

IS Services Annual Report 1997-1998

Introduction

The 1997/98-year was the third year of the implementation of the recommendations of the Information Systems Policy Development Group (ISPDG) report. Many of the projects undertaken during the year were direct extension of those proposed during the ISPDG. A three-year workplan was developed to allow multi-year projects to be undertaken and to allow appropriate staff and financial planning to be performed. Staff and financial resources are scheduled out over the three years, allowing some projects to consume more resources in one year and then to drop back in subsequent years. This plan is updated and revised on a yearly basis. The internal structures of IS Services were once again reviewed, in keeping with the changes in the Information Technology industry. One of these changes involved the creation of a dedicated group of staff to manage the student computer rooms. This group has total responsibility for all hardware and software in these rooms and act as a one-stop-shop for equipment failures and for changing user requirements. In the Information Systems Group staff were assigned specific areas of responsibility and expertise in functional areas. This means that staff have the opportunity to build up relationships with specific areas in College and with the applications running in those areas. Equally, this creates a relationship between the staff in these areas and the specific staff members in IS Services.

Student Facilities

As mentioned above, the Public Access Computer Room, PACR, group was created during the year and took over full responsibility for the student computers. Despite the fact that the group suffered considerable changes through staff turnover, the quality of service provided by the group was greatly improved by the identification of clear lines of responsibility. One of the ongoing problems in student computing has been the provision of reliable and cost effective printing facilities. A number of new laser printers were installed along with a network solution that provides reliable printing for the students. The students provide their own paper and there is no charge for the use of the printers. Due to the unavailability of extra space, no new student computer rooms were provided in the year 1997/98. Many of the computers in the existing rooms were upgraded in a rolling upgrade programme. It is planned that the student computers will be replaced on a three-year cycle in order to provide the best facilities for the users. Any computers that are replaced in the student rooms are sold to defray the replacement costs. One of the functions that IS Services fulfils is the provision of training courses to staff and students in standard College software packages. This was extended during the year to cover presentation graphics packages as more and more people are using PCs to deliver lectures and seminars. The training course in PowerPoint was run on several occasions during the year and will become part of the standard training portfolio. Personal computer ownership is on the increase in the student body and this is being reflected in the requirements for networking in the student residences. A programme is underway to connect all student bedrooms into the College network. At the end of the year, approximately 50% of the rooms were connected. Extra residences will be connected as funds allow, however some buildings are due for major refurbishment work which will include being totally rewired and computer networking will be installed at that stage.

Staff Facilities

The increasing dependence on computers and the College network demonstrated itself during the year with much increased demands on the user support and helpdesk functions. There are occasions when staff members are unable to perform their normal job functions if their computer is not working properly. One measure to minimise these problems was the introduction of a rapid-response person whose function is to provide a quick and immediate service to staff that are unable to perform their normal job functions due to critical computer problems. The number of personal computers in College continues to grow and an increasing amount of time is taken to install these machines and configure them to the College environment. An automated process was instituted that could download the software and configuration to new machines once they connect to the network. A similar scheme is being

introduced where software and configuration problems can be diagnosed and repaired remotely by IS Services staff. This process speeds up the repair of the system as the changes can be made, with the permission of the user, without having to make an appointment and visit the problem machine.

College Networks and Facilities

The ongoing process of upgrading and reworking the College network was continued during the year. The dependence of many activities on the proper functioning of the network necessitates constant monitoring and development. Despite many delays by Dublin Corporation in digging a trench across College Green, the buildings in Foster Place and College Green were connected to the College network. During the delay in the digging of the trench, these buildings were served by a radio connection from College. For several years, staff and students in the Trinity Centre in St. James's Hospital were serviced by a slow speed (64K) network connection. This was upgraded to a 2 Mbit radio-link during the year. This link uses an intermediate station in the DIT in Kevin Street. A faster radio link at 34Mb is awaiting a license from the Director of Telecommunications and delivery of equipment. Following deregulation of the Telecommunications market, some competition has appeared, however it is hoped that this will increase in the coming years to such an extent that network services to the various College outstations will be available at competitive prices.

Research Facilities

The IBM SP Supercomputer, which is jointly owned with Queen's University Belfast, was upgraded by adding an additional 32 nodes and by replacing the existing 16 nodes with faster processors. This 48 node system is now key to many research projects in College. Internet services continue to provide key research facilities in most disciplines. Demand continues to outstrip the available resources and the Internet service degrades at busy times, despite several upgrades during the year. The deregulation of the telecommunication market should help obtain Internet services more cost effectively in the future. External networking has been provided to College by a co-operative of the seven Universities in Ireland since about 1983. In late 1997 a company was formed to put this network on a more commercial footing. The Universities, the DIT and the HEA jointly own this company, HEAnet Limited. HEAnet now employs dedicated network engineers to develop and maintain the network, thus freeing up College staff who performed these functions in the past. Extra clarity is obtained using a formal company structure and it is intended that a more commercial outlook will result in better and cheaper service in the future.

Library and Administrative Developments

With all the student administration information in the College, there are increasing demands for the easy presentation of this information to all staff in a manner that they can use for their day to day work. Some background work was undertaken in investigating methods of providing web access to these databases which will facilitate progress in the coming years. The production of mailing lists and class lists for specific courses and modules was automated via the web. An online analytical processing package with report writing facilities was installed, with appropriate data views, in some user areas. Within the Senior Lecturer's area, much work was done on the conversion of the system from using a character-based system to the more modern GUI, Graphical User interface, type presentation and interface into Microsoft's Office suite. Several other projects were completed, including the automatic production of degree certificates. With the imminence of the start of the year 2000 a complete review of the in-house systems was undertaken. Some systems were due for replacement and were due for a complete rewrite. This left about 3,500 programs in some 40 different systems to be checked and where required, amended and tested. This required a major investment in staff time to ensure that systems work beyond the 31st of December 1999. In general, it appears that the College information systems should handle the date change following the 31st of December 1999 without significant problems. There was considerable background work associated with system upgrades and legislative changes undertaken on systems in the Treasurer's area, such as Third Party returns and Prompt Payments. Development of a system to allow the College report on the value of its fixed assets was developed in conjunction with the Director of

Buildings. In conjunction with the Library, a project was initiated to transform some library texts to digital format. Subject to copyright restrictions, this could allow texts to be perused from PCs anywhere in College, thus allowing multiple students to use the same text at the same time.

Year 2000 and EMU Developments Two major external items that had a major impact on the service provision during the year were the problems associated with the "Year 2000" and the implementation of Economic and Monetary Union, EMU. Two groups were set up to co-ordinate the College's activities in these areas. The EMU group is co-ordinated by the Treasurer's Office and the Year 2000 group by IS Services. An analysis of the College's exposure to problems caused by the Year 2000 was carried out by the group, this comprised the central administration as well as teaching and research areas of academic departments. Equipment and software were checked in areas at risk and a number of items were scheduled for replacement before the end of 1999. Funding was obtained to appoint a full time staff member to co-ordinate the college activities leading to and following the changeover from 1999 to 2000. This staff member will provide a detailed plan for the changeover period and will assist others in identifying and rectifying date problems.

Conclusions During the 1997/98 year much progress was made in the provision of computer and network service to the users in College. The major progress was in the provision of basic computer facilities where improved computer and networking services were provided to all College users. Progress in the provision of information services to users in College made slower progress than was planned. The reasons for the slower progress was due to an increase in staff turnover, specifically in the areas of software development. Attention will have to be taken in the future to ensure that College is not exposed to any risks due to the unavailability of trained information technology staff during an economic upturn.