Project Name:	Student Record Improvement Programme – Strategic Vision and Gap Analysis
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Aim of Project

To clearly establish a strategic vision for Student Information Systems (Phase I) and identify the gaps (Phase II) within the existing systems and processes which need to be addressed in order to facilitate the achievement of the University's stated objectives. A review of third party solutions will be included in Phase II.

The underlying aim of the project is to ensure the correct strategic platform is in place to allow all aspects of Student Records to be correctly aligned with strategic objectives. The alternative of continuing with the current Student Records system without reviewing the strategy and potential platform options from third party suppliers is not recommended.

It is proposed that the project will be split into two phases:

1. Creation of a detailed strategy (vision) for a student information system aligned to the University's strategic aims.
2. A detailed gap analysis to allow an informed comparison to be made of the current student records system and leading third party package offerings. Subject to the outcome of this phase a formal open market tendering process with detailed requirements may then result.

Business Case

The University currently has a student information database and systems, which have been developed in house. These developments have enabled the University to begin to provide on-line services to students through the successful introduction of WebSURF; a web enabled system which allows students to pre-register and select courses as well as maintain personal data and check examination results via the web.

It is recognised that, in an increasingly competitive environment, the University must adopt the optimal strategy for delivering an effective student information system which will enable radical improvements to be made to student administration and the way in which corporate services are delivered for students and academic staff in support of the University's strategic goals.

The University's strategic plans are ambitious and require a step change to processes and systems to improve the applicant and student experience through web based interactions, reduce bureaucracy and time spent on administrative processes (particularly by academic staff) and improve efficiency and reduce the costs of central administrative services. The need is for a reliable database and flexible software systems to manage the complex and continually changing needs of management of students, courses and the production of management information to support decision-making by senior management. The systems must enable self-service and must be responsive and accessible to all users.

In order to achieve these challenging objectives it is recommended that in addition to the continuing SRIP Programme of Work for Session 2006/07 a comprehensive

strategic vision of the Student Records environment should be established followed by a gap analysis comparing the current system and leading third party alternatives.

In simplistic terms the potential outcome will fall under one of the following headings:

Outcome	Approx % of in house	Approx % of third party software
Continue development of current system with limited use of third party components	80%	20%
Significantly extend use of third party components and limited in house development	50%	50%
Implement a comprehensive third party solution requiring limited on-going in house development. It should be noted bespoke development by the supplier would in all probability be required during the implementation phase.	20%	80%

High Level Requirements List
Processes to be supported by Student Information System

The following sets out the main processes in the student life cycle which will need to be supported by a Student Information System and detail some of the requirements which are not supported by the current Student Records System and associated systems or where significant improvements to current systems are required. It is not an exhaustive list but does indicate the scale of development needed to be able to meet the strategic goals set which will be confirmed in the Strategic vision created in the first phase of this proposal.

1. **Enquiries, applications and admissions**: for postgraduate students (taught and research), undergraduate students and visiting students. It is crucial that systems and processes are customer focussed and delivered on-line. Tracking of enquiries and applications and monitoring of turn around times etc must be possible and a workflow facility is required. All stages of the process must be supported through the system, whether the process is managed centrally or at Faculty level. The additional demands relating to handling international applicants need to be addressed eg support for the visa application process, dealing with deposits and agents' fees, need for link to fees data tables to automatically generate fee payable. Funding management and links to available funding/scholarships need to be supported. There must be a Customer Relationship Management facility to support conversion from enquiries to applications.

2. **Registration:** WebSURF provides an on-line registration system which works well. Additional functionality is needed particularly in relation to fee collection

and recording and e-payments; availability of course catalogue on-line; linking course enrolments to room bookings and timetabling so that individual on-line timetables can be generated; managing course enrolments to cap full courses and to enable lab classes and tutorial groups to be assigned through the system; support for provisional registration process and management of withdrawals. The system must be able to deal with registration across sessions for those students taking courses which start mid session so that students are not required to register more than once a year. Improvements to the process of managing recording of students of associated institutions also needed.

3. **Course administration**: The new functionality required of a Course Information System has been separately specified. Course timetabling needs to be developed and linked to room bookings and to individual students' records (see above). Absence monitoring and management (including sickness absence) to be facilitated, probably requiring a link to the ID card system.

4. **Taught Course assessment**: The system should support all assessment processes in line with the Code of Assessment. It should be possible for all results given to students to be recorded in the student information system and all results, including Degree results to be recorded on a student's transcript, should be entered directly at departmental level. (Departments and Faculties will need to specify in detail what is required to support assessment management including support for Boards of Examiners, student progress and appeals).The European Diploma Supplement and future developments of the Bologna Agreement needs to be supported. Transcripts should be available electronically to students and to graduates. Functionality will also need to support Personal Development Planning.

5. **Management of research students and assessment**: Management of PGRs, which is the responsibility of Faculty Graduate Schools, needs to be supported, ensuring that it complies with the University's Research Strategy and the requirements of Research Councils and other bodies.

6. **Placements and Study Abroad:** The number of students involved in placements and study abroad is increasing and the system needs to support the administration of these periods and to enable details to be recorded in the students' records.

7. **Student Finance:** Students need to be able to view the state of their tuition fee account and other accounts with the University to check payments made, payments due and due dates, penalties for late payments and to be able to make payments on –line. The system also needs to support back office processing including fee setting, fee prediction and fee calculation for individual students, fee payments, direct debits, invoicing, credit control/ debt pursuance, bank reconciliations, links to the General Sales Ledger and provision of management information. Student fee income is crucial data for monthly income and expenditure accounts for Faculties and Departments and predicted payments and invoiced payments need to be linked to student load attributable to departments and fed through to the I&E statements. Student Financial Aid – scholarships, bursaries, hardship schemes, US loan schemes also need to be supported.

8. **Graduations and awards administration**: The system needs to support the management of Graduations and award of degrees, diplomas and certificates. These are organised within very tight time constraints. Although the current system has a Graduations module which supports enrolment and the production of graduation lists, parchments and scripts, a great deal of manual intervention is currently needed from enrolment through to production of ceremony programmes. An e-payment facility is also required to enable enrolment to be carried out on-line.

9. **Management Information and Statutory reporting**: There is a growing demand for management information to facilitate decision making both at a strategic level for senior management and at a departmental level. The data recorded in the Student Information System will give a full picture of students from "cradle to grave" and sophisticated reporting tools will be needed to ensure that the data can be easily and effectively used for management reporting and that information held in other corporate systems can be drawn in to be used in reports. The system must also be able to support the frequently changing requirements for statutory reports such as HESA and SFC returns.

Deliverables

- Phase 1: A comprehensive and forward-looking vision aligned with the strategic objectives of the University and the expectations of the SRS.
- Phase II: Gap analysis, review of third party offerings, project proposal including a set of recommendations outlining recommended future plans.
- Phase II: Proposal for Phase III – the way forward.

Approach

- The following approach would be taken:
- Formulate a comprehensive and forward-looking vision assisted by a third party consultant that is aligned with the strategic objectives of the University and the expectations of the SRS involving:
    - o Seeking the views of diverse stakeholders within the University
    - o Carefully assessing the strategic objectives of the University and the expectations for the SRS
    - o Speaking to other HEI's to learn from their experiences
    - o Combining the approaches detailed above with innovative thinking (particularly in terms of opportunities provided by the technology) to formulate the vision
- Perform a Gap Analysis between the vision and the existing SRS to formulate a development roadmap
- Translate the roadmap into a set of well-defined product descriptions
- Examine mechanisms by which the products could be delivered including a complete 3rd party or full in-house solution or combination of both. Consideration will be given to:
    - o Value for money (total cost of ownership)
    - o The extent to which the current and future needs of the University are addressed
    - o Speed of delivery whilst still meeting all requirements
    - o Levels of risk
    - o Levels of future proofing
    - o Ease of integration with other systems.