

**European University Association (EUA)
Institutional Evaluation Programme**

UNIVERSIDADE DO MINHO

EUA EVALUATION REPORT

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Introduction

The Evaluation Process

The Association of European Universities (EUA) offers its member universities, which today exceed 780 in 45 countries, the opportunity to have their strengths and weaknesses in the area of institutional and quality management reviewed. The reviews are conducted under the EUA's Institutional Evaluation Programme (IEP). The IEP evaluations are peer reviews; the members of evaluation teams are all current or former rectors, presidents or other leaders of higher education institutions; hence, they are familiar with the challenges university leaders face and are in a position to ask relevant questions. An EUA-IEP evaluation is a tool designed to assist current university leaders in their efforts to improve their management processes and promote their university's capacity for change. According to its Institutional Evaluation Guidelines, the EUA asks its Review Teams to "examine the following areas:

- Decision-making processes and institutional structures and effectiveness of strategic planning
- Relevance of internal quality processes and degree to which their outcomes are used in decision-making and strategic planning as well as perceived gaps in the internal mechanisms [and] processes."

The EUA's IEP began twelve years ago and, to date, nearly 180 universities in 36 countries (including from outside Europe) have participated in the programme. The EUA does not wish to provide universities with a blueprint for their development; rather, the review process is a consultative, supportive and formative one. The formative characteristic is underscored by the fact that the cornerstone of a review is a university's self-evaluation, which allows the university staff, as a team, to understand their institution's strengths and weaknesses. The EUA anticipates that the growing number of its institutional reviews contributes to the promotion of a culture of quality among its members, and to the dissemination of examples of effective strategic management among European universities.

In Portugal, the government is undertaking a broad review of its higher education sector. In 2005, the European Association for Quality Assurance in Higher Education (ENQA) evaluated the national quality assurance system and made recommendations for changes, which are currently being implemented. The government invited the OECD, through its Directorate for Education, to review the country's higher education system as a whole. The OECD report is forthcoming at the time of this writing. In addition, the Ministry of Science, Technology and Education (MCTES) requested, and supported financially, the evaluation of ten higher education institutions, including public and private universities, and polytechnics, in 2006/07, to be continued in the following years. It has also been agreed that these evaluations will be conducted by the EUA with the assistance of the European Association of Institutions of Higher Education (EURASHE), and experts from the USA, Canada, or Australia. Under the terms of the agreement between MCTES and the EUA, the objective of the national exercise is to provide "both the national quality assurance agencies and higher education institutions with institutional evaluation experiences following the best European practices."

The University of Minho (UM), which previously had been evaluated by the EUA in 1997, was not among the universities reviewed under the auspices of the Ministry but requested the evaluation from the EUA on its own. Nevertheless, it fits into the overall scheme of the system-wide review under which each volunteering university is evaluated individually,

following the EUA's regular institutional review guidelines, and fits also into the timeframe for the national review. Moreover, UM has participated in the EUA's Quality Culture project to explore how the concept of quality can be infused at all levels of the University.

The members of the EUA Review Team to UM were

- Professor Dr. Jarmo Visakorpi, former Rector of the University of Tampere and former Chair of the Finnish Higher Education Evaluation Council FINHEEC, Finland, Team Chair;
- Professor Dr. Dennis Anderson, former President and Vice-Chancellor of Brandon University, Canada;
- Professor Dr. Philippe Rousseau, former Rector of the University Charles de Gaulle – Lille 3, France;
- Nik Heerens, Student at Waageningen University, the Netherlands, and former member of ESIBS's Bologna Process Committee, invited by the EUA on request of UM as a student member of the Team, and
- Christina Rozsnyai, programme officer at the Hungarian Accreditation Committee and Secretary General of the Central and Eastern European Network of Quality Assurance Agencies, Team secretary.

The Team conducted its preliminary visit to UM on 19-20 March 2007 and the main visit between 17 and 20 June 2007. During the two visits the Team had several discussions with Rector António Guimarães Rodrigues, Vice-Rectors Manuel Mota and Leandro Almeida, and Pro-Rector Irene Montenegro, who was the Team's liaison person with the University.

In the course of its two visits the Team was given the opportunity to meet all three vice-rectors and four pro-rectors, who are the main representatives of the University's governing and administrative bodies responsible for teaching and learning, academic and financial decision-making, and administration. It spoke to the persons in charge of research and innovation, which included the heads of the University research units as well as leaders of units serving as interfaces between the UM and the external community. The Team had meetings with many of the University academic staff, both in their capacities as professors and as leading representatives of various academic units, councils, and committees, including the Steering Committee for the self-evaluation process. One meeting involved representatives of the UM dealing with enhancing the University's outside image and another with the persons in charge of internationalisation issues. The Team met with undergraduate, Master's, and PhD students from the faculties it visited and it also met with Student Union representatives. Additionally, the Team was given the opportunity to talk to outside partners from industry and government.

A tour of some of the facilities on the Gualtar Campus in Braga was organised during the preliminary visit, and the members of the Team had meetings also at the Azurém Campus in Guimarães. Two Team members were shown the construction site in the town of Barcelos, where a new campus of the Polytechnic Institute of Cávado and Ave is being built, whose possible integration with UM was gaining currency at the time of the Team's second visit. A lunch meeting was organised to discuss the latter issue specifically, and was attended by the mayor of Barcelos and the former chairman of the Industrial Association of Minho.

The Review Team appreciated that both visits were very well organised, and the Team was awarded most generous hospitality. Pro-Rector Irene Montenegro provided untiring support and great efficiency in liaising with the Review Team and in setting up the many interviews.

The discussions between the leadership of UM, most prominently Rector Guimarães Rodrigues and Vice-Rector Manuel Mota, and the Team were open and constructive. Moreover, the University leadership appeared to have a good working relationship with the other members of UM.

The university's self evaluation exercise was headed by Rector Guimarães Rodrigues. Under guidance of Pro-Rector Irene Montenegro, who is in charge of institutional quality assurance, the University set up a team of academic and administrative heads and a student representative to work through the self-evaluation process. It involved discussions and SWOT analyses at various levels, and culminated in the Self-Evaluation Report (SER), which is in line with the EUA's suggested guidelines. The EUA Team received the SER in good time before its preliminary visit, which it appreciated, given the large volume of supplementary material and abundance of data, some of it dispersed over several sections. The SER contained both descriptive and analytical information and provided the EUA Team with the necessary background for its first visit. However, during the first visit, the Team asked for, and was provided, additional information, which it received prior to the main visit. For the main visit, UM produced an additional, brief SER on the integration of polytechnics, which, as noted, presented a strategic opportunity for UM. The Team was told in its discussions with members of UM that the self-evaluation process itself had been highly beneficial to the University. The Team appreciated this statement because it speaks to the attainment of a major objective of the evaluation process. The Team found that the University had prepared the external evaluation process with great skill and enthusiasm, indicating that a quality culture is already well embedded in UM's operations.

At the end of the main visit, on 20 June 2007, the chair of the EUA Review Team presented an oral version of the Evaluation Report to the University leaders, including a student representative. The present Evaluation Report was prepared for the University's leadership, who are free to decide on its use. The EUA encourages the dissemination of both the SER and the EUA's Evaluation Report to a wide audience in order to reap the rewards of the University's development resulting from the exercise, both among its members and external stakeholders. A discussion of the issues described in the Evaluation Report within the University and with other partners could contribute to strengthening the quality culture at UM. The Review Team hopes that its Report will fulfil the leadership's expectations about the EUA evaluation exercise.

Institutional Context

Following a 1973 decree on a "Programme for the Expansion and Diversification of Higher Education in Portugal", the country's existing four, long-established public universities were joined by four new ones, including UM, along with nine "higher education schools" and eleven polytechnics. The Portuguese revolution in 1974 delayed the enrolment of UM's first students until 1975. From the start, UM was innovative and progressive, following a deliberate policy for staff qualification, designing novel, interdisciplinary degree programmes, while consciously embedding the University's profile into the traditional industries of the region, most prominently textile production. As stated in its SER, UM "sought to achieve a balance [among] pure sciences, applied sciences and humanities."

UM is located in the historic region of Minho in the north of Portugal. Operating on provisional premises for over a decade, the Gualtar campus in Braga opened in 1987 and the Azurém campus in Guimarães two years after that. New buildings continue to be constructed to accommodate departments and faculties now housed in buildings shared with other units on

campus and in buildings in the city of Braga. The number of enrolled students at UM in 2005/06 totalled 15,686, including 1,249 in Master's and specialisation programmes and 719 doctoral students. UM comprises eleven faculties: the Schools of Architecture; Economics and Management; Engineering; Health Sciences; Law; Sciences; and Nursing; and the Institutes of Arts and Human Sciences; Child Studies; Education and Psychology; and Social Sciences. The School of Nursing, previously an independent polytechnic, was integrated into UM in 2004, but it retains its polytechnic-level educational provision. The number of departments within the Schools or Institutes ranges from one (Architecture, Nursing, Medicine within the School of Health Sciences) to nine (Engineering). Among the arts, music studies are offered at present, although UM intends to expand into other fields of art.

At the time of the Review Team's main visit, the matter of integrating two additional polytechnic units, a School of Management and a School of Technology, which are part of the Polytechnic Institute of Cávado and Ave in the city of Barcelos, came to a head. As a strategic issue for UM, both with respect to providing polytechnic-level education and enhancing the University's regional role, this Evaluation Report devotes a section to the proposal in the chapter "Mission and Strategic Plan".

UM has 36 Research Units, which are separate organisational entities but with the Schools and Institutes providing most of their human resources. In addition, there are three private, non-profit R&D units at the Azurém campus that involve university staff and students in their research. Thirty-one of UM's research centres are financed by the national Foundation for Science and Technology (FCT); the level of funding is dependent on quality assessment conducted every three or four years. UM has several places of excellence acknowledged by the FCT. The FCT has the authority to establish and to close down research centres that it finances. Additionally, UM operates some research centres that it has set up based on funding from its own budget. Furthermore, there are private, non-profit R&D units, and two so-called "Associated Laboratories" financed by the FCT in which the UM is a partner. Several international research centres operate at UM, such as the Confucius Institute for Chinese Studies, which was shown to the Team during its first visit.

UM is actively seeking to be an entrepreneurial university. In addition to attracting external funding, the aim is to have UM's staff and students interact with the external community, engaging in knowledge and technological transfer. Among its numerous ventures, TecMinho, the University Knowledge Transfer Office (KTO), is an innovative enterprise, the first among Portuguese universities. KTO is a non-profit association managed by the UM Rectorate and chaired by the Vice-Rector for Research and International Affairs. Established in 1990 to act as an interface for knowledge transfer between UM and business and industry, KTO focuses in particular on intellectual property management and technology commercialisation, and aims to establish knowledge-transfer partnerships and spin-off companies.

UM has adopted an innovative organisational approach to teaching and learning: a "matrix structure". This matrix structure is used in some universities in some countries of Europe but UM's use of it is unique in Portugal. It involves both teaching and research. In teaching, the nucleus is the degree programme, managed by a Degree Director and designed and overseen by a Degree Council. Research is organised by projects. Departments and Schools provide the human resources for degree programmes and research projects. The matrix structure allows for flexibility and innovation in programme design and in human resource allocation.

UM is at an advanced stage in implementing the Bologna process. It has redesigned its degree programmes into the three-cycle structure following the “Bologna model”, which will be completed for the first cycle and most of the second cycle in 2007/08. Half of the staff participated in workshops and seminars on educational methodologies in the new system. In its SER, UM avers to be “one of the three European universities to have received both the ECTS and the Diploma Supplement Labels”.

In addition to publicly financed research via the FCT, UM receives financing from the public budget. Public financing is increasingly tight, and in 2007 it will, for the first time, not cover staff costs. Students pay tuition, which is maximised by law. The University is thus actively seeking innovative means to attract private support and income from external sources.

A high dropout rate is a national concern, observable already at the secondary school-level, and exacerbated by the University’s regional situation within an economically depressed part of the country. This enrolment-dampening factor, in the case of UM, is balanced to some degree by a rising demographic rate in northern Portugal. UM calculated for all degree programmes an average 7.6% dropout rate, defined as the number of not graduated students who did not enrol again in the academic year 2005/06. This dropout rate, according to UM’s SER, is lower than for other institutions in the country. The SER also notes that UM, with a 71% graduation rate from all degree programmes combined, calculated for 2004/05, is among the top three in the country on this measure.

Without government support, UM administers and finances nine cultural entities, including a public museum and the public library in Braga and a museum in Monção. The University is active in a number of other areas in providing services to the community and region.

Mission and Strategic Plan

The first question EUA review teams examine in the course of their evaluations is, “What is the university trying to do?” The university’s mission statement and its strategic goals described in its SER, and presented in the interviews, should provide the background for the answer. Ideally, a mission statement, in addition to identifying the role a university sets for itself as a knowledge institution and a player in society, also provides some specific features of the particular university. A more general mission statement has to be coupled with a university’s strategic objectives in order to adequately describe the institution’s specific characteristics.

UM’s mission statement is a traditional one. Formulated shortly after the University’s establishment, the mission statement defines UM to be:

“... a centre of creation, transmission and diffusion of Culture, Science and Technology, having as main goals: a) human training, at the highest level, covering all aspects, cultural, scientific, artistic, technical, and professional; b) the development of fundamental and applied research, taking into account the necessities of the surrounding community; c) the providing of services to the community, based on reciprocal valorisation; d) the cultural, scientific and technical interchange with similar national or foreign institutions; e) the contribution, in the scope of its activities, for international cooperation.”

Although its mission statement is general, UM has defined its strategic goals and objectives clearly. This became evident if not in the SER, where they are dispersed among various chapters and Annex IX, then certainly in the discussions during the Team’s two visits. The

fact that, in 2004, the Rectorate set up a Strategic Council as its informal advisory body, with eleven illustrious and experienced members from the academic and business community, underlines the Team's impression on this point. As the Review Team understands it, the University's strategic goals are to:

1. position itself as a reference point for high quality teaching and learning;
2. position itself as one of the leading research universities in Portugal;
3. position itself as a key agent in the development of the region by being a university in and for the region (a University Without Walls);
4. expand its applied, polytechnic-level degree offerings; and
5. promote its internationalisation.

The Team appreciates that the University has a clear vision on strategic goals. What has not been presented in this context, however, is a discussion on the more precise strategic objectives of UM's academic activities. The Team is not clear on some general questions, which the University should ask of itself in this regard.

Recommendation: While the SER mentions that UM's educational programme offering is well balanced and suitable for the region's needs, the University should ask itself the following questions: Which are the suitable programmes and which ones are not? To what extent does UM want to expand and to what extent does it want to become specialised and differentiated in the future? Does it have plans to offer some narrower, niche fields for northern Portugal, the whole country, the Iberian Peninsula, or Europe?

Main External Constraints

From the SER and interviews with various University stakeholders, the Review Team came to the conclusion that two main external constraints impede UM in achieving its strategic objectives. They are inadequate autonomy and insufficient funding.

Autonomy

The requirement for university autonomy is well recognised in the current Portuguese law, but UM sites examples where, in practice, autonomy is infringed upon by national regulations to the degree that it impedes the University's efficient operation, without serving any positive function. One example is the detailed regulation of student places the universities can offer and national-level control on student selection. Although the Team understands that student places are publicly financed via normative funding for the number of enrolled students, the fact that universities have access to, and indeed are compelled to seek, external funding from non-public sources makes such a regulation debatable. Another example is the requirement to attain government authorisation to launch new study programmes or change the content of existing ones. Accreditation to control the quality of programmes is practised in many countries; however, the Team believes that quality control and preliminary authorisation could be separated without infringing on the quality of education. A third example is human resource management – the hiring and promotion of academic staff – that is highly regulated by the Ministry for Science, Technology and Higher Education. Again, public funding of academic staff, which is the case in Portugal, does not need to be coupled with national-level control of staff numbers.

In short, it appears that the national government's over-regulation and micro-management of universities acts as a significant impediment to their accomplishing their societal missions.

Recommendation: Portuguese higher education is currently under review. The Team is confident that overly detailed national regulation is being thoroughly discussed at the national level. UM and its internal and external stakeholders should be proactive in moving such discussions in the right direction.

Funding

It is generally acknowledged that European universities are not sufficiently funded, for instance in comparison to North American ones. In the case of UM, insufficient public funding is obviously the major constraint that encumbers its development. It was also of major concern ten years ago when UM was first evaluated by CRE (the predecessor of the EUA). The evaluation report pointed out that funding was lower than in Europe in general. It is, of course, very difficult to conduct comparisons of this kind, because a multitude of factors influences the value of income. The present Review Team would like to judge the conditions prevalent in the first half of 2007, the time of its evaluation. It finds that the staff number and staff-to-student ratio, on average, complies with the European norm. At the same time the Team understands that since 2002, state support has continually decreased, to the extent that, as mentioned in the SER, in 2007 state funding will, for the first time, not cover staff costs at UM. The Review Team believes that reduced funding coupled with limited autonomy are the major external constraints facing UM.

The Team suggests that there are two approaches to alleviating funding problems, namely: diversification of funding streams; and strengthening internal efficiency through rationalisation of functions.

In terms of funding diversification, about 62% of the overall budget of UM comes from state sources, and tuition fees account for 12% of the overall budget. Together, these two sources comprise 74% of UM's total budget and this proportion of public funding is roughly similar to that of many European universities today; it also shows that diversification of funding streams is taking place at UM. Another 12% of the total budget comes from research contracts, which is a rather high percentage. The remaining 14% (approximately) of the total budget is obtained from services to the community. Considering that UM has a large engineering faculty and a business school, moreover it has good relations with industry in the region, there is potential to increase income from private sources. The Team realises that the Minho region is not at the forefront of industrial development. The "China syndrome" prevails, with mainly small- and medium-sized companies dominant, and they do not have the capacity to invest in research and development. Moreover, local authorities do not have the resources to contribute to University funding, even though they recognise the University as a dominant actor in community life and support it otherwise.

During funding crises it is essential to rationalise internal functions. In fact, this tool is useful also in less critical situations when university efficiency is to be bolstered. Making strategic decisions is a precondition for prioritising essential functions and eliminating less significant activities, particularly if they are not profitable. A possibility is to look at the cultural units that UM runs; UM notes in its SER that it is costly to operate and maintain its cultural units. The decision must, of course, be balanced with UM's community-service function. On the other hand, cultural units could be targets for attracting private funding, if not directly via the units' income but by taking advantage of their marketing value. A further option is to look at the range of educational programmes from a value-for-money point of view and decide which ones are appropriate for the University in light of its mission. Similar programmes in universities within commuting range should also be considered.

Recommendations: The Review Team recommends that in spite of the constraints posed by the external conditions, UM should find ways to increase private funding by professionalising its fundraising. The Team also recommends that, although recognising that the University knows full well how painful cost-cutting decisions can be, it should explore ways of increasing its internal efficiency and rationalising its functions in light of its mission.

Attainment of the Main Strategic Goals

Teaching and Learning

UM seeks to be a reference point for high quality in teaching and learning, therefore a great deal of effort has been channelled toward achieving this goal right from the time the University was established over thirty years ago. The matrix structure for teaching courses was implemented early on.

Organisation of Educational Programmes

The matrix structure is organised in such a way that educational activities are managed not on the level of Schools but through Degree Directors and committees operating mainly at the departmental level, and through Degree Councils and their Presidents operating at the School level. Beyond co-ordinating educational programmes, Degree Directors and Degree Council Presidents, with their committees, actually manage the teaching/learning activities. There is also a large student representation in these committees, which makes it possible at this level to evaluate the results when staff and students are working closely together. The matrix structure is thus a co-ordinating, managing, and quality controlling system of the organisation. UM takes pride in its successful running of a complex matrix organisation, and the Review Team supports this view.

UM exerts a lot of effort in planning new degrees and updating existing ones, and does so in consideration of the needs of society and the prospective employment situation for graduates. Some representatives of local industry the Team met have underlined the need for more practically oriented education and more applied research to serve the needs of employers and help build economic capacity in the region. Some of the SWOT analyses in UM's SER refer to the necessity to expand the practical educational provision as well. The Review Team found that UM has been very innovative in its design of new degree programmes. Many of these programmes, such as in the field of information technology and communications, have been the first in the country. A good initiative, described in the additional material to the SER and also mentioned in an interview, is the establishment of a "Career-Path Observatory" for tracking alumni and thereby educational quality.

Teaching Innovation

UM is strongly committed to innovative teaching methodologies, such as project-based learning, co-operative learning, tutorial supervision, and other active learning methods. The medical degree, for example, has incorporated a number of elements of problem-based learning (PBL) since 2001.

An Assessment and Quality of Teaching Office (GAQE), overseen by the Pro-Rector in charge of quality assurance, was established in 2004. In addition to co-ordinating quality assurance procedures, the office sets up projects to improve teaching and learning

methodologies for academic staff and students. The Review Team fully supports the functioning of GAQE, which it considers a necessary organisation within a university.

Bologna Process

UM has largely completed introducing the three-cycle programme structure in line with the Bologna model. In the coming academic year, first-cycle degree programmes and most of the second cycle will be implemented. The development of second-cycle – Master's – programmes has been stalled due to the uncertainty on the national level about whether these programmes will receive state funding. The Review Team hopes that the question will be resolved in the very near future and that UM can proceed without obstruction in this regard. The Review Team is of the opinion that UM represents one of the best examples in Europe of implementing the Bologna structure.

In addition to programme development, the University has successfully introduced the European Credit Transfer System (ECTS), and the Diploma Supplement. As noted in the introduction, UM is one of three universities in Europe to have received both the ECTS and the Diploma Supplement Label. A student- and learning-centred study environment, also a feature of the Bologna process, has already been mentioned. UM involves graduate students in research projects. Students on all levels are involved in projects in a practice setting, such as in a company. Medical-school projects are being conducted in medical clinics. Internship programmes are made possible via co-operative programmes e.g. in engineering with companies near-by.

The well-developed organisation of quality assessment has also been alluded to. The University is keenly aware that a lot more has to be done to implement all aspects of the Bologna process fully, such as even more and systematic programmes for training the teaching staff in various aspects of the Bologna process, and the introduction of e-learning. However, the Team was impressed by how well the interviewed students seemed to be aware of the Bologna process, not only with regard to the Bachelor/Master structure just being implemented, but also regarding its mobility and language aspects.

Academic Performance of Students

The student dropout rate is high in comparison to many Western European universities. The University is aware of this problem, which is linked to the high dropout rate in secondary education. UM is tackling it with various innovative approaches, such as project-based learning and involving students in research projects. As a result, the dropout rate is low in comparison to Portuguese universities. In fact, during interviews with students, the Team found that they were satisfied and, indeed, proud to study at UM. Yet some students perceived uncertainty about the profitability of completed degrees among students.

Student Access

Students are selected through a national, competitive test, combined with the secondary school marks, administered by the Ministry. Such an approach seems to be practised in many European countries, even though it limits university autonomy.

The real problem is the low number of applicants in certain fields, such as engineering programmes, sciences – most notably mathematics, chemistry and physics –, and some languages, where only 85-90% of available student places are filled. The Team is aware of the negative demographic in Portugal, though less in the north, the “youngest region in Europe”. The high failure rate at secondary-school level, which is worse in the north of the country

where the GDP is lower than elsewhere, exacerbates the problem by reducing the potential number of entrants. The University attempts to mitigate the situation by assigning central staff responsibilities for active recruitment of students; these central staff work in close co-operation with designated staff members within schools, departments, and units who perform student recruitment activities for their particular programmes. A Communication, Information and Image Office deliberately targets potential UM student applicants through publicity in secondary schools, job fairs, and the like. As told by students in interviews, UM is for many their first choice university. A common refrain among students interviewed by the Review Team is that, upon entry to UM, their first-hand experiences have been highly positive and they believe the quality of UM exceeds its image.

The 23+ programme, targeted toward older individuals, is another possibility to enhance the University's attractiveness, of which UM is also aware. It allocates a 20% quota in its degree programmes for students of this group. The Team was told that UM currently has 200 new students in its 23+ programme, which is short of its set quota. Recruitment efforts should be strengthened in this area.

The Team finds that UM has certainly reached its goal in teaching and learning, and it is ready to be a reference point in high-quality teaching and learning, not only for Portuguese universities, but also in Europe and, indeed, the whole world.

Recommendations: The Team recommends that many innovative initiatives in teaching and learning, such as the "Career-Path Observatory", quality assessment of teaching and learning, staff training in new teaching methodologies, project-based learning, the continued implementation of the three-cycle educational structure, and other aspects of the Bologna process, such as e-learning, should be supported by the central administration of the University with human and financial resources. Recruitment efforts targeted at secondary-school students and the 23+ group should be stepped up. The public relations efforts of the University should be expanded and given higher priority, not only to enhance UM's attractiveness among prospective students – in the region, nationally and internationally – but also to exploit funding possibilities.

Research

The very ambitious strategic goal of the University is to become one of the leading research universities in Portugal. It is all the more ambitious because the University is young, moreover it is situated outside the major higher education centres in Portugal: Lisbon and Porto and the historic university town of Coimbra. Yet UM has already succeeded quite well in developing its research activities, especially in the last few years. Indicators supporting the Team's assertion are the University's accelerating rate of scientific publications (from 2003 to 2005 they produced a total of 492 books, 446 articles in national and 1,552 articles in international journals); the number of PhD degrees that have risen exponentially, and the significant increase in contract research funds. Furthermore, UM has a number of research units rated as excellent by the FCT, and its researchers engage in a large number of national and international co-operative research projects. UM is a partner in two "associated laboratories" – in biotechnology and engineering, and in nanotechnology –, each in collaboration with three recognised universities and research institutes, set up in 2006. The two associated laboratories are centres of excellence as established by the FCT. Therefore, it is obvious to the Team that today UM is at the level of international research universities, and

the Team has no doubt that the University belongs among the research universities in Portugal.

Structure of Research Management

In the management structure of the University, research is based in research units, which are more or less independent of the school/department structures. Most of the research units have been accepted and are at least partially funded by the FCT, based on national competitions following the British model. FCT criteria include a minimum number of PhD researchers and a demonstrated research record.

Networking is an important factor in all sciences, and UM has exploited this possibility well. A number of examples are listed in various parts of UM's SER. They include the Iberian Institute of Nanotechnology and the European Laboratory of Tissue Engineering, as well as an Erasmus Mundus Master's Programme in Civil Engineering, and two joint Doctoral Programmes with MIT in the United States. International co-operation is later in this report under the topic "International Relations".

Research Strategy

The University has set clear standards for research for the next four years. It uses regular indicators to monitor and promote high-level research. In order to reach these objectives, a number of actions have to be implemented. Although the FCT has the major responsibility for funding research, the University must continue to create an environment conducive to research, both physically and psychologically, and for that purpose the University needs to substantially increase its present low level of dedicated, centrally administered pool of research funds. In this regard, it would be helpful for UM to have an overarching strategy for research, in addition to the research strategies of each School.

Doctoral Studies

PhD education is one of the most important tools to promote university research. Some PhD students as well as post-doctoral students receive scholarships from the FCT; others are supported by other external organisations. Doctoral students are active participants in research projects. At the same time, there is no teaching requirement for PhD students, but there is also no prohibition for them to participate in teaching.

Research Management Service

UM's central Research Management Services unit provides support to all research personnel. This kind of university-wide office is gaining in importance in many universities. As elsewhere, these services at UM guide academic units in developing strategies, negotiating grants and contracts, managing donations and fundraising, arranging for intellectual property rights, and overseeing ethical issues. UM also uses this kind of central office function for its internationalisation effort, namely the International Relations Office.

Recommendations: The Team believes that the University might find it helpful for UM to have a more explicitly defined research strategy, a more explicit formalisation of the strategy-generating procedure, and better identification of the body (or bodies) responsible for the institutional discussion leading to that defined research strategy. In addition, for the promotion of good research, the Team suggests that UM should further develop opportunities for students to gain early access to research, including taking steps to motivate secondary students to engage in research and, eventually, to pursue research careers; UM has good

experience in cultivating secondary students. It is also important for UM to support the development of research careers, starting from PhD Schools and then encouraging PhD students to continue research at the post-doctoral level. UM should, moreover, encourage and support its excellent researchers to take up opportunities to do research at UM or elsewhere during sabbaticals or during similar periods in which researchers are free from teaching and administrative duties. The diversification of the teaching load adjusted to research work at given periods of time should also be considered. Prizes for best papers and similar incentives are good tools for the advancement of research activities. Foreign scientists at different levels should be recruited to UM for various lengths of time and the Research Management Services should be strengthened.

Services to the Community: Technology Transfer and Innovation

The third pillar of UM's mission is to provide services to the community based on reciprocal valorisation. The Review Team reviewed written material on some of the many methods UM has used and continues to employ in pursuing this aspect of its mission; as well the Team visited some of the relevant sites and discussed the relevant activities with UM people responsible for community focused programmes and initiatives. Overall, UM has an impressive array of community services and there is evidence of significant success in serving the necessities of a number of community publics to the mutual benefit of both parties. A prime example among the initiatives is UM's TecMinho.

TecMinho, the University's Knowledge Transfer Office (KTO)

TecMinho is a non-profit association started in 1990 to serve as UM's interface for intellectual property management and technology commercialisation. Specifically, the mission of KTO is: 1) to establish regional innovation hubs and strategic partnerships in the global market; 2) to set up technology-based spin-off companies; and 3) to promote an entrepreneurial culture in academia and the region. Currently KTO's activities are organised into three complementary departments – Continuing Education, Technology Transfer, and Finance – providing a full slate of services to manage UM innovations from the stage of disclosure to the stage of deciding on a commercialisation strategy of licensing or creating a spin-off firm. The TecMinho initiative, the first of its kind among Portuguese universities, is managed by the UM Rectorate and is chaired by the Vice-Rector for Research and International Affairs.

In the process of interfacing with technological funders, entrepreneurs, and regional economic development agencies, TecMinho has created economic growth in its region and, reciprocally, support for academic staff and PhD students' research, jobs and new venture business ownership careers for UM graduates, a revenue stream for the University, and a positive, innovative image for the University among key stakeholders in the region, nationally, and internationally.

KTO is monitored by key performance indicators and is benchmarked against international performance systems for intellectual property management and technology transfer. It has generated impressive results in number of patents issued and in start-up companies fostered during its short life span. It is clear that TecMinho stands as a strong example of UM's strategy of devising innovative methods of achieving first-mover advantage and in supporting the University's third mission.

Recommendations: The Review Team agrees with the strong emphasis UM has on this “third pillar” aspect of its mission. The Team commends UM for the many successful initiatives it has undertaken in its service to the community. TecMinho as a knowledge-transfer instrument is only one example. The cultural units, mentioned from the aspect of cost-effectiveness, are similar community services. It is clear that UM is a major player in the life of the community of the city of Braga and Guimarães, and the Minho region at large. It would be helpful for UM to increase its efforts to link its teaching and research projects to the necessities of the geographical region, including offering an increased array of applied education and research projects. Also UM should monitor the performance of all its community linkage initiatives to assess strategic impact, focusing on cost effectiveness, value for money, and public relations potential.

Integration of Polytechnic Schools

In line with UM’s strategy for establishing itself as a university for the larger region and as a provider for both university- and polytechnic-level degrees, its plan to integrate the Polytechnic Institute of Cávado and Ave (IPCA) could be a key step in the University’s development. Specifically, UM has been presented an opportunity to take legal control over and to integrate into UM the IPCA, located in Barcelos and comprised of a School of Technology and a School of Management. Barcelos, by highway, is 18 kilometres south-west of Braga. UM’s other campus, Guimarães, is 20 kilometres by highway south-east of Braga. Thus, the three campi would form an approximate geographic triangle in the heart of UM’s chosen knowledge region.

In the SER, UM indicates that, if this integration became reality, it would operate IPCA as a third campus. Its short-term objectives would be to maintain the present polytechnic degree offerings at the Barcelos campus and to introduce additional polytechnic degrees and a couple of undergraduate university degrees there. Furthermore, UM indicates that, in the short to medium term, it would add a couple of polytechnic degrees to the offerings of the Braga and Guimarães campi, thus providing both university and polytechnic undergraduate degrees at all three campi. Currently UM offers polytechnic degrees only in Nursing. Potential areas for new undergraduate polytechnic degrees that could be offered in Barcelos are health technologies, farming, administration and fiscal organisation, marine science and technology, artistic studies, social assistance, and cultural heritage. UM foresees that, eventually, some second-cycle polytechnic degrees would rotate among the three campus locations.

Based on its SER, UM perceives three main benefits that would derive from the proposed integration of IPCA:

1. *Synergy*: UM, as a flexible, project-oriented institution, could make the best use of both university and polytechnic competences and resources.
2. *Strategic fit*: This integration would reinforce UM’s positioning as a comprehensive (complete) university, offering high quality cultural, scientific and technological higher education degrees for the region. As well, this integration of applied training and education programmes would be consistent with UM’s stated mission of developing both fundamental and applied research, taking into account the necessities of the surrounding communities.
3. *Regional development*: The strategy of UM is focused on regional development, thus helping to create and strengthen the surrounding socio-economic conditions that will be of mutual benefit (reciprocal valorisation). Keeping a higher education campus in Barcelos would be consistent with

UM's positioning as a university in a region and would strengthen its role as *the* articulation agent for higher education throughout its chosen knowledge region in northern Portugal. Furthermore, the Barcelos third "pole" campus would strengthen the economic development and quality of life in the communities served.

However, in its SER the UM also mentions several conditions that should apply to the integration opportunity, among them:

1. *Financial resources*: UM states that the integration of IPCA, if based on no more public funds than the simple sum of the current budget values of the two institutions, would impose a financial burden that the UM could not withstand. UM believes that the integration process, in particular, the implementation of new technology degrees at Barcelos, should be supported by specific additional public budget allocation of six (6) million euros for each of the next four years. It is also noted that this additional figure does not include the enhanced funding that would be needed to upgrade infrastructure (buildings and equipment) at the Barcelos campus, to integrate the IPCA into UM's management, quality, communications, and information systems, and to cover additional costs of staff and student mobility.
2. *Student body size*: UM believes that the Barcelos campus ought to be made viable independent of the integration process. Therefore, it indicates that, to be sustainable, the Barcelos campus should have a student population of at least 3000 (double IPCA's current enrolment), and that this sizing should not reduce UM's current approved (regulated) enrolment numbers (approximately 10,000 at Braga and 5,000 at Guimarães).

As mentioned earlier, the Team is aware that UM integrated Nursing technology degrees in 2004 and that UM staff have been teaching in some of the polytechnic degree programmes (Accounting and Solicitor degrees) at IPCA. Moreover, the Team finds that the external municipal and industry stakeholders perceive similar benefits. In particular, these stakeholders emphasised the industrial and societal needs for sustainable offerings of technology degrees in Barcelos and the region. Furthermore, they were firm in their beliefs that UM is a solid, credible, and high quality higher education institution that would bring sustainability to the technology degrees currently offered by IPCA, and that UM would have the competences to strengthen regional capacity by augmenting the present IPCA offerings with additional polytechnic and university degrees. The Review Team concurs with the UM Rector that there is significant prospect to embark on applied research projects in Barcelos and the region that would further benefit industry and society. In short, the Review Team believes that there is clear potential to strengthen regional capacity while respecting the distinct nature of polytechnic and university degrees.

The Review Team notes that IPCA has, for a long period, remained in a provisional status and has a current enrolment of only 1500 students. Thus, it would appear that IPCA has not reached a critical mass and that the sustainability of IPCA on its own is an open question. However, the strong logic and potential for this integration needs to be balanced with, and warrants, additional financial resources to provide a larger compliment of degrees (both polytechnic and university) at Barcelos, a degree compliment that will be sufficient to build enrolment to a critical mass.

***Recommendation:** Based on the above mentioned merits of the specific case of the opportunity to integrate polytechnic degrees into the University of Minho, the Review Team recommends that the integration intent be moved to action. Furthermore, the Team recommends that, over the near term, UM pursue sufficient new resources to ensure that additional polytechnic and university-degree programming can be mounted at Barcelos so that a critical mass student body can be generated.*

International Relations

Internationalisation is co-ordinated at the Rectorate level through a Vice-Rector and an International Relations Office. Internationalisation must be managed centrally in all universities, because it involves specialised and complex expertise, such as handling European mobility programmes, and it engages all stakeholders within a university.

Internationalisation is one of the main strategic objectives of UM. The SER lists numerous UM links with university networks and a large number of international network projects in which UM is active. It has bilateral agreements with over 200 universities in Europe, Latin and North America, Africa and Asia. One example for international co-operation is the Confucius Institute for Chinese Studies, which was shown to the Team during its first visit. Established in late 2005, this institute is supported by the Chinese government. Among its aims is to facilitate contacts with universities in China.

In the last few years, UM's involvement in mobility programmes has made considerable headway. In 2005/06 the number of incoming Erasmus students topped 300, with about 10% fewer going abroad under this scheme in that year. Counting all other schemes as well as post-graduate students, there were approximately 300 additional incoming students to UM, the majority of whom were from Portuguese-speaking countries in South-America, Africa, and Asia. Portugal has generally faced the problem of far more students going abroad than the number coming to study in the country. UM has reached the balance in 2005 with approximately 600 students flowing in each direction.

UM's proficient application of the European Credit Transfer System (ECTS) and the Diploma Supplement, which presume a general awareness of what they entail among the University staff, likely contributed to UM's enhanced mobility. It has earned the University the European labels for both schemes.

In addition to student mobility, the University's internationalisation policy comprises a vast array of features, such as the internationalisation of the curricula, the mobility of academic and non-academic staff, and participation in international scientific and academic networks and programmes. The plan to set up a networking scheme with the neighbouring province of Galicia in Spain can only be supported. Overall, the Review Team was impressed by what UM has achieved in internationalisation, especially in recent years.

For international exchange activity, teaching in a foreign language is an important issue. The Team recognises that the Portuguese language is spoken in many other countries, and that around 60% of UM's undergraduate, and roughly 70% of its post graduate foreign students, are from Portuguese- or Spanish-speaking countries. Still, the Team believes that teaching some courses in the main research languages, such as English or French, would help to attract students from outside the Iberian language area. Internationalisation of research activities demands fluency in English. Indeed, the marketability and employability of UM's domestic

students – and UM is aware of this – would profit from greater language proficiency in their area of specialisation.

***Recommendations:** The Team is impressed with the achievements of UM in the area of internationalisation. The attainment of a balance between incoming and outgoing students reflects deliberate planning and actions. The Team encourages UM to continue, and to intensify, its efforts in this regard, in anticipation of an accelerated international mobility in coming years.*

The Review Team believes that UM should have a general language policy, which would outline how it plans to expand its foreign language-taught course offerings in all fields other than philology, and which would be part of academic staff development. One possibility would be to set up a language centre in charge of teaching foreign languages and Portuguese for foreigners on the practical level; this centre could co-ordinate and provide the methodologies for special language teaching for the departments. Such a centre would be a service centre, not an academic and research-based unit. The Team learned that a unit of this kind is under consideration and it encourages UM to proceed with its implementation.

Governance and Management

Governance and Management

In the EUA's "Glasgow Declaration", European universities committed themselves to making themselves stronger by, among other steps, "improving their governing structures and leadership competence so as to increase their efficiency and innovative capacity."

University-Level Governance

The governing structure of the University is composed of three very large, collegial bodies: the University Assembly, the Senate, and the Academic Council. External members are present only in the Senate to a maximum of 10%. Student participation is well guaranteed at all levels of governance.

The Review Team believes that the existing governance structure is too large and complex, and that it encumbers strategic decision-making. The Team realises that the University does not consider this to be a problem; it has not been discussed in UM's SER and is accepted as traditional and democratic. The Team certainly had the impression that a collegial relationship prevailed among the players within the interlinked governance structure. The Academic Council, in particular, appears to hold respect within the University and, in the SER, is considered the key body.

In continental Europe it has become common to develop the governance of universities according to the Anglo-American model. At the top of the governing structure, replacing the traditional assemblies and senates, is a governing board: It has a small number of twenty or fewer members, the majority of whom come from outside the university. As Portugal is just in the process of rewriting its higher education system, the Team foresees that some changes will be in line with the European trend.

UM has been an innovator in a number of respects. It may want to seize the opportunity of the moment to signal to the lawmakers that it intends to continue as an innovator by adopting a

more flexible governing board structure. The Strategic Council and UM's involvement with outside partners have provided the University leaders with experience in this regard.

The Academic Council, whose function is to decide internal academic policies and programmes, will retain its key function as the academic governing body. UM has been analysing and reviewing the function of the Academic Council, providing outlines for options in its SER. The Team suggests that the University reconsider the function of the Academic Council in light of the overall governing structure to be developed after the provisions in the new higher education law are decided. The function of the Academic Council will determine its size and members. A small body of no more than 25 members would be feasible, possibly with an executive committee to work out university strategy, which then could be passed on to the Council and the Governing Board.

Management and Leadership

Besides the University's governing bodies are the individual leaders in the persons of the Rector, the Vice-Rectors and the Pro-Rectors. Their personal leadership seems to the Team to be efficiently organised and their duties and responsibilities well defined. An Administrative Board managing financial issues and assets supports the Rectorate.

Governance and Management at the School, Institute and Department Level

The administration and management between the central administration and the operative units, such as Schools and Institutes, are organised on the basis of the matrix system, of which the University is very proud. The basic idea behind this arrangement is diversification and at the same time integration into the classic faculty structure. The matrix structure at UM is based on Schools and Departments providing the human resources for teaching and research. Degree Councils, set up around study programmes, are the responsible bodies for educational functions and research units manage research projects.

To the Review Team, the matrix structure at UM seemed rather complicated, due to the parallel existence of a traditional university structure along with the other system of the matrix structure. The Team found that the system seems to work well, however, since no problems surfaced either in the SER or during the interviews in the two visits. The structure allows for flexibility and effectiveness in the allocation of human resources. Moreover, it promotes the participation of academic and research staff in a variety of programmes and projects.

The Team feels, however, that there is room for rationalisation, more flexibility and unity can be achieved by trimming down units, possibly via merging some of them. The Team has heard plans to merge the School of Child Studies into the School of Education and Psychology, and believes this to be a rational proposal. The School of Health Science comprises only one department, the Department of Medicine. It could be a good model for other Schools when considering the reduction of the number of departments.

Another general trend in Western European universities has been the principle of subsidiarity to local, or campus, governance, in which decisions are made at the lowest appropriate level of responsibility. UM could examine its internal pathways of decision-making in order to simplify its structure along these lines.

Recommendations: The Team recommends that UM consider a more flexible governing structure, following the provisions of the upcoming higher education

law, keeping in mind the size of the governing bodies for optimum effectiveness and streamlining functions.

On the School and Department levels there is room for rationalisation in the number and arrangement of units, especially keeping in mind that the matrix structure may take over some of the functions that the current physical divisions of organisational units carry, at least on the department level. The decision-making structures within Schools could equally be simplified on the principle of subsidiarity.

Development of Human Resources

UM has paid much attention to human resource development, which is one of the most important functions in developing a modern university. However, strict legal regulations curtail strategic university policy regarding manpower development and inhibit progress in a core area of university operations.

The number of academic staff seems to be satisfactory in spite of funding difficulties. The student/teacher ratio was 12.3 in 2005/06, as compared to the OECD countries' 15.5 for 2003. In young universities, the academic staff is usually young but without yet having established its academic reputation. Over the years, both features progress in parallel. UM appears to classify its teachers into two groups: teachers for practical skills and teachers for academic courses. It calls the latter group "faculty staff" or "teaching staff" and, in 2002, only 57% of the teaching staff held a doctoral degree; this percentage rose to 72% by 2005. UM's goal is for all (100% as per page 21 of its SER), or almost all (90% as per page 27 of its SER) of its teaching staff to hold doctorate degrees. Although this goal is consistent with UM's positioning as a research university, there should be room for hiring young teaching staff members who are still aspiring to attain their PhD. The Team recognises that teachers of practical subjects, for example those in polytechnic schools, may not have and may not need to have the PhD academic qualification.

The share of non-academic (i.e. non-teaching) staff to academic staff is 0.55. Although on the low side, it can still be considered normal for Europe on average. In a majority of universities this indicator is closer to 1.0 In North America it is usually higher than 1.0.

Academic Staff Workload

On average, the academic staff devotes one third of its workload to research. The Team believes that this proportion is rather low. Some teachers have noted that the heavy teaching load requirement is an impediment to their advancing in research.

The Team believes – as was mentioned in the section of the Evaluation Report discussing research – that teaching load should be adjusted for strong researchers for fixed periods of time, which may be shorter or longer depending on the research commitment involved. Performance should be monitored according to the workload mix.

Promotion of Academic Staff Based on Pedagogic Qualifications

As teaching performance has not been measured at UM so far, it is difficult to establish a benchmark that could serve as a tool for promotion and hiring. The Team suggests that pedagogic performance be developed according to the portfolio method.

It is hoped that the upcoming higher education law will allow individual universities more flexibility in their hiring and promotion approaches, where acknowledged pedagogical achievements should be considered. On the individual and programme level, incentives for good teaching should be awarded.

Recommendations: The Review Team agrees that UM should increase its proportion of teaching staff with PhDs to 90% or higher, as it is consistent with UM's mission and positioning as a research university, but suggests that it not totally rule out hiring young teaching staff members who are currently completing or are committed to embarking upon PhD studies. In general, UM should aim to achieve the highest qualifications and skills for (academic) teaching staff and for teachers of practical skills according to their given tasks. The Team also recommends that the teaching load of academic staff be adjusted relative to their research commitments. Pedagogic achievements, crucial to project-centred, skills-based learning, should be recognised and factored in when hiring and promoting academic staff.

Internal Services

The Review Team heard no complaints about teaching and learning facilities or student support services at UM. The library services seem to be functioning smoothly, and students do not have problems in accessing course books. The SER mentions that the library at the Azurém Campus in Guimarães is “poor”, which the Team also heard in an interview. Its improvement is among the University's plans.

The computer infrastructure seems to be satisfactory. To name just a few IT features at UM to support the Team's perception: Students commended their ready access to computers and the Internet. The quality management system uses an elaborate database involving many facets of University staff, students, and activities. UM maintains a so-called “open access” digital repository of scientific work written by the academic and research staff. E-learning programmes are being developed and are recognised as a niche for future progress.

Student support services are administered by a Social Services Department and cover accommodation, scholarships, health, and psychological assistance, as well as cultural and sport activities. The Team noted the quality of the department's performance and had the impression that these programmes functioned to the satisfaction of staff and students alike. However, the Team also felt that the communications unit is too small and should receive additional support from the central administration.

Recommendations: In order to pursue its policy of providing the best possible support services, UM should build in quality monitoring and reporting procedures in this area as part of its continuous improvement approach. This should include strengthening communications about the quality of University services.

University Image

UM has a small (four staff persons plus a trainee/an intern) central Communication, Information and Image Office (GCII), and it works in co-ordination with communication representatives (contact persons) from all the University's Schools/units. It focuses on internal and external communications, supporting UM's horizontal needs in the domains of communication, information, and diffusion of the University's image. External publics or

targets include potential undergraduate and post-graduate students, school teachers, educational psychologists and other educators, the media, and other higher education institutions, focusing mainly on the national level.

The University has demonstrated an ability to be innovative, often seeking and achieving first mover or early adopter advantage and success with University curricula, research projects, and services to the community. However the Review Team observes that there are two areas – alumni friend-raising and programme awards and recognitions – in which the University might be enhanced by monitoring and considering timely implementation of best practices. Although the UM has some level of activity in each of the following areas, it should consider scaling up its efforts, perhaps adding a right-sized, professionally staffed function within the University to spearhead the initiative. In doing so it would further strengthen its image among key University stakeholders in the local, national, and international community and in the long term would benefit materially.

Alumni Friend-Raising and Development

Although the Review Team did not ask for, and UM did not offer, opportunities to meet with a group of UM alumni, several of the external representatives encountered by the Review Team were alumni of UM. Their impressions of the image of UM and the benefit they derived from studying at UM were highly positive.

Sustaining and enhancing UM's image among alumni and fostering friend-raising activities with alumni, can strengthen UM. The Review Team understands that UM's alumni have some form of voluntary organisation that has a, perhaps, limited range of alumni related activities. However, UM does not appear to have any of its staff assigned to co-ordinate alumni image building and alumni friend-raising programming, and to work in close co-operation with UM's volunteer alumni group. It may be advantageous to UM to study, select, tailor, and consider timely implementation of best organisation models for proactively managing alumni relations functions and programming in close association with volunteer alumni groups. Using this best practices approach to developing a proactive alumni relations function, would be consistent with UM's demonstrated ability to be innovative and to achieve first-mover advantage in other areas, such as University curricula, research projects, and services to the community. Although it may be too soon to move in this direction, given the current cultural and economic situation in Portugal, UM should be vigilant and strategic in adding a right-sized, professionally staffed alumni relations office, responsible for mounting a broad range of programming that will sustain and enhance the image of UM among UM alumni, keep alumni as friends of the university, and provide a strong base for eventual attraction of material benefit (donations of funds and donations in-kind) from alumni. A similar best practices approach could be applied to mounting an appropriately sized and timed professional fundraising function at UM, a function that may help UM diversify its funding sources.

Programme Awards and Recognitions

In the course of its review, the Team learned that UM has awards and recognitions for students' achievements and for the best academic staff research article/publication. These tools promote important values of UM and foster a positive image among two of its key internal publics/targets. The UM offers honorary doctorate degrees to prominent individuals and thereby promotes important values of UM and creates a positive image on and off campus. However, it appears that UM should broaden and deepen its programme of awards and recognitions, stretching further within and outside the university. A review of best

practices among universities and other organisations that value outstanding achievements in research, teaching, community linkages/service, and internationalisation – the five pillars of UM’s mission – would appear to be a fruitful approach for UM to use.

Recommendations: The Evaluation Report already mentioned under “Teaching and Learning” that the University’s public relations efforts should be enhanced. The Team underlines this again in this chapter, when it recommends making use of alumni friend-raising and programme awards and recognitions as image enhancing and diversity-of-funding tools.

Quality Practices

The University has created an excellent internal quality assurance structure. The following processes can be identified:

- Large-scale monitoring of results of academic activities, the documentation of which have been the basis for the Review Team’s evaluation;
- The Degree Council system, through which the quality of teaching can be assessed;
- Annual surveys of student and teacher satisfaction about teaching and learning processes;
- Assessment of the evolution of research quality applying the methodology of the FCT and with regular meetings with the units;
- Biannual audit of administrative quality by external, specialised firms; and
- Establishment, in 2004, of the Quality and Teaching Office, and the Pro-Rectorship for quality issues.

The University has co-operated with the – now ceased – National Evaluation Council for external, national programme evaluations. As stated in its SER, UM will continue its co-operative stance with the successor quality agency once it begins its operations. UM also works closely with the FCT, which decides the main part of research funding on a national, competitive basis.

As mentioned, the Team found that there is a good quality culture prevailing at UM. The Team especially appreciates the way educational programmes are managed through the matrix system by degree-based committees and degree leaders; this structure makes it possible to develop, manage, and assess these programmes in co-operation with teachers and students. Such a system may be better than traditional student satisfaction surveys, since it provides an opportunity for immediate reactions. The University is also developing a “Career-Path Observatory”, the results of which can be used in designing degree programmes, and thus improve quality. Thus, after concluding its evaluation, the Review Team believes that UM can serve as a benchmark for other universities in this country regarding quality management.

Recommendations: Some students mentioned that they do not perceive clearly what follow-up measures were taken in response to their comments in student evaluations. Providing them with concrete feedback could stimulate a higher response rate. The planned “Career-Path Observatory”, mentioned also under “Teaching and Learning”, should be supported also as a tool for quality management.

Strategic Management and Change

For strategic management, the University has established quality standards in every field of activity. They are mainly numerical standards, and can thus easily be followed through the information system existing at the University. Although such indicators are useful for central management, they are sometimes overly simplistic tools for evaluating academic activities, which require a broader scope. A simple number of fulfilled degrees and published papers are an easy way to follow these activities, but the real outcome should be the impact of these achievements in society. Of course, this is difficult to observe, therefore a combination of numeric and more complex tools could serve the purpose more appropriately.

The University has demonstrated significant capacity for change, being a first mover in a number of areas of educational and research activity. Both its internal culture and structure give the Team confidence about the sustainability of this dynamism.

It is an accepted notion in Europe that an innovative university with a capacity for change must involve members of the external community in its governing bodies. UM has shown interest in this direction in a number of aspects, beyond the nine external members of the Senate in compliance with the law. Some of these aspects are

- Advisory councils in schools, departments, and degree councils;
- The University Cultural Council with twelve external members;
- An informal Council of Interfaces, and
- The Strategic Council established by the Rector in 2004.

The SER notes that “from the Rectorate point of view, the great challenge is how to persuade middle-level management to undertake commitments in line with the stated strategic objectives.” The Team, with experience in facing strategic issues at universities, knows that this is a real dilemma that has no simple solution.

Recommendations: It is important that when every middle-level governing authority, i.e. Schools, Institutes, Departments, decide their own strategic plan, there is also an overarching strategy for the University. It should be discussed from the bottom up and top down. There must be common resources at the top level for mounting University-wide competitions and financial incentives, as also mentioned in the SER.

Final Words

The leadership of UM is to be congratulated on its serious concern about strategic planning. Its strategic plans will provide a sound basis for change and development of the young University.

The Review Team hopes that the University will find its comments and recommendations worthwhile for discussion and consideration. Implementing them, or at least some of them, will add to the long line of successes the University of Minho has created in executing its role as the articulation agent for quality higher education in its chosen region, and as an agent for sustainable regional development. By participating in this review, UM is automatically eligible for a follow-up review in two-three years, which can prove useful for measuring the University’s progress. The internal and external developments will likely decide this question. UM is now also a member of the EUA’s Alumni Forum, which meets on the occasion of major EUA conferences, where representatives of all reviewed universities can discuss

common problems of strategic management, general European university trends, and related topics.