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## PORTUGUESE PARTICIPATION IN THE MANUFUTURE TP

Synergies with the national initiatives and success factors

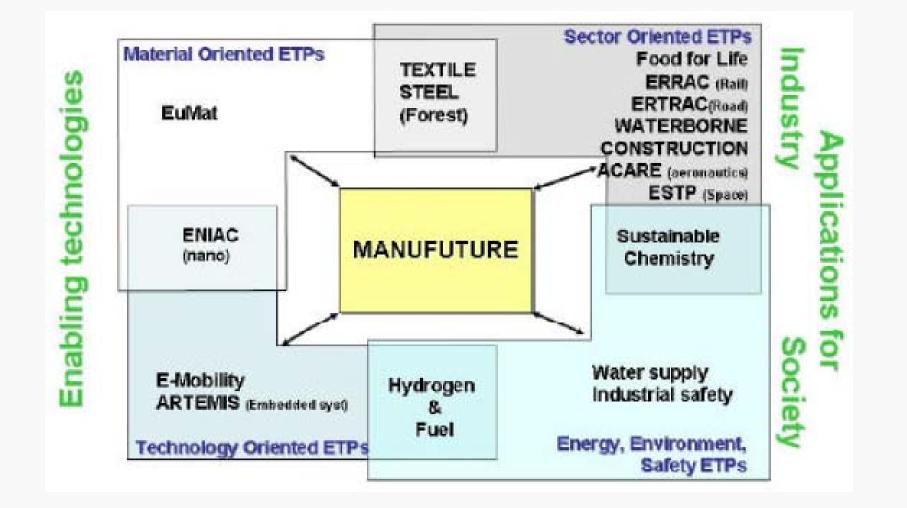
## JOSÉ CARLOS CALDEIRA

(jcc@inescporto.pt)

ETP's were created to <u>support EC defining and</u> <u>implementing Research and Innovation priorities</u> and relevant framework conditions, to ensure Europe's sustainable competitiveness

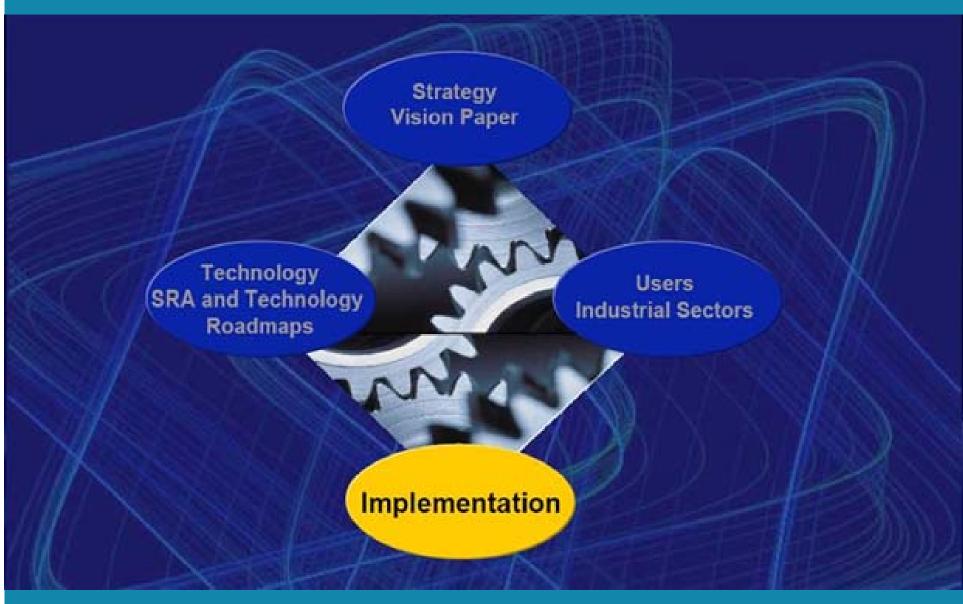
MANUFUTURE it's an umbrela platform, aiming at the development of <u>European MANUFACTURING</u> <u>INDUSTRY</u>, namely by promoting the development of <u>horizontal production technologies</u>

### **MANUFUTURE Platform as an Umbrela**



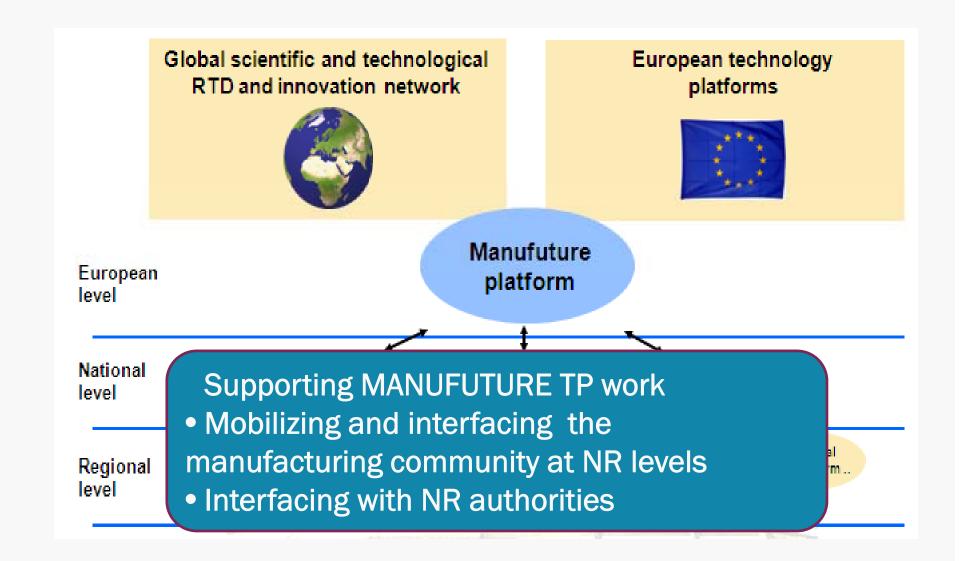
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## **MANUFUTURE** Action Plan



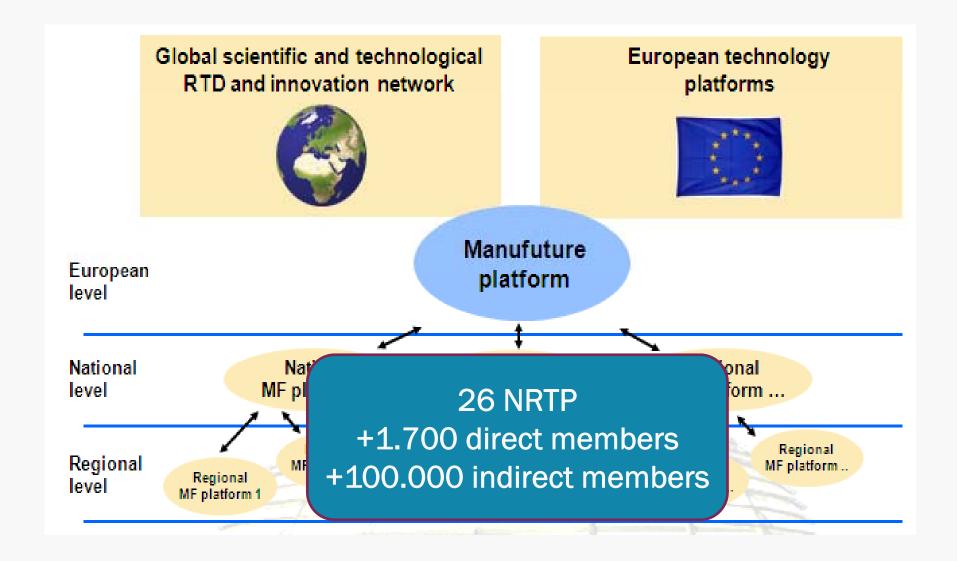
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## **MANUFUTURE Multi-level Structure**



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## **MANUFUTURE Multi-level Structure**



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## **MANUFUTURE Action Plan – Strategic Intelligence**

- 2003 Initial Ad-hoc group (30 people)
- 2003-12: First Conference (Milan-IT)
  - First meeting of a national group (2004-10)
- 2004-12: Release of "A VISION FOR 2020" + Launch of the MANUFUTURE Platform (Enschede-NL)
  - Creation of Fórum MANUFUTURE Portugal (2005-07)
- 2005-12: Release of "MANUFUTURE SRA" (Derby-UK)
  - Organization of the first Industrial Advisory Group Meeting, in Porto (2006-07)
- 2006-12: Presentation of the MANUFUTURE ROADMAPS (Tampere-FI)

## **MANUFUTURE ROADMAPING**

New industrial models and strategies

Adaptive production systems

**Networked production** 

Knowledge based engineering

Convergence of technologies

**ICT** for Manufacturing



## First MANUFUTURE IAG Meeting



Debating the SRA:

- 61 participants
- 40 from industry
- 15 countries

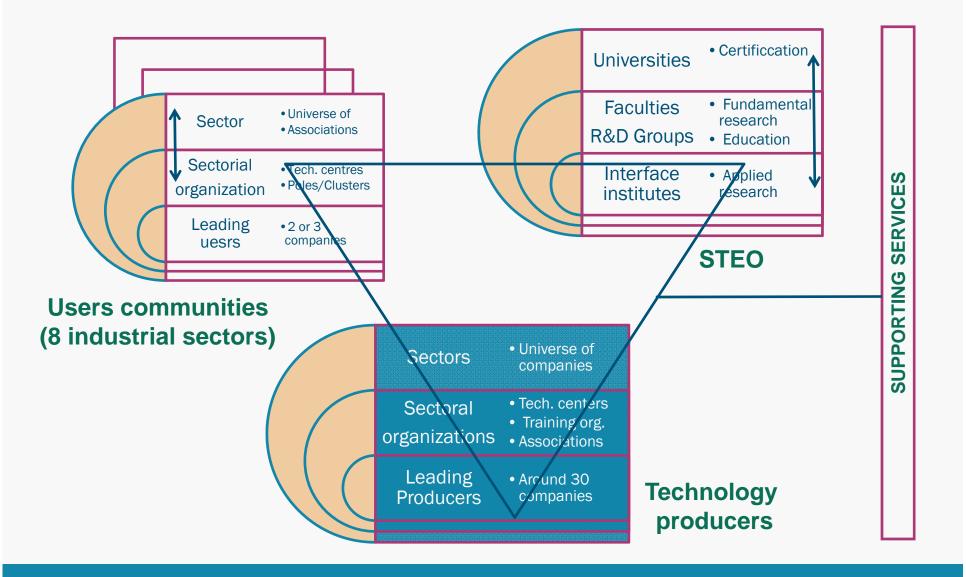
Coverage from all television networks and main newspapers



## **MANUFUTURE** Action Plan – Implementation Phase (I)

- 2007-12: MANUFUTURE Conference in Porto
  - Production of the MANUFUTURE Porto MANIFESTO (2008-03)
  - Meeting with the President of the EC (2008-07)
- 2008-03: Launch of the MANUFUTURE JTI Task force
  - Decision to prepare a proposal for the EEC national programme (2008-04)
  - Creation of PRODUTECH Associação para as Tecnologias de Produção Sustentável
  - Presentation of the proposal (2008-10)

## **PRODUTECH - Portuguese Production Technologies Pole** Architecture



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## **PRODUTECH - Portuguese Production Technologies Pole** Integrated Action Plan

HORIZONTALS	THEMATIC
H1- PROSPECTIVE, STRATEGY, ROADMAPING AND VIGILANCE	T1 - NEW BUSINESS MODELS
H2 - MARKETING AND INTERNATIONAL PROMOTION	T2 - INTELLIGENT PRODUCTION SYSTEMS
H3 – INFORMATION, DISSEMINATION AND DEMONSTRATION	T3 – PERFORMANCE, FLEXIBILITY AND EFFICIENCY
H4 – INTERNATIONAL NETWORKS AND BODIES	T4 - MODELLING AND SIMULATION
H5 – R&D MANAGEMENT CAPABILITIES	T5 – OPERATIONS MANAGEMENT AND LOGISTICS
H6 – ENTREPRENEURSHIP	T6 – NETWORKED PRODUCTION SYSTEMS
H7 – ADAPTATION OF EDUCATION AND TRAINING PROGRAMS	T7 – ADVANCED TECHNOLOGIES AND NEW PRODUCTION SYSTEMS
H8 – CLUSTER MANAGEMENT AND COORDINATION	T8 – ENERGY AND ENVIRONMENTAL EFFICIENCY
	T9 – ADVANCED TOOLS FOR NEW PRODUTCS AND SYSTEMS DEVELOPMENT
	T10 – ACTIVE AND PASSIVE SAFETY IN PRODUCTION SYSTEMS

## **MANUFUTURE Action Plan – Implementation Phase (II)**

- 2008-11: Release of the European Economic Recovery Plan
  - PRODUTECH approved as a Pole (with conditions) (2009-02)
- 2009-04: MANUFUTURE launches the European Factories of the Future Research Association (EFFRA)
  - The previous Portuguese experience with PRODUTECH had a considerable influence

### **Portuguese participation**

#### MANUFUTURE Platform

- Carlos Costa: Vice Chairman HLG (now EIB)
- Belmiro de Azevedo (SONAE): Chairman of the Industrial Advisory Group
- José Manuel Mendonça (INESC Porto): Implementation Support Group (Executive Board) + HLG
- José Carlos Caldeira: Chairman of the NRTP Group + ISG + HLG
- Other HLG members: Fernando Sousa (CEI)+Joaquim Menezes (IBEROMOLDES)+ Knut Kappenberg (SONAE)

#### EFFRA

- GA: SONAE, CEI, IBEROMOLDES, INESC Porto
- BoD: Carlos Bianchi de Aguiar (SONAE) + José C. Caldeira (Chairman NRTP)

#### **Success factors**

- Active involvement from Industry
- Dynamics and organization at national/regional level
- All relevant stakeholders should be involved: industry (technology producers and users + research and education, organizations + technology centers, associations + public bodies, etc.)
- A clear strategy and an action plan, at national/regional level, aligned with the European level
- The existence of complementary initiatives and funds, at national/regional level, capable of supporting the projects and other activities.

#### The future

- Be an active partner from the EC for the definition and implementation of existing and new policies and programmes to support the sustainable development of European Manufacturing Industry
- Increase the Portuguese participation in the EC R&D programmes, specially from industry
- Promote the creation of complementary programmes at national level.
- Promote the alignment between European and national/regional funding programmes (namely using structural funds)
- Monitor and evaluate the results of our work, in terms of industrial competitiveness, and learn from there

## **Related information**

- MANUFUTURE technology Platform: <a href="http://www.manufuture.org">www.manufuture.org</a>
- Fórum MANUFUTURE Portugal: <u>www.forum-manufuturep.org</u>
- PRODUTECH: www.produtech .org
- MANUFUTURE 2007 Conference: www.manufuture2007.inescporto.pt

# *"Many times, what seems impossible It's only difficult"*

## THANK YOU FOR YOUR ATTENTION

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