



# Melissa: Internet Based Services for Lean-Logistics in Manufacturing

## Objective ICT-2009.1.3. INFO DAY

Internet of Things and Enterprise  
Environments

Brussels, 18 February 2009



## PROJECT DETAILS

- Title:

**Melissa: Internet Based Services  
for Lean-Logistics in Manufacturing**



- Research domain:

- Services for logistics, Manufacturing, Production Management, Wireless networks, RFID.

- Idea or expertise description:

- Services for complex high performance logistics in manufacturing companies.



## Why now?

European Manufacturing companies can just compete by exploiting proximity to market and flexibility.

- But this produces a huge increase in the number of references
- While logistics in use were designed for pallet level
  - ⇒ As they can not sell complete pallets anymore
  - ⇒ They have to perform complex operations (such as Picking to generate mixed pallets) to which they are not well prepared.

Complex high-performance logistics are required.



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# Interest from/for Industry

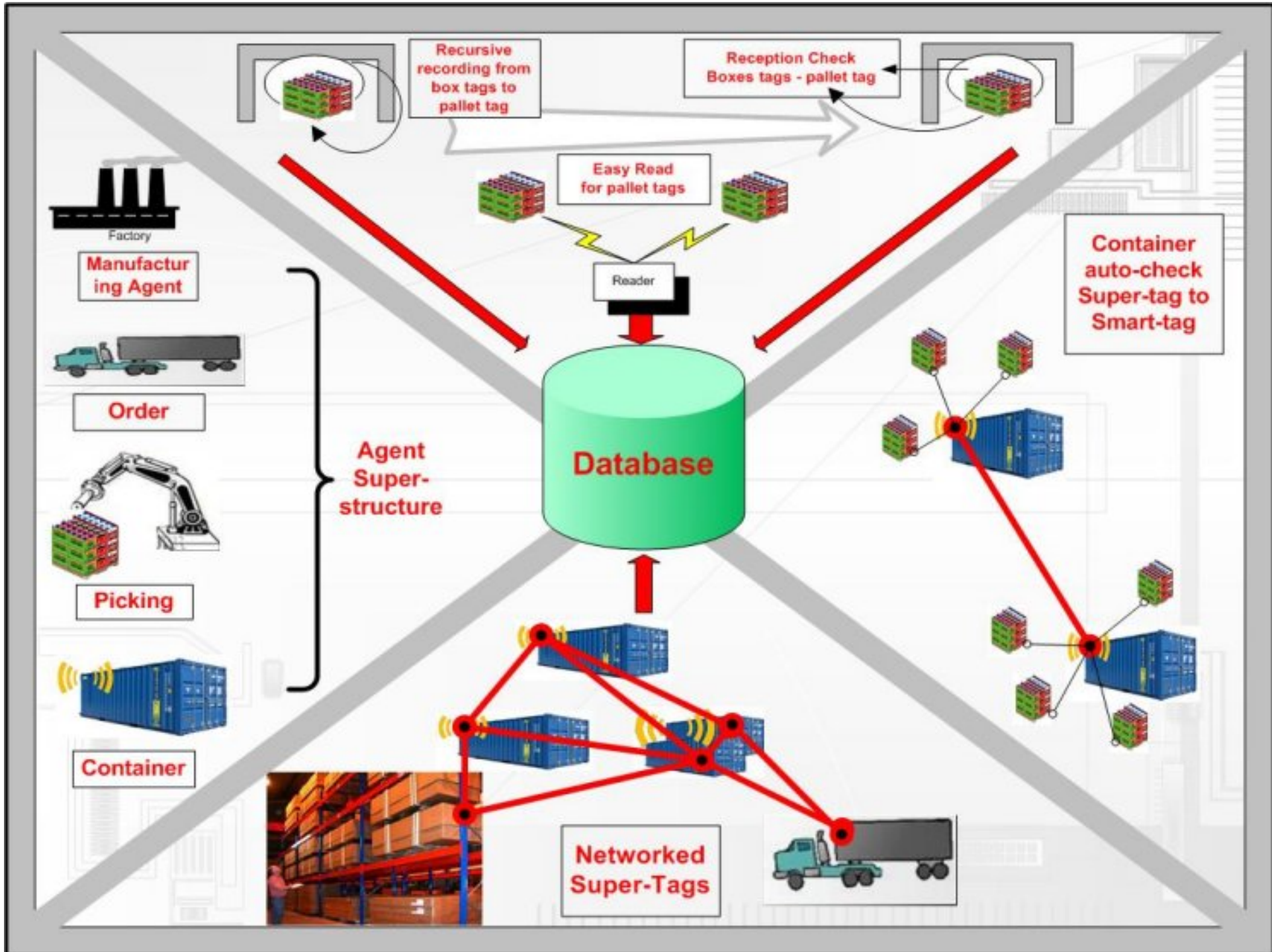
- Increase on the number of references makes unrealistic the work at pallet level in many sectors
- Improve effectiveness of picking operations and order tracking in complex logistics
- Required additional services:
  - MRP, MRPII
  - On-line tracking
  - On-line billing and invoicing.



# Objectives and scope

- Main objectives
  - Provide new services for complex logistics to European Manufacturing Companies
- Scope of R&D work
  - logistics management, MRP, MRPII, Production Planning, Product Tracking, Integrated Systems
- Beyond technical state of the art
  - Specific services for logistics in manufacturing through deployment of the Internet of Things.







# Consortium

- MECALUX (Spain)



- FIIS (Germany)

- KUL (Belgium)



- FEIG (France)

- NTNU (Norway)



- TUD (Germany)

- PREDICT (France) **PREDICT**



- FAU (Germany)

- SINTEF (Norway)  **SINTEF**



- IPB (Portugal)

- VOLVO (Sw-Fr) **VOLVO**



- UBG (Italy)

- REDBITE (UK)  **RedBite Solutions**

**UNIVERSITÀ DEGLI STUDI DI BERGAMO**

- NU (France)

- UCLM (Spain)

Nancy-Université

Université  
Henri Poincaré



# Three layers project

End-users / Innovative Services for Industry  
(PREDICT, SINTEF, VOLVO, REDBITE)

## GENERIC

Global Business Scenario

Requirements and Specs

Evaluation

## SPECIFIC

End-user 1: Evaluation

End-user 2: Evaluation

End-user 3: Evaluation

Process management & Performance Measurement  
(IPB, UBG, NU, KUL, NTNU)

Enablers / Hardware Communication services  
(FIIS, FEIG, TUD, FAU)



# Structure of the project

- Groups:

## 1. Hardware Communication services

(**FIIS**, FEIG, TUD, FAU)

Hardware, Service oriented architectures (SOA/ESB), Software

## 2. Process mngmnt & Performance Measurem

(IPB, **UBG**, NU, KUL, NTNU)

Process modeling, Process management, Performance measurement

## 3. Innovative Services for Industry

(PREDICT, SINTEF, **VOLVO**, REDBITE)

E-maintenance, E-logistics, E-Logistics for e-maintenance, E-waste management

## 4. Project Management, Coordination, dissemination - **UCLM**

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# Expected impact

- **EU:**
  - Better exploit closeness-to-market competitive advantages
    - Increase in the number of references => smaller load units
    - Faster response – in deliveries and time-to-market
  - Quality standards & tracking regulation (food & beverages)
- **National:**
  - Competitive advantage for national products
  - Guarantee of origin and quality
  - Special products
- **SME:**
  - more accurate information to customers
  - Competitive advantage.



# Requests/Contact details

- To better define/try the package of services
- We need more end-users
  - Big companies specialised in logistics
  - Big manufacturers with logistic concerns
- Contact:
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**Thank you**

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European Commission  
Information Society and Media