

# Urban logistics in the Nordic Capitals

## Challenges and opportunities

### Purpose

The purpose of this document is to serve as a background document for the open innovation call regarding sustainable urban logistics. The document will briefly describe already implemented solutions to the urban logistics challenge. The open innovation call will be looking for new and not already implemented solutions, so if a submitted solution has a large overlap with existing solutions, the proposal will most likely not be selected.

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### Introduction

The mobility challenges for urban areas is a well-known issue. Urban areas around the world, including the Nordic cities, experience an influx of people and it has been estimated that 2/3 of the global population will live in urban areas in 2050. Increase in urban residents also means more goods that must be delivered. In addition, there is an increase in online commerce, which again increase the demand for goods delivery. In addition, just-in-time principles gain popularity among retailers, as they are aiming for low volumes in storage resulting in small order volumes and more frequent orders. On the private side, the increase in e-commerce also adds pressure to the urban logistics system. In the Nordic countries around 70-80% of the population are using e-commerce and has some of the best conditions for doing business.

This increased urban population and demand for goods delivery is already putting pressure on the cities with high congestion and bad air quality in the urban areas. It has been estimated that although freight transport comprises about 15% of the total traffic flows in cities, it causes up to 50% of traffic

emissions.<sup>1</sup> As a result many cities are looking for new solutions on the urban logistic issue to lower congestion, improve the air quality and at the same time uphold the service level for commercial business and citizens in the cities.

## Implemented initiatives in the Nordic Capitals

In the following various initiatives on urban freight in the Nordic capitals will be briefly described. The purpose of the this is to inform potential contestants about already tested solutions for not replicating them in the contest. The open innovation call aims at taking a new look at the urban freight challenge and motivate for finding solutions that will benefit the whole urban community.

### STOCKHOLM MAKES URBAN FREIGHT AN INTEGRATED PART OF ITS MOBILITY PLAN

To achieve the objectives of both the Urban Mobility Strategy and the Stockholm Freight Plan, Stockholm relies on a series of measures, projects and studies which include the establishment and use of an Urban Consolidation Centre in the city centre to allow consolidation of freight activities by operators, estate property owners and carriers. Another measure integrated in the Freight Plan is the conduction of an off-peak delivery project to increase the transport efficiency and time reliability without compromising the quality of life of residents.

<http://www.eltis.org/discover/case-studies/stockholm-makes-urban-freight-integrated-part-its-mobility-plan-sweden>

### ELECTRIC LOGISTICS FROM AN URBAN CONSOLIDATION CENTRE (STOCKHOLM)

As part of the FREVUE project a new Urban Consolidation Centre will be implemented in Stockholm. The Urban Consolidation Centre is located in a garage by Klara Norra Kyrkogata, in central Stockholm and it will serve specific post codes within a perimeter of approximately two to three kilometres. The Urban Consolidation Centre is open to all end-user types and expected goods flows at the start of operations are about 10,000 kg per day. Retail and food and drink products will be the main goods that will be delivered from the Urban Consolidation Centre. In addition, reverse logistics operations (waste) will also be part of the scheme.

<https://frevue.eu/demonstrators/electric-logistics-from-an-urban-consolidation-centre/>

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<sup>1</sup> <https://ris.utwente.nl/ws/portalfiles/portal/5134900>

SMART URBAN TRANSPORT SOLUTION – RETAIL SUPPLY CHAIN MANAGEMENT AND "LAST MILE" DISTRIBUTION BY USE OF STANDARDIZED INFORMATION (OSLO)

The main demo ran between October and November 2012 and aimed to show urban transportation authorities, logistics service providers (LSPs) and retailers how automatic data capturing and information sharing can enable harmonization of urban transport to achieve environmental and economic benefits. Shopping centre management may be able to offer better logistical infrastructure and service to retailers and the in-house goods flow may be better coordinated and more efficient. The demo was performed at a shopping centre in the Oslo region, with deliveries from warehouses in outer city or suburb areas. Many small receipts during the same day from different LSPs is inefficient, and it is almost impossible to do the receipt control of goods at delivery time. Another challenge is the lack of logistical collaboration between retailers at the same shopping centre (mall).

[http://www.strightsol.eu/demonstration\\_E.htm](http://www.strightsol.eu/demonstration_E.htm)

Green Urban distribution project (Oslo, Site in Norwegian):

<https://www.sintef.no/prosjekter/gronn-bydistribusjon-i-oslo/>

CITYLOGISTIK-KBH PROJECT (COPENHAGEN)

The project focuses on the requests of the retailers located in the historical part of Copenhagen's city centre. A major focus is to also offer and provide various additional third-party logistics (3PL) services, such as unpacking, returning recycling material, etc. Citylogistik-kbh combines an increased focus on optimisation of urban supply chains with the use of an Urban Consolidation Centre, located outside the city. The suppliers and transport operators deliver their goods to the Urban Consolidation Centre. Deliveries to retailers are carried out using environmentally friendly vans instead of heavy trucks, which is intended to help reduce the negative aspects of the present transport model. The objective is to make it easier to function as a retailer in the city as well as gaining economic and environmental benefit.

<http://citylogistik-kbh.dk/> (Site in Danish)

## Other relevant links

[https://www.sintef.no/contentassets/067ef756b7644281ad2514bef7955c53/gbo/gbo-l-2.1-state-of-the-art-report--urban-logistics-practices\\_1.pdf](https://www.sintef.no/contentassets/067ef756b7644281ad2514bef7955c53/gbo/gbo-l-2.1-state-of-the-art-report--urban-logistics-practices_1.pdf)

[https://www.sintef.no/contentassets/067ef756b7644281ad2514bef7955c53/gbo/gbo-l-2.1-state-of-the-art-report--urban-logistics-practices\\_1.pdf](https://www.sintef.no/contentassets/067ef756b7644281ad2514bef7955c53/gbo/gbo-l-2.1-state-of-the-art-report--urban-logistics-practices_1.pdf)

<https://frevue.eu/>

