Stakeholder responses to measures for green and efficient urban freight

2nd Innovation in Urban Freight International Workshop

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Green Urban Distribution

Research project aimed at identifying and demonstrating green and efficient solutions for urban freight distribution in Oslo through

- Improved utilization of street areas
- Improved time utilization
- Use of technological solutions (vehicles, unmanned stock receipts..)
Green Urban Distribution: stakeholders

• Stakeholders will only adhere to a measure if it does not inflict any negative consequences upon them or if positive consequences outweigh negative ones.

• The introduction of measures depends on the acceptability and receptivity of involved stakeholders, and measures must be in accordance with stakeholder concerns and the complexity of the logistics chain.

• The effective introduction of solutions identified in Green Urban Distribution depends on the ability to comply with the needs and prerequisites of stakeholders in the urban logistics chain.

• How do relevant stakeholders evaluate potential measures for facilitating green and efficient urban distribution?
Stakeholder consultations

- **Purpose**: allow stakeholders to give their responses to
  1) **Measure for improving street utilization: mobile depots**
     - Allow delivery collection within a specified geographic area
     - Allow reallocation of land
  2) **Measure for improving time utilization: night and evening deliveries**
     1) Allow deliveries outside the business hours of end-receivers
     2) Disperse urban traffic across 24 h
     3) Promote deliveries outside peak traffic
Methods

• Pilot interviews
  – Establish basic understanding of stakeholder operations, challenges and problem areas
  – Establish mutual trust and confidence

• Focus group seminar with 15 stakeholder representatives
  – 4 carrier representatives
  – 4 end-receiver representatives
  – 7 representatives from authorities
  – One individual and one joint session
## Results: mobile depots

<table>
<thead>
<tr>
<th>Facilitators</th>
<th>Obstacles</th>
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<tbody>
<tr>
<td><strong>Carriers</strong></td>
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<tr>
<td>• EHS improvements</td>
<td>• Relevant to small share of urban distribution</td>
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<tr>
<td>• Reduced fuel consumption</td>
<td>• Business model</td>
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<td></td>
<td>• Additional consolidation</td>
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<td></td>
<td>• New, unregulated market</td>
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<td><strong>End-receivers</strong></td>
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<tr>
<td>• Increased flexibility</td>
<td>• EHS, increased work load</td>
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<td>• Less noise and disturbance to customers</td>
<td>• Last mile transport</td>
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<tr>
<td>• One, single delivery</td>
<td>• Safety and delivery security</td>
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<td>• Distortion of competition</td>
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<td><strong>Local authorities</strong></td>
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<tr>
<td>• Support existing policies</td>
<td>• Land use conflict with other road users</td>
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<td>• Reduced congestion and emission levels</td>
<td>• Design of depots</td>
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<td>• Alternative to individual stock receipts</td>
<td>• Increased maintenance</td>
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<td>• Reallocate land from parking</td>
<td>• Relocation of business</td>
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<tr>
<td>• Allow freight transport in public transit lanes and pedestrian streets</td>
<td>• Two delivery regimes</td>
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Results: mobile depots

• Stakeholders are in general skeptical to mobile depots
  – Inability to encompass the majority of urban deliveries
  – Require significant alterations of the organization of logistics
  – Challenges to the esthetical environment
  – Must replace existing deliveries

• Skepticism might rest on the measure being less familiar to stakeholders

• Introduction of mobile depots depends on
  – Improving scheme perception
  – Detailed clarifications of responsibilities, commitments and business models
  – Stakeholders being able/willing to redefine own roles and approaches to urban freight transport
  – Stakeholders being able/willing to redefine their perception of the roles of others
## Results: night and evening deliveries

<table>
<thead>
<tr>
<th>Facilitators</th>
<th>Obstacles</th>
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</table>
| **Carriers** | • EHS, working hours  
• Delivery predictability  
• Two consolidation and delivery regimes |
| • Cost reductions exceeding increased costs  
• Key contracts/lock systems | |
| **End-receivers** | • EHS, working hours  
• Unpredictable deliveries  
• Staff required in buildings not suited for technological solutions |
| • Work load distribution  
• Less noise and disturbance to customers  
• Technology and key contracts  
• Incentives on retailer chains | |
| **Local authorities** | • Conflicts with goals of living city  
• Land use, conflict with parking spaces  
• Around-the-clock maintenance  
• Legality |
| • Lower emission concentrations  
• Improved land use  
• Encourages green transport  
• Noise reduction regulations  
• Increased safety | |
Results night and evening deliveries:

• Stakeholders more positive to night and evening deliveries
  – Allow for distributing operations across longer periods of time
  – Reduce noise and disturbance during opening hours
  – Improve day-time conditions for other road user

• Introduction of night and evening deliveries depends on
  – Clarification of working hours and other EHS regulations
  – A regulatory framework which adheres to laws and regulations
  – The establishment of governing principles
  – Access to silent vehicles and loading equipment
  – Routines for handling complaints and violations
  – Responsibilities related to the use of key contracts
  – Specification of commitments and responsibilities of each stakeholder
Common ground
Common ground components

Carriers
- Operational costs
- Green profile
- Noise
- Flexibility
- Predictability
- EHS
- Street safety

End-receivers
- Operational costs
- Investments
- Green profile
- Personnel costs
- Street safety
- Noise
- Flexibility
- Predictability
- EHS

Local authorities
- Street safety
- EHS
- Green profile
- Investments
- Operational costs
- Personnel costs
- Flexibility
- Predictability
- Noise
Thank you for listening!