

150 formal submissions, two formal seminars in Darwin and Townsville, numerous interviews and formal consultations, and nearly 120 written comments on the draft report, it is all rather disappointing. However, at least research and technology in Tropical Australia is on the national agenda and the report has given rise to one useful little paper (Office of the Chief Scientist 1993) on tropical health and the savanna landscape.

REFERENCES

- ASTEC, *Research and Technology in Tropical Australia: Review Papers presented at Symposia in Townsville and Darwin*, AGPS, 1992
- ASTEC, *Survey of Northern Australian Research: Summary of Main Features*, AGPS, Canberra, 1993a
- ASTEC, *Research and Technology in Tropical Australia and their Application to the Development of the Region: Draft Report*, 1993b
- ASTEC, *Research and Technology in Tropical Australia and their Application to the Development of the Region: Summary Report*, 1993c
- G. Crough and C. Christopherson, *Aboriginal People in the Economy of the Kimberley Region*, North Australia Research Unit (ANU), Darwin, 1993
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The Management of Science and Technology edited by Jenny Stewart

(Federalism Research Centre, Australian National University, Canberra, 1992), pp.viii + 135, ISBN 07315 1449 1.

The volume comprises revised and updated papers first given in April, 1991 at a workshop on the theme "Science, technology and Australian federalism: getting the best from the system", sponsored by the Federalism Research Centre and the Australian Science and Technology Council (ASTEC) and then published as the conference proceedings. The papers are organised under the headings of Problems and Prospects, Intergovernmental Relations in Research and Extension Services, Financing Business Development and the International Context. An introduction has been furnished by Jenny Stewart while Cliff Walsh has provided a conclusion.

The volume brings together these papers on Australian science and technology policy for students of federalism. But as a contribution to the literature on the implications for policy of Australia's federal system they are not entirely satisfactory. While there may well be serious issues in science and technology policy arising as a result of our federal system or which might best be tackled in a cooperative fashion, this volume does not succeed in drawing out those issues in any depth. Consequently, the federalism perspective has provided the

occasion for a volume rather than a coherent theme.

Viewed primarily as a collection of papers on the general theme of Australian science and technology policy, however, the volume brings together much that is of value particularly for the non-specialist. This includes factual material on the activities of ASTEC, the contribution of R&D to Australia's rural industries and the rationalisation of support measures, the selection of the Cooperative Research Centres and the operations of the National Industry Extension Service (NIES). None of these papers are, however, strongly analytical. This is somewhat disappointing in the case of the paper on the successful joint Commonwealth/State program, NIES whose title promised a critical appraisal. How this program relates to science and technology policy as opposed to industry policy is not discussed and we are left to infer the success of the program from a few statistics on the number of companies assisted, in isolation from any serious discussion of the nature and scale of the problems being addressed.

These deficiencies are however offset by Jenny Stewart's contributions, 'Towards the Clever Federation?' and 'Science, Technology and Industry Policy, Are We in the Race?' She argues that science and technology policy must be integrated with industry policy to be fully effective. If the industry development framework laid down by the Commonwealth is flawed, no amount of cooperation between the Commonwealth and the States will lead to the desired improvement in Australia's industrial performance.

She then argues that there are deficiencies in that framework. In particular, she suggests that to be the 'home base' of a successful international firm is the acme of industrial policy. She concludes by suggesting the structure of Australia's science base together with emerging trends in global production casts some doubt on the strategy of forming alliances with transnational companies to gain access to global markets. A technology policy which made much more thoroughgoing use of domestic procurement, and targeted technology transfer and strategic investment in downstream businesses might offer better long-term prospects. This is a stimulating challenge to the relative passivity of current industry policy and its integration with science and technology policy and is well worth reading.

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The Political Economy of Communications: International and European Dimensions
edited by Kenneth Dyson and Peter Humphreys. (Routledge, London and New York, 1990), pp.xii+254, \$40, ISBN 0-415-03794-8.

The 1980s saw a whole series of changes which affected European broadcasting and telecommunications. Perhaps the most significant has been the convergence of broadcasting telecommunications and information technology. The advent of market-based economics, cheap cable and satellite delivery services, has led countries to encourage innovation by the introduction of competition to previously closed markets. Deregulation has become *de rigueur* alongside the introduction of new communication technologies.

The authors' previous volume, *Broadcasting and New Media Policies in Western Europe*, published in 1988, recognising the growing economic importance of the communications industry to nations, examined the way West European states were responding to the chal-