1 Introduction

As is true for all institutions, the current academic activity of the university, and in particular that which is developed in the area of science and technology, is carried out in an international context. Even though the Polytechnic University of Catalonia (Universitat Politècnica de Catalunya, UPC) is an institution internationally active in academic activities and research, participates in student’s mobility programs and professors and is involved in the design of the European Higher Education Area, it needs to convert itself to be more international and with greater power in order to compete with success in the future. The objective should be to achieve the maximum level of internationalisation in all the activities which are carried out in the UPC.

To confront these challenges which constitute internationalization, UPC needs a long term institutional strategy, which involves all the community that work and study there. The most important measure for promoting internationalisation will have to be a key paper on the implementation of this strategy, but it will only have success if all the university community supports the change. It will be necessary to assign resources and to ensure that professors, administration and services personnel and students receive all the support required to confront the necessary changes.

In the following, guide lines are presented for the International Policy Plan of UPC.

2 Objective of the Plan

This document has the principal purpose of defining the key strategic lines of the International Policy Plan (IPP) of UPC which it has to promote during the period 2008-2015.

3 Antecedents

UPC has undertaken a long series of work in the international area which has been shaped by different strategic plans of International Relations, evaluation reports and
action lines of government programs. Basically, the main instruments which have been used as a starting point for the definition of this International Policy Plan are as follows:

- The balance between the two previous International Relations plans of UPC: the first Plan (1996-2001) principally drove the mobility of students and of the PDI, while the second (2003-2006) was focused on aspects related to the creation of the EHEA. Both of them, as well, had in common other points of lesser priority at that time like the internationalisation of studies, the international policy of research and the contribution to development.

- The objectives of the electoral programme of the current Rector, where it reflects the intended policy in this area, emphasised various concrete proposals for the development of learning of languages and of international exchanges that are gathered together afterwards in the Governance Plan UPC10 of the month of December 2006.

The university is aware that the international dimension has to be turned into a key element in all its actions. In this context, it has carried out a profound reflection for the production of this International Policy Plan which has taken into account the institutional implications and the participation of the majority of the university community. It has define the main lines of work and the objectives which have to be achieved in this field above all taking into account, among other things, the great challenge which has confronted Spanish universities, in the face of full integration in the EHEA by the year 2010.

4 Methodology and analysis for the production of the plan

To accompany the process of definition of this International Policy Plan the following actions have been developed:

- A Working Party was constituted, formed by an external expert in international relations and four members of UPC to define the principle premises and directions which the Plan has to contend with, debating and agreeing the work lines, and conducting all the processes of constructing it.

- A documental analysis was produced, up to the present time, concerning international relations in UPC starting with determining sources (strategic plans, lists of services, governance plan UPC10, evaluation reports internal and external, etc.) in addition to those produced in a first diagnosis with the objective of initiating an a posteriori analysis process and of internal and external reflection about the most relevant questions in the international context in which UPC as an institution is placed.

- Two enquiries were designed, to structure the process of analysis and reflection. An enquiry of an internal character directed to the groups of the university community and the other of external character directed to members and collaborators of international university networks and to graduates of UPC. The aim of these questionnaires was to be able to obtain the opinion of different groups of the
• An initial diagnosis was completed starting with the analysis of the evaluations made by those consulted in the questionnaires, which served as a point of departure for the formation of the International Policy Plan.

• The initial version of the PPI was reviewed in a bilateral fashion with another two international experts. At the same time, the final version of the PPI gathered together the contributions of the Steering Committee of the University, the Group of Assessors in International Policy, the Council of Directors of Academic Centres and the Council of Directors of Departments of UPC, before, with their agreement, it was taken to the Governing Council of the University.

5 Diagnosis of the Current Situation

The objective of the International Policy Plan and the strategic axes which are defined in the same section of an internal and external analysis of the actual state of internationalization of UPC and its future opportunities for transformation with an international reference, especially, at the European level.

UPC is an institution strongly linked with Catalonian society, with a great recognition in its field in Latin America and with an awareness of the need to change to adapt to the European Higher Education Area. The Governance Plan UPC10 of the University, contemplates actions of an international character in each of its axes, especially with respect to personnel, academic activity and the university and society, which already direct the priority of this theme at the highest policy level.

Additionally, there exists a framework for promoting the strategic lines of the Academic Centres, the Departments and the University Research Institutes which consider internationalisation as a field to be fostered.

The academic offer of UPC already counts with 13 masters taught totally in English, although these are focused in a few areas. Some of these are ERASMUS Mundus Masters, programs in which UPC has a prominent participation. There exist an important number of international double degrees, however these are concentrated in a few countries and a few fields. With respect to research, the participation of the groups of networks of innovation and development is high, as well as in European programs and projects, although this shows that this participation is very unequal between the different research groups of the University.

UPC possesses a good network of international strategic alliances and with a Centre of Cooperation for Development which coordinates and articulates the activity which it has, like the objective to contribute to development, and it enjoys good contacts in Europe and Latin America.
The new rector team has created an appropriate budget assigned to the Vice-Rectorate of International Policy. The management has put in place a Service of International Relations which has two Offices of International Mobility which are well evaluated by the users. There also exist offices of International Relations in the distinct Schools and Faculties, although with an allocation of resources and a capacity very different in function in each of the Academic Centres.

It is clear that the University has a strong European intention, and so the implementation of the Bologna process needs to bring with it an increase in mobility of all the community. UPC, moreover, is situated in a region capable of being a central part of academic and research innovation and for this it should lead the growth of science and technology in the area. Also the city of Barcelona helps to project a modern image, dynamic, international and with high quality services.

The financial plan of the Generalitat (Catalan Government) takes into account the international mobility of students as a relevant indicator and has increased the budget of the university and of Catalan and Spanish research with the intention of augmenting academic quality, of promoting the mobility of the university community and of supporting research. In this context, it has taken advantage of the launching of the European Institute of Technology and the Knowledge and Innovation Communities, in which UPC should play a very active role. Finally, the positioning of the institution in Latin America is of very high prestige.

6 Strategic Axes of the Plan

From the previous diagnosis we can take it, as has been said, that Europe and the world has to become the norm and not the exception in the development of UPC. Therefore, it seems to be an urgent necessity to take on board the principal weaknesses of the institution and the threats that surround it to establish an International Policy Plan with the objective of achieving the internationalisation of the university. Such a Plan must take advantage of the strengths of UPC and the opportunities of the present juncture to launch a promotion at the highest political level which strengthens, coordinates, publicises and acts in all fields. UPC must establish an action plan which consists of a series of planned actions and give sufficient time and resources for the full achievement of the proposed objective.

6.1 Institutional International culture

The following values must be strengthened:

From the cultural point of view:

- Internationalization: as a benefit for all students (including those who do not participate in a mobility programme), the graduates (also those that will develop their professional careers in Catalunya or Spain), the personnel who work in the university and UPC as an institution.
• The command of languages: a truly international community is one that is able to express itself in daily life and spontaneously in different languages. An international campus provides an excellent opportunity to learn languages, to know new cultures, to confront other ways of thinking, of working and of preparing for a professional and personal life where the international dimension will not be an option but a reality.

• The design of internationalisation at home: this strategy is based on the introduction of international aspects (contents of academic subjects, assignment of teachers, support material for courses, PFC, etc.) in all education programs. We also assume that the presence of international staff on the campus and the experience of all the students and teaching staff of UPC that return to Catalunya after spending a period abroad will be taken advantage of in an organised way. To do this we should design tools directed to the different groups.

From an institutional point of view:

• Definition of an appropriate image and communication strategy: it is evident that an academic offer which is attractive and of high quality, and research of impact are the essential elements to project an image and general prestige. But these activities should be the accompaniments of a marketing and external communication strategy which at key times positions the university in an appropriate position.

• The promotion of the external projection of UPC: the promotion of the image of UPC abroad is a strategic objective on which all depends and which in itself produces an ensemble of favourable results, among which should be pointed out:
  - The interest of other universities to associate with UPC in networks
  - The capacity to recruit students, professors and researchers in an academic work market which is all the time more globalised and competitive
  - The international recognition of the degrees given by UPC
  - The positive evaluation of the university in applications and calls for European programs, particularly in relation to R&D groups

To contribute to this external projection, none of the following elements which allow the strategic positioning of UPC abroad should be disregarded:

  - The positioning of a brand, finding a name more comprehensible at an international level than the present one of UPC.
  - The design of a web with an entrance profile oriented to the international public.
  - The participation in international education fairs, not only to recruit students but also to evaluate what interests the candidates.
- An effective and multilingual, rapid-response information team capable of responding efficiently to the requests of people interested in the institution.

- A tracking of alumni, including international graduates, with the objective of keeping them in contact with the institution and for them to act as ambassadors outside our frontiers. This point is crucial when it concerns persons going to countries where UPC is not well known, for example Asian countries, since they are able to have a strong influence on the future of the University in those places.

- A better positioning in the international prestige rankings brought about by the promotion of strategies of study of those indicators which impact on these rankings and the adoption of internal means to improve these.

- A greater participation in activities concerning accreditation of engineering programs of the European area with the objective of conferring credibility in the international sphere and reinforcing institutional attractiveness.

From the operational point of view:

- The management model of the institution: the increase in the culture of internationalization should be taken up by all persons with management responsibility in the different units of UPC. From the highest level to the operatives (the administrative personal should have capacity to call in English, to respond to requests for information in English in their area of work, give help to foreign professors and students in the library or in the different services, reimburse expenses, etc.)

- The management of International Relations: should be an area of effective help to the internationalization strategy of the university. It has to attend international visits for which it is necessary to invest in human, physical and technological resources to protect the image of a high quality international university. The consistency of international policy is a key for success, since it is not possible to develop activities with units which are not in line with the international policy of UPC as an institution. The model will be of a centralized Area of Internationalization to underline this and moreover to coordinate and encourage, its mission includes the extension of internationalisation to all of the other activities and units, and endowed with sufficient resources to project an external image of high quality to visitors. This area coordinates some of the offices on the campus, which have an operative function of welcoming international community and showing the international activities on the campus.

6.2 International projection of teaching and of research

Concerning the internationalization of the teaching programs:

The part of university activities most visible in the European and international area is the set of teaching programs and of research which is developed in a university. This determines in a very significant way the image of the institution and, as a consequence,
the effectiveness of its international relations. It is essential that the teaching offer, which has a direct impact on the international projection of the institution, will be the result of a decision of the institution and not a list of individual initiatives from professors or departments. Because of this, the different levels of study have to be considered separately in taking strategic decisions.

- Undergraduate: is the offer which responds to the regional demands and in which most of the students come from Catalunya. The courses are taught principally in Catalan and Spanish and its mission is formative, cultural, social and regional. This does not mean that it should not be internationalised, but it has to have a different strategy to the rest, favoring, in general, horizontal mobility and internationalisation at home. The model to be followed should be based on an offer of a few undergraduate degrees with a variety of combinations in recent years, which allows the determination of specialisation which corresponds to the degree title of each student.

- Master: this level is the key for the European and international future of the institution; it is the level which is the most attractive internationally and in which the competition between universities to attract the best students is greater. The students of this level are those who do research in the laboratories and construct the image of UPC in the Europe of Knowledge. For these, it is important that the offer of Masters responds to an explicitly institutional policy. There is no need to be excessive and each one should have a specific function which meets with the institutional projection in the European area. The present situation is ambiguous; it already coexist official Masters and non-official Masters which carry 60, 90 or 120 ECTS credits. It is positive that UPC has Masters of 90 or 120 ECTS credits, when in Spain there is a tendency to limit provision to minimalist Masters of 60 credits, whose future, European and international recognition, is not guaranteed. To strengthen the future, it will be necessary to clarify the panorama of present formative offers and for these it is suggested to keep an offer with the maximum academic coverage. At this level of study, the regional function of UPC could consist in convince foreign students to choose Catalunya for the quality of the offer and in attracting talent for studying and developing its activity in providing a qualified labour-force, increasing the potential to innovate of the region and providing attractive arguments to the best professors and researchers and to companies to lean towards Catalunya as a place for establishing their headquarters.

- Doctorate: its area is always more global, and for this it is necessary to compete with all other institutions at a global level to attract the best students, professors and researchers. The creation of a Graduate School which jointly coordinates, manage and makes visible the academic offer at this level and generates an atmosphere of quality and international contact between those researchers offering this area to favour the recruitment of talent, at the same time it would serve for arranging the academic offer of Masters and providing a single access point in order to entry to official postgraduate studies.

Concerning the internationalisation of research:
Research activity of high quality is inherently international, given that advancing the frontiers of knowledge is made with reference to the state of art at a world level. To maintain and advance the excellence of research at UPC is, therefore, to demand the maximum in maintaining international relations and in a capacity of excellent cooperation on a global scale.

The indicators of international research activity of UPC, in the period 2003-2006, shows a dedication to the international impact of the different activities. Clearly, an increasing scientific production of high quality is one of the major components of a competitive UPC, as well as one of the major assets for projecting the image of UPC globally, including in the diverse “rankings” which are going to multiply in the coming decade.

In this aspect of internationalisation, it is difficult to direct the institutional strategy in the field of research, seeing that in this area, the activity generates its own researchers and the institutional function should be limited to incentivising, supplying the best conditions to carry out their work productively, to disseminate and to give maximum visibility to the groups which generate knowledge and transfer of technology.

As was pointed out previously, the project of a real Graduate School, should be conceived in this sense, multidisciplinary, European and international (with the requirement to communicate in English and having cooperation and mobility with several foreign centres) and strongly linked with the Catalan economy in its international dimension, in the manner which can include the source of R&D. Activities at postdoctoral level should be taken into account and are able to serve as a platform for complementing the model of the doctorate and master which exists in Spain.

UPC counts with departments, institutes, its own research centres, consortia, participants, units of a distinct nature, etc. which undertake academic activities and R&D and which have their own research, technical and administrative personnel. It is important that their activities at an international level are empowered, harmonised and consolidated with UPC thus contributing to the spreading of the image of UPC as a global organisation.

6.3 International Relations

This section joins together the activities that normally are grouped under the term International Relations or, in a little wider sense, of International Policy. That is to say, the external cooperation activities of UPC in all its campuses, the mobility of personnel and students from and to UPC and it should act in conjunction with communication activities which have the objective of promoting and managing the image of UPC in the European and international fields. The management of these activities will be a key element in placing the strategic objectives of the institution in their cultural, social and economic contexts, principally in those that refer to:

- Cooperation in networks: UPC is integrated in various university networks of great importance, a factor which should be taken care of and developed to extract the maximum advantage.

- The mobility of students: is one of the strongest points of the University but it has to put in place a quantitative increase of the mobility in both directions, a
The mobility and international cooperation of the PDI and the PAS: this factor should be adopted, in a key manner, by the academic staff and researchers and by the PAS. A fundamental index of internationalization of a university is the geographic origin of its professors, its researchers, its managers, and the experience abroad of all those whose duties are numbered above, and the international dimension of the academic programs and of research. If this is not there, then it is indispensable to supply the university community some training possibilities to adapt (together with incentives to make good use of them) and occasions to participate in interchanges which result in returning to work from abroad having acquired another way of operating and working in the institution. The implication for the professorate and for the PAS of this factor its indispensable for consolidation of all the processes of international culture.

7 Conclusions

Although UPC is an institution internationally active in teaching and research, participation in international mobility programs of students and professors and is involved in the design of the European Higher Education Area, it is necessary that it converts itself in order to become more international so that it is able to improve and compete with success in the future.

The International Policy Plan recommends establishing three strategic axes defined according with:
1) Institutional international culture,
2) International projection of the academic staff and of research,
3) International Relations. These axes operate through strategic lines (SL) of action which are presented in the following. The specific actions are developed in different phases in accordance with the necessary resources and the evolution and implementation of the Plan.