

CITY LOGISTICS IN TRANSITION: MULTISTAKEHOLDER NEGOTIATION IN POLICY DESIGN

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CASE SLP DESIGN IN LAHTI

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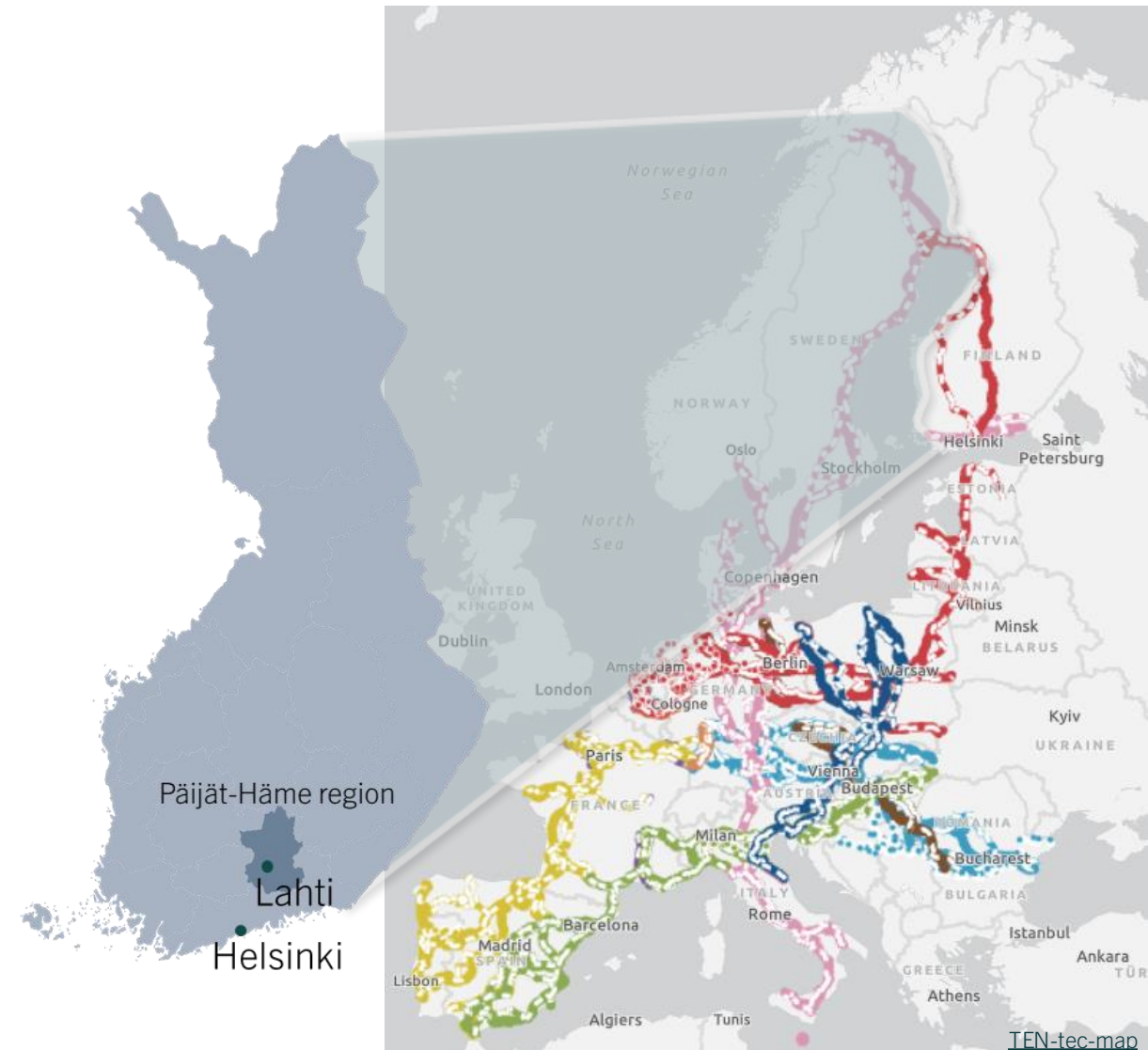
CASE LAHTI

Mid-sized city located 100 km from Helsinki
9th largest city with 121 890 inhabitants.

One of the key nodes of Finland's TEN-T network
Päijät-Häme is a significant location for logistics operations. Logistics are expanding northward from metropolitan area.

The 4th highest number of brick-and-mortar stores
Retail locations in Päijät-Häme are concentrated in the Lahti city area.

European Green Capital in 2021



INTRODUCTION

Cities are increasingly adopting sustainable urban logistics plans (SULPs).

Need to protect historical infrastructure, congestion, pollution and air quality problems increase the acceptability of city logistics initiatives in large cities.

There are less studies on the policy design and implementation of city logistics initiatives in mid-sized cities where such problems are not pronounced.

Previous research (e.g. Matusiewicz et al. 2019) suggests that stakeholder engagement and acceptability plays a significant role in success of such initiatives.

Stakeholders often have conflicting priorities, and acceptability of measures depends on how benefits and burdens are distributed (Stathopoulos et al. 2012).

Multistakeholder processes aim to:

- create space for discussion and negotiations on competing interest and priorities
- bring about agreement for actions and implementation

Engagement is shown to improve stakeholder faith in decision-making process (Dohn et al. 2022)

RESEARCH QUESTIONS

- How needs, constraints and acceptability of different stakeholders negotiated during Sulp design process?
- To what extent do the perspectives of each stakeholder group get represented in the final Sulp strategies and measures?

The analytical framework was derived from the research questions.

Data was collected through surveys, expert group and workshops.

The data was analysed through the thematic categories: needs, constraints, acceptability.

STAKEHOLDERS AND ENGAGEMENT

Stakeholder groups	Engagement activities during SULP design			
	Survey 1: Current state	Expert group	Workshop	Survey: 2 Impacts
Municipal planning		✓	✓	
Logistics operators	✓	✓	✓	
Research and education		✓	✓	
Business sector	✓	✓	✓	✓
Citizens				✓

LAHTI SULP PROCESS

1. Current state analysis

- Logistics flows analysis
- Survey of current state: Logistics operators, business sector
- Multi-stakeholder expert group session 1 & 2 discussions

2. Setting vision and goals

- Preliminary ideas: multi-stakeholder expert group session 2
- Formulation of vision and goals: multi-stakeholder workshop 1
- Commentary round: Multi-stakeholder co-operation group session 3

3. Defining the Urban logistics measures and impact assessment

- Multi-stakeholder co-operation group, session 3
- Comments of measures and impacts: Multi-stakeholder Workshop 2
- SULP final comments: Multistakeholder session 4
- Survey of impacts of selected measures: business sector

4. Municipal decision-making

- SULP-draft presentation in informal council session
- Decision-making in City Council

SUSTAINABLE URBAN LOGISTICS PLAN (SULP)

On August 24, the Lahti City Council approved SULP, which outlines 4 strategic goals and 8 measures for reducing emissions from freight transport and promoting the electrification of heavy-duty vehicles:

Emission-free, disturbance-free

- Loading and unloading framework supports business needs and urban development
- City's procurement and charging infrastructure development promotes low-emission logistics

Smart and anticipated

- Enables the implementation of zero-emission logistics zones
- City logistics information systems support efficient and low-emission operations

Created and maintained together

- Continued public-private sector collaboration for SULP implementation
- Appointment of city logistics Contact Person who coordinates the cooperation and implementation

Boldly experimental

- Active promotion of experiments in urban environment
- Development of innovations related to logistics in collaboration with universities and businesses

RESULTS

Summary of identified stakeholder needs and challenges related to urban logistics, and acceptable development measures.

Stakeholder Group	Dominant needs	Main challenges	Acceptable measures
Municipal planning	Liveability; balanced allocation of urban space; freight emission reductions; agreements / strategy compliance	Built environment; contested street-space; fragmented responsibilities; limited resources	Location-specific planning; zones & restrictions; named coordination; inter-city learning
Logistics operators	Operational efficiency; unloading space; consistent regulations	Costs (fleet, workforce); infrastructure gaps; contested street-space; supply-chain dependencies	Designated unloading; phased electrification; inter-city information systems; public-private collaboration
Business sector	Customer accessible; commercially viable city; current level of service	Profitability; operational efficiency; + lack of interest	Heterogenous opinions: measures that does not obstruct operational level of business making and/or customer accessibility
Research and education	Pilot opportunities enabling scalable innovation; public-private-academia collaboration	Data gaps; funding opportunities; stakeholder participation; weak routes from pilots to scaling	Research based measures; urban pilot and innovation platforms / environments

REPRESENTATION OF STAKEHOLDERS IN FINAL SULP

Stakeholder Group	Priority of representation	Extent and nature of representation
Municipal planning	 Very strong	Orchestrator and enabler. Measures prioritizing emission reductions; Divided resources public-private-academia;
Logistics operators	 Strong but conditional	Direct benefiter but also indirect object of measures. Measures impose adaptation pressures on logistics operators, while also providing measures that enhance their operational efficiency.
Business sector	 Strong but conditional	Mainly a collaboration partner. SULP is designed to support business vitality and continuity while enabling existing delivery operations for them.
Research & education	 Strong but targeted	Representation is limited to a single goal and targeted measures. The application of research findings and pilot new urban logistics solutions.

DISCUSSION AND CONCLUSIONS

The findings of our study

- indicate to partly conflicting needs, challenges, and acceptability among stakeholders, arising from their interests.
- align with Johansson and Björklund (2017) findings that **retailers primarily evaluate urban logistics measures through their operational and economic implications** rather than broader societal benefits.
- aligns with previous research suggesting **that technological solutions are generally seen as acceptable measures** (Pereira et al., 2023; Sales et al., 2024)

DISCUSSION AND CONCLUSIONS

The final Sulp design

- **aims for emissions reductions** with jointly agreed measures, the effectiveness of which remain subject to mixed empirical evidence (Holguín-Veras, 2008)
 - **considers the heterogeneity of stakeholder perceptions and priorities**, which have been identified as a key challenge for balanced representation in urban logistics planning (Stathopoulos et al., 2012; Kiba-Janiak, 2016; Le Pira et al., 2017).
 - **places relatively limited pressure on business sector.** While previous research does not suggest that cities explicitly prioritize retailers over other stakeholder groups (Rzesny-Cieplińska, 2017), the challenge of designing policy instruments that effectively influence retailers' behaviour may contribute to the relatively limited pressures directed at this group (Stathopoulos, 2012).
 - Stathopoulos (2012) argues that **freight operators are often treated as obstacles rather than key stakeholders.**
- Smaller-city dynamics seem to encourage consensus-seeking and limited transformative ambition.
 - The process ensured that conflicting stakeholder interests were at least partially translated into the proposed measures.
 - Measures primarily aim to safeguard business vitality rather than drive substantial behavioural change.
 - Interests of logistic operators were addressed in Sulp. Regardless they remained the group facing the greatest adaptation pressures.

KEY TAKEAWAYS

- Stakeholder acceptability gets highlighted in "young" medium sized cities where multistakeholder process can provide a necessary space for negotiating for trade-offs
- Acceptability favors technological and efficiency-based measures over restrictive interventions
- Business vitality and store accessibility act as key boundary conditions for policy design
- Logistics operators become easily the primary targets of change, while scientific evidence supports collaborative approaches and balanced effort-sharing

THANK YOU AND TIME FOR QUESTIONS

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REFERENCES

- Dohn, K., Kramarz, M., & Przybylska, E. 2022. Interaction with city logistics stakeholders as a factor of the development of Polish cities on the way to becoming smart cities. *Energies*. Vol. 15 (11), 4103. <https://doi.org/10.3390/en15114103>
- Hemmati, M. 2002. Multistakeholder processes for governance and sustainability. [Multi-stakeholder Processes for Governance and Sustainability: Beyond ... - Minu Hemmati - Google-kirjat](#)
- Holguín-Veras, J. 2008. Necessary conditions for off-hour deliveries and the effectiveness of urban freight road pricing and alternative financial policies in competitive markets. *Transportation Research. Part A, Policy and Practice*. Vol. 42 (2), 392–413. <https://doi.org/10.1016/j.tra.2007.10.008>
- Johansson, H. & Björklund, M. 2017. Urban consolidation centres: retail stores' demands for UCC services. *International Journal of Physical Distribution & Logistics Management*. Vol. 47 (7), 646–662. <https://doi.org/10.1108/IJPDLM-02-2017-0114>
- Kiba-Janiak, M. 2016. Key success factors for city logistics from the perspective of various groups of stakeholders. *Transportation Research Procedia*, 12, 557-569. <https://doi.org/10.1016/j.trpro.2016.02.011>
- Le Pira, M., Marcucci, E., Gatta, V., Ignaccolo, M., Inturri, G., & Pluchino, A. 2017. Towards a decision-support procedure to foster stakeholder involvement and acceptability of urban freight transport policies. *European Transport Research Review*, 9(4), 54. <https://doi.org/10.1007/s12544-017-0268-2>
- Matusiewicz, M., Rolbiecki, R., & Foltyński, M. 2019. The tendency of Urban Stakeholders to adopt sustainable logistics measures on the example of a Polish metropolis. *Sustainability*. Vol. 11 (21), 5909. <https://doi.org/10.3390/su11215909>
- Pereira, G. R. B., Guimarães, L. G. de A., Cimon, Y., Barreto, L. K. da S., & Nodari, C. H. (2023). Conceptual model for assessing logistics maturity in smart city dimensions. *Administrative Sciences*, 13(4), 1–20. <https://doi.org/10.3390/admsci13040114>
- Rzesny-Cieplinska, J. (2017). Opportunities and Threats for Goods' Flow Concept Development. *International Journal of Humanities, Arts and Social Sciences*, 3(4), 184. <https://doi.org/10.20469/ijhss.3.20005-4>
- Sales, F. W. C., Soliani, R. D., Oliveira, D. A. de, Lima Junior, F. B. de, Nora, L. A. R. da S., Drumond, T. D. R., Satrapa, H. F. M., & Pereira, F. S. (2024). Urban Logistics and Mobility: A Framework Proposal for Sustainable Cities. *RGSA : Revista de Gestão Social e Ambiental*, 18(4), e07826. <https://doi.org/10.24857/rgsa.v18n4-177>
- Stathopoulos, A., Valeri, E., & Marcucci, E. 2012. Stakeholder reactions to urban freight policy innovation. *Journal of Transport Geography*. Vol. 22, 34–45. <https://doi.org/10.1016/j.jtrangeo.2011.11.017>