

Draft remarks on the Industrial Development (Science Foundation Ireland) Amendment Bill 2012

Thank you minister for bringing this bill forward and for the time to debate its contents.

It is an incredibly important Bill in the context not only of current scientific endeavours in the country, but also the wider economy as a whole.

And while of course economic advantages brought about by scientific exploration are a very good thing, we should be careful not to reduce such an important endeavour as scientific exploration to a simple revenue raising pursuit.

I don't think we will in this country. We have a proud history when it comes to scientific achievement and discovery. One ready example both given current events in Iran and Pakistan, and also from my previous career in nuclear weapon test monitoring, is of course Robert Mallet, an Irish geophysicist who is regarded as the father of seismology.

Changes in the teaching curriculum and advances in technology and in our understanding of the world will ensure that such a history here in Ireland continues. We seem to be developing very inquisitive minds at an early age.

Legislation like this Bill of course also has a crucial role in the strategic planning of how we invest and develop resources in this area.

When we look to Section 4 of the Bill, which is essentially the meat of the Bill, there are a couple of key changes.

The first is the extension of Science Foundation Ireland's remit so that it may fund applied research. This is a welcome development. We can't just be purists – we can't simply discover for discovery's sake and not think about how research might be commercialised or transferred if there could be wider gains to be made (producing jobs or other commercial opportunities for example). Application of our research for financial or social causes must be followed through, and this requires funding.

One word of caution, we do not want to start down a road where funding for research becomes dependent on a proven or expected commercial outcome. Basic, primary research is incredibly important. We need only to look at CERN in Switzerland as a ready example of the importance of such investment, and the great gains we in Europe are making as a result because we have focussed more than others on primary research.

And, of course, some of our most important discoveries were unintended and unexpected. Penicillin of course being the most commonly cited example.

Section 4 also deals with prioritising research for funding. The government did establish a High Level group on this to identify priority areas and this Bill will allow Science Foundation Ireland to re-direct its funding towards these areas. These are research areas that have potential to deliver a sustainable economic return to the country.

It is my understanding though that one area of research – Geothermal – has not made that priority list and I find this slightly peculiar. Of course, not everything can be a priority.

But I would have thought, from the extensive research done to date in geothermal – for example regarding assessing Ireland's deep low-enthalpy geothermal energy potential – that there is a proven potential there for the country. What's more with our research to date we have stolen a march on other countries in this area meaning that we have the potential to become something of a leader in this area.

If geothermal power generation is possible in this country on a wide scale, particularly with regard to say district heating, then we should be directing funding towards research in this area. I hope we are not missing an opportunity here because of the perceived sensitivities around this area.

In relation to Section 5 which covers the pooling of financial resources with partners in the North and internationally, this is a very welcome development. Science is perhaps one of the oldest and most successful areas of cooperation between countries and cultures. We benefit when different people come together in the name of science (and again the Hadron Collider stands as a current example of this, as does the tsunami warning system in operation in the Pacific). So this is a welcome section.