatory Memorandum, p.21.

42 Revised Explanatory Memorandum, p.22.

- Its aggregate R&D expenditure and that of related companies or persons in the company group does not exceed $1 million for the year; and
- R&D turnover for the company group is less than $5 million.

1.93 The Bill excludes companies, however, from access to the offset where an exempt 'entity' (ie, a person or two or more persons and/or their affiliates) controls at least 25 per cent of the voting power in the company or at least 25 per cent of the right to distributions from company.

1.94 As noted previously in the report, this provision was welcomed by a wide range of witnesses. However, some witnesses questioned the appropriateness of the eligibility criteria. For example, Mr Duchini of Deloitte Touche Tohmatsu expressed mixed views about the concession:

> Obviously the 'cashing out' of R&D expenditure, if you want to call it that, is a positive move. Organisations involved in start-ups or early phase R&D often have tax losses, and for them the ability to increase the carry-forward tax loss makes a lot of sense. So the incentive is obviously a positive one. The imposition of a $1 million spend threshold may be restrictive. It is not unusual to spend a lot more than $1 million undertaking R&D, so it would be our preference for that threshold to be increased. It is the same with the $5 million turnover threshold—again, you have to draw a line in the sand, and whether or not that is too low remains to be seen.[43]

1.95 Witnesses from the DISR explained to the Committee that the eligibility criteria had been selected on the basis of research into the tax loss performance of companies. Ms Berman, Executive General Manager in Ausindustry, stated:

> The $1 million and $5 million parameters were very carefully chosen after looking at the data in past years of how many people were in this tax loss situation and what sorts of parameters would give the best return in terms of giving support to the majority of those groups. That is why the $5 million and the $1 million were set as they were. It was not done just on a whim; it was clearly thought out.[44]

1.96 DISR's research also indicated the likely uptake of the offset among companies and in particular the sectors expected to most take advantage of it. Ms Berman pointed out that:

> About 51 per cent of firms will get access and about 1,300 of those are in the tax loss environment. Interestingly, it is the manufacturing groups that do best out of this. In other words, if you look at the average manufacturing group and what their current access is, you can see that through this tax rebate they get a higher access than the rest. That assists in the area where people were concerned that manufacturing might be disadvantaged.[45]

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43 Evidence, p. 11.

44 Evidence, p.89.

45 Evidence, p.89.

Requirement for R&D plans

1.97 The Bill includes a requirement that companies who are seeking to receive the R&D concession lodge an R&D plan. The DISR submission explained that the Government has introduced the requirement for an R&D plan as a tool for the successful management of R&D projects, providing focus and structure to R&D activities and thereby enhancing the likelihood of successful outcomes.

1.98 A number of submissions and witnesses questioned the requirement for such a plan, seeing it as imposing yet another layer of compliance requirements without good reason. For example, Mr Gale of Michael Johnstone and Associates told the Committee that:

> Having to author a plan for each project adds a significant compliance burden on small companies. Because it is being delivered as part of the definition of the act I believe that companies—and certainly this is the reaction that we received from our client base—are viewing this as a compliance requirement to access the concession. They do not associate any real incentive with having to write these plans and address things from a strategic point of view.[46]

1.99 Dr Frater, a fellow of the Academy of Science, expressed similar concerns:

> I work for a company that spends $20 million a year on R&D. If I look at some of the implications for us, depending on the way the definitions are followed through, it would put a huge impost on our R&D people to prepare detailed plans. It really depends very much on the scale of this. At the million dollar level you can do a lot of planning; if you come down to the hundred thousand dollar level then you are going to tie yourself in knots. So there are levels here. Within companies you recognise that at one level there is a great need for pragmatism because the direction of projects changes, meanders and wanders as you try something and if it does not work you go off in another direction. So there are big questions about how this gets implemented and what a plan actually means in the end. There is another concern if you get to too detailed a level, to do with intellectual property. The level of disclosure that you might have, I think, could be a concern. [47]

1.100 Other witnesses disagreed, not seeing any particular problem with plans, but perhaps resenting the intrusion into corporate business. Mr Drenth of the Corporate Tax Association told the Committee that:

> Of course it makes sense and it is positive to have an R&D plan. I would be surprised if most large businesses did not have them. We are just concerned about the government getting into the business kitchen a bit here. We are not sure that being overly prescriptive is really going to do an enormous amount in terms of focusing people on R&D. According to the survey, that is what a lot of businesses think.[48]

1.101 Mr Drew Clarke, representing the IR&D board, was completely dismissive of the concerns about the plan requirement. He said that it was neither intrusive not onerous:

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46 Evidence, p. 61.

47 Evidence, p. 72.

48 Evidence, p. 8.

> Two assertions were made: one was that there was an intellectual property issue in the plan and the other was that there was an onerous compliance burden. The IP issue, I believe, is a complete furphy. The plan is required to be held by the company. The company does not have to submit the plan; when we go and ask for it, we would like to see it. There is no mechanism whatsoever by which the intellectual property embodied in the proposed plan would be exposed to anyone other than the company that prepared it.
>
> I would refute the proposition that there is a compliance burden with respect to the plan. It is certainly not the intent…The plan is intended to encourage business to undertake systematic, thought-through R&D activity. It is about cultural change and planning.
>
> …The form of the plan is entirely open. The board is not presenting a pro forma plan that must be completed. The board is publishing a guideline as to what it thinks a plan might look like. Any company that has already got an R&D plan is almost certainly compliant with the requirements. For very small companies and very small projects, we believe that the requirement to have one or two pages of high level information about what the issue is, how you are going about approaching it and what resources you are putting into it is not a high burden at all. Indeed, it is virtually nothing more than they are already required to fill out in the registration part of the tax concession.[49]

1.102 The Committee agrees with Mr Clarke's views and can see no reason to recommend any change to this provision.

Recommendation

The Committee recommends that the bill be passed, subject to the amended definition of 'Research and Development' recommended at paragraph 1.34 in the report.

Senator the Hon. Brian Gibson
Chairman

49 Evidence, p. 91.

LABOR SENATOR'S MINORITY REPORT

Labor Senators make the following recommendations in respect of the Bill:

That the Bill be split to deal with the two main proposed reforms:

- Firstly, the introduction of the "Backing Australia's Ability" 175% Premium Concession and 125% Small Business rebate, which Labor supports with only minor technical amendments to be made to the rebate framework;
- Secondly, the proposed broad framework reforms that seek, among other things, to alter the definition of R&D, provide greater interpretative powers to the Government, "streamline" the treatment of plant under the R&D scheme; and change the range of eligible R&D activities.

Labor Senators believe that where required, the framework reforms proposed in the Bill need to be amended after appropriate consultation with the industrial research sector to remove elements that appear, on the face of evidence put to the Committee, to diminish Australia's capacity to undertake R&D rather than encourage its growth, which is incongruous given the stated objectives of the Bill.

Specifically, Labor Senators recommend that the Bill be amended to:

Remove provisions that make further changes to the existing definition of Research and Development.

Labor Senators note the recommendation in the Majority Report to adopt the Frascati Definition in total, however, we believe this should be tested with the industry before implementation to ensure it alleviates their concerns;

Either clarify or remove provisions relating to "eligible activities" under s73B(2A) in response to the concerns provided in evidence to the Committee;

Amend the proposed plant tax treatment reforms to allow full depreciation for plant used solely for R&D for three full years, reverting to the Government's model for "effective life" depreciation, backdated to first use;

Amend the definition of "plant" to specifically exclude trading stock and structural improvements where the improvement is made to ongoing prototype models, or to infrastructure used solely for R&D;

Simplify the activity requirements for R&D Plans, and in particular to develop a "scaleable" model for R&D plans that reflects the administrative capacity of small to medium research projects.

Introduction

While Labor generally supports the broad objectives justifying the introduction of this Bill, namely the further development of Australia's innovation framework, Labor Senators are concerned that the reforms appear to be being made for partisan, ideological reasons, have been developed without adequate consultation, and on the evidence provided to the

Committee, may impede the development of a more efficient research and development framework in Australia.

In seeking to advance the totality of reforms proposed by this legislation in the face of strong community criticism, the Government is simply gambling recklessly with our international reputation as a stable and transparent industrial environment, and as a desirable destination for international investment in innovation and perhaps more importantly in production and commercialisation of Australian designed and manufactured goods and services.

The major concerns voiced during the inquiry by many witnesses and submissions predominantly focussed on the following:

- The broad R&D framework reforms, including the potentially tighter definition of research and development and the establishment of history for eligibility for the Premium R&d Concession;
- Changes to the treatment of R&D plant including prototypes;
- The complexity of the R&D tax offset for small companies; and
- The new requirement for R&D plans.

The Prime Minister indicated in the context of the announcement of the Backing Australia's Ability statement in January this year that the Government was determined to invest more in research and development, and laboured the $3 billion "cost" of the innovation package, which is ironic, given the scale of the cuts made to public investment in research and development by the current Government.[1]

Many involved in innovation and the research / commercialisation sectors believe that the uncertainty created by the proposed changes inhibit the growth and development of Australia's intellectual property sector, by discouraging investment and institutional expansion of research projects and facilities.

Defining the elements of research and development

The bill changes the definition of R&D activities so that eligible activities now have to include both innovation and high levels of technical risk (rather than involving innovation "or" levels of technical, as is currently the case).

According to the explanatory memorandum, 'Innovation' continues to mean an appreciable element of novelty, where novelty means 'something new or different'.

Under the reforms, interpretations of 'high levels of technical risk' will effectively be the responsibility of the Industrial Research and Development Board. However, this leaves open the question of what is to be considered ineligible, and whether this means that activities do not involve high levels of technical risk unless there is uncertainty as to whether the technical or scientific outcome can be achieved, and whether this uncertainty can only be resolved through a program of systematic, investigative and experimental activities.

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[1] Backing Australia's Ability - January 2001.

Several witnesses to the inquiry raised issues related to the definitional change. Broadly, these concerns related to whether the test was a higher barrier to eligibility for calculating entitlements under the concession (and indeed whether the change was required of itself), and the question of

the interpretation of newness in the "significant innovation" test used to calculate eligible research and development expenditure.

Several witnesses saw the new definition as excessively severe and a significantly higher barrier to eligibility for the concession than had previously existed:

> *"…the change in definition from 'innovation or a high level of technical risk' to 'innovation and high levels of technical risk' is a major raising of the eligibility requirement of a core activity.*[2]

The Ford Motor Company expressed similar concerns, arguing that the barrier set was higher than that set internationally:

> *Our primary concern is with the fundamental restricting of the definition of eligible R&D activities to require* ***both*** *innovation and high levels of technical risk. The existing definition is already more restrictive than that given in the OECD Frascati Manual, or those used by many other countries, such as USA and Canada.*[3]

Deloitte, Touche Tohmatsu gave examples of how they believed the change would affect the activity of their clients:

> *"…the concern is that the activity has to contain both elements. The project may be innovative in concept…but it may not have any element of technical risk associated with it. Based on the current bill's definition, it would be ineligible as a core R&D activity."*

As well as seriously impacting on existing research and development, Clearly, this raises the question of, the mining or manufacturing industry, being the old economy, may have a project which is an advancement of a mining process, using a known concept or an accepted methodology, but where the outcome is highly risky. It would have a high level of technical risk, but it would not be innovative in terms of that activity.[4]

In further evidence, Deloitte Touche Tohmatsu expanded on how that the proposed reforms (and in particular the definitional change) would adversely affect the research and development operations of their clients.

Labor Senators note with concern that the firm estimates that only between five to ten per cent of their existing client projects would have activities which would satisfy requirements for both innovation and high levels of technical risk. [5]

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2 Deloitte Touche Tohmatsu, in evidence, p. 10.

3 Submission No. 1, Ford, p.2.

4 Evidence, p. 13.

5 Evidence, p. 14.

Labor Senators note the recommendation in the Majority Report to adopt the Frascati Definition in total, however, we believe this should be tested with the industry before implementation to ensure it alleviates their concerns.

Distinguishing between the components of research and development

Labor Senators are concerned that officials from the Department of Industry, Science and Resources appear to be confused about the formal modes by which the components of research and development are identified, and in particular, as to whether the model proposed by the Government in this Bill conforms to the Frascati model adopted elsewhere in the world.

Despite the assertions of Department officials, there is a clear difference between the definition adopted in the legislation and that used in the Frascati manual. Paragraph 79 of the manual states that 'the basic criterion for distinguishing R&D from related activities is the presence in R&D of an appreciable element of novelty and the resolution of scientific and/or technological uncertainty'.

Serious concern was raised by respondents to the Inquiry over the lack of consensus underlying the decision to change the definition to "and" rather than "or". Indeed, there has been a consistent view in the research and development sector that the change would have a significant negative impact on Australia's industrial research sector.

The matter of the definition of R&D was the subject of a specific commitment by the Howard Government before the 1998 election, with the Treasurer, Peter Costello, and then Minister for Industry, John Moore, stating in a press release on the 2nd of July 1998 that:

> *"The Government will also retain the current definition of research and development activities under the R&D tax concession. The decision follows recent widespread industry consultation during which industry favoured the current definition."*[6]

Despite the quite public fears of the industrial research sector, Labor Senators are concerned that the Department of Industry, Science and Resources continues to assure the Committee that the IR&D Board's "interpretation" of the different terminology was the same and did not provide any further or higher hurdle to qualification for the concession than the Frascati definition.[7]

In this context, the reasons for the proposed change become even more unclear.

Labor Senators are concerned that the Department appears indifferent to the clearly articulated views of the industrial research community, and indeed sought simply to attribute the difficulties and misunderstandings about the interpretation to poor communication.

While the Department maintained that it had gone to some trouble to explain how the interpretation of innovation would occur, (and, presumably, any justification for the proposed change) it is clear from evidence before the Committee that this does not appear to have had

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6 "Changes improve the R&D Tax Concession" Costello and Moore /PR220/98

7 Evidence, p. 95.

any impact on the views of the research sector, and therefore represents an ideological reform being forced upon the sector, rather than an efficiency reform developed by industrial consensus.

Indeed, several witnesses before the Committee strongly questioned the need for the change, arguing that the legal cases used by the IR&D board were in fact in reference to the pre 1996 legislation, subsequently tightened by the incoming Howard Government who changed the definition from 'technical risk' to 'high levels of technical risk'.

As witnesses before the Committee correctly noted, the post 1996 legislation has yet to be challenged in Court, and these reforms simply introduce greater uncertainty about the impact of those changes, compounding the broader uncertainty faced by the sector.

In evidence, the Taxation Institute of Australia told the Committee that:

> *The new legislation has not been tested by a court to date, yet the Government has somehow been convinced that even the higher barrier to entry and the concession under the 1996 amendments would not be sufficient to exclude such a small number of marginal claims.*[8]

A number of other organisations, including the Corporate Tax Association and others made similar assertions, and Labor Senators are concerned that the Department, and indeed the Government, are ignoring any evidence that provides a contrary view of the likely impact of the changes proposed in the Bill.

This degree of conflict in views makes it clear that the question of the interpretation of innovation remains a critical issue, both in respect to the Bill, and in relation to the outstanding questions that remain surrounding the 1996 definitional change to require “high levels of technical risk”.

It is for these reasons that Labor Senators recommend that the Bill be amended to remove provisions that make further changes to the existing definition of Research and Development.

<u>The interpretation of “innovation” and “newness”</u>

The issue of the Government’s confusing and uncertain approach to the interpretation of innovation for the purpose of determining eligibility for components of the R&D tax concession scheme was raised by a range of witnesses before the inquiry, including the Corporate Tax Association and Ford Australia.

In particular, respondents to the Inquiry were concerned about whether 'this question of newness should be peculiar to the company, the industry, Australia or the world'.

The central argument against the proposed framework revolves around whether the Australian Tax Office or AusIndustry should determine whether information about particular

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8 Evidence, p. 28-9.

research is available, and whether, in determining what "is not new" should have the potential to take a very extreme view of "newness".[9]

One example given of the possible effect of the proposed reforms on Australian industry was that of the car industry. In this particular sector, changes are often made to the development and production infrastructure of a firm on an incremental basis for the development of new vehicle models.

Under a framework of "newness", research and development undertaken after the initial stage of research might no longer be seen as "new". This clearly raises significant questions about the poorly defined nature of the reforms, and their varying impact on different sectors of Australian industry.

Lack of consultation and consensus forming

Labor Senators are seriously concerned about the potential for uncertainty arising from elements of the Bill, and in particular the economic impact and burden on the industrial research sector of the reforms proposed.

As well, Labor is concerned that there has been an apparent lack of any legitimate attempt to gauge the potential impact of the Bill, and that in asserting that the impact of some of the reforms will be minimal in the face of clear evidence to the contrary, the Government is choosing to pursue ideological reforms over developmental reform.

In not providing a detailed desegregated breakdown of the economic analysis of the impact of the Bill, the Government has further obscured debate on this particular point, and light of this Labor Senators accuse the Government of stifling informed, open decision making.

The Explanatory Memorandum to the Bill indicates that the proposed reforms will have no economic impact, yet clearly many hold the view that this is not the case.

The question of placing economic barriers to the growth of Australian innovation seems absurd, given the attention paid to the value of innovation to the economy in recent years.

The concerns raised about the uncertain nature of the reforms and their subsequent impact on Australia's domestic research and commercialisation infrastructure are serious enough that they must not be ignored, particularly when such concerns are being simultaneously voiced by significant numbers of the peak professional operators in both the research and industrial sectors.

Labor Senators found that the Government did not appropriately consult with the industrial research sector to develop some provisions of the Bill, a point made by several peak bodies in their submissions to the Committee[10].

The question of the impact of reforms on Australia's domestic intellectual property infrastructure must not be ignored, particularly when concerns about the reforms are being

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9 Evidence, p. 6.

10 See, for example Committee Submission 2 – Australian Law Council and Committee Submission 3 – Institute of Patent Attorneys (Australia).

voiced by significant numbers of the peak professional operators in the field of intellectual property.

The recent public debate about Australia's progress as a new economy has reinforced the importance of a strong domestic innovation sector, essential to which is a robust and efficient research infrastructure.

While Labor Senators recognise that some of the reforms proposed in this Bill will provide an appropriate boost to elements of the innovation community, the Government's poor performance in this sector, as evidenced by the decline in business R&D seen since 1996, demonstrates the Howard Government's lack of a clear industrial strategy.

Labor Senators recommend that the Government split the Bill in negotiation with other parties in the Senate, to identify the elements of the Bill that have common assent, and that the Senate conduct an Inquiry into the following:

- **The remaining elements excised from the current legislation, and their impact on Australia's research and development infrastructure;**
- **The predominant causes of the decline in business research and development expenditure since 1996;and,**
- **The potential economic impact of the proposed reforms of the Bill.**

Alternatively, this outcome could be achieved by amending the proposed legislation such that the amendments may only come into effect after the Minister has such an inquiry, and tabled a report on it's findings in both Houses of Parliament.

APPENDIX 1 – CASE EXAMPLES

The following section details hypothetical questions put to the Government concerning the interpretation of different industrial research activities.

R&D Project Example	AusIndustry/Australian Taxation Office Responses
Company A is a manufacturer of polymer products. It has decided to undertake an R&D project to develop a new product to gain a competitive advantage. The following activities were undertaken during the course of the project 1. Determination of Product Specifications 2. Trials to develop new polymer 3. Development of a new Pre-Feeder Equipment	Comment: Although the hypothetical example is described as "an R&D project", there is insufficient information provided in the Example to enable a reliable analysis of the nature of the listed activities, and hence whether or not these activities would meet the definition of research and development activities. In addition, the questions asked relate to both eligibility of the activities themselves (as "research and development activities") and the expenditure rules associated with eligible (R&D) activities. Therefore it is not possible to answer all questions

R&D Project Example	AusIndustry/Australian Taxation Office Responses
4. Trials to test new equipment	definitively, but the responses given are done so in the context of the above qualifications and other assumptions where indicated.
Activity 1 Determination of Product Specifications In order to determine the specifications for a new product line, Company A undertook an extensive program of information gathering including: • Literature searches; • survey of suppliers to determine the availability of raw materials; • survey of customers to determine where an increase in performance is desirable; and project management meetings by technical staff to determine the new product specifications based on information gathered during the first three steps.	
Questions 1) Is this activity an eligible support activity?	Comment: An eligible supporting R&D activity is one which is "carried on for a purpose directly related to the carrying on of activities of the kind referred to…(as 'core' R&D activities)", namely to activities which involve both 'innovation' and 'high levels of technical risk' (ie involving an innovative approach to the solution of a technical uncertainty unable to be solved on the basis of available knowledge and which requires systematic experimentation using the scientific methods to resolve the uncertainty). A. Likely to be eligible in part. Assuming that such an eligible 'core' activity can be identified within the project, some of the "information gathering" activities nominated in the Example would be expected to qualify as 'supporting activities', eg literature searches, and project management meetings by technical staff.
2) Would the survey of customers be regarded as market research?	A. Yes. Assuming that the 'survey of customers' referred to in the Example is undertaken simply to determine whether "an increase in performance is desirable", this activity as described would appear to be 'market research', ie determining what the market desires, and not contributing directly to an innovative solution of any technical uncertainty

R&D Project Example	AusIndustry/Australian Taxation Office Responses
	which may be involved in developing the desired product.
3) Would this activity be excluded by the proposed changes to sub-section 73B(2A)?	A. Yes. Assuming that the activity referred to is market research, ie not part of the R&D process, it would be excluded under section 73B(2A).
If this is excluded under 73B(2A) then: 4) Why was the activity undertaken?	A. Yes. As stated in the Example, the activity was undertaken "to determine where an increase in performance is desirable", ie to find out what characteristics of a product would be preferred by the market. While this sets the scene for subsequent development, as stated above it does not directly contribute "to an innovative solution of any technical uncertainty which may be involved in developing the desired product," and as such is not an R&D activity.
5) Can there be an R&D project without undertaking this step?	A. Yes. Many R&D projects do not require specific prior 'market research', eg process improvements driven by the internal needs of the company. In addition, many companies will be aware of their markets and the needs of their customers and often take the initiative in the marketplace by developing innovative solutions to perceived product deficiencies.
6) Is this activity entirely directed at ensuring a quality, commercial outcome from the R&D program?	A. No. The activity simply establishes what the market desires. The 'quality' and 'commercial outcome' of the project is dependent on the results of the 'R&D', not on the results of the 'market research' activity.
7) On what basis should such activities be excluded?	A. Market research falls outside of eligible R&D activities as they are not part of the process of developing an innovative solution to resolving a technical uncertainty in the development of a new or improved product.

R&D Project Example	AusIndustry/Australian Taxation Office Responses
	However, some activities, for example taste testing a new product formulation, the results of which feed back information to the R&D, would be acceptable activities in an R&D project.
Activity 2 Trials to develop new polymer During this activity, the company manipulates the variables that it can control, in an attempt to develop a process that produces an improved product. Such variables include the raw materials and processing parameters. If the R&D trials result in a product of no value, the company can claim the plant depreciation for this period at 125%. The company is likely to increase its cost of production significantly by doing the trial, however, it will still produce enough commercially saleable output to reduce the benefit of feedstock and depreciation to zero.	
8) Why should a company receive an incentive to undertake R&D when the product is not saleable, but not when it is losing significant profit margin attempting to improve its product from a saleable base to the best of its kind?	ATO Advice The company which does not produce saleable output from its R&D activities has a higher net cost of conducting its trial, whereas the company whose trial is generating saleable output has a net cost of conducting that activity that is lower. The law provides for more support for trialing activities in their earlier stages when they cost more to conduct, and less support in their latter stages should they become self-funding. The proposed amendment provides for a phasing out of the R&D tax concession as the activities being conducted move into profitability. The R&D tax concession supports the actual cost of conducting the trial phase of the R&D activity. In Activity 2, the conduct of the R&D activity is itself generating funds which reduce the cost of that activity – ie the activity has become self-funding to an extent. The reduction in the concession to reflect this is made against the principal costs of producing the output. The law currently provides for the reduction to be applied against only two of the principal costs (material and energy input costs) under the existing feedstock rules. The proposed amendment extends these rules to pick up the other significant cost of producing the output, namely, the effective life depreciation of plant that produces the output.

R&D Project Example	AusIndustry/Australian Taxation Office Responses
	R&D activities are conducted for the purpose of producing new products, processes, knowledge etc, which will be exploited in the future through commercialisation of the results. Such future revenues do not impact upon the level of concession granted; it is only the revenue that the R&D activities themselves produce directly that reduces the amount of concession available.
Activity 3 Development of a new Pre-Feeder Equipment Based on the results of the experimental trials in activity 2, it was determined that the company would need to develop a new, innovative Pre-Feeder system. The development involved high levels of technical risk. The development cost $3 million dollars, of which $1 million dollars was labour expenditure of the company.	
9) Is the whole of the $1 million labour expenditure deductible? 10) How much of this expenditure will be deductible as "salary expenditure" as per the definition in sub-section 73B(1)?	ATO Advice That portion of the labour cost which relates to the development of the concept for the pre-feeder system (including the idea development and design phases – sketching, idea generation, computer modelling, material specification, finite element analysis, specification determination) will comprise 'salary expenditure' as defined, and as such will be included in the definition of 'research and development expenditure' in s73B(1). The salary costs involved directly in constructing the pre-feeder unit itself, including the labour cost of any engineer's drawings or plans required to be created outside of the concept development process, and the costs of construction labour, etc, will form a part of the cost of the pre-feeder unit. As such, they will form a part of the cost of this depreciating asset which is eligible for depreciation.

R&D Project Example	AusIndustry/Australian Taxation Office Responses
<u>If only part of the expenditure is eligible then:</u> 11) How will the remaining amount be treated?	ATO Advice The expenditure which forms part of the cost of the depreciating asset will be eligible for deduction on an effective life basis. Whilst the unit is being used in R&D activities, this deduction amount will attract an additional 25%, subject to the operation of the proposed feedstock rule in any year. In the event of the disposal of the unit in any year, any loss made on disposal will attract an additional 25% deduction to the extent that the use of the unit over its life has attracted 125% depreciation. Conversely, in the event of disposal at a profit, the additional 25% concession previously granted will be recouped to the extent that the profit relates to the previous use for R&D activities that attracted a 125% deduction.
12) Why does this remaining amount not satisfy the following definition of salary expenditure at 73B(1): "salary expenditure … means the sum of: the expenditure incurred by the company during the year of income by way of salaries …. Being expenditure incurred directly in respect of R&D activities carried on by or on behalf of the company"	ATO Advice The amount for labour costs included in the cost of the depreciable asset above does meet this definition. It also meets the definition of the 'amount paid to hold' a depreciating asset under Division 40 (ITAA 1997), and therefore contributes to the cost of the 'section 73BA depreciating asset' in calculating the 'notional Division 40 amount' (similar for Division 42 assets). 'Salary expenditure' is included in the definition of 'research and development expenditure' in subsection 73B(1), which attracts a deduction under subsection 73B(14). Salary expenditure does not attract a deduction in its own right outside of subsection 73B(14). The definition of 'research and development expenditure', however, specifically excludes expenditure in respect of a 'section 73BA depreciating asset'. This expenditure therefore falls to be considered for deductibility solely under the depreciating asset regime. This result is the same as that which currently occurs under the existing R&D plant regime.

R&D Project Example	AusIndustry/Australian Taxation Office Responses
<u>If all of the expenditure is "salary expenditure", then:</u> 13) How are these amounts not caught by the Uniform Capital Allowances legislation?	ATO Advice As above, not all of the expenditure is salary expenditure under subsection 73B(1). However, if it were, it would not be caught by the Uniform Capital Allowances legislation.
<u>If the installation of plant is not R&D, then:</u> 14) If the installation is done in such a way that has not previously been done (i.e. innovative) and there is uncertainty as to the outcome (i.e. whether or not it will work), why is it not R&D?	ATO/ISR If the "installation" of the plant is indeed "innovative" and the "uncertainty as to the outcome" (of the installation) can only be removed by a program of experimentation in a scientific manner, what is described in the Example here would be likely to be eligible R&D activities. However, expenditure associated with these activities would also be subject to the plant expenditure rules.
<u>Another related example is:</u> 15) If a company spends $1 million dollars in labour cost developing a blueprint for software during an R&D project, how would this amount be treated?	ATO Advice Assuming that this development comprises eligible R&D activities (eg not precluded by subsection 73B(2A)), this amount would comprise 'salary expenditure' and 'research and development expenditure'.
16) Does this differ from the example above? 17) Why does it differ or not?	ATO Advice This expenditure is of the same character as the labour costs incurred in the previous example in developing the concept for the feeder bin (ie in developing the intellectual capital). In this latter example, there are no costs incurred in creating a disposable asset that facilitates the development of the concept.
18) If both companies are undertaking R&D and spending the same amount why are both companies not able to receive an enduring benefit?	ATO Advice Both companies will derive an enduring benefit from this expenditure by creating R&D results that can be exploited in the future, and the costs of developing this concept will attract an immediate

R&D Project Example	AusIndustry/Australian Taxation Office Responses
	write-off at the 125% rate. To the extent that expenditure is incurred in acquiring or constructing tangible assets to facilitate the development of those results, the actual net cost of using those assets in that process will attract a 125% deduction through the depreciation provisions. This is applicable only in the case of the feeder unit development.
Activity 4 Trials to test new equipment Activity 4 is conducted immediately before production. 19) Is this activity eligible?	A. To the extent that this is part of the systematic, investigative and experimental process that would feed back into resolving the scientific or technical uncertainty, the activity would be eligible. However, if the trialling is of the nature of demonstration of commercial viability, tooling up or trialling of production runs it would not be eligible.
<u>If it is eligible, then:</u> 20) Why is it not excluded by the changes to sub-section 73B(2A) which excludes "pre-production activities? This activity was undertaken before production.	A. If it is eligible, it is because (as stated above) it is "part of the systematic, investigative and experimental process that would feed back into resolving the scientific or technical uncertainty". The 'pre-production' exclusion relates to activities of the nature of demonstration of commercial viability, tooling up or trialling of production runs (also as mentioned above), not to all or any activities undertaken prior to production.
<u>If it is not eligible, then:</u> The R&D is not complete; Company A is not capable of going into production until this activity is complete. There is still significant uncertainty as to whether the new plant can produce the required product. 21) Why is this not R&D?	A. If the R&D is in fact not complete (as suggested in the Example here), it is likely that trialling undertaken to complete the R&D (ie to finally resolve the scientific and technical uncertainty) would be an eligible R&D activity.

AUSTRALIAN DEMOCRATS

Dissenting Report

1. Introduction

1.1 The Australian Democrats do not support the Chair's recommendation that the *Taxation Laws Amendment (Research and Development) Bill 2001* be passed. Nor do we support the Chair's proposed amendment to the definition of research and development (R&D).

1.2.1 The Democrats support implementation of the two main measures contained in the bill; a tax rebate offset for SMEs and the 175% 'premium' concession. However, we believe there are a number of major definitional, compliance and timing issues that need to be addressed. Accordingly, we believe significant amendments are required before the Bill can be supported.

1.3 We note that industry consultation on the various definitional tightening provisions in this bill have been minimal, and were a surprise to industry participants. Indeed, the Committee was told by a number of witnesses that the tightening of eligibility was such that it is likely to outweigh the benefits of the tax rebate offset and the 'premium' concession. The result is that the bill as a whole is likely to reduce national R&D effort, not increase it.

1.4 In particular, it should be noted that the efficacy of both the rebate and the premium rate are both subject to the tighter eligibility definition.

1.5 Given the stage of the electoral cycle, the need to send a clear signal to industry to invest in more R&D and the need for extensive industry consultation on the consequences of the changes to eligibility, the Democrats believe that this bill should be split. The provisions dealing with the tax rebate offset and the premium concession should proceed subject to some amendments, while the rest of the bill should be withdrawn and subject to a full round of industry consultation.

1.6 It is telling that at the hearings, Deloitte Touche Tomatsu, PricewaterhouseCoopers, the Australian Taxation Institute and Business Strategies International were explicitly asked whether the bill should be passed or defeated by the Senate if the Government would not accept any amendments. While all acknowledged the benefits of the two main measures in the Bill, they argued the compliance impediments and narrower definition mean the package in aggregate will be a disincentive for increased business investment in R&D, thus should be defeated in its current form.[1]

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[1] Deloitte Touche Tohmatsu, *Committee Hansard*, Melbourne, 5 September, 2001, p. 15; Mr McMullan, PriceWaterhouseCoopers, *Committee Hansard*, Melbourne 6 September 2001, p. 26; Mr Graham Carew, Australian Taxation Institute, *Committee Hansard*, Melbourne, 5 September 2001, p. 30; Mr Lynch, Business Strategies International, *Committee Hansard*, Sydney 6 September 2001, p. 70

2. Context

While the Committee's inquiry was into the provisions of the Bill, the terms of reference explicitly referred to the broader context, including Australia's declining business expenditure in R&D.

2.1 National R&D Investment

2.1.1 Australia's total investment in R&D is not internationally competitive. The most recent published OECD data (1998) shows average Gross Expenditure in R&D (GERD) is 2.05% of GDP. In 1999/2000, Australia invested 1.43% of GDP; a gap of 0.62% or $3.9 billion.

2.1.2 It has been argued that for Australia to become competitive with the OECD *average* an additional investment in R&D of more than $13 billion over 5 years is required - $4.2 billion from business, $6.75 billion from the Commonwealth and $2.7 billion from other Government sources including the States and Territories.[2]

2.1.3 Whether the average is an acceptable goal presents additional important questions.

2.2 Trends in BERD and 1996 Changes to concession

2.2.1 The original intent of the Industry Research and Development Act 1986 was to encourage R&D. BERD is an imperfect, quantitative instrument, and when taken as an aggregate masks significant differences in trends between sectors. Moreover different criteria and reporting methodologies mean it is not precisely correlated with the concession. Nevertheless, we believe BERD is sufficiently robust to indicate that the concession was clearly a successful program between 1986 - 1995. This has been borne out by the various reviews of the concession, including those by the Industry Commission and the Bureau of Industry Economics.

2.2.2 Since the imposition of changes to definitions and the lowering of the rate of the tax concession from 150% in 1996, business expenditure on R&D (BERD) has declined each year in real terms and as a % of GDP.

2.2.3 Ms Heather Ridout of the Australian Industry Group drew a direct connection between the tax concession and the amount of R&D being done. She informed the committee that changes to the concession in 1996 had resulted in a declining number of companies accessing the concession due to its weak value and administrative compliance arrangements.[3]

> (Businesses) say, 'we will not bother'. But that has undoubtedly led to less R&D being done in Australia, and less good R&D being done in Australia.[4]

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2 www.go8.edu.au/papers/2000.12.20.html

3 Ms Heather Ridout, AIG, *Committee Hansard*, Melbourne, 6 September 2001, p. 19

4 Ms Heather Ridout, AIG, *Committee Hansard*, Melbourne, 6 September 2001, p. 21

2.2.4 The Government's own figures state the changes to the concession will result in a net increase of expenditure on R&D of $138 million - less than half the decline that has occurred since the changes to the concession in 1996.

2.2.5 The Democrats are well aware that increasing BERD cannot rely on any one instrument, hence the importance of programs including CRCs, R&D Start and COMET and more general aspects of the business environment. Nevertheless, as Mr Carew from the Taxation Institute of Australia pointed out:

> The National Innovation Summit in February 2000 unequivocally concluded that the R&D tax concessions was, inter alia, the primary support mechanism, for business R&D in Australia.[5]

2.2.6 In our view, this underscores the pressing need for significant amendment to the Bill.

2.3 Backing Australia's Ability

2.3.1 The Bill implements some of the changes to the R&D tax concession foreshadowed in the Government's innovation statement - *Backing Australia's Ability* - which in turn, was a partial response to the Chief Scientist's Report, *A Chance to Change* and the Innovation Summit Implementation Group (ISIG) report, *Innovation - Unlocking The Future*.

2.3.2 While a number of the measures in *Backing Australia's Ability* are welcome, the Democrats note with considerable concern the $2.9 billion package merely slows down the decline in GERD relative to OECD averages and, moreover, is substantially 'back-loaded' with only $155 million committed in the first year of the four year phase in.

2.3.2 As the Chair's report notes, Mr David Miles, former Chair of the Innovation Summit Implementation Group welcomes the Government's implementation of two of the three key recommendations of the ISIG report on the tax concessions - the tax off-set for SMEs and the premium concession.[6] However, as Mr Miles noted at the hearing, ISIG recommended a range of 170% - 200% for the premium and the Government has opted for the bottom end of the range.[7] Moreover, the missing ISIG recommendation was an increase in the base rate of the concession because its value has significantly declined. It is to be regretted that the Government chose to ignore this recommendation.

2.4 Value of Concession: International Context

2.4.1 The decline in the value of the concession identified by ISIG was raised by a number of submissions. The committee heard evidence that the change in the corporate tax rate to 30% on July the 1st this year, means the effective value of the 125% concession has declined to 7.5%; well down from the 24.5% when the scheme was implemented. Moreover, while the premium concession is a lot higher at 22.5% the

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5 Mr Graham Carew, *Committee Hansard*, Melbourne, 6 September 2001, p. 28

6 Mr David Miles, *Submission No. 5*, p. 1

7 Mr David Miles, *Committee Hansard*, Melbourne, 5 September, 2001, p. 36

basic concession is not internationally competitive as the US and Canadian incentive is 20%, Singapore 26% and Malaysia 30%.[8]

2.5 Government's Policy shift

2.5.1 This Bill sees quite a marked change in the Government's approach to supporting R&D in that it is no longer about supporting risk *per se*, but the intention is provide some support for risk but claws back that support if the R&D results in successful commercialisation - the objective of business R&D.[9] Some submittees argued this sets up an apparent perverse outcome whereby failure is rewarded and successful commercialisation is not.[10]

2.5.1 As a number of submissions noted, this shift in emphasis is also reflected in the Government's concerns with *genuine* R&D when the issue, in the context of the Bill, is *eligible* R&D.

2.5.3 The Australian Industry Group argued cogently that tax concessions for R&D must be broad based and easily accessible for a wide range of businesses in a wide range of sectors.[11] The Democrats concur with that as we believe diversity of R&D is an essential feature of an innovation system. While this has implications far beyond the tax concession, we are most concerned that the Government's apparent obsession with 'rorts' has resulted in an unhealthy contraction of Government support of R&D.

2.5.4 Dr Frater, a Fellow of the Australian Academy of Science, put the dilemma succinctly.

> [The first issue] is a philosophical one with a plea that these expenditures by government be viewed as part of an investment strategy rather than as a cost containment exercise because in a sense we would not like to see a situation where, in the shaping the gates to crack down on misuse, we make it just impossible for the good guys (sic). [12]

2.5.5 The Democrats acknowledge the public interest in ensuring that tax concessions do not result in manipulation or imbalance between community benefits and revenues forgone. However, we believe a wider net is warranted given the significant returns for the economy and the community on R&D spend. In short, we are most concerned that the change in the Government's commitment to supporting R&D risk lacks balance and a long-term view and thus may be a damaging false economy.

2.5.6 The Democrats urge the Government to rethink its policy approach by recognising the urgency for significant transformation in business culture in respect of investing in R&D. We believe the Government's parsimonious and constraining approach is out of

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8 Corporate Tax Association of Australia, *Committee Hansard*, Melbourne, 5 September, 2001, p. 3

9 Mr Lynch, *Business Strategies International*, *Committee Hansard*, Sydney, 6 September, 2001, p. 65

10 Mr McMullan, PriceWaterhouseCoopers, *Committee Hansard*, Melbourne 6 September 2001, p. 22

11 AIG, Submission no 7,

12 Dr Frater, Australian Academy of Science, *Committee Hansard*, Sydney, 6 September 2001, p. 71

step with Australia's needs in an increasingly competitive global environment and decisive signals and generous incentives are required.

2.6 The 'Creative Industries'

2.6.1 While tangential to the consideration of this Bill, the Democrats would like to place on record a brief comment on the need to encourage the 'creative industries'.

2.6.2 In our view, the R&D concession seems to have been originally formulated from a strong engineering and manufacturing perspective (the humanities and social sciences, for instance, are explicitly cited in the exclusions list). The provisions in this Bill, particularly in relation to treatment of plant, feedstock and prototypes and the focus on the labour component of R&D spend could be interpreted as an attempt to shift away from this focus toward knowledge-based R&D.

2.6.3 The Democrats are concerned however, that the concession still pre-supposes a relatively narrow conception of industry and may exclude R&D activities in the emerging 'creative industries' that are being increasingly recognized as a dynamic and growing part of the economy, especially, but not limited to, the intersection of the ICT sectors.

2.6.4 While the ISIG report explicitly acknowledged the role of the humanities, social sciences and arts in innovation; this was in a subordinate role to commercialisation in science, engineering and technology. While totally supportive of building Australia's SET base, the Democrats believe an examination of the 'creative industries' and the role R&D incentives may play in further developing and nurturing these 21st century industries is warranted.

RECOMMENDATION: That the basic tax concession be lifted to 150% and the premium to 200% to make Australia's R&D tax incentives internationally competitive.

RECOMMENDATION: That the Australia Council and DCITA co-ordinate formal consultation and analysis of the modes of R&D in the 'creative industries' with the view to recommending incentives for business R&D in these sectors.

3. The Bill

3.1 The Bill amends the Income Tax Assessment Acts 1936 and 1997 and the Industry Research and Development Act 1986.

The main amendments are:

- the inclusion of an objects clause;
- extension of the exclusions list of 73B2(C) of the ITAA 1936;
- a change in the definition of R&D to require innovation and high technical risk, as distinct from current 'or' requirement;
- an R&D tax offset for SMEs to access the cash equivalent if they spend up to $1 million on R&D;

- the introduction of an incremental 175% premium for the labour component of R&D spend above a three year average;
- a qualification period of 3 years for the incremental premium;
- removal of the 'exclusive use' test and the introduction of 125% effective life write off for R&D plant;
- retrospective changes in the treatment of feedstock, prototypes and R&D plant; and
- the introduction of an additional eligibility requirement of R&D plans to access the tax concession.

4. Changes to the Definition

4.1 As the Chair's report outlines, there is considerable divergence of views between the Government and its agencies and the private sector as to the impact of the change from 'innovation *or* high level of technical risk' to 'innovation *and* high level of technical risk'.

4.2 The Government has consistently appealed to the authority of the Frascati manual to justify this change. As the Chair's report notes, there is a discrepancy between the definition adopted in the legislation and that used in para 79 of the Frascati Manual which states 'the basic criterion for distinguishing R&D from related activities is the presence in R&D of an appreciable element of novelty and the resolution of scientific and/or technological uncertainty".

4.3 While there may be some issues with the scope of innovation or appreciable element of novelty (ie near-patentability, novel for whom), the meaning of the definitions is not the real issue.

4.4 We believe the very brief discussion of what is R&D in the Frascati Manual is clearly written in a general descriptive sense and it is drawing a very long bow to read it as necessary or sufficient conditions. In our view, this brief passage has been significantly over-determined by the Government and the attempt to reify these few lines as a test stretches the Frascati Manual well beyond its intent.

4.5 The Government's substantive argument for tightening the definition is its claim that the Administrative Appeals Tribunal and the Federal Court have set too low a threshold on 'innovation' beyond the original intent of the Act.

4.6 Mr Carew, a witness for the Taxation Institute and the former Assistant Tax Commissioner responsible for the introduction of the R&D tax concession in 1986, argued that a broad approach to eligibility was consistent with the original intent of the Act, which was about making that concession as "accessible as possible". He pointed out that in 1986, the Australian concession was equal to the Canadian tax incentives. But now, it ranks down near the bottom. Nor, he pointed out, had any

evidence been produced showing that the post-1996 regime was being rorted. On that basis, he recommended that the bill be withdrawn.[13]

4.7 As the original intent was to encourage R&D it is not clear exactly how the Courts have transgressed the original intention. The IR&DB argued that the courts allowed claims that cannot 'in the experienced and expert view of Board members, be described as R&D'.

4.8 While the cited court cases were not discussed in detail, the Democrats formed the view that the Board may be relying on far too linear a view of R&D by attempting to constrain it to 'front-end' R&D at the direct expense of 'feedback', 'incremental' and 'downstream' R&D. This was evident, for example, in the discussion concerning the other definitional change; the extension of the exclusions list.

4.9 Ford Australia argued that the extension of the exclusions list further constricts the definition of eligible R&D and the exclusion of pre-production activities and compliance with statutory requirements will have particular effect on the automotive industry.[14]

4.10 Dr Russell Edwards from AusIndustry argued that the exclusions list "by definition are post R&D activities".[15] However, evidence provided by Deloitte Touche Tomahtsu made a very good case that in relevant circumstances licensing costs, patenting costs, compliance with statutory requirements and pre-production activities are a legitimate, indeed necessary part of the R&D process.[16] Moreover, the ATO have acknowledge such activities can be R&D in character in their Income Tax Ruling IT 2442 and TR 2552.[17]

4.11 It is difficult then, to understand the certainty of Dr Hammond from the IR&DB who argued "if you look at the list, you can see that that list defines a set of activities and it would take a long stretch of the imagination to see it as part of R&D".[18] Particularly as he immediately acknowledged that there is scope for ambiguity for pre-production trials.[19]

4.12 The Democrats believe there can be a grey area between R&D and normal production refinements, however we are not at all convinced that the line is so easily drawn in the sand as the IR&DB suggests.

4.13 In our view, the Government's case on definitions, particularly the 'or/and' change, has not been helped by confusing and apparently contradictory statements about 'low

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13 Mr Graham Carew, Taxation Institute of Australia, *Committee Hansard*, Melbourne 5 September 2001, p. 31

14 Ford Australia, *Submission No. 1*, p. 4

15 Dr Edwards, *Committee Hansard*, Sydney, 6 September 2001, p. 96

16 Deloitte Touche Tohmatsu, *Submission No. 6*, pp 4 - 5.

17 as cited in *ibid*, p. 4

18 Dr Hammond, *Committee Hansard*, Sydney, 6 September, 2001, p. 55

19 *ibid*, p. 55

thresholds' but the requirement of the 'and' test is not 'raising the hurdle' but 'shutting the gate'.

4.14 It is notable that nearly all private sector submissions commented adversely on the change in definition seeing it unequivocally as a raising of the eligibility requirement.

4.15 While it may be the case that proposed change from 'or' to 'and' may have little impact, as the Government asserts, the Democrats are not convinced by their arguments and believe, on balance, that the benefits of retaining the current definitions outweigh the risk of further decline in business R&D and the costs of forgone revenue of some marginal claims.

5. Chair's proposed change in definitions

5.1 The Chair's report has recommended that the Frascati wording be adopted to replace the existing definitions.

5.2 The Democrats believe this recommendation has little merit, as it does not address the different concerns of either the private sector industry or the Government. Moreover, it will add to the uncertainty by eliminating 16 years of case law.

5.3 While not addressing the possibility of this amendment, Professor Anderson of the IR&DB argued that

> We are of the view that incremental improvement to the definition is a superior strategy to one of adopting a new definition, as the outcomes of the latter will be difficult to estimate and manage, whereas the former will avoid further complexity and minimise uncertainty.[20]

6. Premium Concession

6.1 The Democrats welcome the establishment of a premium concession, although we note that as it only applies to the difference between the average of the previous 3 years spend and the current year thus it remains to be determined how much of a real incentive it will be. As Mr Clark from Mimcom pointed out, the premium will be of little assistance to companies who are already heavily investing in R&D "and quite literally would be hard-pressed to invest more".[21]

6.2 There are, however two important issues with the premium that need resolution.

Eligibility

6.3 The Democrats believe the three-year qualification period is inflexible and disadvantages start up SMEs.

6.4 Mr Marcus Webb suggested a staged process by which companies are excluded from accessing the premium in the first year but can then access it in the second and third

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[20] Professor Anderson, *Committee Hansard*, Sydney, September 6, 2001, p. 48

[21] Mr Brett Clark, Mimcom, *Committee Hansard*, Sydney, 6 September, 2001, p. 75

year by using a two-year average and then a three year average so that "we are walking our way into a history".[22]

6.5 While not necessarily committed to this possible solution, the Democrats believe the Government should allow a more flexible approach.

Smoothing Provision

6.6 The Democrats welcomed the Government's decision to change the original eligibility criteria from R&D intensity (R&D spend over turnover) to a rolling averaging mechanism.

6.7 However, a number of submittees, including the AIG argued that the adjustment mechanisms in the Bill introduce "a renewed and unnecessary level of complexity".[23] As the Chair's report point out, the IR&DB acknowledged the concerns about the complexity (1.45).

6.8 According to the EM (5.24) the adjustment mechanisms are an anti-avoidance measure designed to prevent manipulation of the tax concession. However, we note the evidence of Mr Durchini, for instance, who argued "a better way of dealing with a potential mischief is through the anti-avoidance issues".[24]

6.9 Mr Cooper from the ATO made a reasonable case for some element of smoothing for natural and unnatural volatility. Moreover, his argument that the 20% cut off has added equity has merit.[25]

6.10 In particular, we note the evidence from DISR that the 20% averaging approach is more generous than the French system, which requires a full make-up of the drop before accessing the premium rate, and the Japanese concession.

6.11 However, the bill takes the clawback of the adjustment balance too far thus we would recommend that these provisions be deleted to reduce any punitive effect.

RECOMMENDATION: that the Government allow the eligibility criteria to be relaxed to allow access to the premium in the second year.

RECOMMENDATION: that the 'adjustment balance' provisions be removed.

7. R&D Plant

7.1 The Bill introduces a number of significant and complex changes to the handling of R&D plant, feedstock and trading stock.

7.2 The Bill removes the 'exclusive use' test for R&D plant and introduces an 'effective life' write off provision to replace the current 3 year write off.

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22 Mr Marcus Webb, *Committee Hansard*, Sydney, Thursday 6 September, 2001, p. 69

23 AIG, *Submission No. 7*, p. 10

24 Deloitte Touche Tohmatsu, *Committee Hansard*, Melbourne, 5 September, 2001, p. 15

25 Mr Cooper, ATO, *Committee Hansard*, Sydney, 6 September, 2001, p. 82

7.3 The Democrats support the removal of the 'exclusive use' test but believe the 'effective life' provision has a major anomaly in that some R&D plant may have an effective life of literally decades.

7.4 The Democrats share the concerns of many of the submittees concerning the clawback provisions, which could, have the ability to cut away up to 90 per cent of the value.[26]

7.5 Mr McMullan from PricewaterhouseCoopers pointed out;

> Most of the Bill promotes a clawback of tax concessions … If R&D is undertaken and produces successful outcomes, be it a machine or a service that can be exploited quickly, then it seems to me that most of the act will claw back the R&D … to remove the beneficial deduction from companies that are successful … seems to be against the objects of the act.[27] and effective life provisions are not satisfactory.

7.6 Mr Gale from Michael Johnson and Associates also advised the committee that:

> We are concerned the ATO has stated that the overall tenor of the new R&D plant provisions is to bring the treatment of plant in line with the treatment of capital expenditure in other areas of the Taxation laws. The tax concession we submit, should be inconsistent with other areas of the taxation laws thereby providing an incentive to incur the expenditure.[28]

7.7 The Taxation Institute of Australia also argued that:

> Trading stock is not plant and the mere fact it is used in an R&D activity does not transfer it to plant.[29]

7.8 The Democrats are concerned that apart from the changes to 'exclusive use', the Bill's treatment of plant may have a particularly adverse affect on capital intensive R&D, notably in the manufacturing sector. Moreover, we are satisfied that the complex changes are not in the spirit of the intent of the Bill to encourage R&D.

7.9 Accordingly we share the Chair's (1.74) concerns with the reasoning behind the changes and the likely financial impact. The Democrats believe the Government must consider significant changes to the handling of R&D plant.

RECOMMENDATION: That the provisions relating to plant, trading stock and feedstock be removed and subject of a further round of consultation, and that any changes to the treatment of plant be prospective.

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26 Mr Marcus Webb, Business Strategies International, *Committee Hansard*, Sydney, 6 September 2001, p. 70

27 Mr McMullan, PricewaterhouseCoopers, *Committee Hansard*, Melboure 5 September, 2001, p. 24

28 Michael Gale, *Supplementary Submission No. 9A*, p. 2

29 Mr Graham Carew, *Committee Hansard*, Melbourne 5 September, 2001, p.

8. R&D Tax Offset

8.1 The Democrats welcome the introduction of the R&D tax offset. We believe it will be a useful and important initiative for SMEs, particularly in their start up phase.

8.2 The committee heard evidence that the eligibility thresholds of company group turnover of less than $5 million and R&D spend of between $20,000 and $1 million may be overly constrictive[30]. It was suggested to the committee that tapering the cap on R&D spend may overcome the possible disincentive of the $1 million cap.[31]

8.3 The Department argued that the thresholds had been determined on the basis of careful analysis of the tax loss performance of companies, and the Democrats accept that "it was not done just on a whim".[32]

RECOMMENDATION: That the Government consider a tapering of the R&D cap after $1 million R&D spend.

9. R&D Plans

9.1 The Bill implements an additional eligibility requirement for access to the concession; R&D plans to be retrospectively required as of the 29th of January, 2001.

9.2 The Democrats support this measure, in principle, as it may help to further mainstream R&D in business culture.

9.3 It is notable, however, that a number of submittees believed that this requirement was another compliance hoop rather than being a constructive addition to business practice.[33] Moreover, concern was expressed that R&D, by its very nature, is unpredictable and thus not amenable to overly tight planning requirements.

9.4 The guidelines for the plans do not form part of the Bill and will be set by the IR&DB. The committee heard that draft guidelines had been prepared but as these were not tabled at the hearing it is not known how prescriptive these may be. We are aware that a second draft has been recently posted on the Board's website which does address some of the timing issues but appears, at first reading, to have increased the compliance requirements.

9.5 Mr Clarke from the IR&DB argued "the board is not presenting a pro forma

> plan that must be completed. The board is publishing a guideline as to what it thinks a plan might look like. Any company that has already got an R&D plan is almost certainly compliant with the requirements"[34]

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30 Deloitte Touche Tohmatsu, *Committee Hansard*, Melbourne, 5 September 2001, p. 11

31 Mr McMullan, PricewaterhouseCoopers, *Committee Hansard*, Melboure 5 September, 2001, p. 23

32 Ms Patricia Berman, DISR, *Committee Hansard*, Sydney, 6 September, 2001, p. 89

33 Michael Johnston & Associates, *Committee Hansard*, Sydney 6 September, 2001, p. 61

34 IR&DB, *Committee Hansard*, Sydney, 6 September, 2001, p. 91

9.6 The Democrats believe that industry concerns have some validity and accept that if the guidelines are excessively onerous and lack flexibility, including the capacity for revisions in the light of unexpected outcomes, they may constitute an undesirable disincentive for companies to engage in R&D. The requirement for prior approval by the board of directors, for example, could create operational difficulties, which could affect access to the concessions and needs to be revisited.

9.7 On balance, however, the Democrats believe promotion of company R&D plans warrants support. The Democrats expect that the IR&DB board will take note of concerns raised in the inquiry and ensure that the guidelines will demonstrate the requisite features. We will also consult with the industry to see whether the second draft is, in fact, moving in the right direction.

9.8 The Democrats believe an option that merits consideration is to amend the Bill to change the status of the guidelines to that of a disallowable instrument.

RECOMMENDATION: That the provisions relations to company plans be deleted and subject to a further round of consultations. Further that any changes be prospective and apply from the next financial year (i.e. commencing July 1 2002).

10. Timing

10.1 A number of submissions commented on the timing of the implementation of various provisions of the Bill.

10.2 Mr Drenth from the Corporate Tax Association advised the committee that;

> although we have received some assurances from government officials, the way the bill is drafted that date is based on the date the expenditure was incurred, not when the activity commenced. So the grandfathering of that ... is not actually achieved under the legislation".[35]

10.3 Mr McMullan also alerted the committee to changes in treatment of capital allowances Act on 1 July 2001 and different divisions covering the brief period from 29 January, 2001 which will create great difficulties for tax accountants and lawyers let alone companies trying to work out the disjointed implementation.[36]

RECOMMENDATION: That the changes to eligibility should come into affect from 1 July, 2001 at the earliest.

11. Additional Concerns

11.1 A number of submissions commented that the practice of treating R&D as activities rather than projects for the purposes of the concession mean result in currently eligible activities being ruled out because of the change in definitions.[37] This issue

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35 Corporate Tax Association of Australia, *Committee Hansard*, Melbourne, 5 September, 2001, p. 2

36 Mr McMullan, PriceWaterhouseCoopers, *Committee Hansard*, Melbourne 6 September 2001, p. 25

37 Ford Australia, *Submission No. 1*, p. 3

might be worthy of further consideration in the context of the requirements for corporate plans prior to the commencement of R&D activities.

Senator John Cherry
Australian Democrats

APPENDIX 1

SUBMISSIONS RECEIVED

1	Ford Motor Company of Australia
2	Geoff Stearn Management Pty Limited
3	Australian Academy of Science
4	Mincom Limited
5	David Miles
6	Deloitte Touche Tohmatsu
7	Australian Industry Group
8	Vision Systems Limited
9	Michael Johnson & Associates Pty Limited
9A	Michael Johnson & Associates Pty Limited
10	PricewaterhouseCoopers
11	Australian Taxation Office
12	Chief Scientist
13	BresaGen Limited
14	Industry Research and Development Board
15	Group of Eight
16	Probiotec Pty Limited
17	Business Strategies International
18	Pfizer Pty. Limited
19	The Fred Hollows Foundation
20	Taxation Institute of Australia
21	BBL Group Pty Ltd
22	Department of Industry Science and Resources
23	Australian Information Industry Association
24	Corporate Tax Association
24A	Corporate Tax Association
25	Minerals Council of Australia
26	TMDP Consulting Pty Limited
27	Cochlear Limited
28	The Institution of Australian Engineers, Australia
29	Queensland Government, Department of Primary Industries

APPENDIX 2

PUBLIC HEARINGS AND WITNESSES

Wednesday, 5 September 2001, Melbourne

Taxation Institute of Australia
Carew, Mr Graham Douglas

Corporate Tax Association of Australia Incorporated
Drenth, Mr Frank, Executive Director

Deloitte Touche Tohmatsu Ltd
Duchini, Mr Sergio, Partner, Indirect Taxes
Munday, Mr Jamie Robert, Partner, Indirect Taxes

Australian Industry Group
Ridout, Mrs Heather May, Deputy Chief Executive Officer
McKellar, Mr Andrew

PricewaterhouseCoopers
McMullan, Mr Paul, Partner, Tax and Legal Services

Innovation Summit Implementation Group
Miles, Mr David Arthur, Chairman

BBL Group
Sykes, Mr David, Director
Thompson, Mr Don, Director

Bresagen
Verma, Dr Meera, Vice President and Chief Operating Officer

Thursday, 6 September 2001, Sydney

Industry Research and Development Board
Anderson, Professor Donald Keith, Chairman
Hammond, Dr Laurence Stuart, Chair, Tax Concession Committee

Department of the Treasury
Antioch, Mr Gerry Januarius, General Manager Business Income Unit
Tune, Mr David John, General Manager, Business Income and Industry Policy Division

Department of Industry, Science and Resources
Clarke, Mr Drew, Executive General Manager, AusIndustry
Banks, Mr Tim, Manager, Legal Services Section, AusIndsutry
Edwards, Dr Russell Thomas, General Manager, Industry Innovation Programs, AusIndustry
Jenkins, Ms Carolyn Joy, Manager, Innovation and Industry R&D

Mooney, Mr Mark, Legal Manager, AusIndustry
Berman, Ms Tricia, General Manager, Innovation Policy Branch

Mincom Ltd
Clark, Mr Brett Aaron, Manager, Taxation and Planning,

Australian Taxation Office
Cooper, Mr Ian Donald, Innovation Segment Leader, Large Business and International Area
Gill, Ms Claire Lucy, Adviser, Innovation Segment
Miller, Mr Geoffrey John, Assistant Commissioner, Law Design and Development

Pfizer Global Research and Development
Fahey, Dr Kevin John, Scientific Director, Research Investments

Pfizer Pty Ltd
Fowkes, Mr Alexander Lloyd, Manager, Legal Affairs
Hoare, Mr Stephen Gordon, Taxation Manager

Australian Academy of Science
Serjeantson, Professor Susan Wyber, Executive Secretary
Frater, Dr Robert Henry, Fellow
Green, Professor Martin Andrew, Fellow

Michael Johnson and Associates Pty Ltd
Gale, Mr Kris Kendall, Managing Director

Business Strategies International
Lynch, Mr Michael James, Director, Innovation Section
Grant, Mr Anthony Robert, Consultant
Webb, Mr Marcus Graeme, Manager, R&D Services