

Controlling the future: IT&T networks and the Prime Minister's Science Council

THE DELAYED sixth meeting of the Prime Minister's Science Council, Paul Keating's first, focused in part on information technology and telecommunications (IT&T). Unfortunately for the IT&T community the Prime Minister was not present for the IT&T presentation. He was called away to supervise the somewhat disorderly departure of yet another Minister overseeing communications.

The paper, *Information Technology and Telecommunications: Looking to the Year 2000*, provided the basis for discussion. The paper examines Australia's place in the global IT&T scene, major areas of technological change and Australia's IT&T-related R&D capacity. It sets out a vision for government and industry while keeping in mind some of the possible impediments to achieving that vision.

Prepared by an independent working group, the paper suggests that 'to participate in the market we must internationalize our approach to product development, marketing and servicing the market. The internationalization of telecommunications can be achieved through overseas service contracts acting as a pull-through to local suppliers. In information technology this can be done through either forming international alliances or growing software houses with international bridgeheads for marketing and continued servicing.

International alliances are the avenue of the transnational corporations, while growing software houses are the avenue of indigenous industry development. It is notable that this was the only recognition of the possibility of indigenous industry development independent of transnationals. Given that half the working party is from IBM or Alcatel this is not surprising. The statement 'while Australian IT&T enterprises may have a substantial role in their industries, they cannot compete alone' is more characteristic of the line that infuses the paper.

The key recommendations made by the working party stem from the overall goal that industry and government commit to an IT&T export target of \$10 billion per annum by the year 2000. The working party makes recommendations regarding the overall business environment and Australia's R&D capacity and skills base. Chief among the former are:

- stressing the importance of outsourcing government IT&T needs
- strong intellectual property protection
- proposing the establishment of a direct high bandwidth network north into major Asian centres. Chief among the latter are:
- developing a wide bandwidth domestic network for use by R&D groups and industry

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- suggesting an IT disciplinary review focusing on telecommunications.

The main thrust of the working party's submission is the call for broadband networks domestically and north into Asia. An inadequate high bandwidth network infrastructure is identified as a key barrier to Australia's participation at the leading edge in IT&T research. The working party propose the implementation of a high bandwidth domestic research network by the year 2000, at an initial cost of \$30-45 million.

The Australian Science and Technology Council recently gave their support to an Australian Vice-Chancellors Committee proposal to upgrade the AARNet national research network that would place less stress on industry participation and, at \$20 million, was expected to cost a good deal less.

The other main network proposal from the working party is to build high bandwidth links to major Asian centres to facilitate export of Australia's leadership in services, medicine, education, etc. While this idea is plausible, it is possibly flawed. While the Asian market is undoubtedly huge, the working party does not consider the possibility that these customers may not be able to afford to upgrade.

The real benefits would be derived from easier access for Australian research centres to the leading Asian research communities.

On the other hand, of course, the approach is one offering a package; a high-tech pyramid selling approach. In the world that the working party are conjuring up, Australia could supply the whole package — network, basic carrier services and valued-added services — to our great export advantage.

JOHN HOUGHTON

Democrats issue science policy

WHILE THE Coalition explains the continued delays in issuing its science policy by saying it is still going through confidential consultations, the Democrats have issued a *Platform Paper on Science and Technology for Society* supporting Government funding of R&D with an increase to 2% of GNP (currently 1.2%).

The Democrats would set up a 'suitable advisory body' to make the planning of applied research a part of national economic planning, linking it with educational, social and environmental goals. The body would have 'all-political-party' representation.

The platform would increase support for research in the social sciences, review the patent and licensing systems, provide a one-off injection of \$50 million into the new Australian Technology Group and direct Government research institutions to developing energy and resource efficiency standards, with emphasis on a sustainable economy.

Of all the parties, the Democrats are the only ones specifically to encourage scientists to take part in debate about issues of public importance and to protect whistle-blowers from reprisals.

On encouraging technological innovation, the Democrats' approach is similar to Simon Crean's sectoral support scheme, which has been battling to find favour in Cabinet. By targeting key technologies they would have a 'guided approach to industrial development and real funding commitments to substantially stimulate private sector R&D'.

While the Democrats' formal spokesperson on science is Senator Karin Sowada, the hand of the Party's leader, Senator John Coulter (a PhD and former researcher himself), in formulating the platform is clear. The Democrats can now be expected to make some waves on research in the lead-up to the election. ◀

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