ISC11D042

ISD Programme of Work 2011/12 – Jan 2012

Project reports

Improving the Physical Environment	
TV Studio refurbishment	This project has been initiated and a technical specification written. Work is nearly complete to issue tender documentation to the University's preferred supplier list. The current plan remains to carry out the refurbishment in late spring/early summer ready for the 2012-13 academic year. This semester the use of the TV studio for teaching has doubled, bringing additional demands on technician time. To provide the necessary resources a technician has been seconded from the IT technician team until Easter, and a bid has been made to establish a permanent resource for the next academic year.
Tender for AVS managed service	This work is scheduled for later in 2012.
Supporting Research	
Development of Research computing support service	The Research and Specialist Computing Support team have continued to deliver a number of outreach events including involvement on a statistical software seminar in the Norwich Business School, a School of Computing undergraduate lecture and a further running of the Science Faculty PGR PPD programme course in High Performance Computing. The Linux support arm of the research and specialist computing support team consisting of Mike Salmon and Julie Harold has been supplemented with the recruitment of James Cross who is started on 16th January, in time for the launch of a project to develop a standardised Linux desktop solution for researchers across the university. Further work was carried out on the consolidation of Linux services and software license management from end of life UNIX systems onto the RCLogin server. The Subversion and Trac facilities continue to be developed with an increasing number of users and repositories. The team continues to provide High Performance Computing resources with an increase in the number of users and usage on Grace. See - Research computing, provision and support for a 160 node cluster used for high powered computing.
Development of a Virtual Research Environment (VRE)	Work on the VRE has been delayed due to staff resignation. One area that has continued is the investigation of CRIS (Current Research Information Systems) tools. These tools have the potential to provide a portal delivering most of the functionality of what was envisaged by the VRE project. The Research Board has endorsed the approach of pending

	work on the VRE in preference to looking at CRIS tools. Work has begun on developing a tender specification and investigating alternative suppliers and a CUBS/Capital Plan bid has been made.
	Alongside the investigation of CRIS tools work is still progressing to enhance Eprints and Rplan as well as work on upgrading PFACT in readiness for integrating data between PFACT and PMA.
Managing Research Publications	Strategic decisions relating to the development of EPrints continue to be made at the ISD Research Board. Appropriate staff from the Library, ITCS and REN meet regularly to ensure a joined up approach to the development of EPrints. An EPrints User Group has recently been formed by REN (including representatives from the Library and ITCS) to advise the ISD Research Board.

The Library continues to run a limited advisory service for full text deposit, with academics doing their own uploads and checking their own copyright clearance. Last year we secured agreement in principle on a mandate for full-text deposit but this is currently in abeyance as it was predicated on having a Repository Manager post.

It is clear that support for open access deposit is growing. We have noted the recent change in government policy towards supporting open access as laid out in the December 2011 policy document: 'Innovation and Research Strategy for Growth'[1]. This paper makes the specific commitment to ensuring 'that publicly-funded research should be accessible free of charge'. |
| Review of collaboration tools | Work has not yet started on this area. |
| **Supporting Education** | |
| Education Board programme of work | The ISD Education Board approved a programme of work that commenced in the autumn. Progress has been made in a number of areas to date:

The Learning Technology Team is developing a communication plan aimed at promoting the use of existing resources, tools and services to improve engagement and adoption of Technology Enhanced Learning (TEL). This will raise awareness of the Learning Technology Team and its activities, promoting the range of tools, resources, and services and establish a pattern of communication with schools. The communication plan will encompass how the objectives can be met, who needs to be involved, identifying risks and measuring success of communications.

Work has begun on identifying the changes needed within the VLE and its data feeds from SITS to meet the requirements of the New Academic Model.

Work has started on setting up the OpenAthens single login solution to |

[1] Innovation and Research Strategy for Growth, 2011. (CM8239) London: The Stationery Office. [online] Available at http://www.bis.gov.uk/assets/biscore/innovation/docs/i/11-1387-innovation-and-research-strategy-for-growth.pdf Paragraphs **6.6 - 6.9** apply [Accessed 13 January 2012]

improve remote access to UEA online services. At present we are able to demonstrate desktop and remote login, including single sign on, and hooking in to the UEA Identity System to retrieve user roles to control access to resources. The next stage of the work will involve setting up some pilot services to be accessed via this authentication route. We anticipate pilot services will be available by Easter, with wider rollout of major services such as Athens being undertaken over the summer vacation.

A steering group has been formed for the Learning and Teaching Excellence website. The group has met twice and planning for the website has started. A first draft of the website, including materials relating to the use of technology to support learning and teaching, will be complete in the Spring Semester.

Work is ongoing in identify areas of low adoption for content creation in the VLE and targeting support for these areas. A full set of recommendations will be available in May 2012.

Work is ongoing in identifying opportunities for increased use of standard content / learning objects. A full set of recommendations will be available in May 2012.

Work is progressing in formulating training material for academic staff using new technologies. For June 2012 screencasts and guides will be made available covering the most common areas of skills and knowledge that academics will need to use Blackboard.

The development of support and training material that will be used by students using new technologies is underway.

The review of editing tools and potential for creation of an editing service is now underway. This work is being carried out within the context of a potential University wide lecture capture facility. Investigations will look at:

- editing needed within teaching events;
- editing needed as part of filming/TV studio requests;
- possibilities of self-managed editing facilities with training provision;
- branding of videos (ARM developing for 2012) with opening/closing sequences (need to establish formats that can be used in editing software).

A full proposal will be presented to the Education Board in May 2012.

Consultation is taking place on standards needed for lecture capture and the use of iTunesU. ITunesU is for public facing content. The majority of freely available content is generated by ARM. Currently, content is uploaded to the Helix Media Library and then the URL is published. From summer 2012 the Helix Media Library will have the ability to publish direct to iTunesU or via the VLE. Further work on publishing standards is required with a full set of recommendations to be made in May 2012.

Exploration into how mobile technology can be used to support learning and teaching, through literature review and conversation with colleagues at UEA and other Higher Education Institutions, has started. Structured pilots are envisaged for the Autumn Semester 2012.

A text messaging pilot group has been formed within NSC. The work that will be undertaken has a requirement to procure Blackboard Mobile / Connect.

Work for the pilot of the library mobile device loan scheme will commence in January 2012. This will involve a review of how similar services are delivered at other HEIs and possibly a bid to the Alumni Fund. We will be seeking input from other teams within ISD on matters relating to network security and the practical/technical implementation of any proposals.

The Online Coursework Submission (OCS) pilot was successfully completed in 2011. The pilot helped with administrative loads in the hubs during peak periods of semester one, especially in the ARTS hub. Approximately 6000 assignments were eligible for online submission, of which 4000+ (67%) assignments were submitted online.
LTS will be meeting with academic staff to discuss coursework return and to gain feedback how on the process worked from their perspective. LTS are also working with the Students Union to gain feedback from students which will be advertised shortly. LTS are keen to continue with e-submission in semester two and hope to encourage more academics to adopt it.

The work on extending OCS to other types of assessment will be investigated after feedback has been sought from students and staff involved in the pilot.

Investigation into online marking at other Higher Education Institutions, and the context of online marking at UEA, are well underway. Andy Mee will be project manager for online marking pilots. The student feedback and evaluation process development will be completed in conjunction with the online marking process.

A review of e-assessment and how technology can support formative assessment has started through literature review and conversation with colleagues at UEA and other Higher Education Institutions.

A feasibility study is continuing to look at freeing up more learning space within the library. Consultations with Estates and Safety Services have been completed and indicative costs are awaited from two companies expected soon. The question of disabled access remains unclear and further consultation is taking pace with Jane Abson, Disability Coordinator, to determine which options to pursue.

An audit of the 120 centrally-bookable teaching spaces is currently in

	progress and is expected to be completed shortly, in order to determine what equipment is currently installed or available. The Audio-Visual Services (AVS) team within ISD was re-organised in summer 2011, with support for teaching spaces largely absorbed into the IT technician teams. During the early months of 2012 a review of the scope and provision of AV-related services will be undertaken. This is intended to identify the most appropriate set of services and the most efficient means of delivering them. The audit of equipment coupled with the review of the service provision will be used to provide a more detailed and coherent set of proposals that will be brought forward in early summer 2012. Work started in January 2012 on developing a business case for investment in an online meeting space (Elluminate). The pilot in 2011 has been used by 1540 attendees within 13 project groups, who will be asked for feedback on their experiences. The business case will look at demand for this technology and the benefits this can bring when used alongside Blackboard. Investigations will be made into other uses it can be put to such as online meetings for recruitment, research, outreach and business activities. A project group will be formulated with Estates and LCIC to look at cost and carbon saving that this technology could also bring to the University.
Supporting Enterprise and Engagement	
Supporting UEA Business Processes	
SITS Project	The SITS project continues to have a significant amount of resource dedicated to it and has delivered many new or improved processes. The following tasks have been completed: • Accessibility (AAM component) Client and some eVision • Support for Phase 1 implementation of Hobsons (Apply Yourself) • Migration to 11g (all 4 instances of SITS) • Increased length of student numbers from 7 to 9 digits • Amendments to Tier 4 engagement monitoring task and implementation of document manager for visa checks • Timetabling – linking staff and student accounts • Module withdrawal task In addition to items specified on the Programme of Work we have been able to complete a number of minor developments (requiring only a few days of work) or fit in lower priority work as part of the induction and training of new staff. These include • Specification and development of self-service Council Tax

	certification
	• Exploration of issues around address formatting
	• Solution for processing of INTO data for HESA
	• Mapping of old to new acronyms to support ARM reports
	The following developments are in progress
	• Statutory Reporting: NMC Student Index (statutory requirement)
	• Fitness to Practice (MED)
	• SPOT / SITS / Blackboard feeds
	• Migration of servers to updated operating system (critical and requires server rebuild)
	• Revision of automation for withdrawing a student
	• Revised systems monitoring
	• Evaluation of Survey Manager
	• Task to allow evaluation creators to delete incorrect evaluations
	• Student status codes
Finance Systems improvement project	As a result of technological developments and various software company buyouts it has become apparent that the university's current suite of finance management applications is at risk of becoming unsupported within the next 2 years. Our current supplier has an 'upgrade' path from one product to another but this involves a significant amount of work which we should not take on lightly. Although it is anticipated we will most likely 'upgrade' it is important that we understand any opportunities for change and clearly articulate our vision for what is required of finance management systems across the university over the next 5-10 years. We should also not discount the possibility of switching supplier at this stage. The cost of migrating may require a formal tender process which will require University wide engagement in the tender production, and management of the tender process. A project to oversee the selection and tendering process is being set up.
Campus Card Replacement	The project to replace all old campus cards with new proximity chip enabled cards has been completed. This entailed pre-printing and then swapping around 2500 campus cards. Moving to the new technology has enabled the rollout of proximity readers to the new car park barriers. Estates are now specifying the new readers on all new projects and will be replacing magnetic swipe readers with new proximity one when they fail or need maintenance. This project is complete.
Review of ICT support for space management	The Estates division have purchased a new product 'MICAD' and are in the process of migrating data to this to enable both asbestos management and enhanced space management. ISD involvement is now limited to the creation of data feeds to transfer room/building names and floor areas.
Voice Over IP	The VoIP phone roll-out for the final year of the project has started with

	EDU, ENV and CRU completed and CMP and MTH in progress. The rollout is on schedule and it is planned that the remainder of campus will receive their VoIP phones by the end of July. Project negotiations have finally been completed with Siemens and they have agreed to a number of compensation items, which will be installed over the coming months. The CIS development team is working alongside Siemens' engineers to implement a database link so that the call logger data will be used to automatically update the caller ID names on the phones, removing the need for separate manual updates. An out-of-hours procedure for phone faults has been implemented with Siemens. This will cover both major faults discovered by UEA and faults seen on the monitoring system at Siemens. As we already have 24x7 support from Siemens this will utilise the support more effectively without any extra cost to UEA.
Ensuring Service Availability	
ICT Security Project	The IT Strategy Review Group will be considering the recommendations from the Security Review and will consider the future direction and developments that are required. This will inform a final decision of whether additional funding is to be made available. At present a programme of work is underway that concentrates on completing activity that has limited or no funding requirements. Where possible security deliverables are now being embedded into team plans to aid streamlining the management of items.
Administrative Integration Project	This work is now complete.
ITIL implementation	At present this project is concentrating on the implementation of change control processes, the development of the ISD Service Catalogue and supporting a review of our disaster recovery plans.
Enterprise Service Desk implementation	This project is complete.
Costing services	Some work was done to develop more detailed costing information for ISD Services and this was presented to ISSC in November. Benchmarking is planned as part of the work being undertaken by the IT Strategy Review Group and at this stage we propose no further action is taken on this project.
Development of a 5 year ICT Systems Strategy	This work has been completed and a report has been included for consideration by the IT Strategy Review Group.
Development of a 5 year Network Strategy	This work has been completed and a report has been included for consideration by the IT Strategy Review Group.
Server Virtualisation Project	The focus for this project continues to be on reducing the resource required for server deployment and providing additional resilience and agility.

	The vast majority of the existing end of life servers that could be virtualised has now been moved across to the virtual infrastructure. We are now focusing on provisioning additional virtual hardware for the physical servers that we are expected to be at the end of their life cycle this year. In addition to this we are also ensuring that where possible additional server requirements that can effectively be run from a virtual infrastructure are provisioned as such rather than purchasing physical hardware.
	Our investigations into the options for presenting storage in this environment concluded that the commonly adopted solution of IBM NSeries filer gateways presenting the storage to VMware was to be adopted. At present we our using our existing filer gateways to provide storage but are in the process of installing and configuring newly purchased filer gateways dedicated to this purpose. These will allow us to mirror data provided to the virtual hosts across both of our data centres ensuring that critical services can continue to run in the event of one data centre going offline. We had expected this work to be completed in the last few months but have hit a number of issues with one of the nodes. We are now in the process of diagnosing these issues with IBM and hope to be able to migrate the existing data to the new solution in the very near future.
Managed PC procurement	The PC procurement service with Viglen has now been running for 1 year. The management of the service and supplier relations has transferred across to the new Faculty IT Support team, and review meetings with the suppliers have moved from monthly (during the bedding in phase) to quarterly.
Records Management Policy Development Project	At the November ISSC meeting, a records management implementation plan was approved. The plan identified a number of tasks to be covered during Q1 and Q2 2012. The overall aim is to embed good records management practices in departmental information management processes and to develop RRSs (Records Retention Schedules) for business records.

Work on establishing records management in ISD is currently underway, however the Information Compliance Team are under significant pressure as the number of FOI and EIR requests continues to increase and so less progress has been made in this area than had been hoped for. We are hopeful that a recent request to ET for additional resources in this team will be approved. |
| Journals review | A university-wide journals review was launched in February 2011 to better gauge the usage and value of individual journal titles and to inform 'scenario planning' for any potential future budget changes. This work took both a quantitative and qualitative approach. The bulk of the work was concluded by the end of May.

As agreed in October's Library Forum we have been re-engaging with Schools that did not contribute to the exercise. We have liaised with each outstanding school and have made significant progress in obtaining qualitative data from each of them. We expect to conclude this re- |

	engagement within the month. As noted in October's forum, if after this re-engagement there remain any instances where Schools have not provided qualitative data, it will be difficult for us to judge the value of the titles we provide. Therefore when it comes to any budget restructuring, it is likely that any initial cuts would be made to these low use titles, as we do not have the qualitative evidence that they should be retained.
Review of Acquisitions processes	A review of the Library's approach to obtaining reading lists from academics and the subsequent ordering of core texts began in January 2011. We have been focussing in 2011/2012 on working with faculties to increase significantly the number of reading lists deposited with the Library. Alongside this more traditional approach to increasing the deposit of reading lists, we have recently launched a marketing campaign under the 'More Books' banner to encourage students to let us know when the library does not hold books contained on reading lists. More details about the 'More Books' initiative is outlined within the service plan for Academic Services below. At May's Library Forum, there will be a full report on progress with this 'reading list project'. The paper will focus on progress we have made this academic year in acquiring existing reading lists and any progress with trying to obtain funding for 'Talis Aspire' reading list software (including, if successful, proposals for its management and roll out). By then we should also have an estimate of the % of UEA reading lists received by the Library and be able to consider whether a mandate for reading lists might be beneficial. We are continuing through 2011/12 to make changes to our back of house processes to further cut down the time it takes to get books to the shelves.

Service plans

The ISD Strategy 2008-13 identifies eleven keys areas or groupings for ISD service delivery; the table below summarises activity in each of these areas.

Library resource provision, including management of the physical and electronic collections and information skills training.	The request that the Library should stock appropriate texts in the appropriate numbers is regularly cited by our users. In response to this request, we have recently launched the 'More Books' initiative to be better placed to be responsive to these needs. The idea behind 'More Books' is to give more power to our users so they can tell us directly what they want the Library to purchase or if we need to get more copies. The driver for this campaign is to make it easier for our users to get the books that they need, when they need them. If a user can't find the book they need, we want to know about it, so we can purchase it as appropriate. Although the Library works closely with academics in every school to ensure that we have the appropriate reading list titles for every course and in the sufficient numbers, we believe that our users still need to be able to tell us directly where they feel we should add to our resources. The 'More Books' campaign is our way of encouraging that direct communication. Users are invited to complete a web form to recommend a book. We anticipate that this will be an annual campaign to highlight to users their ability to recommend a book. Obviously we can't buy everything and meet every need, but we want to do the best we can. This initiative will run alongside our continuing work with schools to increase the deposit of reading lists as detailed above. In November we rolled out UEA Library's first mobile 'app' for smartphones for a pilot period of a year. This enables our users to search the catalogue from their mobile devices. It also links through to other useful resources, such as library opening times, PC availability, library news and floor plans. The app is freely available to all users with smartphones. Since its launch it has been a popular success. Statistics show it is being well used and we've had some very positive feedback from users. We hope to develop this through this academic year, ahead of any decision to continue with subscription to this app next year. More details and information on how to access the app are available here: http://www.uea.ac.uk/is/cis/teach/libraryanywhere Proposals to find a way to allow the renewal of DVD/VHS items are being considered following requests from students in HUM, especially FTV. It is important to check whether allowing single renewals will inadvertently disadvantage other students and so further testing is taking place. We hope to be able to report the outcome of this to the next meeting.
IT infrastructure in teaching spaces, including IT teaching areas, 24 hours IT area, self study spaces and	Unfortunately both the developers have resigned from the desktop development team leaving no dedicated resource. Recruitment has been completed for one post but this will be vacant until March; the other post is being recruited to currently. Emergency support for the desktop is being provided by the System and Technician teams.

AV services in lecture rooms.	All the requested desktop developments for the new term have been completed. This included SAP and EPRIME as additional teaching applications and Endnote was modified to support UEA Library Services. Updates to the Northgate and QLX finance corporate applications were also deployed. New licences for SPSS were released. The Kings Lynn Terminal Server desktops were upgraded to support Windows 2008 Terminal services and the Application Repackaging server was migrated to the Virtual Server infrastructure. Software deployment documentation is being updated and unused software and Group Policies are being archived and deleted from the Active Directory. It has been noted that there are several helper applications such as Flash, Adobe reader etc that need updating to the latest versions.

The student network printing service (Papercut) was updated in late October, outside its planned update timetable, in order to fix a high usage stability problem. The service has remained stable since then, coping with several high volume coursework deadlines.

We are currently working with staff from LTS and Planning to develop a set of proposals for a project to oversee the refurbishment of all centrally bookable teaching spaces. |
| Staff and student enquiry services, including IT helpdesks, Library helpdesk. | Demands on the space and facilities within the Library continue to increase. Footfall into the building up until the end of December 2011 has increased by 12% on the previous year. We will be closely monitoring use of the building during the 24/7 opening pilot, not only in terms of numbers entering the building but by looking at how the facilities are being used and by whom. We hope to work with the Equality & Diversity Unit to profile Library usage by School, mode of study, and level of study. This should provide some useful data to help inform decisions as to whether the extended opening should continue beyond the pilot.

We have been working closely with the Learning & Teaching Service and the hubs, in particular in relation to coursework submission. There is a late submission box in the Library foyer for use after the LTS hubs close. So far this year, well over 10% of all paper coursework submissions have been made via the Library drop box.

Close liaison with Accommodation, DOS and ARM among others helped ensure a smooth start to the new semester and once again the vast majority of new students in University accommodation were able to receive their campus cards when they first arrived on campus. We worked with staff from ARM to offer a one stop shop for new international students in the Library where they could obtain their campus card and complete visa checks.

We have begun two minor programmes of refurbishment which will result in the chairs in the current 24 hour IT suite being reupholstered and the original study chairs and tables on Floor 01 |

	being refurbished. This should help improve the working environment in both these areas.
	We continue to explore ways of streamlining our processes to free up staff time to concentrate more on services that will directly support Library users and improve their Library experience. Current issues include access to the Library for those without campus cards and minor changes to our invoicing procedures.
	All borrowers now receive a weekly email alerting them to items that will be due for return in the coming 7 days. This is something that has been high on the student wish list for some time.
	We received 47 written comments and suggestions in the 3 months Sep – Nov 2011, all of which received an individual reply within our target response time of 5 working days. We are trying to improve communications with our users and better publicise the improvements to services and facilities we have been able to make. This has been achieved via articles in Broadview and e-bulletins to the University community, news items on our webpages, items on the Library blog, Facebook and Twitter as well as more traditional information posters.
IT infrastructure, including two computer suites providing resilient email, filestore, backup and authentication services.	Phase 2 of a two phase project to vault our TSM backup tapes to our second tape library in Data Centre 2 is now nearing completion. The daily need to manually transport tapes offsite has now been removed and the associated fire safes are now being emptied as the system calls for tapes to be retrieved. Phase 2 has taken longer than expected due to a significant increase in the volume of data being backed up from central file store. We are in process of pulling together quotes that will allow us to increase the capacity of our tape library in Data Centre 2 allowing the completion of vaulting of all data.
	Work with our storage partner Tectrade and supplier IBM has continued to ensure that research file store meets the requirements of its users. In particular we are working to ensure that our current technical ceiling of 50GB quotas can be exceeded as well as better integration with Research Computing services. This work is embedded in the restructuring of personal Central File Store which is due to commence this month.
	Between late October and December the remaining staff and postgraduate researchers using the old Student email service were migrated to the Staff Exchange service. As part of this process the POP email protocol has been removed from service. In turn the insecure IMAP email protocol will be withdrawn from service to enhance the security of the service. Once withdrawn web access, native Exchange and secure IMAP will be the only supported methods for accessing email. A small number of accounts on a mail server in Maths remain to be migrated and we are working with IT Support and Maths to ensure that this process is managed with end-

users' needs in mind.

Email mailing lists are still in the process of being migrated to Exchange. Once completed this will mean that all mailing lists will be provided by a common platform reducing support costs and management considerably. Once migrated, lists will be managed by the UEA Identity Management System and the existing Mailman and text-based list facilities will be decommissioned along with the legacy email servers. The revised mailing lists will provide much more granular control over who can send to mailing lists and this will be implemented to ensure that only those that need to can send to lists.

The implementation of mobile synchronisation policies to secure mobile devices that synchronise email with the UEA Exchange service was delayed whilst we prioritised work to migrate student email to Exchange. We are now looking to implement this in the coming months.

We have continued to try and enhance our defences against SPAM and phishing email. In doing so over the Christmas vacation we implemented rate- limiting (limiting the volume of email a user can send over a defined period of time) on outgoing email as such any user sending large volumes of email per hour was automatically blocked from sending for 3 days. Over this period a significant number of users were caught significantly reducing our potential for being blacklisted by other email providers. We are now in the process of ensuring that we have a comprehensive white-list of authorised bulk-senders to ensure that legitimate email is still sent.

Since October the Data Centre team has been resourced by two permanent members of staff, a contractor and a seconded post. A restructuring of the team occurred in January which resulted in a dedicated Data Centre Manager, Dominic Belisario working 4 days a week and an enhancement in the technicians' duties and responsibilities. The role of Duty Operator has been expanded to include more work on initial server builds.

Within Data Centre 1 work continues to align server racks to improve airflow and ensure we can maximise the benefits of the existing environment controls.

In order to monitor the Data Centre environment more effectively the team have added the environmental monitoring equipment to System Centre Operations Manager service, to alert high/low temperatures/humidity and power failures. The new service also allows us to analyse temperature and humidity trends.

Around twenty end of life servers have been removed from service and been prepared for recycling or reuse. The services running on some of these have been migrated to the virtual server

	infrastructure. The Systems and Data Centre teams are working together to implement a practical and semi-automated solution for the installation of patches and hot fixes to Windows servers, to ensure the servers are secure. A detailed monthly downtime calendar will be published to ensure service owners and users are aware of when servers are at risk or unavailable.
Network and Telephony, management of the internal network, external network links, and telephony.	Power-over-Ethernet switches have finished being installed into ENV and installations have continued into CMP. Much activity has taken place across the team in relation to the replacement DNS/DHCP solution. The migration of the student residences and wireless network to the new solution has been completed, with the main campus configuration in its final stages. Documentation including that in relation to the Network Vision (for the next five years) was completed.
Research computing, provision and support for a 160 node cluster used for high powered computing.	The number of new users registering for accounts on the primary cluster Grace continues to rise, with a noticeable increase in the number of users from the Norwich Medical School. General usage of the HPC cluster continued to increase in the final quarter of 2011, with periods of particularly heavy usage. The number of users working on the old ESCluster and general usage has decreased however there are still periods of heavier load. Storage requirements have also grown, with increased allocations to standard and scratch storage and also tape archive capacity. In November four Grace compute nodes were upgraded to take them to 48GB of RAM, double the standard configuration, to provide large memory facilities for users of the HPC cluster. This has allowed a number of ESCluster users to migrate to the new service. Efforts continue in installing and updating software and packages on Grace, to provide improved performance to existing users and open up the resource to new users. With new computation and storage resources in place, the cluster resource has proved very stable, with no significant periods of downtime disrupting jobs running on Grace, while ESCluster had a short period of planned downtime (less than 4 hours) to carry out some important maintenance.
Teaching systems including the VLE, Portal, Library Management System, and some specialist teaching software.	An upgrade to the database infrastructure that supports Blackboard is being planned. Work has begun to develop technical plans for migration of the current portal (which uses the Blackboard Community Systems) onto the new Liferay web content management system. The objective of this work is to provide a seamless environment for Internet, Intranet and Portal enabling user customisable content across our digital media platform. ISD are in the process of testing both a Mobile interface onto the VLE and SMS text message enabling modules.

	Library management systems have undergone a series of infrastructure upgrades to bring them on to the latest version of database software. A package of tasks is being defined to investigate methods for improved online access to library facilities and resources. Specifically this is looking at a major upgrade to the Athens service, which it is anticipated will enable us to achieve single sign on to internal library systems and external resources.
Administrative and web systems, including Finance, Student Records, HR, Estates and the UEA web site.	The migration of research websites and specialist content to the new Liferay content management system has been continuing. Requests from the Web Steering Board to adjust the programme of work to prioritise migration of Polopoly have led to a range of discussions regarding the potential speed of migration and stability of the current system. A CUBS/Capital Plan bid has been made to increase investment in Liferay software in order to cover for any more rapid deployment, since existing plans were based on a steady migration rather than big bang approach.

The finance system has been upgraded and core infrastructure migrated off the now unsupported Solaris servers. The new infrastructure is now compliant with our Oracle Framework and therefore gives us a more certain level of resilience at the database level.

The HR system has had many core components upgraded, both to enable database upgrades, but also to enable new versions of Web Recruitment and Self Service modules to be installed. ISD are working with HR and Payroll to pilot self service payslips. This project is due to be rolled out over the coming 6 months to all staff.

Identity Management – the main focus of work on SPOT has been the support of self help password resets, email migration and migration of mailing lists. Self help password resets has already significantly reduced the load on the helpdesk in relation to password resets. Supporting the migration of student email from Squirrel mail to Outlook has also improved our processes as it has removed many dependencies on old and poorly managed scripts. Work to migrate mailing lists continues and is expected to continue for several more months as we liaise with list owners to close more lists.

A very successful set of integrations between systems has seen us roll out both dynamic PC availability screens and a data feed to enable students and staff to subscribe to their timetable from applications such as Google Calendar or ICAL. AT present it is not possible to integrate with the student version of Outlook but we anticipate enabling timetables in Outlook once we upgrade to Exchange 2010 in the summer. |
| Faculty IT Support | **Simplifying access to Helpdesk services**: In January 2012 the previous recommendations to reduce the number of email addresses and |

phone numbers coming into the Helpdesk were brought into effect. There is now a single phone number and email address for ITHD queries, and over time the now redundant numbers and addresses will be gradually phased out. (At present the redundant numbers and email accounts are being auto forwarded)

As part of this work the entire "in queue" messaging setup has been overhauled to be more customer focused, and make users aware of some of the web based self service options available to them.

Further work is required to update all of the documentation and web content to reflect the changes, and at the last count there were 112 individual pages that required some form of modification. These changes will be made between now and Easter as part of a wider review of web based content.

Better relationships with 2nd & 3rd line support: The relationship between the ITHD and the 2nd 3rd line support teams has been improved by meeting with and working more closely with the new Support managers. Plans to organise a program of shadowing exercises where 2nd line spend a day on the Helpdesk, and 1st line spend time with the techs in the field are in place for February 2012.

Customer Service & Telephony Skills Training: The end user experience when calling the IT Helpdesk varied dramatically depending on whom you spoke to. Through an ongoing program of 1:1's and call coaching feedback we are starting to see a more consistent and customer focused experience for callers.

Overhaul outward facing service info and self-help: A number of initiatives to make online content more accessible have been implemented over the last few months. These have included "Did you know?" style information messages via email, and a number of poster campaigns with QR Codes giving fast access to FAQ's and help sheets stored online.

Work to provide an online service status information screen is ongoing and the first version of this should be available in the next few months.

Improvements to Campus Card Distribution methods: Changes to the production and distribution methods for Campus Cards for SOY ensured that both the September and January roll outs have been the most successful to date. New initiatives such as the "nobody leaves without a card", dedicated production space, and the bulk distribution of cards to Accommodation have been instrumental in this. During the January distribution of Campus Cards 116 of the 118 cards for students in accommodation were made and delivered before the first day of term.

Process improvement work continues in this area, and a pilot is

currently running with INTO Norwich to streamline card requests using electronic versions of photos rather than the previous paper based forms with attached passport photos.

Improved support for Apple Macs and mobile devices: Due to the significant rise in usage of both Apple Laptops and iOS Mobile devices the Helpdesk have responded by producing more helpsheets tailored specifically for this user base.

In addition to this staff training on how to resolve Mac related issues has been introduced. A high level of familiarity is required to deal with these devices on a day to day basis as a significant proportion of them are presented to Helpdesk staff in foreign language configurations.

IT Support teams: during August and September a series of changes were introduced to the newly integrated IT Support service. These were as follows;
- The skill set of the whole team was determined and steps taken to recruit to vacant posts.
- The balance of personnel and skills within individual teams was determined.
- Departments and Schools were allocated to the teams and technician(s) were allocated to areas where they had primary responsibility for providing support.
- ESD teams were created to reflect the areas of support. Separate ESD teams were set-up for each of the faculties, and the ISD labs. Calls were sent by the helpdesk to individual technicians within these teams.
- New workflows were introduced to replace the services previously provided by AVS. These included:
- Setting up web forms to capture requests for portable equipment and Lecture room support.
- Setting up a web form to capture requests for AV support for conferences and out-of-hours events.
- Using a shared Outlook calendar to record requests for portable equipment and lecture room support.
- Establishing an emergency AV number (#2833) to allow users to report live AV issues effecting teaching.
- Maintaining a spreadsheet to record which technicians were providing support for out-of-hours events.

Key issues affecting service delivery during this period were:
- Calls within ESD being allocated to the wrong ESD team which resulted in delay as the calls were re-routed to the correct technician(s) or teams.
- Technicians being unable to answer calls outside of the areas where they had permissions within Active Directory or that required local administrator rights.
- Users were unfamiliar with the new process for requesting AV support as changes were made to refine this process and were not

completed before the start of the academic year.

- There were delays in reporting AV faults to Snellings and signing off purchase orders before engineers were sent.
- The summer installation of AV was not completed adequately or on time. This resulted in a large number of calls before the faults were identified and rectified.
- It proved very difficult to find technicians to cover out-of-hours events. The issue of who carried out post-production remained unclear.
- Varied working hours due to past agreements meant that many technicians accrued extra time through taking a short lunch break and then finished early on a Friday.

To tackle the issues affecting service a number of changes have been completed or are scheduled for completion. These include:

ESD and the helpdesk: Flattening the ESD teams into three. One for each support team and one for IT Support Management. The calls are sent by the helpdesk to the ESD team rather than individuals. Technicians will filter the calls and look for issues in their designated departments. If there are no calls in their departments they will pick up other calls themselves. IT Support Managers will also review calls, look at trends and allocate staff where needed - Completed. IT Support has provided an up-to-date list of departments and which teams cover these. From February onwards the IT Helpdesk and IT Support will set-up shadowing between the two teams to better understand the roles each perform and identify any service issues that can be better managed. In February IT Support will be creating FAQ's and screen casts and linking these within ESD to promote self help where possible.

Active Directory: The Workstations OU within Active Directory is being modified to reflect the new University organisational structure. Workstations will be moved to the correct OU's. A new development OU is being created to separate testing from the environment in which reporting will be carried out. Group settings within Active Directory are being changed. The existing groups that split permissions along previous departmental lines are being removed and replaced with a flatter model. Two groups will exist; the first will contain the grade 4 and 5 technicians, the second group will contain the IT Support Managers and Senior IT Support technicians. These groups will be used to ensure wider permissions are available. IT Support Managers will review each share and ensure the correct permissions and security groups are set. Delegated Administrator rights for technicians will be introduced removing the need for multiple local administrator rights. These changes are scheduled for completion by the 1st February 2012.

Audio Visual: All technicians attended a demonstration of the teaching spaces in January and have been told that they will be asked to provide support for these calls. A wider set of technicians have

	been asked to monitor the shared calendar and technicians will be allocated calls by the IT Support Manager looking at the weekly schedule. A new 'service call' process was introduced to allow technicians to log faults directly with Snellings for Centrally Bookable rooms. A monthly billing process replaces the per request model. The list of portable equipment has been reviewed and items that provide little value added or are seldom requested (remote clickers etc.) have been removed. Arrangements have been made with FTV to add a limited number of competent and professional students to the out-of-hours pool to make organising the staffing of these events less time consuming.
Audio visual services, including video conferencing, TV studio, off air recording and access grid.	AV Services was disbanded in summer 2011, with the majority of the AV support activities passing to the IT Support team. The TV studio and Access Grid facilities remain within the newly-formed learning technology team.
Print group services.	The Print Group has been involved in the piloting of coursework eSubmission, ensuring that sufficient capacity exists to produce the printed coursework in the required timescales. The outcome of this has been positive and it is expected that volumes of coursework submitted online will continue to grow and can be processed by the service.