Stimulating Knowledge Transfer

- Challenges to the stimulation of the innovation and technology transfer in Portugal -

OECD-Workshop
Lisbon
07. - 08.11.2017

Stimulating Knowledge Transfer

CoLABS

- Colaborative Laboratories -

for the stimulation and reinforcement of the innovation and technology transfer in Portugal

by

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Content

1. The innovation cycle
2. From generating ideas to exploitation
3. The “players” in the Innovation Process
4. The “Innovation Valley of Death”
5. The RTO’s bridge the Innovation GAP
6. Closing the GAP – the need for CoLABS in Portugal
7. What is a CoLAB?
8. CoLAB’s positioning in the Innovations System
9. CoLAB’s Initiative supported by an “Intl. Evaluation Committee”
10. CoLABs in a Nutschell
11. CoLABs: From generating ideas to exploitation
Innovation Cycle

New Knowledge; New Ideas

(Basic) Research → Innovation

Money to invest in research → Business Development; Satisfying societal needs and expectations

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You have to kiss many many frogs, to find the one and only prince!

Arthur Frey, 3M, Inventor of Postit
The „players“ in the Innovation Process

- System integration
- Marketing
- Spin-offs
- Venture Capital

Universities
Public Labs

Market;
Society

Applied
Research
Institutes

Industry

- Basic, market-independent research
- Human resources
- Academic careers
- Progressing Knowledge

- Lobby the field
- Develop market needs
- Implement continuing education
- Technology transfer
- Product Development
- Business Development

- Market-dependent contract research
- Applied research
- Application prototypes

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The "Innovation Valley of Death"
The RTO’s bridge the Innovation CAP

Societal challenges; future markets - being ready for global competition

Universities perform excellent scientific research

Research cycle

RTOs bridge the innovation gap with technological R&D

Innovation cycle

Innovative companies create new products

Intensive exchange with society

- professional R&D services to industry
- demand driven research combined with scientific excellence
- autonomy of institutes combined with simple corporate rules
- working in networks

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Closing the GAP – the need for CoLABS in Portugal

Demand to assure Stability and Continuity
Need to close the Innovation and Technology Transfer Gap

Research Institutes And Public Labs
CoLABs
F&E Projects

Universities
Research and Education
Technology Transfer Bridge

Market
Industry
Economy
Society
Marketing & Sales

Basic Research / Ideas
Technological Prototypes
Trials; Pilots;
Commercial Prototypes;
Innovation Platforms
Products + Business + Services

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What is a CoLAB? (1)

A CoLAB is a private, non-profit association or a private company, specially created for this purpose, that integrates, for example, higher education institutions and its institutes and research units, associated and state laboratories, intermediate and interface institutions, companies, business associations, public institutions and other relevant partners such as social or cultural institutions, incorporated in one independent legal entity, the CoLAB.

The main objective of the CoLABs is to create skilled jobs and economic and social value, by promoting employment through the development of knowledge-based activities, based on the implementation of medium-term research and innovation agendas.
What is a CoLAB? (2)

The CoLABs complement and reinforce the current landscape of R&D units and Associate Labs in Portugal, aiming at stimulating the active participation of the scientific/academic, business and public communities in the analysis and solution of large scale and complex problems, generally multidisciplinary, interdisciplinary and multi-institutional.

They should also complement existing and future scientific and innovation networks.

R&D issues to be analysed by CoLABs are to identified by the coordination of business, social and cultural interventions with a view to mobilize skilled employment in the implementation of effective solutions with socio-economic impact.
What is a CoLAB? (3)

A consortium of participating entities (including mandatorily business and other social partners) being integrated into one single legal entity to work together:

- to solve complex, large scale problems of international relevance and with an effective social impact and economic added-value in Portugal;
- to develop synergies and multi-/interdisciplinary activities in the scientific community in Portugal;
- to create innovative economic value; and
- to create additional high-quality jobs (not only Ph.D.’s and Post-Docs)
CoLAB’s positioning in Innovation System (1)  
(Example: Germany as an orientation for the potential positioning of the CoLABs)

Example: Germany
CoLAB’s positioning in Innovation System (2)

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CoLAB’s Initiative supported by an „Intl. Evaluation Committee“

| Chairman:                        | Prof. José Luis Encarnação          |
|                                 | Technische Universität Darmstadt   |
|                                 | and Fraunhofer Gesellschaft, Germany |

| Members:                        | Prof. Julian Florez                |
|                                 | CEO; VICOMTech                     |
|                                 | San Sebastian, Spain               |

|                               | Prof. Ser Yong Lim                 |
|                               | Executive Director                 |
|                               | SIMTech, Singapore                 |

|                               | Prof. Egbert-Jan Sol               |
|                               | CTO                               |
|                               | TNO, Holland                       |

|                               | Prof. Nicholas Veck                |
|                               | Head of CEO Office                |
|                               | Satellite Applications Catapult, UK |

|                               | Prof. Wolfgang Wahlster            |
|                               | CEO of DFKI and                    |
|                               | Universität des Saarlandes, Saarbrücken, Germany |

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CoLABs in a Nutshell (1)

- Independent legal entities
- “Owned” by a strong consortium (“shareholders”) with financial commitment
- “Market-players” (not universities) seat on the “drivers’ seat” of a CoLAB
- Provide professional R&D services to industry
- Demand and market driven research combined with scientific excellence
- Cooperation with academia / not competition
- Autonomy of CoLABs combined with simple corporate rules and strong brand
CoLABs in a Nutshell (2)

- knowledge in basic research
- transferred to applied research
- to gain sustainable added value through innovation

University, Public Labs

CoLABs

Cooperation with academia
- demand and market driven research combined with scientific excellence
- professional R&D services for industry

Autonomy of institutes + simple corporate rules and strong branding

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CoLABs: From generating ideas to exploitation

Innovative climate with access to R&D results

Technology Push and Pull

Early identification of market potential

CoLAB

I am your idea

go for it

forget it

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Thank you for your kind attention