

High Level Event on ICT R&D and Globalisation

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Working Session 2: European SMEs and Globalisation

Strategies and Success Stories in Portugal

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Portugal

Look at Globalisation as an Opportunity

- Developing Internationalized Knowledgeable, Creative and Skilled Workforce for Knowledge-Based Industry
- Promoting International Patenting and IP Protection
- Attracting Foreign High Tech Industry and R&D Investment
- Building Ambitious International Knowledge Networks
- Adopting Globally Competitive Tax Deductions for Industrial R&D
- Inducing the Creation of New Knowledge-Based SMEs of Global Reach
- Enabling Networks of Competence to Reach Global Markets

Partnerships for the Future

Building Ambitious International Knowledge Networks

- Assure world class excellence in partnership with leading international institutions
- Enhance knowledge networks with a global reach and involving research, industry and university
- Train researchers and contribute to the development of a skilled workforce for technology based industry
- Create clash of cultures in knowledge creation environments to stimulate creativity and entrepreneurship by shaking up the *status quo*

Partnerships for the Future

Building Ambitious International Knowledge Networks

Examples:

MIT – Portugal Programme (11 Oct 2006)

Engineering Design and Advanced Manufacturing, Energy Systems, Transportation Systems, Bioengineering Systems.

Also with *Sloan School of Management*: International MBA and *Lisbon-Sloan Seminar Series in Management Science*.

Involves 6 universities, 6 Associate Labs, 1 National Lab, VW-Autoeuropa, EADS-CASA and 10 Portuguese companies mostly SMEs



CMU – Portugal Programme (27 Oct 2006)

Software Engineering, Information Networking, Information Security, Critical Infrastructures and Risk Assessment, Language Technology, Technical Change and Innovation, Mathematics.

Includes the creation of an international virtual institute: the *Information and Communication Technologies Institute (ICTI)* operating first with two nodes, *ICTI@Portugal* and *ICTI@CMU*.

Involves 11 universities, 4 Associate Labs, Portugal Telecom, Siemens Networks Portugal, Novabase SA and 16 SMEs



Partnerships for the Future

Building Ambitious International Knowledge Networks

Further examples:

UT Austin – Portugal Programme (2 Mar 2007)

Digital Media, Advanced Computing, Mathematics.

Includes the creation of an international virtual institute: the *International Collaboratory for Emerging Technologies (CoLab)* operating first with two nodes, *CoLab@Portugal* and *CLab@UTAustin*.

Involves 15 universities, 3 Associate Labs, 4 Science and Technology Parks, 9 SMEs.



Harvard – Portugal Programme (16 Apr 2007)

Biomedicine and Health Care Content. Signed MoU for assessment phase with Harvard Medical School. Will involve Universities, Associate Labs, large and SMEs.

Fraunhofer – Portugal Programme (18 Apr 2007)

ICT, Biotechnology, Nanotechnology, Advanced Manufacturing Engineering, Logistics. Signed MoU for assessment phase with *Fraunhofer Gesellschaft*.

One objective is the creation in Portugal of the 1st Fraunhofer Institute outside Germany (on *Technology, Applications and Services for Ambient Assisted Living*).

Will involve Universities, Associate Labs, large and SMEs.

Partnerships for the Future

Building Ambitious International Knowledge Networks

Further example:

International Iberian Nanotechnology Laboratory (19 Nov 2005)

Nanomedicine (drug delivery, nanotechnology for diagnostics), Environmental Applications, Food Quality Applications, Electronic Devices. 200 researchers. International research organization under UN umbrella whose joint creation was decided by Spain and Portugal governments at the Spain-Portugal Summit of 2005. Convention signed in Summit 2006 (25 Nov 2006).

“The ambition of both countries is to create a research site of world scale relevance, capable of attracting scientists and technicians from all points of the world”

José Mariano Gago, Minister of Science, Technology and Higher Education, Portugal

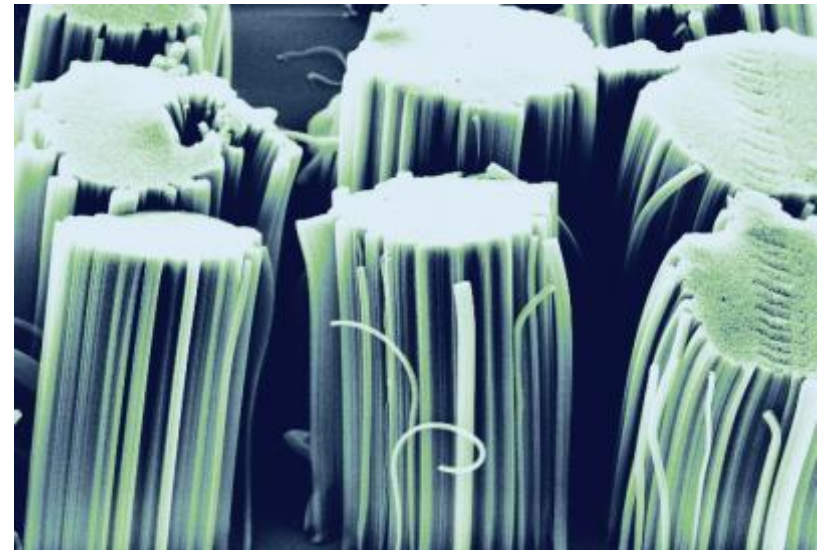


Figure: Carbon nanotubes

Fiscal Incentive to Enterprise R&D System

Adopting Globally Competitive Tax Deductions for Industrial R&D

- Introduced in 2005 for period: 2006-2010
- Base deduction: 20% of R&D expenses
- Incremental deduction: 50% of R&D expenses relative to average of two preceding years, up to 0.75 MEuros
- Presently: the most competitive fiscal incentive to enterprise R&D in OECD countries

NEOTEC – New Technology-Based Enterprises Initiative

Inducing the Creation of New Knowledge-Based SMEs of Global Reach

- **Targeted at university researchers/students entrepreneurial projects, with high growth potential oriented to world markets**
(on the average 74% of sales abroad)

- **Support for 3 phases of enterprise creation:**
 - 1) From idea to new products/services/processes (≤ 6 months)
 - 2) Developing business model and business plan (≤ 6 months)
 - 3) Launching enterprise operation (≤ 14 months)

- **Approved 103 new enterprise projects since 2005**
54% ICT, 11%
12% Agrifood Biotech, 11% Health Biotech, 5% other Biotech,
8% others

- **Already in operation more than 40 new enterprises**

Networks of Competence

Enabling Networks of Competence to Reach Global Markets

→ **Approval of 9 Networks of Competence involving enterprises, research centres, universities, industrial associations, public bodies:**

Telecommunication and Information Technologies

Mobility

Agro-forestry and Food

Bio-Energy

Health Care and Medicine

Mould Micro-Machining

Polymers

Dematerialization of Transactions

Fashion

They involve 158 entities, including 87 enterprises

High Growth Knowledge-Based SMEs

Examples of SMEs Created in Period 1995-2002

- Chipidea
- YDreams
- Enabler
- Alert, integrated clinical software in a completely paperless environment. Funded in 1999, has more than 260 workers, and installations in Portugal (Porto, where it originated), Spain, Netherlands and USA (Virginia, California, Florida, Georgia, Pennsylvania). Its products were adopted by 64 hospitals and 105 health care centers. It had a three digits growth in the past three years.
- WeDo Consulting
- Altitude Software
- Critical Software