CITY LOGISTICS IN EUROPEAN CITIES

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Paris Sustainable City Logistics Charter, Sept 18, 2013

- One objective: half of delivery vehicles to be non diesel by 2017
- 16 measures to reach the objective
- One strategy missing: enforcement
New demands for urban freight

• Clients are served despite difficult urban conditions
• The urban economy today:
  – Less inventory and more frequent deliveries
  – Less independent retail activities, more professional transport
  – More service activities, increased demand for express and courier
  – Explosion of e-commerce and home deliveries
• The Paris region: one million deliveries every day, of which 40% happening within the city of Paris, because of a very high concentration of jobs
E-commerce: fast increase since 2003

- Today, 9% of European retail value, 10% in the US
- 40% of UPS deliveries in the US and Canada
- 20% of French e-shoppers are delivered in drop off points, fast increase in supermarkets’ « drives »
Social and environmental impacts

• A few innovative sectors, many routine operations
• 12,000 small freight transport companies in the Paris region, half of them not legally registered
• Freight: a quarter of urban transport-related CO₂, a third of NOₓ and half of particulate matter
Five Best Practices identified

- Topic 1: Consultation and partnerships
- Topic 2: Innovative traffic and street space management
- Topic 3: Low emission zones, environmental access regulations
- Topic 4: Land use, logistics planning, building codes
- Topic 5: Innovations in city logistics
Topic 1: Consultation and partnerships
Discussing with the industry

- Negotiating with trucking and business organizations
- Paris Sustainable Urban Logistics Charter, September 18, 2013
- Freight Quality Partnerships in the UK
- Transport for London: FORS
  - FORS: Freight Operator Recognition Scheme
  - Bronze, silver or gold medals to truck companies
Multi use lanes in Barcelona

Six boulevards today are “multi use”

- 8 am to 10 am general traffic
- 10 am to 5 pm deliveries only
- 5 pm to 9 pm general traffic
- 9 pm to 8 am residential parking

Variable message signs inform drivers of the regulation in real time
Off-peak hour deliveries

• In the Netherlands, the PIEK program develops silent delivery equipment and vehicles
• Dublin, Paris and Barcelona: test of deliveries to urban stores very early in the morning
Topic 3: low emission zones, environmental access regulations

London Low Emission Zone
- For all trucks and large vans
- All the metropolitan area
- Old trucks pay a charge of £100 or 200 per day
- Plate-reading and recognition system
In Tokyo, logistics terminals are part of the urban environment.

A Prologis multi-story logistics terminal located in a central neighborhood of Tokyo.
Building code regulations

Barcelona’s zoning code:

• Off-street delivery bays for commercial/industrial buildings over 400 m²
• Storage area for bottles in all new bars and restaurants
• All car parks close to food markets must provide a space for truck parking
Topic 5: City Logistics

- Optimised management of the movement of goods in cities to provide innovative sustainable responses to customer demands
- Many new players in Europe: Star’s Service, Shurgard, Kiala, La Petite Reine, Green Logistics, Colizen, Cargo Hopper, ByBox
- New concepts: pick up points, automated locker banks, urban consolidation centers, electrically assisted cargo tricycles, use of waterways, rail and public transit
• Star’s Service (2000 employees) has become the main partner for French grocery e-commerce companies, with a high tech vehicle fleet
Pick up points: ByBox, Kiala (UPS), Packstations (DHL)
Cargo-cycles and electric vans in European cities’ core business districts

- Start-up companies (The Green Link, Colizen)
- DHL, TNT, FedEx, UPS
- Large companies: Office Depot in London, L’Oreal, Sephora in Paris
Cargo Hopper in Utrecht (the Netherlands)

- Electric ‘little trains’ of vans
- A large truck from Hoek, a major Dutch carrier, brings the 3 mini trailers every day and places them on chassis
- Solar panels on the trailers’ roof
Barge + cargo-cycles in Paris
VELOCE (Italy)
Vicenza Eco LOGistics CEnter

ELCIDIS (ELectric CIty DIStribution center, La Rochelle, France)

More than 150 Urban Consolidation Centers in Europe in the 1990s, about 20 today

Bristol consolidation center (UK)
London Construction Consolidation Centre

The LCCC (2006 – 2009) was financed by Transport for London and private developers.

Main results:

• Reduction of 68% of the number of vehicles delivering or picking material to the building sites served by the LCCC.

• Average reduction of 2 hours for the delivery time (including loading/unloading) of building supplies.

• CO2 emissions reduced by 75%.

• But costly.
Few alternatives to road transport in cities

- A major cargo-tram project in Amsterdam, called City-Cargo bankrupt in 2009
- Rail freight: impacts, cost and lack of available infrastructure capacity because of a growing passenger rail traffic
- The Monoprix and Franprix experiments in Paris
The Monoprix rail experiment in Paris

- 90 Monoprix supermarkets supplied by rail since 2007
- Trains arrive in a renovated freight terminal close to the center of Paris
- CNG trucks for the final distribution
- +14% costs/pallet
Conclusion

• Urban freight represents many jobs and an important economic asset for cities
• And many environmental impacts
• Local decision-makers can implement simple and effective policies to address part of the issues
• Many freight and logistics issues depend on the economics or on long-term national policies that cannot be properly addressed at the local level
References

• UN Habitat Global Report (2013): Urban Mobility – (with an urban freight chapter)