

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

1

	Facilitators	Obstacles
Carriers	<ul style="list-style-type: none"> • EHS improvements • Reduced fuel consumption 	<ul style="list-style-type: none"> • Relevant to small share of urban distribution • Business model • Additional consolidation • New, unregulated market
End-receivers	<ul style="list-style-type: none"> • Increased flexibility • Less noise and disturbance to customers • One, single delivery 	<ul style="list-style-type: none"> • EHS, increased work load • Last mile transport • Safety and delivery security • Distortion of competition
Local authorities	<ul style="list-style-type: none"> • Support existing policies • Reduced congestion and emission levels • Alternative to individual stock receipts • Reallocate land from parking • Allow freight transport in public transit lanes and pedestrian streets 	<ul style="list-style-type: none"> • Land use conflict with other road users • Design of depots • Increased maintenance • Relocation of business • Two delivery regimes

Results: mobile depots

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- 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

1

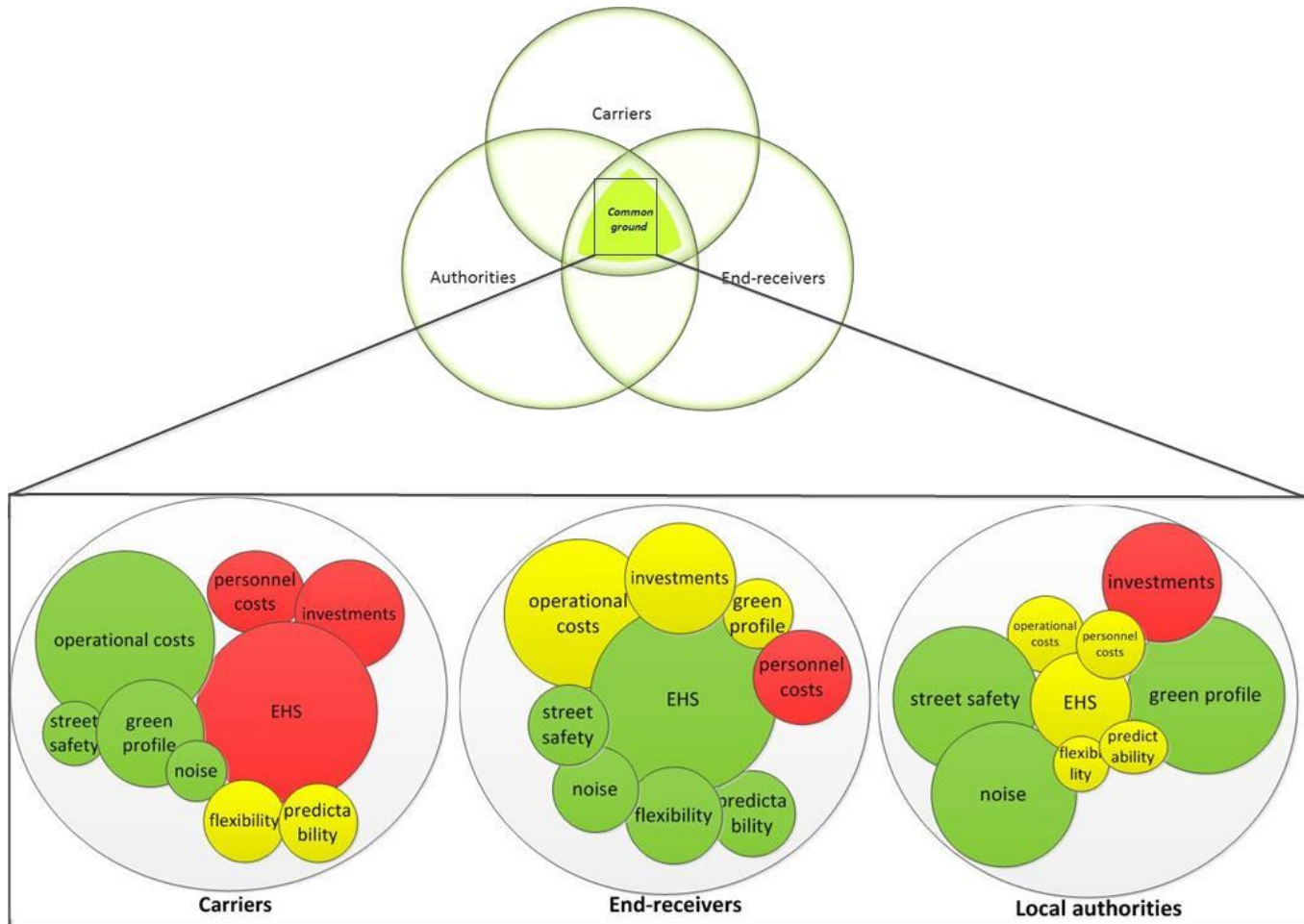
	Facilitators	Obstacles
Carriers	<ul style="list-style-type: none">• Cost reductions exceeding increased costs• Key contracts/lock systems	<ul style="list-style-type: none">• EHS, working hours• Delivery predictability• Two consolidation and delivery regimes
End-receivers	<ul style="list-style-type: none">• Work load distribution• Less noise and disturbance to customers• Technology and key contracts• Incentives on retailer chains	<ul style="list-style-type: none">• EHS, working hours• Unpredictable deliveries• Staff required in buildings not suited for technological solutions
Local authorities	<ul style="list-style-type: none">• Lower emission concentrations• Improved land use• Encourages green transport• Noise reduction regulations• Increased safety	<ul style="list-style-type: none">• Conflicts with goals of living city• Land use, conflict with parking spaces• Around-the-clock maintenance• Legality

Results night and evening deliveries:

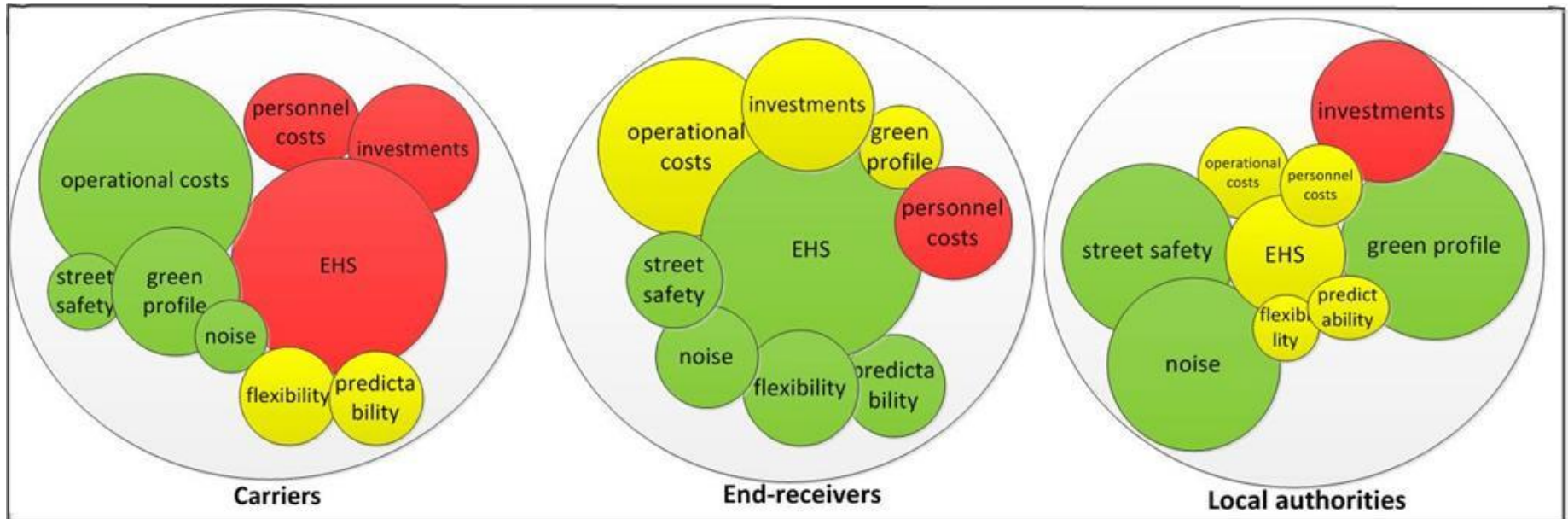
2

- 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



Thank you for listening!

<http://www.sciencedirect.com/science/article/pii/S2210539514000133#>