

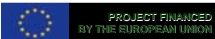
## SUPER-SME

« Supporting Potential and Existing Research intensive SMEs »

3rd Peer review meeting – Catalonia – 23&24 April 2007



<http://www.e-innovation.org/supersme/index.html>



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## Region of Central Macedonia URENIO Research Unit

Aristotle University of Thessaloniki

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## URENIO

- The URBAN AND REGIONAL INNOVATION Research Unit (URENIO) is a university laboratory for the promotion of research and supply of scientific and technological services. URENIO is affiliated to the Department of Urban and Regional Planning and Development in the Faculty of Engineering, Aristotle University of Thessaloniki.
- URENIO's research focuses on territories that base their development on R&D, technological innovation, technology-intensive companies, technology infrastructure, and knowledge and information networks. Central research theme are:
  - the cities and regions of innovation including knowledge clusters, technopoles and science parks;
  - regional innovation systems and strategies
  - digital innovation spaces and intelligent cities.

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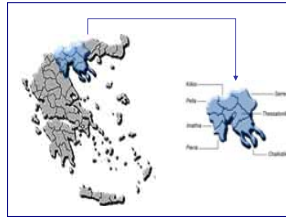
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## The region of Central Macedonia

A Strategic position in southern Europe

- Northern Greece
- Neighbors with Balkans
- and eastern Europe
- (FYROM, Bulgaria)




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## The Region of Central Macedonia

### Innovation Performance

(average of re-scaled indicator values 2002)  
83% of the National=100 - 35% of the EU=100

R&D expenditures in C. Macedonia	% in GDP
Private sector	0,1
Public – Government sector	0,08
Higher education sector	0,44
Private non-profit sector	0,01
Total region	0,62

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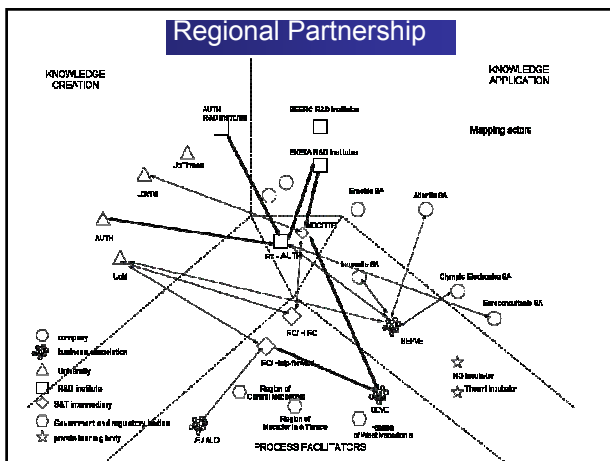
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## The cluster

### Information and Communication Technologies

- ▶ SMEs: more than 90% of total companies
- ▶ Young companies in the majority: 2/3 were established after 1990
- ▶ Dynamic trends: more than half of the companies increased their turnover and number of employees
- ▶ Main activities:
  - Software (Operational applications and Internet applications): 32%
  - IT Services: 31%
  - Distribution of office machines and PCs: 16%
  - Trading telecommunication products and equipment: 8%

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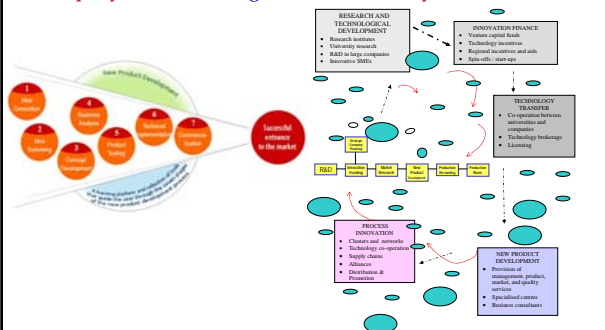
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## Innovation as Territorial Cooperation

Regional Innovation Poles transfers cooperation in innovation and new product development from the company level to the regional innovation system




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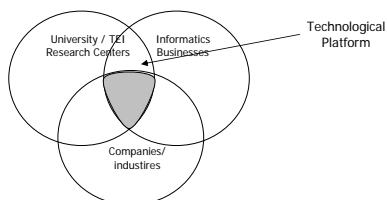
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## Regional Innovation Pole CM: Actions

Research and technological development consortia



- The participants in the R&TD Consortia are from:
1. Enterprises/ industry organizations or services of the public or private sector
  2. Informatics and Communication Technology companies (ICT)
  3. Research Centers, Universities/ TEI and their laboratories

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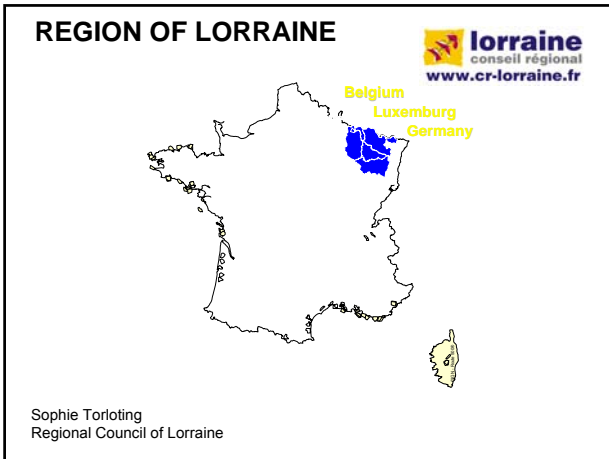
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1. The Lorraine S&T intermediation system: S&T services offer and networks
2. Involvement of the Regional Council of Lorraine in cluster policy : the poles of competitiveness
3. Support to spin-offs and start-ups: main actors and services

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**Introduction: Lorraine R&D key figures**

**A research with public dominant:**

- Share of spending in R&D compared with GDP : 1,1% (54,3% public expenditures)
- 6 900 full time equivalent in R&D (2% of R&D employees in France) including 3200 Full time equivalent researchers (60,4% in public sector)
- Public expenditures distribution : 54% from universities; 26% from EPST (national institutes, such as CNRS – national centre for scientific research); 20% EPIC (such as ADEME – Environmental agency)

**A high potential of students and research:**

- 76 600 students in 2002;
- 193 laboratories;
- an important engineering pole (one Polytechnic Institute and 16 engineering schools)

**The technological production:**

- an average of 260 patents application per year;
- main sector of patents : industrial processes

Source : INSEE – October 2006

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### 1.1. Main actors implied in the S&T intermediation system

- **7 technological centers**  
(with the French Ministry of Research Label "Technological resources centre or CRT")
- **3 technological transfer organizations**  
(“CRITT Interface” or Centre of technological transfer and innovation)
- **4 university interface and technological transfer units** (4 universities : INPL; UHP; University of Metz, University of Nancy 2) grouping in CERES project
- **3 technological platforms** (CETELOR-Textile; Plastinov-plastic materials; Agro-food platform)
- **2 Business innovation centers** (BICs) : Promotech and Synergie
- **1 university incubator** : Lorraine incubator
- **other technological organizations**: 1 national technical institute (Institut de Soudure – Institute of weld) + 1 organism specialized in hydrogen and its applications (ALPHEA)
- **non-technological organizations** : Regional Trade Chambers + INPI (National institute for industrial property) + IRC + EIC

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### 1.2. Three main types of S&T intermediaries

Types	Lorraine actors	Services
Technological advisers	Non-technological organizations (Regional trade chamber, INPI) + CRITT Interface	Awareness raising activities for enterprises, opening to innovative approach; identification of SME needs, technological watch
Technological guides	Specialized technological centers (CRT) + technological platform + + BIC(s) Promotech & Synergie	Technological watch; technical support, support for new product development = support to SMEs during innovative process
« Valorizators »	University interface units + university incubator	Valorization of university research results, IPR, support to spin-offs creation

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### 1.3. Sectors of the 17 interviewed S&T intermediaries

No specialisation	7 (CRCL; Incubator; 2 university interface units; INPI; 2 BICs)
Advanced Materials (metallic, plastic, polymer)	3 (METALL 2T; PPE; APOLLOR)
Mechanics –mechanical engineering	1 (CIRTES)
Wood industry	1 (CRITT Wood)
Agro-food industry	1 (CRITT Agrialorraine)
Agriculture	1 (CRITT Agrialorraine)
ICT	1 (CRITT TTI)
Metrology	2 (NANCIE; PPE)
Industrial design	3 (CIRTES, PPE, CRITT TJFU)
Chemistry	2 (PPE, Agrialorraine)
Textiles	1 (CRITT Agrialorraine)
Energy	2 (NANCIE; Agrialorraine)
Biotechnology	1 (NANCIE)
High pressure cutting –fast prototyping and tooling	1 (CRITT TJFU)
Water treatment - environment	1 (NANCIE)
Health technologies (medical devices)	1 (CLTS)

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1.4. Three main networks in Lorraine managed by 3iLorraine

“3iLorraine” (Initiatives: Innovation, Intelligence) :  
 non-profit association supporting the regional economic development  
 > managed by an independent “managing board”;  
 > a partnership institution : RCL/State/OSEO;  
 > a dialogue and exchange place;  
 > a role of observation

- **Lorraine RDT « technological development network »** : created in 1990 in each region  
 Aim : support SME technological development by identifying needs of regional SMEs and by connecting technological actors in order to improve quality range services
- **The economic intelligence network (RELIE and DECILOR programme)**  
 Aim : coordinate actions of economic intelligence actors and make EI tools available for SMEs
- **The enterprise creation network : “Initiatives”**: coordinate main actors implied in assistance for enterprise creation

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**2. The Regional Council of Lorraine: involvement in cluster policy**

- In 2002 : regional involvement for the creation of aeronautics and space cluster « **Aeriades** »
- In 2003 : pre-feasibility studies in several sectors  
 Focus on two thematic clusters :  
 > **Health sector**  
 > **environmental engineering**
- Since 2005 : regional involvement in poles of competitiveness (national call of proposals) :  
 > **The MIPI pole of competitiveness** : Innovative materials and smart products  
 > **The Great East – Natural Fibers pole of competitiveness**

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2.1. Poles of competitiveness : SUPER-CLUSTER

**Concept :**  
**Poles of competitiveness is a initiative from the Ministry of industry where French Regions were asked to identify concentration of :**

- > Industrial plants and corporate research activities;
- > Public research;
- > Higher education potential together with vocational and life long training;
- > Technology transfer systems.

Working differently :

- > partnership and alliances between competitors;
- > cooperation on research;
- > new relationship between local government and businesses
- > obtaining a critical size to exist

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### 2.1.1 French competitiveness clusters

**In France : 65 labelled Competitiveness clusters in 2005 among which 15 on world scale**

#### **Additional budgets (National, Regional and sub-Regional)**

- To support collective RDT projects jointly elaborated by companies (mainly SMEs), Research performers and transfer systems (including not only technology aspects but also "soft" innovation management techniques)
- To finance new education and training fields;
- To facilitate industrial research and innovation in SMEs
- To support communication...

**In Lorraine Region : two labelled clusters :**

- **MIPI – Innovative product and intelligence materials**
- **Great East Natural Fibers**

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### 3. Support to spin-offs, spin-outs and start-ups

#### **Main actors in Lorraine:**

- Lorraine incubator : official statute (label of the French Ministry of Research in 1999) ;
- CERES (4 university interface units);
- Business innovation centres (BICs) : Synergy and Promotech;
- Regional networks : « Initiatives » network, CREAlliance network; Lorraine Entreprenre network;
- Financial organisms: OSEO; regional and local authorities; SADEPAR-ILP, Lorraine business Angel.

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### 3.1. The Lorraine Incubator

• **Statute** : created in 2000 by the 4 universities; support projects with close links with public research; convention/contractual agreement between incubator and "would-be" entrepreneurs/creator after a selection by universities (economic feasibility study)

• **Objective** : support "would-be" entrepreneurs, valorization of research results

#### • **Services** :

- daily support : individual support;
- assistance for developing a business plan;
- refundable advances with 0% rate during two years after the creation;
- search for scientific and technological competences (universities labs, technological platforms, CRT, CRITT);
- search for specific competences : legal services, assistance in public and private funding (members of "enterprise creation" networks and funding actors);
- incubation services (offices)

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### 3.2. CERES project

• Created in 2006 (call for proposal of ANR – National Agency for Research)

• Objective : to mutualize the 4 university interface units in order to improve the valorization process of universities research results

• Services :

- common project;
- identification of research projects with economic potentiality (technological transfer, creation of spin-offs)
- legal support, economic & technological analysis; IP information, assistance in commercialization of industrial research

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