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MANUFUTURE TP

Cooperation for Sustainable Production Technologies

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The framework for the sustainable development of PT

Research organizations

Production technology producers (providers)

Industrial sectors (users)

Roadmapping

New solutions

• Develop new technologies (research)

• Adapt and integrate existing technologies

• Transfer solutions between sectors

FACTORY AS A PRODUCT + TECHNOLOGY CONVERGENCE
(machine tools, system integrators, software, engineering services, etc.)
The framework for the sustainable development of PT

CRITICAL MASS / RESOURCES / COMPETENCES

Roadmapping

PROJECTS INITIATIVES

New solutions

Projects

European

Trans-national

Trans-regional

National

Regional

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COOPERATION FOR SUSTAINABLE PRODUCTION TECHNOLOGIES
Clustering and Inter-clustering

1. DO WE NEED 3 LEVELS?

2. HOW TO ENSURE:
   - EFFECTIVENESS
   - EFFICIENCY

ETP NoE  
ERANET EUREKA INTERREG  
NR Clustering (Pôles de Compétitivité)  
European  
Trans-national Trans-regional  
National Regional
Relevant drivers and success factors

- **Strategy and Roadmapping:**
  - From a business vision to a relevant R&D agenda

- **Innovation cycle coverage**
  - From basic research to exploitation

- **Funding model(s)**
  - Combine and align resources + extract more value from investments

- **Knowledge access and dissemination**
  - Spreading and re-utilization

- **IPR protection and management**
  - Paving the way for effective cooperation

- **Standards**
  - Integrating the components
The framework for the sustainable development of PT:
The MANUFUTURE Platform: Multi-level structure
Relevant drivers and success factors: Strategic Intelligence

- Strategy Vision Paper
- Technology SRA and Technology Roadmaps
- Users Industrial Sectors
- Implementation
MANUFUTURE Action Plan – Strategic Intelligence

- 2003 - Initial Ad-hoc group (30 people)
- 2003-12: First Conference (Milan-IT)
- 2004-12: Release of “A VISION FOR 2020” + Launch of the MANUFUTURE Platform (Enschede-NL)
- 2005-12: Release of “MANUFUTURE SRA” (Derby-UK)
- 2006-12: Presentation of the MANUFUTURE ROADMAPS (Tampere-FI)
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

• 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

• 2008-11: Release of the European Economic Recovery Plan
  – PPP Factories of the Future (1.200 M€)
  – Creation of the AIAG (Ad-Hoc Industrial Advisory Group)
  – Production of the Multi-annual Strategic Roadmap + First calls

• 2009-04: MANUFUTURE launches the European Factories of the Future Research Association (EFFRA)
Clusters and inter-clustering
Innovation cycle coverage

- Size of companies and projects
+ Research/Development/Dissemination

New solutions

SECTORIAL CLUSTERS

TEHOMATIC CLUSTERS

European

Trans-national

Trans-regional

National

Regional

Tech. Transfer/Exploitation/Dissemination

Number of companies and projects
- Global funding
Examples: PRODUTECH - Portuguese PT Cluster Architecture

Users communities (8 industrial sectors)

Technology producers

Sectors
- Universe of companies

Sectordial organizations
- Tech. centers
- Training org
- Associations
- Around 30 companies

Leading Producers
- 2 or 3 companies

Sectorial organization
- TICs/Clubs
- TICs

Leading users
- Universe of associations

Sector
- Universe of associations

Universities
- Certification

Faculties
- Fundamental research

R&D Groups
- Education

Interface institutes
- Applied research

STEO

SUPPORTING SERVICES
### Examples: PRODUTECH - Portuguese PT Cluster Integrated Action Plan

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Final remarks

- An effective and efficient European framework for the development of sustainable production technologies calls for an **integrated multi-sector, multi-level structure approach**.

- **Clustering and inter-clustering are crucial**, probably more than in any other area.

- Some themes are critical for the success of such a system:
  - Roadmaping: **what to do** (industrial relevance and impact, for short, medium and long term) **and where** (at which level)
  - From research to the market: need to ensure that **all phases of the innovation cycle are covered**
  - “All the money is not enough”: **combine and align public funding, at all levels, boosting private funding**
“Many times, what seems impossible
It’s only difficult”

THANK YOU FOR YOUR ATTENTION