

Integrating Regional and Urban Freight Distribution and the Sugar Project

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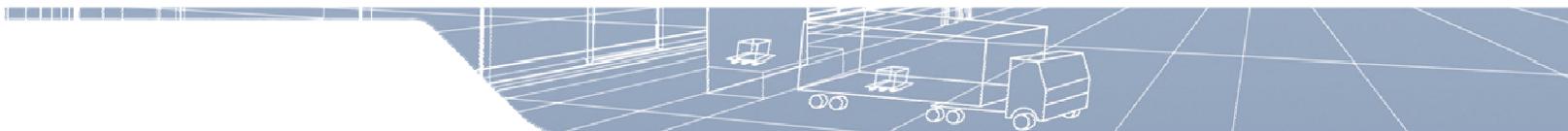
Regione Emilia-Romagna,



Made possible by the INTERREG IVC programme

Outline

- Why Urban Freight Distribution?
- The European Context and European Urban Transport Policy
- The SUGAR Project
- The SUGAR AWARD
- Conclusions



The context

- **Urban Freight transport and Distribution (UFD) has a growing importance in the political agendas of EU cities and regions as it rises manifold challenges related to congestion, environmental protection, energy consumption, logistics management and business models.**
- **Public authorities will play a key role in developing measures and actions aimed at optimising UFD and making their territories more attractive and liveable, also following the EC Action Plan on Urban Mobility.**

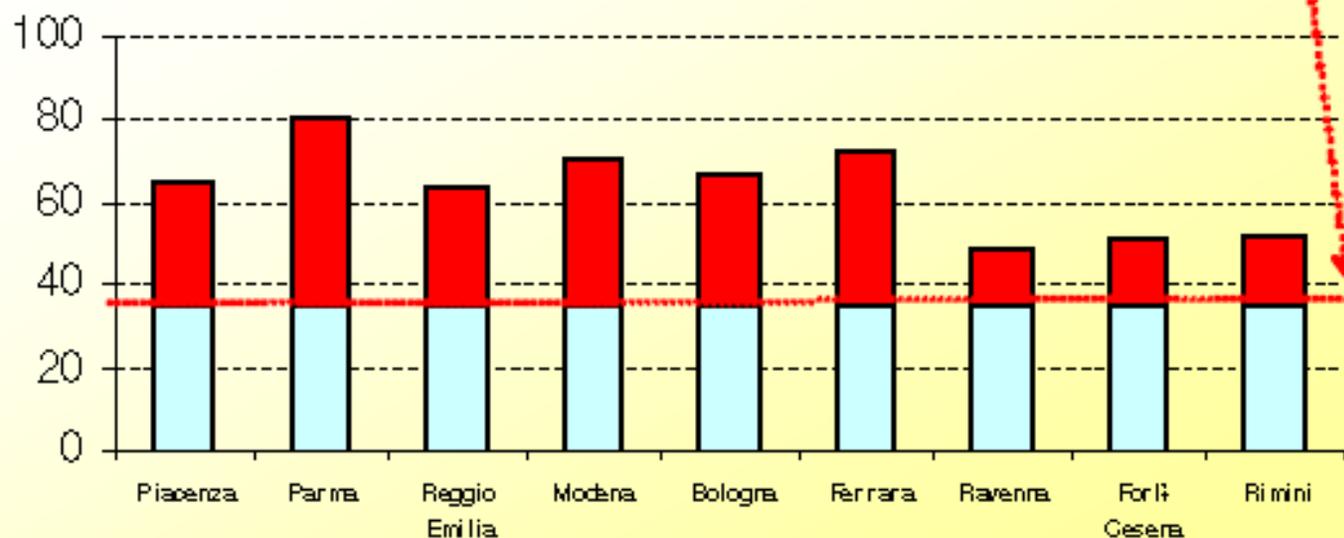
The context

- **Developing efficient UFD systems in urban and metropolitan areas has nevertheless become an increasingly complex task which deals with:**
 - urban and transport planning,
 - infrastructural development,
 - technological and technical innovation,
 - new private logistics initiatives (green distribution),
 - business models of distributors and of the final customer
 - governance consolidation.

Urban Freight Distribution Policy: Why

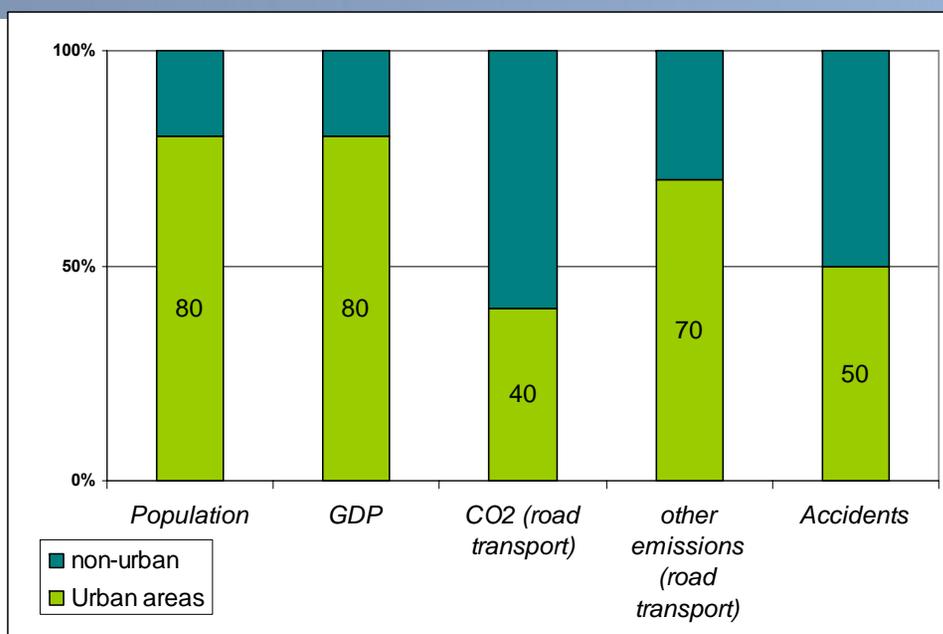
PM 10 - Superamenti del limite giornaliero per la protezione della salute umana ($50 \mu\text{g}/\text{m}^3$)

limite nell'anno (DM 60/02)



Fonte: ARPA Emilia-Romagna (annuario regionale dati ambientali, edizione 2005)

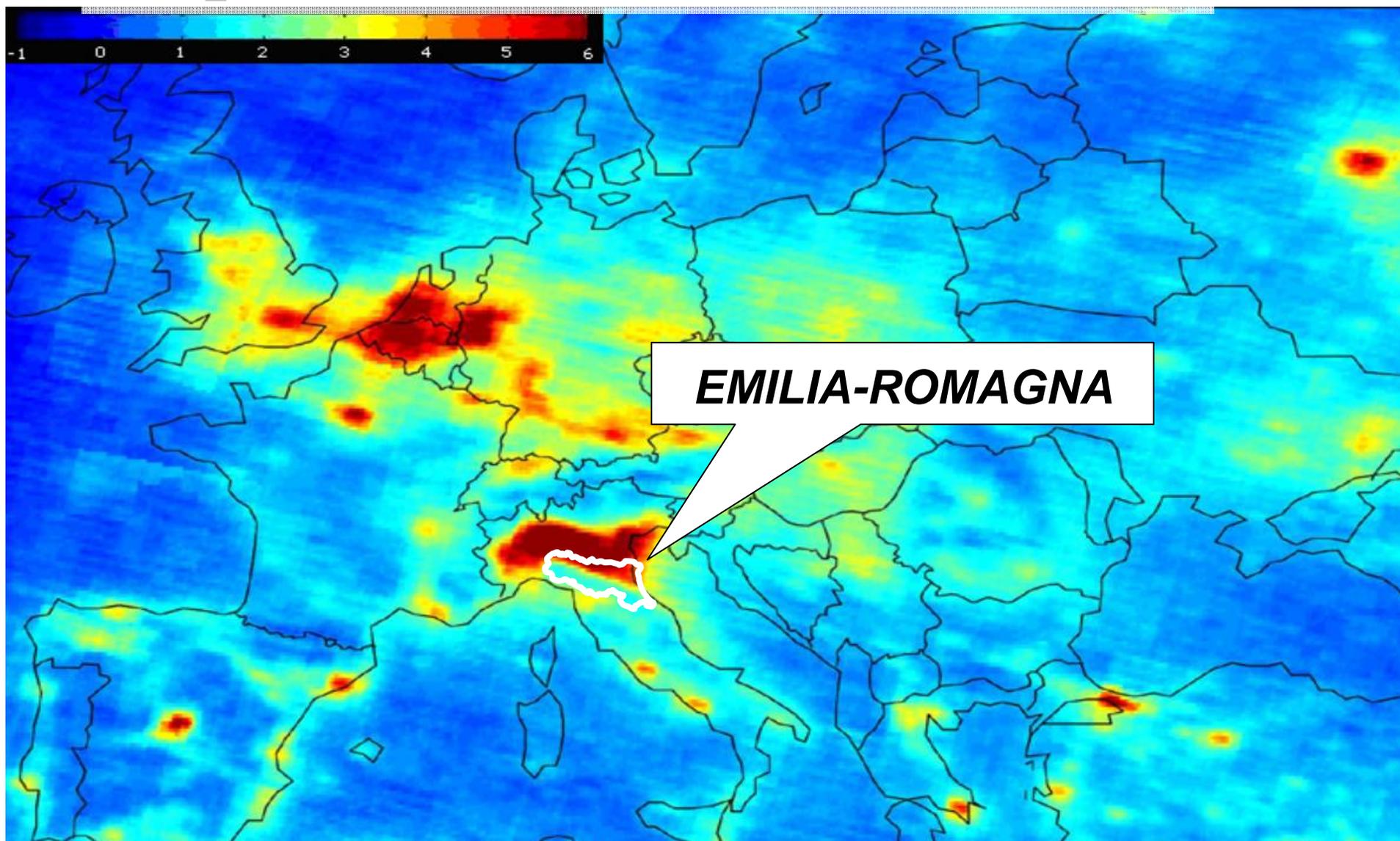
Urban Freight Distribution Policy: Why ?



- **Urban areas are vital to the economic, environmental and social future of the EU**
- **Urban mobility contributes both to economic efficiency and to the quality of life of urban population**
- **Urban mobility is increasingly challenged by negative impacts of transport**

How to increase mobility while reducing congestion, accidents, air pollution and noise is a common challenge to all major cities

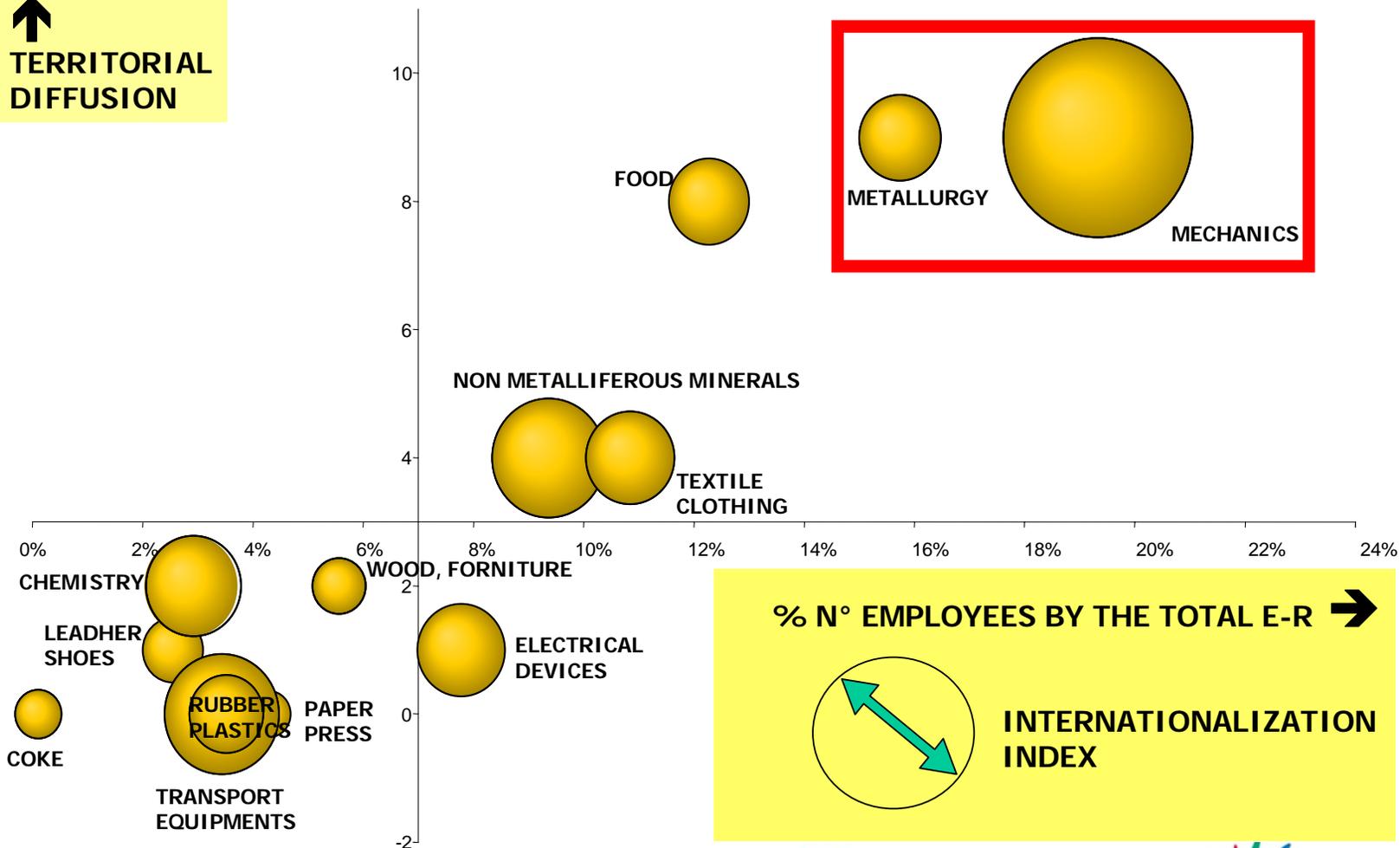
NO₂ CONCENTRATION IN EUROPE



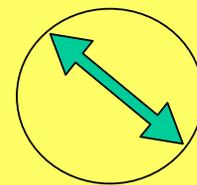
MANUFACTURING SECTORS



**TERRITORIAL
DIFFUSION**

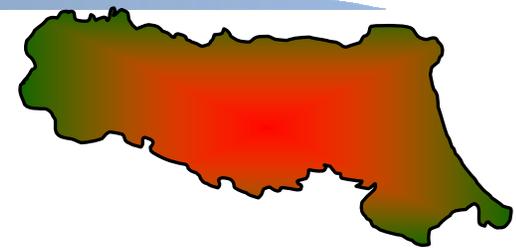


% N° EMPLOYEES BY THE TOTAL E-R →

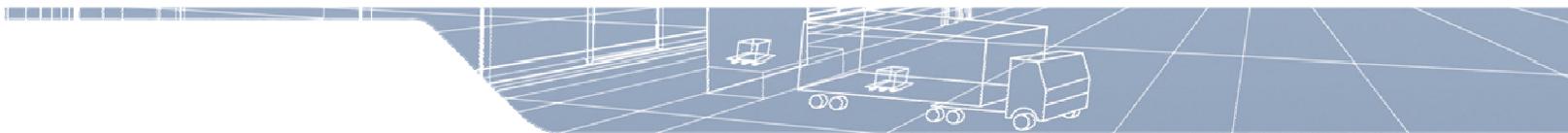


**INTERNATIONALIZATION
INDEX**

ECONOMIC STRUCTURE



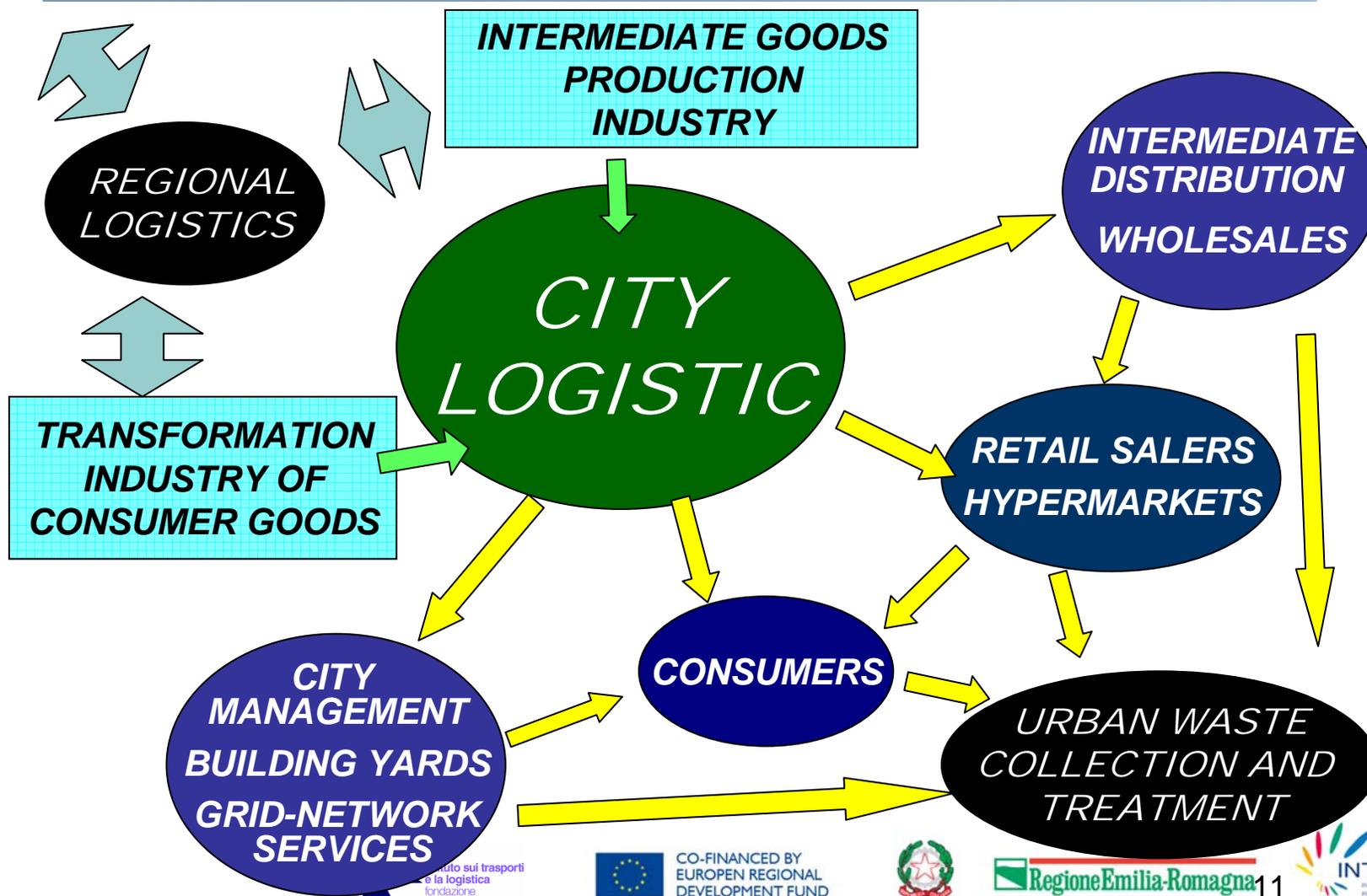
- **Over 400.000 active firms**
 - (almost 1 every 10 inhabitants)
 - Mainly SMEs
- **More than 90% have less than 50 employees**
 - the average firm has 3.5 employees:
 - 7.4 in manufacturing,
 - 2.6 in service sector)
- **There are more than 110.000 firms in the industrial sector**



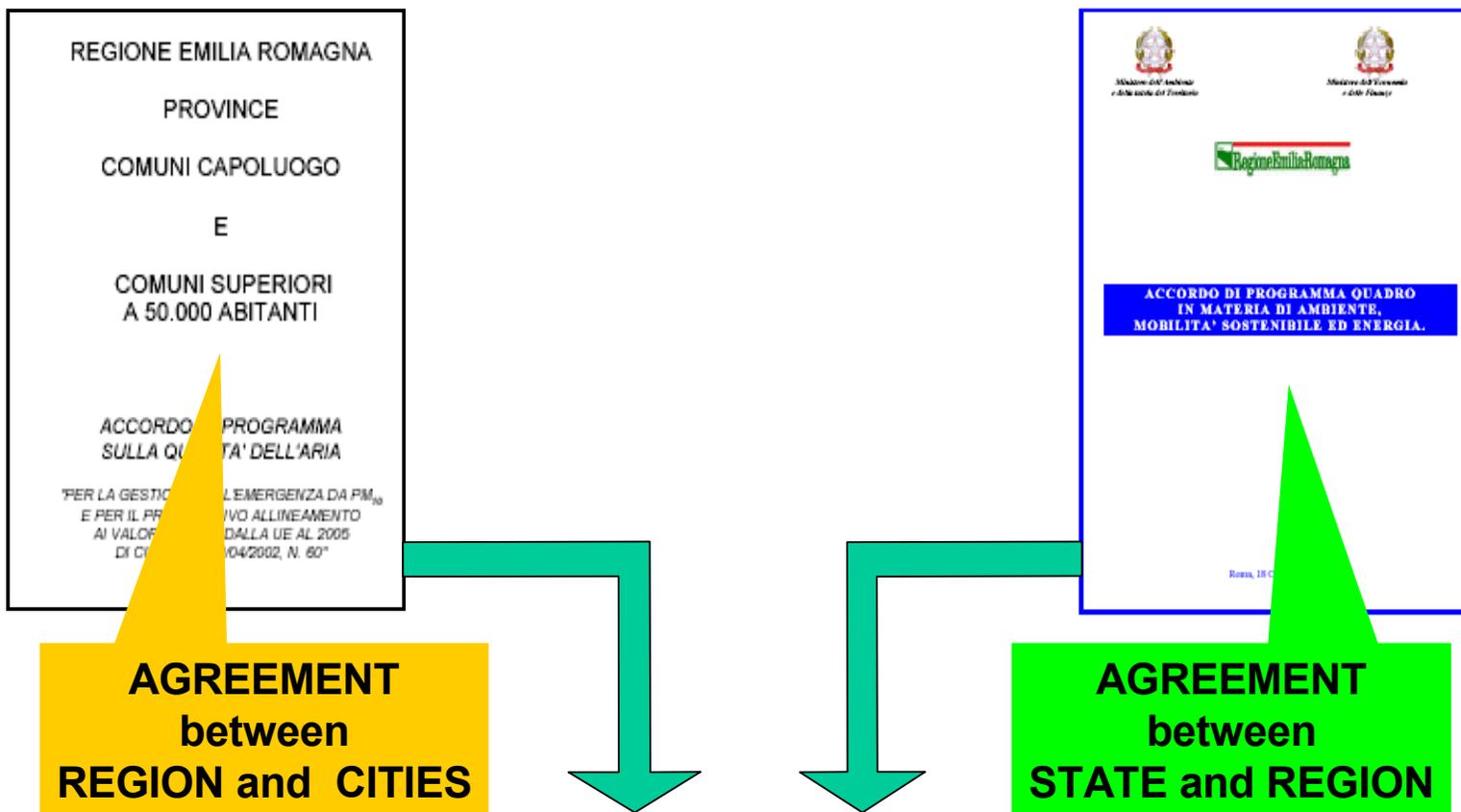
SIDE EFFECTS TO BE FACED

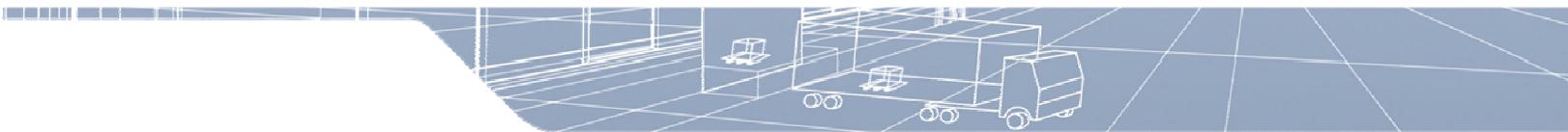
- **POLLUTION** (maximum level in Europe: PM10, NOx, CO, ...)
- **DISEASES** (very high health costs on regional&local budgets)
- **CONGESTION** (traffic jams and waste of time all over the entire transport network, not only at urban level)
- **HIGH COSTS OF PRIVATE AND PUBLIC TRANSPORTS** (lot of money wasted by industry, services and public administration)
- **LOSS OF COMPETITIVENESS BY COMPANIES IN THE GLOBAL MARKET**

MEASURE 5: CITY LOGISTIC

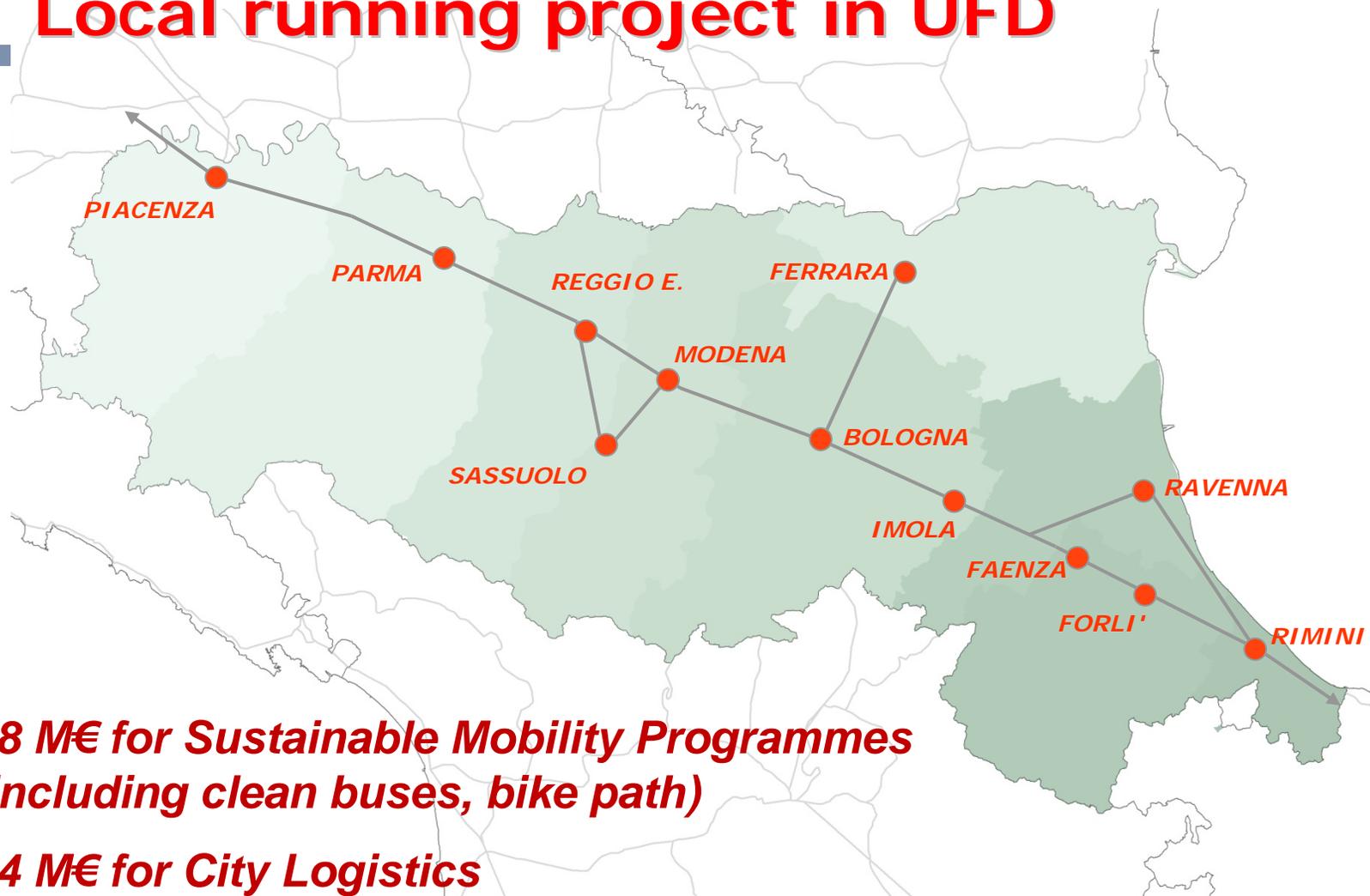


EXTRAORDINARY MEASURES in Emilia Romagna



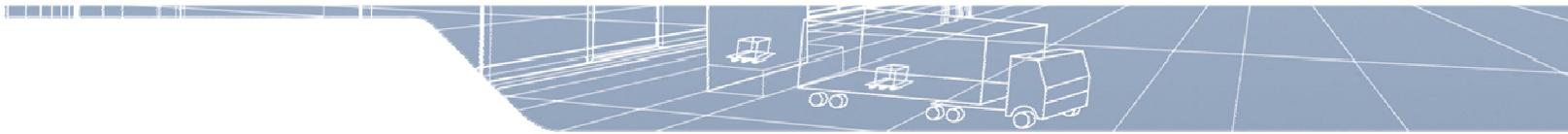


Local running project in UFD



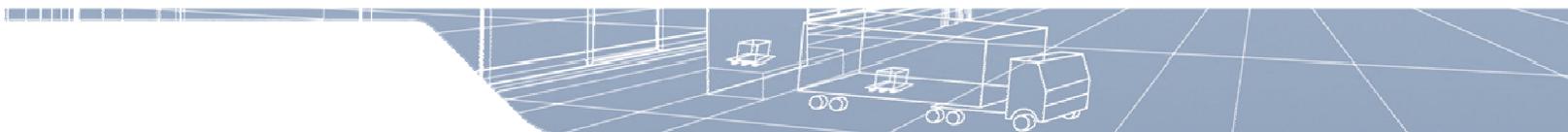
Urban Freight Distribution

- **Reduce congestion**
 - 25% of traffic due to freight distribution in cities
- **Improve Quality of Life**
 - Reduce pollution (> 40% of PM10 and NO.x)
- **Improve efficiency**
 - Business sustainability (against “diseconomy”)
 - timely and useful information exchange between supply chain partners (stakeholders)
 - exchange of information between public and private organizations (statistics).
- **Enhance safety and ICT security**
 - ensure that critical information is captured and disseminated to the appropriate facilities and organizations.



Urban Freight Distribution: Some Peer Review Findings

- **Freight transport *is not a high policy or action priority* for many cities but is perhaps one of the biggest threats**
 - Freight movements contribute significantly to the negative impacts
 - » 10% of all traffic movements
 - » 20-30% of all vehicle km
 - » 16-50% of emissions of air pollutants
 - High ambitions to become a “logistics centre” without understanding the implications arising from increasing logistics activities
 - Competition between cities for new businesses undermines the cities sustainable transport efforts
- **Evidence of difficulty in finding solutions – attempts to consolidate and coordinate distribution activities failed**



New logistic concepts for advanced UFD

- **The main objectives in UFD policy are improving accessibility and reducing the adverse effects of freight transport. This can be done by:**
 - reducing the number or trip-ends;
 - reducing the number of kilometers driven;
 - minimizing the use of large vehicles;
 - minimizing the effect of vehicle-use.
 - Adoption of green vehicles
 - Supporting innovation at IT or organisational level
- **The logistical solutions that can be used to meet the above requirements and at the opportunities these logistical solutions offer to make use of new transport technologies**

European Urban Transport Policy

- **White Paper on European Transport Policy (2001)**
 - Recognizes the huge upsurge in traffic in towns and the related problems of pollution, congestion and safety
 - Principle of subsidiarity: Commission confines itself to promote good practice
 - **White Paper Mid-Term Review (2006)**
 - *Green Paper on Urban Transport (2007)* to identify added value for local initiatives at EU level
 - **Strategy on the Urban Environment (2006)**
 - Importance of high quality urban areas in delivering the objectives of the EU Lisbon Strategy
 - Transport plays a key role in the sustainable development of cities
 - The commission strongly recommends local authorities to develop and implement Sustainable Urban Transport Plans (SUTP)
 - SUTP concept developed by *Expert Working Group on Sustainable Urban Transport Plans (2004)*
- **Urban Transport is a priority for the EU Commission in 2007**
- **Action Plan for the Deployment of ITS in Europe, (2008)**
- **Urban Mobility Action Plan (2009)**

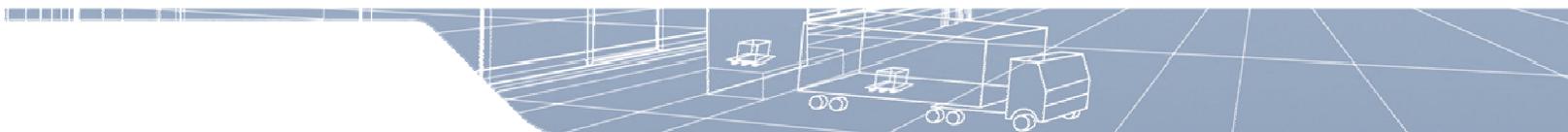
ITS in Europe

- **Action Plan for the Deployment of Intelligent Transport Systems in Europe**
- **The main policy objectives arising from these challenges are for transport and travel to become:**
 - cleaner,
 - more efficient, including energy efficient,
 - safer and more secure.

"Action Plan for the Deployment of Intelligent Transport Systems in Europe", (2008)

Time-plan in the Action Plan

- Support for the wider deployment of an updated multi-modal European ITS Framework architecture for intelligent transport systems and definition of an ITS framework architecture for **urban transport mobility**, including an integrated approach for travel planning, transport demand, traffic management, emergency management, road pricing, and the use of parking and public transport facilities
 - 2010
- Definition of a set of common procedures and specifications to ensure the continuity of ITS services for passenger and **freight in transport corridors and in urban/interurban regions**. This work should include benchmarking and standardisation on door-to-door information flows, interfaces, traffic management and travel planning, and, in particular, event and emergency planning
 - 2011



Urban Mobility: an Essential Part of Urban Planning

- **To emphasize the important relationship between urban planning and urban mobility,**
 - e.g. via the concept of Transport Development Areas, by exploring the possibilities of congestion charging and through the spatial relationship of land use and transport infrastructure.
- **The Action Plan for Better Urban Mobility**
 - measures for greening urban transport
 - upgrading statistics and databases on urban mobility.
- **It also calls for the European Commission to draw up a report on urban charging and guidelines on such charging, in order to reduce distortions between railway and road tolls for accessing town and city centres.**

Technologies: a Driver ?

- **Technologies ?**: **ICT solutions**, **Advanced Warehouses**, **Intelligent gates**, **RFID solutions**, **Delivery Certification**, **Green Vehicles**, **ICT Interoperability**, **T&T**,
- **Investments in technology and :**
 - the total amount of money invested to design, realize, implement, and sustain the Urban supply chain
- **Benefits of a technology are the positive monetary gains on the supply chain actors, including:**
 - Cost savings resulting from improving processes
 - Cost savings resulting from eliminating activities
 - Reduction or elimination of miscellaneous costs such as customs fees, pilferage, etc.

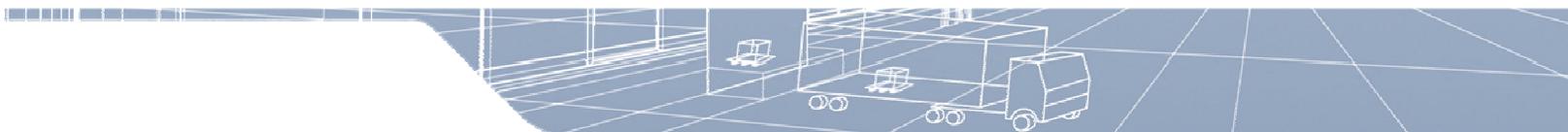
ICT: The Situation Today

- Integrated solutions are only available in closed systems
- Manual Inputs are required to support sharing of data



Promotion of standards

- **Standards allow information sharing and facilitate interoperability**
 - Did you ever buy a CD/DVD and wonder if would work in your player?
 - Have you ever not been able to pull funds from an ATM machine anywhere on the planet?
- **The answer is NO because of industry standards.**
- **The same is NOT true for transportation data**
 - Some data is in EDI format which is primary domestic
 - Some data is in EDIFACT format primary international
 - Some data is in XML formats which is proprietary



The SUGAR project

*Sustainable Urban Goods logistics
Achieved by Regional and local policies*

www.sugarlogistics.eu



Made possible by the INTERREG IVC programme

SUGAR

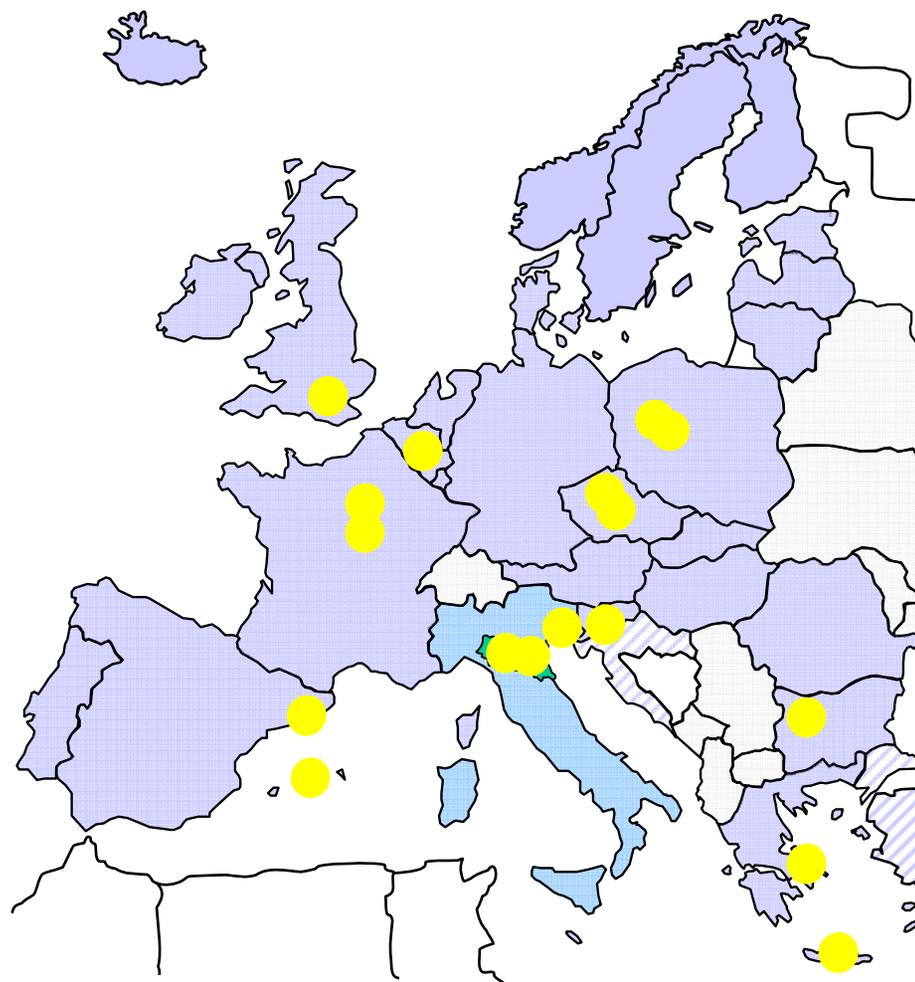
DEVELOPMENT OF POLICIES IN CITY LOGISTICS WHICH:

- REDUCE CONGESTION AND TRAFFIC
- REDUCE EMISSIONS AND POLLUTION
- REDUCE ENERGY INEFFICIENCIES
- IMPROVE INFRASTRUCTURES USE
- ARE ECONOMICALLY SUSTAINABLE
- IMPROVE SUPPLY CHAIN MANAGEMENT

THEMATIC PERSPECTIVES

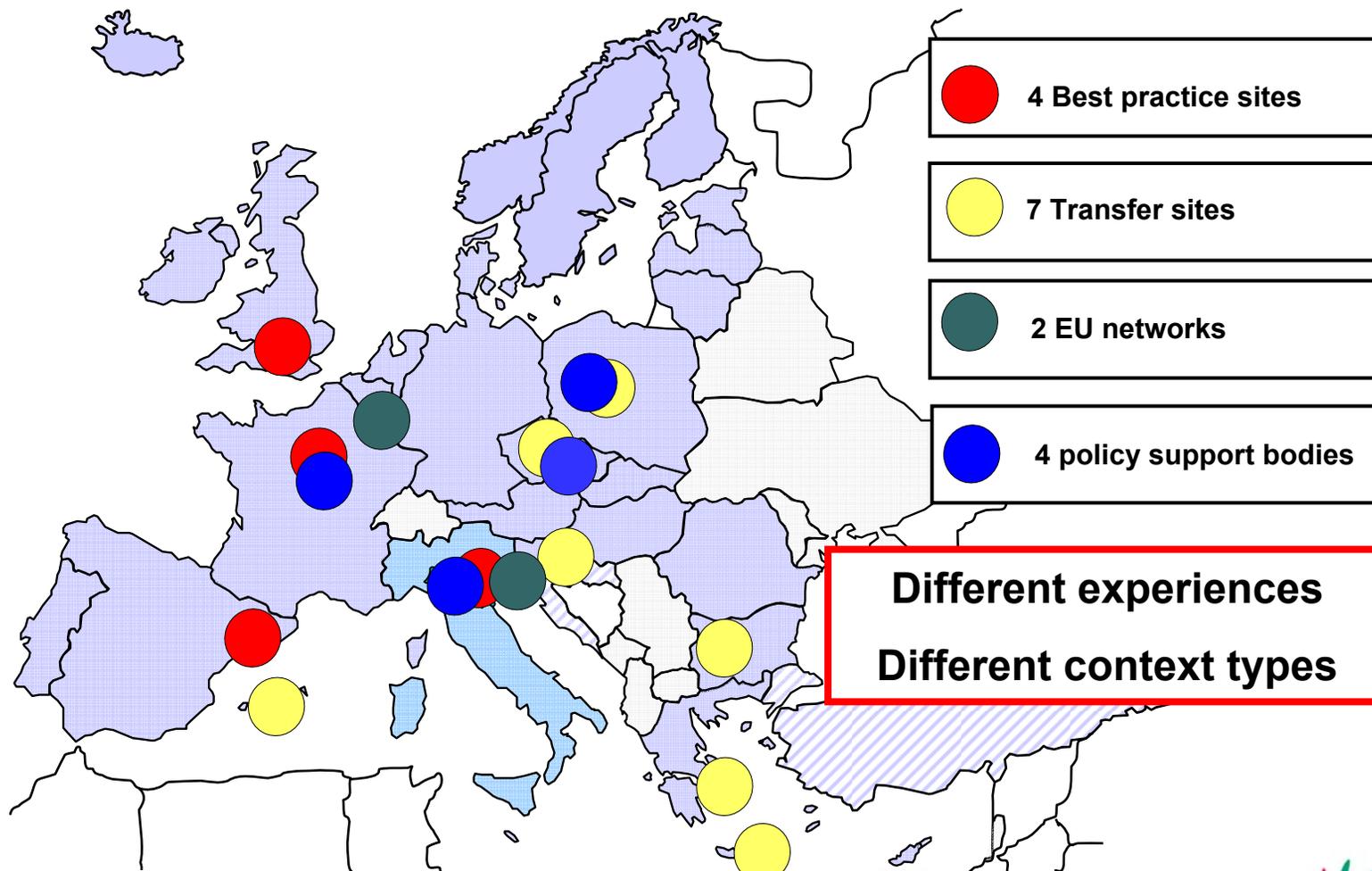


Partners



LP	Emilia-Romagna Region (IT)
P2	ITL (IT)
P3	Transport for London (UK)
P4	INRETS (FR)
P5	City of Paris (FR)
P6	Barcelona City Council (ES)
P7	POLIS (BE)
P8	Central European Initiative (IT)
P9	Palma de Mallorca (ES)
P10	Region of Crete (GR)
P11	Municipality of Athens (GR)
P12	Municipality of Poznań (PL)
P13	ILIM (PL)
P14	Municipality of Vratsa (BG)
P15	Municipality of Celje (SI)
P16	City of Usti nad Labem (CZ)
P17	Czech Railways (CZ)

Partnership structure



POLICIES MAPPING

- ADMINISTRATIVE MEASURES (Advisory, Statutory + Enforcement, Permissive, Incentives)
- ITS & TECHNICAL MEASURES
- URBAN PLANNING MASURES
- INFRASTRUCTURAL MEASURES
- INFORMATION MEASURES
- GOVERNANCE MEASURES
- AWARENESS
- MODELLING TOOLS MEASURES
- SUPPLY CHAIN MANAGEMENT MEASURES

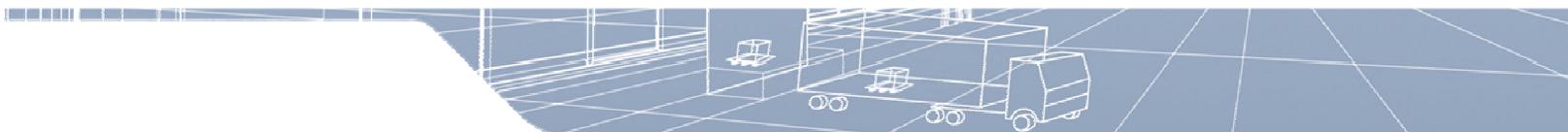
WITH A PROJECT FOCUS ON

- Real policies (best practices)
- Different territorial and policy makers levels
- Policy life cycle (set up, analysis, phases, governance issues, problems, critical success factors)
- Target to policy makers

EXAMPLE OF A TRAINING SESSION

Paris 23-26 NOVEMBER 2009

- **Good Practice Round Table (half day) – theme: UDC**
 - Types and real examples of UDC (with invited experts and policy makers)
 - Preliminary analyses and implementation steps
 - Cases of multimodal UDC (rail for urban freight)
 - Public actions and market distortions
 - Economic sustainability of UDC (real cases)
- **SITE VISIT TO PARIS UDC (half day)**
- **Train the trainers sessions (1,5 day) – theme: Loading & unloading in urban areas**
 - Planning loading & unloading areas
 - Technologies for loading and unloading areas
 - Areas management & control
 - Real examples in EU cities
 - RELATED THEMES: on/off street delivery bays & night deliveries noise reduction



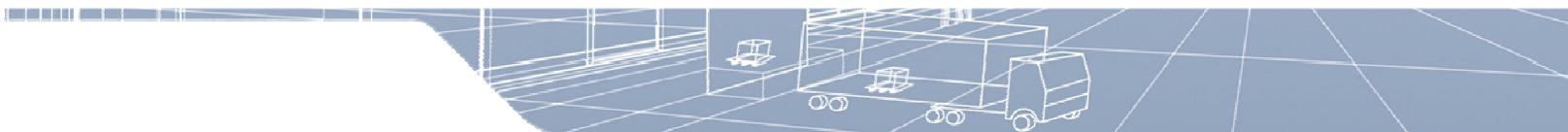
SUGAR AWARD

*Deadline for submission: **December 31, 2009***

www.sugarlogistics.eu



Made possible by the INTERREG IVC programme



What is the Award

The SUGAR award aims at **sharing** best practices and at providing a **platform for communication** and knowledge exchange among cities and local and regional contexts all over the EU on city logistics public actions which go into four directions:

- 1. Have a sound technical and analytical background.**
- 2. Are economically sustainable.**
- 3. Match business needs and environmental protection.**
- 4. Rely on public-private cooperation in city logistics solutions implementation.**

Award Categories & the future winners

- **The SUGAR award is structured in two categories:**
 - **Metropolitan areas and large cities:** applicants to this category can apply with public actions, measures and policies with focus on metropolitan areas and big conglomerations, Larger Urban Zones and regional contexts.
 - **Small and medium sized cities:** applicants to this category can apply with public actions, measures and policies with focus on the local and Municipal level, in cities or areas with less than 300.000 inhabitants.

Award Categories & the future winners

- Winners will be recognized as **examples of excellence inspiring other cities**, local and regional contexts and stimulating further development of city logistics initiatives.
- Winners will be awarded by Regione Emilia-Romagna during a ceremony of assignment in Bologna (Italy) on 25th January 2010 at Regione Emilia-Romagna venue.
- The day foresees technical sessions, political debates and the awarding ceremony.

Award Categories & the future winners

- **Travel and accommodation to attend the awarding ceremony in Bologna (Italy) for one person for each winner will be paid by the SUGAR project.**
- **One person for each winner will have the chance to participate to selected city logistics training sessions organized within the SUGAR project.**
 - The travel and accommodation of the winners to attend the sessions will be paid by SUGAR.
- **Details and procedures on the travel and accommodation arrangements (according to the rules of the financing EU Programme Interreg IVC) as well as on the dates of the training sessions will be defined with the winners.**

Who can apply

- **The SUGAR Award is open to:**
 - public authorities and
 - bodies governed by public law (according to Directive 2004/18/EC)
 - in the eligible area of INTERREG IVC European Territorial Cooperation Programme (www.interreg4c.eu), which covers the whole territory of the European Union with its 27 Member States - including insular and outermost areas.
 - » Norway and Switzerland are full members of the Programme and public authorities and bodies governed by public law from these countries are welcomed to participate to the SUGAR Award.

Contacts



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