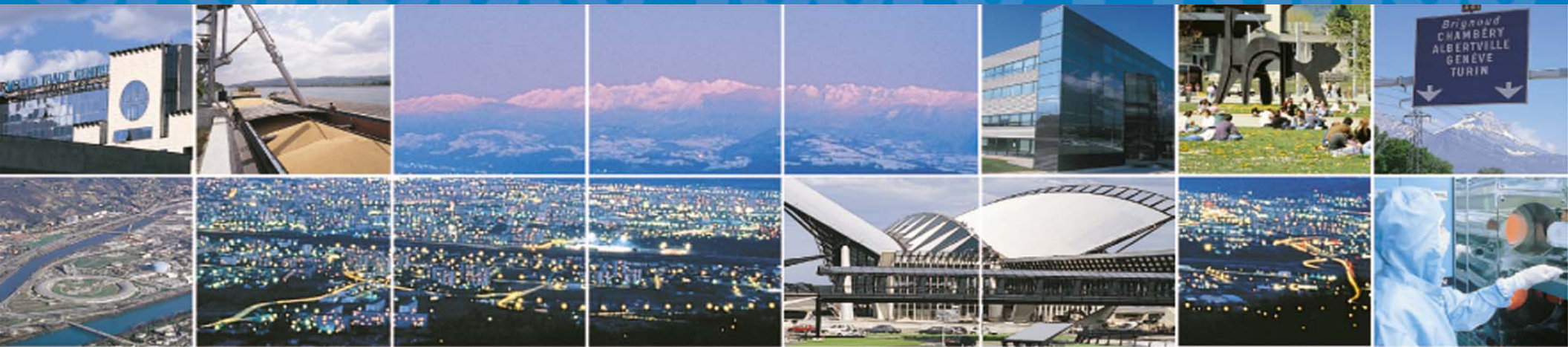




Grenoble-Isère-France



Agence d'études  
et de promotion  
de l'Isère

*AEPI - Grenoble-Isère, France, Economic Development Agency*

Arizona  
Nanotechnology  
Symposium

April 23, 2007



**minalogic**  
les solutions miniaturisées intelligentes





## Public Research Budget for Micro & Nanotechnologies in France

### Key figures in France

Public budget for research (2005): 19,8 B€ (~ 1% GDP)

Total budget (public and private): 2,2% GDP

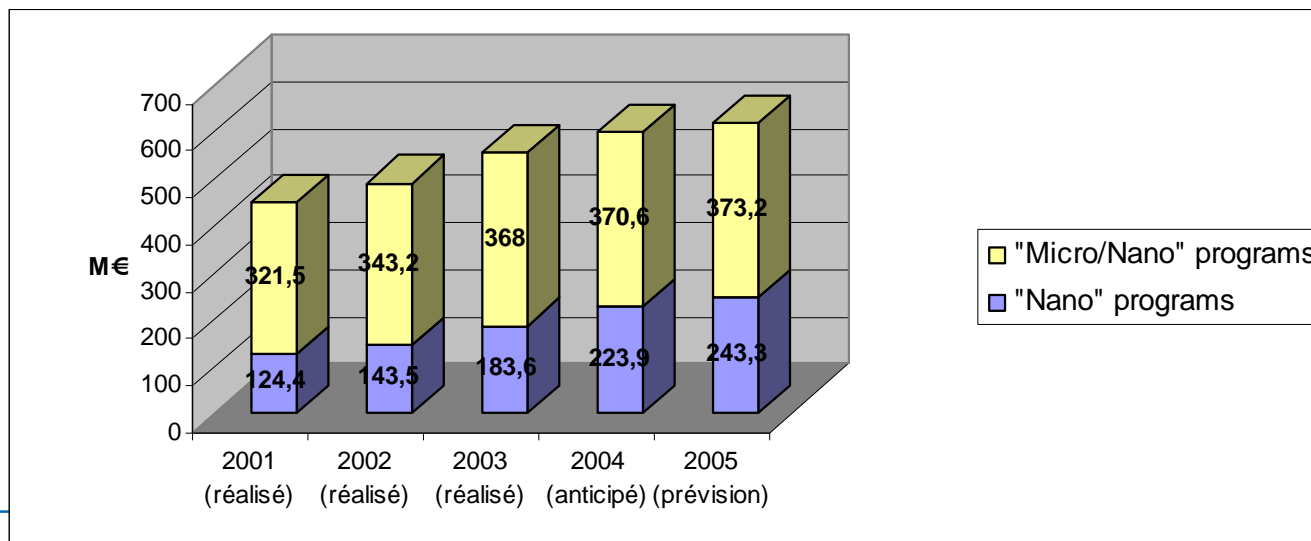
Goal: 3% GDP in 2010

### Micro and nanotechnologies public budgets:

445,6 M€ (2001) → 616,5 M€ (2005)

Main recipients: CNRS, CEA, INSERM, ...

Estimated private investments: ~ public budget





## What is a Competitive Cluster?

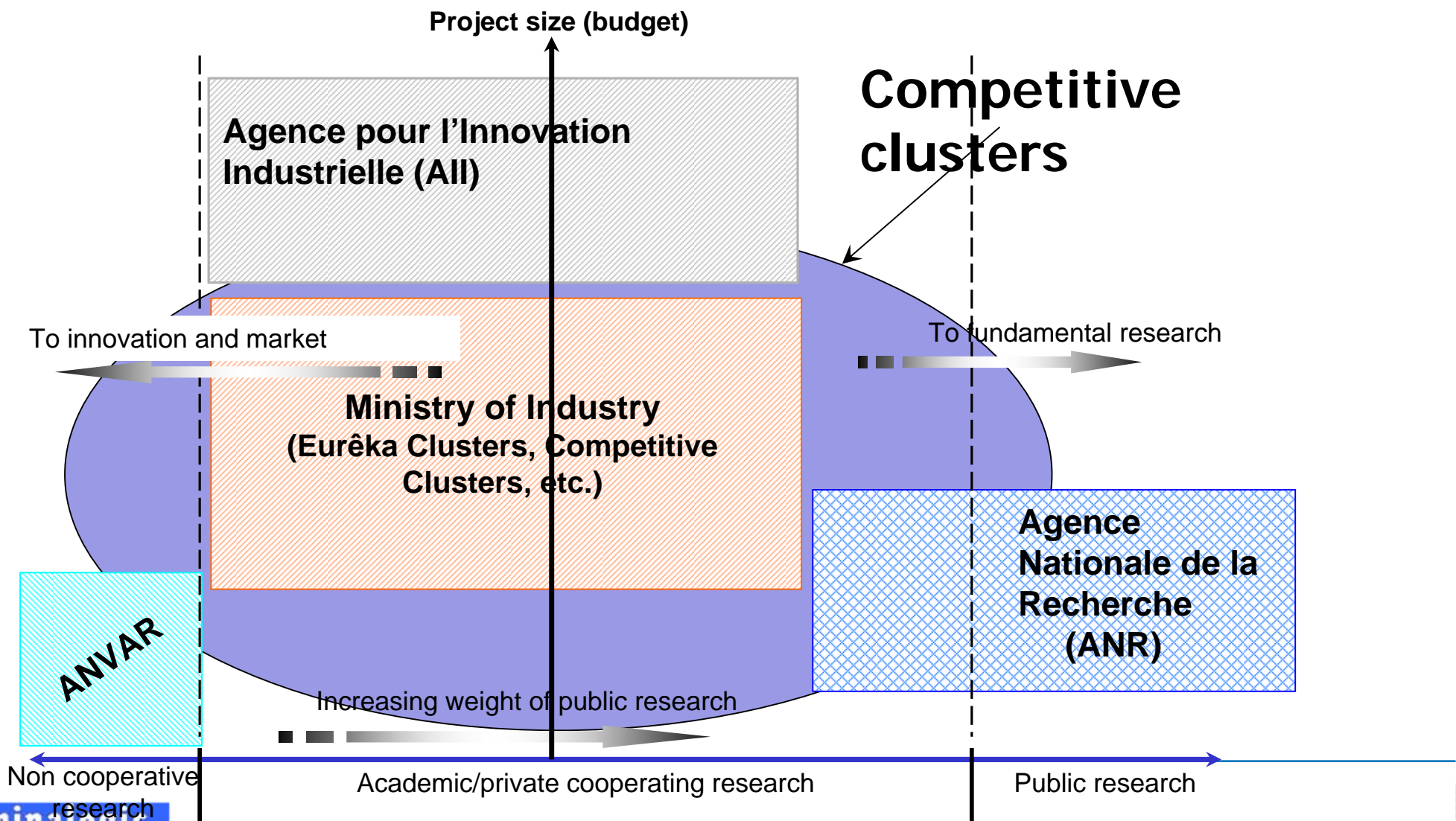
### A Competitive Cluster is:

- A combination of industry, research community and education institutions located within a well defined geographical area
- All involved in partnerships to create synergies around innovative projects ,
- Which must reach a critical mass/threshold for international visibility





# Competitive Cluster R&D Financing





## minalogic

Micro & nano technologies and embedded software competitive cluster

Minalogic gathers a great number of resources and competencies dedicated to creating and developing new products and smart miniaturized solutions for the industry.

### Strategy:

- Mass market & traditional manufactured products become commodities
- Aggressive competition from low production cost countries
- Copies of new products come fast



Move the competition battle from the field of production costs to that of innovation speed, enriched product feature sets & services

Design highly differentiated products

- Miniaturized
- Smart and Communicating

Release innovations faster and more frequently

Develop service businesses around products



✓ **MINATEC :**  
**A scientific hub for education, research and industry**

Operational  
early 2006

Industrial valorization

Research

Industry

Research

Education

Education

House of Micro and  
Nano-Technologies

4 000 persons by 2007  
200 / 300 mm silicon platform

Area  
45 000 m<sup>2</sup>

Cost  
170 M€

## The 52 Founding Partners of Minalogic



28 Enterprises

6 Academic research and education

18 Local Institutions

SMEs represent 70% of Minalogic industry members.

16 new companies have joined Minalogic since its creation:

- Adixen • Air Liquide Electronics Systems • Alpwise
- Centre Technique du Papier • DeFacto • Flexody
- IROC Technologies • Kapix • Memscap Mesatronic • Serma Technologies • SleepInnov Technology
- Teamlog • Temento • Tracit Technologies • VaST Technology • Xenocs



## Minalogic: Key Figures

### Projects certified in 2006

- **30** projects were labellized by Minalogic for a total R&D budget of more than **€1.2 billion** and submitted in response to three requests for proposals by the Enterprise Competitiveness Fund [*Fonds de Compétitivité des Entreprises*], ot to the All [*Agence pour l'innovation industrielle*]
- **31** projects were labellized by Minalogic for a total R&D budget of more than **€63 M** and submitted in response to requests for proposals by the National Research Agency [*Agence Nationale de la Recherche*]

### 79 Members

- 48 companies, including 33 SMEs (70%)
- 10 research centers and universities
- 14 local governments
- 6 economic development organizations
- 1 private investor

### Financing

- **3** projects are financed by the All [*Agence pour l'innovation industrielle*] for a total of **€161 million**.
- **7** projects are financed by the Directorate General for Enterprise [*Direction Générale des Entreprises*] for a total of **€37.2 M**
- **14** projects are waiting for the decision of the Directorate General for Enterprise (will be available by end march)
- **15** projects were financed by the National Research Agency, for total funding of **€14 M**





## Minalogic: Current Running Projects

### Core micro-nanotechnologies

- **Nanosmart center** leader SOITEC, 162M€ over 4 yrs
- **Imalogic** leader Sofradir, 22 M€ over 3 yrs
- **Minimage** leader STMicroelectronics, 141 M€ over 4yrs
- **Foremost** leader STMicroelectronics, 120 M€ over 3 yrs



### Embedded System on Chip

- **«Atelier du Futur» (Workbench of the future)**
  - **Multival** leader ST Microelectronics, 7M€ over 4 years
  - **Sceptre** leader ST Microelectronics, 10M€ over 4 years
  - **OpenTLM** leader ST Microelectronics 12M€ over 5 years



### Core technologies applied to industry solutions and services

- **Smart Electricity** leader Schneider Electric, 20 M€ over 5 yrs
- **Homes** leader Schneider Electric, 88 M€ over 5 yrs
- **Printronic** «Large surface electronics» leader Sofileta, 17 M€ over 4 yrs
- **Hibrix** leader Xenocs, 7 M€ over 3 yrs



+ 15 upstream projects funded by the National Research Agency

**THANK YOU FOR YOUR ATTENTION!**

## **Contacts**

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### Spin-offs from research laboratories, universities and Grenoble-Isère companies

• <a href="#"><u>Actim</u></a>	3D measurement systems (CEA-Leti)
• <a href="#"><u>Ad Valor</u></a>	Users centric studies, innovation management (UPMF)
• <a href="#"><u>Akazi</u></a> (W4 in 2004)	Administrative process management (Bull, Sema Group, MC2)
• <a href="#"><u>Alira</u></a>	Educational software (Deltalab)
• <a href="#"><u>Allegro</u></a>	Digital video technology (UJF)
• <a href="#"><u>Altatech</u></a>	Technology equipment and process solutions for advanced film deposition
• <a href="#"><u>Arturia</u></a>	Sound synthesis software (INP Grenoble)
• <a href="#"><u>Asterop</u></a>	Business intelligence software (INRIA)
• <a href="#"><u>AuviTran</u></a>	Audio-video and transcoding (Digigram)
• <a href="#"><u>Beamind</u></a>	HDI IC test (CEA-Leti)
• <a href="#"><u>Blue Eye Video</u></a>	Video security systems (UJF-INPG-INRIA)
• <a href="#"><u>Cabrilog</u></a>	Software for geometry (UJF)
• <a href="#"><u>Certess</u></a>	EDA software for design blocks and IPs
• <a href="#"><u>Ciprian</u></a>	Laboratory instrumentation (CNRS)
• <a href="#"><u>Cotranet</u></a>	Intra-extranet solutions (Cap Gemini)



## INFORMATION AND COMMUNICATIONS TECHNOLOGY

- [Coyote Software](#) Video games developer
- [Crocus Technology](#) Mram memories (CEA-Spintec)
- [DeFacTo Technologies](#) design for test (INP Grenoble)
- [Design Processing Technologies](#) Software solutions for industry (INP Grenoble/CNRS)
- [Design&Reuse](#) Internet database of virtual electronic components (INP Grenoble)
- [DGTec](#) Micronic powders (Thomson Multimedia)
- [D'Mailer](#) Electronic information management (UJF)
- [Eboo solutions](#) Digital solutions for video surveillance
- [EdXact](#) Electronic design: extraction, analysis and control tools
- [Eloquent](#) Advanced voice communication solutions for service providers (HP)
- [Eve](#) Engineering for electrical and electronical equipments (INP Grenoble)
- [H3C-Energies](#) Consultant in energy conservation
- [Icatis](#) Grid computing (CNRS/UJF/INRIA/INP Grenoble)
- [Ifotec](#) Fibre optic (Radiall)
- [Imakina](#) Creation of interactive sites
- [Incam Solutions](#) Silicon wafers packaging in miniature clean rooms (CEA-Leti)
- [Infiniscale](#) Editeur de logiciel CAO pour les micro et nanotechnologies
- [Intexys](#) High speed X-connect systems (CNRS/CEA-Leti)
- [IRocTechnologies](#) Integrated robustness on chip. (IMAG-TimA)



## INFORMATION AND COMMUNICATIONS TECHNOLOGY

- [Kelkoo](#) (Yahoo in 2004) Shopping search engine (Bull/Inria)
- [Keesda](#) Electronic systems' design automation
- [Mataru](#) Network security (INRIA-Sun Microsystems)
- [Memscap](#) Design software for complex circuits and virtual components (INP Grenoble-TIMA)
- [Musicalis](#) (Emme in 2005) Real time music classes on internet.
- [Nanolase/JDS Uniphase](#) (Teem Photonics in 2005) Microlaser (CEA-Leti)
- [Nanosprint](#) Virtual science for nanotechnology
- [Omega Centauri](#) Management software on internet
- [Opsitech](#) (Memscap in 2003) Integrated optics on optical mems
- [Ontologos Corp](#) Software editor
- [Opensugar](#) Solutions for providing applications on connected devices (FT R&D)
- [Otrix](#) Software editor
- [Paxitech](#) Fuel cell membranes (CEA)
- [Polyspace](#) Test and validation of embedded aeronautics software (INRIA)
- [Probayes](#) Bayesian programming techniques(UJF-INRIA)
- [Raise Partner](#) Financial risk management (INRIA)
- [Scalagent](#) Software (INPG-UJF-Bull)



## INFORMATION AND COMMUNICATIONS TECHNOLOGY

- [Soisic](#) Technology CMOS/SOI - (CEA-Leti)
- [SOITEC](#) Silicon On Insulator technology (CEA-Leti)
- [Stantec](#) UWB Radio communication system (IMEP)
- [Stratelia Silver Peas \(OEVO\)](#) Internet portal
- [TecKnowMetrix](#) Strategic awareness services
- [Teem Photonics](#) Optic components for telecommunications (INP Grenoble, Radiall and Schneider)
- [Temento Systems](#) CAO software for electronic systems (CEA)
- [Tracit Technologies](#) BSOI innovative substrates (CEA-Leti)  
(Soitec in 2006)
- [Tronic's Microsystems](#) Mems components (Leti-CEA)
- [Ulis](#) silicon uncooled infrared components (Leti-Sofradir)
- [Valiosys](#) system-on chip design and test software (INPF-TIMA)
- [VirtualActors](#) Virtual reality (UJF)
- [Vitamib](#) secure collaborative platforms
- [Volubill](#) GPRS & UMTS mobile phones invoicing systems (Cegetel)
- [Xenocs](#) Optical multi layers systems (ILL)
- [Widip](#) Management on Internet for SMEs