



# Collaboration of SMEs in supply chains: projects SEAMLESS, KASSETTS and eBEST

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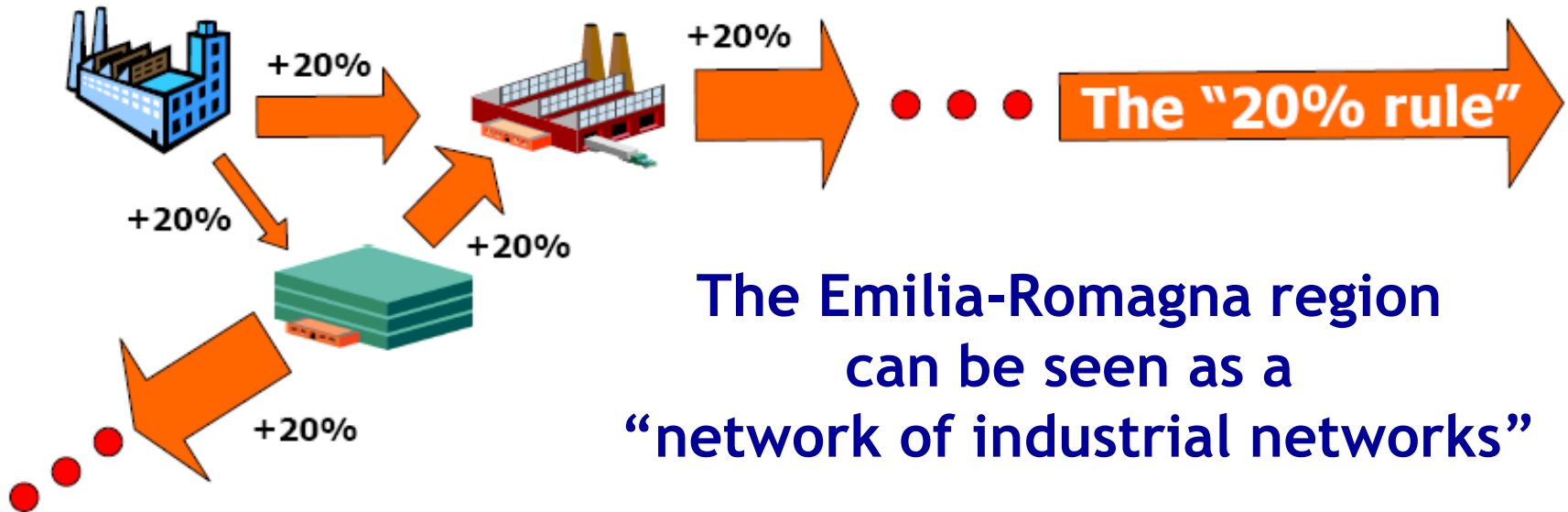


2<sup>nd</sup> B2B LOCO workshop - Portorož 27.05.2011





# SME behaviour - the 20% rule



- ❑ Small size, high interaction, intense transportation flows
  - ❑ Each SME adds the 20% of the **product value**
  - ❑ This means **flexibility** vs. customers and suppliers
  - ❑ A lot of **short-range transports** (80% of them in the radius of 100 km)
  - ❑ And strong need to **exchange documents**



# SME network requirements

## ❑ Communication & collaboration

- ❑ Search for **partners** within the ecosystem and between ecosystems
- ❑ Establish steady **P2P relations** with complementary partners
- ❑ Keep using as much as possible your own **language** and **legacy ICT tools**
- ❑ And nevertheless exchange **business documents** with partners easily

## ❑ Optimised processes

- ❑ Ensure **fast and co-ordinated answer** to customers
- ❑ By making the network behaves as a **unique organisation**
- ❑ And increasing **single company efficiency** (resource optimisation)
- ❑ And **reactivity** (exception handling)

## ❑ Rational outer logistics

- ❑ Save **transport costs** (and possibly CO2)
- ❑ By optimising the use of **internal fleets**
- ❑ And taking advantage of **more convenient offers** from logistic operators
- ❑ Thanks to the **aggregation** of a scattered demand



# The SEAMLESS project /1

## □ Generalities

- **Small Enterprises Accessing the Electronic Market of the Enlarged Europe by a Smart Service Infrastructure**
- EU 6<sup>th</sup> Framework Programme - Information Society Technologies [2003-2006]
- Start date: Jan 2006
- End date: Jun 2008
- Budget: 2.8 MEuro >> Funding: 1.8 MEuro
- [www.seamless-eu.org](http://www.seamless-eu.org)

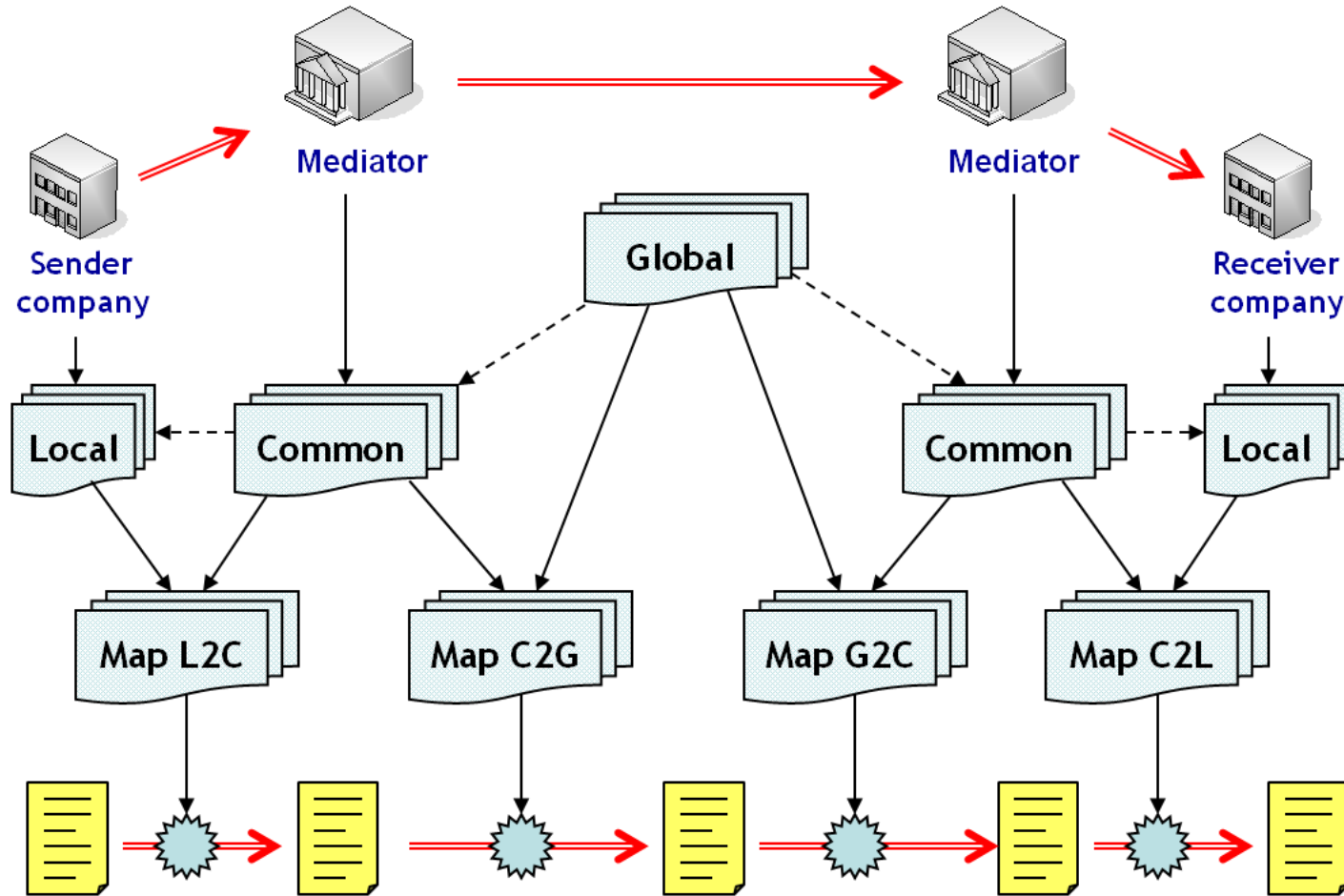


## □ Partnership

- University of Modena & Reggio Emilia (coordinator)
- 4 Universities: Kosice, Maribor, Poznan, Stuttgart
- 4 innovation centres & associations: AITEX, CSTB, JAPTI, PRC SCCI
- 6 software houses & technology providers : ANTARA, ATC ROM, ISOFT, KELYN, T-ONLINE, TIE



# The SEAMLESS project /2





# The SEAMLESS project /3

## □ Results

- Defined a **multilingual ontology** for document exchange and translation
- Developed a networking and data management infrastructure including
- Support to **partner search** (hybrid P2P architecture)
- Support to **negotiation** (configuration, request for quotation, quotation)
- Support to **collaboration** (order, order progress, delivery note, invoice)
- Established a **network embryo** of seven nodes in ES, HU, IT, PL, RO, SI, SK
- Pilots in the textile sector, B&C sector, ICT sector

## □ Lessons learnt

- The **involvement of mediators** is a critical factor to increase ICT adoption at SMEs
- Nevertheless it is very difficult to reach a **critical mass** of users
- **Incentives** can be useful (financial support to enterprise networking)
- **Obligations** are even more useful (mandatory eInvoicing for public administrations)



# The KASSETTS project /1

## □ Generalities

- **Knowledge-enabled Access of Central Europe SMEs to Efficient Transnational Transport Solutions**
- INTERREG Central Europe [2007-2013]
- Start date: Oct 2008
- End date: Sep 2011
- Budget: 2.5 MEuro >> ERDF Funding: 2.0 MEuro
- [www.kassetts.eu](http://www.kassetts.eu)

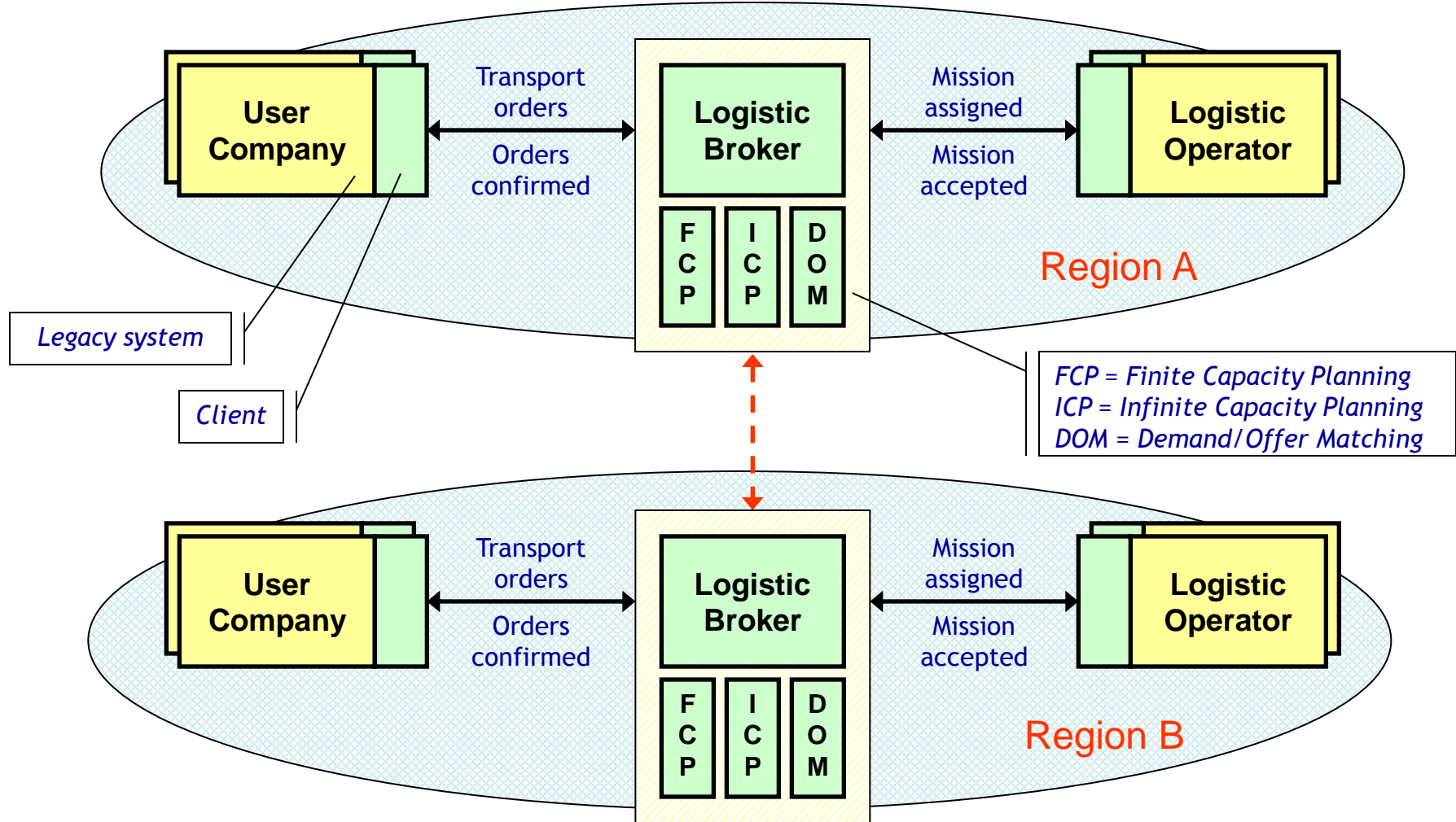
## □ Partnership

- Fondazione ITL (coordinator)
- Universities: UNIMORE; TUKE
- 3 innovation centres: CDV, Fraunhofer IFF, ILIM
- 2 development agencies : DARFU, RDA MURA





# The KASSETTS project /2





# The KASSETTS project /3

## □ Results

- Company/district behaviour analysis by strategic **simulation**
- Transport request **acquisition** (multiple and heterogeneous sources)
- **Finite vs. infinite capacity** planning (known vs. unknown fleet)
- Price list management and mission **cost estimation**
- Mission assignment to the **most convenient logistic operator**
- Automatic generation of pro-forma invoices
- A **network of logistic brokers** in Central Europe
- **Six pilots running** (coordinated by RDA-MURA, Slovenia)
- **Some tens** of companies and logistics operators involved

## □ Lessons learnt

- SMEs can obtain high cost and CO2 savings (**over 20%** in the average)
- But this is often not sufficient to get their commitment
- Many transportation costs are **hidden** (ex-works sales and purchase, bad use of internal fleet)
- A paradigm shift is needed: from **urgent** transports to flexibly **planned** transports
- Involving **logistic operators** is easier thanks to the aggregated demand



# The eBEST project /1

## □ Generalities

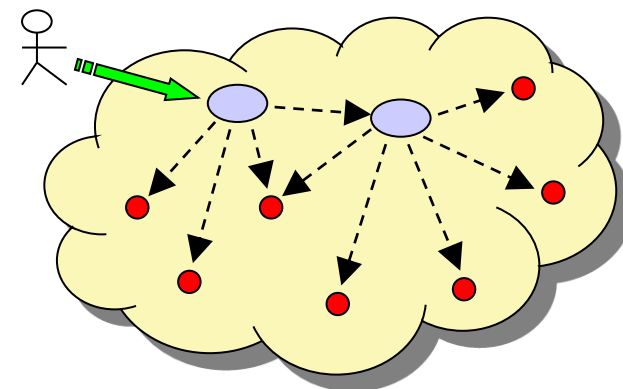
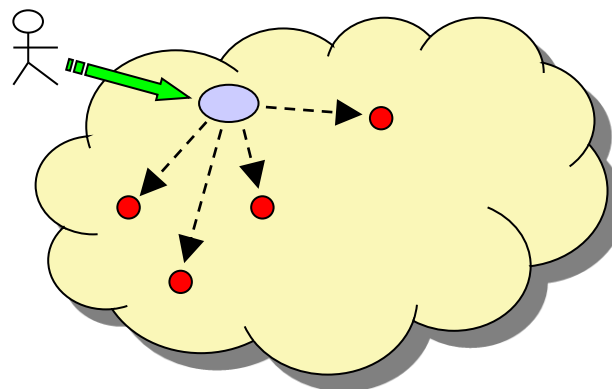
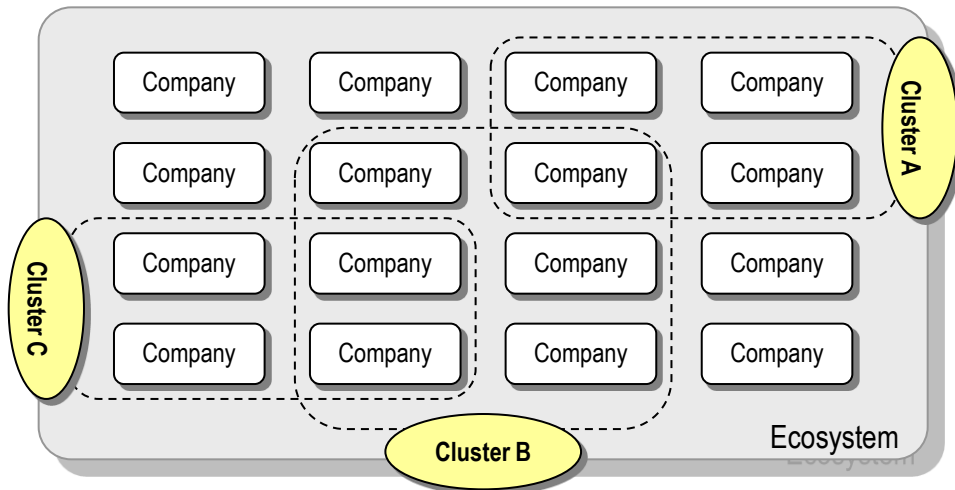
- **Empowering Business Ecosystems of Small Service Enterprises to Face the Economic Crisis**
- EU 7th Framework Programme - Research for the Benefit of SME Associations [2007-2013]
- Start date: Jan 2010
- End date: Feb 2012
- Budget: 2.7 MEuro >> ERDF Funding: 1.65 MEuro
- [www.ebest.eu](http://www.ebest.eu)

## □ Partnership

- CNA Modena (coordinator)
- 5 SME associations: CCI KILKIS, GAIA, OKISZ, SCCI, SIRRIS
- 8 innovation centres: BIB, CORVINNO, Euroconsultants, Netsmart, SATA, Spikes, TUKE, UNIMORE
- 2 SMEs : IDM, TEL&CO



# The eBEST project /2





# The eBEST project /3

## □ Results

- Request for quotation and order **acquisition** (multiple and heterogeneous sources)
- **Distributed process planning** (with dynamic task assignment)
- Manual and automated modes for **internal resource scheduling**
- **Automated exception handling** against perturbations  
(e.g. problems of internal resources, delays from partners, delays from customers)
- Immediate **notifications** of events along the SME network
- Support to **ecosystem shaping** and **new network creation** and set-up
- **Two pilots running** in Italy (network in the textile sector, ICT maintenance sector)
- **Four pilots planned** (BE, GR, HU, SP)
- **Some tens** of companies and **their associations** involved

## □ Lessons learnt

- Focus on SMEs in the service sectors (thousands in our region, neglected by the ICT market)
- Used to collaborate but a higher degree of transparency and efficiency is needed
- Tools for work assignment and “objective” performance evaluation are needed to generate **trust** and a assure **better image** towards the customer



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