Department of Education

Dear Sir/Madam

#### Re: Response to "Boosting the commercial returns from research" paper

I welcome the opportunity to respond to the *Boosting the commercial return from research* paper recently prepared by the Department of Education, and the Department of Industry. The discussion paper provides a forum to highlight a number of important issues and we submit the following feedback for the Departments' consideration during this review process.

### **Encouraging Industry (Bridging the Risk Gap)**

Industry/ Commercial partners are not always able to take the initial risk on projects which may require lateral solutions. These projects need strategic support and encouragement to establish partnerships to increase Australia's innovation delivery path. To increase industry encouragement the following are supported and/or propsed:

- Diversify the utilisation of R&D tax incentive resources such as supporting industry or discipline national brokerage bodies with localised state arms such as the highly successful service provided by the Australian Minerals Industry Research Association;
- The provision of Government funding for industry that can only be accessed by conducting collaborative research with universities;
- Develop a "challenge" fund which collates both specific big challenges and sector challenges to Universities to collaborate and solve them. This should be industry led and potentially coordinated by State based chambers of commerce. Such a funding scheme works exceptionally well in Canada and is coupled with an open innovation framework when participating (<u>En Mode Solutions</u>);
- Supports the proposed principle of an online point of access for industry relevant research but would like to see more detail on how this would be executed. This point of access could be done at a State/ Federal partnership level.

## Enabling a collaborative relationship (Bridging the understanding/institution gap)

 Establish an education or training program combining members of industry and universities to educate both parties on how to effectively communicate needs, expectations, limitations etc. For example conducting workshops for both industry and academics. These programs should be discipline specific to be most effective.

# **Enabling industry relevant pathways (Bridging the research partnering gap)**

 Continue and increase resource support for both the Australian Research Council Linkage Project Schemes and Cooperative Research Centre Program. Increased funds and scheme frequencies also provided an excellent opportunity for PhD

- candidates to experience industry placements thereby bridging the industry-university gap;
- Collaborations between industry and universities at the University school-level (e.g. having an industry representative on the School Board) to facilitate industry relevant influence upon the undergraduate program and foster potential collaborations;
- As part of the Industry Innovation and Competitiveness Agenda, a departmental review of existing industry relevant research training would be a worthwhile consideration towards better informing how relevant and accessible it is, as well as identifying opportunities to further develop the enhance industry relevant graduate attributes;
- Investigation into how support could be given to incorporate industry secondments and/or placements as part of PhD (MITACS provides a good example).

### Other considerations

- Measurements of commercial outcomes would be difficult to achieve beyond assessment of the joint research engagement (JRE) research funding scheme and category 3 and 4 income review because most outcomes would be long-term and therefore may be harder to measure;
- Not all research should be focused on commercial outcomes. Basic research has
  the potential for wider benefits and industry is less likely to undertake basic research
  than universities. Australia must maintain a base of fundamental research funding;
- The Medical Research Future Fund needs to embrace the enabling sciences (eg science and engineering links) because the potential industry links are positive;
- There is a fundamental challenge inherent in the misalignment of the nation's commercial focus and the country's research strengths;
- There needs to be a coordinated and focused effort on encouraging/ requiring
   University spin offs particular focus should be on reducing the risk profile of this
   activity and unlocking many University's reluctance to participate in creating these
   companies due to risk (perceived or real).

In summary, I largely support the principals of the Governments endeavours to explore ways of boosting the commercial returns on research. Specifically rewarding industry for engaging with research institutions would greatly assist in motivating this collaboration, thereby creating a culture in which researchers and industry can connect. Streamlining the researcher/industry connection process is also required to foster ongoing relations and establish a fertile ground to realise development and training opportunities. However in the midst of maturing commercial development there must also always remain a strong and sure national support for pure research. The Government's Industry Innovation and Competitiveness Agenda provides an excellent opportunity to grow both research and commercialisation opportunities.