Maximising universities' role in research and innovation

Australian universities comprise a relatively big part of the Australian R&D system (HERD was 0.48% of GDP in 2004; 0.40 in UK; 0.36 in USA)

Australian universities spend more than they earn on research

- Universities earned \$2.2b for research in 2006
- & spent \$5.2b on research

Maximising universities' role in research and innovation

Breakthrough research in many fields that:

- buys us a seat at the global R&D table and provides links for the rest of the NIS (98/2%)
- builds our absorptive capacity for leadingedge technology

If that's the case then ...

The emphasis should be on building strong links:

- high quality, competitive research
- keeping in touch conferences, meetings
- international joint research
- international training

& in the future on:

e-research joint ventures

and on ...

increasing the capacity for connection across the Australian NIS

Australian universities should be easy to connect with

But what do we do when we have Peter Doherty?

Providing support

Paying for patents

Do we need some Hollingsworth centres?

Maximising universities' role in research and innovation

Education/human capital

- generic skills for innovation
- providing professionals
- research training
- business education focusing on service industries, SMEs & process innovation

Maximising universities' role in research and innovation

Providing spaces + facilities for innovation

Through studying innovation

Through example – in process innovation

CRCs – the issues

- Not necessarily addressing market failure or market creation
- Not attracting the best researchers and research organisations
- Affecting relatively few industries in some sectors
- Becoming an end in themselves
- High overheads & bureaucracy

Review recommends

- Addressing a big challenge for breakthrough effect; pre-competitive or pre-applicative research + end-user uptake of research output
- Flexibility in structure, timing & governance
- Excellent program design/selection/review
- Strong links to similar programs
- An auxiliary program to help industry enduser establish a whole-of-industry collaboration

and ...

- Involve SMEs/service industries
- Public-good CRCs allowed
- CRCs in HSS fields
- End-users to provide >50% cash
- In-kind not to rate as cash
- Research providers do not have to provide cash or in-kind

Recommendation 2

That:

the prime objective of the CRC Program be to provide support for pre-competitive or pre-applicative research ventures between end-users and researchers which tackle a clearlyarticulated, major challenge for the end users addressing identified risk gaps such as a significant challenge: •in creation of a new industry area; or •in an existing industry sector where the risk involved in solving the challenge is too great for a single firm to tackle alone; or •in the provision of public goods and services; or •in an area of community or social benefit. The solution to the challenge should be innovative and of high impact and capable of being deployed rapidly by the endusers to good effect. Each CRC should be of high national benefit with significant spillovers.