



Education and Culture

Erasmus Mundus



Findings - Micro Level Analysis

“University of Alicante”

“Alexandra Mayr”

10 – 11 August 2009

IP UniLink Consortium meeting

Rorkee, INDIA

Process for data collection

- **Who collected the data?**
 - Alexandra, Roberto
- **How did you collect the data?**
 - Collected data from the internet (TTO web, Ministry, etc.)
 - Interviews with: IP Unit, Head of TTO
- **How many interviews did you conduct?**
 - 4 (with 2 interviewees)
- **When did you collect the data?**
 - July 2009
- **What is your assessment of the data collection process?**
 - Interesting, time-consuming, very detailed questionnaire, lot of research through interviews!

Legislative Environment

- **What characterizes the legislative environment for HEI based Innovation and IP in your country?**
 - LOU- Ley Orgánica de Universidades: Regulates all aspects of higher education.
 - Grounds for creation of technology transfer office, spin-offs etc.
 - regulates that ownership of university research (universities), and inventors are entitled to receive a share of benefits (what share is left to the universities)
- **What are the strengths in your legislative environment?**
 - IP laws and LOU regulate all important aspects
 - New amendment of LOU on creation of spin-offs -incentives to University professors and researchers to set-up technology based companies
- **What are the weaknesses in your legislative environment?**

Political Environment

- **Which are the 3-5 most important national/regional programs/policies for supporting Science & Technology, Research and Innovation in HEIs?**
 - National R&D plan - programming instrument of the Spanish Science and Techn. System, sets out objectives and priorities of the R&D & innovation policy in the medium term to reach the strategic objectives. Legal basis = law for science (Ley de la Ciencia)
- **What are the strengths of the existing programs/policies?**
 - The government has realized the need for innovation in order for the country to become competitive and create sustainable development.
- **What are the weaknesses of the existing programs/policies?**
 - Funding
 - programmes that promote Uni-Industry cooperation

Brief facts about your HEI

Name:	University of Alicante
Legal Classification:	Public
Location:	Alicante, Spain
<u>Number of:</u>	
-Students	30 000 Students
-Professors	2.212 Professors and Researchers
-Researchers	1.240 Technical and Administrative staff
-Administrative staff	
Main academic areas:	Law, Economics, Faculty of Sciences (chemistry, etc)
Main research centers:	chemistry, organic chemistry, biotechnology

Innovation, IP and Entrepreneurship Policies at your HEI

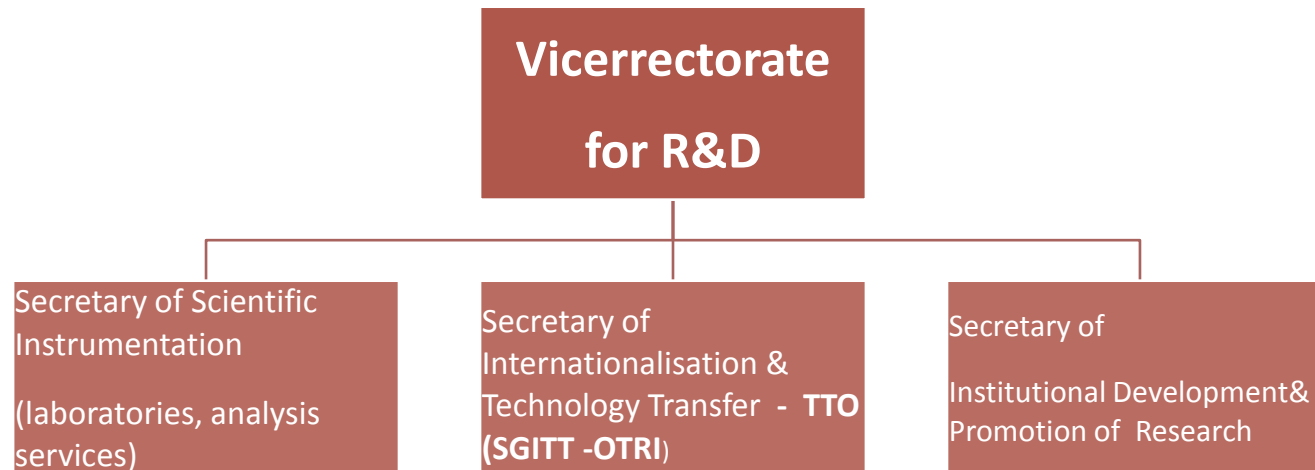
- **Do you have Innovation, IP and Entrepreneurship Policies?**
 - PLAN ESTRATÉGICO I+D: INCLUDES ALL INNOVATION, IP, ENTREPRENEURSHIP ISSUES
 - High quality basic and applied research; Knowledge and Technology transfer and commercialisation, Finalisation and successful running of the science park, Scientific-Technologic training of students, Dissemination of research and technology
 - **NORMATIVA DE PROPIEDAD INTELECTUAL E INDUSTRIAL DE LA UA:**
 - **INTERNAL PROCEDURES REGULATING EXPLOITATION OF IP AND TRANSFER**
 - **NORMATIVA – CREACION DE EMPRESAS DE BASE TECNOLÓGICA:**
 - There is a regulation /policy for the creation of Spin-off companies (EBTs in Spanish), motivated by a recent reform of the Spanish University Law (LOU). The new policy establishes a series of incentives for university staff to engage in spin-off creation, such as sabbatical leave, participation in revenues etc.

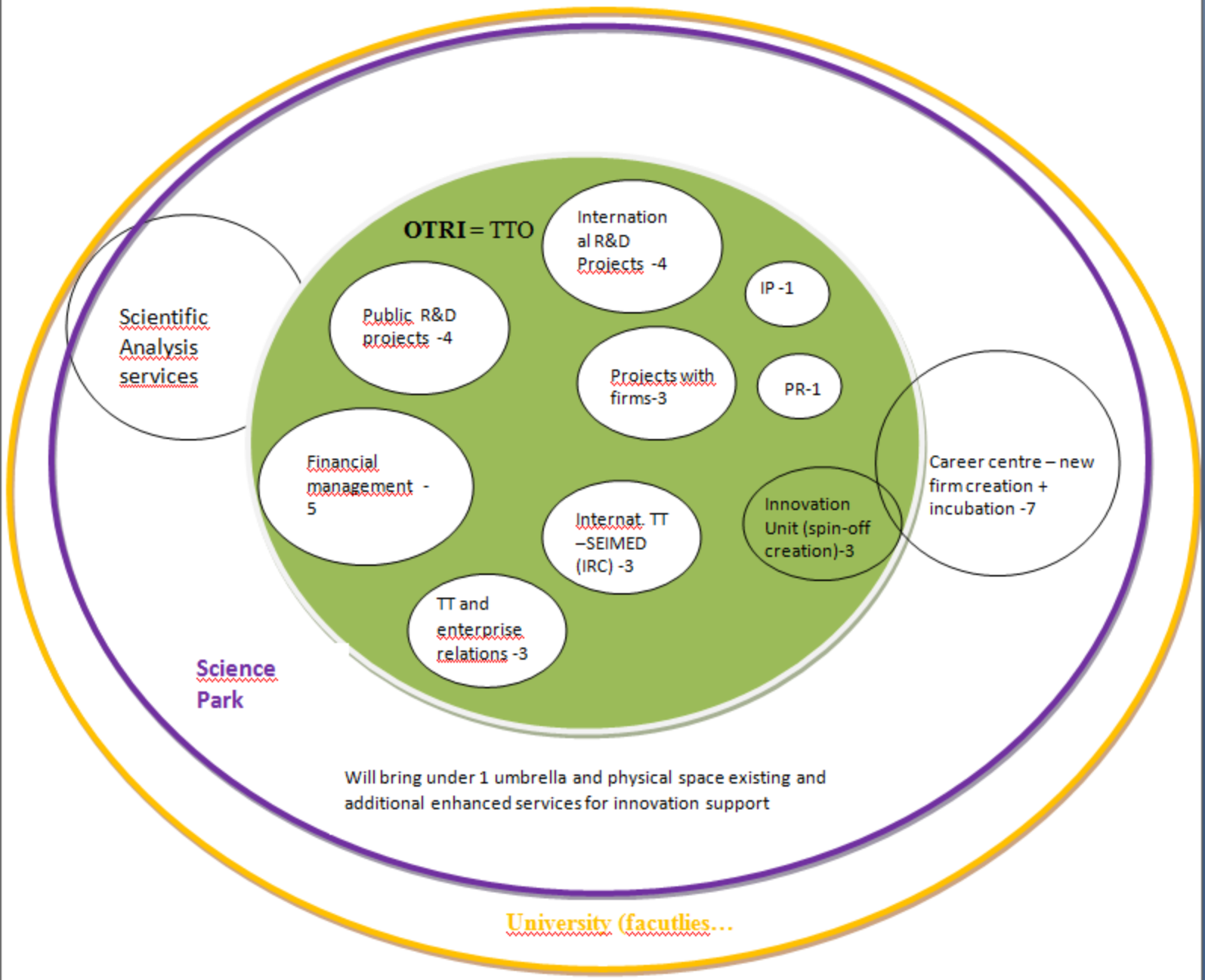
HEI Innovation System

- Which are the most important units/organizations/functions/departments that are responsible for driving innovation in your HEI?

Name of Entity	What is the main focus of this unit?
Vice-rectorate for R&D and Innovation	coordinating all initiatives related to research, innovation, IP and TT
TTO	Contact with enterprises, research offer and demand brokerage, fundraising, project applications and management; IP management, spin-off creation,...
Science Park	Gathering high-tech companies already constituted & new businesses, research institutes and groups and R&D Mixed University/Enterprise Laboratories. They will share high quality research, technical, logistic and consultancy services, which will make easier the establishment of networks and agreements.

HEI Innovation System





HEI Innovation System

Innovation entity 1

OTRI = Oficina de Transferencia de Resultados de la Investigación = TTO (Technology Transfer Office)

- Legal classification and customer orientation (internal/external):
 - internal, integral part of the HEI
- What are the academic and professional profiles of the people employed?
 - Mixed: mostly university people, private sector, some civil servants
- How is the entity funded?
 - 60% University general budget, 30% projects, 10% services.

HEI Innovation System

Innovation entity 1 (cont.)

OTRI = Oficina de Transferencia de Resultados de la Investigación = TTO (Technology Transfer Office)

- What are the main responsibilities?
 - Public calls for R&D
 - R&D contracts with enterprises
 - Economic research management
 - Technology offer and transfer
 - IP Management
 - Spin-off creation
 - Evaluation and documentation of R&D
 - International R&D Projects

HEI Innovation System

Innovation entity 1 (cont.)

- What are the strengths of this entity?
 - Very motivated personnel
- What are the weaknesses of this entity?
 - Funding constraints
 - Too little personnel
 - more business experience would be useful
 - Hard to engage businesses – there is little demand from enterprises for innovations

HEI Innovation System

Innovation entity 2 – **Scince Park** (not yet fully operational)

- Legal classification and customer orientation (internal/ external): **General Foundation of the University of Alicante is managing the park = public foundation**
- What are the academic and professional profiles of the people employed? **Very varied – academic, research, business**
- What are the main responsibilities and activities of this entity?
- Knowledge management centers and research institutes, public-private Scientific labs and instrumentation service
- Business Incubation;
- Continuous training and knowledge transfer
- Advice on Intellectual Property and TT , scientific and technological development
- Advice and assistance in patent applications and commercialization
- General business services (marketing, design, human resources, labor market

HEI Innovation System

Innovation entity 2 (cntd.)

- What are the main responsibilities and activities of this entity?
 - Knowledge management centers and research institutes,
 - Public-private Scientific labs and instrumentation service
 - Business Incubation
 - Continuous training and knowledge transfer
 - Advice on Intellectual Property and TT, scientific and technological development
 - Advice and assistance in patent applications and commercialization
 - General business services (marketing, design, human resources, labor market studies...)
 - Facilities for conference and seminars organization

Innovation Activities, Processes, Practices and Procedures

1. What do you consider to be **good examples of information and communication processes** in the areas of innovation and IP in your HEI?

Passive

- There is a **Technology Map** among others, presenting the UA research competences in a way that is easy to understand for businesses, includes Search function: <http://www.ua.es/otri/es/areas/ttot/ttototac.htm>
- **Active**
- Seminars for researchers (about funding opportunities, enterprise cooperation, TTO services)
- Visiting enterprises to find out about their needs, trying to match with research groups...

Innovation Activities, Processes, Practices and Procedures

2. What do you consider to be **good examples of awareness building and education processes** in the areas of innovation and IP in your HEI
 - Seminars on IP for researchers by the TTO and in cooperation with patent office..
 - Conferences with participation of national patent office etc.
 - Innovation fairs where research results are presented

Innovation Activities, Processes, Practices and Procedures

3. What do you consider to be **good examples of processes for ‘searching for value in research’** in your HEI?
 - TTO staff regularly visit research groups to find out about their activities, and offering possibilities to participate in national and international projects or finding application (i.e. business partners) for results
 - TTO staff regularly visit firms, offering University technology or possibilities to cooperate
 - Sectoral round tables with Industry ‘technology breakfasts’
 - awareness raising actions such as seminars, conferences..

Innovation Activities, Processes, Practices and Procedures

4. What do you consider to be **good examples of processes for 'assessing the value identified in research'** in your HEI?
- TTO assess:
 - State-of-the-art , Technological viability, patentability
 - Innovation Unit
 - Evaluate technology ideas to see if it has commercial potential (from technology to market)
 - TTO help to find business partner to transfer result
 - Conducts market analysis

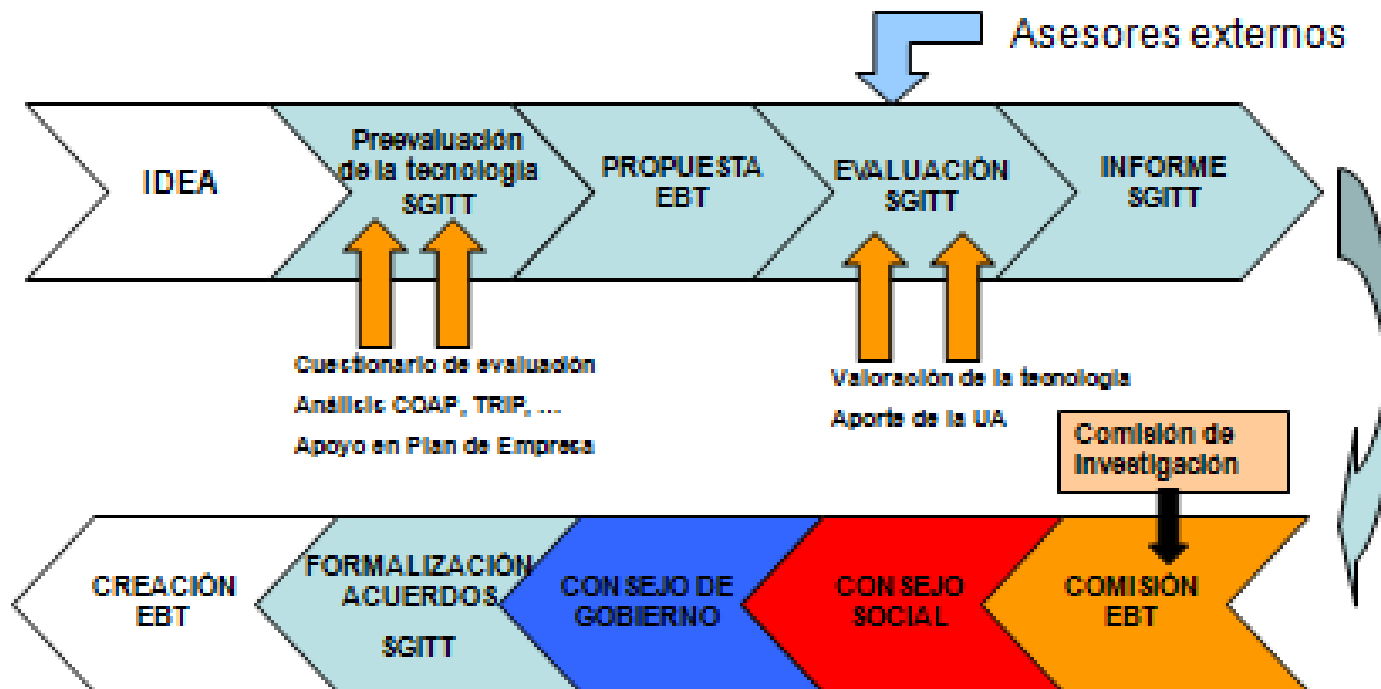
Innovation Activities, Processes, Practices and Procedures

5. What do you consider to be **good examples of processes for ‘evaluating possibilities for protection and seeking protection for innovations’** in your HEI?
- a) decision by research commission (composition detailed earlier)
 - b) confidentiality agreements
 - c) decision and procedure:
 - -receipt of petition by IP unit
 - -decision to protect by IP unit
 - -Establishment of respective rights
 - -preparation of technical application: researcher + TTO , eventually outsourcing to expert
 - -national application
 - -international application

6. What do you consider to be **good examples of commercialization processes** in your HEI?

Empresas de Base Tecnológica (EBT)

- **Proceso de creación de la EBT**



Innovation Activities, Processes, Practices and Procedures

7. What do you consider to be **good examples of ongoing processes** in the areas of innovation and IP in your HEI?
 - No good practice exists

Innovation Activities, Processes, Practices and Procedures – Summary

- In your assessment – what are the **strengths and weaknesses** of your current activities, processes, practices and procedures for Innovation and IP management in your HEI?

Strengths

- Awareness that University has to address innovation support activities;
- Centralisation: all related activities are under the supervision of the Vice presidency of research and most are carried out within the different units of the TTO, physically located at the same building; Strong relationships among all units involved

Weakness

- Basic processes have been defined
- More Processes should be defined formally
- More experience of staff – to boost licensing and exploitation!
- A legal staff in the IP unit would be needed

Historical Review – Ownership

- Who has received ownership (at the time of creation) for HEI based IP during the last 3 years?

Year	HEI (%)	Professor/researcher /inventor (%)	3 rd Party Partners (%)	Other (%)	Total 100%
2006	70		30		100%
2007	70		30		100%
2008	70		30		100%
Historical total (since HEI foundation):	70		30		100%

Historical Review – IPR

- What **type of IPR** protection is most frequently applied for?
 - In the last 3 years?
 - Patents
 - Historical total since HEI foundation?
 - Patents
- **In which countries** is IPR protection most frequently applied for?
 - In the last 3 years?
 - In Spain and PCT
 - Historical total since HEI foundation?
 - In Spain and PCT

Historical Review – Licenses

- How many license contracts has the HEI as a whole signed?
 - In the last 3 years?
 - 3
 - Historical total since HEI foundation?
 - 22
- What is the most common subject of license (invention, brand, software, etc.)?
 - In the last 3 years?
 - Invention
 - Historical total since HEI foundation?
 - 12 Invention + 10 Software

Historical Review – Start-ups/Spin-offs

- How many start-ups/spin-offs has the HEI as a whole created?

2006	2007	2008	Historical total
23	14	18	270 start-ups (all types of companies)
2	4	8 (in process)	18 Spin-offs (high -technology)

Culture for innovation

- **How would you assess the culture of innovation at your HEI:**
 - The people working with Innovation and IP are very committed
 - Science park project held back for years for political /legal issues
 - The researchers are in general not very committed to innovation and IP management but focus on publications
 - Resources always an issue- however, people are in general fairly satisfied.
 - spin-off creation historically low – last year boost through new law; before there were legal barriers for profs to engage in new companies
 - technology transfer to regional enterprises difficult due to low high-tech orientation of the business environment here

Culture for Innovation

- People that work with Innovation and IP generally are really motivated.
- Communication with enterprises could be improved (different cultures; university very slow in admin. things)
- Low level of knowledge of foreign languages might inhibit
- In fact people that work with IP have a lot of 'liberty' but in many cases one has to respect the hierarchical structure

Culture for innovation

- What characterizes the culture in your HEI?
 - Not so open
 - Quite hierarchical
 - Academic focus
- What values are important?
 - Too many civil servants, too little research
 - Some departments are motivated, strive for more and get good results
- How would you like to improve the culture in your HEI?
 - researchers need to understand the importance of IP and Innovation
 - Academics/researchers need to be more international and from private sector to boost innovative culture
 - More business competences of staff working with IP and TT

Final Assessment

- What factors/measures do you use in your HEI to determine if you are successful or not in being an 'Innovative University'?
 - Quality of basic and applied research
 - Knowledge and Technology transfer and commercialisation
 - Finalisation and successful running of the science park
 - Scientific-Technologic training of students
 - Dissemination of research and technology
- Based on the factors listed above – how satisfied are you with how your HEI is performing with Innovation and IP Management?
 - There is potential for improvement

- Thank you for your attention!

Alexandra MAYR
International Project Manager
University of Alicante (Spain)
General Foundation
T.: +34 965 90 97 18
F.: +34 965 90 97 15