

NTNU
Innovation in Urban Freight International Workshop
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Oslo, Norway

**Municipal co-distribution – to meet environmental demand
and brings a shift in power of the supply chain**

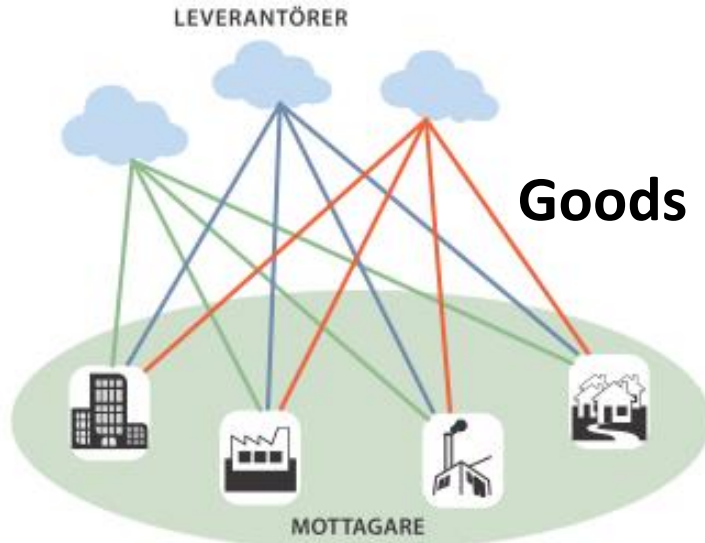
Olof Moen
Department of Economy and Society
School Business, Economics and Law
University of Gothenburg

To distinguish between;

The municipality as a traffic regulatory authority

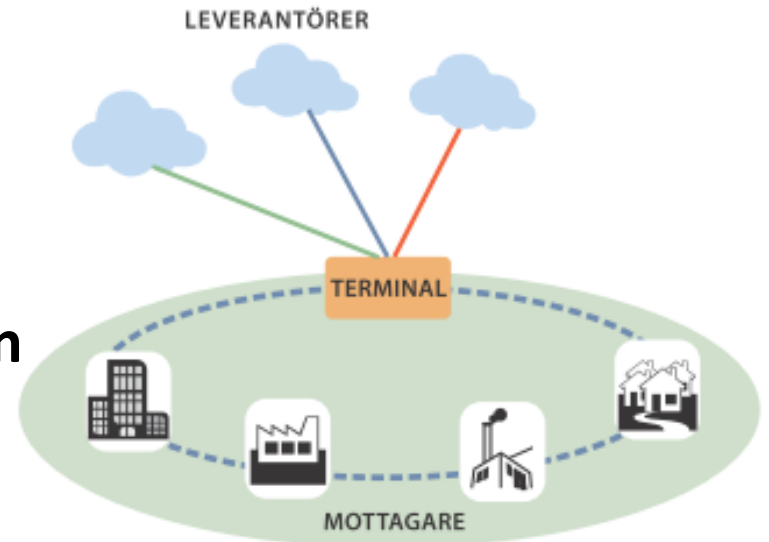
The municipality as transport buyer and receiver of goods

Purchase of goods under the Public Procurement Act (EU)



Goods purchased with "free shipping"

Goods purchased with co-distribution



Organizational innovation(s)

(1) Borlänge 1999

- Transport technological change through a freight consolidation center
- Separation of (1) goods and (2) transportation in procurement
- Derived from the transport industry business model

(2) Växjö 2010

- Integration with e-commerce and the SFTI-standard of the public sector
- Increased competition due to a segmented procurement process
- In 2011 establishing a SFTI-standard for co-distribution of goods

(3) Ystad-Österlen 2013

- Logistics are taken over by the municipality “in-house”
- Route optimization is used in preparation of tender documents
- Payment is executed with reverse billing and vehicle monitoring

The innovation(s)

(1) Borlänge 1999

- **Transport technological change through a freight consolidation center**
- **Separation of (1) goods and (2) transportation in procurement**
- **Derived from the transport industry business model**

Driving force;

- **Focus on environmental impact (Swedish Road Administration)**

- **Focus on local production of groceries - food served in schools and elderly care**

- **No focus on economy with the assumption that reduced price would pay for the FCC and vehicles (“zero-sum game”)**

The innovation(s)

(2) Växjö 2010

- Integration with e-commerce and the SFTI-standard of the public sector**
- Increased competition due to a segmented procurement process**
- In 2011 establishing a SFTI-standard for co-distribution of goods**

Driving force;

- SFTI-initiative by Swedish Association of Local Authorities and Regions**
- Integration of functions that support co-distribution**

- Focus under the Public Procurement Act to break an oligopoly situation on the supply side**
- Focus on suppliers and increased competition to reach SME-bidders**

The innovation(s)

(3) Ystad-Österlen 2013

- Logistics are taken over by the municipality “in-house”**
- Route optimization is used in preparation of tender documents**
- Payment is executed with reverse billing and vehicle monitoring**

Driving force;

- Save working hours by integrating incoming goods with workforce scheduling**
- Cost reduction by lower prices and control of taxpayers money**



26 245 deliveries
per year by the
business model
free shipping

80%
in reduced
environmental
impact

< 6 000 deliveries
per year by the
business model
co-distribution

Reversed billing based on real time reports

Procurement with conventional business model
“fixed price per stop”

“Resource optimized procurement model” based
on hours worked and VKT

Reverse billing = reversed in the sense that the
transport buyer specify what to be invoiced



Vehicle monitoring



A Paradigm shift in behaviour

Probably YES !!!

**100 000+ municipalities with logistics "in-house" the Ystad-Österlenmodell;
Västerås, Borås, Norrköping, Örebro**

**Others have just adopted co-distribution or the Borlänge model;
Lund, Jönköping**

**60-70 municipalities are reviewing or have made a decision of co-distribution;
Aprox. 25 percent of Sweden's municipalities**

Next step in shift in behaviour

Sweden has 20 county councils, closely watching how municipalities will increase transportation efficiency

- County councils have "in-house" third-party logistics**
- Generically can be applied to a purchaser-provider model**

A new procurement model with reverse billing (replacing RFI/RFQ) is tested by shippers in private enterprise

Next step in shift in behaviour

An overarching hypothesis represents an emerging shift in power of the transport supply chain from transporter to transport buyer

However, this implies a significant impact on organization and changing roles of stakeholders

Organizational innovation

Samordnad varudistribution 2.0

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8th International Conference on City Logistics

Co-distribution of Municipal Goods in Sweden - Procurement from a New Standpoint

Olof Moen^{a*}

Department of Human and Economic Geography, University of Gothenburg, Box 630, Gothenburg SE-405 30, Sweden

Olof Moen

Thank you