

Submission No. 17

The role of clusters in technological innovation

**Submission to the House of Representatives
Standing Committee on Science and Innovation**

Inquiry into pathways to technological innovation

**Clusters Asia Pacific Inc.
May 2005**

Contents

1. Background	3
2. The role of clusters in the innovation process	4
3. Australian experience	5
4. Overseas experience	7
5. Concluding remarks	10
Attachment 1 - Applied Collaborative Innovation Alliance	12
Attachment 2 – More about CAP	15

Inquiry into pathways to technological innovation

1. Background

The House of Representatives Standing Committee on Science and Innovation seeks to compile a series of case studies of successful technological innovations, and the pathways to commercialisation.

Moreover, the recently released Australian Government's *2004-5 Innovation Report* placed strong emphasis on the need for increased collaboration between industry and research organisations in order to achieve the desired outcomes of increased innovation and commercialisation of innovation.

Clusters Asia Pacific Inc. (CAP) is vitally interested in this subject, and this submission documents some case studies for the attention of the Standing Committee. We would be most interested in attending any hearings in order to provide supporting material and further explain how clusters can provide robust pathways to innovation.

CAP's specific interests

By way of background, We are an organisation comprising professionals involved in facilitating the development of industry clusters to generate investment and innovation outcomes at a local and regional level. CAP has a substantial track record in utilising clustering techniques to build the collaborative framework necessary for innovation.

The outcomes we seek are in three areas:

Innovation – this involves the development of improved systems to commercialise research, connect researchers with industry, build research consortia and diffuse technology. Government agencies continually wonder about how to get firms to collaborate – we have documented evidence of superior techniques and real outcomes in this field.

Investment – clusters often develop as a result of investments in research or education facilities, airports, transport hubs, water infrastructure etc. Our members are variously involved in infrastructure audits and business analysis associated with such investments.

Trade/Aid – CAP was the first agency to promote 'linking clusters' across countries to generate two-way trade and investment opportunities. We also intend to build clustering concepts into aid activities in the Asia Pacific region. The UN and World Bank place great emphasis on capacity-building - clustering concepts are a proven means of delivering this.

The benefits of clustering concepts have been widely discussed in recent years. It was triggered by the seminal work of Professor Michael Porter ('The Competitive Advantage of Nations') in the late 1980s. Since then others around the world have done a substantial amount of research on clustering and collaboration.

CAP has been a major contributor to the body of research, and in applying the research results to develop best practice cluster methodologies and tools that facilitate innovation, industry capability building, international competitiveness and export outcomes.

CAP argues that innovation is essentially the smart application of knowledge, and finding more imaginative ways of doing business. However this depends on connectivity in various forms – without it, innovation rarely occurs. The direct relevance of clusters is that they are a proven method of encouraging collaboration and connectivity between businesses, between businesses and research institutions (e.g. universities, CSIRO) and between businesses and government.

This submission argues that if the Australian Government is serious about research collaboration and commercialisation, it should develop a detailed cluster policy. AusIndustry's Business Network Program provides a foundation.

2. The role of clusters in the innovation process

There is misinformation about industry clusters. A simple definition is that they are groups of independent companies and associated institutions (e.g. TAFEs, universities, research institutions) that are:

- Collaborating and competing;
- Geographically concentrated in one or several regions - although the cluster may have global dimensions;
- Specialised in a particular field, linked by common technologies and skills;
- Either science based or traditional;
- Have some form of governance i.e. they have a proper cluster management.

The worldwide literature indicates that high-performing clusters have a positive influence on:

- Innovation and competitiveness;
- Skill formation and information;
- Growth of long term business dynamics.

'The cluster approach focuses on the linkages and interdependencies among networked actors for bringing about innovation (systemic activity that requires an active search process).'

- OECD Working Group on Innovation & Science Policy

An industry cluster is an advanced form of business network that involves public sector organisations and addresses infrastructure issues (which business networks rarely do).

- They provide a focal point for investment
- Assist in commercialisation of research
- Build value chains into export markets
- Identify champions to drive engagement process.

Clusters can also address environmental and social issues.

Innovation is a process which creates new knowledge and through this knowledge generates economic growth, environmental sustainability and social well-being. It involves the development of improved systems to commercialise research, connect researchers with industry, build research consortia (e.g. Australian Mineral Industry Research Association) and diffuse technology (e.g. Australian Microelectronics Network). Cluster facilitators (mostly CAP members) have demonstrated superior techniques for collaboration and can document real outcomes.

Clusters often develop as a result of investments in research or education facilities, airports, transport hubs, water infrastructure.

Clusters support firm leadership

The biggest challenge in getting organizations to collaborate is to find a group of CEOs with a common mindset. Often a lead company is needed to leverage other companies into the collaboration agenda.

For example, Priority Engineering Pty Ltd, in Adelaide (MD Mr. Peter Page), has been and still is involved in bringing other companies into collaborative agendas in the advanced manufacturing field. The process was assisted by the role of a facilitator from the City of Playford who worked with the companies to achieve their target outcomes.

Clusters support research & market linkages

Clusters can be demanding customers for R&D Centres and Universities. Clusters can help set priorities for R&D institutions. Clusters can become incubators without walls. They surround R&D programs, allow them to grow, develop etc.

Support from the Chief Scientist

Australia needs to shape a program that kick-starts new companies and helps them grow towards global opportunities.

Western Sydney has the power to develop powerful regional ICT and biotechnology clusters, and become a role model. Regional collaborations which concentrated on innovation and excellence would deliver significant economic results.

A prime example of this approach is the marine science cluster, where a range of organisations have collaborated for work on toxins from cone shells – this cluster has cost about \$20 million in funding, but now looks like delivering a return of around \$200 million. Not every venture will be a winner, but when you get the right focus and clustering for critical mass, that is what will happen.

- Australia's chief scientist, Dr. Robin Batterham, Global Knowledge Economy conference, Sydney - November 2002

Incremental innovation

While disruptive innovation can involve new technology (e.g. podcasting, wireless networks) and is favoured by the investment community, it also can involve new methods of doing business (e.g. Aussie Homeloans).

However the number of disruptive innovations is small in comparison with the power of market driven **incremental innovation**, a key driver of which is "what customers demand". Most incremental innovation occurs in either:

- Procedural
- Personnel
- Process, or
- Structural activities.

Incremental innovation in conjunction with the often unrecognised transformations in business models and in the competitive behavior of firms, are the vital ingredients for sustained long-run business performance. Clusters provide the framework for incremental innovation.

3. Australian experience

This section provides an overview of some of the cluster activities in Australia designed to facilitate improved innovation outcomes.

A. The Applied Collaborative Innovation Alliance

The attached paper by Frank Wyatt summarises cluster initiatives developed through an alliance between Business SA and Enterprise Partnerships Pty Ltd and addresses many of the issues being covered by this inquiry.

B. The Water Industry Alliance in South Australia [www.waterindustry.com.au]

The Water Industry Alliance is a cluster of companies and associated businesses associated with the Water Industry. The intent is to build better integrated leverage from closer alignment with and the involvement of public research institutions such that the Alliance embraces innovation, investment and export development.

The original function of the cluster model always envisaged synergistic leverage from greater integration between the functions of applied research and commercialization in building a creative culture of entrepreneurship. Following an initial focus on developing linkages between the players, the Alliance has now moved to further capture the original intent by way of seeking to develop a platform and process for engagement and enablement of linkages between applied research [public and private] and commercialisation.

Ref: Cluster Innovation System Report *WaterIndustryAlliance* **Report | Appendices**

C. Innovation and the Knowledge Economy

Innovation and the Knowledge Economy (City of Playford Publication Dec 2003) outlines how the City of Playford, an industrial council in northern Adelaide, is developing local solutions to addressing issues of globalisation.

The report includes input and case studies on best practice supply chain management, entrepreneurship, clusters, cities and a practical guide to building business networks, by national and international experts Rod Brown (Australia), Dr Peter Brain (Australia), Charles Landry (United Kingdom), Ryan, Giblin & Green (Ireland), Des Masters (Australia), Bryan Moulds (Australia) and Alistair Nolan (OECD, Paris). This report was written and compiled by Rodin Genoff and Graeme Sheather.

D. Clusters Innovation and Investment

Clusters, Innovation & Investment reports on the latest developments and thinking on industry clustering approaches from around the world.

This book is essential reading for policymakers, industry practitioners, businesses and research agencies. Topics include:

- The importance of clusters to Australia
- 'Scotland the Brave' - the Scottish approach
- The Competitiveness Institute conference in Glasgow - the key issues according to world experts
- The 'Linking Clusters' initiative
- Overview of Australia-New Zealand clusters

E. Food for Thought

The City of Playford's *Food for Thought Report* was launched by SA Treasurer Rob Lucas at the Manufacturing Prosperity Conference.

After interviewing over 100 companies and stakeholders 24 action agendas were developed covering:

- Environmental management
- Economic infrastructure

- Market development
- Industry development.

The report concluded with a chapter on innovation. The authors found that most of the innovation undertaken by small to medium sized enterprises is incremental in nature.

Outcomes of the project included formation of new company networks and regional road infrastructure initiatives. The project stretches from Northern Adelaide into the Barossa and Adelaide Hills.

F. Cairns Regional Economic Development Corporation

The Cairns region has one of the most developed and effective cluster group formulas in the world. Based on a philosophy of regional businesses competing collaboratively in the global marketplace, the system has proven success in assisting the growth and development of a diverse range of industry sectors.

Each industry cluster operates autonomously while remaining under the umbrella structure of CREDC. This allows for industry-driven economic development with tangible and holistic support from other clusters and economic and management expertise from CREDC. Some of Cairns' key clusters are:

- Australian Tropical Foods
- Aviation
- BioNQ
- Cairns Region Flowers
- Cairns Region Engineering Network
- Creative Industries
- Ecofish TNQ
- Information Technology
- Northern Developers Industry Association
- Sports TNQ
- Study Cairns
- Super Yacht Group Great Barrier Reef

For details see www.credc.com.au

4. Overseas experience

G. European Commission

The European Commission in their *Final report of the expert group on enterprise clusters and networks 2002*, "recognises that clusters and networks are important settings for the development and growth of SMEs because they help improve productivity, increase innovation capacity, facilitate the commercialisation of innovation and generate high employment. At a higher level, clusters and networks enhance the economic as well as the social growth of the region or nation hosting them.

The Commission experts suggest that policy towards clusters should be based on public authorities supporting embryonic and existing clusters rather than trying to create them from scratch.

The EC experts argue that basic policy on clusters should provide a framework for dialogue and inter-firm cooperation as well as cooperation between small enterprises, higher education and research institutions, public and non-public organisations at local national, European and International level. Public sectors should limit themselves to providing a catalytic role.

Regional dimensions

The European Union is providing 400 million euros to assist the less-favoured regions to cope with globalisation, while promoting economic and social cohesion in the EU. Their thinking is to develop

competitive assets based on innovation, rather than competing on costs (particularly wage costs) - such an advantage can be swiftly eliminated in a globalised economy.

The rationale is that the links in innovation systems are weaker, more fragmented or nonexistent in certain EU regions - firms are smaller, less innovative; little tradition and business culture re business networking; branch plants may be simply exploiting regional cost advantages; public agencies are not facilitating value chain networking through local subcontracting; SMEs are finding it difficult to access public funds for innovation/networking; government programs have long lead times for payment and implementation; universities in less favoured regions tend to be young, and have weak relationships with the private sector. Sound familiar?

Behind the EC thinking is the burgeoning literature about networks, regional competitiveness and innovation processes. This has gone on for at least two decades, viz.:

- 'industrial districts' from the Italian school
- 'innovative milieux' from the francophone and Spanish school
- 'regional innovation systems' via the Scandinavians, and
- 'learning regions' via the Americans, et al.

The common thread to each of these concepts is that localised networks are critical because they generate intense knowledge exchange (personal contact, economic/technological transactions, worker mobility etc.) and flexible and multidirectional networking among different agents (finance, technology centres, universities, firms, public agencies, business consultants, higher education). These localised networks are imbedded in social/institutional infrastructures that foster cooperation, trust and reciprocity, facilitate the flow of strategic information, nurture alliances, and generate external economies.

H. Sweden

VINNOVA, the Swedish Government's Agency for Innovation Systems, is working for sustainable growth, through funding of problem-oriented research and the development of effective innovation systems.

Its prime objective is to obtain increased return on R&D investments through:

- strengthening the research component in innovation systems;
- supporting problem-oriented research;
- supporting areas with a high growth potential;
- promoting internationally competitive innovation environments; and
- supporting a national system of incubators and stimulating new R&D-based enterprises.

Regional Innovation Systems

Vinnova explains that these systems are the vehicle through which firms, research institutions and government interact, collaborate and drive (contribute to) the innovation process within a regional context.

A regional innovation system exists when most innovative firms are active within the context of a regional network or cluster. Vinnova argues that such a cluster must interact and collaborate with research organisations; institutions for collaboration; venture capitalists; local and central government bodies. Linkages between these various actors are essential for turning knowledge into competitive advantage.

Social innovation

Vinnova explains social innovation as the development of new ways of thinking, the creation of new ways of doing things (i.e. products, services or processes), experimenting with them, accepting them and using them in human, economic, technologic and social activities.

This is often a prerequisite for technological innovation – for example:

- How you interact, do things and think.
- The structure and the process of organising
- Social capital ("tacit" knowledge, values, attitudes, regional identity etc.)

Social and technological innovations are created in collaboration between different regional actors, networks and systems. The regional innovation and renewal capacity depends on the dynamics and functionality of the collaboration. viz.

- Shared values and a regional vision
- The ability to focus on growth areas
- Integration of resources
- Internal and external marketing

Ref: www.vinnova.se

I. USA

There is a strong body of US research that points to regions with strong universities tending to be more prosperous and innovative. The most obvious examples are America's leading technology companies emerging out of Silicon Valley (home of Stanford University) and Boston (home of Harvard and MIT). There is now fresh and compelling evidence to this claim in a new study by Bruce Kirchoff & Catherine Armington, *The Influence of R & D Expenditures on New Firm Formation and Economic Growth*. The study was funded by the U.S. Small Business Administration, the Ewing Marion Kauffman Foundation, and the National Commission on Entrepreneurship.

The study argues that R&D spending increases innovation, competitiveness etc. The study confirms that R&D spending also has a strong effect on start-up business activity. It notes that a common criticism of university research is that it takes too long to create market opportunities. However the authors find that the lag time between the investment of R&D is shorter than previously expected.

The study notes that Schumpeter's argument that "creative destruction" enables newly-formed firms to commercialise inventions that increase overall demand. These firms "destroy" existing markets structures and redistribute wealth among the remaining firms. This theory and later findings confirm that while smaller firms cannot make the level of investment that larger firms make, their ability to commercialise technology and create new markets causes them to generate more innovations per R&D dollar than big firms. The knowledge generated spills over, and leads to innovative clustering that is prevalent in R&D intensive industries. These clusters form the base of a networked entrepreneurial community.

The study notes that researchers have often lacked empirical data to support this claim. The Census Bureau's database (the Longitudinal Establishment and Enterprise Microdata Set) made it possible to study all regions of the U.S. and to assess the impact of universities, such as the University of Iowa at Iowa City, the University of Alabama, University of Missouri at Rolla etc.

The report also argues:

- thinking of universities only in terms of research dollars is dangerous. The university's role as a "talent magnet" probably ranks as its most important contribution to entrepreneurial development.
- Other roles matter - entrepreneurs agree that the existence and strength of local entrepreneurial networks often determines their personal and community success.
- Universities can help jumpstart entrepreneurial networks - forming incubators, partnering with entrepreneurs, providing leadership and mentoring; publicly supporting their local entrepreneurs.

J. OECD

The OECD's Working Group on Innovation and Science Policy circulated a report in 2001 arising out of its work on national innovation systems. The main points are:

- Innovation seldom takes place in isolation but is systemic. The notion of a cluster is centered around linkages between (firm and non-firm) actors needed for bringing about innovation.
- Clusters are networks of production of strongly interdependent firms (including specialised suppliers) linked to each other in a value-adding production chain.
- Clusters mostly also encompass strategic alliances with universities, research institutes, knowledge-intensive business services, bridging institutions (brokers, consultants) and customers.
- Proximity to shared resources (e.g. technological competence, key client, specialised labour) can be of importance to the functioning of clusters, although clusters are not exclusively or by definition regional or local.
- The cluster approach focuses on the linkages and interdependencies among networked actors for bringing about innovation (systemic activity that requires an active search process).
- The cluster approach offers a menu-approach ...those involved in upgrading clusters can pick and choose, depending on the needs of the actors in a cluster.
- Cluster studies can in practice be used as a working method for policy making (i.e. policy learning) and as an economic development tool for strategic business development.

IT clusters feature high on the agenda of both policy-makers and innovation researchers. The cluster in Finland in which Nokia play a pivotal role (in its value chain 4,000 other firms are involved) is highly dissimilar from the case of Ireland (switch from FDI-based development strategy to developing an indigeneous ICT cluster) and the UK (various regional clusters historically strongly influenced by defence and spatial planning policies).

5. Concluding Remarks

This submission has highlighted the underlying rationale of clusters in promoting innovation at both the firm and regional level.

The particular relevance of clusters in the context of the Standing Committee's enquiry is that they provide pathways to innovation. Clusters are a connectivity mechanism at a number of levels:

- Engaging otherwise unconnected researchers.
- Engaging researchers with the 'right' type of companies i.e. those capable of taking research to the market.
- Linking Australian companies with overseas companies with a significant place in global markets.

There is a plethora of examples of Australian inventions failing the commercialisation test. In our experience, the chief failing is indeed the lack of robust innovation pathways. The standard excuses put forward for this are variously the lack of venture capital, the small size of the Australian market, the proliferation of SMEs, lack of faith in our home-grown science, and lack of government support.

CAP argues that these excuses are either a smoke screen or the symptom, rather than the cause. The overwhelming evidence is that the fundamental cause is that researchers and companies are wary of collaboration. In an increasingly competitive market place, people with ideas and intellectual property are reluctant to connect to others. As Frank Wyatt and Hugh Forde (SA-based CAP members) have realised, firms need to be taught how to collaborate. See Attachment 1.

The role for the Australian Government should thus to facilitate collaborative research efforts by funding a national cluster program. There are numerous precedents among other national governments – Canada and Sweden are two obvious examples.

The problem at the moment is that the State governments are picking up on the importance of clusters and Victoria, SA, NSW and Queensland have cluster programs in place. However the bulk of the public expenditure on R&D and its support mechanisms (e.g. Cooperative Research Centres, Centres of Excellence) are federally funded.

There is thus a huge opportunity for the Australian Government to use clustering concepts to achieve better innovation outcomes. We look forward to providing more detailed advice on how a clustering program might be established.

In the meantime, we would invite members of the Standing Committee to visit the Cluster Asia Pacific website www.capinc.com.au

Richard Walker
Member of the Board of Clusters Asia Pacific Inc.
PO Box 187, Oyster Bay NSW 2225
Ph/Fax: 02 9528 7864 Mob: 0419 617 510
Email: walkerri@bigpond.net.au

Rod Brown
Executive Director
Clusters Asia Pacific Inc.
PO Box 1145 Woden ACT 2606
Phone 02 – 62317261
Email apd@orac.net.au

Attachment 1 - Applied Collaborative Innovation Alliance

The following is a list of outcomes in a number of industry clusters and sectors arising out of implementation by Enterprising Partnerships of the Business SA Collaborative Innovation System ©. The CIS was designed, developed and implemented through a Strategic Partnering Alliance between Business SA and Enterprising Partnerships Pty Ltd. It is a distillation of learning from over two years research carried out in partnership with the Water, Defence and Environment industry clusters.

Water Industry Alliance

To implement the outcomes of the *Cluster Innovation System -Process Report 2003* (Industry Cluster Project) the Alliance has established an 'Innovation and Commercialisation Task Force' linked to its export development agenda. The Task Force has:

1. Established the 'Water Innovation Network' to apply vocational skills to the 'invention to innovation' pathway.
2. Prepared a report entitled *Building Capability for Collaboration across the Water Industry - a global review of contemporary knowledge in innovation development*. The report now acts as the framework for Water Industry Alliance initiatives.
3. "What frustrates commercialisation of intellectual property: perceptions of company representatives across four industry sectors" and "So What – what should the WIA do about enhancing the commercialisation of IP?" Two papers prepared as discussion documents to facilitate discussion by a CEO's Group within the Water Industry.
4. Using Intellectual Property Holdings © ICOSA model, the WIA has committed to implementing a global audit of the capability and propensity of companies to link innovation and investment into national water industry agendas.
5. *Strategies for Accelerating Commercialisation of Intellectual Property* is a paper summarising the activities that companies and the industry can collaboratively implement to accelerate the commercialisation of intellectual property.
6. *Innovation Leadership Publication* is a regular developmental and industry showcase production of innovation best practice and company profiling.
7. *Collaboration Readiness* is a facilitation program linked to practical projects and the innovation/export development agendas of the WIA.
8. *Water Industry Strategic Think Tank*. A regular facilitated discussion between key CEO's in the water industry to enable them to address systemic industry wide issues.

SA Government Defence Unit and the Defence Teaming Centre

1. Collaborative Innovation Project – a *Scoping Report* reviewing and strategically profiling the Defence Industry in South Australia.
2. Arising out of the review, establishment of the Strategic Plan and an alliance between the SA Defence Unit and the Defence Teaming Centre. The Alliance has now embarked on a schedule of deliverables jointly funded by State Government and Industry.
3. Engagement of a *SA Defence Strategic Think Tank*. This is a virtual organisation facilitating enablement of the CEO's of the defence primes – and key leaders from the public research sector -

who meet regularly for a facilitated discussion of broad strategic issues related to the development of the defence industry in South Australia and its application to Australia.

4. *Defence Skills Institute* – a component of the DTC's Strategic Plan and subject to being launched by the Premier on the 11 March 2005. An initiative has begun to implement a skills and capability analysis within the related industries to the Defence sector.
5. See 4 above customised to the Defence Industry.
6. *"What frustrates commercialisation of intellectual property: perceptions of company representatives across four industry sectors"* and *"So What – what should the Defence Unit and the DTC do about enhancing the commercialisation of IP?"* Two papers prepared as discussion documents to facilitate discussion by a CEO's Group within the Defence Industry.
7. Development of a *Defence Skills Portal* and communities of interest linked to the DSTO Continuing Education Program, a joint exercise with KAZ Technology Services
8. *Collaborative Capability Development Plan* and a *Collaboration Readiness Program*: - these initiatives are linked to the work programs of upcoming major defence capital-acquisition projects.
9. Collaboration between DTC Export and Education Adelaide Skills Export.

Environment Industry Cluster

1. *Collaborative Innovation System – Process Report 2004*, a scoping report reviewing the environment industries in SA.
2. Review and Strategic Planning Processes for two sectors of the environment industry – renewable energy and resource recovery.
3. *Collaboration Readiness Program*.
4. Facilitated two asymmetrical companies entering the Thailand export market to collaborate in development of market entry strategies, contacts, and alliances.

Innovate SA Project - 2005

Formation of an Applied Collaborative Innovation Alliance (ACIA) comprising the above three clusters and Business SA in association with Enterprising Partnerships Pty Ltd to implement an agreed schedule of initiatives that will address core industry development needs common to all sectors. An application for \$250,000 has been lodged with AMACC to part fund the Schedule of Initiatives linked to ACIA.

Wine Makers' Federation

1. *Accelerating Global Leadership and Incubation Program*
2. Building cross-industry collaboration
3. Eventual partner in above Collaborative Innovation Alliance.

Complementing the above is work being undertaken directly by Business SA, Industry Cluster Program, including:

Publishers and Printers

1. Establishment of an informal cluster of firms from printing and publishing sector.

2. Identification of a series of product driven collaborative initiatives to respond to export market opportunities. For example, proposed joint venture with manufacturing (e Books) in China provides potential significant global competitive edge. The joint venture will enable development of highly competitive devices for the global market, with technology transfer from USA and China to Australia.
3. Alignment of companies to form advantageous collaborative partnerships to advance product and export market development.
4. Positioning of the industry as a national player with a voice in industry development policy.
5. A series of new technology information seminars.
6. Eventual partner in Collaborative Innovation Alliance.

Disability Cluster

1. *SA Disability Industry Development Cluster: Plan 2005 –2006.*
2. Encourage innovative product, services and programs.
3. Develop 'brand' and logo.
4. Develop DIDC website (identify resources for development and maintenance).
5. Explore opportunities to showcase expertise.
6. Market opportunities for South Australian businesses in identified industries e.g. tourism, hospitality, education.
7. Eventual member of Collaborative Innovation Alliance.

Education and Health Industry clusters

1. These clusters are currently being established in response to request from the Department of Trade and Economic Development to initiate clusters in these sectors. The Economic Development Board recommended that a cluster be initiated in Education.
2. *A Cluster Innovation System* - process scanning exercise is about to commence in each sector.
3. Eventual partners in Collaborative Innovation Alliance.

Adelaide University

Under the urging of the Director of Innovation and Support Services, who had participated in our Strategic Partnering leadership program, and the influence of the (GB) Lambert Review of Business-University Collaboration, the new Vice Chancellor Dr. Wha has adopted a clustering model to build research density and linkage to industry. This unique approach is also being adopted in response to the growing urgency to compete internationally in industry related research.

Four research clusters are in the process of formation and more have been approved. The most senior professors in selected areas of research e.g. Health, Water, Defence, have enthusiastically committed to becoming Champions of their respective cluster of researchers. Under the auspice of Innovate SA we are working with these champions to facilitate cross cluster learning and enablement of collaborative approaches to their leadership.

Our initiative in becoming involved in this University Project was also to capture and share the emerging learning across the university so that the goal of reorganising all research around 12 research clusters

could be achieved as quickly as possible. The eventual aim is to integrate the collaboration and leadership skills into the strategic framework of the University.

This Project will take us only 'to the edge of the new world of internal relationships'¹ between colleagues, taking them 'into new patterns of active relationships'.² Externally with industry it will lead to new long term strategic partnering relationships that will enable industry sectors to sustain international competitiveness. This is an opportunity to make break through in creating a new paradigm of collaboration within universities and we hope across universities.

Generic

A further Strategic Partnering Program is planned for 2005. This will involve a cohort of 15 leaders from industry, research and academia and Government.

Frank Wyatt
Enterprising Partnerships Pty. Ltd.
February 2005m

¹ Margaret J Wheatley: Leadership and the New Science

² ibid

Attachment 2 – More about CAP

Clusters Asia Pacific Inc. is an alliance of 35 organisations, mostly in Australia and NZ, but with associates on every continent.

CAP members have a common interest in developing and sharing knowledge about clusters, and in collaborating with like-minded groups. Our private sector members look for commercial and professional opportunities on each other's behalf. As part of this approach, we have developed links with organisations in twenty five countries, including Austria, Belgium, Brazil, Canada, China, Denmark, France, Germany, Hong Kong, Ireland, Italy, Jordan, Mauritius, Netherlands, New Zealand, Singapore, South Africa, Spain, Sweden, United Kingdom and USA. We are keen to establish links with any country that has an economic relationship with our region.

CAP has offices in Canberra and Adelaide. But in many respects we are a virtual operation – a cluster of cluster expertise. We circulate a monthly newsletter, free of charge, to members and friends, and promote the benefits of industry collaboration to a wider audience. Our website - www.capinc.com.au – contains our newsletters that contain substantial material on the how, why and what of clusters.