

Memorandum of Understanding

The ATN/ISTA NanoNetwork

This Memorandum describes the establishment and operation of a new research network involving researchers from The Australian Technology Network of Universities (ATN) and the member universities of The International Strategic Technology Alliance (ISTA) – henceforth to be known as the **NanoNetwork** (“Network”).

(1) The NanoNetwork proposes to

- deliver enhanced research outcomes in areas of significance and relevance to the research agenda of member universities through the development of joint capabilities in nanoscience and nanotechnology;
- demonstrate a strong capability for ‘team building’ across the member universities and thus be attractive to external parties seeking high-value and innovative solutions to ‘real world’ problems that require multi-disciplinary and multi-institutional collaborations; and
- promote technology transfer of research outputs to industry, making high level impact and contribution to the economic development of the society.

(2) The NanoNetwork will enable the collaboration of member universities in

- **Academic exchange and joint supervision for**
 - ❖ professional development of graduate students through international research experience;
 - ❖ mutual understanding and establishment of common research interests with complementary skills;
- **Academic research** through the establishment and implementation of collaborative research projects;
- **Knowledge dissemination** through
 - ❖ the sharing of research interests and capabilities on nanoscience and nanotechnology across members to aid the identification and activation of research collaborations;
 - ❖ the public promotion of the joint capabilities, achievements and application potentials of nanoscience and nanotechnology researches of member universities;
- **Knowledge transfer** through the partnership of member universities with the industries and enterprises for commercialisation of high-value research outcomes.

(3) The research foci of the Network will be within the domains of nanoscience and the various technologies it does or could underpin. For the duration of this MOU the intention will be to build network capabilities in the application domains of **health care, environmental management and renewable energy**. Fundamental and core technologies, such as **new nanomaterials**, will also be included in the research foci of the Network.

(4) NanoNetwork Co-ordinators

The ATN and ISTA Secretariats will each nominate a NanoNetwork Co-ordinator with the responsibilities to:

- maintain a current activity data base for the Network;
- act as the person of first contact in the Network;
- identify potential collaboration partners among the ATN and ISTA member universities;
- develop on-going research themes for the Network that are of relevance to the research agenda of the member universities;
- evaluate researcher and/or graduate student exchange proposals for support from the ATN/ISTA member universities;
- seek external assessment to keep the Network abreast of current opportunities and challenges in the academia and industries; and
- annually report Network outcomes via the ATN and ISTA annual general meetings.

(5) NanoNetwork Projects

The NanoNetwork will operate via collaborative projects involving researchers from ATN and ISTA member universities. Researchers from member universities can seek support and endorsement for a project via a brief Project Application to be available on the dedicated NanoNetwork web-site. The collaborative projects are expected to:

- build from a combination of complementary research capabilities from member universities;
- identify research outcomes relevant to the research foci of the Network;
- involve researchers at the Associate Professor level or below from ATN and ISTA member universities; and
- involve at least one graduate student from each participating member university.

Endorsement of projects will be managed by the Network Co-ordinators on advice from the Deputy Vice-Chancellor/Pro Vice-Chancellors (Research) of the ATN member universities (or their nominees), and ISTA convenors nominated by the ISTA member universities. An endorsed project will be supported by the Network in ways described in Section (6) below.

Endorsed projects will be assessed for financial support as described in Section (7) below. The project owners, however, may be required to solicit internal funding from their respective universities to support the collaboration project, if funding acquired from sources external to the ATN and ISTA member universities is not sufficient.

Before the commencement of collaborative projects, participating ATN and ISTA member universities will make an agreement on the principles for the allocation and management of intellectual property to be generated in the project.

Project progress will be reviewed at 6-month intervals, mainly in the aspects of

- research outcomes;
- generation of intellectual property, professional development of researchers and graduate students;
- development of sustainable relationship among member universities; and
- potential establishment of applied technology platforms for knowledge transfer to the community.

It is anticipated that Network researchers and their graduate students will organise annual Network workshops as part of the ATN and ISTA annual general meetings, where the Network Co-ordinators will report the outcomes of the Network.

(6) Organisational Support for the NanoNetwork will be provided via the ATN and ISTA Secretariats. This will involve support for the Network Co-ordinators (see (4) above) regarding:

- communication across ATN and ISTA member universities;
- hosting of an interactive web-site to assist exchanges of research information;
- assistance with grant applications for third party funds to support Network projects; and
- public dissemination of the activities and outcomes of the Network via targeted media releases, publications, public seminars and events.

(7) Funding of the NanoNetwork

The Network and its participating universities will actively explore and apply for funding support through relevant external funding agencies and industries in Australia, Chinese Mainland and Hong Kong SAR. The Network Co-ordinators will work with researchers and ATN/ISTA leaders to target appropriate industries and funding agencies internationally.

Funding will be used to support both endorsed projects and the core administrative activities.

1. Endorsed Network projects will attract support funds from participating universities, industries and external funding agencies as appropriate for each project. Funds secured from participating members and external parties will be availed to:
 - cover the costs of researcher and graduate student exchanges between ATN and ISTA member universities (each participating university will support the cost of its own researchers and graduate students); and
 - support essential project costs on upstream research and downstream development for potential commercialisation, such as research consumables and graduate student stipends, arising out of the ATN/ISTA collaboration. Sharing of costs, particularly those arising from internal institutional sources, will be accorded to a mutually-agreed schedule by the universities participating at the project(s).
2. Core administrative activities undertaken by ATN and ISTA Secretariats (see (6) above) can draw on resource contribution from participating universities in a manner acceptable to members concerned.

(8) Participating Member Universities

Participation to the Network is open to all member universities of ATN and ISTA.

(9) NanoNetwork Associate Members

- Non-ATN and non-ISTA universities may participate as Associate Members in NanoNetwork activities as required to deliver to Network objectives. These would generally be public sector or industry bodies who may be interested in the policy dimensions or technology transfer aspects of the Network.
- Associate Members may stimulate the formulation of Network projects by identifying real world problems that Network research teams may address.

Admission of Associate Members requires the written approval of the Network Co-ordinators from ATN and ISTA.

(10) The Involvement of Graduate Students in the NanoNetwork – Joint Supervision

It is a core aim of the Network that graduate (doctoral preferred) students be involved in collaborative projects formed by multiple ATN and ISTA member universities. It is thus also expected, where appropriate, that such students will benefit from the expert supervision of research collaborators based at ATN/ISTA universities other than their home university. Participating ATN

and ISTA member universities will ensure that formal joint supervision of graduate students is consistent with the academic policy at their respective ATN and ISTA member universities.

(11) Mutual recognition

The Parties to this MOU are entitled to recognise each other as a strategic partner in their publicity materials, provided that each Party shall submit the format and content of such publicity materials to the other Party for prior approval before publication.

(12) Implementation, Modification and Termination

This MOU shall become effective from the date of the last signature by the representatives of both Parties and will remain in effect for three years in the first instance. A list of actions proposed upon the establishment of the Network as shown in Appendix A shall guide the initial operations of the Network.

Modifications to this MOU may only be made by mutual agreement in writing. Six months prior to expiry of the MOU, the Parties can discuss to agree on terms for its extension. Either Party may terminate this MOU by providing a written notice six months in advance to the other Party. In the event of termination, all existing agreed activities shall be allowed to proceed to completion.

This Memorandum signed in Brisbane, on February 5th, 2009 by

Prof. Margaret Gardner AO



On behalf of
the Australian Technology Network

Dr Sun-wing Lui



On behalf of
International Strategic Technology Alliance.

Appendix A

NanoNetwork - Initial Actions

To drive the initial development of the NanoNetwork, ATN and ISTA would drive the following actions within the first year upon the signing of the Memorandum of Understanding.

(1) Communication

- Establishment of a common web-site to:
 - ❖ facilitate communication and sharing among researchers
 - ❖ maintain an activity data base of the Network
 - ❖ promote the joint capabilities and achievements of the Network to the public
- Dissemination of the establishment and activities of the Network to the public via media release and publications
- Reporting of the Network outcomes in the next ATN and ISTA annual general meeting/conference

(2) Funding

- Commitment to seek out and approach relevant industries and funding bodies in Australia, Chinese Mainland and Hong Kong SAR for their potential interests in supporting the Network
- Development of a cost sharing mechanism to support the core administrative and supporting tasks undertaken by the ATN and ISTA Secretariats

(3) Administration

- Agreement on project endorsement mechanism
- Agreement on mechanism for engaging relevant participating university executives for project endorsement
- Agreement on guiding principles and related mechanisms for formal joint supervision of graduate students with conformance to the academic policies of the participating universities, regarding student registration, credit exchange, residency, tuition, tuition waiver, quality assurance, etc.

(4) Appointment

- Nomination and appointment of Network Co-ordinators

(5) Milestones for Strategic Development

- Agreement on the short-term and medium-term strategies and milestones in developing the Network into a research consortium with active academic and industrial participation