



**INDUSTRY  
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Dear Mr McMahon

**Inquiry into increasing value-adding to Australian raw materials**

In our letter to you of 12 April 2001, we indicated that we would provide a response to you at a later date on Mr Morris' question concerning the R&D tax concession (Hansard pages 330-331) which the Department took on notice when it appeared before the House of Representatives Standing Committee on Industry, Science and Resources on 8 March 2001.

We have now prepared the enclosed response to this question for you Committee's consideration.

I trust that this reply assists the Committee in its deliberations on this matter.

Yours sincerely

Donald Brunker  
General Manager  
Industry Analysis Branch  
5 June 2001

**Mr Morris' question on how the system evaluated possible R&D support for production facilities which are based on risky or unproven technology; how the Department (ISR) approaches this issue; and if there is a difference of view between ISR and Treasury. (Hansard pages 330-31).**

### *ISR Response*

It should be noted that the R&D Tax Concession program is only one of a number of government programs which support innovation and R&D and which are relevant to the questions concerning proven and unproven technologies.

The Government provides assistance through the R&D Start Program and several sector specific programs such as the Textiles, Clothing and Footwear Program and the Automotive Competitive Incentive Scheme. In addition to the Commercialising Emerging Technologies (COMET) Program and the Cooperative Research Centres Program, a number of new assistance measures are being introduced following the launch of the Innovation Statement *Backing Australia's Ability* including the Innovation Access Program and Major National Research Facilities.

In the case of the R&D Tax Concession, the relative responsibilities across Government and the technical risk issues are set out below.

### *The R&D Tax Concession – Roles and responsibilities*

The R&D Tax Concession is the Government's principal support mechanism to increase the amount of R&D performed by businesses in Australia. The R&D Tax Concession program is jointly administered by the Industry Research and Development Board (The Board) and the Australian Taxation Office (ATO) via section 73B of the Income Tax Assessment Act 1936. The Board determines the eligibility of R&D activities and the ATO determines the eligibility of R&D expenditure.

The IR&D Board had sole responsibility for determining whether an activity is eligible R&D in terms of the legislation i.e., whether the activities involve innovation, technical risk etc as defined in the legislation. If the ATO undertakes an audit of a company and has doubts as to the eligibility of an R&D activity, the ATO must refer the question by the IR&D Board and the ATO is then bound to accept the determination made by the IR&D Board. The ATO does not make decisions regarding the eligibility of R&D activities.

The responsibilities of the Board, which include the registration of eligible companies and determination of eligible R&D activities, are set out in *The Industry Research and Development (IR&D) Act (1986)*. The Board has the power under section 39L of the Act to determine whether particular activities are R&D activities, and to provide a certificate to the Commissioner of Taxation to that effect. The Commissioner may request the Board to issue a certificate, and the Board also undertakes its own risk-based compliance monitoring of companies registered for the Tax Concession.

Under section 21 of the *IR&D Act (1986)*, the Board has delegated most of its legislative responsibilities to the Tax Concession Committee. Secretariat support to both the Board and to the Tax Concession Committee is provided by AusIndustry.

## *Eligible R&D Activities*

The eligibility of both R&D activities and R&D expenditure is provided by the *Income Tax Assessment Act (1936)*. The definition of ‘research and development activities’ is contained within section 73B (1) [Please note: this is the pre-29 January 2001 definition]:

- 73B (1) ‘research and development activities’ means:
- (a) systematic, investigative and experimental activities that involve innovation or high levels of technical risk and are carried on for the purpose of:
    - (i) acquiring new knowledge (whether or not that knowledge will have a specific practical application); or
    - (ii) creating new or improved materials, products, devices, processes or services; or
  - (b) other activities that are carried on for a purpose directly related to the carrying on of activities of the kind referred to in paragraph (a).

- 73B (2B) For the purpose of the definition of research and development activities in subsection (1):
- (a) activities are not taken to involve innovation unless they involve an appreciable element of novelty; and
  - (b) activities are not taken to involve **high levels of technical risk** (*our emphasis*) unless:
    - (i) the probability of obtaining the technical or scientific outcome of the activities cannot be known or determined in advance on the basis of current knowledge or experience; and
    - (ii) the uncertainty of obtaining the outcome can be removed only through a program of systematic, investigative and experimental activities in which scientific method has been applied, in a systematic progression of work (based on principles of physical, biological, chemical, medical, engineering or computer sciences) from hypothesis to experiment, observation and evaluation, followed by logical conclusions.

When undertaking an assessment to determine the eligibility of activities, the IR&D Board applies the definition including the risk criterion set out above. Commercial risks or issues to do with the exploitation of the R&D are not relevant issues in such an assessment.

In essence, what the Board is looking for to satisfy eligibility requirements is that the R&D project contain three main elements:

- the first element is the identification of a problem with *significant technical uncertainty* which is not able to be resolved on the basis of publicly available knowledge in that particular field of technology;
- the second element is *creativity* in the generation of an applicability original idea leading to a possible solution(s) to the problem, and that this creativity will be expressed in a proposed hypothesis to resolve the technical uncertainty in the problem; and

- the third element is the requirement for *systematic, investigative and experimental* activity in the form of either testing or trials to have been undertaken to resolve this technical uncertainty.

The Board's interpretation of the key terms within the R&D definition is consistent with that of the Courts.

The 'systematic, investigative and experimental' test is a compound phase that may be satisfied by the core R&D activity. The activity may be 'systematic' if it has been undertaken as part of a logical progression of activities, and 'investigative' if a search or investigation into the particulars of the technical problems have been undertaken, and is 'experimental' if it involves consideration of competing possible solutions and establishes the framework for later trials or tests to be undertaken. The approach to analysing this test has not changed.

The criterion of 'innovation' is defined<sup>1</sup> as 'an appreciable element of novelty', where 'novelty' is understood<sup>2</sup> to mean "newness" or "something new or different". Therefore, if the core R&D activity involves something which is either appreciably new or appreciably different to that which existed in that industry at the time that the activities were undertaken then the 'original thinking' within this activity is likely to satisfy the legislative requirement for 'innovation'.

The criterion of 'high levels of technical risk' is defined<sup>3</sup> in terms of uncertainty as to whether the technical or scientific outcome can be achieved on the basis of current knowledge or experience, and this uncertainty can only be removed "through a program of systematic, investigative and experimental activities in which the scientific method has been applied...from hypothesis to experiment, observation and evaluation, followed by logical conclusions."

There is a strong degree of complementarity between the 'innovation' and high level of technical risk' tests. If there is uncertainty of outcome, then some original thinking would be required to resolve the uncertainty, and the original thinking would be evidence that the innovation test has been met. Conversely, it is unlikely that original thinking would be required if the outcome was already known on the basis of current knowledge or experience.

Preparedness to take risks is at the heart of R&D – indeed it is exactly why R&D is supported, to encourage to take the risk.

### *Streamlining changes to the definition of R&D*

The Government announces new Streamlining measures for the R&D Tax Concession on 29 January 2001, including changes to the definition of 'research and development activities' to ensure that the Concession meets the policy intent of the Act.

These changes involve strengthening the eligibility criteria by requiring that all future claims meet both the 'innovation' and 'high-technical risk' requirements; extending the application of the exclusion list (s.73B(2C)), which currently applies only to core R&D activities, to cover 'supporting' activities; and including a requirement that R&D activities are to be the subject of a R&D plan approved by the controlling entity (eg. CEO or Board).

Then will apply to any activity commenced after 12:00 noon Canberra time on 29 January 2001, pending the passage of legislation in Parliament. R&D activities commenced before that time will be subject to the old definition.

In summary, the above information illustrates how the issues of uncertainty/risk is applied in the R&D Tax Concession and it also indicates that the IR&D Board only has responsibility for determining whether risk or uncertainty is present.

Additional information on the new tax initiatives announced on 29 January 2001, in particular on the definition of R&D, can be found on the following website: [www.innovation.gov.au](http://www.innovation.gov.au)