



ANNUAL PROGRESS REPORT FOR THE YEAR ENDING 31 DECEMBER 2002

1. Executive Summary

- Provide an overview of NICTA's progress over the previous calendar year towards meeting the objectives specified in Item 2.3 of the Schedule to the Commonwealth Funding Deed.

Item 2.3 of the Funding Deed Schedule reads as follows:

1.1 The aim of the Project is to:

- a) develop within Australia ICT research capabilities in existing and emerging fields;**
- (b) increase the availability within Australia of ICT research skills by providing postgraduate training and attracting ICT researchers from overseas;**
- (c) exploit for the Benefit of Australia the commercial potential of research outputs;**
- (d) become a catalyst for the development of networks and clusters of ICT industry activity.**

National ICT Australia was incorporated in mid-September 2002, and the first Commonwealth Government Funds were received in October. Much of NICTA's activity in 2002 revolved round planning to meet the objectives set out above, under the leadership of a core management team (Professor Brian Anderson, CEO, Professor Arun Sharma, Director of Sydney Node, and Professor Robert Williamson, Acting Director of Canberra Node). Three sites were activated, two at the partner universities, and the headquarters site at the Australian Technology Park in Sydney.

Initial programs were planned, based on leadership strengths being contributed from the two partner universities, the University of New South Wales and the Australian National University. Programs are the organizational units within NICTA through which research activities, training, linkages and commercialization will be conducted.

A number of research and support management positions were advertised, and offers started to be made in late 2002, with staff commencements beginning in January 2003. A number of the research staff come from abroad, including expatriate Australians

A summer school program was conducted, and arrangements put in place with the two partner universities to ramp up PhD student recruitment in 2003, using NICTA staff (contributed from the universities or directly employed) to supervise the students.

Planning of programs included emphasis on linkages and commercialization, with the fruits of this planning becoming manifest from the first half of 2003. Recruitment of staff to assist the commercialization process was also begun in 2002. Many organizations were visited to explain the NICTA concept, and detailed engagement commenced with a number of organizations with a view to building substantial linkages. A number of these are reported below, mainly in the confidential section of the report.

The progress that has been achieved has been in no small measure due to the generosity and good will of the members of NICTA, namely:

ACT Government
Australian National University
NSW Government
University of New South Wales

Their support, and the unstinting assistance and professionalism of the Commonwealth Government's Project Executive, is gratefully acknowledged.

2. Research

- Description of NICTA's progress with its research activities
- Details of any determination or activities relating to the communication of research results, as required by Items 3.2 (j) and 3.2 (k) of the Schedule of the Funding Deed.

During 2002 NICTA carried out no research activities. It had no researchers on staff or seconded, and no PhD students were associated with it. There was no need to make any determinations according to clause 18.4 and no communication of research results occurred.

Considerable planning was carried out by senior academic staff at the Australian National University and University of New South Wales. This planning was to further develop NICTA's plans for its research programs which commenced in early 2003. Details of the planning can be found in the Annual Activity Plan previously submitted to the Commonwealth Government. There were 11 initial research programs identified:

- **Wireless Signal Processing**
- **Autonomous Systems and Sensing Technologies**
- **Logic and Computation**
- **Statistical Machine Learning and Sensor Signal Processing**
- **Systems Engineering and Complex Systems**
- **Knowledge Representation and Reasoning**
- **Embedded, Real-time and Operating systems**
- **Networks and Pervasive Computing**
- **Formal Methods**
- **Symbolic Machine Learning**

- **Empirical Software Engineering**

A. 2003 Progress

At the time of writing (April 2003), there were 8 researchers appointed into NICTA, most of whom having taken up their appointments in March or April, and all of them at a junior level. They are just starting their research activities. A significant ramp up of research activity will occur with the secondment of partner university staff which is expected imminently.

A number of Projects are also been developed with a variety of external organizations; these will strongly shape the research activities of the centre.

3. Research Training

- Description of NICTA's progress with its research training programs.
- Number of students at each NICTA site.

Research Training, the education component of NICTA, is one of the four pillars on which the NICTA vision stands.

B. Establishing preliminary research training policy documents

Documentation of the various facets of research training required to fulfill the NICTA vision as outlined by the proposed partner organisations in the bid for NOIE Centre of Excellence was produced. This documentation, drafted by the architect of the Education sections in the bid, drew together the themes of the vision into operationally distinct areas and was intended as a first draft of NICTA research training policy.

C. Refinement of policy and plans

A key facet of the development of NICTA was to engage students in its research training vision from the outset with actual enrolments in 2003, the initial policy documents were used to generate procedures for the management of this process. It was important to explore the synthesis of the raw vision espoused by the partner universities (being the institutions in which the students would enroll) and their differing cultures and mechanisms for implementing that vision. A significant start in this complex process was made by the appointment of designate Associate Directors of Education (ADE) for both the Canberra and Sydney nodes. These designate ADEs had intimate knowledge of PhD candidature processes at ANU and UNSW respectively. This expertise was focused on the processes of attracting applicants for NICTA endorsement in a way that dovetailed with current practices at ANU and UNSW.

D. Recruitment of students

The recruitment of students began with advertisements in the major newspapers of each state and the ACT and in the higher education section of the Australian in mid October. These advertisements were backed up by more information in the

education section of the NICTA web site. Only overview information was available as formal agreements between NICTA and the universities were not even drafted at this stage. To enable initial academic screening and to ascertain scholarship budgeting applicants were directed, to NICTA Research Program Leaders who generated initial estimates of likely numbers for the 2003 intake.

E. Endorsement processes

A transitional Student Endorsement Panel was established to promote buy-in by all research programs to emerging endorsement processes. An initial SEP session was held on 23 December at which eleven applicants were endorsed as acceptable students for NICTA programs. Formal advice to successful applicants was delayed until the start of the New Year, but negotiation at ANU concerning the provision of interim scholarships was completed before the end of the year.

Within the first four months of 2003 six of the endorsed students enrolled at ANU, two were still expected to enroll and three had accepted alternative offers. There were no endorsements in 2002 of students intending to enroll at UNSW.

F. Outreach to undergraduates

The designate ADEs stimulated the development of a joint ANU/UNSW Summer Research Scholarship scheme by building on existing schemes and injecting some support from NICTA. NICTA support was in the form of additional scholarships, 10 to ANU summer students and 21 to UNSW summer students, and the provision of ten “snapshots of NICTA research” sessions by video link between ANU and UNSW. This support greatly enhanced the scale of the Summer Research Scholarship schemes at ANU and UNSW and provided highly focused publicity about NICTA research to high-achieving undergraduates in ICT disciplines from around Australia. The delivery of these sessions occurred in January 2003.

G. Developments into 2003

During the first three months further Student Endorsement Panel sessions have been held and in total 34 students have been endorsed by the 3 April. As detailed agreements with universities on student management and scholarship conditions have been held up by delays in the establishment of primary agreements of various kinds, the endorsed students have been sent letters of intent to offer NICTA scholarships under conditions yet to be determined. With this offer, students have also received offers of scholarships from ANU or UNSW under standard university conditions. These students have also been given the option to transfer to NICTA conditions as soon as the latter are agreed or as soon as the standard university conditions of their interim scholarships allow.

H. 4. Commercialisation

- Description of NICTA's progress with its commercialisation activities.

- Details on NICTA's progress in developing an Intellectual Property Policy Document.

NICTA was in the process of being set up in 2002, and the research programs were in early planning stage. Hence, there are no commercialisation activities to report from 2002.

I. Intellectual Property Document

Development of an Intellectual Property Policy document was a significant activity in 2002. The policy was developed with the help of Philip Mendes of Innovation Law. The document was discussed extensively at the Board and also benefited from significant input from the Commonwealth. The development of the policy took into account the following:

- the precepts behind NICTA's establishment,
- the need to maintain the integrity of IP to facilitate commercialisation,
- the best practice in commercialisation benefits for researchers and students and
- benefit to Australia.

The IP Policy document has been designed to be a living document. It will be supported by a number of implementation protocols, including publications policy, commercialisation revenue policy, student IP policy, visiting scientist IP policy, etc.

2003 Progress:

- The NICTA Board and the Commonwealth have approved the IP policy document, and a copy of this document has been submitted to the Commonwealth.
- A number of protocols to support the IP Policy document are being prepared. These will be subjected to internal NICTA researcher scrutiny and then provided to Board for approval.
- A number of the protocols require resolution of taxation issues. This is being undertaken with the assistance of PWC.

5. Networks and Linkages

- Description of NICTA's progress with its networking activities relating to research, research training and commercialization, both nationally and internationally.

Discussions have taken place with DSTO, CSIRO and several multinational corporations. Some details are included in a confidential appendix and progress in 2003 will be publicly reported at a later date. (See appendix 1.)

J. INTERNATIONAL UNIVERSITIES

University of California, Berkeley

- Professor Shankar Sastry, Chair of UC Berkeley's Department of Electrical Engineering and Computer Science had agreed to serve on NICTA's International Scientific Advisory Group as part of the bid. Professor Sastry has also nominated Professor Lucien Polak – an expatriate Australian – as a contact person to oversee the linkages between UC Berkeley and NICTA.

2003 Progress: A trial has been conducted so that NICTA researchers can interactively participate in Berkeley's research seminars using Internet Video-Conferencing technology.

- John Canny, an expatriate Australian and a leader in Human Machine Interaction research at UC Berkeley, spent two weeks at NICTA and advised the Sydney Node Director on development of Human-Machine Interaction programs in NICTA. Aruna Seneviratne, leader of the Networks and Pervasive Computing program, was invited as an external visitor to the Sahara Project by Randy Katz of UC Berkeley.
- Richard Newton - Dean of Engineering at UC Berkeley, an expatriate Australian and a member of ICT Centre of Excellence selection panel - spent time with the NICTA CEO and the Director, Sydney Node, during his November 2002 visit to Australia. He provided extensive advice on a number of issues related to research and commercialization.

Massachusetts Institute of Technology

- Professor Rodney Brooks, Director of MIT's Artificial Intelligence Laboratory, visited NICTA in Sydney, and held discussions with a number of NICTA researchers. He plans to promote exchange of researchers between MIT and NICTA.

2003 Progress: Linkage has also been made with Professor Victor Zue, Director of MIT's Laboratory for Computer Science.

1. Stanford University

- Professor Jeffery Ullman of Stanford University, one of the world's most cited computer scientists, had agreed to serve on NICTA's International Scientific Advisory Group. The Sydney Node Director met with Professor Ullman to get his input on development of NICTA research activities in the area of database systems.

- The Sydney Node Director also met with Professor Byron Reeves, Director of Stanford's Center for Study of Language and Information, and arranged for his visit to NICTA in July 2003 to explore linkages.

2. University of Illinois at Urbana-Champaign (UIUC)

- UNSW/NICTA researchers had already been engaged in collaboration with UIUC through the HP/Intel's Gelato Consortium – a project involving leading international research groups in operating systems and compilers working on Intel's Itanium architecture. A number of researchers from the University of Illinois visited NICTA's Kensington Site in December 2002 to progress this collaboration.
- Professor Ravi Iyer, an expatriate Australian and Director of the Coordinated Sciences Laboratory at UIUC, visited NICTA twice, and hosted NICTA researchers at his laboratory. He has also arranged for NICTA researchers to meet with managers of a number of US corporate Research and Development laboratories.

K. MULTI NATIONAL CORPORATIONS

1. IBM

- Discussions took place with IBM executives, including Gene Hoffnagle (Research and Technology Strategist, IBM Yorktown Heights) for NICTA to become a cornerstone of the IBM Centre of Advanced Studies Program in Australia.

2003 Progress: *This partnership was announced on 30 April 2003 at a launch attended by Senator Alston.*

- Hugh Blemings, manager of IBM OzLabs in Canberra, was tasked to undertake the research interaction with NICTA in the area of Embedded, Real-Time and Operating Systems.

2003 Progress: *An MOU was signed on 30 April 2003 for collaboration between IBM OzLabs in Canberra and NICTA's Embedded, Real-Time and Operating Systems program.*

- NICTA also worked to identify a senior IBM researcher to join its International Scientific Advisory Group (ISAG).

2003 Progress: *Dr Stuart Feldman, VP of Internet Technology, has been invited to join ISAG.*

- Some discussion took place with IBM Australia personnel to arrange for NICTA students to undertake internships in IBM laboratories worldwide.

6. Human Resources

- Description of NICTA's management of human resources, including recruitment and remuneration strategy.
- Details of staffing numbers broken down by function for each of the NICTA sites. Staffing information should explain which staff are NICTA employees and which staff are employed under agreements with other organisations.

Milestone

- Report on the progress made toward the search for a CEO with the aim of a suitable candidate being selected and announced by 31 March 2003. [N.B. this milestone was covered in the 31 December 2002 Milestones report but is included for completeness. Suggested that it be included verbatim as per the 31 December response.]

Introduction

NICTA is to be an organisation innovative in diverse and exciting ways. Its Mission is to encompass research, research training, commercialisation and linkage building in an integrated framework. To reflect this, and to clearly define the NICTA culture, NICTA's recruitment strategies, remuneration structures and human resource policies will be driven by outcomes of excellence in all facets of the NICTA Mission. In such an entrepreneurial culture, where both individual and team performance reward is to be an essential component, it is important that from the outset, NICTA clearly enunciates the value it places on its staff and that all staff are informed of and understand the impact of NICTA HR policy and processes and of how remuneration will apply across the organisation.

Recruitment Strategies

General Principles

NICTA is committed to attracting exceptional research and support personnel to carry out its Mission. Four key motivators will be emphasised in this search:

- The stimulus of a prestige intellectual environment
- Excellent resources and facilities for all staff
- Internationally- and market-competitive remuneration levels
- An excellent quality of life in Australia - Canberra and Sydney.

Initial strategies have included:

- Executive search for the Chief Executive Officer
- Advertisement for research staff in Australia and overseas
- Executive search and recruitment initially for key management staff and initial support staff
- Personal contact, including targetting specific highly regarded researchers.

Priorities for Appointment

Executive search for the Chief Executive Officer

As recorded verbatim in the Milestone report of 31 December 2002:

“Heidrick and Struggles have been engaged by the Chairman to undertake an executive search for the position of Chief Executive Officer. A guideline paper has been developed. The NICTA board has authorised advertisement, and the timetable for long and short-listing, and interviewing

It is expected that the appointment will be made by 31 March 2003”

2003 Progress. Dr Mel Slater commences as CEO in mid May..

Research and Research Support

NICTA has advertised broad ranging Research (Level B) positions to provide support across the initial 11 research programs of NICTA. This is a rolling advertisement which will continue until program support at this level is substantively filled to critical mass. Applications are assessed monthly, and began the week commencing 18 November 2002.

Management and Executive Support staff

All the directors and managers of NICTA’s key administrative programs (Commercialisation and IP, Industry Development, Communications, Finance, HR and IT) are to be located at Sydney Headquarters, ATP site. These critical appointments were facilitated through executive search. As these key managers are in position, planning for the development of strategies and future support positions will take place.

Support staff

Operational Canberra and Sydney node support staff in SME liaison management, HR administration, IT, and recruitment and outreach will be advertised after appointment of key managers.

Immigration Approach

An immigration consultancy has been contracted to provide specialist immigration support to NICTA to facilitate the immigration of overseas

researchers. Australia has a highly complex visa system which requires applications to be carefully prepared in accordance with the legal requirements. NICTA wishes to ensure that overseas staff recruited to Australia are assisted at a high level in this process.

Remuneration Strategy

The key objective of NICTA's remuneration strategy is to attract and retain world-class researchers. NICTA's total remuneration package will comprise the following:

- Internationally competitive base salary for researchers
- Market competitive base salary for managers and support staff
- Employer superannuation contribution of 17% for most staff. Minimum 9% option available to senior and support staff
- A performance incentive program for teams, for research staff and support staff at senior management and above
- Salary sacrificing options.

Base Salaries

The following have informed the determinations of NICTA research and support staff base salary profiles.

Research Staff

- Account has been taken of the provisions of the Funding Deed between the Commonwealth of Australia and National ICT Australia. In particular, under the Objectives of the Schedule attached to the Deed at 2.3 (b)

The aim of the the project is to increase the availability within Australia of ICT research skills by providing post-graduate training and attracting researchers from overseas.

- NICTA's performance will be benchmarked against that of top international institutions. To ensure our competitiveness of performance, NICTA must be able to recruit the same calibre of people as those institutions.
- Because of complex internal and historical reasons, university salary scales are complex due to the use of a range of loadings. These loadings are present because of the broad range of markets the universities find themselves having to compare their researcher salaries with. It is recognised that the use of various loadings complicates matters and thus the aim was to develop salary scales for NICTA that captured the conditions that market-loadings in universities did.
- It is understood that however carefully one might draw up salary scales, there will be occasion to pay people off scale. The international experience is that that is acceptable, but only when off-scale salaries are rare.

- An extensive set of comparisons of overseas researcher salaries was made. The comparison was made using both exchange rate figures and purchasing power parity (Big Mac Index).
- The USD-AUD and Euro-AUD exchange rates are a relevant consideration for NICTA appointed staff who will return to their country of origin after leaving NICTA, as this impacts on superannuation and assets disposal.
- Given its Mission, NICTA will have a wider range of expectations of its research staff than normally expected of academic staff in Australian universities. NICTA salaries will match these greater responsibilities and dependence on prior experience. This follows through particularly in the salary levels for senior positions and in responsibility loadings for Program Leaders.
- The competitive base salary encapsulates university minimum salaries PLUS existing market and merit loadings, and other existing incentives such as private-use motor vehicles.

Support Staff, including Corporate and Senior Management Staff

- There is a recognition that administrative salaries in the partner universities, for work of equivalent value, are competitive within the sector, except for a few minor adjustments.
- To make the necessary adjustments, and to take account of expected increases experienced as a result of partner university EBA outcomes, salary levels are set at the higher end of partner university administrative salaries.
- For IT support staff and Engineering and Programming support staff, there is a need to be competitive with the wider IT sector in Australia.
- Consideration was given to the view that it would be inequitable to have differential salary scales for NICTA appointed support staff and for staff seconded from the partner universities.
- Comparative assessment of salaries and position descriptors was undertaken with respect to the partner universities, the Australian Public Service, salary reviews from Mercer Cullen Egan Dell, Hays Personnel Services, the Association of Professional Engineers, Scientists and Managers, the Australia (APESMA) and the Australian Computer Society, and some known company salaries.

Salary Sacrificing

NICTA recognises the value to employees of providing salary-sacrificing options to assist flexible remuneration planning, through a third party provider. It is

proposed therefore to allow voluntary flexible salary sacrificing to increase the market desirability of the overall package NICTA can offer to its staff once the provider is contracted. The key principles that will be applied are:

- Must appeal to staff but not be burdensome to implement
- Costs incurred in implementing packaging arrangements are born by the package
- Initially a set of possibilities would be offered. They would all need to be easy to implement. They include:
 - (additional) employee contributions to superannuation
 - novated leases on cars
 - child-care (where available)
 - car-parking (where possible)
 - additional options may be considered from time to time.
- NICTA will review its salary-sacrificing scheme annually, and may amend at any time aspects of, or discontinue, the scheme on the basis of any legislative changes (in particular, Fringe Benefit Tax legislation) or other impact factors (for example, the level of participation in the scheme).

Performance based reward

Some general principles were developed and will require further refinement:

- NICTA's overall strategies should be aligned to the NICTA Mission
- Performance indicators and any performance reward scheme should be determined by and be aligned to the strategic directions of NICTA
- There needs to be a strong link between strategies and individual or group goals and objectives
- To achieve its aims, NICTA will place major emphasis on its people for:
 - Leadership
 - Management
 - Use of their intellectual capital
 - Entrepreneurship and innovation
 - Teamwork
 - Skill sets and learning/development
 - Outcomes
 - Client focus
 - Development of integrated, innovative and streamlined processes, well-defined infrastructure
 - Maintaining a conducive work environment.
- The initial reward scheme will need to be developed more fully in the future in conjunction with staffing groups to ensure ownership
- Any performance scheme must be clearly communicated openly to all staff, and reinforced regularly
- A reward system should be motivational, to encourage staff to develop and use their skills and abilities in areas to best develop NICTA
- An effective reward system can work to improve organisational effectiveness through employee involvement.

NICTA Staffing

There were no staff appointed during 2002, however, extensive effort was applied by staff in the partner organisations working on NICTA business, contributed as an in-kind arrangement. This effort mainly related to planning activities associated with the bid process and establishment of NICTA. Planning activities included:

- Assistance with the preparation of the bid documentation
- Incorporation of the business and legal requirements
- Facilities planning for each site
- Workforce planning for both research and support staff
- Development of key operational human resource and finance policies and delegations
- Appointment of contractors engaged in establishment activities
- Development of annual activity plans
- Creation of NICTA's website
- Extensive liaison with the Australian partner organisations, domestic and international research organisations and universities.

Moving ahead through 2003

Significant Human Resource developments in 2003 will include the requirement to:

- Build the corporate HR infrastructure in a way that integrates with node administration
- Design and implement contemporary HR policies which provide the operational support to the unique culture that NICTA is attempting to build
- Implement recruitment strategies to rapidly achieve critical mass, incorporating on-line recruitment methods
- Design and implement a change management program particularly as it relates to the transition for university appointees to NICTA
- Build a performance based culture through the design and implementation of a performance management system
- Ensure that remuneration policies and practices provide for both flexibility and attractiveness to potential staff
- Ensure that secondment arrangements for researchers and the appointment of NICTA Fellows work integrate with NICTA employed staff.

7. Accommodation

- Description of NICTA's progress for the period in relation to the provision of accommodation and infrastructure at each of its three sites.
- Description of NICTA's progress over the period in establishing and developing the ATP site as NICTA's headquarters.

Milestone.

- Provide details on whether NICTA's premises had opened at both the University of NSW and the Australian National University prior to 31 December 2002. [N.B. This milestone was covered in the 31 December 2002 Milestones report but is included for completeness. A copy of the 31 December response is included verbatim excluding the appendices. *Appendix 2.*

General

Property consultants were engaged to provide a master plan of NICTA's interim and permanent accommodation requirements at the Australian Technology Park, University of NSW and Canberra.

Headquarters Site at Australian Technology Park:

A suite of offices was rented in Innovation House at ATP to provide a temporary site for headquarters staff. As senior executives were recruited they were housed in these offices and an office was provided for the CEO. The CEO used this office while in Sydney for meetings and general administration.

A suitable room at ATP was rented to cater for meetings of the Board held in Sydney.

Negotiations were commenced with ATP Management for the lease of Bay 15 at the ATP and work commenced on planning fit out requirements for Bay 15. This fit out will include accommodation for all headquarters staff including the CEO and Board Chairman and will have facilities for Board meetings. It is also intended that at least three research programs will be located at the ATP. Space will be available for showcasing NICTA's work.

University of NSW:

NICTA occupied a dedicated area of 550sqm. at the UNSW which had been fitted out by the UNSW. Appropriate signage was erected.

Detailed planning commenced with the UNSW for the construction of a permanent building for NICTA on Anzac Parade adjacent to the UNSW. This building is scheduled for completion in late 2004 and will provide 4,000 sqm of accommodation.

Canberra:

NICTA occupied the RSISE building on the ANU campus to provide temporary accommodation for staff and researchers. Appropriate signage was erected.

Discussions commenced with the ACT Government over the transfer of land to provide a site for NICTA's permanent accommodation in Canberra.

8. Finances

- Provide a Grant Income and Expenditure statement which complies with Items 3.2(c), (d), (e), (f) of the Schedule and Clause 15.4 of the Funding Deed.

The Finance Report up to 31 December 2002 was submitted in April 2003 and is attached to this report as *appendix 3*.

9. Annual Activity Plan

Milestone

- Report on the finalisation of NICTA's 2003 Annual Activity Plan including milestones and performance indicators that have been agreed with the Project Executive as required by Items 2.5 and 2.10 of the Schedule to the Funding Deed. [N.B. This milestone was covered in the 31 December 2002 Milestones report but is included for completeness. It is recommended that a verbatim copy of the 31 December response be included excluding the appendices.]

The Annual Activity Plan is attached at *appendix 4*. **Note that part of this appendix is confidential.**

10. Publicity

- Provide notification of any publication, advertising, promotion or activity where acknowledgement was made to the Funding provided by the Commonwealth as per clause 18.1 of the Deed.

NICTA's website and published promotional material acknowledged the funding that was provided by the Commonwealth. The normal form of wording for acknowledgements is that of Schedule 8.1, and is normally accompanied by DCITA and ARC logos.

However for some items, more abbreviated material is used. Power point presentations include DCITA and ARC logos as a matter of course.

In addition, there has been a wide-range of speeches and presentations and press, radio and TV interviews acknowledging this funding.

Presentations have been made in Western Australia, Queensland, Victoria, NSW and ACT. Those presenting have included the Interim CEO, Professor Brian Anderson, The Node Directors, Professors Arun Sharma and Bob Williamson, the NICTA board Chairman, Mr Neville Roach and another director, Mr Brand Hoff. Professor Sharma also presented to a European Union meeting in Brussels

He also gave presentations to the School of Mathematics, Physics, Computing and Engineering at the Macquarie University in November; the Fibre Culture Conference in Sydney in November; the Information Industries Bureau in Queensland in December; the Western Australia Government in December; the European Union launch conference and to Ernst and Young.

Audiences at presentations included SME groups, attendees at conferences on commercialization and on particular technical themes (including Australian Technology Showcase, and Smart Internet Technology CRC Conference), university groups, government-organised forums and professional society meetings.

If you require any further clarification or require additional information concerning information in these reports please do not hesitate to contact the undersigned.

11. Attachment – Confidential Information

- All confidential information to be provided in an attachment to the main report. See *appendix 1*. Confidential Report (attached). Note also that part of Appendix 4 (the Annual Activity Plan, supplied earlier) is confidential.

Appendix 1—Confidential

This material is not included due to its confidential nature.

Appendix 2—Supplementary information on Networks and Linkages

The Centre's premises opened at the University of NSW initial site and the Australian National University initial site, with Centre staff operating from each of these sites.

Achievement

NICTA's initial premises have opened at the University of New South Wales. There are staff working on behalf¹ of NICTA operating from the refurbished Electrical Engineering Building (G17) as follows.

Symbolic Machine Learning and Knowledge Acquisition	1
Real-time and Embedded Systems	2.8
Formal Methods	1
a) Kensington Sub-total	4.8

NICTA Centre's initial premises opened at the Australian National University. There are staff working on behalf of NICTA operating from the Research School of Information Sciences and Engineering (RSISE) as follows.

Systems Engineering and Complex Systems	5.6
Statistical Machine Learning and Sensor Signal Processing	4
Logic and Computation	4
Autonomous Systems and Sensor Technologies	6.2
Wireless Signal Processing	4.1
Canberra Sub-total	23.9

¹ "On behalf of" because they are not formally employed by the Centre. There are University staff who expect to be seconded once the partner agreements are in place, as well as some consultants working for NICTA. Some of the consultants are appointed as consultants as an interim measure prior to them taking up their formal appointment early in 2003 (when we will have a preliminary payroll system in place).

Appendix 3—

Appendix 4— Annual Activity Plan

This material is not included as it is already on the website.