



Education and Culture

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Presentation Format



Findings - Micro Level Analysis

St.-Petersburg State Electrotechnical University, Russia

10 – 11 August 2009

IP UniLink Consortium meeting

Rorkee, INDIA

Process for data collection

- Who collected the data?
 - Petr Afanasyev, Nikolay Ryzhov, Mikael Muraviev
- How did you collect the data?
 - Discussions and interviews with researchers and office members of Technopark, Patent Office, Center of Technology Commercialization and with external expert
- How many interviews did you conduct?
 - 4 (with 4 interviewers)
- When did you collect the data?
 - July 2009
- What is your assessment of the data collection process?
 - It is occupied a lot of time in view of absence of interviewees at summer holiday's period.
 - Collected a lot of interesting information for the analysis.

Legislative Environment

- What characterizes the legislative environment for HEI based Innovation and IP in your country?
- Strong government regulations are occurred. In case of government contracts IP may belong to: the state, organization where IP was created, both. IP belongs to the state if results are restricted in use or government is ready to take responsibility for commercialization. Both state and R&D organization (university) own IP in case of defense-related results or if results are related to implementation of government functions (health protection etc).

Legislative Environment (cont.)

- What are the strengths in your legislative environment?
- The state policy provides a comprehensive and well structured program for creating and management of IP.
- What are the weaknesses in your legislative environment?
- The criteria for identification of R&D results that government is ready to commercialize by itself is undefined
- The calculation of payments that organization-owner of IP will pay to the federal budget is undeveloped

Legislative Environment (cont.)

- Other Problems
- Contradictions between legal and sublegislative (level of ministries) documents.
- Results received under government contractual agreements should be published. This may contradict to the intention of organization to patent.
- Undeveloped methods to calculate the cost of IP. Usually it is calculated as expenditures on R&D.
- Problems related to amortization of IP.
- Mistrust towards Russian patent system among researchers. Patenting abroad is expensive. Result: low level of patenting. Preference is given to know-how.

Brief facts about your HEI

Name:	Saint Petersburg State Electrotechnical University "LETI" (ETU)
Legal Classification:	State institution
Location:	5, Professor Popov str. , St.Petersburg, 197376, RUSSIA
<u>Number of:</u>	
-Students	-12 000
-Professors	-1 200
-Researchers	-2 000
-Administrative staff	-800
Main academic areas:	Electrical Engineering and Automatics, Electronics Economics and Management, Computing Technologies and Informatics, Instrumentation, Biomedical and Ecological Engineering, Radio Engineering and Telecommunications, Humanities

Brief facts about your HEI (cont.)

Main research centers:

Microwave physics and engineering;
Microwave wireless technologies;
Silicon Carbide technology and applications;
Semiconductor materials, structures and devices;
Micro-mechanical systems for extreme operating conditions;
Information technologies.

Innovation, IP and Entrepreneurship Policies at your HEI

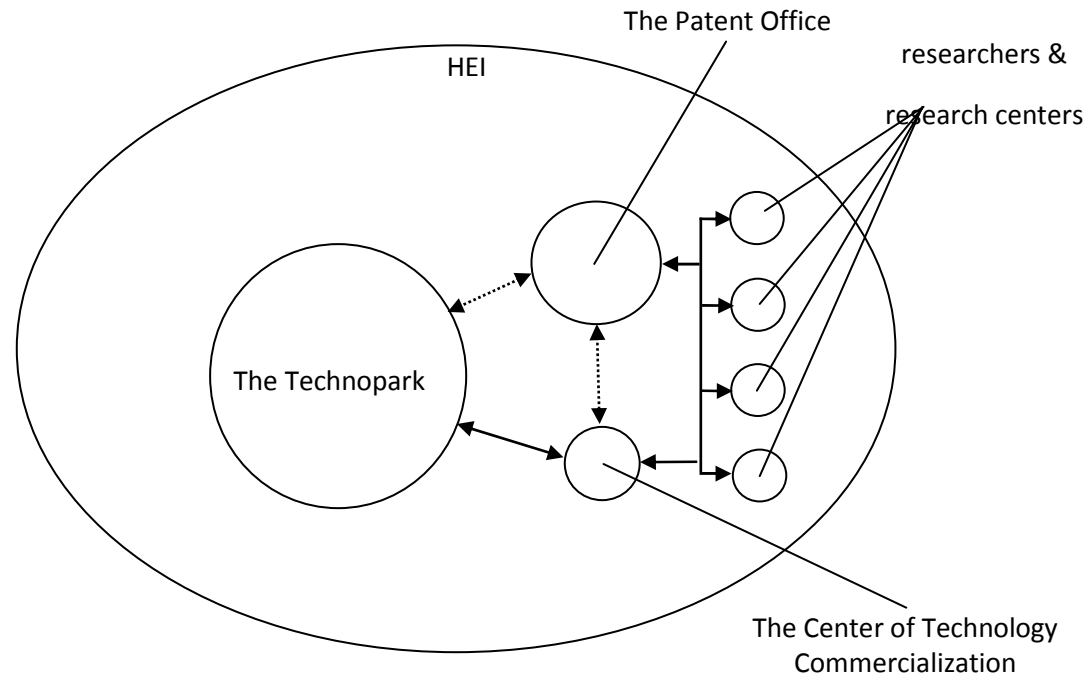
- Do you have Innovation, IP and Entrepreneurship Policies?
 - The Innovation Policy has been established in 1995. The main aim is the working out of new products / or services via strategic partnership with the key partners (organizations).
 - The Entrepreneurship Policy has been established in 1991. The main aim is support and incubation small companies in hi-tech sphere: from the idea before, and to the start-up company.

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?
The Patent Office	To determine inventions that can be patented and offer full spectrum of patent works.
The Center of Technology Commercialization	The center provides administrative and accounting support to the university undertaking sponsored research and consultancy works.
The Technopark	It is helps to creating a start-up company around an invention and offering business development services.

HEI Innovation System



HEI Innovation System

Innovation entity 1 - The Patent Office

- Legal classification and customer orientation (internal/ external)

Internal entity belonging to HEI

- What are the academic and professional profiles of the people employed?

People from various academic background: Economy, Law, Science, Engineering and Marketing.

- How is the entity funded? HEI funding

HEI Innovation System

Innovation entity 1 - The Patent Office (cont.)

- What are the main responsibilities and activities of this entity?
 - determination if an invention can be protected by IPR;
 - conducting prior art search;
 - supporting researchers to develop a technical description report;
 - supporting the application of patentability evaluation;
 - drafting an application and applying for protection (e.g. patent, design, etc.) of an invention;
 - monitoring pending applications and registrations;
 - HEI's IP portfolio managing.

HEI Innovation System

Innovation entity 1 - The Patent Office (cont.)

- What are the strengths of this entity?

The patent office offers a full spectrum of services in patenting, including prior art search and registration of all documentation.

HEI Innovation System

Innovation entity 2 - The Center of Technology Commercialization

- Legal classification and customer orientation (internal/external)

Internal entity belonging to HEI

- What are the academic and professional profiles of the people employed?

People from various academic background: Economy, Law, Science, Engineering and Marketing.

- How is the entity funded? HEI funding

HEI Innovation System

Innovation entity 2 - The Center of Technology Commercialization (cont.)

- What are the main responsibilities and activities of this entity?
 - disclosing an invention to the HEI;
 - determination if there is a market for an invention;
 - supporting researchers to create a business plan for their inventions;
 - drafting legal documents;
 - continuously linking research results to HEI teaching and the development of HEI research agenda.

HEI Innovation System

Innovation entity 2 - The Center of Technology Commercialization (cont.)

- What are the strengths of this entity?

The Center of Technology Commercialization helps to provide a complex system for technology transfer and commercialization of innovation by the university.

- What are the weaknesses of this entity?

The center is completely focused on the key partners of the university.

HEI Innovation System

Innovation entity 3 - The Technopark

- Legal classification and customer orientation (internal/external)

Internal entity belonging to HEI

- What are the academic and professional profiles of the people employed?

People from various academic background: Economy, Law, Science, Engineering and Marketing.

- How is the entity funded? HEI funding

HEI Innovation System

Innovation entity 3 - The Technopark (cont.)

- What are the main responsibilities and activities of this entity?
 - creating a start-up company around an invention;
 - offering or finding a place for a start-up company in an incubator;
 - offering business development services.

HEI Innovation System

Innovation entity 3 - The Technopark (cont.)

- What are the strengths of this entity?

Bring out the university innovation potential into the market via start-up companies creating.

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?
 - The university provides seminars and workshops for innovation, business incubation and management of innovations.
 - The university publishes lists of most perspectives works in the special magazine “Innovations”.
 - The university Web site contains lists of most perspectives works, and plays major role on innovation activities.

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?
 - “Innovation management” BS and MS courses include one semester elective course of IP management are issued.
 - The university provides short-term training program in the sphere IP and innovation management.

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?

The university's internal or external R&D grants includes terms about patenting.

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?

The Center of Technology Commercialization assesses demanding of the invention.

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?

The Patent Office determine if an invention can be protected by IPR and provide registration procedures for the university.

Innovation Activities, Processes, Practices and Procedures

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

Innovative complex of the university support researchers to create a business plan, apply a patent and launch a start-up company.

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?
 - Monitoring of innovative work at the university for creating the database of potential new goods.
 - Popularization of the innovative works via grants.

Historical Review –Ownership

- Who has received ownership (at the time of creation) over HEI based IP during the last 3 years? (*Present according to table p. 18 in the interview guide*)

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

Historical Review – IPR

- What **type of IPR** protection is most frequently applied for?
 - In the last 3 years?
Patents, utility models, integrated circuits topographies, databases, PC programs
 - Historical total since HEI foundation?
Patents, utility models, integrated circuits topographies, databases, PC programs
- **In which countries** is IPR protection most frequently applied for?
 - In the last 3 years?
Russia
 - Historical total since HEI foundation?
No data

Historical Review – Licenses

- How many license contracts has the HEI as a whole signed?
 - In the last 3 years?
1
 - Historical total since HEI foundation?
1
- What is the most common subject of license (invention, brand, software, etc.)?
 - In the last 3 years?
Invention
 - Historical total since HEI foundation?
Invention

Historical Review – Start-ups/Spin-offs

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

(Present according to tables on p.21 in the interview guide)

- In the last 3 years?

3

- Historical total since HEI foundation?

45

Culture for innovation

- How would you assess the culture of innovation at your HEI:
 - For the driving of the innovation and IP process in the university, responsibility takes university leaders, technology transfer office, research centers and individual researchers.
 - We have all resources to keep working to drive and manage innovation, except time.
 - To support us in our work we have goals, plan, resources and work according to plan.
 - While working for innovations, the our researchers get energized sometimes and stressed sometimes.
 - The researchers share a dynamic relationship with bosses, colleagues and subordinates.

Culture for innovation

- What characterizes the culture in your HEI?
 - Open
 - Transparent
 - Communicative
 - Strongly Hierarchical
- What values are important?
 - Strong influence of traditions in all spheres of the university life;
 - There are open and dynamic relations with colleagues and subordinates
- How would you like to improve the culture in your HEI?
 - Self-motivation

Final Assessment

- What factors do you use in your HEI to determine if you are successful or not in being an 'Innovative University'?
 - The university's experience on research and teaching
 - Openness for innovations
 - The university's internal processes adaptability
- Based on the factors listed above – how satisfied are you with how your HEI is performing with Innovation and IP Management?
 - Most persons are satisfied.