

Dear Reader,

Freight has a significant impact on the environment, quality of life, road safety and attractiveness of a city – and it influences citizens' decisions to walk or cycle or to take the car instead. Mobility management brings many stakeholders together and is an indispensable part of smart logistics: we will help you to find the mobility management tools that cities can use to make logistics smart and sustainable.

This e-update was produced in collaboration with the [SMARTSET project](#) (2013-2016).

Smart logistics: an urban challenge



Source: www.eltis.org

Freight comprises many different services and sectors, such as supplies to the retail sector, parcel and courier services, provisioning of construction sites, or household waste collection. Each has their own characteristics and demands. The demands on urban freight transport have increased due to the concentration of the population in urban areas. Increasing specialisation of the urban and economic system with a global division of production and its associated freight. In urban areas up to 20% of traffic and 50% of greenhouse-gas emissions are generated by freight.

Many different parties are involved in urban freight transport: city authorities, residents, visitors, tourists, producers of goods, shippers, receivers of goods (retail as well as customers), and transport operators. Their interests can be very different, and therefore typical MM-measures such as awareness raising, incentives and dialogue can be very helpful to achieve distribution efficiency, which creates a win-win situation for all parties involved.

Local freight networks



Source: www.eltis.org

A local freight network establishes regular interactions and meetings between all parties involved.

- The city of [Ljubljana \(Slovenia\)](#) led the [CIVITAS ELAN](#) cities in establishing their own local freight networks. In each city, active participation in the freight network was formalised through a memorandum of understanding among members.
- However, both the [CIVITAS](#) cities of [Norwich \(UK\)](#) and [Brighton and Hove \(UK\)](#) struggled to motivate freight operators to attend regular meetings.
- Sometimes it takes a concrete conflict of interest or a common challenge to get all stakeholders involved. In [Rotterdam \(The Netherlands\)](#), the city's intention to introduce time access restrictions met with strong opposition from the freight sector and other stakeholders. But this conflict resulted in a constructive cooperation that laid the groundwork for further steps towards low-emission zones and clean vehicles.
- In London, the 2012 Olympic Games gave a tremendous boost to the spirit of cooperation and positive engagement and resulted in a [Freight Forum](#) that continues to meet twice a year in order to build on this positive experience and deliver a [freight legacy for London](#).
- Local freight networks are also the perfect platform for working on a participatory and strategic Freight Plan for the city (e.g. the [London Freight Plan](#)), which should ideally be a part of the city's Sustainable Urban Mobility Plan (S.U.M.P.).

Delivery and Servicing Plans



Source: www.civitas.eu

On the level of individual businesses, governments can promote the use of as **Delivery and Servicing Plans (DSPs)**. Transport for London made such a **plan for one of its own buildings** and achieved reductions in the number of deliveries from 20 to 40%. They explain on their website: “Essentially the equivalent of a workplace travel plan for freight, a DSP will improve the safety, efficiency and reliability of deliveries to that location. It will also identify unnecessary journeys, and deliveries that could be made by more sustainable modes, to help reduce congestion and minimise the environmental impact of freight activity. DSPs comprise a number of measures including delivery reduction, consolidation of deliveries and increasing out-of-hours delivery activity.”

Online shopping and pick-up points



For home deliveries, multiple delivery attempts can be avoided with automatic pick-up points, e.g. the **LP EXPRESS service** in Lithuania and **DHL PackStations** in Germany. With their **Post Receiving Box**, Austrian Post even made it possible to deliver parcels at home even when the recipient is not present, thus eliminating multiple delivery attempts or the need to divert the delivery to an.

However, it is wise to think about whether or not one should encourage city residents to shop online and have their goods delivered at home. Studies from **the University of Newcastle (UK)** and **the University of Göttingen** show that a certain distance between home and shop or a certain volume of products is necessary in order to make online shopping more sustainable than actually going to the shop.

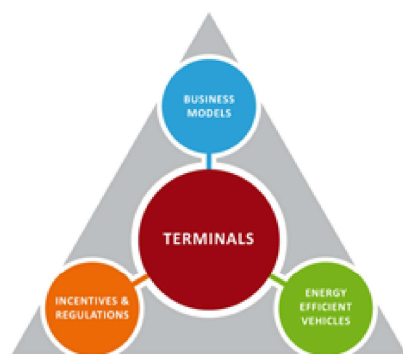
The SMARTSET project

SMARTSET aims to show how freight transport in European cities and regions can be made more energy-efficient and sustainable by a better use of freight terminals both for long distance transports and 'last mile' distribution (such terminals are called urban consolidation centres).

SMARTSET is structured around three core aspects:

- Market-based business models in order to create viable and self-sustaining terminals.
- Incentives and regulations to steer towards an energy-efficient urban freight transport.
- Facilitation of the use of intermodal transport and clean and energy-efficient vehicles for last-mile distribution.

On eight application sites, partners are working towards this goal: **City of Berlin** (Germany), **City of Forlì** (Italy), **City of Gothenburg** (Sweden), **City of Graz** (Austria), **City of Rome** (Italy), **City of Sundsvall** (Sweden), **Newcastle University** (United Kingdom) and **Interporto Padova S.p.A.** (Italy). In the application sites SMARTSET is setting up local freight networks with actors who are in the position to make a significant breakthrough in the uptake of sustainable urban freight transport. SMARTSET is also creating national networks in the countries with an application site, and a European network involving interested follower cities and regions as well as decision makers from the EU level. Read more about these networks on the **SMARTSET website** or in the **SMARTSET network cooperation plan**.



Click on the picture to enlarge.

Building sustainable business models in SMARTSET

SMARTSET business models are conceived to overcome several barriers for smart logistics:

- Failure to set viable tariffs and costs after the end of public granting;
- Lack of enforcement of regulation schemes supporting the trial;
- Non-optimal location of the urban consolidation centre;



Source: www.eltis.org

- Lack of commitment by relevant transport chain stakeholders, such as major forwarders and express couriers.

The cities will commence the development of their business models with the establishment of a local freight network. The group will be composed of public officials, representatives of commercial organisations and freight transporters. Nine business model building blocks - covering the four main areas of a business: customers, offer, infrastructure and financial viability - form the basis for the Business Model Canvas concept (See [Small scale demonstrations – action plan and guide for demonstrators for start and organization of business model](#)).

Urban consolidation centres



Source: www.civitas.eu

It is difficult to make consolidation centres viable when they are set up from a top-down city logistics perspective (see this [report by Newcastle University](#)), and there has to be a clear advantage for businesses and transport operators to participate.

- For SMARTSET partner [Interporto Padova](#), a vast logistics centre in Italy, their [last-mile city distribution service](#) using methane and electric vehicles is such an advantage, and they offer it to all the haulage companies.
- Both the cities of [Gothenburg \(Sweden\)](#) and [Utrecht \(The Netherlands\)](#) however experienced difficulties in getting local businesses and retailers to participate in their urban consolidation centre schemes.
- The city of [Parma, Italy](#), gave operators a choice: either they have their own vehicles accredited on a number of sustainability criteria in order to obtain permission to carry out deliveries in the city, or they give their goods to the urban distribution centre that consolidates and delivers them in the city.
- In [Norwich \(UK\)](#) vehicles making deliveries from the trans-shipment centre got a specific advantage: they were allowed on the bus lanes, which resulted in an average peak journey time saving of 1.8 minutes.
- In [Graz \(Austria\)](#) the same containers used for making consolidated deliveries to the largest department store in the city, were also used to transport waste material out of Graz. There were incentives for participation in the scheme such as special delivery times.
- Particularly challenging is the consolidated distribution of fresh products such as food and drinks, which are usually delivered multiple times a week in order to guarantee freshness. In [Borlänge, Sweden](#), the distribution of food to schools, kindergartens and adult social care centres was taken out of the hands of the food suppliers and consolidated in one distribution centre.
- The city of Brussels (Belgium) invested in a [central marketplace for fresh products](#). Although it was not easy to organise the marketplace in such a way that the interests of both the large wholesalers and the small retailers were taken into account, it is now self-supporting.



Source: www.civitas.eu

Information, awareness raising, incentives



Photo by Mikael Colville-Andersen – Source: [www.cyclelogistics.eu](#)

SMARTSET's [overview of current incentives and regulations](#) recommends that incentives and regulations go hand in hand and should be used in combination to achieve the maximum effect. Information and awareness raising initiatives towards businesses and transport operators can facilitate more efficient and sustainable city logistics.

- A new municipal mobility centre in Gothenburg offered free consultation to companies on available transport alternatives and how to cut transport by consolidating orders for office supplies. The companies decreased their frequency of deliveries by up to 80 percent. To reinforce the measure, the city introduced additional [access criteria based on vehicle loads](#), and incentives for suppliers, hauliers and retailers to coordinate and consolidate deliveries.
- In Belgium, the Flemish minister of transport launched a [campaign](#) to make businesses more aware of the services of bicycle couriers, as a [Flemish study](#) had shown that bicycle couriers have a great economic potential.
- A very simple and cheap measure to optimise city logistics is handing out good information to transport operators. In [Winchester \(UK\)](#) freight maps showing routes,



Source: www.eltis.org



Source: www.eltis.org

destinations and restrictions were distributed to businesses and local service stations. This service was very much appreciated by users.

- The EU project [Cyclelogistics](#) (2011-2014) introduced many measures to promote modal shift among customers, including [shop by bike campaigns](#); information about shopping trailers, bicycle bags, bike trailers and cargo bikes; as well as good bike parking and other facilities at the shops. Their work is continued by a new project, [CYCLELOGISTICS AHEAD](#), and by the [cyclelogistics federation](#).

Several experiments with alternative vehicles are also worth advertising towards operators, such as:

- Cargobikes for the collection of paper waste in [Bucharest, Romania](#)
- An electric [MicroCarrier](#) utility vehicle for parcel delivery in Berlin, Germany
- A tram for the collection of bulky waste such as old furniture in [Zürich, Switzerland](#).
- Boats for supermarket supplies in [Paris](#), or the "[Beer Boat](#)" in Utrecht delivering to restaurants

Further reading

- [SMARTSET download centre](#)
- [EC study on urban freight transport \(2012\)](#)
- UN Habitat (2013). [Planning and design for sustainable urban mobility – Chapter 4 : Urban goods transport](#)
- CIVITAS (2010): [Policy Advice Note n°5 Logistics and Freight Distribution](#)
- EPOMM e-update (2012): [e-update on Cycle logistics](#)
- [European Cycle Logistics Federation](#)
- SUGAR project (2011). [City Logistics Best Practices: a Handbook for Authorities](#)
- STRAIGHTSOL project (2014). [Strategies and measures for smarter urban freight solutions](#)
- ENCLOSE project (2014): [Electric Fleets in Urban Logistics](#)
- [BESTFACT.net](#): portal of freight transport best practices, contacts and policies
- BESTUFS project (2007). [Good Practice Guide on Urban Freight Transport](#)
- [Other EU projects on freight](#)

Upcoming events

- **Stepping Stones Final Conference - How to make Mobility Patterns more sustainable**
18-19 September 2014, Cracow, Poland
[Registration and Conference Information](#)
- **MODUM Conference - Building the Bridge from Research to Sustainable Urban Transport Management -**
24 September 2014 - Nottingham, UK
www.modum-project.eu
- **ENCLOSE Final Conference**
22 October 2014 – Brussels, Belgium
www.enclose.eu
- **Polis Conference**
27-28 November – Madrid, Spain
www.polisnetwork.eu

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