New approaches for the last-mile: the Smile Project

CIVITAS webinar on Green vehicles for urban freight delivery
24/07/2014

Presented by:
Giuseppe Luppino - ITL
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- Some first results from pilots
- Considerations for Public Administrations

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ITL

- **ITL** is a no-profit research body with HQ in Bologna
- **Partners:** Emilia-Romagna Region, Provinces, Municipalities and Universities from the region and the Ravenna Port Authority. 100% PUBLIC
- **Mission:** It relies on a stable network among public and private actors to develop specific operational, study, research projects and support policy making, also thanks to the set up of EU funding requests.
- ITL is in charge of the Presidency of the **Open ENLoCC network** (European Network of Logistics Competence Centres – www.openenlocc.net), 17 LoCCs from Europe.
Range of action

(1) Industrial logistics in production systems
(2) Transport and spatial planning
(3) City Logistics and urban freight distribution
(4) Supply chain management in specific sectors (i.e. healthcare, agro-food, dangerous goods)
(5) Logistics training
(6) EU policies
(7) Logistics statistics
(8) ICT for supply chain management
(9) Co-modality and nodes/services development

Supporting Regional and Local Administrations

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### Pollution

PM10 - N° Superamenti Giornalieri Limite di 50 μg/mc per Città > 50.000 abitanti in RER. Periodo 2005-2010

#### Numero superamenti

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**Source:** Arpa Emilia-Romagna

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Deliveries and operators

Daily deliveries

- Own Account: 10
- TA non local: 14
- TA local: 20
- TA regional: 45
- Express courier: 80

Source: ITL - SCS, Progetto SONORA (ETCP Central Europe)

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Policy sandwich

AWARENESS

RULING - PLANNING

Spatial - transport planning
Land Use

Pricing – Access ruling

DEVELOPMENT

Transport infrastructures

Logistics Supply

OPTIMISATION

Demand management

ICT

Fleet management

GOVERNANCE

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• EU MED project on city logistics (also small scale ones)

Development and implementation of innovative strategies, plans and measures to obtain energy-efficient mobility solutions in intelligent MED cities.
4 Pillars

• The project has several pilots in different topics but all related to the city logistics

• In particular the SMILE project has 4 main topics:

  Electric Mobility
  • Barcelona
  • Valencia
  • Bologna

  Green labeling
  • Valencia
  • Montpellier
  • Rijeka

  Waste logistics
  • Bologna
  • Piraeus
  • Barcelona

  ICT solution
  • Piraeus
  • Montpellier
  • Rijeka

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Electric Mobility: Emilia-Romagna case

• The electric mobility plan of the Emilia Romagna Region:
  • The Agreements
    • In December 2010 agreement among the Region, the Municipalities and ENEL SpA (first agreement between a national power supplier and a Regional Government)
    • Since 2011 other agreements with other Municipalities and power suppliers (Hera, Iren and CEI-CIVES)
    • **Main result**: Interoperability of the charging stations and infrastructural network
  • Harmonization of the access in city centres
    • Agreement with all Municipalities to harmonize the access in the city centre for electric vehicles (including freight vehicles):
      • **No restriction** for access in terms of time windows
      • **Free parking**

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Electric Mobility: Emilia-Romagna case/2
Electric Mobility: Emilia-Romagna case/3

RULING - PLANNING

NETWORK PLANNING AND BUILDING

INDIRECT INCENTIVES

DEVELOPMENT

POLITICAL DIRECTION - INVESTMENTS

OPTIMISATION

Demand management

INTEROPERABILITY MiMuovo CARD

Fleet management

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Electric mobility for urban freight transport and urban distribution centres

BARCELONA

Ajuntament de Barcelona

TNT

CENIT

sure we can

VALENCIA

InnDEA

Valencia

AJUNTAMENT DE VALENCIA

Fundación Valenciaport

Comercio Histórico Valencia

Cercanías Valencia

ASME

SEUR

vanAPEDAL

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Green Labelling

• A variety of recognition schemes

• With 2 main issues
  1. Voluntary systems Vs Ruled systems
  2. Target of the (own account) fleet

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Green labelling/2

am 9.00 – 10.30 pm 15.00 – 16.30

from Monday to Friday - LTZ

Freight distribution vehicles up to 3,5 tons
Third party

Minimum EURO 4 vehicles
LPG/Methane vehicles
Electric vehicles (access h24)
Green labelling/3

RULING - PLANNING
- Spatial - transport planning
- Land Use

DEVELOPMENT
- Transport infrastructures

OPTIMISATION
- OWN ACCOUNT
- ICT
- Fleet management

INDIRECT INCENTIVES

SUPPLY INNOVATION

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Results

Pilots are still running or in some cases in the planning phase.

- Cargo bike in Barcelona and Valencia – 600 deliveries per month vs 110 from other experiences in Sant Andreu (2007)
- Interest from the operators on the scheme and new cooperations with express couriers
- Interest from the PA to continue emission savings

Distance savings

Pilots are still in the development phase

- Incentives to the transport operators to be more efficient and green
- Potential harmonization if rules are applied in metropolitan/regional area
- Rules certain and clear make possible investments from private

Source: CENIT & Ajuntament de Barcelona

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The citygoods model 2.0, a new tool for the analysis of urban freight demand and the evaluation of its external effects.

generation & distribution of freight movements in urban areas

Focusing on user defined supply chains and traffic zones

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## City Logistics projects

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<th>Models</th>
<th>Ruling/labelling</th>
<th>Best practices</th>
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Range of action

- **Medium-Long distance & nodes-hinterlands global**
- **Extra-urban areas**
- **Wider metropolitan context**
- **Historical & urban centres**
- **Cities**

- **Multimodal transport road-rail-inland-maritime all road transport**
- **B2B Short distance flows**
- **City logistics freight & service**

LAST MILE INTEGRATION INTO SUPPLY CHAINS

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Attention to Business models

- **Strategy**
  - If business model is unknow, the strategy is uncertain

- **Innovation**
  - New rules and new technologies create new Business models (tricycle, Electric deliveries, e-commerce)

- **Public administration role?**
  - Anticipate the market with new rules made with the private also with Public-Private initiatives

- **Harmonization of the rules**
  - At least in neighbouring areas, to simplify rules for the private operators

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And more in http://smile-urbanlogistics.eu