

Australian Technology Network

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Submission to the Review of Closer Collaboration between Universities and Major Publicly Funded Research Agencies

September 2003

The Australian Technology Network is a coalition of five leading innovative Australian universities, committed to providing high quality, professional and vocational education and research oriented towards the needs of industry and the community.

The ATN undertakes a range of research activities with innovation and the uptake of ideas, our main objective. Whilst each university has its own particular and unique research strengths, in a collaborative sense, each member supports and complements one another in their efforts.

The ATN has developed modes for cooperative research, such as the on-line programs for research student skilling in intellectual property and project management. These modes recognise the individual research strengths of each university, whilst at the same time provides mutual support by complementing individual universities' strengths with research input from other ATN universities.

More than 70 percent of research funding for ATN universities is sourced from partnerships with government and industry. This figure is considerably higher than that achieved by other universities across the sector and reflects the strong commitment and priority the ATN membership places on partnerships, not only with publicly funded research agencies, but also with government, industry and the professions.

The ATN believes it has greater flexibility in the kind of research its members undertake, with many of our collaborations with research-*users* rather than research-*providers*. In this sense, the ATN distinguishes itself from other institutions, with a focussed effort on measuring positive client satisfaction. We are focussed on research which has an impact and makes a difference in the communities within which we operate.

Each of the ATN members seek to participate in enduring, strategic partnerships with industry, government and other research providers. In the case of research, there are many existing partnerships with PFRA's which can be benchmarked as successful examples of collaboration.

The ATN believes that this review is a timely opportunity to further examine those existing partnerships, and identify areas in which improvement can be made which will serve to further encourage the development of such partnerships between the sector and PFRA's.

In particular, ATN members, in their own capacity, have developed successful collaborative arrangements with the CSIRO, the DSTO, ANSTO, and AIMS. In all cases the ATN enters such collaborations through perceived mutual benefit.

PFRA's, for the most part, are exclusively funded to undertake research. This automatically gives PFRA's a very different perspective from that of universities, which are more broadly based institutions, on collaboration.

The perceived problematic collaboration between universities and PFRA's arise from the apparent lack of trust that sometimes exist between the different organisations, which lead to partnerships collapsing and hence resources and time having been wasted. A clear government policy and a set of national and complementary institutional strategies to encourage collaboration should work to eliminate any lack of trust that might have existed in the past.

As well, a clear disadvantage arises as it relates to the resources required to establish and maintain research collaborations. These opportunity costs include long lead times required to develop trust between collaborators and an understanding of differing research traditions and cultures. They are particularly resource intensive with respect to the human resources required to maintain these associations.

The importance of personal relationships in developing partnerships cannot be overstated. The ATN has been involved in collaborations that have arisen directly because of individuals and networks based on personal relationships. These have included joint appointments, access to infrastructure, the involvement of staff from PFRA's in the supervision of honours and postgraduate research students, and joint research projects.

However, at times, relationships with the CSIRO have struck difficulties. Difficulties have arisen mostly around the issue of intellectual property and the perception among ATN staff of the expectations of CSIRO staff in particular, about the control, ownership and commercial returns of IP. More important should be the contribution this research base makes to the generation of wealth and well being within Australian enterprises, rather than local ownership.

Present CSIRO policies in these areas are adversely affecting collaboration through restrictive confidentiality and management practices. These difficulties have led to some

ATN staff being reluctant to work with CSIRO. For enhanced university/PFRA collaboration in Australia, a uniform approach to the management of intellectual property must be urgently developed, and, if necessary, underpinned by public policy.

A further impediment to effective collaboration between PFRA and universities involves human resource issues. These include the lack of a flexible superannuation scheme and employment arrangement to assist in ensuring staff mobility between PFRA such as CSIRO, and universities, without loss of benefits and career advancement opportunities. The ATN would strongly urge the investigation of more flexible employment arrangements to facilitate movement of staff between universities and PFRA

More opportunities are needed for seeding early stage collaboration. While such an investment may be seen as higher risk, it also might yield higher returns through sustainable relationships. Collaboration cannot be forced; it must be facilitated, over the long term. Again, it is often the personal networks developed as a result of conferences, exchange programmes, and professional memberships, which are a significant precursor to collaboration, and these need to be seed-funded. People prefer to collaborate with people they know and respect. Funding for major projects can then help collaborations that were already strong to move to a higher level of activity.

The ATN is a major participant in the CRC program, which clearly encourages collaboration. However, there have been difficulties in this program, mostly in the collaboration between universities and CSIRO. These difficulties have arisen primarily because of IP issues, (as mentioned) and because of the stance taken by the CSIRO in relation to providing matching funds to CRCs. There is a view that the CRC program is cross-subsidising CSIRO divisions, leading to decreased research output per dollar of Commonwealth CRC funding. The ATN strongly believes that universities and other research organisations should not be expected to provide unreasonable amounts of matching funds.

The formation of an oversight committee between the Australian Vice-Chancellors' Committee and the CSIRO, which would work to enhance areas like strategic planning around research priorities and infrastructure investment, as well as developing best practice to ensure Australia receives the best return on investment from collaborative programs such as CRCs, might be to address this issue.

The ATN believes there is significant potential to enhance co-location and would welcome the arrangements for the co-location of relevant groups and initiatives in CSIRO as one key mechanism for encouraging the sharing of resources. Co-location can yield effective results, provided it is well managed, and the priorities of each organisation can be met. It is a logical step towards integration of the operations of PFRA into universities, with the JCU-AIMS venture seen as an appropriate model. The ATN believes further such examples of concentration of effort are needed to provide the critical mass and collaboration required to ensure research outcomes of benefit to Australia.

In summary, the ATN believes closer collaboration between the universities and PFRAs is an essential component of the research matrix, and, with further development, believe our research effort as a nation can only be enhanced.