



# BOOSTING SMES COMPETITIVENESS IN MANUFACTURING

## What is MANUNET?

MANUNET is a network of regional and national agencies that use their own funding programmes to fund transnational research and development projects performed by companies-preferably SMEs, research centres and universities in the field of Manufacturing.

# An experienced network

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- Created in **2006**
- **Supported** by the **EC**
- launched **9 calls** for proposals
- coordinated successfully **20** national/regional funding programmes
- **180 m€** of public funding committed

As a result

- **874** proposals have been received
- more than **2350 SMEs** have been actively involved.
- **208 projects** and **548 SMEs** recommended for funding



# MANUNET impact assessment\*

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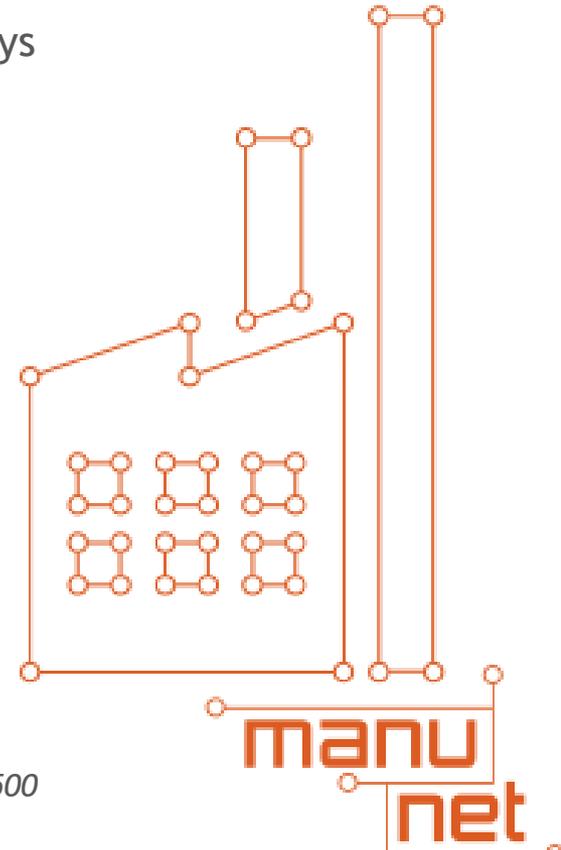
- Company level:
  - ❑ Development of new products, process and methods:
    - 75% of applicants have had innovative results (specially in products, process and methods)
    - 61% of results have been commercialized
    - 47% of the project results commercialized have reached the market in a period of 2 years time
    - 83% of project results led into in-house application or generated a follow-up project.
  - ❑ R&D activities
    - 65% of beneficiaries increased their R&D expenses
    - 66% of beneficiaries increased their R&D personnel
    - 46% of the cases allowed the non-permanent personnel recruited during the project to get a permanent position
  - ❑ Economic benefits
    - 41% of the respondent experimented an increase in turnover
    - 73% of the cases resulted in business opportunities

\* Data based on the survey done by MANUNET to the participants on summer 2015. (1500 applicants- 464 respondents)



# MANUNET impact assessment\*

- Regional/national level
  - ❑ The increase of the international cooperation  
87% of the respondents continue cooperating in different ways
  - ❑ The increase of their R&D activities
  - ❑ It allows the exchange of knowledge  
92% of the cases resulted in access to know-how



\* Data based on the survey done by MANUNET to the participants on summer 2015. (1500 applicants- 464 respondents)

# Impact - Example (I)

Experts in 3D Vision , optics, electronics and software engineering , offers customers innovative solutions based on non-contact sensors , high-speed virtual point cloud processing , verification and real-time processes reverse engineering.

**DATAPIXEL**  
QUALITY CONTROL ENGINEERING

Has been recognized at European level as optical measuring expert. Opening them new opportunities of transnational collaborations.

## DeLAs project

**Objective:** to bridge the gap between product development and automation control by means of methods and software tools for implementing complex sensor-guided handling and alignment processes.

### Participating partners:

Rohwedder (IND-GR)  
INGENERIC (SME-GR)  
Coherent (IND- GR)  
Fraunhofer IPT(PUR-GR)  
MMI Aachen (UNI-GR)  
Datapixel (SME-BC)  
Unimetrik (SME-BC)  
RIF (associated,OTHER- GR)  
Schunk (associated,IND- GR)

### Project duration:

24 months

### Total project cost

2,317,631 €

## Impact - Example (II)

Experts in the field of oil analysis, mostly dedicated to predictive maintenance and quality control. Activities focus on mechanical damage prevention and hydraulic system control, by integrating diagnostic systems, oil analysis and termography.



They have gained knowledge and skills. A very valuable result for the SME. (first prototype)

First agreement with a big US company for the on-line monitoring, also interested in the implementation of this A.I.

### MIDA project

**Objective:** to promote preventative maintenance in manufacturing plants through the development of a fully automated prototype for oil analysis and fault prediction. The prototype is based on Artificial Intelligence (A.I.) software and online hardware.

**Participating partners:**

Mecoil Diagnosi Meccaniche srl (SME-Tuscany)  
KKT srl (SME-Tuscany)  
Resolvo srl (SME-Tuscany)  
EMSIL TECHTR ANS srl, oradea (SME-RO)

**Project duration:**

24 months

**Total project cost**

435,000 €

## Impact - Example (III)

Produces small and medium series of machined mechanical tools components. Their process is supported by turning and milling machines and CNC five-axis machining centre.



By participating in the project. They gained knowledge on the machining of Titanium. Consequently the number of clients demanding machining of Titanium has increased.

They are gaining presence in the aeronautic sector, despite the size of the company (30 employees)

### TiMac project

**Objective:** The aims of the project are (I) the definition of the working conditions for precision manufacturing: the machining of complex 3D Ti-parts made of Titanium and (II) the development of a new family of tools for machining titanium and titanium alloys with enhanced performance and lifetime, made of PKD and coated cemented carbides.

#### Participating partners:

OMS (SME-Piedmont)  
PEGASO SISTEMI s.r.l. (SME-Piedmont)  
Zubiola (SME-Basque Country)  
Microlan (SME-Navarra)  
AIN (PRC-Navarra)

#### Project duration:

24 months

#### Total project cost

1,450,124 €

# MANUNET next Call for proposals

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## 10th MANUNET call for proposals (2016)

**MANUNET** 2016 Call is open for entities belonging to these regions/countries: Asturias (Spain), Basque Country (Spain), Castilla y León (ES), Catalonia (Spain), Navarra (Spain), Germany, Iceland, Israel, Lower Austria (Austria), Piedmont (IT), Romania, Russia, Slovakia, Switzerland, Turkey, Wallonia (Belgium), Western Greece.

**MANUNET call includes all fields in Manufacturing**, structured in the following topics:

- Knowledge-based engineering, information and communication technologies for manufacturing.
- Manufacturing technologies for environmental and energy applications.
- Adaptive manufacturing technologies.
- New materials for manufacturing.
- New manufacturing methods, components and systems.
- Other technologies/products related to the manufacturing field.

All **MANUNET** projects must be designed on the following principle: **consortia consisting of at least 2 independent SMEs belonging to 2 participating countries, or 2 regions in different countries.**



# Future of MANUNET

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MANUNET proposes for the next 5 years an effective solution for an integrated and sustainable European manufacturing programme based on national and regional funds and able to effectively complement other continental RTD support calls.

- Constituting a Consortium with longer international extension
- Improving cooperation and coordination among MANUNET and other initiatives at European level
- Supporting technological as well as practice-based innovation. Implementation of annual joint calls.
- Monitoring of funded projects and promoting good practices
- Increasing the SME participation

21 countries/regions: Basque Country, Wallonia, Germany, Catalonia, Romania, Slovakia, Tuscany, Turkey, Israel, Piedmont, Western Greece, Asturias, Switzerland, Castilla y León, Lower Austria, The Netherlands, Nord-Pas de Calais, Russia, Province Gelderland, Province of Overijssel and Norway.



Thank you for your attention!

Cristina Ugarte

cugarte@innobasque.com

