THE STRATEGIC POSITIONING OF STELLENBOSCH UNIVERSITY AS A 21ST-CENTURY, RESEARCH-DRIV-EN UNIVERSITY MAKES STIFF DEMANDS OF THE QUALITY AND STATURE OF THE RESEARCH OUTPUTS, THE INNOVATIVE PROMOTION OF SUITABLE LEARNING SPACES AND THE MUTUAL BENEFICIAL INTERACTION WITH COMMUNITIES. THE UNIVERSITY'S COMMITMENT TO THIS IDEAL OF EXCELLENT SCHOLARSHIP PRESUPPOSES AN EFFICIENT AND ENABLING ENVIRONMENT THAT FACILITATES THE EFFECTIVE EXECUTION OF THE INSTITUTIONAL CORE FUNCTIONS.

The seven divisions that report to the Executive Director: Operations and Finance, namely Facilities Management, Information Technology, Interactive Telematic Services, InnovUS, Legal Services, PROJEKtUS and Finance, each plays a unique and important role in the creation and maintenance of a seamlessly integrated, cross-cutting support environment that promotes the realisation of the University's strategic endeavours across the institution. Over the past few years, comprehensive restructuring has taken place in some of these environments in order to raise the quality of the support services through more meaningful positioning, both between them and with regard to the changing needs of the core business.

Although these divisions have divergent responsibilities, good progress was made in 2009 with coordinating the underlying focuses in a synergistic manner and to bring the separate aims into agreement with the challenges offered by the Strategic Framework, Vision 2012, the Overarching Strategic Plan and the formulated internal strategic objectives (see "Transformation aims", page 7).

In this multidimensional management environment, important support services such as financial planning and management, the operation of institutional information systems, the creation of technology-supported alternative access routes to postgraduate study at the University, the extension and maintenance of physical facilities and protection services, the formal management of projects, the provision of a professional legal service, as well as the management of the commercialisation of intellectual property were joined together meaningfully to the benefit of the University. Sustainability is the foundation of the functioning and of the supporting services of all the divisions.

ACCOUNTABLE FINANCIAL MANAGEMENT

The Finance Division, under the leadership of Mr Manie Lombard as Chief Director, creates a financially enabling environment in which the following can take place effectively: financial planning and budgeting; financial reporting; the development and implementation of accepted internal control mechanisms and procedures; the development and maintenance of appropriate financial systems; financial training; determining and administration of student fees; the administration of student loans; the administration of funds, investments and banking; the determination, control and management of staff remuneration payments, debtors, creditors and other assets and liabilities; the administration of purchases; the facilitation of tenders for product purchases and services; and commercial services.

The University's financial planning and management depends on a set of financial management principles that were adopted by the University Council in 2003. Within this framework, a comprehensive set of financial policies was developed and implemented. Any addition to or amendment of financial policies is checked by the internal auditors and reported to the Audit and Risk Committee of Council.

Strategic financial planning in terms of the central theme of sustainable positioning on the way to 2015 is directed by the strategic objectives of accessibility, diversity, student success, staff success and research success. The related business plans

of the respective centres of responsibility, including six-year rolling plans, serve as a framework for the annual budget. The detailed budgeting method for the annual budget allocations for centres of responsibility was finalised in 2007 and was refined further in 2009 to ensure that the employment of resources is done in agreement with the University's strategic priorities.

IN PURSUIT OF FINANCIAL SUSTAINABILITY IN THE LONG-TERM PLANNING, THE FOLLOWING ARE DONE, AMONG OTHERS:

- Realistic income and expenditure projections, including student fee increases, which, with a few exceptions, amounted to 11% for 2009 and 8% for 2010.
- Linking of perennial student enrolment planning to income, expenditure and capital planning. In the medium to long term, the University thus has planned for moderate growth in the number of undergraduate students, with greater growth in the focus areas of Engineering, Health Sciences and Education and stronger growth in the number of postgraduate students.
- Thorough setting off of the backlogs and new strategic needs for facilities.
- Identification of various actions to create sustainable space in the future budget, such as increased net income from OSP projects, implementation of a full-cost approach, better commercialisation of third stream income and utilisation of dormant assets.

- The allocation of an amount equivalent to 0,6% of budgeted annual income to a contingency reserve for the financing of unforeseen expenditure. Balance funds in the faculties and support service environments are also used for unforeseen expenditure in the environments concerned. Savings on the annual budget allocations are transferred to balance funds to prevent unspent funds from being wasted.
- The allocation of an amount equal to 2,0% of budgeted annual income to a strategic fund. This enables the University management to finance strategic initiatives in support of the University's business plan and the related business plans of environments within the University. In many cases, a portion of the expenditure for an initiative is also financed from the balance funds of the relevant academic or service environment. Projects and activities are only financed from the Strategic Fund for a limited time, after which they must be paid for from normal budget funds.

The University's financial management principles emphasise the central role of the budget in the realisation of strategic priorities. Acknowledgement is also given to the importance of responsible financial management in the light of the duty of care that is imposed by the use of tax-payers' money and the money of students (and of their parents and other supporters), business enterprises and sponsors. At the same time, the Finance Division creates space for decentralised financial management, which promotes entrepreneurial behaviour and increased efficiency. Managers throughout the University have the decentralised responsibility to use their discretion in the allocation of funds and the utilisation of fixed assets. They are committed to proper reporting and are accountable for the use of money and fixed assets in achieving the University's strategic objectives.

The execution of managerial responsibilities is supported by the maintenance and continuous development of effective accounting and management information systems through which credible and evaluated data can be made available in good time. The University's financial statements for 2009 comply with the requirements of international financial reporting standards (IFRS).

INFORMATION TECHNOLOGY (IT) HAND IN GLOVE WITH UNIVERSITY

Under the leadership of its Senior Director, Mr Helmi Dreijer, the Division for Information Technology creates an enabling environment in which the benefits of an effective IT infrastructure are optimised for IT users. Elements of the comprehensive IT support services that are provided to support the effective implementation of technology in each division are:

- The establishment of a powerful IT infrastructure on which institutional information systems can be established and developed.
- The empowerment of academics in the execution of their core activities of research, teaching and community interaction.
- The analysis of institutional processes with a view to the development of solutions in which modern technology applications can lead to an improvement in productivity.

• The increasing integration of cross-cutting process and systems levels to promote greater synergy and effective cooperation between faculties and support environments.

The Division succeeds in using its own technical specialists, systems analysts and systems developers and thereby is independent of external systems providers. It also develops tailor-made solutions of a high quality for the unique problems of a higher education environment. The maintenance of this inherent development ability is of critical importance in order not only to provide IT services, but also to be an enabling partner that adds value to the technological systems and processes.

A number of manual processes were replaced with electronic workflow processes in 2009, leading to improved service delivery, increased productivity and rapid access to information.

Over the past year, the Division built further on the cyber infrastructure that had been established during the ecampus initiatives of previous years. These initiatives include the establishment of a client-and-donor relationship management system (CRM), and a postgraduate technology platform with the aim of providing an improved information management system.

Good progress was also made with the Academic Offering Information System (AOIS – the e-Calendar). This online information source appears to be of great value for students in relation to their fields of study and career choices. To further support students, a web application system was developed for postgraduate bursaries, which also makes it possible for bursary providers to enquire online about the status of their bursary holders. Systems have been developed that make it possible for students to apply electronically for admission to programmes, as well as to register for the programmes online from their home environments. About 70% of students who can register electronically made use of the service in 2009.

The Telecommunication System Project, which has as its aim the replacement of existing telephones with IP telephones, is progressing well. A total of 87I Telkom telephones were replaced in 2009, which led to a monthly saving of R342 000 on telephone rental costs. A further extension of the telecommunication systems is the establishment of an electronic contact centre that will come into operation as part of a client relationship management system and one-stop service for students as of 2010.

In order to improve access to the Internet, the University undertook a long-term investment by purchasing a portion of the Seacom undersea fibre optic cable. This has led to international bandwidth being increased from 40 megabytes per second to 600 megabytes per second from 2010 onwards, without an increase in cost.

The increase in information processing places a lot of pressure on the capacity of the data infrastructure. The data storage capacity is currently being upgraded to make provision for the continuous backup and archiving of information that is linked to the execution of the core processes of the University.

REPORTS

REPORT OF THE EXECUTIVE DIRECTOR: OPERATIONS AND FINANCE CONTINUED

Preventative measures are taken to ensure the availability of information systems. The computer venues were fitted with new alarm and fire-fighting systems in 2009 and care is also taken that the information is archived in appropriate ways to ensure that it can be recovered effectively should it be necessary.

The growing necessity for access to computers and networks for effective learning and teaching means that students are increasingly wanting to use their laptops in the lecture halls. The Division therefore created advisory services in 2009 that will be able to support lecturers and students from 2010 in the purchase of computer equipment and the use of the equipment in a higher education environment.

The University's IT infrastructure and information systems currently are of the most advanced in the country and compare well with the best in the world.

INTERACTIVE TELEMATIC SERVICES (iTS) CREATES VIRTUAL STUDY SPACES

The Division for Interactive Telematic Services, under the leadership of the Senior Director, Prof Tom Park, is responsible for the expansion of the University's virtual study spaces in order to place the postgraduate programme offering within the reach of all prospective students to a greater extent. Vision 2012 commits the University to fulfil a strong capacity-development role in Africa as an excellent institution of higher education. An important prerequisite for the realisation of this institutional ideal is increasing the participation rate of all communities in the academic programmes of the University. Underlying this challenge is not only the need to make the University more accessible, specifically to those who wish to combine a professional career with further postgraduate study to maximise their potential, but also to provide appropriate academic support to these students so that they can study successfully.

Against this background, the Division for Interactive Telematic Services endeavours to improve the virtual mobility of geographically dispersed students in order to broaden their participation in the postgraduate academic offering of Stellenbosch University. Comprehensive improvements were made to the physical and technological infrastructure in the past year, and this has further increased the capacity of the Division to provide cuttingedge support services. Purposefully selected technology, which also takes the unique challenges of the availability and costs of internet access in Southern Africa into account, is an important vehicle with which students who are not on the campus can reach the academic, administrative and support services that are offered by the University. By creating technology-supported alternative access routes to the University, the traditional boundary between contact and off-campus educational opportunities fades, while the limitations that often are imposed on further study by place and time are lessened. The ideal is that the University offers optimal learning experiences to all postgraduate students, regardless of where they are.

A unique technology platform that integrates satellite, mobile, web-based, smartcard and video conferencing technologies creates a continuum of learning opportunities that vary from synchronous to asynchronous education. Many postgraduate programmes and short courses offered by Stellenbosch University already use the integrated platform with great success to create virtual study spaces as part of a blended approach to learning.

The continuing increase in the number of postgraduate students who are supported by the telematic platform is in line with the Vision of the University. The technology platform also makes a positive contribution to improving the diversity profile of the postgraduate student population because of its ability to break through the traditional barriers that hamper the participation of some communities in higher education.

Acknowledgement of the strategic role that the Division plays in the realisation of the institutional endeavours came from the fact that one of the University's projects, Virtual Postgraduate Learning Support, which arose from the Overarching Strategic Plan, was awarded to the Division.

As part of the University's continuous quality assurance programme, the Division was evaluated in the course of the year by an external panel that included foreign experts. In the final report, the panel says: "The Evaluation Panel applauds the achievements of the Division of iTS with regard to the quality of service, the improvements that were made over the past years and the delegation of responsibilities within the iTS team. The evaluation panel is impressed by the well structured Division and the transparency and effectiveness of its operation. The University of Stellenbosch should be applauded for taking this visionary decision to be the first university in South Africa to expand its postgraduate academic offerings to off campus learning centres where students can actively interact in the learning process."

In order to enlarge the Stellenbosch footprint in Africa by way of the telematic platform, negotiations currently are under way with different institutions in Malawi, Zambia and Swaziland to establish learning centres in these countries. In this way the University, as a knowledge partner, can play a bigger development role on the continent.

In 2009, the Division was requested by the Western Cape Education Department to launch an imaginative project to support Grade 12 learners by means of the telematic platform. Teachers chosen by the WCED broadcast five subjects to 10 selected schools for a total of nearly 100 hours. The feedback from the schools, learners and communities was very positive. The plan is to expand this pilot project into a perennial project in 2010 to reach a further 100 schools.

FACILITIES MANAGEMENT AS TRENDSETTING ENABLER

With the appointment of the Chief Director: Facilities Management, Mr Chris Munnik, the accelerated repositioning and transformation of the Division was started in all seriousness. A business plan was developed with a vision that envisages a

"leading campus environment in South Africa". In support of this vision a set of key values was compiled and put into practice so that the Division can focus more sharply on the important task of the environment. The business plan is supported by a new service-delivery model, staff structure, staff plan, communication plan, strategic priorities and a road map for the following five years — everything aimed at establishing and improving the physical facilities as enablers on a broad base. This planning is complemented by a new budget process for 2010 that not only interprets the business plans of the environment, but also offsets an operating budget and capital needs for six years.

In order to enable the sustained growth in academic activities, the Division plays an important enabling role with regard to providing appropriate physical spaces.

Data obtained from a sample spatial audit carried out in 2009 will be used for the further planning of physical spaces. As a point of departure for the development of an Integrated Master Development Plan that will direct the future development of the campus for at least the next 20 years, a basis master plan was compiled in 2009. This planning is essential, as the University has already exceeded the optimal occupational capacity of its physical infrastructure. An increase in the capital investment over the next few years therefore appears to be unavoidable.

About 30 property projects with a total project value of R120 million were carried out in 2009. On the strength of thorough alignment with the core business, and tuned in to the vision of SU, the total need for capital investment for new facilities in 2010 was estimated to be R128 million, of which about 66% has been allocated for academic facilities. This does not include the projects that are partially funded by the Department of Education.

Optimal maintenance of the physical facilities as an important enabler of the University's core functions is essential, since large-scale maintenance backlogs lead to structural shortcomings, safety risks and the non-sustainability of services. A condition audit of the facilities and a catch-up estimate showed that the total backlog amounts to R1,057 billion (including accommodation), of which R220 million is on the Tygerberg and Bellville Park campuses. A full-cost lease model that links to the proposed planned maintenance philosophy is envisaged to manage the University's facilities in a sustainable and competitive manner in terms of healthy business principles.

The Protection Services reconsidered the University's Campus Safety Strategy in its entirety in 2009 with the view to sustainability by 2015. There is a growing demand for services and the expectation is that the University will increasingly take responsibility for safety and security beyond the borders of the campus. As a result of the liability risk if services outside of the SU sphere of responsibility lead to damage or injury, the campus safety strategy has been adapted. A comprehensive budget to the value of close on R15 million has been put together for physical access control equipment at about 240 of the University's buildings.

In order to provide quality support to environments by way of physical risk management, occupational safety audits, fire, emergency and disaster planning and access control, the physical risk-management function was again joined to the protection services function. A campus building safety audit was done in the third term and a corrective plan was worked into the 2010 budget.

An adjusted Energy-saving Plan, which reduced the initially estimated capital requirement from R25 million to R3,4 million, has already been accepted. The project will be launched in 2010 with a view to the realisation of significant savings in energy from 2010 or 2011.

Over the past year, plans were being undertaken to launch a new subdivision, namely Facility Services, at the beginning of 2010. In future, the environment will coordinate and facilitate all facility services and processes on a one-stop basis with the aid of a computerised facilities management model. The system is currently being implemented. A limited number of facility managers will be appointed to integrate and coordinate the entire spectrum of specialised facilities functions and services within agreed service-level agreements. This is in accordance with best practice in the international facilities management industry.

PROJEKtUS INTEGRATES SUPPORT SERVICES OPTIMALLY

A function was created in the centre of responsibility of the Executive Director: Operations and Finance to focus on the optimal integration of the support services in the centre of responsibility and to support the meaningful integration of different work environments in the University. This function falls under the leadership of the director, Dr Barbara Pool. In its implementation, use is made to a large extent of project management principles and, where appropriate, of formal project management.

EXAMPLES OF THE SUPPORT PROVIDED IN 2009 ARE THE FOLLOWING:

- The establishment of the Electronic Contact Centre flows from the redesign of the Division for Academic Administration. From 2010 the Centre will serve as the central point for enquiries from the University's different clients groups, whether these enquiries come in via telephone, fax or email. The current switchboard will also be incorporated into this Centre. In 2009 the focus fell on both the construction of the Contact Centre and the appointment of the contact centre manager and agents. The further implementation is now being managed in the line function.
- The restructuring of Facilities Management reached a high point in 2009. In order to establish the credibility of the project, the entire spectrum of staff was involved in the definition of the work that should be done in the Division. This information was expanded through input from Deloitte, who helped by checking the best practices nationally and internationally and testing these in the context of the University. The new staff structure was based on this definition of work. With the appointment of a Chief Director: Facilities Management, the further implementation of the restructuring was handed over to him.

- The project for the integrated planning of the administrative buildings was initiated at the request of the Rector and his centre of responsibility heads. The aim of the project was to optimise the utilisation of physical spaces in these buildings. Important recommendations were made with regard to the refurbishment of the buildings according to new spatial norms. The next phase will include detailed planning, which will consider aspects such as sustainability, energy consumption and affordability.
- Support was provided for the execution and monitoring of the
 Overarching Strategic Plan projects that extend across the entire
 University. A mechanism was created by means of which the
 Division for Finance and the Stellenbosch Foundation, for example,
 as well as the project managers, can share information with one
 another seamlessly. A central storage space that is accessible
 via the web was created for each project. Project plans and any
 additional information are stored here. The status of the projects
 can then be updated easily. In this way, feedback can be obtained
 from the project managers in an effective manner without putting
 an unnecessary administrative load on the shoulders of the project
 managers. This promotes effectiveness and better service delivery.

Furthermore, the project managers were assisted in the compilation of complete project plans. This is supplemented by training in the use of appropriate technology. This assistance also takes place in a phased manner.

LEGAL SERVICES ASSISTS SU COMMUNITY WITH EXPERTISE

The Division for Legal Services is in the process of being restructured and reported to the Executive Director: Operations and Finance in the interim. Adv Riana Coetzer is the acting head of the Division.

Legal Services, which is based in the University, is easily accessible to all SU staff and students. At the institutional and functional level, the Division provides a professional legal service to the entire SU community, namely the management, academic and non-academic staff, and students. A diverse spectrum of institutional needs is handled. In addition, expertise and services are also contracted from outside. Legal Services serves as an expert contact point between the external advisor and the University.

In 2009, Legal Services paid attention, among others, to the compilation and approval of a large variety of commercial contracts, advice with regard to policy formulation, the compilation, checking and completion of a variety of legal documents, and the management of processes relating to legal claims by and against SU. Negotiations and discussions with outside organisations and private law firms with regard to various matters, and decision making on the granting or denial of applications in terms of the Promotion of Access to Information Act and the Electronic Communication Policy of the University were dealt with.

During the year, Legal Services also completed an audit of the University's liquor licences on all three campuses with a view to the new Western Cape Liquor Act. Together with external legal advisers, a draft legal compliance policy was compiled for the University and submitted to management.

The Head: Legal Services will function as the legal compliance officer of the University.

The University Council also approved the new draft code for students during the year under review. In terms of this code, the Division for Student Discipline will also form part of Legal Services from 2010.

INNOVUS LEADING THE WAY IN INTELLECTUAL PROPERTY AND TECHNOLOGY TRANSFER

This new division is managed by the director, Ms Anita Nel. InnovUS Technology Transfer (Pty) Ltd manages the commercialisation of the University's intellectual property portfolio through patenting, licensing and the formation of spin-out companies. InnovUS adds value to the University's strategic plans and objectives by generating third stream income, investment assets and public benefits, i.e. taking the benefits of scientific inventions to communities. InnovUS is widely recognised for leading the way in inventor support, commercialisation activities and technology transfer infrastructure. The company was incorporated as a wholly owned subsidiary of the University in 2009, following a significant and very successful restructuring process that resulted in the termination of the former technology transfer division of the University and of Unistel Group Holdings (Pty) Ltd.

InnovUS received a total of 62 disclosures in 2009. This is a significant increase on the previous record of 43 disclosures in 2007, and surpasses the target of 39 for last year. The portfolio of spin-out companies generated a combined turnover of more than R82 million in 2008. During 2009, the companies involved employed a total of 203 people.

The shareholders' agreement for NioCAD (*Pty*) Ltd, the newest spin-out company, was signed in November 2009. The company develops software for circuit design and has a strong focus on integration, automation and collaboration. NioPulse, their first product, focuses on superconductive electronics. The Innovation Fund invested approximately R7 million in the project while it was incubated in the University, and IDC Venture Capital recently invested R12,5 million to take the company to the commercialisation phase.

InnovUS received R896 801 through licensing income and a dividend payment for the amount of R175 000 from Unistel Medical Laboratories (*Pty*) Ltd, exceeding the licensing income target of R826 000 for 2009. The company has signed five license agreements with Genediagnostics (*Pty*) Ltd, a BEE start-up company.

InnovUS experienced yet another record year for registering approved short courses. Approximately 5 420 students attended 356 courses in 2009. The Short Course Division generated an income of R864 399 for 2009, totalling R1 664 899 since its establishment in January 2007. Short courses facilitate the continued professional development of various skills with access to further adult learning in a particular field, while still complying with the quality assurance requirements of the University and relevant government institutions. Short courses presented at

Stellenbosch University are limited to National Qualifications Framework (NQF) levels five to eight. The fields of study presently covered by our short courses include civil engineering, renewable and sustainable energy, community health (including HIV counselling), communication skills, executive development, and leadership programmes.

The Training Buggy, an automated training buddy for athletes developed by four students of the Faculty of Engineering, was selected as Stellenbosch University's winning entry in the first phase of the National Innovation Competition during the year. The prize was R50 000. The second prize (R30 000) went to PowerMon, an innovative device that is plugged into an electricity socket to display the power consumption of that particular socket in a reader-friendly manner. Third place (R20 000) went to a business plan on patient-specific knee replacements. Using a self-training neural network with a database containing healthy knee geometries, the original articulating knee geometry of the

affected knee can be predicted. Prostheses can be designed and fabricated using rapid manufacturing techniques, within days. The purpose of the competition is to promote entrepreneurship through the possible commercialisation of the innovative ideas of young entrepreneurs. In the first phase of the competition, three winners are selected per higher education institution, and in the second phase the winners from all the institutions compete for the national prizes. The national winners will be announced in April 2010.

InnovUS celebrated its tenth birthday in 2009 by hosting a Spring Workshop series. The theme was in line with its motto, "Going for gold". An enewsletter was started (www.innovus. co.za/pages/afrikaans/nuus-en-gebeure/ons-nuusbrief.php), and an article on InnovUS featured in the 2009:I edition of Matieland, the University's glossy magazine distributed to alumni. An article on Scryer, one of our technologies that we aim to spin out as a company in the future, appeared in Brainstorm magazine. A new web site (www.innovus.co.za) was also launched.

STELLENBOSCH UNIVERSITY SENDS SATELLITE INTO SPACE

SumbandilaSat, launched on board a Soyuz rocket from the Baikonur base in Kazakhstan, is the Faculty of Engineering's second microsatellite. Sumbandila is a Venda word meaning 'to pave the way'. Sun Space and Information Systems, a spin-out company of the Faculty, built SumbandilaSat in record-breaking time thanks to government support from the Department of Science and Technology.



