



UNIVERSITY INFORMATION STRATEGY COMMITTEE

A meeting of the University Information Strategy Committee will be held from 10:00am on Thursday, 30th July 2009 in the Ross Hohnen Room, Chancelry.

Apologies and enquiries to the Council and Boards Secretariat by telephone on (02) 6125 2825 or email at: karen.holt@anu.edu.au

Karen Holt
Committee Secretary
Council and Boards Secretariat

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IMPORTANT INFORMATION FOR MEMBERS

CONFIDENTIALITY

Members of the University Information Strategy Committee and others receiving the Agenda are reminded of the need for careful discretion in the use and communication of University business. All matters in the Agenda relating to individual persons, including appointments, enrolment, candidacy for degrees, personal details, performance and conduct are declared to be confidential. Information marked or declared to be confidential is not at any stage to be communicated to others without prior reference to the Chair of the Committee.

DISCLOSURE OF MATERIAL PERSONAL INTEREST

Under sections 27F to 27H of the *Commonwealth Authorities and Companies Act 1997*, a member of the Committee who has a material personal interest in a matter that is being considered, or is about to be considered, by the Committee must disclose the nature of the interest at a meeting. The disclosure must be made as soon as possible after the relevant facts have come to the member's knowledge and must be recorded in the Minutes of the meeting.

USE OF INSIDE INFORMATION OR POSITION

Sections 24 and 25 of the *Commonwealth Authorities and Companies Act 1997* provide that a member of the Committee must not make improper use of inside information or of his or her position as an officer in order to gain advantage for himself or herself or to cause detriment to the University or to another person. There are penalties for contravention.

PART 1 – PROCEDURAL ITEMS

★ 1 ANNOUNCEMENTS AND APOLOGIES

No apologies have been received to-date.

★ 2 MINUTES

RECOMMENDATION That the Committee note the Minutes of the meeting held on 30 May 2008 (304/2008).

★ 3 DISCLOSURE OF MATERIAL PERSONAL INTEREST

In accordance with sections 27F to 27H of the Commonwealth Authorities and Companies Act 1997, members of the Committee are required to declare any direct or indirect material personal interest in matters on the agenda.

★ 4 ARRANGEMENT OF AGENDA

1. Agenda Items 1 to 12 have been starred for discussion.
2. The Chair will ask members to foreshadow matters to be raised under Agenda Item 11 Other Business.

304/2008



UNIVERSITY INFORMATION STRATEGY COMMITTEE

CONFIRMED MINUTES

The 1st meeting of the University Information Strategy Committee for 2008 was held from 2:00pm on Friday, 30th May in the Ross Hohnen Room, Chancelry.

MEMBERS PRESENT

Pro Vice-Chancellor, Professor Robin Stanton (Chair)
Professor Simon Bronitt
Dr John Bowden
Mr Robert Wells
Dr Chris Johnson
Professor Shirley Gregor
Dr Mark Nolan
Professor Peter Gill
Mr Rick Van Haeften
Mr Vic Elliott
Dr Markus Buchhorn
Mr Matthew Aucklett
Mr Bart Meehan
Mr Mark Erickson (for Tim Beckett)

IN ATTENDANCE

Mr John McGee
Mr Allan Williams
Ms Karen Holt, Secretary to the Committee

PART 1 – PROCEDURAL ITEMS

1. Announcements and Apologies

Apologies were received from Tim Beckett and Michelle Searle. Mark Erickson attended for Mr Beckett. There were no announcements.

2. Minutes

The Minutes of the meeting held on 8 May 2007 (348/2007) were confirmed.

3. Terms of Reference and Membership

The Committee noted the UISC Terms of Reference and Membership. The Pro Vice-Chancellor informed members that in order to move forward with the new College structure, this Committee will in the future focus more on governance issues. This was further discussed at Item 6.9.

4. Disclosure of Material Personal Interest

No members declared any direct or indirect material personal interest in matters on the Agenda.

5. Arrangement of Agenda

3. Agenda Items 1 to 14 were starred for discussion.
4. No matters were foreshadowed under Item 13 Other Business.
5. The Chair foreshadowed two additional items for Item 6 - the LMS Rollout and the proposed new directions for the UISC.

PART 2 – REPORTS AND POLICY MATTERS

6. Pro Vice-Chancellor's Report

The Pro Vice-Chancellor gave a verbal report to the Committee. The following points were noted:

1. Update on Platforms for Collaboration: Prospect for National Collaboration Research Infrastructure Services (NCRIS). (Paper tabled by Chair entitled, 'Australian Access Federation')
 - Mr Allan Williams spoke to this item:
 - The ANU has played a vital role in driving NCRIS and is heavily involved in setting up the Australian Access Federation (AAF).
 - The AAF will provide a framework and supporting infrastructure to facilitate electronic communications collaboration within and between universities and research institutions in Australia and overseas.
 - The ANU is currently involved in a test bed federation and it is expected that the AAF will commence operations by the end of 2008.
 - This is a significant development that will impact the ANU and an additional item on NCRIS will be brought to the next meeting of the UISC.
2. ANUSF Supercomputer RFT
 - The ANU is purchasing a new supercomputer, expected to be more than ten times stronger than the current machine. The tender for the new machine closes today.
3. IIS-08 Review
 - The IIS-08 Review recognizes that Colleges are still forming.
 - The report is currently with the Vice Chancellor.
4. Recording Lectures
 - A program is being developed to record visuals in the same way as audio. It will be phased in gradually with more functionality added as it becomes possible, including capturing information from data projectors and whiteboards.

5. iTunes University Agreement
 - The ANU has signed an iTunes University Agreement, along with five other Australian Universities and one New Zealand University.
 - iTunesU is a distribution mechanism and will provide a channel for students and the public to view public lectures, seminars and selected course lectures and to stay up-to-date on cutting edge research conducted at ANU.
 - The private/internal content (not visible to the outside world) will include recorded lectures and content published by academics.
 - A Non-Disclosure Agreement with Microsoft exists until the 3 June public announcement.
 - Marketing and Communications (MAC) is responsible for the publicly accessible material and the Vice-Chancellor has contributed \$100,000 to enhance the quality of the ANU presence.
 - Guidelines on content will be established and the question of the value of public education (versus just publishing lectures) will be explored.
6. Development of Document and Records Management System
 - Rick Van Haeften informed the Committee that in collaboration with a consultant, the ANU has identified hotspots and how to address these. The University currently does not have an electronic records management system and relies on staff to recall the files that information is stored on and then on the central records file tracking system to locate the files.
 - The ANU is currently looking at open source solutions, including collaborating with other universities - which would involve no cost to the ANU other than for software licensing.
 - The focus will be on post-graduate files (as undergraduate information is captured in the student system) and on personnel files and corporate information.
7. Development of Web Based Public Access to ANU Scholarship
 - This portal project will integrate some 50 publishers across campus. It will provide a structured way to increase the visibility of research at ANU and to identify who's here and what they are doing.
 - Processes will be implemented to protect the integrity of research data.
8. Learning Management System Rollout
 - Our current version of WebCT is becoming less compatible with the way we now use the web, and vendor support (*e.g.* upgrades and patches) for WebCT CE 4.1 will be discontinued in August 2009.
 - The next version of WebCT has a significantly different user interface and would require major changes to existing course sites.
 - The ANU is reviewing New Learning Management Systems now on the market (including the newer versions of WebCT) with features that increase the quality, flexibility and efficiency of Learning and Teaching.
9. UISC to Focus on Major Governance and Strategic Issues;
 - The Pro Vice-Chancellor provided an overview of the Division of Information 2007 Structure and Budget Levels to demonstrate the importance of connecting this spend (approximately 10% of the ANU budget) to the ANU strategic direction and goals.
 - The UISC will assist management to know whether the University is prepared for the future. There will be more directed focus on points 13.1(a) and (b) of the existing Terms of Reference.
 - The UISC will also provide a stronger framework within which the Colleges can better understand how purposes lead to expenses. The newer Colleges are still working on bringing IIS together and this will be taken into consideration.

- To this end, the UISC will focus more on management dimensions and major governance and strategic issues and provide an advisory role on issues that need to be addressed by the University.
- To achieve this, a stronger College base needs to be reflected in the Committee's Membership, possibly with an academic representative and a General Manager from each of the Colleges.

As the UISC is not constituted to perform these functions, the Committee's Terms of Reference and Membership will need to be amended and approved by the Academic Board and Council. The Pro-Vice Chancellor informed members that he will be looking further into these issues and invited comments and guidance from the Committee to be sent his office.

7. Acceptable Use of Information Infrastructure Policy

The Committee noted the update on the Review of Information Infrastructure and Services Policies and the Schedule of Policy Revisions (294/2008).

The draft Acceptable Use of Information Infrastructure Policy (295/2008) was discussed and the following comments were noted:

- The policy could be more specific in defining 'offensive behaviour' (or unacceptable use) and what people can and cannot do; and
- The policy should refer to the relevant classification standards and provide a framework (or best practice guide) for how to act legally and ethically.

The Committee endorsed the draft Acceptable Use of Information Infrastructure Policy - with the above comments to be taken into account. These further changes in addition to drafting improvements (to be suggested by Professor Bronitt) will be circulated electronically to members for approval before the next meeting.

The committee also endorsed the draft User Credentials Policy (296/2008) with the following comments to be taken into account:

- That 'core identity attributes' be defined;
- That the final dot point (page 26) under 'Context' be clarified; and that
- Wireless mechanisms be incorporated into the policy.

Members noted that there are four procedures that accompany this policy and it was agreed that these would be circulated to members.

8. Open Access Policy Proposal

The University Librarian/Director, Scholarly Information Services, Mr Vic Elliot, informed the Committee that it is timely for the ANU to consider whether to move to Open Access. Members noted that following support from the UISC, the proposal will be presented to Colleges and then to the Academic Board.

The Committee discussed issues of liability for authors and for the University for infringing publishers' copyright and it was agreed that the University Legal Office should be consulted.

The Committee supported the development of the Open Access Policy Proposal (297/2008).

9. E-Research Task Force Report

The Committee noted the Executive Summary of the ANU E-Research Task Force Report (78/2008) and that the recommendations are currently with the Vice-Chancellor.

10. Governance and Management Framework

The Head of Networks and Communications, Mr John McGee, spoke to the IIS Governance and Management Framework which sets out the basis for moving the University's IIS toward the following five Governance Objectives or Principles:

1. **Strategic Alignment:** that the development of plans for the IIS are continuously aligned to the strategic objectives of the University.
2. **Value:** that the IIS delivers the expected benefits and has the capability to exploit emerging technologies which respond to the future needs of the Community.
3. **Resourcing:** that the investment in infrastructure is sustainable and the allocation of resources for services meets expected service levels.
4. **Risk Management:** that risks to the IIS are identified and managed through mitigation and control, as appropriate.
5. **Performance Management:** that the IIS is evaluated against efficiency and effectiveness over time, and is compliant with the IIS policy framework.

The following comments from members were noted:

- Good governance structures and systems have around a 40% return for organisations and enable users to be more innovative with IT and more productive;
- The Framework will enable Colleges to think about how to manage their own IT more efficiently and they will endorse the Framework if the benefits to them are more clearly defined;
- A presentation should accompany the consultations with College Deans; and
- An IT leadership course for Deans/Directors was suggested.

The Committee supported the five governance principles (above) and the directions of the Information Infrastructure and Services Governance and Management Framework (298/2008).

11. Assurance Advisory Committee Reports

The Committee noted Section 3 in each of the following Assurance Advisory Committee Reports:

- Information Assurance Advisory Committee (IAAC) (299/2008)
- Academic Systems Assurance Advisory Committee (AcSAAC) (300/2008)
- Administrative Systems Assurance Advisory Committee (AdS-AAC) (301/2008)
- Scholarly Collections Assurance Advisory Committee (SC-AAC) (302/2008)

PART 3 – OTHER BUSINESS

12. Question Time

No questions were asked.

13. Other Business

No other business was raised.

14. Next Meeting

Members noted that the next meeting of the UISC is scheduled for Tuesday, 26th August from 10:00am in the Refshauge Room, Chancelry.

The meeting concluded at 4:15pm.

Karen Holt
June 2008

★5 UISC ROLE, TERMS OF REFERENCE AND MEMBERSHIP

PURPOSE To provide members with background information on the UISC.

SPONSOR Chair

RECOMMENDATION That the Committee note the UISC Role, Terms of Reference and membership (535/2009).

535/2009

Role of the UISC

The Report of the Information Infrastructure and Services Review 2009 (IIS-09) has been presented to the Vice-Chancellor, and the recommendations contained therein have been accepted. The purpose of this letter is to set out the action being undertaken with regards those recommendations within the IIS-09 that relate directly or indirectly to the University Information Strategy Committee (UISC), and to provide guidance with respect to the activities of this Committee.

Terms of Reference of the UISC

Recommendation 1 of IIS-09 states:

The University Information Strategy Committee should have a focus on assessing the coordinated IIS strategic plans of ANU Colleges, Administrative Divisions and DoI.

This is consistent with the previous terms of reference, as set out in (now repealed) *Academic Board and University Policy Committees Rules 2008*:

13.1 The Committee may advise:

- (a) the Chair of the Committee on matters relating to the University's information infrastructure, management and services; and
- (b) the Academic Board on major issues relevant to the University's strategic plans and overarching policy; and
- (c) the Academic Board on any matter referred to the Committee by the Academic Board.

but does provide additional focus as to which matters should be brought to the UISC.

Following the repeal of the *Academic Board and University Policy Committees Rules 2008* by Council on 29 May 2009, a request was made for the establishment of the University Information Strategy Committee by decision of the Vice-Chancellor. The terms of reference presented with this request differed only marginally from those of the Committee established under the previous Rules, and together with the establishment of the Committee these were approved by the Vice-Chancellor.

A copy of the Terms of Reference is attached.

Membership of the UISC

Membership of the UISC includes one member of the academic staff of each ANU College, chosen by its Dean, with a term of appointment determined by the Chair. The original College members on the UISC were appointed for two year terms, expiring on 31 December 2008. Given the comments with regards the UISC contained in the Report of the 2008 Review of Information Infrastructure and Services (IIS-08), and the then imminent commencement of

the IIS-09, no action was taken to extend appointments or otherwise deal with the resulting vacancies.

In requesting new appointments to the UISC the College Deans were requested to consider Recommendation 6:

Each College to nominate a senior staff member to act as point of contact for the strategic aspects of information infrastructure and services. It is expected that this person will be a member of, or report to, the College Executive Committee and can speak on behalf of the College on IIS matters.

In order to assist the UISC to be best placed to “focus on assessing the coordinated IIS strategic plans of ANU Colleges, Administrative Divisions and DoI” (Recommendation 1) the College representatives on the UISC should also be the “senior staff member [acting] as point of contact for the strategic aspects of information infrastructure and services” (Recommendation 6) where possible.

A list of the members of the UISC is attached.

University information Strategy Committee

Terms of Reference

1. University Information Strategy Committee

- 1.1. There is to be a committee to be known as the University Information Strategy Committee.
- 1.2. Each of the following is to be a member of the University Information Strategy Committee:
 - (a) the Pro Vice-Chancellor with portfolio responsibility for information strategy;
 - (b) one member of the academic staff of each ANU College, chosen by its Dean;
 - (c) the Director, Information Services;
 - (d) the University Librarian;
 - (e) one postgraduate student appointed by the Chair of the Committee in consultation with the President of the Postgraduate and Research Students' Association Inc.;
 - (f) one undergraduate student appointed by the Chair of the Committee in consultation with the President of the Australian National University Students' Association;
 - (g) 2 members of the general staff appointed by the Chair of the Committee;
 - (h) one Head of an Administrative Division appointed by the Chair of the Committee;
 - (i) any additional members appointed by the Chair of the Committee.
- 1.3. The Chair of the Committee is to be the Pro Vice-Chancellor with portfolio responsibility for information strategy.
- 1.4. The term of appointment of each appointed member of the Committee is to be determined by the Chair of the Committee.

2. Terms of reference of University Information Strategy Committee

- 2.1. The Committee may advise the Chair of the Committee on:
 - (a) matters relating to the University's information infrastructure, management and services; and

- (b) major issues relevant to the University's strategic plans and overarching policy; and
- (c) any matter referred to the Committee by the Chair of the Committee or a member of the University Executive.

3. University Information Strategy Committee meetings

- 3.1. The Chair of the Committee is to convene all meetings of the Committee and preside at all meetings of the Committee at which he or she is present.
- 3.2. At a meeting of the Committee, 50% of its members constitute a quorum, or, if that number is not a whole number, then the next whole number greater than the first-mentioned number.
- 3.3. The Chair of the Committee must convene a meeting of the Committee at any time if asked to do so by at least 50% of the members.
- 3.4. The procedure at meetings of the Committee is to be determined by the Chair taking into account the advice of the members.
- 3.5. The Vice-Chancellor is to nominate officers of the University to provide secretariat and other support to the Committee.
- 3.6. At a meeting of the Committee, the Chair has a deliberative and a casting vote.

University information Strategy Committee

Membership

<i>Category</i>	<i>Occupant</i>	<i>Term</i>
a) Pro Vice-Chancellor (Chair)	Prof. Robin Stanton	Ex Officio
b) One academic staff member from each ANU College, chosen by the Dean of the relevant College;		
▪ ANU College of Arts and Social Sciences	Prof. Toni Makkai	1 July 2011
▪ ANU College of Asia and the Pacific	(vacant)	
▪ ANU College of Business and Economics	Prof. Alex Clarke	1 July 2011
▪ ANU College of Engineering and Computer Sciences	Prof. Bob Williamson	1 July 2011
▪ ANU College of Law	Prof. Stephen Bottomley	1 July 2011
▪ ANU College of Medicine, Biology and Environment	(vacant)	
▪ ANU College of Physical Sciences	Prof. Aidan Byrne	1 July 2011
(c) the Director, Information Services	Mr Rick Van Haeften	Ex officio
(d) the University Librarian	Mr Vic Elliot	Ex officio
(e) one postgraduate student appointed by the Chair of the Committee in consultation with the President of the Postgraduate and Research Students' Association Inc.;	Mr Chris McCarthy	31 Dec 2009
(e) one undergraduate student appointed by the Chair of the Committee in consultation with the President of the Australian National University Students' Association;	Ms Alice McBurney	31 Dec 2009
(f) two members of the general staff appointed by the Chair of the Committee;		
▪ ANU College of Engineering and Computer Science	Ms Michelle Searle	31 Dec 2009
▪ Facilities and Services	Mr Bart Meehan	31 Dec 2009
(g) one Head of an Administrative Division appointed by the Chair of the Committee.		
▪ Registrar, Division of Registrar and Student Services	Mr Tim Beckett	31 Dec 2010

PART 2 – REPORTS AND POLICY MATTERS

★6 Pro Vice-Chancellor's Report

PURPOSE To receive a verbal report from the Pro Vice-Chancellor on current issues.

SPONSOR Chair

RECOMMENDATION That the Committee note the Pro Vice-Chancellor's verbal report.

BACKGROUND

The Pro Vice-Chancellor's verbal report will include the following:

1. UISC and Campus Wide Planning
 - IIS Governance and Management Framework [UISC 298/2008]
 - a. Services-in-Common Domain
 - b. College-centred Domain
 - Information Infrastructure and Services Review 2009
[http://info.anu.edu.au/ovc/Executive/070PP_Reports_and_Papers]
 - Coordinated planning focus – strategic directions
 - Director Information Services
 - Assurance Advisory Committees - Planning Advisory Committees
2. Commonwealth Budget 2009 eResearch Infrastructure (\$312m)
 - Data: Data Storage (\$97m); Data Commons (\$48m)
 - Networks: National Research Network (\$37m)
 - HPC: National Centre of SKA Science (\$80m); Climate HPC Centre (\$50m)
3. E-Research:
 - HPC: major upgrade through NCRIS/NCI; NRIC climate support being planned
 - ARCS/ANDS – ANU partnerships
 - E-Research Task Force Report
 - Victorian Life Sciences Computational Initiative
 - Research data management policy
4. E-publishing:
 - Open access policy – ScholarsKeep/ScholarsGate services
 - Manager, Scholarly Communications & ePublishing appointment
5. Networks:
 - Capacity model for external access
 - New generation wireless campus access

★7 Planning Advisory Committees

PURPOSE To endorse the Terms of Reference of the Planning Advisory Committees (PACs).

SPONSOR Chair

RECOMMENDATION That the Committee note the creation of the Planning Advisory Committees, following the IIS-09 Review, and endorse the Terms of Reference and the specialist Planning Advisory Committees established as per attached (536/2009).

ATTACHMENTS

- Planning Advisory Committees (536/2009)

536/2009

Planning Advisory Committees

Information Infrastructure and Services Review 2009 (IIS-09), Recommendation 2:
Establish Planning Advisory Committees with terms of reference that focus on providing informed advice on information and technology strategies to the UISC.

IIS-09, in support of the above recommendation, stated that:

The Committee believes that the University Information Strategy Committee advised by a small number of specialist planning committees, with responsibility for endorsing or referring back area IIS strategic plans, would better serve the University. Such a suite of coherent approved plans will help to inform resource allocation decisions made by the University Executive, and by College Deans and Administrative Directors.

Shifting from the Assurance Advisory Committee model to Planning Advisory Committees (PAC) is consistent with the broad thrust of this Review, reflecting the move towards a greater emphasis on planning and strategy. Newly formed PACs would require members with expertise in strategy as well as operations, and will have a focus on how information and technology can best be used to support the activities of the University.

Terms of Reference

The draft terms of reference for a PAC are:

Within their area of expertise PACs will:

- Advise the UISC on strategies and priorities to ensure a coordinated, well-planned approach to the provision of information infrastructure and services at ANU.
- Review IIS strategic plans of ANU Colleges, Administrative Divisions and Division of Information at least annually and:
 - a. provide advice to the UISC to ensure the strategies proposed will provide ANU with an effective, efficient and coordinated IIS;
 - b. provide advice to the UISC on the scope and completeness of plans and planning processes; and
 - c. provide feedback and advice to the originating areas on their strategic plans.
- Advise UISC on policy for ensuring coordination across University organisational units and that measures are in place to assure expected outcomes.
- Provide a forum for interrelating ANU College internal plans to ensure common interests are taken into account.
- Advise UISC on concerns and possible improvements with regards to plans and planning processes.

Specialist PACs

Determination of which PACs are to be created is driven by the need to ensure that all major aspects of IIS strategic plans can be addressed by a PAC, that appropriate levels of expertise can be incorporated within PACs, and ensuring that PACs are not subject to unreasonable workloads.

The suggested PACS, with draft areas of responsibilities, are:

- Enterprise Services PAC
 - The University has a significant investment in academic and administrative enterprise services and the systems that support these services. These services are vital in providing timely access to information resources, supporting key business processes and meeting regulatory and legislative requirements.

- This PAC will address:
 - The provision of access to University corporate information resources, on demand.
 - Improvement in data integrity
 - Improvement in the management of institutional data (data sharing).
 - Organisational flexibility and responsiveness.
 - The divide between enterprise and non-enterprise systems.
- IT Infrastructure PAC
 - This PAC will address the IT platforms through which information is delivered, including networks, servers, storage, desktop environments, and related services.
- Scholarly Services PAC
 - This PAC will address:
 - Publications, including e-publications;
 - Information Systems and related support for teaching, learning and research;
 - Integration of information technology and information systems into teaching and learning spaces, especially the information Commons.
 - Physical and digital archives of material relevant to research and teaching activities, and the related long-term preservation of, and access to, archival material.
 - Libraries and collections.
 - E-research and digital scholarship, excluding HPC.

Subject areas that may be included in University strategic plans, but not included within the remit of one of the above PACs include:

- General governance matters, which will be dealt with by the UISC directly.
- High Performance Computing, and related e-research activities;
- Educational Design: While this will impact on the requirements of learning management systems and other support systems, strategy and policy issues in this area fall within the terms of reference of the University Education Committee. Issues that relate to services and systems within the remit of the UISC will be dealt with through the Scholarly Services PAC.
- Major research equipment coupled to the information infrastructure such as the Electron Microscopy Unit or high speed sequencers, which are governed by the University Research Committee directly or through sub-committees.

Membership of PACs

The general composition of the PACs will include a member from each of the ANU Colleges, and a representative from the Division of Information. This may be varied where circumstances require, with additional members or alternative membership structures used. It is further recommended that the Chairs of the PACs be appointed from the membership of the PACs by the Chair of the UISC, but will not normally be the representative of the Division of Information.

Enterprise Services PAC:

- College General Managers
- Directors with responsibility for corporate transactional systems
- Director, Information Services

IT Infrastructure PAC

- College IT Services Managers ¹
- Director, IT Infrastructure

Scholarly Services PAC:

- Up to two Education and/or Research Academics from each College.
- Director, Scholarly Information Services.

¹ Where there is more than one Manager, or the ANU College has not appointed an individual with overall responsibilities for IT Platforms, the Dean of the College will nominate a member.

★8 ANU College Information Infrastructure Strategic Plans

PURPOSE To receive the IIS plans, draft plans and progress reports from the ANU Colleges

SPONSOR Chair

RECOMMENDATION That the Committee note the plans, draft plans and progress reports of the ANU Colleges.

BACKGROUND

College based Information Infrastructure Strategic Plans are being introduced into the University planning process, following the Information Infrastructure and Services Review 2009 (IIS-09). This builds on various levels of planning that took place within Colleges and their constituent parts in previous years.

The UISC is asked to note the attachments, and provide advice on the processes being undertaken, with a view to advancing the College plans and the development of a University IIS plan.

Each of the Colleges will be asked to comment on their own plans and planning processes.

ATTACHMENTS

- CASS IIS Plan (537/2009) page 19
- CAP Draft IIS Plan (538/2009) page 28
- CBE Draft IIS Plan (539/2009) page 37
- CECS Draft of Strategic Principles (540/2009) page 43
- CECS Draft IIS Plan (541/2009) page 45
- CL IIS Plan (542/2009) page 54
- CMBE and CPS IIS Working Party Progress Report (543/2009) page 59



537/2009

ANU COLLEGE OF ARTS & SOCIAL SCIENCES

INFORMATION INFRASTRUCTURE STRATEGIC PLAN

This strategic plan presents the roadmap for CASS information infrastructure to support the College's education and research mission.

This plan describes a rolling program of activities. The initiatives described in this plan build upon the foundations provided by the consolidation of IT support into a central provision across the college in January 2007.

However the plan also reflects the historic limitations of amalgamating individual areas who had varying practices in how, what and when they funded information infrastructure.

A significant achievement was the automatic provision of 50% of RIBG funding to the college for 2009; this provided a mechanism whereby the CASS executive focused on college wide infrastructure priorities.

1. Mission

CASS Strategic Plan 2008 – 2010 states the mission of CASS is –

- Globally, to be recognized by its academic excellence across the creative arts, humanities and social sciences, while bringing its expertise to bear on key social, cultural, and political problems facing the contemporary world;
- Nationally, in partnership with the public, the private sector, and government, to shape Australia as an innovative knowledge-based society;
- Locally, to engage with, and enrich the community.

In fulfilling its mission CASS will –

- Promote multi-disciplinary scholarly endeavours across and beyond the humanities, creative arts and social sciences for the public good;
- Take advantage of our location in Australia's national capital with its cultural institutions, key organizations and government departments.

The CASS Strategic Plan articulates the following objectives for **information infrastructure** –

- Identify CASS Information Infrastructure projects that promote efficiencies in education, research and administrative activities within the College, as well as strengthening linkages between ANU Colleges internally and between ANU and its external partners;

- Identify new funding opportunities and supporting grant applications to resource innovation projects that deliver improvements to information infrastructure for the benefit of the College and the ANU;
- Develop these capacities consistently with the broader information infrastructure strategies of the ANU.

These objectives align to key priorities identified by the College for education, research and administration that are specifically reliant on information infrastructure. These are:

Education:

CASS has identified the following priorities -

Flexibility: provide flexible approaches to education to support a range of learning needs and opportunities while maintaining quality.

E-Learning: is characterized by the appropriate educational use of electronic and digital media, tools and devices to enhance student learning outcomes, knowledge construction, and critical thinking.

CASS has developed a number of operational goals for these priorities and these, together with implementation timeframe is set out in Appendix 1.

Research:

CASS has identified the following priority -

E-research & Digital scholarship: provide framework by which CASS is at the forefront in the application of digital technology in the humanities, social sciences and creative arts to ensure that our research [and education programs] can achieve maximum benefit from the enhancements made by possible by this developing medium.

CASS has developed operational goals for this priority and these, together with an implementation timeframe is set out in Appendix 2.

Administration:

CASS has identified the following priorities -

Capacity: provide advice on the capacity of the College to deliver high quality research and education, including such matters as workforce planning, information infrastructure and research management.

Linkage: ensure effective linkages between the College administration and Central administrative divisions to support the academic enterprise.

CASS has developed operational goals for these priorities and these, together with an implementation timeframe is set out in Appendix 3.

2. Governance and Planning

2.1 College IIS Governance and Planning

At the College, the College Dean is responsible for the development and implementation of the College Strategic Plan. The College Dean is advised by the College Executive in preparation of the Plan. The plan is also informed by the work of the College Education, Research, Information Strategy Committees (ISC) and the CASS E-Research and Learning Advisory Committee. These committees are chaired by members of the College Executive and their membership is representative of College Areas and, where necessary, our major partners. The College ISC is chaired by the Dean of the College. Terms of reference and membership of each of the College committees can be found at <http://cass.anu.edu.au/ppes-office/committees>.

The education and research objectives of the College are linked to our governance and planning process. The College has formed an alliance with CAP to establish an Education Design Studio. A review of the studio was conducted in April 2009 by CASS/CAP and the OVC. The review can be found at <http://cass.anu.edu.au/ppes-office/reviews-and-archive>. The recommendations of the review are being implemented by the Dean. The work of the studio is guided by an Advisory Committee, with members drawn from both Colleges, the PVC (Education) and the DOI. The College has also formed an E-Research and Learning Advisory Committee to advise the Dean on a range of matters associated with this objective. Membership of the Committee is drawn from individuals across the College and within the DOI.

2.2 Links from the College to University IIS Governance and Planning

Membership of the CASS ISC and other committees includes a representative of the Division of Information. Ex-officio members of the CASS ISC represent the College on the four ANU Planning Advisory Committees.

3. Technology and Education/Research/Administration

Academic staff and doctoral students of the college undertake research and teaching in the disciplines of humanities, social sciences and the creative arts. Research and education production in the College is supported by multiple providers including the individual (academic/doctoral student), the College Area (through specialist services often funded externally), the College (through its centralized IT Services Group and infrastructure), and the DOI five major service areas. The human capital is supported by the infrastructure provisioned by the College Area, the College (as a collective) and the DOI.

To achieve the key objectives of the College for education, research and administration, we will utilize the following infrastructure and service providers –

College-centred	ANU-wide services-in-common
Education <ul style="list-style-type: none"> ▪ CASS academic staff ▪ CASS/CAP Education Design Studio staff ▪ CASS IT Office ▪ CASS computer hardware & software (including servers) 	Education <ul style="list-style-type: none"> ▪ Scholarly Information Services ▪ ICT Environments ▪ Networks & Communications ▪ Information Infrastructure Services ▪ Space Services

<p>Research</p> <ul style="list-style-type: none"> ▪ CASS academic staff ▪ CASS doctoral scholars ▪ College Area IT specialists ▪ CASS IT Office ▪ Digital hub ▪ CASS computer hardware & software (including servers) 	<p>Research</p> <ul style="list-style-type: none"> ▪ Scholarly Information Services (includes ANU E-Press) ▪ ICT Environments ▪ IT Systems ▪ Networks & Communications ▪ Information Infrastructure Services ▪ ANUSF
<p>Administration</p> <ul style="list-style-type: none"> ▪ CASS administrative staff ▪ CASS IT Office ▪ CASS computer hardware & software (including servers) 	<p>Administration</p> <ul style="list-style-type: none"> ▪ Corporate Information Systems ▪ Networks & Communications ▪ Information Infrastructure Services

4. Sustainability

To resource current and future needs the College will –

- Partner with the respective areas of the DOI, to deliver services. The includes
 - Integrated College infrastructure project.
Implementation timeframe: August 2009
 - Integrated College IT Assets Lifecycle Management
Implementation timeframe: February 2010
- Commit to an annual budget allocation for maintenance of information infrastructure, both as a contribution to shared services and those that are Area-based.
Implementation timeframe: August 2009 for 2010 budget
- Review annually the provision for specialist services that support education, such as the Education Design Studio.
Implementation timeframe: December 2009 and on-going
- Establish centralised IT service operations, including call centre and on-line help desk to improve efficiency and effectiveness.
Implementation timeframe: February 2009
- Finalise and implement a high level service level agreement (SLA) with the College's internal clients. The objective of the SLA is to communicate the target levels of service delivery committed to by the College IT office and highlight its performance in support of the College's mission.
Implementation timeframe: Develop agreed SLA January-June 2009
Implementation timeframe: Implement and monitor SLA July –Dec 2009

Review SLA annually

- Identify staff and student needs through an on-line survey to assist with prioritisation of work within the CASS IT Office and inform the CASS Information Strategy Committee and CASS Executive on client requirements and expectations for IT support.

Implementation timeframe: June 2009

Analysis and response: September 2009

- Commit to continuous upgrading of the skills of IT staff to meet changing needs and enhance efficiencies;

Implementation timeframe: 2009 and on-going

- Provide skills training to all staff to enhance the efficient and effective use of IT.

Implementation timeframe: IT skills audit, July 2009

- Commit to continuous improvement in communication strategies through use of the college intranet.

Implementation timeframe: on-going

5. Risk management

Poor provision of IT infrastructure can:

- a. damage the reputation of the College's undergraduate teaching program;
- b. affect recruitment of HDR and academic staff whose cutting edge research can't be supported;
- c. impede the College's uptake of digital research resulting in second tier research;
- d. fail to attract international visiting scholars of repute.

The College has identified the following risks to be managed -

1. Failure to make annual budget provision for the routine refresh of base desktop IT units for staff and graduate students within budget units.
2. Failure to invest in appropriate IT infrastructure to support efficient and effective academic, educational and administrative across the college.
3. Lack of an integrated document management system for administrative data.
4. Loss of key personnel and failure to attract IT staff with the skill level required.
5. Failure to make adequate provision for IT related costs in external research and consultancy grants.

6. Increasing demand for advanced IT infrastructure to enable e-research that costs more than the college can afford or has the technical capacity to provide

APPENDIX 1: EDUCATION – OPERATIONAL GOALS AND IMPLEMENTATION TIMETABLE

Objective	Operational Goal	Implementation Timetable
Flexibility	Develop and communicate a CASS Plan for Flexible Learning and set annual priorities for 2009 and 2010.	June-July 2009
	Ensure all PGC programs can be taken in flexible mode by 2011.	2009-December 2011
	Review professional development needs to staff in flexible delivery and increase staff skills in flexible delivery and support a culture of innovation.	2009
	Ensure that teaching spaces are appropriately equipped to enable staff engaged in digital research are able to deliver that research into our undergraduate and postgraduate education programs.	2009 & ongoing
E-Learning	Awareness: CASS will provide information sessions and training opportunities for staff that describe the principles and concepts behind E-Learning. Staff will be introduced to a variety of teaching and learning activities and models that can be supported by E-Learning.	September 2009-September 2010
	Innovation: CASS will initiate projects that explore and develop best practice in E-Learning innovations, with a particular focus on contributing to the cutting edge of current developments in E-Learning activities and materials.	2009-June 2012
	Flexibility: CASS will assist staff to implement new, flexible iterations of current courses by providing information sessions about flexible teaching and learning principles and concepts, and, secondly, and by demonstrating how and where those models might be supported by the appropriate use of digital technologies.	Ongoing
	Capacity building: The CASS Education Design Studio will provide professional development opportunities for staff in E-Learning pedagogies in the form of both hands-on workshops and one-on-one consultations with staff, where appropriate.	Ongoing
	Intersections: CASS will support collaboration by providing practical solutions to realize the potential for sharing across disciplines, between courses and colleagues.	Ongoing
	Partnerships: the new Discipline Support Strategy by ALTC Learning Network for Arts, Humanities & social Sciences offers prospective associations. A social networking site connecting stakeholders will be established by CASS.	Ongoing
	Sustainability: On-going professional development support will be provided to College staff through the Education Design Studio. CASS will require all staff to have a minimum presence in the new ANU LMS and those staff who want to extend their teaching and learning skill base will be encouraged and supported to take part in innovation and flexibility projects and programs offered by the College.	Ongoing

APPENDIX 2: RESEARCH – OPERATIONAL GOALS AND IMPLEMENTATION TIMETABLE

Objective	Operational Goal	Implementation Timetable
E-Research & Digital Scholarship	<p>Innovation: Establish a College digital Research Hub to generate innovation E-Research and Digital Scholarship projects and to support existing projects; Encourage participation among researchers in funding initiatives that support innovation in digital scholarship, eg ARC Linkage Grants and funding schemes available under the Commonwealth NCRIS program</p>	<p style="text-align: center;">January 2010 Ongoing</p>
	<p>Awareness: Showcase work from projects that have applied for funding in the 2009 Digital Scholarship and E-Research round, and also other major relevant initiatives across CASS; Organise a two-day forum for this purpose</p>	<p style="text-align: center;">February-March 2010</p>
	<p>Capacity building: Establish CASS-wide training and mentoring program through short orientation courses on key conceptual and methodological aspects of digital scholarship; In the initial stages draw on courses already on offer at RSH & ADSRI</p>	<p style="text-align: center;">First tranch of courses in place by June 2010</p>
	<p>Intersections: Ensure all CASS research themes have a digital scholarship component as far as possible; Meet formally with related clusters in other Colleges; Take into consideration the outcome of the University-wide audit of E-Research undertaken in 2005-2006</p>	<p style="text-align: center;">Ongoing</p>
	<p>Partnerships: Undertake audit of partnerships to date and ensure support to significant ones Provide incentives to seed fund and foster new and developing partnerships</p>	<p style="text-align: center;">Audit by December 2009 Existing & potential partnerships ongoing</p>
	<p>Dissemination: Encourage staff to publish or co-badge publications through ANU E-Press; Ensure that staff supervision at all levels includes raising awareness to the benefits of e-publishing in addition to publishing through more conventional academic presses.</p>	<p style="text-align: center;">On-going</p>
	<p>Sustainability: Factor costs to maintain and enhance the College Information Infrastructure (including hardware, software and professional support) into the planning cycle of the College budget.</p>	<p style="text-align: center;">Ongoing</p>

APPENDIX 3 – ADMINISTRATION – OPERATIONAL GOALS AND IMPLEMENTATION TIMETABLE

Objective	Operational Goal	Implementation Timetable
Administration	Integrate College-wide IT infrastructure and delivery services to enhance efficiency and effectiveness	Commence 2009 and ongoing
	Support the simplification of business process for staff and students through the use of on-line policies and procedures	Commence 2008 and ongoing
	Increase the base IT skills of all staff to maximize the full potential that an integrated IT infrastructure and operating systems provides	Ongoing
	Commit to continuous improvement through the use of a service level agreement	Ongoing

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- This draft plan has been developed in the absence of a full College strategic plan;
- The Executive Committee for the College is yet to make decisions about resources (particularly Section 7); and
- A comprehensive consultation process with internal and external stakeholders has not taken place in the development of this document.

ANU College of Asia and the Pacific

Draft IIS Strategic Plan

Introduction

The ANU College of Asia and the Pacific's mission is to lead Australia's intellectual engagement with Asia and the Pacific through research, teaching and contribution to public debate. In so doing, the College seeks to set an international standard for scholarship about Asia and the Pacific.

The essential quality of the College's intellectual vitality is the creative interaction among area studies, disciplinary and cross-disciplinary perspectives. Geography is central to the College's academic operations: it is the only reason we exist as a distinct entity.

The College has four priority categories (regional powers, small neighbours, sub-regions and regional themes). Each category requires a full range of disciplines (including languages) and cross-disciplinary thematic work. In all, the College strives for a creative blend of scholarly work that speaks both to the challenges of the contemporary world and unanswered questions about our past (Foundation Strategic Plan, 30 June 2009).

Given the diversity of our academic work, it is essential that the University and the College provide robust information infrastructure and services in order to achieve our mission.

Governance & Planning

College IIS Governance & Planning

The ANU College of Asia and the Pacific established an Information Technology Committee in 2006. This Committee was chaired by an academic staff member and heavily relied on the Information Technology Manager for its support. The Committee was comprised of 50% IT staff and 50% users (academic and general staff). It was not designed to provide advice on strategic planning.

The College aims to revise its governance and planning for IIS. Consistent with the ANU IIS review 2009, the College will establish an Information Strategy Committee by 2010. This Committee will be chaired by a senior academic (preferably a member of the College Executive) and will be supported by the General Manager and Information Technology Manager. This team will be responsible for the strategic aspects of information infrastructure

and services in CAP and will take the lead on the development, consultation and revision of the College's IIS Strategic Plan.

The CAP Information Strategy Committee will run a consultation process within the College and with external stakeholders to obtain input on the CAP IIS Plan. The Committee's membership will represent the key areas/functions of the College and will draw on the opinions and views of the Executive, Education and Research Committee, Outreach Committee, Administration, Publications, Information Group, Technical Services and student representatives.

Links to University IIS Governance & Planning

The College welcomes further engagement with the University in the area of IIS. However, setting our own priorities and implementing them has often been difficult given the ambiguity of priorities at the University level. A clear statement to Colleges about what infrastructure, services and resources can be provided by the University and specifying timeframes for possible implementation would be extremely beneficial.

The College will make its priorities, plans and resources clear and transparent. It will also consult broadly with other Colleges, Administrative Divisions and DOI in the development of its plan. Relevant CAP staff will be represented on appropriate IIS University committees.

Research & Education

College Specific Requirements

The ANU College of Asia and the Pacific employs 361 staff (31 March 2008). Whilst this population is unlikely to change dramatically, the College has a number of specific research and education requirements that rely on information infrastructure and services support.

The College:

- Teaches and researches the languages of the Asia and Pacific region including small enrolment languages of Burmese, Cantonese, classical Chinese, classical Japanese, Javanese, Lao, Malay, Pacific Pidgins, Hindi, Sanskrit, Urdu and Tetum;
- Is a field work based College and conducts its work in the Asia and Pacific region (at times in areas of DFAT Category 4). The College provides pre and post information and infrastructure support for fieldwork. Given the large amount of staff and student travel (over 1162 trips per year), a system that locates staff and students, and reports on all travel is critical;
- Is actively engaged in public debate via the media, organising updates, large public events (Asia and the Pacific week) and seminars (approximately 1110 media reports per month);
- Has a national role in maintaining archives and collections of publications, primary sources and data of various kinds. The College is a repository of knowledge and also helps protect and preserve other holdings in neighbouring countries (e.g. Pacific Manuscripts Bureau and Pacific Research Archives);
- Is a postgraduate hub at the ANU and requires resources to facilitate and support flexible learning as well as providing infrastructure that meets the expectations of students;
- Is characterised by a high proportion of international students at postgraduate coursework and PhD level; and

- Undertakes administrative and technical services to support the research and education priorities of the College.

Discipline Specific Requirements

The College works in a range of disciplinary and cross-disciplinary perspectives to address its four priority categories as stated above. The disciplines the College has invested in are below:

Anthropology	Environment studies	Natural History
Archaeology	Gender and Sexuality Studies	Philosophy
Criminology	Geography	Political Science
Cultural Studies	History	Psychology
Education	Law	Sociology
Economics	Languages	
Environmental Science	Linguistics	
Environment and Resource Management	Literature and Translation	

(Foundation Strategic Plan, 30 June 2009).

The College currently supports the above disciplines by a variety of information and infrastructure services. The below resources to date have been concentrated in the Research School and have not been reviewed since the establishment of the College. They are a valuable resource but are currently without common planning or leadership. An audit of College resources will take place in 2009 after the College reform process to determine where they will be located and managed in the new College structure. A process for aligning these resources with the College's strategic priorities and plans will be of importance.

Resources to Support Research

- *Pacific Manuscripts Bureau* – (Pambu) aims to provide long term preservation of and access to the documentary heritage of the Pacific Islands through various technologies (see section 9.3);
- *Pacific Research Archives* – aims to preserve invaluable and extensive collections of cultural and research material relating to the Pacific (see section 9.4);
- *Paradisec* – a distributed digital archive dedicated to sound and video recordings of languages and cultures of the Pacific;
- *Cartographic Services* – provides high quality maps and illustrations for scholarly books, atlases, journal papers, seminar presentations and theses. Cartographic Services also includes the Map Library that comprises of up to 50,000 maps, including topographic, cadastral, bathymetric, aeronautical, and geological and tourist maps.
- *Geographic Information Unit* – provides expertise and services in the collection, manipulation, analysis and display of geographic information and data collected in the field;
- *Integrated Fieldwork Laboratory* - provides a range of field equipment for loan to staff and students of CAP and parts of CASS;
- *Digital Data Archive* - is a repository and resource for geographic information and spatial data collected by researchers. This is continually being updated and modified as information is acquired;
- *The Audio Visual Laboratory* - provides staff and students with facilities for editing and archiving both audio and video data collected from a variety of sources;
- *Internet Publications Bureau* - facilitates, promotes and supports professional uses of the Internet for scholarly communication, information storage/publishing, and online research;
- *Photographic services* – is offered as a part of the College Outreach team;

- *State-of-the-art microscope facility* – is used for the analysis of pollen, charcoal, phytoliths and diatoms from ancient and modern sites. These laboratories support research into prehistoric textiles, archeobotanical remains, rock art, zoological material and ceramics;
- *Osteological Reference Collection* - a collection of animal skeletons for use in identifying bones recovered from archaeological or natural death sites;
- *Pollen Reference Collection* – a volunteer effort to assemble pollen data from a region extending from the Indian to the Pacific Ocean.
- *Ethnographic Film Unit* - Video cameras, editing lab and other facilities of the unit are available to academic staff and postgraduate students in priority departments.

Teaching and Learning

Learning Management System

The transition process from WebCT to Moodle is considered to be critical to the delivery of undergraduate courses and many College graduate coursework programs. As such, the College is approaching the implementation of Moodle with careful planning and consideration, and is closely observing best practice of other areas in the University. The College will undertake a proactive uptake of Moodle in S1 2010, and in the interim has committed the following resources:

- Employment of specialist staff by Crawford to support staff in the use of Moodle;
- The Education Design Studio is the central point of contact for the initial phase of College implementation; and
- As a result of the University implementation grants, the College is employing a specialist to work with the Japan area to create a template for languages (courses that have the most extensive use of sound and video).

The College Education Committee will continue to oversee the implementation of Moodle (and Wattle more broadly), communicate the changes to staff and will run targeted seminars as required.

Language Laboratories and Cooperative Learning Centre

In 2008, the College together with CASS commissioned a report into the current and potential value of the joint language labs in enhancing teaching and learning opportunities. Information was obtained from staff and student users.

Given the long standing and unresolved issues about responsibilities, support and maintenance, the College will amend its strategy in the delivery of languages. It aims to move away from specialist labs and software to an approach that will see languages being taught from any location on campus. This requires some limitation of the technology tools used by teachers in order to receive the support languages deserve from both the College and the University.

The original space occupied by the language laboratories is being replaced and redefined as a *Cooperative Learning Centre*. This redesign is currently underway on the second floor in Baldessin in consultation with CASS and DOI. The space will consist of 3-4 zones of learning with infrastructure that enables flexible learning and group work. Indonesian and Japanese will be delivered via video technology and as this extends beyond four classes per semester, a further investment in technical support will be required.

Education Design Studio

In 2009, the College together with CASS reviewed the joint Education Design Studio. All submissions noted the critical role of the studio and its involvement in the education innovation taking place at the ANU in a short period of time. The review considered and made recommendations on the:

- objectives and future role of the studio;
- structure and resourcing; and
- governance and planning.

The studio has been refocused to provide generalised support for teaching and learning programs and to ensure that both Colleges meet agreed University quality and compliance standards. The studio will also be responsible for supporting the hardware and software applications essential to assist innovative program delivery. The studio will be enhanced by the appointment of an Education Technologist in 2009.

Staff members were also relocated to their respective Colleges and roles and supervisors were changed to reflect this. An Advisory Committee will be established with a revised terms of reference. The requirements for ongoing funding for the studio will be a priority beyond 2010.

Student Requirements

Undergraduate Students

The ANU College of Asia and the Pacific has a small undergraduate load of 408.3 (15 June 2009). All undergraduate programs have a language requirement and therefore students will be exposed to the facilities in Section 4 at some time during their academic career. The College also provides opportunities for undergraduate students to have an overseas study experience through the Year in Asia program. As a result of the 2008 undergraduate curriculum changes, a greater number of students may spend time overseas. Enhanced IIS support will be required as a component of the student work may be assessed via the academic content of blogs.

The University also enables flexible learning by providing undergraduate students with access to the ANU's University Commons, including access to a number of computer laboratories and wireless connectivity across a range of locations on and off campus.

Until 2008/2009, all undergraduate course material was made available through hardcopy course bricks. The course bricks were sold to students through various venues depending on the course. The College has changed its approach to course bricks. Printed course bricks are only being used if there is a special pedagogical reason for doing so. E-bricks are promoted as the preferred option, either organised by the academic themselves or arranged via the library.

Graduate Coursework Students

The ANU College of Asia and the Pacific has a graduate coursework population of 447.1 (15 June 2009) (of which a large proportion is international students). Graduate coursework students have access to the Information Commons. In addition, a number of departments within the College have created computer laboratories specifically for their students, utilising student fee income to provide these services. In recent times, DOI has converted the laboratories to the Information Commons standard, with consistent image, file access arrangements and software. This has reduced information technology management issues.

HDR Students

The ANU College of Asia and the Pacific has a current HDR load of 287.9 (15 June 2009) (of which a large proportion is international students). HDR students are supplied with individual desktop computers, similar or identical in specification to those made available to staff. Many of CAP's HDR student programs involve extensive fieldwork, and the College must continue to provide financial support for this, and to ensure specific equipment such as "hardened" laptops, satellite phones and GIS equipment can be provided for use in remote/difficult field work locations. In the future, CAP HDR students may have access to the full range of information resources under Section 3.3.

The College aims to increase its HDR and Graduate Coursework student numbers which will place further pressure on IIS.

College Administration and Support

Operating Environment

College Administration utilises imaged desktops which access university wide applications and systems, as well as College Administration workgroup file shares. College administration staff are provided with Windows PC and in some cases laptops. Standard software includes the Microsoft Office suite of applications.

Links with university-wide systems

The College Administration uses the University's corporate information systems and has not commissioned any specific or shadow systems for the College, although there are emerging needs when it comes to providing management information and clear and concise reports for decision making (particularly in the area of financial and research information).

The College would find the following systems useful in improving its business processes:

- Travel system to track and report on staff and student travel;
- Electronic system for delegations;
- Development and upgrade of the HDR Component in Student Administration system (and improvement of scholarship reporting);
- Electronic system for monitoring external links such as exchanges and MoU's.

This information has been provided via the Corporate Administrative Systems Planning Committee (CSPC).

Information Technology/Enablers

Academic units within the College fund and operate their own discrete IT services. Whilst there has been some progress in rationalising common services, in efficiencies and uneven levels of resources and services still exists across the College. Since 2006, the College has been grappling with how to develop an integrated information technology strategy and office that provides services common to all. An internal IT review was conducted in 2008. This coincided with the College review and reform process and the recommendations have since been placed on hold as a number of resource decisions must be made by the College Executive. An action plan has been developed by the General Manager that outlines actions as a result of the CAP IT Review 2008 and the ANU IIS review for 2009. The recommended strategies are outlined below. *Please note: this still requires final approval by the College Executive Committee.*

Staffing (LITSS and other IT support)

The College will:

- Draft a ‘catalogue’ of services delivered under the ‘Service-in-Common’ Service. This will be characterised by services that are common to all College staff and HDR students and define minimal set of standard services valued for their campus-wide cohesion, interoperability and ubiquity properties;
- Establish a single College service for the purchase and management of all computer equipment and software (in consultation with Schools);
- Re-organise the IT Office into ‘function’ based teams;
- Undertake IT workload monitoring to establish a College formula for the even distribution of user support staff; and
- Undertake succession planning for IT Office.

Servers and Storage Infrastructure Services

The College will:

- Develop College future server, data storage and business continuity requirements to address current infrastructure approaching end of life; and
- Discuss service delivery options for such requirements with DOI.

Desktop Computers and Peripherals

The College will:

- Develop a lifecycle management strategy for College IT assets delivered by the Services-in-Common service, which includes desktops and communal networked printing, scanning and photocopying facilities; and
- Extend the College-wide Active Directory framework for computer asset management and software deployment to Crawford School.

Specialist or Enhance Services

The College will:

- Investigate specialist and/or enhanced service needs for discipline-specific requirements or newly-formed College Level II Schools. Additional services may include:
 - Installation of specialist software;
 - Audiovisual equipment;
 - Basic publishing assistance;
 - Advanced features of base software;
 - Standard web page delivery;
 - Conversion to digital formats; and
 - High performance computing

Web Content Delivery Service

The College will:

- Transfer the oversight and coordination of the College’s web presence to College Outreach Committee and Outreach Office;
- Investigate web-based technologies to enhance the College’s web presence with emphasis on user generated and dynamic content;
- Ensure that information about all the resources of the College are available via the web in a consistent manner; and
- Investigate suitable (open source) Content Management Systems (CMS) for use within College with the aim of improving efficiencies; trial the ANU CMS site (Silverstripe).

Publications

The College is extensively involved in publications of research and the research of others in their field. The College is directly involved with 78 publications of various sorts in addition to the unnumbered publications outside the University that are being used to disseminate research.

A review of the College publications and publications processes will be undertaken following the completion of the College reform process in 2010. A review should examine the College's strategy towards publishing operations, how the College will keep an overview of its publications, and ways the publication operations can be supported, particularly mechanisms to improve efficiencies in administration and business processes, editing, printing and distribution.

ANU E-Press

The College utilises E-Press, which takes advantage of new information and communication technologies to make available the intellectual output of the academic community, through the publication of scholarly text. There are two issues currently impacting on the use of ANU E-Press:

- Restrictions on the number of publications that can be processed by ANU E-Press each year; and
- The need to develop an appropriate Editorial Board for the College, given the broad scope of disciplines researched within the College. This will be considered in 2009/2010.

Libraries and Archives

ANU Library

The College will maintain representation on the Asia and Pacific Library Advisory Committee and on the Social Sciences & Humanities Library Advisory Committee, to ensure acquisitions and collections properly reflect CAP's scope of academic coverage. The College will attempt to coordinate its approach to suggesting items for the library to acquire. This will require greater preparation before Library Committee meetings and representation of the College as a whole.

Local Libraries and Collections

There are nine local area libraries within the College, and a number of reading rooms. All collections are small and generally consist of a combination of hard-to-obtain materials, journals, PhD theses, donated collections and core reference works. The College will provide a summary on the web site of the scope of our collections, where they are located, who can use them and who to contact.

CAP is expanding its use of electronic journal subscriptions through DOI and this practice is encouraged. HDR students are encouraged to deposit their theses with the Australian Digital Theses (ADT) program (<http://thesis.anu.edu.au/>) which may reduce the need for local holdings of hard copy theses.

Scholars are encouraged to provide their collections to the College or University but it is not always possible to house/store them in the ANU Library, so resources need to be identified to enable them to be stored in a local area e.g. a reading room.

Crawford School and RegNet also maintain a number of electronic database collections, which are specific to research undertaken in those areas.

Pacific Manuscript Bureau

The Pacific Manuscripts Bureau, known as Pambu, was formed in 1968 to copy archives, manuscripts and rare printed material relating to the Pacific Islands. The aim of the Bureau is to help with long-term preservation and accessibility of the documentary heritage of the Pacific Islands. The Bureau is based in the College and is a non-profit organisation sponsored by an international consortium of libraries specializing in Pacific research. It is a rare example in the world of an on-going archival project involving this high level of international cooperation and commitment.

The Pacific Manuscripts Bureau helps to preserve Pacific records of all kinds (paper and digital documents, audio recordings, photographs) on all subjects and in all languages. The Pacific Manuscripts Bureau copies records, leaving the originals with their owners or custodians. Copying is usually done at no cost to the owner or custodian, either on-site or at ANU. Access to the microfilms is determined by the owner/custodian of the original documents. Where appropriate, the original records are arranged, listed and packed for storage by the Bureau's experienced archivist. Arrangements for institutional custody of the original documents can also be made, if necessary. The microfilm master negatives are held in the National Library of Australia.

Pacific Research Archives

The ANU College of Asia and the Pacific proposed in March 2006 that the Pacific Research Archives be established to preserve the 'invaluable and extensive collections of cultural and research material relating to the Pacific' which RSPAS and its researchers had amassed over its 50 years. This material relates to a wide range of disciplines and includes field notes, audio tapes, maps, photographs, manuscripts, film and digital archives. As well as preserving important historical records, the archive also allows CAP to meet its obligations under the University's Responsible Practice of Research Policy, which stipulates that all data (including audio and video material) collected by researchers must be retained for future reference.

The College continues to support the Pacific Research Archives by funding activities (\$120,000) that benefit both the College and the Archives, and enhance the reputation of the College within Australia, the Pacific and the rest of the world. The only other archive in the world similar to the PRA is the Melanesian Studies Resource Centre at the University of California at San Diego which contains the personal papers of anthropologists who worked in the region.

The Pacific Centre in CAP sought and received funds from the International Centre for Excellence in Asia-Pacific Studies (ICEAPS) to establish the Pacific Research Archives. The proposal was supported by the Australian Association for the Advancement of Pacific Studies (AAAPS) who identified the Australia-wide need for an archival facility to house the papers of Pacific scholars. It was recognised that with the recent retirements (and deaths) of a number of Pacific scholars that valuable research material in Canberra and elsewhere in Australia was at risk of loss and destruction. It also sought to store, preserve, and catalogue and make available the personal documents, field note-books, images, audio recordings and reports and papers of former RSPAS researchers and of other individuals and institutions in the Pacific region, to contemporary researchers and students.

The Pacific Research Archives was established in February 2007 with the appointment of a Pacific Archivist. Her position is funded by the College and by the Division of Information in turn, over three years, and terminates in February 2010. The Archives is governed by a committee which includes representatives from the Pacific Manuscripts Bureau, the National Library of Australia, the ANU Archives Program, and the ANU Library.

The requirements for ongoing funding for the Pacific Research Archives will be a priority beyond 2009.

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ANU COLLEGE OF BUSINESS & ECONOMICS**CBE Information and Infrastructure Services (IIS) Strategic Directions****2009****DRAFT****1. INTRODUCTION**

This document has been produced as part of the College engagement component of the ANU's IIS Review 2009. It provides a snapshot of IIS in the ANU College of Business and Economics (CBE) in the context of the College's strategic plan, emergent needs and operational imperatives. It is expected that the position and directions contained in this document will change over time as the uncertainties of the future become clearer.

To date, IIS in CBE has been mainly focussed through the centralised CBE IT Unit, which was formed at the establishment of the College through the incorporation of the Faculty of Economics and Commerce and National Graduate School of Management IT units. However, as the frontier and scope of IIS widens, other units within the College might be expected to have increasingly significant input to IIS in CBE, e.g. CBE Educational Innovation Office. The current governance and management model in CBE can accommodate this.

The CBE IT Unit is funded by the College and reports to the Dean through the College General Manager. Major investment decisions and operational issues are referred to the College Executive for consideration. Funding of desktops and specialist software for each School is the responsibility of the relevant Head with purchases, specifications and licensing managed through the College IT Unit. It has oversight of compliance with relevant ANU policies, interface with ANU 'corporate systems' and network facilities, and liaison with relevant units within ANU, including the Division of Information (DOI). CBE does not run shadow systems for any of the major, corporate, administrative systems. The most recent College review was undertaken in 2008.

This model has proven successful and has delivered effective and efficient services to the College at a relatively low cost. The 2008 review reaffirmed satisfaction with the model and its ability to deliver a high standard of service and planning for the future consistent with the College's objectives and strategy. The review also served to inform decisions about a range of developments, to which the College is now committed.

2. GOVERNANCE AND PLANNING**2.1 CBE IIS Governance and Planning**

CBE IT reports to the Dean and College Executive through the College General Manager and is subject to reviews from time to time. Supervision is provided by the College General Manager, operational guidance is provided the College General Manager, Deputy Dean and Dean, and the College Operations Committee, and strategic guidance is given by the College Executive and the College's IT Working Group chaired by the Deputy Dean and comprising the IT Manager, College General Manager and a representative from each School and CAMA. A recent review by the IT Working Group revealed a high level of satisfaction from the clients and endorsed the future directions detailed below.

CBE IT is expected to be both proactive and responsive in providing, managing and maintaining IT infrastructure within the College. It is needs and demand driven being informed at multiple levels – individual user (staff, students and visitors), Head of School regarding specific school needs, College Executive (including the Dean, Deputy Dean and College General Manager) regarding operational positioning and strategic directions, CBE IT

Working Group and the College Operations Committee for feedback on user satisfaction and emergent needs, within group monitoring of risks, emergent trends and technology change, and liaison with DOI regarding centrally provided infrastructure and services and related governance issues.

The College has adopted a number of suggestions made by the CBE IT Working Group. These were developed having regard to the College's strategic plan and on the basis of demand and need within the College, the age and state of critical IT infrastructure within the College, and various scenarios emerging within DOI and across the University.

The CBE domain described in 5.1 below is sitting on aging technology which makes the domain less reliable than is desired. CBE IT is in the process of moving all the services currently offered to newer and more reliable servers with more recent and supported software. This ensures CBE will have a sound basis for the immediate future (3-year time horizon), which can accommodate change and growth with minimal downtime for the users.

The College is currently replacing the aging technology with a view to virtualising the whole domain, give the College the latest mail and server technology, upgrade the backup solution offering increased redundancy, make initial advances toward the ANU's IIS integration policy and decrease server maintenance tasks for CBE IT. It also includes full knowledge transfer ensuring CBE IT staff are in a position to manage the whole system once the work is completed (expected completion and implementation in August 2009).

The work in progress involves migration of the current 2000/2003 CBE physical domain resident on legacy CBE Hardware to a single, virtualised Windows Server 2008 domain resident on a combination of CBE server hardware and Division of Information (DOI) SAN based storage. The end result will deliver a best practice, virtualised domain built on fault tolerant hardware with a comprehensive yet granular data protection capability. The component technology platforms have been chosen to be common with DOI standards (Microsoft/VMWare/Sun/HDS/Commvault). This will allow CBE to take advantage of DOI purchasing power, be hosted within DOI datacentre facilities and allow CBE staff to leverage the existing skillset around these technologies resident in DOI. The process will also facilitate knowledge transfer relevant to the ongoing administration of the environment.

Specifically, the current upgrade will involve:

- Rationalising the two domain environment into a single Microsoft Server 2008 Domain.
- The existing Exchange 2000 server be upgraded to Exchange 2008.
- Hitachi Data Protection Suite (Commvault) be installed to provide back up and data archiving.
- All but one of the production servers retired from the production environment.
- CBE moves to the centrally provisioned "storage as a service" model offered by the ANU DOI.
- All existing physical servers are virtualised onto a high availability VM ware configuration based upon two high performance Sun blade servers (resident within the DOI Crisp Centre in a DOI-provided Sun blade chassis) and the SAN storage provisioned by ANU DOI.
- One Dell 2850 will be redeployed as a backup and Virtual Centre server. The existing LTO4 autoloader will be retained as a backup device. The existing SAN disk array will be redeployed as a disk to disk to tape cache.

Other planning issues

The recent installation of additional wireless nodes within the College precinct has improved wireless coverage. CBE IT will undertake further work in the near term, both independently and in conjunction with DOI, to explore how the wireless technology might be used to improve services to students and staff.

Audio-visual and computing support for CBE teaching spaces particularly in the HW Arndt Building and the new CBE building – urgent consideration needs to be given to the most cost

effective and efficient manner of providing audio-visual and computing support for these teaching spaces.

The blurring of the boundaries between conventional IT, audio-visual and technological support for educational innovation (flexible learning, Wattle, etc.) raises a number of management considerations which need to be pursued in the near term.

Consolidation of all IT needs to ensure the College's objectives are being met and future growth is being catered for. Essentially this will involve integrating more comprehensive disaster recovery procedures, placing a greater focus on risk management, tracking and monitoring assets and licenses, tightening security, improving the scope and range of services offered to clients, providing greater accountability for support staff, upgrading remote access and updating all procedures and documentation.

Consideration of the College's needs is being undertaken in the context of developments in DOI and other parts of the University. There will also be ongoing investigation into the next phase of improving the network services offered to clients. This will (eventually) include investment in the latest technology (both hardware and software) affecting both the underlying infrastructure and the desktops used by all CBE staff. During this investigation phase all options will be explored with particular attention afforded to the services offered by DOI. However, before these services can be seriously considered DOI need to be able to provide an objective, consolidated strategic plan, accurate costings for the services and specify the level of support that will be provided. CBE will be unwilling to make use of DOI's services unless there is evidence of a level of service, efficiency and effectiveness matching that currently provided by CBE IT.

Long term planning issues

The long term goal is the implementation of new network services. The nature of these improvements is largely unknown at this stage as adequate investigation of the options is yet to be undertaken. Some likely scenarios include:

- Full virtualisation of desktops
- Implementation of thin desktops
- Integration with DOI's UDS Domain
- Possible further centralisation of services in common across campus

2.2 Links to University IIS Governance and Planning

CBE links to University governance and planning in a number of formal and informal ways:

- CBE IT/IIS is subject to the relevant ANU rules and regulations
- CBE IT liaises regularly with DOI and LITSS in other Colleges
- CBE links through a number of formal and semi-formal ANU committees and project teams
- CBE links through the ANU budget process

3. RESEARCH

3.1 CBE Specific Requirements

- Large data sets
- Behavioural modelling (may require new facilities, hardware and software)
- Possible expanded use of 'super-computing' facility

3.2 Discipline Specific Requirements

As in 3.1 above.

4. TEACHING AND LEARNING

4.1 Learning Management System

CBE requires access to and support for a learning management system.

4.2 Teaching Laboratories

- Behavioural (computer) laboratory
- Dedicated IT facility for postgraduate coursework students

4.3 Teaching Rooms

CBE has a number of teaching rooms including lecture theatres and tutorial rooms. All are equipped by CBE to minimum ANU standards and in a number of cases exceed the minimum. CBE works closely with Space Services regarding these facilities. Construction of a new CBE building, including a significant number of new teaching spaces, is well advanced with completion expected in December 2009. The AV/IT fitout of the new teaching spaces will be to a high standard with specifications and ANU compliance developed in close consultation with the Technical Services section of the Space Services Program in the Division of Information. It will be important going forward to ensure that teaching spaces, including ANU general pool teaching rooms, are equipped (and supported) to facilitate changes in teaching modes and student expectations. e.g. flexible delivery, streaming and recording of lectures, in-class (electronic-based) interaction, etc. A new model for the provision of support for the College's teaching spaces will be developed during the latter part of 2009 in consultation with, where appropriate, Space Services and other parts of DOI.

4.4 Student Requirements

4.4.1 Undergraduate Students

- CBE undergraduate pass degree students are catered for by the Information Commons. An increase in numbers will have implications for the ANU Information Commons.
- Undergraduate honours students in CBE are catered for by an in-house honours IT laboratory/work space funded by CBE. No significant changes are envisaged in this regard.

4.4.2 Graduate Coursework Students

- Dedicated IT facilities for postgraduate coursework students (IT laboratory and work spaces)
- Planned growth in postgraduate coursework enrolments has implications for the College and the University infrastructure.

4.4.3 HDR Students

- Planned growth in HDR enrolments will have implications for the College and the University. Accommodation for HDR students has been incorporated in the planning for the new CBE building.
- May be some new needs in relation to support for HDR research. See 3.1 above.

5. CBE ADMINISTRATION AND SUPPORT

5.1 Operating Environment

CBE is a fully integrated teaching and research college. It offers undergraduate degree programs in Actuarial Studies, Business Administration, Commerce, Economics, Finance, International Business and Statistics in addition to associated combined degree courses. The College also offers a range of graduate programs at graduate certificate and diploma, master and PhD level. Student enrolments in the College comprise approximately 2,500 undergraduate EFTSL, 460 postgraduate coursework EFTSL and 85 higher degree by research EFTSL. Approximately 40% of the College's students are international students. The College has a significant research and outreach agenda in each of its disciplinary fields.

The College structure comprises a central College administration, four academic schools and a number of research centres. The central College administration group includes the Dean/Chair's Office consisting of the Dean/Chair, Dean/Chair's Executive Assistant, College General Manager, Deputy Dean, Associate Dean (Education), Associate Dean (Research) and Associate Dean (Research Training), College Student Administration, Research Services Office, Marketing and Development Office, Finance & Business Services Office, Education Innovation Office and the College IT Unit. There are approximately 160 full-time equivalent academic staff, 46 general staff and a number of academic visitors.

The College IT unit provides IT support to the College's teaching, research and administrative programs. It manages the College's internal IT server infrastructure, synergistically interacting with the campus-provided infrastructure. The IT office also supports all the desktop hardware (approximately 400 machines) and applications on a mainly Windows XP platform (using Office 2003), with a small number of Macintosh computers. There are also teaching room facilities requiring support and a small number of computer laboratory environments. The server infrastructure is Windows based and is currently in transition from Windows 2000 to Windows 2008. The IT Office is responsible for the facilitation of telephone services (mainly IP) and related trouble-shooting for the College. The College's website is currently being redeveloped as a major source of information concerning the College's operations for internal and external users. CBE IT works in close conjunction with various stakeholders within the College, both staff and students, and with colleagues in other parts of the University, most noticeably staff in DOI and the LITSS network, to provide and manage, and test demand for, IT infrastructure and services relevant to the work and needs of the College. CBE IT also uses these networks, and staff development and training to stay abreast of changes and developments in IT.

The College is currently running a Windows Server 2000 domain offering the following services:

- Internal DNS, DHCP and WINS management
- Active Directory user and account control
- Storage space and roaming profiles
- Print server
- Microsoft Exchange e-mail with Outlook Web Access
- Internally managed desktop deployment
- Internally managed Help Desk package
- Internally managed website based on MySQL, PHP and CSS
- Locally supported network applications
- Centralised local hardware and software acquisition
- Provision of RDP for remote access

Clients can request assistance through the help desk system, the dedicated help desk phone number or by calling into the office. Response times for most requests are appropriate depending on the nature of the request. CBE IT also provides some support for equipment and IT services in the HW Arndt Building teaching spaces. This is done partially in conjunction with parts of DOI.

5.2 Links with University-wide Systems

CBE links with:

- The majority of DOI managed network and IIS infrastructure systems, including telephony and communications
- The majority of ANU enterprise systems, particularly the core administrative systems
- Teaching rooms through Timetabling and Space Services

CBE works closely with DOI and relies on DOI for provision of some essential services. These include but are not limited to:

- Network infrastructure (routers, switches, cabling and wireless)
- Software licensing (site licenses and asset tracking)
- Teaching space and audio/visual support
- Telephony
- ISP services

6. INFORMATION TECHNOLOGY / ENABLERS

6.1 Staffing (LITSS and other IT Support)

CBE currently employs five full time staff in its IT unit. This consists of a Manager, a Systems Administrator and three Help Desk personnel who undertake substantial project work. Some additional support is periodically provided by staff within the Schools. This is generally

consequential to other principal duties and not dedicated IT support. Staff support (currently one position) for flexible learning/education innovation initiatives is provided through the CBE Education Innovation Office – this is not, however, dedicated IT support.

It's likely that the staff complement will need to be expanded in the near future to cope with the significant growth which is foreshadowed for the College during the coming planning period. Staff training has been stepped up to assure staff knowledge and capability. Active consideration is also being given as to how best to provide the mix of IT, audio-visual and educational technology support that will be required in the College.

6.2 Servers and Information Infrastructure Services

See 2.1 and 5.1 above. The current replacement and upgrade of aging technologies constitutes a major refresh of the College's core IT infrastructure and places the College in a good position to respond to needs, demands and developments over the next few years. Servers and associated equipment and software plus College information infrastructure services (including staffing of the College IT Unit) are funded and managed at the College level, and accounted for in the annual planning cycle leading up to the budget round.

6.3 Desktop Computers and Peripherals

See 2.1 and 5.1 above. The College currently has approximately 400 desktops and associated software, which are managed and supported by the College IT Unit. It is likely that this number will rise over the next few years. Desktops (and any specialist software) are budgeted for and funded by each local area within the College (the 4 academic Schools, the Centre for Applied Macroeconomic Analysis, and the College Central Administration). The rollover period for desktops is generally 3 years, corresponding to exhaustion of warranty and maintenance contract. The College IT Unit periodically alerts each local area to the status of each of its desktops to enable timely budgeting for replacement. At any time, a small number of new machines is held in reserve as a contingency.

6.4 Specialist or Enhanced Services

None other than specialist software used by the College to support electronic tutorial allocation.

6.5 Web Content Delivery Service

See 2.1 and 5.1 above. CBE supports and manages its College website but does not currently have dedicated web positions within the College IT Unit. The skill set in the Unit is, however, being grown and developed to enable better support for web operations. The website is also being redeveloped throughout 2009, in concert with the ANU web transformation project and the ANU (and College) rebranding exercises. The website is a critically important component of the College.

7. PUBLICATIONS

7.1 ANU E-Press

Some CBE staff use ANU E-Press. The journal *Agenda* is edited and published through ANU E-Press. It's possible that use of ANU E-Press will grow in the future.

8. LIBRARIES AND ARCHIVES

8.1 ANU Library

No significant changes to current practice and usage is envisaged. Planned growth in both staff and student numbers will have an implication for the Library as will further moves to electronic storage and access.

8.2 Local Libraries and Collections

CBE has no local libraries or collections.

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CECS IT Strategy – Draft of Strategic Principles – V2 (14/6/09)

Bob Williamson

- All IT support is **driven by the mission** of the college – the support of research and teaching.
- IT is **coordinated and supported centrally**
 - The IT support group is managed by the College Business Manager
 - Oversight and liaison with the staff and students is facilitated by the IT Steering Committee which advises management college on concerns and priorities
 - Regular assessment of quality of service is undertaken
- The college recognises the large (and typically invisible) total cost of IT support. Its three key strategies for dealing with this are
 - **Total Cost of Ownership (TCO):** The college will make the costs explicit through analysing all issues of where to provide support and how by Total Cost of Ownership.
 - It is expected that by conducting TCO analyses of existing systems that the number of bespoke systems that are maintained in-house will decline over time and the college will reap efficiency gains. All existing assets to be evaluated. Part of the evaluation will entail study of appropriate financing mechanisms; i.e. should centrally managed desktops be college assets, budgeted by the college, with departments paying a service fee?
 - **Service Oriented Perspective:** Focussing on the services provided rather than the technology itself – what matters to the college is what the IT systems do. As long as the appropriate service is provided issues of ownership and control are less relevant
 - **Explicit Documentation and Responsibilities:** All services provided are to be explicitly documented (including clear lines of responsibility).
 - The college expects that by explicitly documenting the services needed and currently provided will allow a **cleaner interface to the ANU DOI** and allow a more rational basis for decisions concerning split of responsibility. Decisions regarding what the college does vs what is done centrally are driven by analysis of needs of college and TCO
- In recognition of the diverse needs (support staff and less IT-focussed academics versus IT focussed and intensive users) there are **two distinct support models**

- A clearly documented standard operating environment managed by the IT support group. This will likely imply a limited set of desktop/laptop systems.
- A set of infrastructure services (also clearly documented) to enable college members who need systems beyond the SOE to self-administer their solutions with the freedom they need to achieve their academic goals
- **IT staff are properly managed**
 - IT support staff are provided time and opportunity for professional development
 - This can provide an opportunity to contribute to open source software. Such contribution is a side effect and not a justification for allowing the PD time.
 - IT support staff do IT support. Academic staff do teaching. There is a clear separation of responsibilities. Performance management in-place for both.
 - Research programmers and engineers are not college IT support staff (and should not do support staff functions). They are *users* of IT services like others and can report to academics.

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ANU College of Engineering and Computer Science

Draft IIS Strategic Plan

Introduction

The College of Engineering and Computer Science commissioned a review of its IT across the College in July 2008. The review provided a plan for improvement including recommendations relating to how to organise resources. Since that time, the combined IT groups within CECS have been preparing a plan for integration of resources across the College to meet the vision of a fully integrated team and IT system.

Care has been taken to implement at a pace through 2009 that is not disruptive to teaching and research activities within the College, and in line with other structural changes implemented late 2008 by the College Dean, which includes conflation of four Departments to two Schools and the creation of a fully integrated College support structure. An additional complexity for this College is that we teach and research into the discipline of Computer Science and Information Engineering requiring particular needs and considerable flexibility in the teaching and research domains. Coupled with this need for greater flexibility with our IT systems is a greater resourcing demand.

The three IT groups have commenced work under one senior IT manager. Detailed consideration as to how the research, teaching and administrative support requirements will be met is currently being developed.

The way the group is deployed and the technical solutions to be developed to achieve an integrated system are both part of the criteria to be considered by the College IT Implementation group—chaired by the College IT manager. A report from this group is due within the month.

Governance & Planning

College IIS Governance & Planning

IIS planning within CECS is carried out by senior IT staff in response to requirements. There is consultation through the general manager where plans will have a long term or significant cost impact. Recognising the limitations of current arrangements the CECS IT review 2008 recommended the formation of a committee “... constituted to advise the Dean through the College Advisory Board on the governance, strategic directions, and planning of Information Technology support, scholarly information matters, and provision of services, within the College and in the university”. The Chair of this Committee has been identified—Professor Bob Williamson, Director ICT.

Links to University IIS Governance & Planning

The IT manager is a member of the Infrastructure Advisory Assurance Committee (IAAC) and the Infrastructure Advisory Assurance Committee (IAAC). Senior IT staff liaise with DoI where DoI plans impact on CECS. The College also has representation on the University Assurance Committee.

Research

College-Specific Requirements

Much of CECS research and teaching involves IT so it's not surprising that we have a large number of special requirements:

- Experimental hardware
- Robots
- Computer Teaching Labs
- Computer Room Access for students
- Hosting special-purpose compute hardware in computer rooms
- High-performance desktops
- Experimentation with Operating Systems
- Experimentation with Networking
- Software development
- Engineering hardware with specialised computer hardware/software requirements.

Discipline-Specific Requirements

As a teaching and research College in Computer science and information engineering—a heavy reliance on agile computing systems is business-critical.

Both Computer Science and information engineering have the above specific requirements—by staff, HDR and undergraduate students.

Teaching and Learning

Learning Management System

The College has established a flexible learning unit, and is commencing application of Wattle the University wide system. Web CT has been used also in delivery of undergraduate material. As part of the College IT implementation group is to consider how to better integrate this emerging form of education delivery.

CS has traditionally utilised per-course websites that are each administered by the course co-ordinator involved. The Department has recognised that it needs to work towards a more consistent “look and feel” and so towards a Learning Management System (LMS). We are awaiting the deployment of the new ANU WATTLE system (currently due for semester two, 2009). In the meantime we also have a requirement to operate systems such as Moodle (same system as WATTLE), Joomla and Drupal for teaching and course development reasons for particular courses.

Teaching Laboratories

CS relies on a number of teaching laboratories for the delivery of coursework material as well as providing students with a resource for independent research and development of assessment items.

Over recent time periods, more and more undergraduate students and others will bring their own laptop devices into labs and other classes and so we need to provide "spaces" for these machines to be used, as well as providing some background level of support for our more specialised software packages. It could be anticipated that all courses be taught using laptops provided either by the students or by the School/Department.

Most of the existing labs (five out of eight) have machines provided by DoI as well as much of the supporting infrastructure such as desks, chairs, network switches, file servers etc. The machines in these labs are administered by CS technical staff as the teaching requirements for these labs cannot be managed by existing DoI desktop support staff (mainly, we require the machines to run the Linux O/S and DoI have staff proficient in Microsoft Windows and Apple OS X).

The rest of the teaching labs (Software Engineering project area, Masters lab and fourth year Honours/individual projects lab) have equipment provided by CECS and are likewise managed by the CS technical staff. Teaching labs within CECS are run cooperatively by DoI and CECS IT.

Student Requirements

Undergraduate Students

Wireless networking, LMS/online course materials, external login server, web-quota (provided by DoI).

Graduate Coursework Students

These students are supported in a way similar to undergraduate students. They are also provided with their own lab.

HDR Students

HDR students receive a level of IT support at the same level as that of staff. CECS has 182 HDR students.

College Administration and Support

Operating Environment

Background

Since the review all IT staff have been working closely together on a range of projects to consolidate the groups and provide a more consistent environment across the college.

Administration

CECS administration already has a desktop SOE across the college on a common network with a consistent standard of hardware.

Academic Personnel

Teaching and research staff and students require a range of different operating systems for their work. This means that no single SOE will satisfy all needs for the foreseeable future. Currently several SOEs are provided for desktops across CECS using Microsoft Windows XP, Linux and Apple OS X.

Self-managed computers

Some personnel require or prefer to use a non-standard operating system. These are designated “self-managed” machines and a reduced level of IT support is provided for them.

Laptops

Laptops represent a growing proportion of staff computers. IT staff experience is that the use of a conventional, locked-down SOE is not practical on laptops as these are too limiting, especially at remote locations. Also, staff tend to have a wide range of hardware preferences

which makes a single SOE very difficult. Consequently laptops are run in the same way as self-managed desktop machines. Laptops require a disproportionate amount of IT support time.

Multiple OS Installations

Running multiple OSES on a single machine either through boot time options or concurrently via a VM environment is a convenient and increasingly popular option. The RSISE SOE is a dual-boot Windows XP and Ubuntu Linux installation. One problem with such installations is that they can multiply the amount of IT support required.

Off-campus Personnel

A large number of CECS personnel (mostly postgraduate students) are located off-campus at NICTA's London Circuit premises. Their computers and software are owned by the ANU.

Links with university-wide systems

Integrated Communications Network

The ANU Integrated Communications Network (ICN) is intended to replace multiple older communications networks on campus in handling computer data, telephony and steamed video services.

CECS is required to obtain its Internet connectivity via the ICN. Our network connexion to the campus backbone, network devices within CECS buildings and cabling to office outlets are managed by DoI. There is an exception within DCS which operates most of its networks independently, i.e., it purchases its own ethernet switches which are isolated from DoI switches.

Firewalls

CECS currently operates its own firewalls. Recently DoI has offered and encouraged the use of virtual firewalls based on hardware that's part of the campus backbone. CECS IT will continue to work with DoI to consider the best option given the high flexibility requirements of CECS researchers and teaching staff.

Telephony

Telephone services are provided through DoI. Some handsets are IP-based, rely on the campus network and have regular scheduled down-time. Many phones are still conventional analogue handsets which are much cheaper and more reliable.

Video Services

CECS is not currently a user of the video services offered via the ICN. DoI has a policy of not providing video services to parts of the ICN not using firewalls provided by DoI.

Domain Name Services (DNS)

The cecs.anu.edu.au and rsise.anu.edu.au domains are delegated to name servers within CECS. This arrangement exists because, previously, there was no support for operating subdomains of anu.edu.au without using separate DNS servers. In fact a 'flat namespace' policy used to exist forbidding subdomains whereas the current policy directs us to move towards cecs.anu.edu.au. We would be open to moving back to a centrally provided DNS service that supports our subdomains, particularly if we could avoid all change requests going through hostmaster@anu.edu.au and if an external (to the ANU) secondary service was provided.

World Wide Web

CECS makes some use of web services provided by DoI but the great majority of our content is provided by our own servers. We do this because the DoI services available to us are set up to provide static content managed by a few users whereas we have:

- Enterprise applications, e.g., studentdb, seminars, asset and people databases, web-mail and calendar services,
- The ability for all users to publish their own content both static and dynamic, and
- A need to keep published URLs valid as long as possible.

Electronic Mail

CECS has historically provided its own email service because some of our email users have requirements beyond those provided by DoI, e.g., storage of over 5GB of email or the use of over 10 000 separate mail folders. We also provide a secure, authenticated send and receiving service available off campus which is something only recently provided by DoI. Our associated web-mail service is integrated with our web-based calendar system. Finally, our relatively small, local service provides a faster, more responsive service to our users.

Calendar

We use the open-source eGroupWare software to provide a web-based calendar service. Recent developments mean we will soon be able to support syncing of this calendar with PDAs and mobile phones via the Internet.

DoI provides a calendar service via Microsoft Exchange for the use of only some staff including some senior CECS staff. Since it's not expected that this service will be expanded for use by all staff and postgraduate students CECS can not recommend its use to our personnel.

DoI provides a second calendar service (in conjunction with its web mail service) for use by staff and students. This service sees little use on campus and appears to be minimally supported. It does not support syncing to portable or mobile devices.

Mailing Lists

CECS provides a large number of mailing lists on its own mailman installation. These lists allow CECS personnel to send well-targeted postings within the organisation. Membership of the lists is based on CECS' 'people' database.

The mail ANU mailman service provided by DoI provides only a few automated lists for CECS and these are college-wide lists. With the college restructure we need automatic lists not only for the new schools but also for each research group. Since membership of these groups is not known to ANU HR the required mailing lists cannot be provided by DoI.

Authentication (LDAP)

CECS uses the, DOI-provided authentication (LDAP) service (based on UniIDs) for some services. Since we also provide other internal services (email, file servers, web servers, etc.) we need our own LDAP service to support these.

File

Currently there's a mix of file service and backup strategies across CECS. RISE uses a central file server whereas DCS and, to a lesser extent, DE, more commonly rely on local storage on end-users' machines. Most of the existing file servers are due for replacement within 2009 so it's expected that a new central file and backup service will be required with a capacity of around 20 TB. The option of provisioning this service from a DoI data centre will be investigated.

Applications

Many campus-wide web-based applications provided by DoI are used extensively within CECS, including:

- ESP Finance
- ESP HR
- WebCT
- OLAMS
- DoI Helpdesk
- Library Catalogue
- Horus
- ANUBIS

There are other services not available centrally that we've therefore had to provide for ourselves, including:

- People Database
- Asset Database
- Software Database
- StudentDB
- Seminar Lists
- Resource Booking System

Wireless

The wireless Ethernet service provided by DoI is not secure and is not suitable for use by experimental equipment. CECS has maintained its own, separate system (originally known as 'ANUNorth'). Very recently, DoI network services has replaced CECS wireless hardware with new equipment supporting both the ANU and CECS systems in parallel. A new 'ANU Secure' wireless service is also being deployed with may allow most CECS wireless users to use this new service. It's expected that the CECS wireless network will continue to be required indefinitely for use by experimental equipment.

VPN

The security of the CECS wireless network is based on an associated CECS VPN service. This service also allows remote access to the CECS network allowing staff to work from home or overseas. The advent of the 'ANU Secure' wireless network and a DoI VPN service may allow the CECS VPN service to be shut down.

Licence Service

CECS runs a licence service to administer some commercial software within the college. The service is used by many other areas on campus just for Matlab. CECS is the largest user of this software on campus and has historically managed its purchasing and administration

Information Technology / Enablers

Staffing (LITSS and other IT support)

There are nine permanent IT staff within CECS:

- James Ashton (IT Manager)
- Bob Edwards (Head, DCS Technical Services Group)
- Peter Shevchenko (Senior IT Administrator)
- Matt Gray (Senior IT Administrator, Research Programmer)
- Steve Hanley (Senior IT Administrator)
- Hugh Fisher (Senior IT Administrator)
- Andrew Wilkinson (IT Administrator)
- James Fellows (IT Administrator)
- Shaun Press (Research Programmer)

In addition, Teddy Mantoro (Senior IT Administrator) is on leave without pay and Chris Thomson (IT Administrator) holds a full-time casual position that will end within weeks.

This figure of nine staff is down from twelve in 2007.

Of these staff not all are full time and some hold dual roles of teaching and developers which is an important part of the professional accreditation requirements of our course offerings.

Servers and Storage Infrastructure Services

CECS operates over fifty servers in production. Mission critical hardware is typically run with a three- to four-year life cycle backed by maintenance contracts and/or spare hardware. Old server hardware retired from mission critical duty is often reused for other purposes. Most hardware is relatively low-cost commodity server equipment, some of it rack-mounted. As yet no blade servers, SAN disk hardware or server virtual machines are in use. We are continuously evaluating and investigating options in this area as existing hardware comes due for replacement.

Desktop Computers, Laptop Computers and Peripherals

A desktop or a laptop computer (rarely both) is provided for all staff and postgraduate students; around 300 computers in all. Equipment is purchased with a three-year warranty but expected to average a four-year life cycle. One standard model desktop and laptop is recommended per year in an attempt to simplify the task of maintaining an SOE. Personnel with special requirements supported by a head of department can opt for different equipment with a reduced level of IT support.

Most printing is via large workgroup size copier/printer/scanner/fax devices on five-year maintenance contracts. There is a current project to move all these printers to a single, college-wide printer network. Some senior staff have local (non-networked) printers in their offices though this is discouraged due to the high cost of support and consumables.

Specialist or Enhanced Services

A/V Facilities

CECS IT staff support several seminar, board, meeting and video conference rooms across the college with AV and IT equipment to facilitate presentations.

Experimental Equipment

With a wide range of IT and robotics teaching and research in progress there's a continuous stream of requests for the support of specialist hardware. Examples include:

- Compute clusters,
- One-off software installs on many platforms,
- 3D visualisation facilities (“The Wedge”),
- Server equipment donated or loaned by manufacturers,
- Workstations using graphics hardware to accelerate computation,
- Mobile Robots with special wireless connectivity requirements,
- Wireless and Wired connectivity to an autonomous car,
- Computers supporting engineering equipment, like CNC lathes and mills,
- Teaching of OS development in a secure environment.

Computer Rooms

The large amount of IT infrastructure in CECS has resulted in there being five computer rooms in use. With the consolidation of IT staff into a single, college-wide group this number should be reduced to no more than two in the medium term. At least DCS will continue to require a computer room for the foreseeable future as some teaching activities require physical access for students. Other server infrastructure may, over time, be able to be relocated to a DoI-run facility with restricted physical access.

Movement of server equipment to one or both of the two main ANU server facilities has a range of issues:

- Power (especially air conditioning) efficiency will be improved
- Higher cost (blade) servers will be required (with virtual servers)
- Server reliability should be improved
- Servers remote from CECS will reduce reliability
- Blade server management should simplify server purchasing and configuration
- There will be training costs for IT staff
- Having CECS IT staff at a distance from the server hardware will have a time cost.

Web Content Delivery Service

CECS provides three main categories of web services:

Official Content

The main CECS web site, containing largely static content, is focussed on external users but also contains links to pages for internal consumption. Static content is maintained using a content management system.

Enterprise Applications

Several database and web servers are used to support a range of CECS enterprise applications.

User Content

CECS Academic staff and postgraduate students can publish their own content via separate web servers. In some cases researchers have provided dynamic content to showcase their projects.

Publications

ANU E-Press

Libraries and Archives

ANU Library

Local Libraries and Collections

CSES maintains its own library.

ANU College of Law

Information and Infrastructure Systems Strategic Plan

Introduction

Governance & Planning

College IIS Governance & Planning

The ANU College of Law governance and planning structures have been in place for a significant time. The primary body charged with developing the strategic direction of IT within the College and with resolving conflicts and determining priorities is the IT&C Committee. Membership of this committee is reviewed annually by the Dean, and there are a number of ex-officio positions on the committee to provide a level of continuity of expertise. The 2009 IT&C Committee membership is:

Associate Dean* (Chair)	Prof Stephen Bottomley
Director, Educational Development*	Dr Jonathan Powles
Associate Director, Educational Development*	Mr David Catanzariti
ICT Manager*	Mr Phil Drury
College General Manager*	Ms Alison Daun
College Marketing Manager*	Ms Christine Denny
COAST Manager*	Ms Christine Debono
CEIST Manager*	Ms Aliya Steed
Law Library representative*	Ms Debbie Forbes
Law School staff member	Mr Brad Jessup
Legal Workshop staff member	Ms Lyn Du Moulin
Student representative	Mr Stephen Priest

*Ex-Officio members

Links to University IIS Governance & Planning

Members of the ANU College of Law sit on several University level committees. Perhaps the most successful and long lived of these committees is the Infrastructure Assurance Advisory Committee (IAAC) and its partner committee the Infrastructure Planning Advisory Committee. The membership of the IAAC and IPAC committees consist of the IT Managers of the seven colleges and DOI representation at the Executive level.

The College also has representation on the UISC and on AAAC both of which are currently undergoing a restructure. The College General Manager attends the Core Administrative Systems Planning Committee (CASPC) which provides an opportunity for College IT planning issues relating to administrative systems to be discussed in a wider University forum. A planning list of developments to systems has been drawn up and the DOI and

Division Directors work with the Committee to plan amendments and improvements to systems and to ensure funding for this work is sourced.

These committees have assisted the ANU College of Law in sharing information, in building relationships with other Colleges and in advising the University on its IIS strategic plans

Teaching and Learning

Learning Management System

For many years the ANU College of Law has run a mirrored system with WebCT to provide services that the closed system could not deliver. Now that an open sources system, Moodle, has been selected to replace WebCT the College finds itself in a position to scale back the development of its own system and redirect its efforts into transferring the functionality required by Law into the University system. These efforts have been continuing for a while with cross training and secondments between DOI and the College.

Because the new Moodle system (known as Wattle at the ANU) will not meet all of the objectives of the College, Law we will be running a system called SIMPLE but we will be doing it in such a way that a much closer integration with Wattle and its authentication model will be possible. To achieve this not only have members of the IT&C Unit been working with the SIMPLE pioneers at Glasgow University but talks have started with DOI about the best authentication method for all systems to use.

Hopefully as Wattle matures on campus, with a view to going into production in 2010, both the functions of the Law Learning Management System (LMS) and the SIMPLE integration projects will dovetail into this timeline.

Student Requirements

Teaching Spaces – Physical and Virtual

Undergraduate Student IIS requirements are heavily predicated on the success of the new LMS. The ANU College of Law is well down the path of Flexible Learning with both undergraduate and postgraduate courses. To that end the College has set up a specialist unit that concentrates on educational design, the College Education and Innovation Support Team (CEIST) to review and assist lectures in the redesign of their courses for the eventual placement, and use on the LMS.

Physical Theatre space will still be required at the College. With the University Wireless network covering a large part of the teaching space across campus, more and more students bring personal laptops into class. Unfortunately our current teaching spaces have not had sufficient, or well placed, power outlets to cover the need. Discussions with DOI Space Services is well down the track with the Law Link theatre being upgraded this year to accommodate in-seat power, with the other teaching spaces being upgraded over the next couple of years.

While the power upgrade is being done, other technology will find its way into the Law teaching spaces. An increasing number of students are demanding that lectures be made available in an asynchronous way, and while work by CEIST may change the style of the traditional lecture, some method of recording of material will still be required. The Law Theatre is going to be upgraded to accommodate the new improved version of the Digital

Lecture Delivery (DLD), incorporating video and data capture so that “Vodcasting” to students of material will become another method of flexible delivery.

We accept that such technology can not be made available everywhere we want to teach and as such we will maintain and expand our fleet of handheld recorders so that lecturers who wish to use the outside amphitheatre, teach in other locations or simply want to record additional material in their offices can continue to do so. Integration of Law’s system of recorders and DLD v 2 for streaming and, or some form of file transfer (mp3) is no issue. Expansion of our technical services will come about as a direct result of pressures on existing resources by an increasing number of lecturers using this system and an increasing acceptance by the student population of these technologies being the norm.

College Administration and Support

Operating Environment

One of the underlying philosophies of the ANU College of Law is the premise that the administrative and support staff are just as important as the academic staff to the life of the College. To that end the Information Systems in the College do not distinguish between the two types of staff except in certain operational requirements. All administrative staff computer systems are replaced as part of a College wide program and they have access to the same level of general software as everyone else, enabling easy communication and collaboration.

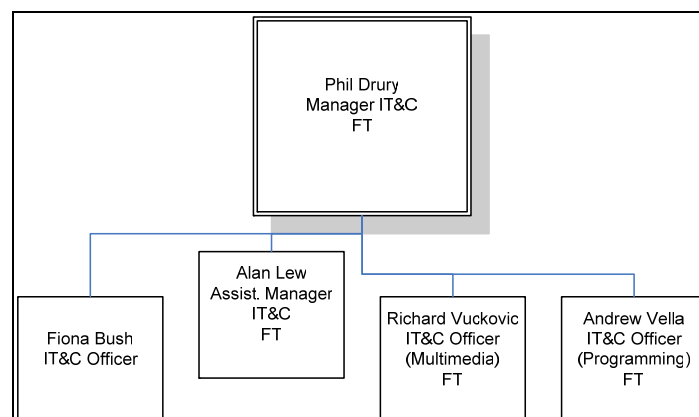
Though our Email system, Groupwise, the Administrative Staff have the ability to send and receive Calendar and Tasking events. Groupwise has always had the ability to interact with other iCal compliant calendaring system and now that the rest of the ANU is moving down this path I expect that use of this system will expand beyond the College.

Other technologies that Administrative Staff have ready access to are the obvious scanning and printing as well as the ability to store information in a central repository to be shared with other members of the same team or rest of the College.

Information Technology / Enablers

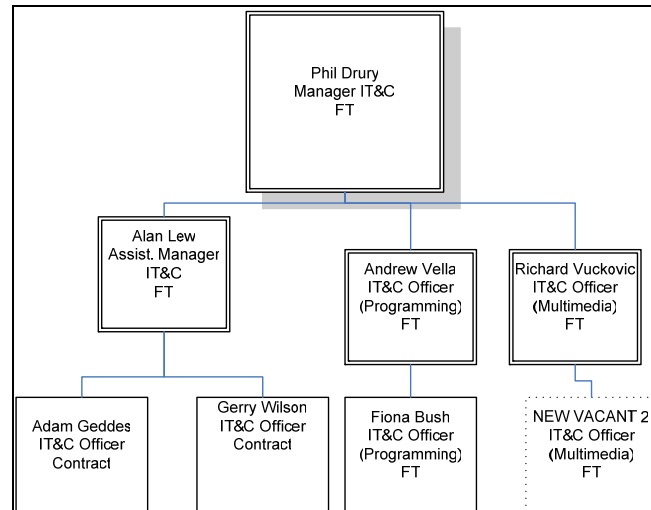
Staffing (LITSS and other IT support)

The ANU College of Law has a central IT support model with 5 full time staff supporting all of the IT aspects of the College. The current structure has been in place for some years now and does require some augmentation as the College grows and develops its activities.



Current Structure

With several projects in the pipeline, a general increase in the overall numbers of supported users and location as well as increase in the complexity of the operations of the ANU College of Law, the current structure is stretched beyond what is reasonable for the quality of support that the College is used to. As a result of this we have been looking at several different models



The model above is just one of those currently under consideration but is dependant on a number of other projects coming to fruition.

Servers and Storage Infrastructure Services

The College has been paying close attention to DOI initiatives such as the temporary CRISP data centre and the proposal for two new data centres to be built within the next 5yrs and would like to think that these facilities could be used for housing the future server needs of the College. However CRISP, which was due for completion in December 2008 is not yet operational (March 2009) and there are now grave doubts as to physical access to the facility making it probably unsuitable for the College's immediate needs, however we will continue to monitor developments in this area.

The ANU College of Law runs several servers inside its own dedicated server room, several years ago the College invested in an IBM Blade centre and 7 blades to run its operations. The IBM Blade centre is coming to the end of its useful life and replacement or component upgrade to extend its life cycle is under active consideration. The primary storage facility of the College is a two tiered system comprising of 2Tb of Fibre Channel connected drives and 4 Tb of SATA drives.

In 2009 the College will be making two major changes to its server operations, with both virtualisation and some form of automated Hierarchical Storage Management (HSM). Virtualisation will give the College two major advantages over its current "one server per blade" system in that;

1. we will be able to reduce the number of blades required and as a consequence reduce our carbon footprint and;
2. we will be able to commission and decommission servers far more easily as well as more dynamically allocate resources to those servers.

Automated ASM (most likely Comvault) will give the College the ability to make far better use of its tier two storage facility while giving the end user the experience of viewing all files

as if they were in one location. This is extremely desirable to the ANU College of Law as a large percentage of our stored files have not been touched for more than two year but the staff still desire real time access to these files.

The Colleges primary backup facility is an SDLT tape robot with twin 160/320Gb drives for redundancy, fibre connected to the IBM Blade centre, this unit has served the College well over the last 5 yrs and while there is no real problem with its continued operation there is scope to upgrade the actual drives in the robot. The upgraded drives would decrease the number of tapes required for nightly backups and decrease the physical storage requirements. If this upgrade was to go ahead it would not be until 2010, after the HSM upgrade.

Off site storage of critical backup tapes and other files should be acceptable for the next 5 yrs with the caveat of a 2nd safe required off site should the College continue to store all of its tapes beyond the 7yr cycle.

Desktop Computers and Peripherals

The ANU College of Law runs a re-fleeting program whereby all systems within the College are changed over at the same time. This program used to operate as a successful leasing system however, due to changes in ANU policy it is now funded by Development Bank loans with the annual costs being debited from the Colleges IT&C budget. There are many reasons why this practice works well within the College of Law however there are also good reasons why it can not be lifted up and applied to other Colleges in the same manner.

Members of the IT&C Unit have sat on the PC/laptop tender evaluation committee for many years now and as result have obtained from, and provided to, that committee very useful information about the evaluation of equipment. It has also obtained significant cost and warrantee advantages.

We are currently in our 1st year of our 4th cycle (each cycle lasts about 4 yrs) with a full deployment of ACER equipment and our next examination, baring rapid expansion, of this program is in 2012.

Printer and Copying Services

The ANU College of Law does not have a need for Chemistry labs or a need for access to the Supercomputing facilities, what it does need and what it has access to is a variety of high speed/high capacity printing devices. The College also runs a re-fleeting program with its main printing resources, on a 5 to 7yr cycle, which is offset to the desktop and server replacement programs. Currently the College is entering year 4 of the current print cycle and is due to examine replacement device in 2011. At this point in time the college is gathering its photocopier equipment and replacing them with colour Print/Scan/Copy engines, possible negating the need to re-fleet in 2011, something we will examine closer to the time.

PDA's and the University Wireless system

With data accessibility available from most fixed systems both on and off campus, the College is looking at real data access on portable devices such as PDA's and smartphones. The College already has in place two servers capable of transferring data to Windows CE based PDA's and now has developed this capacity for its Blackberry community. Currently both sets of PDA's have the ability for real time reception and transmission of email, calendaring and scheduling of events and is fully integrated with our GroupWise email solution. The only service that we currently lack is access to a full cross campus wireless network which would significantly reduce the running costs of these devices. The IT&C Unit is maintaining a watching brief with the DOI regarding cross campus wireless propagation.

543/2009

Australian National University

IT/IS Working Party Progress Report

ANU College of Medicine, Biology & the Environment
ANU College of Physical Sciences

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1. Executive Summary

The ANU College of Medicine, Biology and the Environment (CMBE) and The ANU College of Physical Sciences (CPS) is currently in the process of reviewing the delivery of IT services. The draft information Infrastructure Services (IIS) strategic Plan submitted on the 1 April 2009 is the current Joint Colleges' plan until the review process by the IT/IS Working Party is completed in September 2009.

The IT/IS Working Party is focused on reviewing where coordinated services could exist, what are the broad requirements of such services and make recommendations on suitable IT structures that would enable coordinated IT services across CMBE, CPS and DOI as appropriate. The IT/IS Working Party expects stage 1 of the review process to be completed in September 2009 and has identified the need to establish five subgroups to review each of the following service groupings.

1. *Client Support Services*
2. *Infrastructure Services*
3. *Specialist Research Services*
4. *Teaching & Learning Services*
5. *Administrative Systems*

The IT/IS Working Party subgroups has developed a Catalogue of IT Services for each of the five service groupings with the objective of identifying whether there is opportunity for coordinating a service and if so recommending where the coordination would be best served. A report outlining recommendations from each subgroup will be provided to the IT/IS Working Party shortly. In addition the CMBE & CPS IT Managers are providing a complete list of related IT projects across the Joint Colleges.

The IT/IS Working Party is in the process of investigating possible IT structures that would enable coordinated IT services across CMBE, CPS and DOI. The IT/IS Working Party has identified the need following 3 key components to exist within the Joint Colleges to enable a coordinated IT structure.

1. *IT Governance body – Linked with the USIC*
2. *IT Operational body – Linked with the DOI*
3. *IT Consultative Group(s) – Provide input and feedback from Research and Teaching services*

The IT/IS Working Party has made the following recommendations to the Joint Colleges Executive Committee (JCEC).

Recommendation 1

The IT/IS Working Party focus on reviewing where coordinated services could exist, the broad requirements of such services and make recommendations on suitable IT structures that would enable the coordination of such IT services with central University service providers.

Recommendation 2

Establish a Network and IT Security operational group to develop an effective and coordinated network & IT security service for CMBE & CPS. The initial objective of the group is to develop a network & IT security plan jointly with DOI to meet the needs of the Joint Colleges of CMBE & CPS. The group would report to the current CMBE/CPS IT Managers group.

2. Introduction

The Joint Colleges of CMBE & CPS is currently in the process of reviewing the delivery of IT services through the CMBE/CPS IT/IS Working Party. The draft information Infrastructure Services (IIS) strategic Plan was submitted on the 1 April 2009 and is still the current Joint Colleges' plan until the review process by the IT/IS Working Party is completed in September 2009.

The IT/IS Working Party progress report is the Joint Colleges response to the OVC request for a final approved submission of the Information Infrastructure Services (IIS) strategic Plan. The IT/IS Working Party is taking in to the consideration the 10 recommendations made in the Information Infrastructure

and Services Review 2009 along with information being received through the review process with the objective identifying a suitable coordinated IT service aligned with the strategic and operational requirements of the Joint Colleges and University centres.

3. IT/IS Working Party Focus

The IT/IS Working Party is in the process of reviewing the Joint Colleges' IT structure and relationship with University centres and has noted that the objective in developing a coordinated IT service for the Joint Colleges' IT function is much broader in scope when compared to the other Joint Colleges' functions as IT across the schools, Joint Colleges and the University has not successfully established coordinated structures for the governance or operation of IT.

The IT/IS Working Party therefore has identified the need for a two stage strategy for the Joint Colleges as part of the plan for a coordinated IT function across CMBE, CPS and DOI as outlined below.

- Stage 1 – Recommendations from the IT/IS Working Party on an enabling IT Structure capable of reviewing, developing and implementing coordinated IT services across CMBE, CPS and DOI.
- Stage 2 – The implementation of the enabling IT Structure capable of reviewing IT service requirements in detail, developing and implementing coordinated services as identified through the IT/IS Working Party.

The two stage strategy allows the IT/IS Working Party to focus on reviewing where coordinated services could exist, the broad requirements of such services and make recommendations on suitable IT structures that would enable coordinated IT services across CMBE, CPS and DOI as appropriate. The IT/IS Working Party expects stage 1 of the review process to be completed in September 2009.

The existence of a suitable IT structure to enable coordinated IT services as part of stage 2 would facilitate the detailed review of each of the services which may need to be planned over a period of years as the scope and impact will be extremely broad. A well establish coordinated IT structure would enable better alignment of coordinated services and systems across the Schools, Joint Colleges and University centres. The role of the IT/IS Working Party within such a structure may need to be reviewed.

Recommendation 1

The IT/IS Working Party focus on reviewing where coordinated services could exist, the broad requirements of such services and make recommendations on suitable IT structures that would enable the coordination of such IT services with central University service providers.

4. IT/IS Working Party Subgroups

The IT/IS Working Party is currently focused on stage 1 and has identified the existence of five service groupings across the Joint Colleges IT function. Subgroups of the IT/IS Working Party have been established for each service grouping with appropriate representation from across CMBE, CPS and DOI with the objectives as described below.

1. *Client Support Services subgroup* is reviewing the delivery of IT Helpdesk support services identifying where coordinated and standard delivery in support services across CMBE & CPS and DOI is possible.
2. *Infrastructure Services subgroup* is reviewing hosting and environmental services identifying duplicate infrastructure services and services-in-common and whether a service is best served within the School, Joint Colleges and/or the University centres.
3. *Specialist Research Services subgroup* is reviewing highly specialised services unique to the Joint Colleges and is identifying the possibilities for any coordinated services.
4. *Teaching & Learning Services subgroup* is reviewing related IT services identifying requirements with the objective of the IT function having a stronger service presence for Teaching & Learning within the Colleges.

5. *Administrative Systems subgroup* is reviewing university enterprise systems and the requirement of local database and shadow systems identifying duplicate systems and whether a service should be provided within the Schools, Joint Colleges or the University centres in the short and/or long term future.

5. Surveys and Reports

The IT/IS Working Party subgroups has developed a Catalogue of IT Services for each of the five service groupings identifying where the provision of a generic service exists across the nine school IT departments within CMBE & CPS. The extensive list of services is currently being reviewed by each subgroup with the objective of identifying whether there is opportunity for coordinating a service and if so recommending where the coordination would be best served.

A final report outlining recommendations and a complete catalogue of IT Services from each of the subgroups will be provided to the IT/IS Working Party along with a complete list of related IT projects from CMBE and CPS IT Managers.

6. IT Structures

The IT/IS Working Party is working in parallel to the subgroups and is currently in the process of investigating possible IT structures that would enable coordinated IT services across the Schools, Joint Colleges and the University centres. The IT/IS Working Party has identified a block diagram (as shown in figure 1) suggesting a model capable of providing appropriate communications for coordinated IT services as they relate to the Joint Colleges.

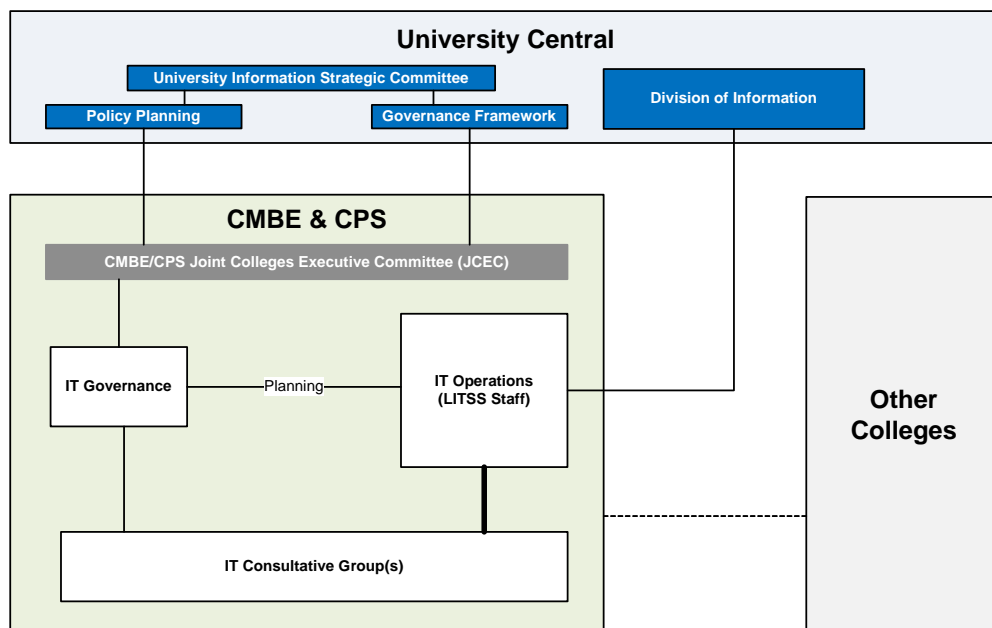


Figure 1

The block diagram identifies 3 key blocks that need to exist to enable coordinated IT services across CMBE & CPS. Each block as currently identified is described below:

- *IT Governance* - could be a block that would enable communication to flow from the UISC through the 2 CMBE & CPS representatives in to the Colleges and similarly from across the two Colleges up through to the UISC. This would provide the Joint College Executive Committee, the Joint Colleges’ decision making body, with an IT assurance and advisory group capable of representing the Research and Teaching requirements of the Joint Colleges.

- *IT Operations* - could be a block made up of LITSS staff suggested to have operational links with DOI to enable participation at the design and planning stages of projects being developed by University centres or local IT services to support the Colleges.
- *IT Consultative Group(s)* - could be a block of group(s) that would allow input and feedback to flow from the Administration, Research, Teaching and Student group of clients across the Colleges in to both the IT Governance and IT Operations blocks as appropriate.

The IT/IS Working Party is continuing to discuss further the possible details for each of the three blocks identified above. The IT/IS Working Party will receive reports from the five subgroups outlining recommendations for coordinated services shortly which will assist in identifying suitable options for a coordinated IT structure across CMBE, CPS and DOI.

7. Network and IT Security Group

The CMBE/CPS IT Managers group has forwarded a recommendation to the IT/IS Working Party for consideration of a Network and IT Security operational group that would assist the IT function in managing and planning of the Joint Colleges' IT network environment.

The CMBE/CPS IT Managers group has identified the need to establish a Network and IT Security operational group to develop an effective and coordinated network & IT security service for CMBE & CPS.

It is proposed the group membership consist of relevant technical representation from each of the nine plus school IT departments and would include appropriate DOI operational representatives. The group would be chaired by the Joint Colleges' IT Manager and report to the CMBE/CPS IT Managers group. The group would also call upon relevant consultants as required.

The initial objective of the group is to develop a network & IT security plan jointly with DOI to meet the needs of the Schools, Joint Colleges and University centres. The group will enable a mechanism, not available within the Joint Colleges presently, to resolve network communication issues under the Joint Colleges' current IT structures. The existence of such a group may also pose as an example of how coordinated service may be provided in to the future.

Recommendation 2

Establish a Network and IT Security operational group to develop an effective and coordinated network & IT security service for CMBE & CPS. The initial objective of the group is to develop a network & IT security plan jointly with DOI to meet the needs of the Joint Colleges of CMBE & CPS. The group would report to the current CMBE/CPS IT Managers group.

★9 Admin Divisions System Outlook Plans

PURPOSE To receive information

SPONSOR Director, Information Services

RECOMMENDATION That the Committee note the proposed plans

ATTACHMENTS

Admin Divisions System Outlook Plans (544/2009)

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
REGISTRAR & STUDENT SERVICES				
2008	iMIS Phase 2	Development of research performance management reporting with the inclusion of HDR student and supervision related information	Statistical Services	50000-
2008	Student Card Replacement	Replacement of all student cards to prepare for the introduction of new security technology and replacement of current card validation processes	Facilities & Services	Unknown
2009	AHEGS	Implementation of the ANU Australian Higher Education Graduate Statement	Registrar	100000+
	SA - HELP	Implementation of the Student Amenities Fee	Registrar	50000-
	DEEWR Reports	Implementation of the National Student Data Collection reporting suite for Admissions data	Registrar	50000-
	Study@ANU Phase 4	Refinement of online forms, functionality and reporting to support the College program and course approval processes and integration with current content management functionality	Registrar	100000+
	EDMS	Implementation of Alfresco pilot for the support of electronic applications	Central Records	50000-
	Integration of Student Information System and WATTLE	Integration of Student Information System and WATTLE	DOI	Unknown
	Implementation of Innovation Pack Release 1 - Relationships and Affiliations	Implementation of Innovation Pack Release 1 - Relationships and Affiliations	Registrar	100000+
2009/10	Online Deposit Payments	Facility to allow the payment of deposits by international applicants to streamline application process and reduce manual payment processing	Registrar	50000-
	Enquiry Management System	Introduction of contributor relations management style system to enhance ANU's enquiry management capabilities, improve accessibility of advice and content, and provide strategic reporting	Unknown	250000+
2010	Support of the USQ MOU	Support of the USQ collaborative MOU on delivery of education	Executive	Unknown
	Syllabus Plus Upgrade	Replacement of existing timetabling application with upgraded version that replaces technology with internet delivered application and additional functionality	Registrar	250000+

	Student administration system changes for HDR students	Implementation of changes recommended by the 2009 HDR Working Party to facilitate management of HDR students	Registrar		100000+
	Replacement of Dudley	Replacement of degraded unsupported database with new client management software that is integrated with student administration and timetabling systems for Disabilities Services Unit	Registrar		50000-
	International Student Services Client Database	Introduction of a new client management database to facilitate the support, intervention and compliance requirements of International Student Services	Registrar		50000-
	Replacement of the SIGN Mentoring database	Replacement of the SIGN Mentoring database	Registrar		50000-
	Implementation of an International Links database/repository	Implementation of an International Links database/repository	Registrar		Unknown
	Implementation of the Digitary application for viewing official University documents securely online	Implementation of the Digitary application for viewing official University documents securely online	Registrar		100000+
	Implementation of Innovation Pack Release 2 - Application Web Services & GL interface changes	Implementation of Innovation Pack Release 2 - Application Web Services & GL interface changes	Registrar		100000+
	Teaching and Learning Evaluations	Student system integration with Teaching and Learning Evaluations application	CEDAM		Unknown
	Implementation of Innovation Pack Release 3 - Program Based Enrolment	Implementation of Innovation Pack Release 3 - Program Based Enrolment	Registrar		100000+
2010/11	Academic Advisement Deployment	Deployment of Academic Advisement functionality to provide improved service and advice to students on program progression and look to automate graduation eligibility checking	Registrar		250000+
	Database Separation	Separation of the Student Information System and HRM databases	Registrar and Director	HR	100000+
2011	Online scholarship application	Online scholarship application forms with student administration system integration and online applications	Registrar		Unknown
	Online forms - review and replacement of existing	Completion of a comprehensive review of all paper forms to replace either through deliver of self service option in ISIS or other electronic means.	Registrar		Unknown

	paper forms			
	Implementation of a University wide tutorial allocation system	Implementation of a University wide tutorial allocation system	Registrar	Unknown
	Implementation of Innovation Pack Release 4 - Unknown	Implementation of Innovation Pack Release 4 - Unknown	Registrar	100000+
	Implementation of Innovation Pack Release 5 - Unknown	Implementation of Innovation Pack Release 5 - Unknown	Registrar	100000+
2012	Review of Study@ANU Content Management system.	Review of existing Study@ANU content management system in line with ANU strategic directions and technological advances with the view to replace/upgrade.	Registrar	Unknown
	Online student payments	Review and expansion of student online payment facilities to introduce a single electronic payment gateway of a range of miscellaneous charges currently supported by various systems across Campus	Registrar	Unknown
	Implementation of Innovation Pack Release 6 - Unknown	Implementation of Innovation Pack Release 6 - Unknown	Registrar	100000+
	Implementation of Innovation Pack Release 7 - Unknown	Implementation of Innovation Pack Release 7 - Unknown	Registrar	100000+
2013	Review and upgrade/ replacement of student administration system	Review of existing student administration system in line with ANU strategic directions and technological advances with the view to replace/upgrade.	Registrar	Unknown
	Implementation of Innovation Pack Release 8 - Unknown	Implementation of Innovation Pack Release 8 - Unknown	Registrar	100000+
	Implementation of Innovation Pack Release 9 - Unknown	Implementation of Innovation Pack Release 9 - Unknown	Registrar	100000+

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
FINANCE & BUSINESS SERVICES 2009	iMIS	Budget & forecast tool, now likely to be 2010.	Director, FBS	F&BS estimated 4 more months, of in kind. DOI /Focus Cost – \$300,000
	Campus car booking tool	Green initiative, assist sharing resources across colleges	Director, FBS	F&BS - in-kind contribution DoI - \$30,000
	LTIP (long term investment pool)	Off the shelf product to manage Investment Portfolio - currently in-house Access database.	Director, FBS	Not yet known. Tender process underway. Options - Up to \$500,00 and \$100,000 pa maintenance fees. (FUNDED IN 2009 Budget)
	OCR/AP automation	Automation of the AP function - scanned invoices/ reduction in data entry	Director, FBS	DOI - max of \$100k in software & hardware. External - \$100k. F&BS/DOI staff - in kind
	Travel Management Database	Mgt of Travel absences & approvals (CoS exists - ?Uni Wide application)	Director, FBS	Not yet available- Circa \$250,000 purchase cost plus F&BS /DOI staff - in kind

	Assets Database (Grants Equipment)	TBA	Director, FBS	Two meetings held with the end users. Requirements spec., not yet rec'd therefore not possible to cost. Allow \$200,000
	Conference Management	One Stop Web Conference Registration Module Receipting Module was commissioned in 07	Director, FBS	Application is in. CoL. Still to advise if we can remove it off the Colleges priority list. Completed - 0 cost
2009/10	Archiving	Help improve performance, Accounts Payable implemented Sept 99	Director, FBS	In kind from DOI / F&BS
	Reporting	Reporting / data extraction is under continual development request from end users and University management.	Director, FBS	In kind from DOI / F&BS
	Bank Reconciliation Database	Key internal control - currently managed in separate Access database. Timeliness of bank data high for all areas, especially students.	Director, FBS	In kind from DOI / F&BS
	Report Distribution	Delivery of key reports to the desktop of relevant user	Director, FBS	In kind from DOI / F&BS
	Automation of TT/Wires	Interface between PS Financials & Global Pay Alliance - speed up issuing of wires/ save resources/ reduce errors	Director, FBS	In kind from DOI / F&BS
	Exchange Rates Gains & Losses	Automation of the accounting entries for FX gains & losses will improve timeliness of reporting, improved grant reporting etc	Director, FBS	In kind from DOI / F&BS
	Bar coding interface with ESP AMS (Asset Mgt System)	Improve stocktake process. Assist with mgt of assets etc	Director, FBS	\$50K
	Integration of ESP Financials with 'electronic' delegation system.	Improve approval function / assist with system access/ PC issuing etc	Director, FBS	Hopefully just in kind from DOI & F&BS.
	Workflow	Definition of workflow to be agreed (is it just for AP approvals for eg). Need to be supported driven by the HR system (to cater for absences, acting etc) and the delegations system to a certain extent.	Director, FBS	Not costed. Needs ANU delegation system first.
	Electronic storage of large \$ assets images	Assist with asset mgt/ stocktake/ insurance etc	Director, FBS	Not costed
	Automation of low \$ PC transactions	To be determined	Director, FBS	In kind from DOI / F&BS

	'Bulk charge out database'	Assist timely & accurate disbursements of charges		Director, FBS	Unlikely to proceed in light of OCR project.
2011/12	Review ANU Financials	PeopleSoft/Oracle was selected in 1998 by selective tender. ANU to revisit future direction.		Director, FBS	Not yet scoped If move from PeopleSoft could be \$2m
	Review ANU Cashiering	PeopleSoft/Oracle was selected in 1998 by selective tender. ANU to revisit future direction.		Director, FBS	Not yet scoped

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
FACILITIES & SERVICES				
2009/10	Space Management	A review of space management processes and the current locally designed data base has been completed. There are clearly gaps in the functionality of the system. While it provides a "snap shot" of space allocation - it has limited value in providing more detailed space data - such as space utilisation, compliance issues etc. It does not integrate with timetabling, AUTOCAD or other asset data bases. In the longer term, a more sophisticated system will be required, particularly as more space becomes vacant due to new capital works. The space management functionality will be reviewed as part of the Asset Management system (see below)	Director, F&S	\$100,000
	Capital Works Planning and Delivery	Capital works data are currently captured in a series of excel spreadsheets - some locally managed by the relevant Project Coordinators. With an increasing capital works program, there is a need for a system that centralising these data and assists in University management in tracking capital works progress from feasibility to completion. Information from this system would also feed into the Strategic Asset Management System (see below) providing the foundation for long term life cycle management and planning. A system user brief is being compiled and will be completed by August. This will then be used to determine whether there is a suitable proprietary product in the market or whether the existing (locally designed) database should be redeveloped.	Director, F&S	\$100,000

Strategic Asset Management	There are currently a number of Divisional systems and/or desktop databases (eg. excel spreadsheets, individual Access databases) that capture data on assets. However, there are still gaps in these electronic records, including information on heritage status, BCA compliance, environmental performance and OH&S issues. The Division is currently reviewing business processes and will shortly develop a scoping document for a proprietary asset management system to capture all these data, as well as integrating with existing systems such as Maximo, Cardax and BMS. We are also reviewing the options of using the IMIS to warehouse and report information from existing systems. This business process review will be completed in August 2009.	Director, F&S	\$400,000
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In addition to the above, as part of improving the efficiency of services, the Division will be considering options for integrating the timetabling system with Security Access and BMS, thereby providing an automated option for opening booked lecture theatres/teaching rooms and this reducing the need for security officers to manually open/close areas. Similarly, depending on the final design of an Asset System and how broadly it would be used, this may also be defined as an Enterprise system.

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
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UNIVERSITY ACCOMMODATION SERVICES

2009/10	StarNet	StarNet enhancements including implementation of the Incident Module	Director, UA	
	Web portal	Web portal to support online management processes	Director, UA	
	PeopleSoft interface	Investigation and feasibility of a PeopleSoft interface	Director, UA	
	Asset Management System	UA requires access to an Asset Management System to support cyclical maintenance and condition reporting of facilities	Director, UA	
	System to Monitor Visitor Activity	Development of a system to monitor visitor activity is critical, not just to accommodation planning, but also to monitor and report wider University targets	Director, UA	

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
HUMAN RESOURCES				
2009	HRMS Post-Prod Release 2	Work completed - Online OHS Incident Notification From to 'go live' end June/early July 2009	Human Resources	< 50K
	HRMS Post-Prod Release 3	Residual work from HRMS Advancement Project - in progress. Includes e.g.: a) Remuneration reporting b) Online general casual staff timesheets c) Quick Hire	Human Resources	< 50K
	Implementation of 'The Varied ANU Enterprise Agreement 2005-2009'	System changes required for implementation of 'The Varied ANU Enterprise Agreement 2005-2009' including: a) new salary structure; b) rostering academic annual leave	Human Resources	50K-100K
	Ongoing reporting & business process improvements and patching	Continuous improvement and legislative/policy changes including implementation of system patches/versions provided by Oracle PeopleSoft to meet legislative compliance, fix bugs and/or provide additional functionality	Human Resources	
	HRMS Archiving	ESP HR (V7 HRMS) must be archived to ensure legislative record-keeping compliance. DOI are seeking for this to be done as soon as possible so that hardware can be decommissioned.	Human Resources	< 30K
	ePerformance (incl ePortfolio, Academic Promotions)	Implement Oracle PeopleSoft ePerformance module as a tool to support ePerformance management at the ANU.	Human Resources	Licence (already purchased) + < 100K
	IAS Processes	Process to support review processes and information capture as required for implementation of the proposed IAS	?	Unknown
	OHS Systems	Implementation of systems to support OHS legislation and compliance including: a) Chemical Inventory System (ANUCIS) b) Plant and Equipment management system (investigating use of Maximo)	Human Resources	50K-100K
iMIS Phase 3 (HR Metrics)	HR Health Check reporting using iMIS	Statistical Services	50K-100K	

	Review Time & Labor Module	Determine if the Oracle PeopleSoft Time & Labor module is required to meet the University's business needs or if: a) timesheet processes in progress OR b) other open source options provide a more effective solution.	Human Resources	
2009/2010	Delegations	A delegations system is required to: a) record delegations and delegation profiles b) assign and track delegations to positions c) integrate delegations with major control points e.g. travel approval using workflow d) reports and queries as required	Human Resources	> 100 K
	Electronic forms	Electronic forms can contribute significantly to streamlining business processes. As the University moves to expand the use of workflow to support delegations and processes, the ability to deliver standard forms electronically and integrate these forms with core administrative systems becomes of high importance.	?	Unknown
	HR/SA database separation	Changes to support provided by Oracle PeopleSoft for the Campus Solutions module require the combined HR/SA database to be split given the same changes do not apply to the HRMS.	DOI/HR/DRSS?	Unknown
2010	Ongoing reporting & business process improvements and patching	Continuous improvement and legislative/policy changes including implementation of system patches/versions provided by Oracle PeopleSoft to meet legislative compliance, fix bugs and/or provide additional functionality		
	Onboarding project	This project is intended to streamline processes for bringing new staff 'on board' to the ANU e.g. University access, initial induction training etc. Collaboration with DOI is required particularly in regard to Identity Management.	Human Resources	< 50K
	Talent Management System . Career Planning Tools . Succession Planning Tools	The skills shortage is likely to impact the way the University seeks and retains talent. Investigate the capability of the tools available in the delivered HRMS and implement as required. Consideration of the tools used to support recruitment at the ANU is also required (see below).	Human Resources	Unknown
	Review & evaluate recruitment systems	The current online recruitment system (ImpeIHR) needs to be evaluated in the context of talent management to determine if a more sophisticated product is required to meet the University's longer term goals (see above).	Human Resources	<50K
2011	Ongoing reporting & business process improvements and patching	Continuous improvement and legislative/policy changes including implementation of system patches/versions provided by Oracle PeopleSoft to meet legislative compliance, fix bugs and/or provide additional functionality	Human Resources	

	New online recruitment system?	Depends on outcome of 2010 review.	Human Resources	Unknown
	Workforce planning forecasting & modelling tools	As workforce planning extends from looking at short-term staffing needs to projecting future requirements, tools to support forecasting and modelling will allow the university to better manage its risks in regard to future workforce needs.	Human Resources	>100K
2012	Ongoing reporting & business process improvements and patching	Continuous improvement and legislative/policy changes including implementation of system patches/versions provided by Oracle PeopleSoft to meet legislative compliance, fix bugs and/or provide additional functionality	Human Resources	
	Competency (capability) management module	Investigate the capability of the competency management tools available in the delivered HRMS and implement as required.	Human Resources	<50K
<u>Other University-wide Support Systems</u>				
2009-2010	Identity Management System	Collaborate with DOI	DOI	
	Travel Management System	Collaborate as required with F&BS re possible integration with HRMS		
	Integrated University Help Desk	The current HR Help Desk is only available for 'Customer Service Agents' within the HR Division. There is a significant requirement to extend this to HR staff in the colleges and to extend the functionality to support other University functions such as student recruitment (using Knowledgebase capabilities) and administration etc.	?	Unknown - depends on scope
	Electronic Document Management System	Not HRD-specific project	DOI	
	Role-based Portal	Not HRD-specific project	DOI	

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
RESEARCH OFFICE				
2009	Finalise development of rDNA module and deploy it	This work has been delayed by the urgent need to implement the ERA module. The rDNA module will replace the ageing GENESIS system and be used only in the Office of Research Integrity. Likely timeframe September 2009.	Director, Research Office	\$30K
	Specify, develop, test and deploy ERA module of ARIES	This work is being done in conjunction with the University of Sydney and Murdoch University. The three universities are jointly specifying, commissioning, paying for and testing the functionality required to make ERA submissions.	Director, Research Office	\$30K
	Provide specifications for an ANU repository as required by the ERA exercise.	This is a joint project with DoI - DoI will build the Repository, Research Office will test the design and supply items for upload from ARIES.	Director, Research Office	\$150K
	Finalise development of Commercialisation module, test and deploy it	Specifications for the final piece of functionality in the Commercialisation module were signed off on in March 2009. Work has been delayed by the ERA exercise. Likely timeframe early 2010	Director, Research Office	\$60K
	Populate management information fields in Grants module	Fields for HERDC income and Cost Adjustment Factor have been added to the Contracts/Grants module and are in the process of being populated. This process is partly algorithmic and partly manual, depending on the complexity of the funding. The task to input previous year's data is ongoing.	Director, Research Office	Recurrent budget. Estimate at 1.0 FTE ANU level 8 for 2-3 weeks, \$4K per year
	Review and enhance Animal Ethics	The Animal Ethics module was developed early and, unlike most of the other modules, did not replace an existing system. Technical specification is being developed.	Director, Research Office	work uncoded, estimated \$20K
	Detailed specification and development of user reporting for Human Ethics	Reporting from Human is currently a combination of generated forms and specialised Access queries. There is a need for a reporting interface similar to that for Contracts/Grants and Publications.	Director, Research Office	work uncoded, estimated \$20K

<p>Review and specify enhancements for Contracts/Grants module</p>	<p>The contracts and grants module went into production in late 2005. It has been heavily used since then by a very large user base. Over the past three years business processes relating to grants have changed as the ANU college structure matures. The review will involve extensive and detailed consultation with College research management staff. The review will be informed by the release of the new external funding policy and procedures due in the third quarter of 2009.</p>	<p>Director, Research Office</p>	<p>work uncoded, estimated \$50K because major data architecture changes are required.</p>
	<p>As with Animal Ethics, many of the lessons learned in developing the Human Ethics module have potential for improving business processes and workflow in the Contracts/Grants module.</p>		

If the Excellence in Research for Australia (ERA) initiative, the Research Quality Framework replacement, requires system changes, they will need to have high priority as the timetable is externally driven.

The Australian Research Council is in the process of releasing a new version of GAMS, its Grant Application Management System. It is possible that minor changes may need to be made to ARIES to allow the continued uploading of data for ARC Discovery Grants. Similarly, the National Health and Medical Research Council is developing a new grant application and management system which has the potential to impact upon the Contracts/Grants module of ARIES.

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
STATISTICAL SERVICES				
2009	Initial academic contribution report	Development of academic contribution report prototype using existing data warehouse data and identifying data gaps for final development	Director, Statistical Services	*Operational
	Scholars Gate	Provide data extract for use in Scholars Gate project.	Director, Statistical Services	*Operational
	Human Resources (work force planning)	Incorporation of HR data into the data warehouse.	Director, Statistical Services	**\$250,000-\$500,000
	Human Resources (Health Check Report)	Include Business rules into data warehouse processing to enable supply of Health Check report (currently a manual process)	Director, Statistical Services	**\$250,000-\$500,000
	Org Structure	Review and standardisation of ANU organisational structures to provide a standardised reporting platform.	Director, Statistical Services	**\$250,000-\$500,000
	ERA		Director, Statistical Services	**\$250,000-\$500,000
	Citation Benchmarking	Inclusion of citation data (Scopus and or Thomson Reuters) into the data warehouse for integrated research reporting	Director, Statistical Services	**\$250,000-\$500,000
	Final academic contribution report	Finalisation of Academic Contribution Report adding in fields dependent on HR data.	Director, Statistical Services	*Operational
	AHEGS	Provide publication data to Australian Higher Education Academic Statement	Director, Statistical Services	*Operational
	2009-2010	College reporting	Collect College reporting requirements, identify data gaps in data warehouse.	Director, Statistical Services
2010	Students	Include Students data into data warehouse	Director, Statistical Services	**\$250,000-\$500,000
	Research Office Snapshot	Include data into data warehouse and add business rules/processes to be able to produce report dependent on current manual process	Director, Statistical Services	*Operational
2011	Finance	Include Finance data into data warehouse	Director, Statistical Services	**\$250,000-\$500,000
2012	Facilities	Include Facilities data into data warehouse	Director, Statistical Services	**\$250,000-\$500,000

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
OFFICE OF ENDOWMENT				
2009/12	Growth in Records	An additional 5,000+ records will be added to RE each year into the future, and an increase is expected with the information held on each individual will grow, with plans for an Annual Appeal and the addition of other donor information.	Director, Office of Endowment	Cost for additional Casual staff
	PhD Career Tracking	The project coming from the AUQA review recommendation of more actively tracking the careers of PhD graduates will add significantly to usage and users of RE.	Director, Office of Endowment	Cost for additional Permanent Staff
	Broader Applications and Additional Modules	Additional capabilities and modules may be purchased, such as a web interface for individuals to update own details (currently re-keyed), on-line event registration, donation module and social networking capabilities (the Netcommunity module).	Director, Office of Endowment	Software/Ongoing maintenance: estimated \$100,000.00 + Cost for 2 additional Permanent Staff
	Relational Database Capabilities	The relational capabilities of RE will be further developed across the University Wide/College user base. This will involve greater use of the system to maintain non-traditional information and contact lists as required.	Director, Office of Endowment	No additional costs
2010/11	Number of users	As users and usage of RE increases across the campus, additional licences will be required. Current projections suggest an increase to 20 licences in 2010 and a further increment from 2011.	Director, Office of Endowment	Initial/Ongoing licence costs approx \$5,000 per licence.
	Skill development among the user base	Future growth in usage of RE will require additional data development staff to support the growing number of query requests and reporting sought from across the University community, and to improve our capability to manage data uploads and updates. Any venture into the Netcommunity module (social networking) will also require additional support.	Director, Office of Endowment	Cost for College Staff

YEAR	MAJOR INITIATIVE	BUSINESS REQUIREMENT	Project Owner	Project Cost
DIVISION OF INFORMATION				
Commencing 2009	IMIS	Enhance IMIS system to support strategic decision making. This system is capable of harvesting, transforming and presenting data to support strategic decision making on all aspects of University activity. In conjunction with Statistical Services, DOI will expand the capabilities of this system to further enhance strategic decision making within the ANU.	Associate Director Enterprise Systems	
	University Centralised Help/Service Desk	There is currently no centralised system to assist areas providing support services to the ANU client base. It is possible to provide software as a service solution that would enable a single point of entry for clients, improve consistency of service and enable effective tracking and management of requests to these areas. The Enterprise Systems Program will investigate, select and pilot a potential solution to this issue in consultation with local areas.	Associate Director Enterprise Systems	
	Availability of Centralised Information. Phase 1	Large amounts of information as a result of processing transactions on the ERP systems is of value to Colleges in long term planning and for supporting day-to-day activities. In 2009 the Enterprise Systems Program will investigate mechanisms to convert the interfaces of existing systems to services oriented architecture. This will allow direct access for local applications to relevant data where approved.	Associate Director Enterprise Systems	
	Role-based Access	Each role within the University is interested in a specific set of information and systems. In 2009 the Enterprise Systems Program will implement and pilot portal technology with a view to providing role-based entry points to information and systems at the ANU.	Associate Director Enterprise Systems	
	Content Management System	In 2009 the Enterprise Systems Program investigated and implemented software as a service solution for the provision of Web Publishing support to ANU Web Publishers. The initial implementation of this service only supports existing users of the Content Management System. There are competitive advantages for the University to ensure that all web pages are current and provide accurate information. To reduce the impost on local areas and improve accessibility, it is planned to extend	Associate Director Enterprise Systems	

this service to all Web Publishers at the ANU.

Chemical Management	In conjunction with Human Resources, develop centralised software as a service solution for the management of chemicals within the ANU	Associate Director Enterprise Systems
Travel Management.	In conjunction with Finance and Business Services, review and if possible incorporate the College of Science Travel Management system into the services provided from the centre.	Associate Director Enterprise Systems
Fleet Management.	Investigate providing software as a service solution for Fleet Management to the ANU.	
Kuali	Investigate and develop an open source solution framework for University Finance, HR and Students systems.	Associate Director Enterprise Systems
EDRMS Pilot study	Although plans for a full scale Electronic Document and Records Management System (EDRMS) are currently on hold, Records Management continues to investigate low cost solutions and has started an electronic capture pilot to provide streamlined handling of documents and to improve access	Associate Director Enterprise Systems
Common signalling domain	development of a SIP-based single contact and interconnection domain – a single contact to reach all communication end points used by an individual.	Director Information Technology Infrastructure
UC application domain	Development of a SIP-based single contact and interconnection domain – a single contact to reach all communication end points used by an individual.	Director Information Technology Infrastructure
iTunesANU	the post-production of media-rich content to the next generation LMS.	Director Information Technology Infrastructure
Authentication and Identity Management (IDM)	The upgrading and linking of services with the IDM will ensure appropriate access rights for individuals.	Director Information Technology Infrastructure
mobile printing solution	For students and staff within the Library.	Director Information Technology Infrastructure
Unified Directory Service (UDS)	will allow staff to have local College resources available in lecture theatres through networked drives. Expansion of Unified Directory Service (UDS) leading to the ability to share software packaging across the campus, a reduced number of active directory domains, reduced administration, and simplification and unification of logins for staff and students to an increased number of university services.	Director Information Technology Infrastructure
Alliance	Upgrade of the Alliance site to the latest version of Sakai providing a greater range of toolsets and configuration options.	Director Information Technology Infrastructure

single email/calendaring system		Investigation of a single calendar and email solution for the University.	Director Information Technology Infrastructure
Centralised software licensing tracking		allowing for better compliance management of software licenses, purchasing the correct number of licences required, and the ability to share licenses between areas. Reduced delay in software renewals as licence contracts are proactively monitored for expiry dates	Director Information Technology Infrastructure
Wattle		deployment of a new Learning Management System to replace our current WebCT platform. The new platform will tackle some of the many requirements identified by users over the last years, and allow the University to move towards a much more flexible environ	Associate Director Academic Services
Digital Lecture Delivery		upgrading of our Lecture Recording Infrastructure (DLD), in part supported by a BURF grant, to provide richer capture of audio, lecture visuals and in some cases room video. This will be integrated with the current and new LMS platforms as well as other delivery channels the University supports (downloads, podcasts, iTunesU and others)	Associate Director Academic Services
Scholars Keep		building on the Repository Framework, providing services for high-quality and significantly easier submission, curation and access to materials.	Associate Director Academic Services
Electronic submission	Thesis	development of an Electronic Thesis submission process, providing support for the complex workflows associated with the assessment of theses, to simplify and accelerate the process, and to automate their retention in the University's online collection.	Associate Director Academic Services
ArticleReach		The introduction of unmediated document delivery to all staff and students through ArticleReach, a service provided via an international consortium with partners in the US, UK and Australia.	Director Scholarly Information Services
Scholars Gate		The further development of the Scholars Gate (formerly RP3) service to provide a rich and deeply integrated search service across the University's research and education activities, expertise and outputs, to support a range of external audiences.	Director Scholarly Information Services

PART 3 – OTHER BUSINESS

★10 QUESTION TIME

PURPOSE For members of the Committee to ask questions through the Chair.

SPONSOR Chair

RECOMMENDATION That the Committee note responses to questions asked.

★11 OTHER BUSINESS

PURPOSE For members of the Committee to raise any other business through the Chair.

SPONSOR Chair

RECOMMENDATION That the Committee consider matters raised under other business.

★12 NEXT MEETING

PURPOSE For members to note.

SPONSOR Chair

RECOMMENDATION That the Committee note that the next meeting of the UISC will be held in October 2009 at a date to be determined.
