

WestTrans Study Visit: Consolidation Centres in Stockholm

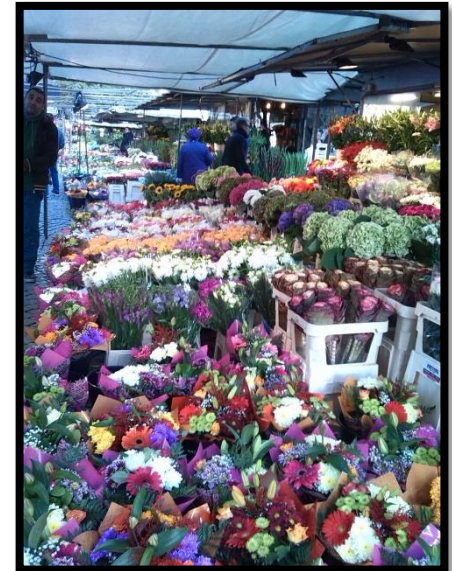
Background: The concept of consolidating goods to achieve cost efficiency is not new. It was first documented as a concept in the 1970s. However, interest in this approach is increasing due to a significant rise in delivery activity associated with rising urban populations consuming more products as well as the exponential growth of e-commerce. Interest in consolidation techniques is also growing due to safety concerns about vulnerable road users and the



Gamla Stan - The Old Town

level of HGV and van movements on London's road network. There are many different consolidation techniques available that can address these concerns and deliver positive, benefits for all stakeholders.

Aim of the study trip: The aim of the study visit (06.10.15-07.10.15) was to enable borough officers (LB Brent, LB Ealing, LB Hammersmith & Fulham and LB Harrow) and WestTrans staff to gain a better understanding of how urban consolidation centres operate on a commercial basis in Stockholm and identify potential lessons to be learned when developing and operating similar facilities in the west London region.



Flower Market

About the City of Stockholm: The City of Stockholm has 900,000 cars in the city and 80-90% of these are parked most of the time. City officers first started to work on freight related projects three years ago and it produced the City's first Freight Strategy Plan (2014-2017) within that period. To support the implementation of the Plan, a budget of €450,000 was secured from government and in-kind support was provided by a range of external stakeholders including Chalmers University, Royal Institute of Technology, private sector and European funding.

Issues facing the City of Stockholm: The city is made up of a number of different but connected islands. Concerns about poor air quality and emissions are a problem the city is trying to tackle. The city has an ambition to be a Fossil Fuel Free City by 2040. There is a clean vehicles and clean fuels plan and strategy for the future, which initially started with heavy vehicles, waste and bus fleets. The city is witnessing a growth in van use. It has an environmental zone for heavy vehicles but is looking to London and the implementation of the Ultra Low Emission Zone before it decides whether it will take things even further. The city centre has a night time HGV ban (10pm-6am). New construction in the city centre area is pushing freight related issues up the political agenda.

Consolidation centres (old and new)

Old Town Consolidation Centre

The Old Town Centre area is made up of old and narrow one-way medieval streets that make it difficult for companies to make their deliveries. Restaurants are able to receive their deliveries between 6am and 11am. After that enforcement teams patrol the area and issue parking tickets. Home2You is a private company that operates an Urban Consolidation Centre (UCC) for food deliveries. Successful when it was started but it took a long time to get up and going. Initially there was a slight increase in the costs of contracts but new companies came on board and offered the same services for a reduced fee and the market drove down the additional costs.

The UCC is still operating and delivery companies pay a fee to the centre to make the last mile delivery on their behalf. Two methane vehicles are used to make the deliveries. 35 out of the 80 restaurants use the UCC. The distribution companies currently make 6,000

deliveries a year but have the potential to make 20,000 deliveries a year.



City Centre Basement Consolidation Centre

Ragn Sells Town Centre Consolidation Centre

Centre is operated by a private sector company (Ragn Sells) specialising in recycling and waste management. The City of Stockholm's role was to facilitate stakeholder meetings and cover the planning costs. The Centre is located in a car park owned by a real estate company (Vasakronan). The Centre is a combination of a waste minimisation facility and micro consolidation centre serving the shops and offices in the building. Waste from other parts of the city is collected and sorted at the Centre.

The tenants in the building are not forced to use the centre. Trucks arrive from 7am until 11am (most arrive before 10am). Goods arrive, boxes are scanned using a hand held device, once scanned and

automatic email is sent to the recipient who can have their items delivered to them (additional fee) or can collect in person (free). The Centre manages 100 delivery shipments each day but it could expand to 500 in the future. The Centre facilitates more efficient deliveries and less congestion near the building.

Vasa Konan offers this service because it fits their environmental agenda and reduces the company's impact on the local environment. Currently the centre is just used for deliveries to tenants in the same building but Ragn Sells plan to extend the service to other neighbouring buildings. The business model can be explained as:

- The landlord (Vasa Konan) charges the tenants for the delivery service via their facilities management fees.
- Waste management – Ragn Sells charges the tenants directly for waste services
- Delivery of goods – Ragn Sells charges Vasa Konan for the service of receiving, booking in and notifying tenants about their deliveries. Tenants can pay Ragn Sells extra to receive their deliveries in their workplace or can collect them for free.

Next steps: Vasa Konan is trying to encourage its tenants to co-ordinate their deliveries / ordering / suppliers. At the time of the visit, a business breakfast meeting was planned to encourage interested companies to come together.

Royal Seaport Area Consolidation Centre

[Website: www.ndslogistik.se/english]

Royal Seaport is currently one of the largest mixed use urban development construction sites in Europe (15,000 new homes and 32,000 new workspaces). The construction consolidation centre is

operated by a construction management company on a commercial basis. The land is owned by the City of Stockholm and the costs of establishing and maintaining the consolidation centre building are borne by the City. The use of the Centre at the site is mandated via a planning requirement.



Loading bay – Construction Consolidation Centre

The site access entry point is gated, which means transport companies have no choice but to use it. Delivery companies have to apply for a license to be able to make a delivery. If they don't have a license they cannot enter the site. Deliveries are made using a pre-booked delivery management system, which is operated by the Centre operator. Vehicles making deliveries with over five pallets can go straight to the construction site but anything less must go via the consolidation centre. Primary contractors and their sub-contractors

are required to attend a course to achieve a permit card to enter and work at the site.

Swedish research into the construction industry showed an average of 10-15 hours per week is wasted searching for materials. This has been calculated as 8,500 lost working hours per year (equates to 3mSEK). The consolidation centre offers a solution to this problem as it provides short term storage and increased accessibility on site. Materials are shuttled across to the construction site on a just-in-time basis. Similarly, loading and unloading machinery can be booked rather than hired or bought elsewhere and minimises the need for construction companies to own their own machinery.

The City of Stockholm has set the financial fees and the Centre's operator cannot increase the fees or fines without consultation with the city. The business model can be explained as:

- The Centre operator charges the developer companies. Some developers absorb all the costs of the construction consolidation centre whereas others charge the builders a fee to use it and the cost depends on their contract value (i.e. 100kEUR and above must use the centre).
- The Centre operator charges the delivery companies for the last leg of the delivery.

Complaints from builders about using the consolidation centre include that it takes an extra day to receive the goods. The response to this is the goods can be ordered and delivered to the Centre up to 7 days in advance and stored on site until they are needed.

Results to date have shown 75% less HGVs delivering to the construction site itself and this has made it a safer place to work for construction workers. The Centre operator is looking at providing

additional services and facilities, including a canteen for delivery drivers, to make the Centre a multi-use facility.

Role for the public sector

Landlord: Review of the local authority's estate to identify potential sites for consolidation.

Champion: Local authority to become a customer and user of the consolidation centre

Planning process: Ensure the consolidation centre is linked to planning controls and rules.

Procurement processes: The contract process is key to delivering some of the requirements. If suppliers want to work for the City then they need to meet the requirements. For example, start by changing the requirements for 1 truck, then a 10% change to fleets then a 25% change.

Scheme promoter: To help with the administration and legal issues relating to establishing a new centre. In the case of Stockholm, the City acted as the key driving force to push things along and facilitated events to encourage matchmaking.

Engagement: Getting the key players in the room at the same time to identify opportunities to consolidate upstream orders.

Investing in new technology: For example, installation of parking and loading bay sensors. The sensor detects whether a loading bay is free and sends a message to a driver. Such technology could be used to support enforcement activities.

Off-peak project: Enable and encourage deliveries to take place during out-of-hours using cleaner vehicles. For example, evidence from Stockholm has shown delivery distances can be greater at night - 45km opposed to 18km during the day. This means companies can introduce an extra shift and financial gains.

Geo-fencing: Establishing a geo-fenced area to ensure hybrid vehicles switch to an electric only application when operating in the area.

Awareness campaign: Work with stakeholders to encourage them to use the consolidation centre now because it will make things easier in the longer term as new rules and regulations may have to be introduced to tackle congestion and air quality problems.

Next steps for WestTrans Sub-Region

WestTrans has secured funding from TfL to carry out a feasibility and scoping study to identify potential opportunities for consolidation within the sub-region.



Loading availability sensor