

## UNIVERSIDADE DO PORTO

## **Self-Evaluation Report**

## Annex VII

Strategic Plan 2009-2013

Institutional Evaluation European University Association



PORT

# Strategic Plan U.Porto 2009-2013







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### **1. Introduction**

This document presents the Strategic Plan of the U.Porto for the period 2009-2013.

This Strategic Plan respects the best international practices, adapting them to the U.Porto context and to the community where it is established. With this in mind, this document took into account not only the principles espoused by the best international Universities, but also the multiple contributions of players that are actively involved with the University, with the aim of establishing a set of strategic topics to strengthen a greater qualification of the U.Porto, respecting the overarching and demanding evaluation standards .

In an initial phase, we reflected subjectively on the current context of the University, and it soon became clear that the U.Porto must fully acknowledge its intention in becoming one of the best European Universities, even though it already shows signs of growing recognition, both in Portugal and abroad. A renewed Vision was, therefore, outlined for the U.Porto. In a second phase, the development of the Strategic Plan was marked by a prospective analysis, where we identified the strategic aims leading to the U.Porto vision and the guidelines required for its effective operation.

However, this plan is not limited to identifying the actions that must be conducted by the players within the U.Porto. Indeed, we are dealing with a dynamic document, open to the community, which we hope will enhance a culture of responsible participation, fostering a sustainable dynamics within the development process of the University.



## **1<sup>st</sup> Part** From the Mission and Vision to the Strategic Topics



### Facts

The U.Porto is a Portuguese higher education institution founded in 1911, with origins dating back to the eighteenth century. It is currently the largest university in Portugal (in terms of number of students, courses and scientific areas), and one of the most prestigious teaching and scientific research institutions in the country.

In the academic year 2007/2009, a total of 28,901 students attended classes at the U.Porto, 7.55% of which were foreign students.

In the same academic year, the U.Porto totalled 1,428 PhDs (1,355.1 FTEs), which represent 71.2% of its teaching and research staff.

The U.Porto houses 14 faculties and 69 research units - 31 scored Excellent and Very Good, and 13 are integrated in Associated Laboratories.

In 2007, the U.Porto published a total of 1,721 scientific papers indexed in the *Web of Science*, which represents 22.4% of all the Portuguese indexed scientific papers. Within the awareness actions focusing on the economic value of knowledge set in motion, 26 Portuguese patents have already been registered and 32 technology-based companies were set up. The U.Porto has also signed 1,132 cooperation agreements with several entities, and its collaborative activity has spread to 57 countries.

However, the U.Porto also stands out in specific fields in the international framework. This growth is due mainly to the continued and focused efforts of students, teachers and researchers who, having contributed to achieving significant competitive potential, have also secured the progressive integration of the U.Porto in international scientific cooperation networks. This progressive integration is materialized as challenges and decisive opportunities for the University, encouraging it to strengthen its comparative attractiveness even further, and to invest more in the internationalisation of its knowledge – preferably steered to the qualified and innovative development of the region, the country and Europe.

### 2. Mission

The mission of the University of Porto is to create scientific, cultural and artistic knowledge, to provide high quality training, strongly anchored in research, the social and economic value of knowledge and the active participation in the advancement of communities in which it is established.

The U.Porto is an education, research and development institution committed to the full training of citizens, respecting their rights and actively involved in the progress of their communities.

The U.Porto is today a national reference, in cultural, artistic, technological and scientific qualification terms, and in the production and dissemination of knowledge. The U.Porto is, therefore, a mobiliser and a driver of the socio-economic and cultural development of the country.



#### **Strengths**

Advanced Training: the provision of diversified training, namely in robotics and automation, information technologies and telecommunications, biotechnology, energy, new materials, and offers in the lines of the immediate market requirements, for instance in areas believed to be strategic for the country, such as health, energy autonomy, the preservation of marine resources and biodiversity, among others.

Innovation, Science and Technology: Significant progress in terms of scientific papers and in attracting young PhD candidates. A consolidated network of R&D units, with a diversified research potential, favouring network economies. A strong bet on the transfer of technology and on valuing research outcomes.

International Networks: the increasing integration into global scientific excellence networks, thus simplifying the transfer of research results at transnational level

#### Weaknesses

Advanced training: The provision of lifelong training is still limited. Insufficient post-graduate studies in excellence areas resorting to national and international partnerships.

Innovation, Science and Technology:

Frailties in the relations established with the entrepreneurial structure, which is detrimental to applied research and the effective endogenous process of research results. Excessive fragmentation of R&D units, deteriorating the desired scale economies. Limited interaction with other entities in the National Technological Scientific System.

International Networks: Internationalization of the U.Porto is still limited, particularly with regard to the training activities in partnership with internationally renowned Universities.

#### **Opportunities**

Strengthening the cooperation with other countries connected to Portugal.

Expected impact on the greater Porto region of the internationalization strategies adopted, and of the reorganization of companies at the level of transfer of activities to areas where quality human capital is available, and other production factors. A tendency to clustering certain activities in the North Region, intensifying the network and agglomeration economies, and the articulation between the National Technological Scientific System and the entrepreneurial structure.

#### Threats

Limited attractiveness of the country for top talents. Strong competition from other Universities in large emerging economies, privileged in terms of centrality, costs and human capital. Expected reduction of public support, following the cutback in Structural Funds, which may hinder further the still frail production structure of the Region, and the young qualified entrepreneurship.



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The U.Porto Strategic Plan privileges a set of basic principles to be assumed by the University, and which must be known by the entire community. 1. The University of Porto provides the conditions needed for scientific, cultural and technological freedom, ensures that the ways of life and opinions are multiple and free, and encourages the participation of all university entities in a common academic life.

2. The actions of the University of Porto are underpinned by high ethical standards.

3. The University of Porto pursues strictness, transparency and quality, and is particularly concerned about acknowledging merit.

4. The University of Porto guarantees equal access and treatment, regardless of gender, social, political, ethnical or religious background.

5. Under the terms of law, the University of Porto agrees to abolish all factors leading to unfavourable conditions experienced by students with a disability, within the University.

6. The University of Porto is concerned about the personal fulfilment of all those that are part of it.

7. The University of Porto fosters innovation, providing a stimulating environment for creativity and for the entrepreneurial attitude of its members.

8. The University of Porto respects the environment and strives for a sustainable economic and social development.

### 4. Vision

As we are approaching an historical event – the 100<sup>th</sup> anniversary of the University, on 22 de March 2011, which is a perfect reason to celebrate, the U.Porto Strategic Plan 2009-2013 offers a renewed vision for the U.Porto.

*To become one of the Top* 100 Universities in *Europe in 2011, the* year of its 100<sup>th</sup>

anniversary

### Facts

The U.Porto is among the best Universities and higher education institutions, scoring in the majority of the international reference rankings as the best Portuguese University. The U.Porto is also the only Portuguese University included in all the renowned international rankings.

#### Academic Ranking of World Universities (Shangai Jiao Tong University)

	2007	2008
Portugal:	1 <sup>st</sup>	1 <sup>st</sup>
Europe:	173 <sup>rd</sup> -208 <sup>th</sup>	169 <sup>th</sup> -210 <sup>th</sup>
World:	403 <sup>rd</sup> -510 <sup>th</sup>	402 <sup>nd</sup> -503 <sup>rd</sup>

#### Times Higher Education (QS World University rankings)

2008 Portugal: 4<sup>th</sup> World: +500

#### Performance Ranking of Scientific Papers for World Universities (Taiwan)

	2007	2008
Portugal:	1 <sup>st</sup>	1 <sup>st</sup>
Europe:	195 <sup>th</sup>	161 <sup>st</sup>
World:	459 <sup>th</sup>	375 <sup>th</sup>

#### Webometrics (CSIC, Madrid)

	2007	2008
Portugal:	1 <sup>st</sup>	1 <sup>st</sup>
Europe:	87 <sup>th</sup>	99 <sup>th</sup>
World:	251 <sup>st</sup>	267 <sup>th</sup>

Ranking Iberoamericano de Instituciones de Investigacion (SCImago Research Group, Granada)

	2007
Portugal:	1 <sup>st</sup>
bero-America:	11 <sup>th</sup>



## 5. Strategic Topics

The continuance of the strategic aims consolidated in the Vision for the U.Porto is based on the definition of objectives along four major strategic topics, which represent the basic foundations of the U.Porto strategy.

## Training Research Internationalization Governance

The first two topics are central to the intervention taking place in all high level universities. The third topic reveals the new Vision for the U.Porto, the will to be compared to the best international institutions. The fourth topic represents a more cross-level area, but which is seen as a priority and a fundamental requirement, and is therefore considered a strategic topic in its own right.

Although independent in terms of objectives and methodological interpretation, the interdependence of all four topics is forever present, in that in order to follow through the Vision and the Mission of the U.Porto, all four approaches must be successful.

### A Note on Methodology

The development of the U.Porto Strategic Plan was based on the methodology developed by *Kaplan & Norton*, in their vast work dedicated to the strategic operation, and consolidated in the *Balanced Scorecard* and the development of Strategic Maps.

As such, and in a first phase, we defined the Mission and the Vision of the U.Porto, and then we identified the areas that

due to their importance for the accomplishment of the Vision, must assume a central role in the strategy: the Strategic Topics (Training, Research, Internationalization and Governance).

Having identified the Strategic Topics, we analysed each thoroughly in a three-pronged perspective:

- the perspective of the *Stakeholders*, or Public, central to the Strategic Topic, and for which we tried to find answers to the following question: how will the U.Porto overcome the expectations of its *stakeholders*?

- the perspective of the Abilities and Competences, in other words, the group of aptitudes and processes that must be mastered by the U.Porto in order to respond to the previous question, thus creating a direct relation between competences and expectations of the *stakeholders*: any competence or ability that does not result in overcoming one of the *stakeholder's* ambitions is a waste of resources, and is therefore not strategic; on the other hand, an expectation that can not be guaranteed by Abilities and Competences will lead to the loss of competitivity.

- the perspective of the Development, Learning and Infrastructures; we analysed the resources (tangible and intangible) that must be available, or be acquired, for the development of Abilities and Competences to be developed. Having outlined the Strategic Maps and, consequently, the objectives for each Strategic Topic, we can then identify the indicators and metrics that will enable the evaluation of the current status of the U.Porto; we can then measure the progress achieved after the implementation of the Action Plans described in the meantime.

The cycle of the strategic operation will be complete with the implementation of the Action Plans, and their monitoring and control, through a *Balanced Scorecard*. The overall process will result in compensations, penalties and, when applicable, corrective measures that will make the implementation of the Strategy, and of the corresponding Action Plans, a process of continuous improvement within the U.Porto, associated to the actual performance evaluation.



## U.Porto Strategic Plan Strategic Topics



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## Strategic Topic 1 Excellence in Training

Achieve excellence in the various levels of Training offered by the U.Porto, in compliance with international evaluation standards

### **Current Situation**

The U.Porto is a higher education entity with competences in all major areas of knowledge. In the academic year 2008/2009, the U.Porto offered 240 degree courses, split into 35 1st cycle courses, 18 Integrated Masters, 138 2nd cycle and 49 PhD courses, and several hundred continuous education courses. In the academic year 2008/2009, there were 26,633 places available in the national universities, and successful applicants totalled 25,239 in the first round of the National Competition for University Admission - corresponding to a 94.8% rate of places being filled. The U.Porto is also the institution with the highest number of places available (4,025) and with the highest number of successful applicants (4,010), showing a 99.6% rate of places being filled in the national examinations. Of all the applicants who chose the U.Porto to obtain an undergraduate/1<sup>st</sup> cycle degree and Integrated Masters (13,990), 7,045 students (corresponding to 13.3% of options at national level) chose the U.Porto in 1st option. In the academic year 2007/2008, the total number of students enrolled in the various cycles of education rose to 28,901 (41% in the 1st cycle, 36% in integrated masters, 13% in the 2nd cycle, 2% in specialization courses and 7% in the 3<sup>rd</sup> cycle).

The students enrolled in masters studies totalled 3,845, corresponding to an increase of 160% compared to 2002. The number of students enrolled in specialization courses has increased - 44%, compared to 2002. The number of students enrolled in PhD programmes is of 2,049, which means an increase of 67% compared to 2002.

Of the 4,428 graduates in 2007, 3,047 obtained the undergraduate degree, 678 a masters degree and 219 a PhD degree. The remainder 484 obtained a specialization diploma. The number of foreign graduates stood at 146. The final average mark of the undergraduate course was of 13.6 on a scale of 1 to 20. The number of graduate students has increased since 2003, and reached a growth of around 11% for the period between 2003 and 2007. The growth of masters and PhD graduates for the same period was of 56% and 71% respectively. In 2007, there were 2,270 staff teachers and researchers (1903 FTEs) at the U.Porto, of which 3% were foreign teachers.

71.2% have doctorates and 10.9% have masters degrees. Of all the staff teachers and researchers, 235 are Full Professors (including 27 Full Guest Teachers), 487 Associate Professors and 869 Assistant Professors.

Strategic Topic 1 Excellence in Training



What must the U.Porto do to develop abilities?

Strategic Aims

To achieve excellence in the various levels of training offered, the U.Porto intends to improve continuously the quality of teaching/learning offered to its students, contributing to improve the overall level of employability and thus providing the potential employers with facilitated access to professionals, techniques and exceptional knowledge.

To achieve the aims described above, the U.Porto must focus on several key-abilities in the coming years: it must be able to attract and retain more and better students and guarantee the effective link to employers and to communities in which it is established, to render the region and the country globally more competitive. Without these factors, the community will not be able to have access to these professionals for the areas of knowledge and to the extent it requires. These are then the features that will allow the evaluation of the quality of training offered at the U.Porto: the number of students that the University will be able to attract and retain until the end of the training period, the quality of these students and the actual connection to the needs of the community, evaluated through the rate of employability of its students.

It must master five competences and processes which, having reached levels of excellence, will lead to the fulfilment of its objectives:

- attract and retain the best staff teachers, supporting the quality of training and the ability to attract more and better students;

- promote the effective multidisciplinarity, guaranteeing the effective connection to the community by preparing professionals with overarching competences;

- increase the visibility of courses and training offers, to attract more students and to awaken the interest to the distinct training offers;

- guarantee adequate course contents, strengthening the connection to the needs of the community and, consequently, increase the levels of employability; and

- promote distance teaching/learning, to simultaneously attract and integrate more students and to close the gap between the university and the employers (flexibility and tailored teaching).

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#### Strategic Topic 1 Excellence in Training



The Strategic Map on Training shows the solutions that the U.Porto must provide to the students and the community to achieve excellence in training, and the competences and abilities that must be mastered in the process.



#### Strategic Topic 1 Excellence in Training



#### Main Actions

Having identified the objectives for Training, its operation comprises a group of actions that, directly and indirectly, the U.Porto agrees to implement, through its Faculties. The actions are as follows:

- Analyse the training offer at the U.Porto, in all study cycles, establishing their suitability to the immediate and long term market requirements and to the past, current and future expectations of the students. This suitability and improvement will be accomplished through a continuous, thorough and transparent evaluation process, conducted by independent entities.

- Make the information on the U.Porto's training offer and employability more easily available to the younger public.

- Create permanent and thorough mechanisms to assess the degree of satisfaction of students, with the purpose of reducing the drop-out risk.

- Increase the offer of multidisciplinary courses.

- Reinforce the quantitative and qualitative offer of post-graduate training (2nd and 3rd cycles), supported by the potential shown by the U.Porto, and the R&D units comprised in the University, encouraging the joint organization of multidisciplinary courses by the various Faculties.

- Invest in the creation of post-graduate courses, especially in the 2nd cycle, aimed at the specific market requirements, in close collaboration with the business world, which will foster the integration of employed graduates in the U.Porto.

- Provide the training programmes for the 3rd cycle studies with training components transversal to the scientific component, to enable the acquisition of competences in project and human resource management, leadership and organizational dynamics. - Promote the creation of a doctoral school to enhance the introduction of multidisciplinary courses aiming to activate the reorganization of areas of knowledge, and lead to the consolidation of the U.Porto as a regional, national and international education reference.

- Assess and invest in training support infrastructures, attesting continuously the quality of building, technological and other infrastructures, covering, obviously, the Social Action Services of the University. Regarding the social support, a new policy will have to be implemented, designed to provide distinct support to students, disadvantaged or not.

- Promote new and more rational teaching practices and methodologies, in the same line as the teaching-learning paradigm recommended by the Bologna process, inviting the teaching and researcher communities to participate more actively.

- Design a programme to encourage the creativity of teachers, to reward excellence and innovation in training.

- Intensify the mobility of students, teachers and researchers within the intra-university sphere, favouring interdisciplinarity and interculture.

- Foster scientific research in pre-graduate studies, encouraging the 1st cycle students to create knowledge and innovation.

- Broaden the continuous training offer, focusing on lifelong learning, adapting its contents to the emerging needs of new public, so that they will grant a degree in the future.

- Value the training of teachers and researchers, providing them with the necessary competences to address the (new) public attending the continuous education offers.

- Value the continuous training offer, resorting to other public and private entities able to provide additional training to the one currently offered by the U.Porto. 14

Strategic Topic 1 Excellence in Training

#### Indicators and Targets

To harmonize the objective of training Excellence with Vision in terms of visibility in the main international rankings, the definition of targets and subsequent evaluation of how they are being completed will be based on the following indicators:

- Number of students that seek the U.Porto each year, in each degree;

- Number of students that seek the U.Porto each year as their 1<sup>st</sup> option in the 1st cycle and integrated masters;

- Average classification of the last qualifying student in the 1<sup>st</sup> cycle and integrated masters;

- Average classification of students in the 1<sup>st</sup> cycle and integrated masters;

- Number of students completing the training cycle in which they are enrolled;

- Average time before the 1<sup>st</sup> job placement after completing the degrees (1<sup>st</sup> and 2<sup>nd</sup> cycles);

- Percentage of students who found a job position in their study field of knowledge.





## Strategic Topic 2 Excellence in Research

Transform the U.Porto into a Research University, increasing the quantity and quality of research works

### **Current Situation**

Scientific production stemming from the U.Porto (indexed in n the *ISI-Web of Science*) represents 20% of the national total in the last ten years. According to the last data available, the U.Porto was responsible for 22.4% of the national scientific production indexed in the *ISI-Web of Science* (1,721 scientific papers in 2007 compared to 567 in 1998), which means that it ranks first in Portugal.

The U.Porto has participated actively in international and national research projects. In the last FCT call, the university proposed or participated in 22.4% of the total number of projects funded, leading the majority of these projects (leadership in 16.9% of the projects in Portugal, in the last FCT call).

In 2007, the number of U. Porto patents totalled 26 Portuguese patents (until December 2007, one French patent, one USA patent and 11 PCT extension patents). As at December 2007, the U.Porto had promoted a total of 32 technology-based companies.

#### Strategic Objectives

The aim to establish the U.Porto as a *Research University* will have to result in an actual increase of the amount of research, and especially of quality of research, to be assessed by the academic community, and by the community in general, through the implementation and economic value of research results, and to use it to solve problems of great social relevance.

The U.Porto is, therefore, responsible for providing its staff teachers, researchers, and the external scientific community, with the encouragement needed for the development of research and innovation, by setting up the proper conditions for the development of the research activity and by focusing on the economic value of the research results. To achieve this, the U.Porto aims to meet the aspirations of researchers and the community by developing the ability:

- to attract and retain better (the best) researchers;

 to define strategic areas based on the actual needs of the community in which the U.Porto is established and on the major scientific and technological challenges in society;

- to foster the access to international research networks;

- to improve the funding requirements for research;

- to stimulate and value the research activities, namely through their integration and articulation with education at post-graduate level (2<sup>nd</sup> and 3<sup>rd</sup> cycles);

- to promote the articulation among the Research Units at the U.Porto;

- to increase the visibility of research conducted at the U.Porto;

- to develop science/technology parks/centres.

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#### Strategic Topic 2 Excellence in Research



By mastering these abilities, competences and processes, and investing in their actual development, the U.Porto will be prepared to set up a favourable environment for research and for the allocation of resources to high visibility and economically valuable projects, which will bring further prestige to the University and foster an honourable scientific development cycle. The Strategic Map on Research shows the competences and abilities that must be mastered so that research can be encouraged, valued and provided with the necessary conditions, thus helping the community to access the excellence knowledge developed in the U.Porto.



Strategic Topic 2 Excellence in Research



#### Main Actions

To guarantee that the research and development of the U.Porto leads to added value in national and international contexts, the U.Porto aims to develop a policy that privileges the following actions:

- Promote a reflection on priority strategic areas of research at the University, taking into consideration the emerging areas at international level and the areas in which the U.Porto has already revealed unmatched abilities.

- Consolidate and vitalize the relations of proximity between the various research units forming the U.Porto universe, by developing a coordinated strategy for research. This strategy will be supported by the best practices in force in the excellence centres, and will preserve the diversity and identity of each unit.

- Develop internal and external dissemination actions of the work carried out by each R&D unit, and address the funding sources in a coordinated way, promoting a greater sharing and optimization of material and non-material resources.

- Guarantee better support to the dissemination of scientific research results of the U.Porto, privileging the publication in scientific journals, and the participation in renowned international conferences.

- Promote the exchange of knowledge with the outside, establishing a two-way communication channel to facilitate the dissemination of R&D results, inviting society to seek the collaboration of the U.Porto in specific research, development and service areas. - Promote the sharing of equipment and other resources, and purchase this equipment after defining the specific requirements of researchers, and considering alternative funding sources.

- Help the integration of research teams in international research networks, and facilitate the coming of guest researchers.

- Diversify and expand the research funding mechanisms, promoting the funding instruments available, enhancing the mechanisms to help the submission of applications and narrowing the relations with the business market, aiming to promote cooperation projects or projects under the framework of donations, legacies, sponsorships or business angels.

- Promote a solution for the frame-base of the research career at the U.Porto.

- Enhance the programmes to support the introduction to research of non-graduate students at the U.Porto, and implement a programme to encourage projects, studies and experiments that will later lead to the definition of medium and large projects to be submitted for external funding appraisal.

- Disseminate, promote and apply the U.Porto Protection of Intellectual Property policy, to help the economic value of the R&D results within the U.Porto.

- Encourage the technological study and the dissemination of results that are capable of being traded or of starting up companies through the definition of incentives to the participation in national and international idea competitions.

- Support entrepreneurship training and stimulate the set up of technology based companies, through strategic partnerships with risk capital networks and other entrepreneurship facilitators – for example, science and technology parks and business incubators. 18

Strategic Topic 2 Excellence in Research

#### Indicators and Targets

To harmonize the objective of improving Research at the U.Porto with the Vision in terms of visibility in the main international rankings, the definition of targets and subsequent evaluation of how they are being completed will be based on the following indicators:

- Number of articles published in the last 11 years;
- Number of articles published in the last 2 years;
- Number of citations in the last 11 years;
- Number of citations in the last 2 years;
- Average number of citations in the last 11 years;
- Number of Highly Cited Papers;

- Number of articles in high-impact journals in the last year;

- Average number of citations per researcher/ staff teacher;

- Average number of scientific papers per researcher/ staff teacher;

- Number of researchers cited in 21 research areas;

- Number of researchers and ex-researchers with international awards;

- Amount of additional funding raised for research in percentage of the total amount of U.Porto own revenue (average in the last 2 years);

- Percentage of U.Porto students involved in research projects (average in the last 2 years);

- Production and knowledge transfer rates (registered patents, patent marketing and technology licensing, spin-off start-ups).





Expand the internationalization of the U.Porto.

### **Current Situation**

As a national and international reference education institution, the U.Porto is investing in an internationalization strategy based on: student, teaching staff and researchers mobility in and out, through the many European mobility programmes available in this institution (Erasmus, Leonardo Da Vinci and the cooperation programme with the Lusophone and Latin-American countries), on pre-graduate and post-graduate foreign students who seek the U.Porto to obtain a degree, on researchers, postdoc foreign researchers, on foreign students taking specialization courses, on the increase of the number of foreign staff teachers conducting their regular activities at the U.Porto, or doing so for a short period of time, on the reinforcement of cooperation agreements with renowned European universities, on the increase of the number of subjects taught in English, on joint teaching programmes with foreign universities leading to joint or multiple degree diplomas, on the organization of major international meetings and on the good scores obtained by the U.Porto in the best international rankings.

In terms of internationalization, we must note that the U.Porto has focused on applying to important European projects for Higher Education, under the framework of the ERASMUS MUN-DUS programmes – EXTERNAL COOPERATION WINDOWS, ALFA 3, EDULINK, etc, aiming to increase the rate of success of these applications, to achieving better funding for its internationalization strategy and to establish itself internationally as a prestigious university among its peers, and a leading institution when it comes to articulating European Union Universities and Third World Universities.



#### Mobility out

In the academic year 2007/2008, 732 students of the University of Porto moved to 215 universities in 31 countries in the world, under the framework of Erasmus and Leonardo Da Vinci programmes: 610 students chose 27 European countries, with Spain (140) and Italy (119) being the preferred destinations. 84 students moved to 22 universities in Lusophone and Latin-American countries, namely Brazil (79), Argentina (3) and Chile (1), the first non-Portuguese speaking countries within the Ibero-American space to welcome U.Porto mobility students.

#### Mobility in

In the academic year 2007/2008, 1,075 foreign students from 259 universities in 29 countries in the whole world chose the University of Porto as their study/research destination. 567 students from 197 universities in 24 European Union countries sought the U.Porto under the framework of the Erasmus programme, with the largest group of students coming from Spain (128) and Italy (98), followed by Turkey (38), Germany (36) and the Czech Republic (36). 456 students came from 51 universities in 3 Latin-American countries, 451 of which from Brazil, 4 from Chile and 1 from Peru. Note also the presence of 37 students from 2 U.S.A. universities, and 4 students from an Algerian university.

#### Foreign students seeking a degree

The students seeking an undergraduate/integrated masters degree at the University of Porto (577 students from 46 countries) are mostly from the Portuguese speaking African countries - CPLP (329). The African Continent has the highest number of students (203 students from 11 countries), followed by Europe with the most highly represented countries (184 students from 22 countries) and South America (158 students from Brazil and Venezuela).

We also find at the University of Porto 324 foreign masters students from 28 countries, and once again the CPLP countries have the highest representation, with a total of 82% students, and Brazil (with 192 students), Brazil being, by far, the country with the highest number of students. As we can see, the continents with the highest number of countries are, firstly, Europe, with 12 countries, followed by Africa, with 6 countries, 5 countries from South America, 3 from Asia and 2 from Central America.

Regarding foreign students who came to the University of Porto to obtain a PhD degree, we have 208 students from 34 countries: 15 countries in Europe, 6 in Africa, 5 in Asia, 4 in South America, 2 in North America, 1 in Central America and 1 in Oceania. Once again, the CPLP countries are clearly the most highly represented countries (52% of the total number of students), particularly Brazil (107 students) which has the highest number of students in this situation.

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## Cooperation Agreements with Foreign Universities

Of the 553 cooperation agreements with foreign universities, 393 were signed under the framework of the Erasmus programme. The University of Porto has signed 93 agreements (15 more than in the previous year) with Universities ranking among the Top 100 in Europe, according to the Academic Ranking of World Universities 2008, published by the Shanghai Jiao Tong University, nowadays known as the top reference ranking. However, most of these agreements (86%) have also been signed under the framework of the Erasmus mobility programmes. Nevertheless, the situation has improved compared to the previous year, in which these agreements corresponded to 94% of the total. Within the Erasmus agreements, 7 were signed with HEIs ranking among the top 10 universities, 9 with HEIs ranking among the top 25 and 26 with HEIs among the top 50 universities. Therefore, this means that in terms of student mobility, we have established agreements with a significant number of reputed European universities.

The same can not be said with regard to the remaining types of agreements – bilateral, co-tutelage PhDs, European PhDs and joint/multiple programmes. Nevertheless, compared to the previous year, we have more than doubled (from 5 to 13) the number of agreements in these categories, with HEIs positioned in the top 100 universities in the ranking.

Furthermore, the University of Porto has signed agreements with 28 universities ranking among the top 100 in the World, according to the same ranking (ARWU 2008).

#### Strategic Objectives

The aim to expand the level of internationalization of the U.Porto converges in two basic cornerstones: i) the ability to make the members of the academic community at the U.Porto (students, staff teachers and researchers) interact with foreign universities, and ii) the ability to attract foreign groups to the U.Porto, to study or to develop, in the University, their teaching and research activity.

As we needed to define priorities, the U.Porto Strategic Plan has identified three priority target groups:

foreign students, who will be attracted to the U.Porto if the educational offer has quality standards, if the language of instruction is in Portuguese and English, and if they know that the study environment is cosmopolitan;
the students of the U.Porto who seek an education experience abroad, which will be as attractive as the high prestige and quality offered by the University of destination; and

- the foreign reputed staff teachers and researchers, who will consider the possibility of developing their teaching and research activity at the U.Porto if they are provided with excellent conditions and environment to do so.

We can easily see that the advancement of the U.Porto's internationalization process will be largely based on its ability to attract foreign students, staff teachers and researchers to the U.Porto, which, in turn, will depend on the ability to achieve the aims established by the U.Porto within the Training and Research already mentioned. The ability to attract more and better students, as well as reputed teachers and researchers, will only be possible if the University provides excellent Training and fine conditions for the development of Research. As such, the field of competences identified in Strategic Topics is likewise crucial for Internationalization. However, although they are needed, they are not enough. In addition to them, the U.Porto must promote objective conditions to encourage internationalization by continually improving its ability to foster and manage protocols with reputed universities, and international cooperation consortia.



The *Strategic Map* for the Internationalization shows the cross-level and integrating nature of competencies and abilities that the U.Porto must master in order to increase its interactivity with international entities.





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Strategic Topic 3 Strengthen the Internationalization of the U.Porto



#### Main Actions

To allow the internationalization of the training and research activities, the U.Porto will also focus its greatest efforts on the actions described below:

- Disseminate the U.Porto internationalization strategy after preparing the U.Porto Dissemination Programme, making the various target groups interacting with the University aware of its importance.

- Reorganize the University's web page and provide information on the courses and other relevant information, in several languages, according to the target groups, namely the countries interacting closely with Portugal.

- Organize a basic information kit – Welcome Guide – to clear all doubts shown by students, teachers and researchers interested in coming to the U.Porto, removing the energy-sapping paperwork associated to the mobility process. Develop an identical initiative for students, teachers and researchers from the U.Porto interested in studying or doing research work abroad.

- Promote the international comparison of courses and teaching practices.

-Sign cooperation agreements with international Universities that tally with the U.Porto's strategic objectives, and that aim to attract foreign students for short periods or for first, second and third cycle courses at the U.Porto.

- Disseminate successful foreign student, teaching staff and researcher mobility experiences in Portugal, or of Portuguese students, teaching staff and researchers abroad, by developing *marketing* actions especially designed for that purpose. - Make teachers and researchers aware of the importance of providing education in English.

- Define a programme designed to support the short periods of stay at the U.Porto of internationally reputed researchers, including arrangement of accommodation for these foreign researchers.

- Define a programme to allow the contracting of international specialist researchers, for long periods of time, needed to lead research units or projects focusing on emerging areas particularly relevant for the U.Porto's strategy.

- Encourage the organization of joint second and third cycle programmes, exploring the opportunities offered by many funding programmes, including the "Erasmus Mundus" programme.

- Strengthen training in English for the U.Porto students interested in joining mobility programmes.

- Disseminate the funding tools available.

- In coordination with other regional players, encourage the U.Porto to organize more events with an outward projection, preferably based on the concept of business tourism.

- Promote the presence of the U.Porto in fairs, exhibitions and other similar events on education, with an international scope.

- Guarantee a permanent contact with entities responsible for the higher education rankings; the U.Porto must understand the mechanisms and indicators privileged by these entities.

- Promote a survey on the facilities available for foreign students, teachers and researchers coming to the U.Porto, improving and adapting them to the defined growth objectives.

#### Indicators and Targets

To harmonize the objective of expanding the internationalization of the U.Porto with the Vision in terms of visibility in the main international rankings, the definition of targets and subsequent evaluation of how they are being completed will be based on the following indicators:

#### - Number of students studying at the U.Porto;

- Number of U.Porto students joining mobility programmes (relative and absolute numbers);

- Number of foreign staff teachers and researchers working at the U.Porto;

- Number of protocols signed with the Top 100 Universities in the rankings where the U.Porto aims to score;

- Number of major international events organized every year by the U.Porto.





## Strategic Topic 4 Expedite U.Porto governance and management

There is a pressing need to guarantee effective and efficient governance and management for the U.Porto, as this is a relevant, cross-level strategy based on the three strategic topics already outlined. The aim is to develop a governance and management model capable of guaranteeing prompt decisions, with an adequate level of decentralization and empowerment, as well as a high level of financial autonomy in relation to the direct State funding. In addition to the Rectory, the current organizational model at the U.Porto takes into account other component units (UOs) - including 14 Faculties - with autonomy of management and self-governance capacity. Each component unit guarantees the implementation of activities needed to conduct its mission and several services supporting these activities. The Rectory is responsible for intervening at a strategic level, and to observe the compliance of the university's mission, the quality of the activities developed, the effective and efficient use of resources available, and to provide some common-use and common-interest services, engaging the representatives and leaders of the said component units. To reduce the fragmentation resulting from the organization mentioned in the previous paragraph would allow the university to expedite the cooperation among the various component units, and facilitate the interaction between the services provided by each unit and the central services. On the other hand, it would also be possible to obtain significant gains in terms of efficiency and effectiveness in the use of resources required for the development of activities, and to facilitate the implementation of strategic decisions applicable to the University as a whole. The current management bodies operate as a Board formed by many members. However, we believe that the bodies formed by a small number of members more responsible for the decision making process are better able to make a decision in a timely fashion. On the other hand, if they have more authority, they will be more productive, avoid duplication and waste of efforts, and will be more able to develop a strategic reasoning.





Nowadays, there is an intense succession of some leaders responsible for managing the component units. The reason for this is that the position is hardly valued for the advancement in professional careers. If these positions were valued, the number of people interested in taking up management offices would increase substantially, and this would guarantee that this would be a full-time activity, with no other charges, therefore increasing the time and dedication given to the various and complex management tasks.

In addition to this, if the managers and those that are supervised were to be actually separated, it would make decision making easier, free and independent, and it would be encourage people to take up management roles.

If these factors were overcome, there would be more dynamic leaders, better prepared for management functions.

Due to all these reasons, it is important to expedite the decision making and implementation processes, the decentralization and effective division of work, and to foster a culture and practice of evaluations, empowerment and strictness.

The U.Porto has invested in a strategy grounded on new funding models, namely by attracting its own revenue. We believe that the opportunities made possible by this strategic plan will undoubtedly help the University achieve revenue of around 50%, which will not be directly transferred from the State Budget. The U.Porto is the largest university in the country, and one of the three Portuguese public universities aiming to be transformed into a foundation, operating under private law, as it believes that this legal model will enable a more flexible and less bureaucratic management system, thus enabling the above mentioned management principles to be followed through, and the reduction of financial dependence on the direct State Budget funding.

#### Intervention areas and Objectives

The aim to "Expedite U.Porto governance and management" means making the organization management more effective and efficient.

With this in mind, the U.Porto and its responsible entities agree to intervene in three key governance areas (*buil-ding blocks*):

- Expedite the decision-making processes, which implies acting on the organic structure of the U.Porto and establishing targets, for instance, to turn the U.Porto into a Foundation, streamlining the administrative services and simplifying and eliminating the physical administrative processes;

- Increase the decentralization and responsibility level of its governance and management model, which means investing in the increase of management skills of those in charge of the Component Units, decentralizing the decision-making process and fostering, at the same time, the development of performance appraisal and risk analysis practices that will result in good management practices; and

- Develop a funding model based on the idea of reducing the level of direct independence on the State Budget, by vitalizing and coordinating the alternative funding mechanisms.

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Strategic Topic 4 Expedite U.Porto governance and management



Due to the cross-level nature of the Governance Strategic Topic, the Rectory Team will coordinate the measures to be adopted with the remaining U.Porto bodies, acting as the organizer of actions under its scope of competences and as the vitalizer and sensitizer element near the Component Units to report on the measures that must be implemented by these Units. The indicators and targets of the Governance strategic topic will be analysed and reported after the Organizational and Governance Model for the U.Porto is approved, and will be first defined according to the compliance of deadlines and phases according to the changes dictated from the implementation process.





## 6. Cross-level Areas: Structures and Resources

All Strategic Topics and subsequent Strategic Maps include a group of abilities, processes and infrastructures that are considered to be the corner-stones of the U.Porto structure and, obviously, essential for the implementation of its Strategic Plan.

Development, Learning and Infrastructures

Infrastructures & Equipment / Intra-U.Porto cooperation, with communities and at international level / Information Systems / Quality Management Systems / Communication / Management Competences in Component Units / Bologna Process

Financial Resource Management

All the strategic objectives identified in previous items depend on the ability to manage, develop and, if applicable, to acquire these competences and processes. Below is a brief presentation of the basic processes:

- The management of infrastructures and equipment, in terms of quality, suitability and effective use;

- The management of cooperation among the component units at the U.Porto, between the U.Porto and the Community and between the U.Porto and a vast group of international entities;

- The integrated management of Information Systems at the U.Porto and those of its Component Units;

- The management of the Communication Policy at the U.Porto, at an institutional level and also among the Component Units, and between these and the community;

- The development of Management skills within the Component Units;

- The management and dissemination of the Bologna Process as the paradigm of Education;

- The implementation and dissemination of the Quality Assurance Policy, within a framework where a quality culture and the promotion of continuous improvement is developed.

Furthermore, the ability to improve continuously the management of its financial resources is particularly relevant for the U.Porto, no longer in the perspective of attracting revenue, but in terms of its effective allocation, which should be the grounds for prioritizing the actions and projects that tally with its Strategic Plan.

## 2<sup>nd</sup> Part From Strategy to Action



## 7. Implementation of the Strategic Plan and Management Control

Although it is indeed an incentive when re-launching an entity, by definition, a strategic plan is not enough for the continuous improvement of the institution. In fact, the success of a strategic plan depends especially on the actual undertaking of responsibilities and on the availability of resources essential to its completion.

As such, the U.Porto is committed to setting up the favourable conditions to conduct the actions identified in this plan. With this in mind, the university intends to foster the creation of a Planning and Management Control unit, with cross-level responsibilities and scope of action, aiming to:

- Assess and monitor compliance of the Action Plan; to do this, it will have to be in permanent contact with those in charge of the actions established;

- Assess, periodically, the indicators defined in the plan;

- Prepare and submit periodical reports on the previous items;

- Advise the Rectory Team on the evaluation and monitoring processes used to measure the compliance of the Strategic Plan;

- Provide advice on the integrated budget of all Component Units, consolidating them in the U.Porto Budget and guaranteeing their strategic efficiency: no strategic objective will be left out of the budget, and no action will be estimated if it is not related to at least one of the strategic objectives;

- Provide advice on the process of integrating the strategic plans of the Component Units within the cross-level objectives contained in the U.Porto Strategic Plan.

The implementation of the U.Porto Strategic Plan implies that the Vision of the University is a consensual fact, but equally important, it implies that the process is explained and communicated internally, because the operation of a strategic programme depends invariably on the thorough awareness of such a programme.

Therefore, to resist against insufficient internalization and a slow generalization of the guidelines contained in the U.Porto strategic plan, the University will explain and disseminate the Plan in the course of events open to the entire community. This involves expediting the intra-University coordination and cooperation, decreasing the amount of inadequate information.

In this process, begun in the meantime, we will emphasize the coordination of strategic objectives for the U.Porto, which can be formally implemented and managed by the Rectory, particularly those in which the Rectory will play a vitalizing, integrating and guiding role, and it will be the responsibility of the Component Units to implement them effectively.

## 3<sup>rd</sup> Part Final Notes

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This document presents the Strategic Plan of the U.Porto for the period 2009-2013. It contains the Mission, the Vision and the strategic Objectives of the University for the said period, in addition to the main guidelines of the UP for each area considered to be strategic, and the indicators that will enable the university to assess the compliance of the objectives established. The Strategic Maps summarize the main objectives and strategic areas of intervention.

The U.Porto intends to use the *Balanced Scorecard* methodology as a tool to explain and to operate its strategy. The *Balanced Scorecard* is a tool designed to relate strategic objectives (long term) with short term objectives and actions (strategic operation). On the other hand, it monitors the performance (degree of compliance) of the organization in an integrated way, by means of adequate indicators (quantitative and qualitative).

Within this context, the strategic operation to be conducted by the U.Porto, in a near future, will involve the definition of "Action Plans" that will lead to the completion of objectives outlined for each Strategic Topic. In addition to the required actions, these Action Plans include the identification of the person or persons in charge of its completion, the chronogram, the sequence of actions and the indicators to be used in assessing the success of actions.



