



PRIFYSGOL CYMRU —————
Y Drindod Dewi Sant
————— UNIVERSITY OF WALES
Trinity Saint David

Department of Knowledge and Information

Information Services Strategy

2011 - 2012

Excellence in education, delivered with distinction

Trinity Saint David's mission 2010

1.	Executive Summary	3
2.	Introduction	4
3.	The Strategic Case	5
3.1	Trinity Saint David Strategic Plan 2010 -2013	5
3.2	WAG: For Our Future.....	5
3.3	PricewaterhouseCoopers LLP - IT Strategy review	6
4.	Information Services contribution to University success.....	8
4.1	Priority 1: Achieving excellence in learning and teaching	8
4.1.1	Enhancing the student experience	8
4.1.2	Innovation in learning and teaching	9
4.2	Priority 2: Achieving excellence in research	11
4.2.1	Research culture and research environment	11
4.2.2	Learning Resources Centre: research resources	11
4.3	Priority 3: Providing a high quality student experience	12
4.4	Priority 4: Investing in its Staff.....	13
4.5	Priority 5: Establishing an international profile.....	14
4.6	Priority 6: Developing the knowledge economy	15
4.7	Priority 7: Advancing social justice, inclusion and access.....	16
4.8	Priority 8: Promoting bilingualism and cultural distinctiveness	17
4.9	Priority 9: Promoting regionalism and institutional sustainability	18
5.	Current Information Services Applications Portfolio	19
6.	Current Information Technology Infrastructure	23
6.1	Lampeter campus	23
6.1.1	Servers	23
6.1.2	Wired and wireless networks	23
6.1.3	Desktop, laptops and Macs.....	24
6.2	The Carmarthen Campus.....	24
6.2.1	Servers	24
6.2.2	Wired and wireless networks	24
6.2.3	Desktop, laptops and Macs.....	25
7.	The New Information Technology Architecture.....	26
7.1	The Intercampus link	26
7.2	Infrastructure architecture.....	26
7.3	Directory services	27
8.	Information Services Principles.....	28
9.	Information Services Governance	29
9.1	Council committees	29
9.2	Academic committees	31
9.3	Senior Management Team	32
10.	Financial Management.....	33
10.1	The rolling programme for capital replacement	33
10.2	IT Investment Plan - IT Integration and Merger budget.....	33
11.	Information Services and Processes.....	34
12.	Information Services Structure, Staffing & Sourcing	35
12.1	Department structure	35
12.2	Skills inventory.....	35
12.3	Training and recruitment plans	35
13.	Information Services Risk Management	36

1. Executive Summary

To deliver objectives outlined in the business case for the creation of University of Wales Trinity Saint David (TSD) there is a need to develop the new Department of Knowledge and Information to provide Information Services and Learning Resources.

This document describes the strategic priorities and operational activities that will shape the development of Knowledge and Information services for the new University during its first two years from September 2010. The action plans will form the basis for a more detailed operational plan that will be used to prioritise workload and will be updated annually.

Information Services is made up from a number of sections within the university including Network Systems and System Development Support Services at the Carmarthen Campus, University Computer Services, Management Information Systems, Media Centre and Reprographics at the Lampeter campus. These sections have very different capabilities and processes and require significant work to harmonise practice. The Learning Resources Centre is a more mature department but insufficiently linked to Information Services, allowing for an overlap in provision and therefore higher costs.

The vision of the department is to provide a first class, cost effective and value added service to the university and partners. To achieve this, the different sections within Knowledge and Information must be aware of the strategic direction of the university and how it impacts on the department and its services. There needs to be a realignment of staffing structures with customer focus in mind; a change from reactive to proactive service provision; inefficiencies to be removed; effective planning introduced and finally accountability by achieving budgetary targets and key performance indicators, management of risk, service level agreements and clear governance oversight.

The key targets for the 2010-11 academic year include the completion of the TSD merger programme which includes the full implementation of the intercampus link establishing a single network for the University; completion of the wiring of student halls on the Trinity campus; merging and enhancement of 'SITS' student record system; completing the integration of the phone system; implementation of a single finance system, HR system and payroll; implementing a single TSD email system and begin the building of the new University domain with new systems architecture and core management systems. The latter is a task of significant investment and will continue throughout 2011-12 academic year including the development of a single portal, access management. From the strategic plans developed by the University, Faculties and support functions an action plan of over 70 items will be scheduled alongside the merger priorities.

2. Introduction

In October 2009 the Higher Education Funding Council for Wales (HEFCW) approved the merger and associated funding of Trinity University College Carmarthen (TUCC) and University of Wales Lampeter (UWL) on the basis of the business case submitted in June 2009.

The Department of Knowledge and Information (DKI) has been created from the merger of Network Services (NS) and System Development Support Service (SDSS) at the Trinity campus and University Computer Services (UCS), Management Information Systems (MIS), the Media Centre (MC) and Reprographics at the Lampeter campus and the Learning Resources Centre (LRC) on both campuses. The Information Services Strategy (ISS) seeks to establish the strategy for the future operation of what were NS, UCS, SDSS and MIS and MC. The ISS will cover the initial two years of Trinity Saint David in detail, three years in outline, demonstrating the strategic direction for Information Services contribution to the University's success.

The ISS covers both capital and revenue investment priorities and aims to provide sufficient detail to identify all objectives to move from 'as-is' to 'to be'. This will be the primary input to Information Services departmental operating plans which will detail the run of the mill business in the short term and provide details of the assets and metrics used for measuring.

Conclusions have been drawn from the knowledge of the strategic aims and objectives of the merged University documented in a number of papers, which has been supplemented by discussions with members of the senior management team and academic staff. The strategies and associated documents reviewed in preparing this ISS include

- Strategic Plan 2010 – 2013
- WAG – For our Future, the 21st Century HE Strategy and Plan for Wales
- HEFCW – Guidance for Submission of Regional Strategies (W10/16HE)
- PWC IT Strategy Review
- Learning & Teaching Strategy 2010 – 2011
- Research Strategy 2010 – 2011
- Transforming Education, Transforming Lives
- Creation of a New University
- HEFCW – Developing a Regional Dimension to the Planning & Delivery of HE
- HEFCW – Regional Strategies; Funding and Support (W10/28HE)
- WAG EIPB An ICT Strategy for the Public Sector in Wales
- Third Mission Strategy 2007 – 2010

3. The Strategic Case

3.1 Trinity Saint David Strategic Plan 2010 -2013

The strategic plan clearly states the vision for the new University as a higher education institution:

- which delivers high quality higher education and research and contributes to the economic, social and cultural prosperity of its region and the UK more broadly through offering a distinctive and progressive portfolio of strong academic activity;
- which is regarded as a hub for the development of higher level skills and workforce re-skilling within south west and mid-Wales;
- which has a clear international profile as it develops international excellence in research and teaching networks;
- that is committed to the bilingual agenda and
- that celebrates its strong and vibrant academic and cultural heritage

The ten year vision is for a distinctive bilingual centre of excellence for research, learning and teaching, delivering on WAG policies and objectives, acknowledge for its international partnerships, maximising the potential of the knowledge economy, with confederate links to FE colleges and secondary schools and to be seen as a valuable and effective member within a new regional confederation of HE institutions in south west and mid-Wales.

The nine strategic priorities identified in the strategic plan are

- Achieving excellence in learning and teaching
- Achieving excellence in research
- Providing a high quality student experience
- Investing in its staff
- Establishing an international profile
- Developing the knowledge economy
- Promoting social justice, inclusion and access
- Promoting bilingualism and cultural distinctiveness
- Promoting regionalism and institutional sustainability

Throughout this ISS reference will be made to the institutional strategy and evidence given on how the Information Services Department will support and deliver on the priorities contained within.

3.2 WAG: For Our Future

For our Future¹ builds on The Jones Review of Higher Education in Wales, which set out a clear message that higher education needs to change and develop still further, and the One

¹ WAG For Our Future, The 21st Century Higher Education Strategy & Plan for Wales; Nov 2009

Wales themes of social justice and supporting a buoyant economy. There is an expectation of maximum participation through different ways to experience higher education; inconsistencies in access and opportunity to be addressed through collaborative partnerships and linking to the frameworks for higher education such as Y Coleg Federal ; part time learning to be improved; there is to be a thriving and effective research activity that benefits the international profile of Wales and business in and beyond Wales; the economy is to be supported by strengthened and systematic knowledge exploitation; a greater proportion of the population to achieve higher level skills; employability is to be a key outcome and continuing efforts are to be made to deliver an excellent student experience.

As a result of For Our Future we can expect a higher education system for Wales to be created with a regional dimension to the planning and delivery of higher education, with progression pathways from school, community, workplace and further education. The aim is to improve provision regionally, especially for learners who, for whatever reason, are geographically constrained, and for employers who are seeking higher education support, of whatever kind, locally.² Greater diversity and flexibility is expected in programme design, duration and delivery with shorter accredited programmes tailored to fit around lifestyle and responsibilities, aligned to the needs of employers and businesses. Higher education providers will work more closely with each other, with further education providers, with employers on research, learning and teaching and on shared services.

The University of Wales: Trinity Saint David will establish a regional confederation of educational institutions in South West Wales to provide widening access and life long learning opportunities to maximise the potential of the knowledge economy. The Department of Knowledge and Information through the Information Services Strategy will provide a technology infrastructure that facilitates the consolidation of Trinity Saint David and is adaptable in the evolving political and economic environment in which we operate. To meet these objectives Department of Knowledge and Information must merge, integrate and empower its employees on all campuses, developing a new culture which builds on the existing strengths. New ways of working must be developed, new skills developed, deficiencies in the existing technology infrastructure corrected and efficiency gains achieved.

All areas of the ISS will be directly aligned with these priorities and regulatory frameworks.

3.3 PricewaterhouseCoopers LLP - IT Strategy review

In October 2008 PWC were engaged to assess the current responsibilities of IT functions for both TUCC and UWL and the envisaged IT responsibilities for Trinity Saint David. The review included all areas of Information, Learning and Data Services and those areas which are typically covered within an IT Strategy, in accordance with good practice.

² HEFCW Guidance for Submission of Regional Strategies (W10/16HE)

As a result two roadmaps were drawn up³, an integration roadmap and a long term strategy roadmap. The recommendation was that the focus should be on the integration, incorporating the long term strategy when there are sufficient resources.

The integration roadmap advised on the completion of a number of activities. Progress on these is noted below:

- Recruit IT Integration Manager: This was superseded by the appointment of Director of Knowledge and Information.
- Set up integration strategy committee to prioritise activities and monitor the integration until August 2010. The work of the IT Strategic Project Board has successfully monitored progress to date and the work of the committee is now complete.
- To define high level objectives around governance, organisational people and culture, systems and process priorities, infrastructure and South West Wales Higher Education Partnership (SWWHEP). These objectives are contained within this ISS.
- Understand the impact of SWWHEP. This resulted in the cancellation of the major SWWHEP project to merge regional student record systems into a single instance for South West Wales, thereby releasing resources, so that the integration of UWL and TUCC and the creation of a Trinity Saint David Student Record System could remain a priority.
- Detailed integration objectives to be defined. These were identified as
 - Integration of student records system –live 3rd September 2010
 - Trinity Saint David web site –live 1st September 2010
 - Inter campus link – installed 31st July, live September 2010
 - Patching email system to appear as one. This objective was suspended in favour of auto forwarding to a single email system. A new email system is due to be installed by November 2010, but all staff are able to send and receive email from @tsd.ac.uk or @ydds.ac.uk from 1st September 2010.
 - Other recommendations to merge finance systems and other support areas were recognised as not essential for integration and therefore shelved in the short term.

The long term strategy roadmap advised on the definition of high level objectives around governance, organisational people and culture, systems and process priorities, infrastructure and SWWHEP and detailed analysis of current position leading to the “to be” position. Some of these objectives have already been achieved, particularly in relation to the organisation where Department of Knowledge and Information has been created from a number of existing departments. Further objectives, which will be address by this ISS include a review of resources and skills; a full audit of all the applications used by each department; data management and ownership and an infrastructure review. Finally these long term objectives need to be structured through new policies and procedures, change control and a benefits plan.

³ PWC IT Strategy Review July 2009

4. Information Services contribution to University success

The nine priorities set out in the Strategic Plan 2010-13 are the result of significant work by management and governance within the University. These priorities already take note of the For Our Future and supporting HEFCW documents. The following sections will therefore concentrate on how the Information Services Strategy will support and enhance the main strategic plan and relevant supporting strategies from other faculties and departments, being mindful of the larger regulatory framework.

4.1 Priority 1: Achieving excellence in learning and teaching

The primary objective of this priority is to implement the new Learning and Teaching Strategy. This strategy outlines the excellent provision that already exists for students and introduces plans to ensure all students will continue to have a high quality learning experience. The vision is to offer 'a personal learning experience within a supportive university community'.

The Learning and Teaching Strategy identifies a number of themes that have an impact on Information Services.

4.1.1 Enhancing the student experience

The University supports an increasingly diverse learner body encompassing on-campus learners, distance learners, learners based at a select number of partner institutions and work based learners. There is significant diversity within these learner groups, for instance the majority of the University's international students are currently based at College of Technology London (CTL).

Information Services priority to support this theme will be to provide a comparable student experience across all campuses by delivering effective Service Desk support, providing an effective Virtual Learning Environment (VLE) through Moodle and Blackboard, working toward 100% student assessment submission via the VLEs and TurnItIn.com, social networking and online Peer assessment.

The Information Services Strategy recognises that technology enhanced learning plays an important role in the creation of independent learners therefore continuing support and development by both Information Services and the Learning Resource Centre will be given to

- Provision of a comprehensive Service Desk with a centralised face to face support provided at Learning Resource Centres on the main campuses, a single help line number and email address. Staff and students needing Service Desk support should experience the same service levels, independent of location or staff responding to their request.
- The Service desk will be staffed by phone Monday to Friday 9.30am to 4pm. Technicians will be available to attend in person to provide problem resolution between 8.45am and

5pm. Web access to log service requests will also be provided for both staff and students.

- On campus students will have the provision of computer laboratories, loan laptops and both on and off campus students will have provision of printing, photocopying and binding services.
- Provision of VLEs to enrich and enhance the student learning experience.
- Enrolling external examiners onto the VLEs to access work electronically.
- Increasing use of e-books and e-journals.
- Continued development of an institutional repository.
- Increase in Athens usage for access to online resources for all students .
- PebblePad, an eportfolio and personal learning system, will continue to be used to aid development of Professional Practice Frameworks.
- Further use of e-tutorials via webcams.

Further developments to be considered include extending the hours of on-site technicians; online submission of assignments and a cross-catalogue searching.

Information Services is working closely with the School of Initial Teacher Education and Training (ITET) as they review the use of ICT to support learning and teaching. Laptops and wireless access will be implemented in the short term with planning for wired access completed before the end of 2011. A digital resource centre to support Welsh medium teaching and learning is to be established.

Technology is used extensively to support Student Services through online resources and video conferencing will be further developed.

Technology Enhanced Learning (TEL) is to be used to create flexible learning routes in the future. A combined TEL team from Information Services and the Learning Resources Centre will continue to increase pedagogical support and demonstrate collective good practice. The importance of collaboration and the sharing of good practice were highlighted in HEFCW's Circular Enhanced Learning and Teaching through Technology⁴, Information Services are therefore working with other educational institutions in the region via the SWWHEP programme to deliver many of the above programmes.

4.1.2 Innovation in learning and teaching

A strategic review will be undertaken of digital media technology support provided on both campuses with a view to selecting the best provision for the University.

Information services will work with SHOE to review the pilot of Google Calendars, alongside the use of Celcat with a view to implementing an institutional wide staff rostering and timetabling system. A single email service for staff and students in the University will be introduced before the end of 2010 and the most up to date systems, such as Zimbra, offer both calendaring and timetabling, and migration to a single software solution for email, calendar and timetabling would improve the support provision for the University.

⁴ HEFCW W08/12HE Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales

We will work towards a fully wired campus and wireless availability in most public areas.

To encourage online collaboration and facilitate the sharing of resources and best practice, a Facebook page, social book-marking, blogs and wikis are being trialled by staff alongside increased usage of Twitter.

There continues to be a commitment to build a strong, electronic resource collection to support learning and teaching activities. The new Trinity Saint David website is hosted within a content management system providing access to all University web services through dedicated resource sections for staff and current students. The site continues to be accessible to all its users by supporting the Web Accessibility Initiative, World Wide Web Consortium validation and aims to satisfy the minimum conformance level "AA" of the Web Content Accessibility Guidelines with "Triple A" being strived for in all critical website and

4.2 Priority 2: Achieving excellence in research

The 2010-2011 Research Strategy is a medium term planning document which will direct the development, implementation and management of key areas relating to Research within University of Wales Trinity Saint David. Apart from standard research themes such as Research Excellence Framework (REF) preparation, research culture and research resource allocation, it seeks to address a number of additional issues that will enable the University to deliver excellence in this area. Its main purpose is to underpin the University's Strategic Plan 2010-2013 as it seeks to articulate the University's approach to developing research within the new University. Specific action plans have been formulated for each identified theme, many of which require input from the Information Services department.

4.2.1 Research culture and research environment

The University is committed to the development of a strong, dynamic and vibrant research culture throughout the institution and is fully aware of the need to make sure postgraduate distance learners feel part of the research community on campus. Information Services will therefore continue to work with the Classics department to build on the successful lecture capture pilot, ensuring the parity of experience for all students. The Department of Knowledge and Information TEL team will support and enhance a VLE pilot for research degree students being developed within the School of Archaeology, History and Anthropology.

4.2.2 Learning Resources Centre: research resources

The Learning Resources Centre (LRC) delivers resources and services via the libraries within the University. In order to create a central research infrastructure and meet the aims and objectives outlined in the Institutional Strategy with regard to research and research degree students, there is an urgent need to develop a central infrastructure for library research resources. This will involve setting up a specific research library resource policy as part of the Learning Resources Centre's collection and acquisitions policies. A review of the current library holdings of the proposed research clusters and the acquisition policy of Schools will be a necessary first step to identify the scale of the problem and gaps in provision and to review the way resources are currently allocated. As part of this review, discussions will also need to be held with regard to the purchase of electronic resources, journal subscriptions, and Inter Library Loan policies.

In order to realise these aims part of the LRC budget will be reserved for the acquisition of research resources. The introduction of specialist subject librarians will facilitate a close relationship between resource officers in the Schools and the LRC. Specialist research support will also be available via the LRC such as inductions, 1:1 and group training, and dedicated web pages. It is, however, unlikely that, even with a far more strategic approach to the purchasing of research resources, scholars will be able to access all the resources they need within the Learning Resources Centre. A budget for research trips to major libraries will therefore be available to staff through the central staff development fund.

4.3 Priority 3: Providing a high quality student experience

The University seeks to provide a high quality student experience for a diverse community of learners which includes campus-based students, part-time and flexi learners, distance learners, learners based at partner institutions and work based learners. A key focus is to ensure comparability of experience for these learners.

The Department of Knowledge and Information is aware of the critical performance indicator to increase the Student Satisfaction rates. This survey identified some areas of technology as an issue for our students so a programme of infrastructure improvements will be undertaken that will maintain and increase student satisfaction levels, including the wiring of the student halls for online access. A key element of a high quality student experience is the provision of clear, relevant and accurate information, so access to online resources, including lecture capture, will be streamlined and simplified to aid information management and encourage student engagement through electronic means.

Regular interaction will be had with the Students Union to ensure Union staff have the resources they require and that end users needs are being met. The project to complete the creation of TSD Union in Sage will be completed by the start of the 2010 academic year.

The first phase of the Customer Relationship Management (CRM) system will be completed by end of 2010. This will include a communications function for Alumni. The next phase, linking the CRM to SITS will be completed by the end of 2010-11 academic year.

4.4 Priority 4: Investing in its Staff

Critical to the success of the institution is having a cohort of staff appropriately qualified and supported to be able to deliver the mission of the University. To achieve this staff will have access to a full range of development programmes. Staff will be encouraged through appraisal where feedback will be given.

The University aims to increase the number of staff gaining post-graduate qualifications.

The University aims to appoint Governors with an appropriate range of skills as identified within the skills matrix, who will then be encouraged to participate in the staff development programmes.

Finally the University has gained the Investors in People Award, a positive audit of the institution's activity, and the University recognises the importance of retaining this Award.

4.5 Priority 5: Establishing an international profile

The Universities success in creating a distinct international profile with significant income generation is a key element of the Strategic Plan. A review of existing Information Services provision for international and other UK-based partner institutions will be undertaken. Improvements will be implemented that ensure these students are offered a high quality student experience through the use of technology.

Much of our communication with off-campus students is supported by use of the Virtual Learning Environments (VLEs). A review of VLE provision will be completed by the end of 2010-11. Currently most users at the Carmarthen campus use Blackboard, hosted at Swansea University and funded through the SWWHEP initiative, whilst Lampeter uses Moodle, both on a maintained server at Lampeter and an externally hosted instance. It has already been agreed that the institutional VLE for Trinity Saint David will be Moodle. Our partner institution of SMU also uses Moodle. The review of provision will include recommendations for the transferring of Blackboard data and the training requirements to support this move.

There are plans to introduce Eduroam, which allows users (researchers, teachers, students, staff) from participating institutions to securely access the Internet from any Eduroam-enabled institution. This would mean a student at TSD could take a laptop to another university and authenticate to gain access to the internet. This system has now been rolled out across Europe, America, Canada parts of Asia. We have partnerships with some Universities in these continents, and this would mean students from China, the Middle East, North America and Europe arriving at Trinity Saint David from an Eduroam-enabled institution would need no Information Services intervention to use their laptops on campus as authentication would be automatic.

Videoconferencing is a vital tool for distance teaching and one of the main reason we are able to attract international students. A review of videoconferencing usage across the University will be undertaken. This will include corporate and academic usage, desktop and large screen conferencing, using the internet 'cloud meeting' software or the Welsh video network.

A review of processes for the supply of information services to summer school students will be undertaken.

The largest cohort of international students is based at our partner institution at College of Technology London. A project is currently underway to improve the IT provision offered to these students, including CTL student registration, developing a Moodle presence for CTL staff and students, to pilot online assessment submission using Turnitin.com and consider the benefits of direct SITS access at CTL for mark entry. We will be mindful of the increase in students from CLC and ensure that developments are sufficiently generic to be applied at CLC and other partner institutions when required.

4.6 Priority 6: Developing the knowledge economy

The University's success in undertaking effective and applied high level research, high quality teaching and training and generating increased non recurrent income will depend on its effective engagement with networks and communities and collaborating closely with strategic partners in its region.

The current project to redesign the directory of expertise (DORSA) will be completed by the end of the 2010-11 academic year. This database will serve three purposes: to serve the needs of the third mission by capturing data for the project matrix, to feed the online TSD repository and feed the WAG portal for HEI expertise.

The University is the lead partner in the Creative Oracle (CORACLE) Project. The project comprises of a partnership, which includes Institute of Technology Carlow, Wexford Arts Centre, Wexford County Council and Carmarthenshire County Council. CORACLE has been developed to provide additional higher-level skills to the creative and cultural sector. The aim is to maximise the economic, social and cultural value of the creative and cultural arts to the regions of South West Wales and South East Ireland. Information Services are working with the Research and Development Office on the tender for the website and social network and exploring the benefits of developing an e-commerce section within the project.

The JISC Capacity Building Programme will be completed within the academic year. The brief broadly aims to disseminate and enhance JISC outputs (research, projects, publications, & funding opportunities) throughout the Higher Education Sector by raising awareness within individual institutions. The project has a number of elements that include review of JISC projects (internal and external, wider literature and research) as related to individual institutions, review and establishment of communication processes between JISC and the

4.7 Priority 7: Advancing social justice, inclusion and access

A key challenge for the University will be to be innovative in addressing the WAG priorities as set out in the For Our Futures document focussing on the economic and social needs of Wales.

The transformational TSD partnerships with further educational colleges, secondary schools and community adult groups will be supported by the use of common technologies within the TSD group such as Moodle, email and combined data centres. This will also support the pathways of learning strategic objective.

Information Services will work with the University to creating regional alliances through the creation of the South West and Mid Wales Educational Confederation. Economies of scale will be deployed by combining IT activities as appropriate.

Information Services will work to capture the data for the Higher education-business and community interaction survey (HEBCIS). The annual HE-BCI survey examines the exchange of knowledge between universities and the wider world, and informs the strategic direction of 'third stream' activity that funding bodies and higher education institutions (HEIs) in the UK undertake.

The DKI will engage in the development of government initiatives in relation to IT. This will include working with WAG on the development of a regional data centre for South West Wales. Robust and sustainable partnerships will be developed with other public sector institutions though shared services where appropriate and talent sharing, such as shared email with Carmarthen Unitary Authority.

4.8 Priority 8: Promoting bilingualism and cultural distinctiveness

As a national university for Wales, Trinity Saint David will act as a key agent to promote and celebrate the Welsh language, bilingualism and the heritage and culture of Wales.

A project will be undertaken to ensure all students are able to access appropriate Information Services and LRC technology resources through the medium of Welsh. Outputs from this project will ensure there is a fully switchable bilingual VLE.

A review of and further investment in translation will be undertaken to enhance and increase the use of the Welsh Language in meetings.

Appropriate Information Services support will be given to Coleg Federal and CWMHE.

All staff within DKI will be fully aware of and adhere to the bilingual policy.

4.9 Priority 9: Promoting regionalism and institutional sustainability

The current vision for Trinity Saint David offers a strategic opportunity to define a new common shared critical path between the new institution and other higher education institutions and a number of further education colleges in South West Wales.

The Department of Knowledge and Information will work with the University to develop strategic alliances with other public service institutions, to create economies of scale and further efficiencies through shared information services, maximising the effectiveness of resources. The current project to open the VLE to Coleg Sir Gar and Pembrokeshire College and streamline student registration will be completed by the end of 2010.

An objective of this priority is to increase the financial resources available for capital investment in the information technology infrastructure. To support this DKI will implement this integrated Information Services Strategy, with supporting operational plans to be developed during staff development week, and a communication strategy. The ISS will include a sustainable Information Services investment plan funded from internal resources.

A separate Strategic Capital Investment Plan has been developed and DKI is working with the strategic director to implement a number of capital programmes. These include refurbishment of the Dewi block, Merlin and Haliwell buildings at the Carmarthen main campus, the new teaching and learning block on Carmarthen north campus, a student one stop shop and improvement to main library at the Lampeter campus.

5. Current Information Services Applications Portfolio

The current Information Services applications portfolio is complex. Major systems are in place for most support departments but as a result of the merger of TUCC and UWL we have a portfolio that has different applications for almost every department area. In some instances business owners are different on each campus for different applications. For example ID Cards are managed by both Estates and LRC on the Carmarthen campus and by LRC and Information Services on the Lampeter campus.

The decision and timing of any convergence rests with each business area. The role of Information Services is to advise on availability of resources, technical suitability, propose efficiency options that could be adopted before finally working with each business area to manage the merging, replacement or upgrade programme for each application in use. For some considerable time, probably up to eighteen months, different applications will continue to exist on both campuses.

The following is a list of the main information systems, but it not exhaustive because many departments previously had responsibility for their own systems. There may therefore be systems which Information Services have no knowledge of.

5.1 Registry

Student Records

The SITS Student Records System is the most complex and critical of all our information system applications. The system is supplied and supported by Tribal and is the industry leader in student record systems. It is the only installed system that is the same on both campuses. The decision has already been taken to adopt a largely Carmarthen campus centred implementation of SITS, including the underlying RDBMS SQL Server. The Lampeter campus instance of SITS ceased to exist as a live system in September 2010.

As one would expect for an application of this nature, there are a large number of interdependencies with other systems. In support areas data is available for student services, employability and careers office, Information Services department and the Learning Resources Centre. Externally data is extracted for HEFCW, HESA, UCAS and the Student Loans Company. Integration with VLEs, ID cards, accommodation systems and RegWeb for student registrations and finance systems have been developed. From 1st September all data is extracted from a single instance of SITS.

Timetabling

The Carmarthen campus use the CelCat application for timetabling whereas the Lampeter campus has no central timetabling provision. CelCat has therefore been deployed on the Lampeter campus in time for the new academic year in September 2010.

Postcodes

As with timetabling, the absence of a system at the Carmarthen campus would favour the adoption of the Lampeter campus postcode system QAS Pro. This system also integrated well with SITS and is an industry standard. QAS should be implemented in time for the new academic year in September 2010.

Student Web Portal

It is anticipated that RegWeb, developed internally at the Carmarthen campus, will be operational for use by all University staff by September 2010. Once the current RegWeb system is implemented a decision needs to be made on whether RegWeb is an interim solution or if it is to be developed further for the University, or replaced by SITS e-Vision or some other system.

It will take up to eighteen months to implement the majority of functionality required by the University e.g. use by students, online registration et al, irrespective of which system is ultimately chosen.

Microsoft Access

There are over fifty small Access based systems in use in both Registries and it is assumed that in most cases these will be adopted by the University to reflect the business changes to both the Registry and Quality Assurance functions. A thorough review of these will take place with a view to removing them all, over the next eighteen months. The University will move away from MS Access as its development platform of choice for small application front ends. MS Access does not scale well and is difficult to secure and distribute to users. It is also uncertain how long Microsoft will continue to support this system so there may be no choice but to move away from this development platform. As yet we have been unable to fully analyse the exact functionality of each system but the critical Access databases for Meeting Minutes for Exam Boards and the database to send awards to University of Wales Registry have already been adapted to work with the new instance of SITS, for the new academic year.

All the Lampeter Access databases will be migrated from Oracle to SQL Server. The majority of these systems should be either moved into SITS, and if this isn't appropriate, they will be incorporated into the web portal development.

5.2 Finance & HR

Although separate departments, it is important that finance, payroll and human resource systems are considered together; as the interdependencies between these systems are complex. The finance office on the Lampeter campus uses the Symmetry application whereas the Carmarthen campus uses Aptos. A decision has recently been made to consolidate the finance system onto Symmetry.

Consideration is being given to the implementation of the SITS finance interface components of SAM and SRS Fees and Charges, and payroll. Currently payroll is processed

through Sage at the Carmarthen campus whereas on the Lampeter campus payroll is already integrated into the Symmetry finance system.

HR utilise Visual Personnel Director at the Carmarthen campus, a package also in use at partner institutions such as Swansea Metropolitan University (SMU), whereas on the Lampeter campus a different package Chris21 is in use. The Lampeter campus package is an excellent system specifically tailored for the needs of Lampeter, but strategically the latest version of Visual Personnel Director offers greater functionality and a self service web-portal. It also offers an integrated Learning Management System. A decision on HR system will be made once there is greater clarity on the outcome of the SWWHEP initiative currently in progress.

5.3 Estates

It is understood that currently only the Carmarthen campus has an Estates Management System, QueMIS EMS from Qantarc. This system is reliable and has been further developed through the SWWHEP initiative. We therefore expect that this system will be extended for use at the Lampeter campus.

A number of systems are in use on each campus for the production of ID cards resulting in staff and students having more than one card. These cards can be used for door entry, car park entry, library loans, cashless payment, NUS student ID and many more functions. The primary task will be to agree a business owner for staff and student ID cards. Information Services have investigated the possible options for convergence but each option has pros and cons.

A Task & Finish group has been created to review and recommend the best options for the University.

5.4 Schools Partnership Office and Placements

The current Teaching Practice database was developed by the School of ITET and has grown to encompass a number of functions. It is based on Microsoft Access front end and SQL Server back end. It is linked directly to SITS and originally had full access to the SITS tables. School administrative staff routinely add new reports, forms, queries to the system and modify existing system objects. This causes disproportionately high support costs. It is often the case that issues become apparent at critical times and have to be resolved immediately.

The SDSS department started assisting the Partnership Office with this system a number of years ago, have completed a full requirements analysis but haven't had the capacity to replace it. It can be considered a high risk system due to the open nature of its design and the necessity for the administrative staff to continually amend it. It is recommended that this system is replaced as part of the web portal development.

5.5 Student Services

The current student services system at the Carmarthen campus is no longer considered fit for purpose and it is recommended that following a requirements analysis that its functionality is incorporated into the web portal development. There is no student services system on the Lampeter campus.

Accommodation

The Carmarthen campus utilise a bespoke MS Access/SQL Server based accommodation system which was never intended as a long term solution and it is recommended that the Kinetics system in use on the Lampeter campus is adopted by the University. Currently responsibility for accommodation is held by Estates at Lampeter and Student Services at Carmarthen.

5.6 Learning Resources Centre

Catalogue system

The Horizon catalogue system in use at the Carmarthen campus is being de-supported by the suppliers Sirsi-Dynix in favour of their other offerings in this field. Also, it has been indicated that Voyager, in use at the Lampeter campus, has serious flaws and isn't favoured as a replacement. Therefore, without performing further analysis it is impossible to recommend a replacement or indicate a timescale. Currently WorldCat will be implemented to provide a way of sharing information between these systems.

Virtual Learning Environment

The Carmarthen campus has extensive development on the Blackboard VLE, whereas Lampeter has installed Moodle both internally on servers and externally on a hosted service at Rackspace. The current institutional view is that for both cost and functionality reasons Moodle should be adopted as the University VLE. For contractual reasons we will be running both systems in parallel for a number of years whilst we plan the transfer of modules and retrain staff on Moodle.

VLEs will be fully integrated with the lecture capture software Panopto Focus.

Further instances of Moodle are being designed for use at CTL, CLC and Coleg Sir Gar.

6. Current Information Technology Infrastructure

Both campuses in TSD have the same basic infrastructure consisting of

1. Servers to run multi-user applications such as finance systems, email etc,
2. Wired and wireless networks to link server applications to the desktop and for access to the internet
3. Desktop PCs, laptops and Macs

Each campus has chosen different technology for each area of the infrastructure. Equipment on the Carmarthen campus is older but well maintained by support staff, whilst equipment at the Lampeter campus is generally newer but possibly less integrated.

6.1 Lampeter campus

6.1.1 Servers

There are over fifty servers on the Lampeter campus, almost all running a version of the Microsoft operating system, but some are also running the newer VMWare, a system to create virtual servers, as and when required.

6.1.2 Wired and wireless networks

All academic buildings are connected to the a campus network, and all other networks route traffic though this device. There are 46 switches providing comprehensive access across the campus. The video conference equipment is also a segment of this network. Servers are predominantly connected to a dedicated server network spanning two server rooms. All of the Lampeter campus residence rooms have network connectivity through residential network with 20 switches providing connectivity back to a core in the UCS building. The language network is a single switch providing a boundary to the multicast requirements of the Language laboratory workstations.

The wired network is protected by a de-militarised zone (DMZ).The DMZ comprises two switches which provide a network for the transmission through the perimeter for email routers and Domain Name Servers (DNS) e.g. trinitysaintdavid.ac.uk.

The wireless access networks are connected to a single controller. This centrally controls and administers 24 access points distributed across the campus. They provide wireless connectivity within all meeting, seminar and lecture rooms, and it also extends throughout the library, student union and the 1822 conference area.

The edge of the network is protected by a firewall. This provides security boundaries between the Internet, the DMZ network and main campus network. Two further network appliances provide security divisions within the Campus network, securing the Server network and a security boundary for the Residence network. At the very edge of the network, a router bears all traffic into and out of the Lampeter network.

All network traffic is 'shaped' for best performance.

Thirty six IP security cameras are connected to the network and a number of door control units and energy metering devices also connect through the network.

Further network divisions are also configured within each of the physical networks, allowing for logical segmentation and access control of machines e.g. the Residence connections cannot communicate with neighbouring machines or to any internal appliance or service unless explicitly allowed, therefore virus outbreaks cannot spread between machines within the network. Similar provisions are also made for wireless access.

6.1.3 Desktop, laptops and Macs

The Lampeter campus has for some time had a central purchasing policy for technology. The dominant hardware on the desktop is 330 RM PCs and 150 Intel-based PCs and a number of Apple Macs in the Media Centre. A further 370 Toshiba laptops are in use by staff and available as student loan laptops. Film and Media have fifteen Apple Macs. An additional ten MacBook Pros have been purchased for this academic year to be available as student loan machines.

6.2 The Carmarthen Campus

6.2.1 Servers

The Carmarthen campus has approx 60 servers of different makes, in the main these are Hewlett Packard (HP) but there are also SUN servers and a number of old servers still in operation. The majority of these servers are large 'tower' servers, but some of the more recent are rack mounted. Whilst there are backup devices providing backups for Finance, SITS, Payroll, HR, email and Staff/Student data, these backups only copy data and applications. In the event of a major hardware failure, many of these devices are single points of failure and represent a risk to the University.

There are fifteen servers in the Microsoft domain, running SITS, Estates and Library systems. A further fourteen servers in the Novell domain running Groupwise, student NetMail and general file storage. The remaining servers are SUN and MAC providing all the system utilities.

6.2.2 Wired and wireless networks

The Carmarthen campus has a Novell based network. There are 56 switches linking all departments and buildings and the network is available to all staff and students. The ITET computer room has a separate Microsoft Active Directory. Carmarthen also has another Active Directory domain, available in Finance, Registry, Payroll and HR departments. Users here also connect to the main network, hence the need for a dual login client.

There are a number of access points providing cross campus access to wireless networks.

The network is segmented in to a number of physical segments using Unified Security appliances. The Development Network, Y Llwyfan and Wireless networks are controlled using these devices.

Timetools GPS/MSF NTP server provides highly accurate time synchronisation across the campus.

The Carmarthen campus, in common with other universities, houses the primary regional connection to the WAG public sector broadband network (the CPOP). This not only generates revenue for the University but is also a cost saving as the Carmarthen campus does not have to purchase a high speed link to the nearest CPOP but is able to use local cabling.

6.2.3 Desktop, laptops and Macs

Until the beginning of 2010 there was no central purchasing policy for PCs and laptops on the Carmarthen campus. There are therefore a number of brands and models in use, making support and upgrading labour intensive and expensive.

The predominant technology on the desktop is 575 Intel-based PCs. To support the creative arts and our teacher training agenda there are now over 40 Apple Macs and 30 RM PCs in use throughout the campus. In the school of Theatre and Performance there are 10 Dell machines with dual screens supporting photo editing and Computer Aided Design software.

Because of the ageing infrastructure at the Carmarthen campus, allowing laptops to connect to the main campus network presented a security risk. As a result any staff member who needed to use a laptop was allocated a separate machine for use off campus. This has resulted in 480 Intel-based Sony and Toshiba laptops being in use. A further 250 MacBook Pro laptops and 30 RM laptops are also available, although many are loan laptops for students. An additional fifteen MacBook Pros have been purchased for this academic year to be available as student loan machines.

7. The New Information Technology Architecture

7.1 The Intercampus link

An intercampus link has been installed and is connecting the two campuses directly. The infrastructure has been designed to pass server traffic securely and allow client machines to communicate with the relevant business systems. Significant work has been carried out on the Carmarthen campus network design to allow traffic to be routed in this way, whilst the Lampeter campus network had most of the infrastructure in place to facilitate this new topology.

The link has been engineered to pass the following traffic:

- All SITS users can communicate with the new SITS server at Lampeter
- SITS to Horizon
- Email from Lampeter to Trinity is routed over the link – this will allow for a single entry point for TSD.ac.uk addresses
- TSD.AC.UK Web traffic
- Student union clients to SAGE
- Telecom links to trunk calls between sites will be routed once the equipment has been installed

Two new Firewall appliances are due to be commissioned to provide a secure link between the campuses and the servers will be in their own server networks behind these firewalls. Access control rules will prioritise traffic traversing the link with Voice Over IP i.e. phone calls, taking priority over data. To avoid unnecessary 'chatter' between groups of servers, the servers will be arranged onto relevant address schemes with appropriate access control rules.

7.2 Infrastructure architecture

The advent of the new University, latest developments in technology and the acute need for a significant refresh in server and storage systems particularly at the Carmarthen campus, present an ideal, as well as possibly unique opportunity to create a modern, state-of-the-art facility that will meet the needs of the new University for the foreseeable future. It will provide the cornerstone on which to build the university's plans for Information Technology provision over the next five years. The primary components will be aligned to the business, will guide investment and change behaviours. These are:

- Distributed Storage Area Networks (SANs)
- Chassis-based blade servers, reducing energy and space requirements
- Virtualisation systems software, allowing new systems to be developed quickly and effectively within a secure and robust architecture
- Robust dedicated networks with capabilities that are fit for purpose

- Appropriate tools and training to enable effective management of these systems and the network.

These architectural principles will be applied across all campuses in the Trinity Saint David group. Services will be provided at different locations to provide a robust flexible infrastructure and utilise skills available to the whole group, thereby reducing staff costs.

7.3 Directory services

A directory service is a software system that holds and provides access to information by means of a directory. The directory holds objects and their multiple values which can be looked up. These objects can be users, printers, computers and other shared resources.

The Carmarthen and Lampeter campuses currently use different directory services, Edirectory (EDir) from Novell is the main directory service at the Carmarthen campus and Active Directory (AD) from Microsoft is also in use. The Lampeter campus uses Active Directory only. The need to have a single directory service is vital to allow the Information Services department and all dual campus staff to work as a single entity.

As more and more applications today require Active Directory to provide full functionality, a decision has been made to unify Trinity Saint David systems with Active Directory.

8. Information Services Principles

Information Services principles guide the day to day decision making and governance. These principles are:

Service: The Department of Knowledge and Information recognises its primary function is to provide an information service and learning resources to the University, reflecting and supporting the institutional strategy.

Agility: The growth of the Trinity Saint David group is rapid. There is a high expectation that systems and processes can be merged across a number of areas to deliver effective new systems and financial savings. The infrastructure will be developed using standardised, off the shelf, widely used technology and applications that by their very nature can be supported and modified by internal or external specialists to quickly meet our changing needs.

Availability: Users will be provided with a high level of Information Services resources providing quality information to users. This will include extended local service desk support, 24/7 availability for business critical systems and appropriate business continuity management and disaster recovery.

Security and accessibility: Users will be allowed ease of access to information within the organisation in a manner that will not compromise security and control. We aim to meet the needs of all stakeholders offering realistic options where access and security conflict.

Mobility: To be able to connect and access information whilst working on multiple campuses is of high importance. Processes must exist to allow access to files, email, printing, information and online discussion whilst working remotely.

Sourcing: We must be expert in interpreting academic needs and transforming them into a technology vision, then sourcing, managing and maintaining the resulting systems. Sourcing decisions will be made by considering all options available. This will include internal skills and technology if they exist and can be deployed and supported long term, outsourcing if a cheaper but as effective solution already exists; externally hosting our server infrastructure, sharing services with other South West Wales public service institutions, using Software As A Service i.e. readily available web based applications such as Sharepoint and Google Docs.

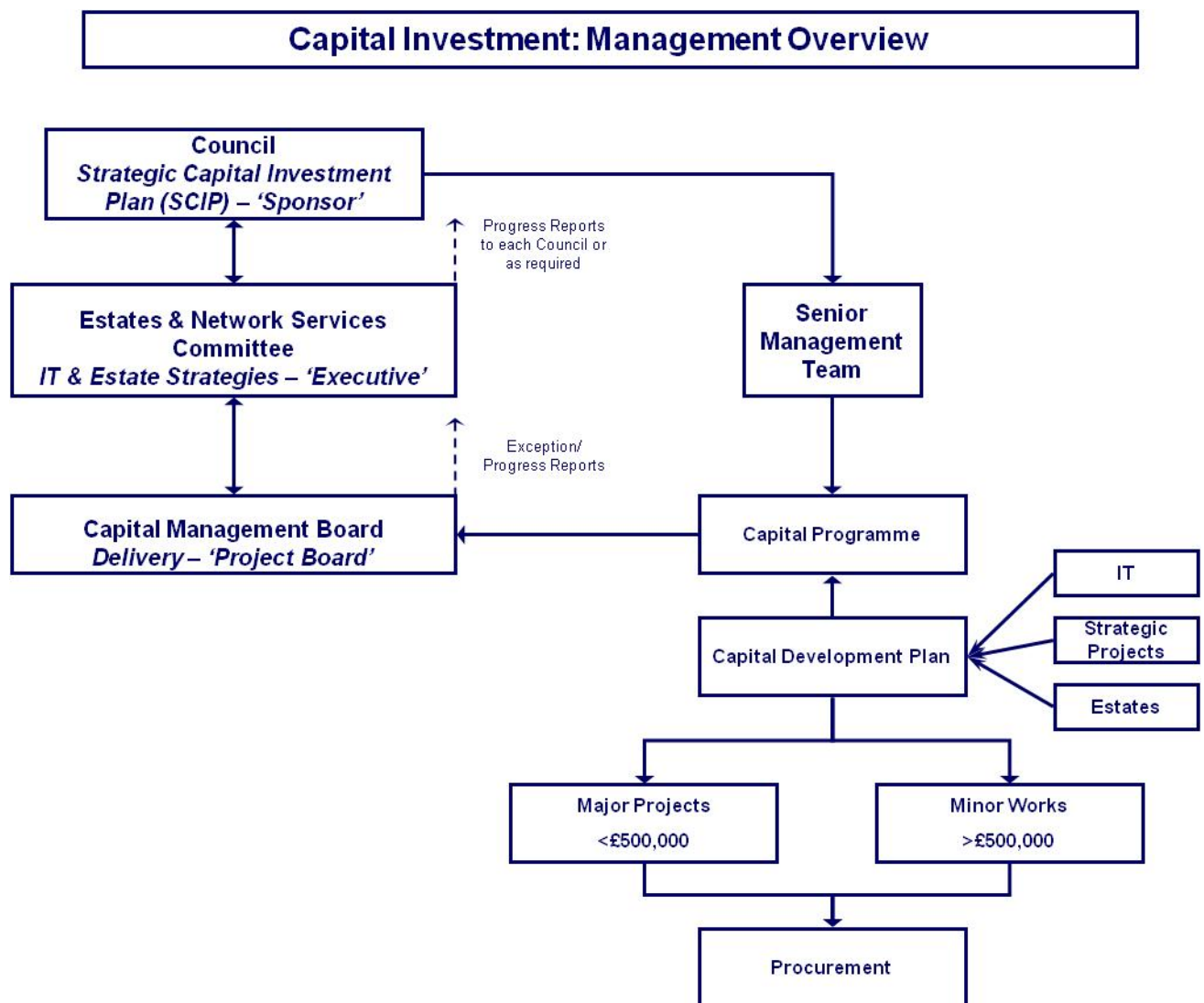
Financial sustainability: All technology purchasing and asset management will be centralised within the Department of Knowledge & Information. An inventory of Information Services assets will be maintained and a 5 year programme of refresh and replacement implemented. A knowledge and understanding of the strategic requirements of each department will inform the rolling programme. Funds for purpose will still be directed to the successful departments but purchasing channelled through DKI to add technical review and advice, ensure integration with existing systems and that value for money is obtained.

9. Information Services Governance

The Department of Knowledge and Information operates as a service to the University and is subject to strict governance procedures to ensure the service meets the strategic requirements and the academic needs of the institution.

9.1 Council committees

Council has approved a budget for the Integration and Merger of IT for the new University and an annual capital budget.



9.1.1 Estate & Network Services Committee

Council delegates the following authority to the Estates & Network Services Committee with respect to the development and management of the University's capital programme:

1. To oversee the development and implementation of the Estates and Information Services strategies and associated Master Plan that has been approved by Council.

2. To consider recommendations from Officers on the delivery of strategic investment priorities, i.e. with a value in excess of £1million, based on appropriate option appraisals, and to give an opinion to Council on the recommended way forward, the level of budget certainty consistent with the stage of project development, the adequacy of risk & project management, the consideration and mitigation of revenue consequences, and the overall value for money of the recommended way forward.
3. To receive progress reports from the Capital Management Board and to ratify all variations to approved projects with individual values of less than one million pounds (<£1million)
4. To consider and approve variations for all projects with an individual value of more than one million pounds (>£1million) where the variation(s) are significant and essential and could result in the approved budget being exceeded by up to an overall maximum of 10% of the value of the project (variations higher than 10% will be considered by Council).
5. To ensure that adjustments are made to the overall capital programme that has been approved by Council to accommodate any changes to approved budgets for all projects regardless of value
6. To ensure that appropriate independent professional advice is obtained to support the development of capital funded schemes
7. To oversee and ensure that capital procurement processes are robust and consistent with standing financial orders and best practice and, within this context, to ensure that the University develops and/or utilises appropriate supplier frameworks (up to and including EU threshold limits).
8. To ensure that the contribution of capital development initiatives, especially with regard to the reduction of backlog maintenance commitments, is appropriately recorded and reflected in progress reports submitted by the Executive Head of Estates & Facilities.
9. To monitor the application of the University's approved partnering protocol, especially with regard to the implementation of the 'pain/gain' incentivisation protocol.
10. To approve and monitor appropriate Key Performance Indicators for capital development projects.
11. To ensure the attendance of non-members with relevant experience and expertise (as appropriate and necessary to develop the project)

9.1.2 Capital Management Board

The CMB is a sub group of the Estates & Network Services Committee and is responsible for overseeing the implementation of the strategic capital investment programme approved by Council.

Delegated Powers

1. To oversee the development of a three year rolling capital investment programme, comprising all investment necessary to support the implementation of the Estate and Information Services strategies, ensuring that the programme is updated on an annual basis and presented to the Estates & Network Services Committee for consideration of any changes and recommendations to Council.

2. To manage projects within the financial envelope approved by Council and consistent with the Schedule of Delegation for capital expenditure.
3. To ensure that project management arrangements are robust, effective, and appropriate to the size and/or strategic importance of the investment initiative.
4. To ensure that all projects are adequately resourced and that each project has a programme with clearly defined approval milestones that are consistent with the approved Schedule of Delegation for capital expenditure.
5. To monitor the implementation of the University's capital programme with particular regard to the identification and mitigation of project risks and to submit regular progress reports to the Estates & Network Services Committee.
6. To ensure that each project has an appropriate discretionary contingency sum, which will be managed by the designated Project Manager.
7. To approve variations up to a maximum of 10% of the value of the project for projects with an individual value of up to £1million.
8. To note the potential impact of variations on the wider capital programme and to refer these to the Estates & Network Services Committee and/or Council where a variation on one approved initiative could adversely affect the delivery of another approved initiative.

9.2 Academic committees

9.2.1 Information Services & Resources Committee

The Information Services and Resources Committee (ISRC) is a standing committee of the Senate Academic Board and is charged with securing high quality information services and resources throughout the institution. The term of reference of this committee are:

1. To have overall responsibility for overseeing the effective development and delivery of information services and resources on behalf of the Senate.
2. To prepare and periodically update the Information Strategy for approval by Senate;
3. To develop policies and procedures in relation to information services and resources for approval by the Senate;
4. To monitor, evaluate and review the performance of the delivery of information services and resources within the institution;
5. To conduct audit visits to Support Units in order to ensure that appropriate quality assurance procedures are being followed and to report its findings to the Senate;
6. To advise and report to the Senate on any matter it considers relevant to issues relating to the provision of information services and resources;
7. To monitor and co-ordinate the work of Task and Finish groups established from time to time to consider particular issues relating to information and resource services;
8. To have overall responsibility for overseeing Risk and Risk Management throughout the University;
9. To consider such matters relating to information services and resources as may be referred to the Committee by the Senate or any of its standing committees.

9.2.2 Faculty Boards

Each Faculty has a Faculty Board, chaired by the Dean of Faculty and reporting to the Senate. The Boards have overall responsibility for developing and implementing the Faculty's Strategic Plan and for ensuring that the Faculty engages appropriately with the University's academic regulations and quality assurance framework.

The terms of reference include receive and ensure appropriate response to action points relating to the Faculty from all other Standing Committees of Senate Academic Board. The Director of Knowledge and Information is invited to each meeting to present an update on the Information Services Strategy with particular reference to matters of concern to the Faculties.

9.3 Senior Management Team

The Director of Knowledge and Information is a member of the Senior Management Team. The Senior Management Team is responsible for supporting the Vice-Chancellor in the effective strategic management of the University. It is responsible for devising, monitoring and implementing strategies, policies and plans which will secure the University's defined objectives; to lead and manage the University, its services and resources effectively and efficiently in accordance with policies determined by the Governing Body; to provide strategic advice to the Vice-Chancellor with regard to academic planning and related activities; to provide effective strategic direction with regard to risk management; to develop, evaluate and maintain a corporate approach to the management and execution of the University's affairs.

10. Financial Management

The Department of Knowledge and Information is a cost centre and limited opportunities exist for revenue generation. Strict financial control will be deployed with all purchasing decisions demonstrating business value beforehand.

The department can also be viewed as an investment centre where the investment in a robust flexible architecture that underpins the institutional strategic plan will enable delivery of strategic goals for the University.

There are capital and revenue budgets, and discretionary project funds are made available for specific projects such as the IT Integration and Merger, SWWHEP or similar initiatives. Income is derived from charging for the use of internet access from student halls, printing and photocopying services and the hosting of the PSBA CPOP public service broadband link.

10.1 The rolling programme for capital replacement

The five year rolling capital investment programme for servers, networks, desktop and audio visual equipment will be implemented. A goal will be to become cost neutral within five years with overhead expenditure funded from income and where costs can be identified as being specific for the support of a department or faculty a charge back system will be in place

Information Services will provide a central purchasing facility for all IT and AV equipment for the new University. This will include funds for purpose for specific projects. All budgets for IT equipment through the University have been moved to a central budget, managed by Information Services. The benefits of centralised purchasing are the implementation of common technologies, access to more competitive price breaks, accurate asset tracking and improved support services.

The teams have compiled a complete inventory of all the IT equipment. A rolling programme of desktop and laptop renewal will be implemented through a five year replacement cycle, 20% of the equipment each year. The default replacement will be of the oldest equipment, but we expect to negotiate with some departments as they identify different priorities for replacement at different times.

10.2 IT Investment Plan - IT Integration and Merger budget

The Information Services Integration and Merger budget, approved by Council, will be invested over the next two years to create a single technology infrastructure for the University with common services delivered to a high standard to staff and students, equally across all campuses.

11. Information Services and Processes

Information Services will be delivered using the Information Technology Infrastructure Library (ITIL) framework. ITIL is the globally accepted approach to IT Service Management and provides a cohesive set of best practice drawn from public and private sectors internationally. The ethos behind the implementation of ITIL is the recognition that the University is becoming increasingly dependant on technology in order to satisfy the academic aims and meet the business needs. This leads to an increased requirement for high quality Information Services.

ITIL is a systematic and professional approach to the management of Information Services provision. Adopting its guidance offers University staff and students a range of benefits that include

- Reduced costs
- Improved Information Services through the use of proven best practice processes
- Improved customer satisfaction through a more professional approach to service delivery
- Standards and guidance
- Improved productivity
- Improved use of skills and experience
- Improved delivery of third party services through the specification of ITIL or ISO 20000 as the standard for service delivery in services procurement.

The large ITIL framework will take up to two years to implement. The Department of Information Services plans to introduce portfolio and financial management, a service catalogue and event, incident and problem management during 2010/11. Other ITIL services will continue to be supplied but not through the ITIL framework.

12. Information Services Structure, Staffing & Sourcing

The creation of the new University offers a unique opportunity to review the Information Services and Learning Resources Centre department structure, the required staff in each department, to conduct a skills inventory, training and recruitment plans and the strategic sourcing approach.

12.1 Department structure

The Information Services department comprises staff from the Carmarthen campus Network Service Department and the Lampeter campus University Computing Services, Media Centre and Reprographics, and staff from MIS/SDSS on both campuses.

12.2 Skills inventory

Each department brings different capabilities, with Network Services having a strong technical skill set in maintenance of complex infrastructure with minimal budget, whilst University Computer Services is adept at using funding to implement strategic projects that integrate with existing systems. A merger of the best of these skills and a realignment of responsibilities will enable Information Technology to deliver on the institutional strategic plan and will add value to the overall strategy.

MIS and SDSS have a high level of complimentary skills which are directed primarily at Registry functions. TSD will benefit greatly from these skills being applied across all applications. The Media Centre and Reprographics Unit have specialised technical skills though different to Information Services which can also be technically complex and which requires high quality production with specialised equipment.

A skills inventory has been taken which indicates there are sufficient technical skills to meet the demands of the new University. Managerial skills are concentrated in very few of the staff so a targeted programme of professional development will be required in this area.

12.3 Training and recruitment plans

Information Services are constantly evolving and developing with new technologies requiring new skill sets, therefore there will be a need to review how the skills required for each new technology are to be sourced. Options include providing skills internally, out sourcing, sub contracting, external hosting or utilising 'Software as a Service', or Cloud Computing, from internet based providers. For example

- Where a technology is completely new, the planning and installation will be outsourced with only the ongoing maintenance and integration delegated to internal staff. E.g. capacity planning for the new system architecture;
- If a technology is particularly complex and expensive to maintain this will be outsourced e.g. SITS development;
- If a service is less expensive if provided externally then external hosting and sub contracting will be considered e.g. NorMAN Out of Hours Service

13. Information Services Risk Management

As part of the wider management of risk within the University, the Information Services department is developing a departmental risk policy. A register of risks will be compiled and a means of recoding adverse events that occur within the department will be established. These adverse events are then reviewed and considered for inclusion in the department risk register and possibly for addition to the institutional register, depending on their severity and impact. Risks that occur through project or operational work should also be recorded by completing a risk notification form

All Department of Knowledge and Information departments will be represented in a Risk Management Group. The group will have as its members a department risk manager and a deputy risk manager to take responsibility for meetings, policy and reporting, a risk champion and deputy risk champion to lead mitigation work after an adverse event.

The Risk Management Group will meet monthly to review adverse event logs, to review project risk logs, to update action plans and make recommendations to the Director of Knowledge and information on matters for escalation to the local or corporate risk registers. Regular reports from the Risk Management Group will be presented at E&NS and ISRC committees.

All department staff will be reminded regularly of the process for managing risk within DKI. A list of procedures will be published and regularly reviewed and staff will be reminded of their responsibilities during staff development week and at regular staff briefings.