

Transport and Climate Change Week

Focus 2017: Urban Mobility

18 - 22 September 2017

How can national governments create a supportive framework for a low-carbon urban logistics?

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Workshop II on Urban Freight Berlin, 20 Sep. 2017

Objectives of the day

- Understand the challenges and opportunities for sustainable urban freight solutions
- Learning about existing good practices and how to replicate them
- Participate and exchange (learning by doing) on policy instruments of national and local governments
 - 1. Session 1: National Governments
 - Presentation, introduction of concepts and examples
 - Presentation from partner country
 - Interactive session
 - 2. Session 2: Local Authorities
 - 3. Session 3: Learning from case studies

Opportunities and experiences

- Bottom up approach already happened since the years 2000 in many hundred cities, projects, committees, programmes etc.
- Key approach is learning from good practices
- Design trials in small scale → growth → industry scale?
- Private and public sector cooperation
- Multiple stakeholders
- Tests (pilots) and data collection → decision and control

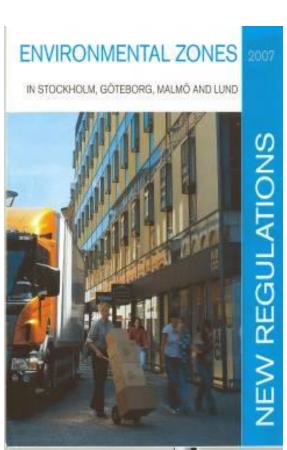
Objectives of case studies on "successful" freight transport operations

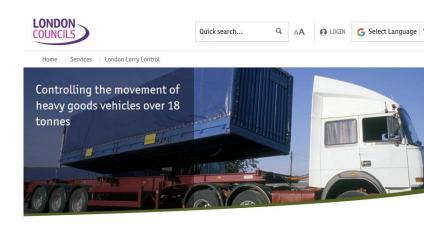
- To inform on cases in urban or long distance transport context
 - Trials and demonstrations of technical feasibility and economic profitability
 - Sustainability
 - Decarbonisation
 - Profitability
 - Social acceptance
 - Impacts estimates or assessments
 - Expectation/assumption: Other businesses are going to replicate and scale up the solution on the market
 - Sources, references
 - Contacts, networking

Regulation on traffic and parking, access restriction, environmental standards and permits

Low Emission ZONE

- Simple and cheap measures any local government can take
- Large impacts on the city's environment (if enforcement is working well)
- New standards used: Euro standards (truck pollution level)
- New concepts such as congestion charging, low emission zones, night delivery time windows, time sharing of the roadspace (multi-use)
- New enforcement measures: dedicated brigades, clock stickers, cameras, ITS





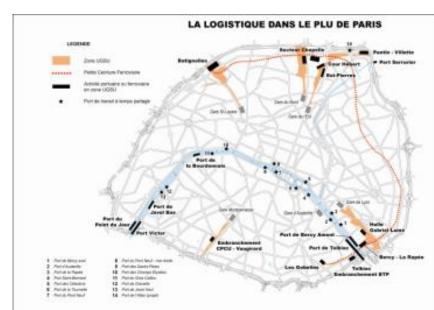
London Lorry Control

Planning, land use, construction code

- Integrating freight into planning policies (urban and/or transport planning) and building codes is an interesting strategy for a local government
- These strategies have both short and long term consequences
- Common concepts: off-street delivery space provision
- New concepts: compulsory storage space in business' premises, multi-story logistic terminals in urban areas, reservation of

logistics land use in urban master plans







Intelligent Transport Systems (ITS)

- Not yet widely used for the management of freight transport in cities but the identified practices have proved very efficient
- Strategies to use ITS to better manage goods transport will develop in the future as ITS become more precise and less costly
- ITS are efficient to enforce access measures
- Crucial in data collection and real time information for truck drivers on traffic and parking conditions
- ITS is tested in several dimensions for routing and scheduling, load optimisation, combination of pedestrian and driving trips



Consultation processes and labelling schemes

- These policies have proved crucial in raising awareness among freight transport companies
- Providing forums for discussion can ensure that a policy targeted towards freight transport is successful
- Giving specific labels to virtuous truck companies (companies using clean vehicles for example) has proved useful in some cities
- Signing "charters" or giving labels is well appreciated but promises must be met
- If not well enforced, the participating truck companies feel frustrated

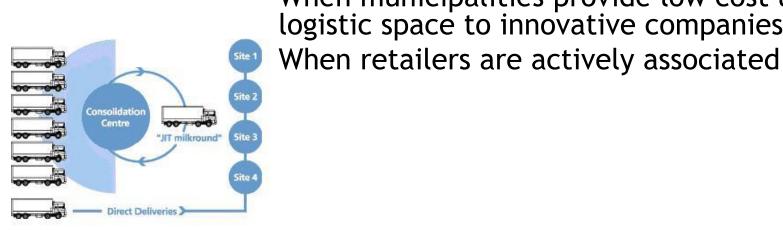




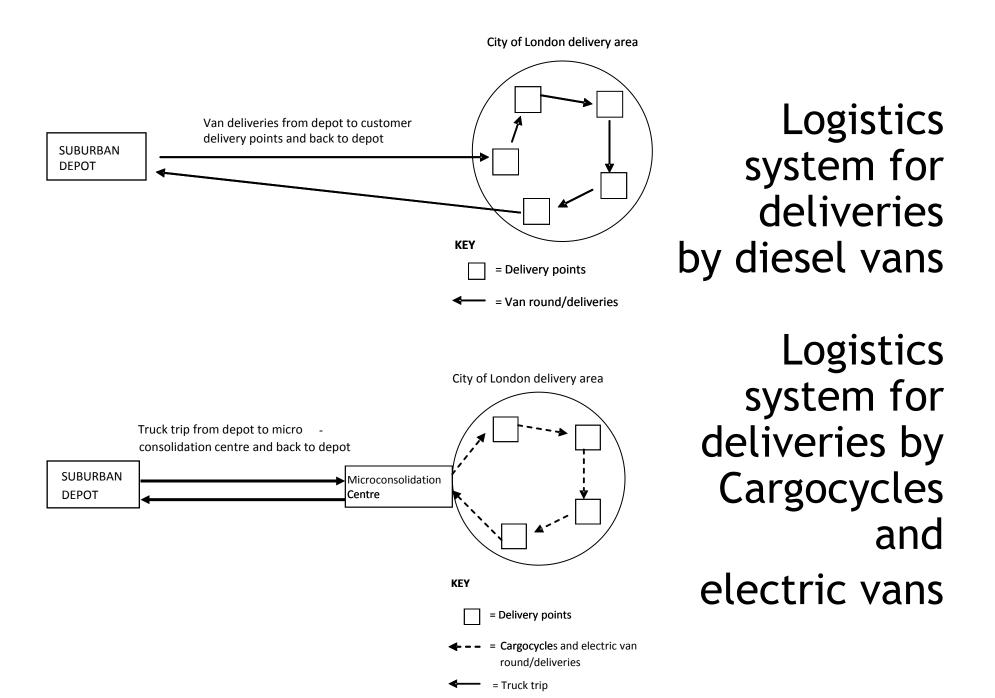
Consolidation schemes and measures targeting urban supply chains

- Setting up Urban Consolidation Centres and urban logistic spaces can be experimented by cities
- Many experiments failed because of costs
- Some experiments met with success:
 - When consolidation centres are specialized (construction sites)
 - When municipalities provide low cost urban logistic space to innovative companies





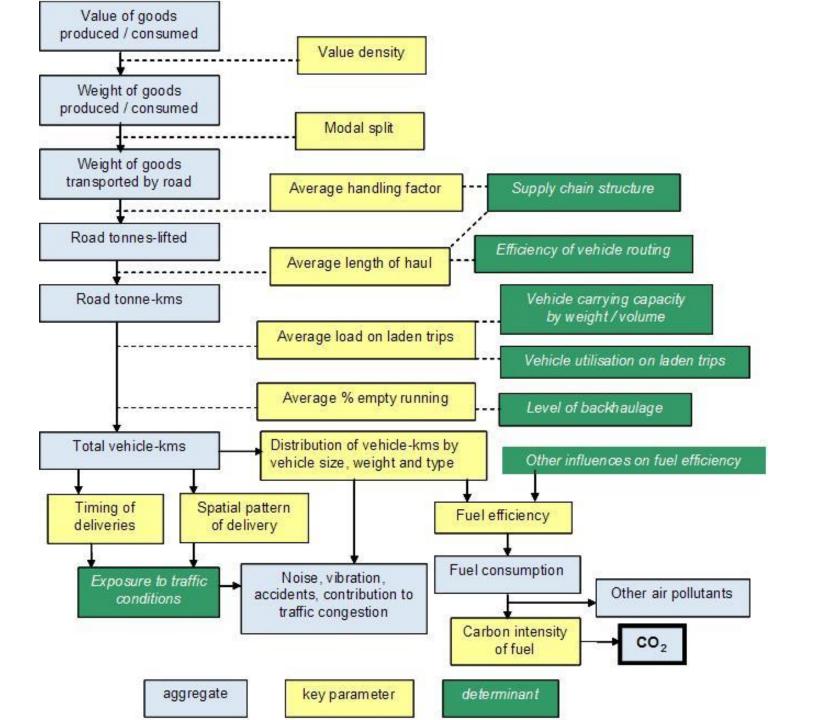




Limits of the system of observations

- + infrastructure + vehicle construction + employees
- = transport & logistics sector management
- + upstream and downstream suppliers' and customers' chains
- = logistics & supply chain management
 - + warehouse & logistics services = **logistics**
 - + vehicle maintenance and repair = freight and fleet management
 - + fuel supply = **freight energy**

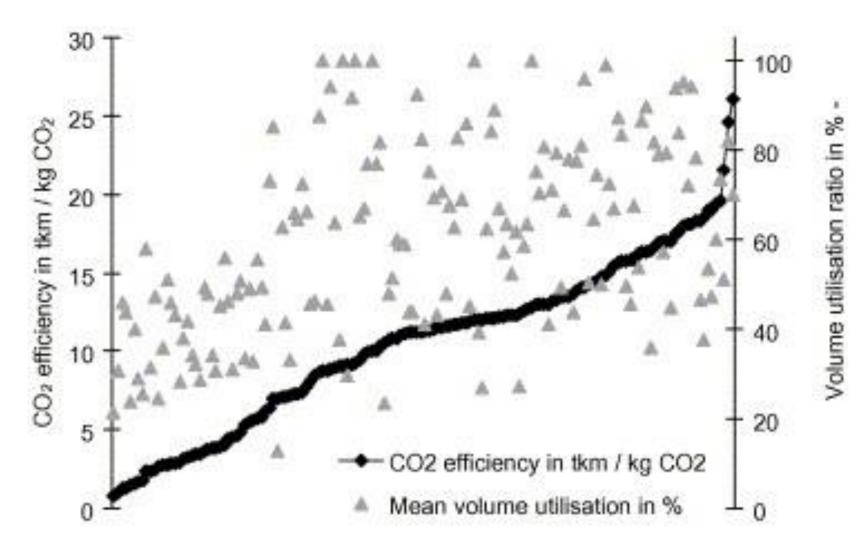
Vehicle + load = **freight transport**



Measuring climate change emission efficiency & sustainability of logistics

green-logistics.

Road freight efficiency and CO₂



Road freight trip data from original survey in Germany 2002 (point = group of trips) Source: Leonardi, Baumgartner 2004: CO2 efficiency in road freight transportation: Status quo, measures and potential, Transport Research D.

Efficiency measures in transport organisation

Answers from 20 container trucking companies in %, 2003

	Implemented		
Measures	yes	partly	no
Semi automatic scheduling system	25	0	75
Route planning software	45	0	55
On-board navigation system in the vehicles	0	10	90
Radio phones in the vehicles	65	0	35
Mobile phones in the vehicles	80	0	20
Coupling of two 20' containers orders to single freight transport	100	0	0
Sub-contracting with partner companies	80	0	20
Informal co-operation - Co-ordinated order delivery with "friends" companies	90	0	10

Efficiency measures in transport behaviour & technologies

	yes	partly	no
Driver training	25	5	70
Fuel use information on board	5	35	60
Fuel use statistics for the company	100	0	0
Additional maintenance (higher frequency)	5	0	95
Low resistance tyres	0	10	90
Wind spoiler	80	5	15
Biodiesel fuel	5	10	85

Summary: role of national government

- Support cities with favourable framework conditions
- Regulation of access to city centres with clean vehicles
- Legislation beneficial for clean vehicles (subsidies, less penalties etc.)
- Funding for trials, tests and pilot programmes (for local authorities such as local development agency and cities)
- Funding for data collection and evaluation (consultancies and industry)
- Funding for research (academics)
- Coordinate and collaborate with multiple stakeholders, at least with the 3 key groups transport industry, cities, research
- No research project on national policies favourable for urban freight in Southern countries, few cooperation, no compendium of good cases