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Private public collaboration on logistics in Norwegian cities

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Abstract

This paper presents conclusions from a survey among urban freight actors in the four biggest cities in Norway (Oslo, Bergen, Stavanger and Trondheim). The survey focus on logistic operations and transport decisions affecting the city logistics. In the studied cities we found that there is lack of emphasis on urban logistics and urban freight transport planning. The survey indicates that the missing focus on logistic activities is due to lack of co-ordination among actors involved in urban logistics, and often insufficient dialogue between city authorities and private actors who operate in the cities. Representatives from the industries do not always understand the municipal planning processes and on which level of bureaucracy the plans are accomplished.

To solve challenges a suggestion related to urban logistics and collaboration among private and public actors is to develop structured Urban Logistic Plans. A part of such plans should be the involvement of all stakeholders in the exploitation and processes of development. The stakeholders must also be involved in policy development and strategic planning processes. The survey indicates that congestion and access to centrally located loading and unloading zones are the biggest problem for freight transport in Norwegian urban areas. From the industry, there is a request that loading and unloading zones must be incorporated as part of land use plans.

It was also stressed that local authorities must include plans for goods deliveries in line with services from taxi and public transport in sustainable urban mobility plans (SUMPs).

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1. Introduction

Urban areas represent particular challenges for freight transport, both in terms of logistical performance, environmental impacts (emissions, noise, accidents, congestion and land use) as well as area for public private collaboration. Urban freight is indispensable for the city's economy, but at the same time freight deliveries significantly affect the attractiveness and quality of urban life. Freight transport is a part of the urban transport system, and goods, waste and service trips in cities impact negatively on traffic and the environment. As these activities take place in space shared with many other actors, including public transport operators, private car users, taxis, cyclists and pedestrians, this generates conflict between the different interests of stakeholders. The inevitable outcome of business trade are the freight flows as goods must be conveyed between sellers and buyers which are often apart. Bearing in mind that 80 % of the European Union population lives in urban areas, while about 85 % of the Europeans Union GDP is generated in cities, then goods will inevitably be carried into, out of, or even across such areas (Ecorys, University of Antwerp, University of Lisbon and prof. Dablanc, 2015). Urban freight transport represents between 20 to 25% of road space contributing to between 10 to 20 % of urban road traffic (TURBLOG, 2010). (European Commission DG MOVE, 2012) reports that the share of emissions of freight vehicles is between 20% and 30% of total urban traffic emissions.

The development of new consumers' demands and retail formats (including e-commerce) makes urban freight operations even more challenging.

European Commission (2013) defines urban logistics as "the movement of goods, equipment and waste into, out from, within or through an urban area". Urban freight and urban logistics have been given increasing attention over the last decade, and many cities and companies across Europe have undertaken various trials of regulatory, technological, infrastructural and logistical measures with the intention of making urban freight transport more efficient.

In the Action Plan on Urban Mobility (European Commission, 2009 (COM(2009)490 final)) the Commission explains that it intends to provide help on how to optimize urban logistics efficiency, including improving the links between long-distance, inter-urban and urban freight transport, aiming to ensure efficient 'last mile' delivery (Action 19). Another focus in the Action Plan is how to better incorporate freight transport in local policies and plans, and how to better manage and monitor transport flows.

There remains however a lack of emphasis on urban logistics in city and transport planning. Of those who expressed an opinion in a 2012 DG MOVE public stakeholder questionnaire, 83% did *not* agree that "urban transport planning gives sufficient consideration to urban freight logistics". The European Commission (2013) suggested that this was due to a lack of:

1. focus and strategy on urban logistics, and few cities have an individual in authority responsible for urban logistics;
2. co-ordination among actors involved in urban logistics, and in many cases insufficient dialogue between city authorities and private actors who operate there;
3. data and information which makes it difficult to improve operational efficiency and long-term planning. The development of new consumers' demands and retail formats (including e-commerce) makes urban freight operations even more challenging.

Many attempts have been made to improve the economic and environmental performance of urban freight transport (Macharis and Melo, 2011; SUGAR, 2011; TURBLOG, 2011 and STRAIGHTSOL, 2014) are some of several projects that study urban-interurban interfaces and last mile distribution promoting increased effectiveness and sustainable solutions for urban-interurban shipments and urban logistics. To answer topic 2 a suggestion is to especially study Urban Logistic Plans and involvement from all stakeholders in processes and decisions to solve day to day challenges and how private stakeholders are involved in policy development and strategic planning processes. On the other hand freight knowledge does affect the outcome of actions. Lindholm M, 2010 conclude that the lack of awareness and knowledge in freight transport issues generates no, or low, interest in handling those problems in urban areas. This is most probably affecting the sustainability of the freight transport system, since nothing, or almost nothing, is done to reduce the impacts in an efficient way.

Collaboration or Freight Quality Partnerships (FQPs) can facilitate improved dialogue about urban freight transport issues between local authorities, freight transport companies, retailers, manufacturers and other businesses, local residents and other interested parties. This can lead on to more efficient, less harmful operations. In their guidance document the government states that, "Freight Quality Partnerships provide local authorities with a means to formalise the consultation and development work undertaken in their sustainable distribution strategy. Authorities have an integral role to play in helping industry, through developing partnerships to progress and develop best practice in sustainable distribution systems, and to find solutions to the issues of greatest concern" (DETR, 2000). The collaboration has been achieved through the promotion by central government of the concept of "Freight Quality Partnerships" (FQPs), and the establishment of many such FQPs at regional and local levels. These FQPs aim to bring together the public and private sector parties involved in freight transport and logistics to discuss problems, and identify and implement solutions with the intention of improving the sustainability of freight transport activities in an economic, social and environmental sense (Allen J et al., 2010).

In this paper we focus on experience from a survey among the four largest Norwegian cities (Oslo, Trondheim, Bergen and Stavanger) on involvement from stakeholders on logistic and transport decisions affecting the city logistics. The objective of the study is to summarize experiences from these cities about conflicts and disagreement related to urban freight transport and how the conflicts and disagreement were solved. Particular emphasis is placed on the discussion of how the private stakeholders are involved in the planning and decision processes. An important contribution from the paper is the solutions to involve private stakeholders more actively in the planning processes in cities.

2. Motivation

Efficient and environmentally friendly freight deliveries are important to create attractive cities with commercial activities, cultural offerings and high level of service to residents and tourists (Eidhammer and Andersen, 2015a). Challenges faced in Norwegian cities are among others the common use of street network between public transport, walking, cycling and private cars. This requires priorities between user groups, especially in city centres. For the business community located in the city centre it is important to offer a competitive service compared to car-based shopping centres located outside or on the outskirts of towns. The challenges are many and the solutions will require prioritization by politicians.

To gather knowledge on ongoing disputes and disagreements on urban freight transport in Norwegian cities and how the disputes and disagreements is solved a study among the largest Norwegian cities have been conducted.

3. Methodology and accomplishment

The analysis was conducted by telephone interviews using semi-structured questionnaires. The respondents are representatives from the four largest Norwegian municipalities: Oslo, Trondheim, Bergen and Stavanger. Representatives of transport and logistics service providers were also interviewed through their organizations both at national and regional level. In addition, interviews with business enterprises that have significant transport activity in the mentioned cities were conducted.

The semi-structured questionnaires were prepared as two separate sets of interview guidelines, one set adapted to the representatives of municipalities and one set with questions prepared for representatives of transport and business enterprises.

In total 17 interviews with stakeholders were conducted, and the results were analysed by collocating the collected information. This means that the collected data is grouped and analysed for each of the cities/municipalities and another subsets is grouped and analysed including logistic service providers, transporters and business enterprises. In this paper, as a case study, we also do a more in-depth analysis on the collaboration on urban freight transport and logistics among stakeholders in the city of Oslo.

4. Challenges and co-operation among actors in Norwegian cities

4.1. Challenges in urban freight transport and how to solve them

The study indicate that congestion and access to centrally located loading and unloading zones are the most challenging problems for freight transport in the studied cities. Response from the interviewed stakeholders indicate that unloading zones must be located and adapted to the needs of shops to satisfy their requirements. Respondents also request that the loading and unloading zones must be incorporated as part of the cities land use plans. In Bergen, the municipality experience that the biggest challenge is related to location of freight terminals (Eidhammer and Andersen, 2015a). An international study on Freight Quality Partnership indicate that the outcome from the forums could be divided into Physical and Soft outputs (Browne M and Lindholm M, 2014). Among the Physical outputs generated in FQP's and documented in this study we found topics like, New pilot projects in urban freight, Multilingual delivery and information points for truck drivers, Interactive roadmaps for drivers, Plan of priority sectors for redesign of bays and regulation for deliveries. Our study indicate that the local collaboration forums are focusing on Physical outputs and the specific topics they are engaged in to some extent are identical. An assumption is that the topics in focus depends on the freight transport situation in the studied city and how developed the planning and regulations connected to urban freight and logistics is.

A general challenge in all the studied cities is the continuous trends towards larger trucks that cause conflicts with other users like pedestrians, cyclists and public transport of the street network. It is stressed that the main problem in urban freight transport and logistics in Norwegian cities is related to accessibility, availability of loading zones and time scarcity by deliveries.

Stakeholders respond that the municipal regulation agency need to understand that various types of goods need different categories of unloading zones. "One size fits all" is not good enough for development of efficient city deliveries.

A problem is lack of information on temporary changes in infrastructure availability and solutions for how freight transport and logistic services can be completed during construction periods; it is challenging to conduct efficient deliveries in periods with temporary infrastructure changes.

It was stressed that local authorities must include goods deliveries and logistic services in line with services of taxi and public transport in city planning. The problems related to deliveries of goods must be included in land use plans in line with public transport services.

4.2. Forum for co-operation on urban freight logistics

A question in the survey dealt with the subject of cooperation platforms among stakeholders for solving challenges in urban freight logistics: "*Is there a forum on urban logistics in your city with aim to facilitate co-operation among representatives from freight operators, carriers, manufacturers shops and police, and to prepare suggestions to the municipalities?*" Answers to this question were somewhat inconsistent, mostly because in some of the cities such cooperation forum were established, but not all of the interviewed actors were invited as members. However, in some cities cooperation forums are not established at all.

The established forums have usually 2-4 meetings a year. In the forums, the focus is to discuss issues of concern to members and their views on how to solve challenges. Suggestions for solutions and developments from the forums are delivered to the municipalities and are taken into account when preparing decisions on urban freight solutions. In that context, initiatives from the forums affect urban freight decisions and solutions in the cities.

One the cities participating in the study one does not have the overview on how many employees that is dedicated to freight transport. Among the other cities one city reported to have 0,4 man-year dedicated to freight transport, the two remaining cities does not have any resources dedicated to urban logistics of freight transport in urban areas. This result fits well with findings for Swedish cities, there is only 1% that has a full time employee working with freight transport issues, (Lindholm M, 2010).

Among the organizations and companies participating in the survey only two answered that co-operation with the municipalities was poor. The other 11 organizations and companies were satisfied or indifferent with experiences from cooperation with the municipality.

4.3. How to improve the co-operation between companies, organizations and the municipalities/cities

The interviewed organizations believe that today there is an insufficient dialogue between the municipality and organizations, and that stakeholders should be more involved, both in planning processes and as consultative bodies on given topics. To solve this challenge the municipalities must establish forums to initiate collaboration and discussions among actors to prepare suggestions solving problems connected to urban freight problems that ensure commercial development of the city. The forums must conduct at least two meetings annually.

A suggestion which is frequently highlighted is that freight transport industry should be treated in line with other industries; delivery of goods must be taken seriously and included in the cities land use plans. Collective freight transport must be equated with collective passenger transport.

5. Collaboration activities – the case of Oslo

5.1. Forum for business Activities

Over the last years, there has been a Forum for Business Activities in Oslo. Recently the municipality of Oslo decided that there was need for a new forum with focus on urban freight transport. The existing Forum for Business Activities has been terminated and a new forum has been established. The reason for the termination of Forum for Business Activities in Oslo is several, but among the reason we find the same things as is reported to be a problem/could be better in FQPs on an international level (Browne M and Lindholm M, 2014). The study find drawbacks in working conditions like: Same people every time tend to give less variation to the discussions, Members who do not attend on a regular basis, Members from police and citizen groups sometime missing, Politicians and senior management from industry are needed, Tends to become a talking group and Lack of dissemination. To be successful, the new forum endeavor to avoid the challenges mentioned above and promote collaboration between different actors like transporters, logistic service providers, Polis and various agencies representing public authorities and private companies and organizations. The new collaboration agency – Oslo Forum for Urban Freight Transport – was established on 9. September 2015.

5.2. Oslo Forum for Urban Freight Transport

Motivation

Over the years, there have been many attempts to establish forums to discuss problems connected to urban freight deliveries and to initiate collaboration and understanding among all involved parties in Norwegian cities.

Oslo desire to be a modern city with focus on sustainable transport and logistic solutions. At the same time the number of residents is growing, traffic increases and the growth of freight traffic exceeds the growth in population. These challenges put extra pressure on Agency for Urban Environment to suggest good solutions. Therefore The Agency for Urban Environment expressed that there is a mutual need for formalized cooperation on city logistics between the city of Oslo, suppliers of goods, shops and other operators in the city environment. In this context, the initiative to establish Oslo Forum for Urban Freight Transport was saluted by the managing director of Agency for Urban Environment.

When the forum was constituted, all invited actors was present, a fact that indicates that there is great interest and commitment. The forum will work for a more environmentally friendly and efficient freight transport in the Oslo area.

The Agency for Urban Environment have many responsibilities (as well as possibilities and opportunities) in Oslo, and it is for the Forum to come up with suggestions and solutions to solve existing and upcoming challenges.

A good interaction between the participants in the Forum will be a driver for more environmentally and efficient urban freight transport.

Challenges in Oslo

The municipality of Oslo is working on mobility issues, parking policies and accessibility for passenger traffic in the central areas of the city.

Oslo city center is important for the entire Oslo area. It is important that the city facilitate a vibrant downtown with retail trade.

This is also linked with the security situation. Freight traffic is prioritized in this picture. A goal is to develop a plan for City logistic in close cooperation with the actors.

Results from this work must be translated into definite solutions that promote the goal of an environmentally and efficient urban freight transport. The Agency for Urban Environment should be a good partner to the work to be done in Oslo Forum for Urban Freight Transport.

5.3. Concept for Oslo Forum for Urban Freight Transport

Oslo Forum for Urban Freight Transport draft regulations are available as a note from The Norwegian Supply Chain Development and Competence Center (LUKS, 2015). These will be outlined below.

- **Aim:** Aim for The Forum for Urban Freight Transport is that participating actors work together to find solutions addressing common challenges connected to the distribution of goods to, in and from Oslo. This implies that conflicts of interest between participating actors must be put aside.
- **Legacy:** Each member must have its participation and mandate approved within his agency, organization and/or business. The Standard of Freight Deliveries (BVL) is in addition to applicable laws and regulations reference documents for actions to be taken in the Forum for Urban Freight Transport.
- **Organization:** Oslo Forum for Urban Freight Transport is a community of interest and no organization, association, trust, team etc. Agency of Urban Environment is secretariat for the community.
- **Way of working:** The Forum for Urban Freight Transport arranges their meetings 2-3 times a year, if necessary more often. The first major task to work on will be an Urban Logistics Plan for distribution of goods in Oslo. The Norwegian Supply Chain Development and Competence Center (LUKS) is secretariat for the Urban Logistics Plan in Oslo.
- **General focus for the Oslo Forum for Urban Freight Transport:** Oslo Forum for Urban Freight Transport focuses on freight distribution inside Ring 3 in Oslo, the main roads connecting to the freight terminal at Alnabru and Port of Oslo and different freight receivers in the Groruddalen. The number of participants in Forum for Urban Freight Transport in Oslo is fixed. Additional actors could be invited to meetings if the theme on the agenda affects them especially. Recipient of proposals and solutions is the Agency for Urban Environment, Municipality of Oslo. This body will prepare the ideas for further discussion and decisions in the planning processes and implementation in the city environment. It is stressed that the discussions and decisions should be transparent. For the Oslo Forum for Urban Freight Transport it is important to have access to information on all actions of affecting the actors. The Forum cannot be entitled to comment on actions, but can present ideas for actions to the municipalities.
- **Way of working Members of Oslo Forum for Urban Freight Transport:** Members of Oslo Forum for Urban Freight Transport in Oslo are:
 - The Police
 - The Norwegian Labor Inspection Authority
 - The Norwegian Public Road Authority – Region East
 - Agency Of Urban Environment in the City of Oslo
 - Agency For Plan And Building Services in the City of Oslo
 - Norwegian Logistics and Freight Association

- Norwegian Transport Workers Union
- The Norwegian Food and Allied Workers Union
- Transport and Logistics Association Norway
- Norwegian Haulers Association
- Oslo Retail Association
- The Norwegian Supply Chain Development and Competence Center

6. Summary and conclusions

There is a lack of emphasis on urban logistics and urban freight transport planning in the cities studied. The survey indicates that this is due to lack of co-ordination among actors involved in urban logistics, and often insufficient dialogue between city authorities and private actors who operate in the cities. Representatives from the industries do not always understand the municipal planning processes and on which level of bureaucracy the plans are accomplished. Another challenge is that more than one municipal agency is involved in the planning, explanation and decision processes. Having multiple agencies to deal with complicates the co-operation between the municipality and private actors.

Challenges related to urban logistics and collaboration among private and public actors could be solved by development of a structured Urban Logistic Plans. A part of such plans should be the involvement of all stakeholders in the exploitation and planning processes, as well as actors involved in in policy development and strategic planning processes.

Based on a survey among the four largest Norwegian cities (Oslo, Trondheim, Bergen and Stavanger) the study give a summary of the situation in Norway on urban freight collaboration between public and private actors. Objective of the study was to gather knowledge and summarize experiences from the cities about disputes and disagreements related to urban freight transport and how the disputes and disagreements are solved.

The interviews are conducted by phone by using semi-structured questionnaires. The respondents are representatives from the four largest Norwegian municipalities: Oslo, Trondheim, Bergen and Stavanger and representatives of transport and logistics service providers, and organizations both at national and local level. There are also conducted interviews with business enterprises that have significant transport activities in the mentioned cities.

The answers indicate that congestion and access to centrally located loading and unloading zones are the biggest challenge for freight transport in Norwegian cities and urban areas. There is a request that loading and unloading zones must be incorporated as part of land use plans. Another challenge is inefficient deliveries in periods with temporary infrastructure changes.

The survey results also stress that local authorities must include plans for goods deliveries in line with services of taxi and public transport.

Over the last years there has been a Forum for Business Activities in Oslo that was accused of promoting special interests. This forum has been terminated. However the interviews indicated that to cooperate a successfully there is need for a new forum including actors like transporters, logistic service providers, police and different agencies representing public authorities and private companies and organizations. To support this conclusion Oslo Forum for Urban Freight Transport was established on September 9th, 2015. The Forum was saluted by the managing director of Agency for Urban Environment.

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