CAMPUS MONTEGANCEDO:

The ICE oriented towards international technological innovation

I2_Tech

Qualitative and quantitative results
QUALITATIVE

Strategic plan and feasibility study for the conversion into an International Campus of Excellence
Second phase - Presentation to the international committee

Madrid, 25th November 2009

GOBIERNO DE ESPAÑA — MINISTERIO DE CIENCIA E INNOVACIÓN

GOBIERNO DE ESPAÑA — MINISTERIO DE EDUCACIÓN

UNIVERSIDAD POLITÉCNICA MADRID

CEI-CAMPUS DE MONTEGANCEDO
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Qualitative Results

The qualitative results correspond to the proposals objectives. Their transversal character implies that the results will have an impact on each one or many of the proposal objectives established, at the same time. The following matrix illustrates the various objectives relationships (ICE Montegancedo and Open Call)

UPM Objectives

Proposals Objectives	A. Involve the entire university community	B. Strengthen the R&D structures and teams	C. Improve the HR policies related to research and innovation	D. An international dimension in R&D and innovation activities	E. Entrepreneurial spirit	F. Unique positioning	G. Simplify the complicated	H. A Campus of ideas and sustainability
1. Improve the quality of the Spanish Universities	X	X			X	X		X
2. Increase the research quality and international recognition	X	X	X	X		X		X
3. Create academic environments which promote the university life	X						X	X
4. Configure the Campus in such a away that it is urbanistically and socially integrated into its urban environment						X	X	X
5. Promote integrated policies on teaching, research, transformation and valorisation of knowledge and the	X	X		X	X	X		X
6. Improve the Campus's singularities and specializations	X				X	X	X	
7. Improve the indicators related to the academics and an increased level of internationalization	X		X	X				
8. Increase the number of international students		X	X	X				X
9. Promote employment policies	X		X		X	X		
10. Develop an innovative marketing programme						X	X	X
11. Incorporate projects from other universities into the Integrated Plan				X				X
12. Participate in student collective projects	X			X				X

Table 1: Matrix of the proposal and ICE Montegancedo's objectives

1. Improve the quality of Spanish universities, with the objective of positioning them at the forefront of the European and international panorama, either as a whole or in a specific field

Result A: Involve the entire university community in the R&D&I activities and the postgraduate teaching improvements

- Create an International Postgraduate School (GMS & GMT)
- Increase the number of English taught master's in the Campus
- Improve the teaching with a focus on the postgraduate courses
- Implement the UPM Education Model, centred around innovation
- Create a Centre for the Research and Innovation of Teaching Methods (CIIET-UPM)
- Boost Innovative Education Teams

Result B: Strengthen the R&D&I structures and teams

- Create new research centres emphasizing their relationship with ICTs (Information Communication Technologies):CTB; IMDEA-SW, Informatics and Information Security Research Centre Centro (CCTC), Bioclimatic Architecture Centre, Marine Engineering Excellence Centre (ICTIO), 3D Centre and The Centre for Integrated Applications GMES/ Galileo.
- Strengthen the current infrastructure
- Strengthen the Research Teams
- Create technology demonstration platforms (photovoltaic demo areas, "living labs", emission of digital 3D HDTV channel and establish pilot mobile broadband services, etc.)
- Develop R&D&I collaboration agreements with various entities

2. Enhance the research quality and international prestige, through improved research infrastructure/facilities, resulting in teaching and scientific advances

See Result B

Result C: International dimension of the R&D&I activities

- Participate in international R&D&I projects and/ or in joint centres located outside of Spain.
- Establish international R&D&I agreements
- Increase the internationalization of created spin-off companies
- Create a Technological Human Development Centre

3. Create academic environments that promote university life, with infrastructures aimed at the attraction of talent for advanced studies and research excellence

See result A

Result D1): Simplicity, a functional and integrated Campus

- Create university community support services: International Welcome Centre
- Create innovative spaces for the exchange of knowledge
- Create a student and professor hall of residence
- Implement New Ways of Working, oriented towards ICTs
- Create a Vocation Centre, making it easier for students to embark on their professional careers

4. Create a Campus which is urbanistically and socially integrated into its surroundings

Result D2): Simplicity: a functional and integrated campus

- Urban and building improvements: Transportation, energy efficiency, security, urbanistic and environmental rehabilitation, sporting facilities and communications
- Integrate the Campus into its urban district (Pozuelo de Alarcón); roll out agreed agreement with the Council of Pozuelo
- Develop social-cultural activities

5. Promote an integrated teaching, research, knowledge transfer, commercialization, professional and business policy

Result E: Develop an entrepreneurial spirit on Campus

- Contract experts in knowledge & technology transfer and innovation
- Encourage business, university and research integration as well as the interaction between R&D&I activities and the business community
- Improve the relationship with the business sector, focusing on the area of commercialization of R&D&I results
- Create structured models, which enable life long learning in the areas of innovation and entrepreneurship
- Commercialize intellectual and industrial property
- Create platforms that support business innovation
- Boost the creation of technology based companies
- Incorporate innovation management and entrepreneurship into the curriculum
- Expand the current Business Centre, extending its ability to create spin-offs

6. **Promote the singularity and specialization of the Campus, forming part of a diversified Spanish university map each with its own specialization**

> **Result F1**: Unique Campus positioning: A global international brand and reference

- Place technological innovation as the core Campus action
- Create a Campus oriented towards ICTs and their vertical and horizontal application
- Establish a campus government infrastructure

7. **Improve the academic efficiency indicators of the graduate students and increase the number of international students at all levels**

> **See results A & C**
>
> **Result F2**: Unique Campus positioning: Achieve academic excellence

- Orientation towards technology innovation and internationalization through external internships, English master's degrees and Spanish courses for foreign students
- Establish the ISAAC Peral Programme

8. **Increase the number of international students, researchers, professors and academic support professionals**

> **See results A, C, D1 & F2**
>
> **Result G**: Improve human resources (HR) dedicated to research and innovation

- Strengthen the R&D&I and knowledge transfer HR programmes
- Strengthen research activities by facilitating the hiring of foreign researchers
- Create diverse research teams (origin, sex, background, disabilities)

9. **Develop employment programmes, allowing students to combine studies and work within the Campus's focus areas**

> **See results E, F2 & G**

- Scholarships/ PIF contracts
- Creation of direct and indirect employment on Campus
- Hire doctors with experience (I3) and young promising doctors

10. **Propose and innovative international communication plan for the CEI**

> **See results A, C & F2**
>
> **Result F3**: Unique Campus positioning: An international communication plan & promotion of international activities

- Attract international attention and recognition by presenting the Campus as being known for its learning, research and innovation centres and for its international business creativity
- Create an integrated communication plan (message and image) using both traditional and non-traditional communication media

11. Involve other universities in the project

See result D
Result H1: Campus of open innovation. University collaboration
- Develop collaboration agreements with the EOI spanning business creation and innovation
- Create agreements with the adjacent universities on urbanistic themes, for example the CEU Monteprincipe University
- Encourage detailed agreements with national and international universities, eg. Complutense University in cognitive neurosciences and Rey Juan Carlos University in neuro-imaging.

12. Seek student involvement and collaboration in the project development

See result A
Result H2: Campus of open innovation. Promote student participation, innovative culture and entrepreneurial spirit

- Create collaborative platforms, where students can participate in the creation of the Campus
- Involve the student body in the creation of the Campus, collaborating with the UPM's Social Council and the student council
- Entrepreneurship training
- Organize and participate in technology and business competitions
- Create an Innovation and Entrepreneurship office
- Expand the Web 2.0 platform
- Welcome and support foreign students: Welcome Centre and various integration policies

To conclude a summary of expected results

Planned Impact
A campus focused on the application of TIC's, through horizontal activities (value added services for education, remote working, digital campus, new ways of working) and vertical activities (IT Sector, Telecoms, Aerospace, Biomedical, Plan Genomics and Energy)
Development and promotion of an offering specialized in research and positioning of ICE Montegancedo as a campus focused in innovation and technology transfer
Creation of an academic excellence area to boost teaching, research (through new research centres) and knowledge transfer with special attention to postgraduate and doctorate degrees
Incorporation of the foremost national and international partners. Strong projection towards other geographies
Institutionalize entrepreneurship: strong attention to the transformation of research into technological developments applied to the production sector and the creation of based technology companies
Attract and retain the best researchers (international focus)
Position the campus as a best practice for innovative proactive sustainable management models aimed at the development of an integrated social model
Development of a campus characterized by its open innovation, seminars, conferences and work groups and its unique cultural offerings
Project these improvements and methodologies to the rest of UPM´s centres and activities becoming a best practice and a catalyst for the transformation and modernization of the UPM