

# Webinar: Become a HUPMOBILE Follower City!

**Moderator:** Jutta Mäkinen, UBC Sustainable Cities Commission

18 December 2019

10-11.30 CET

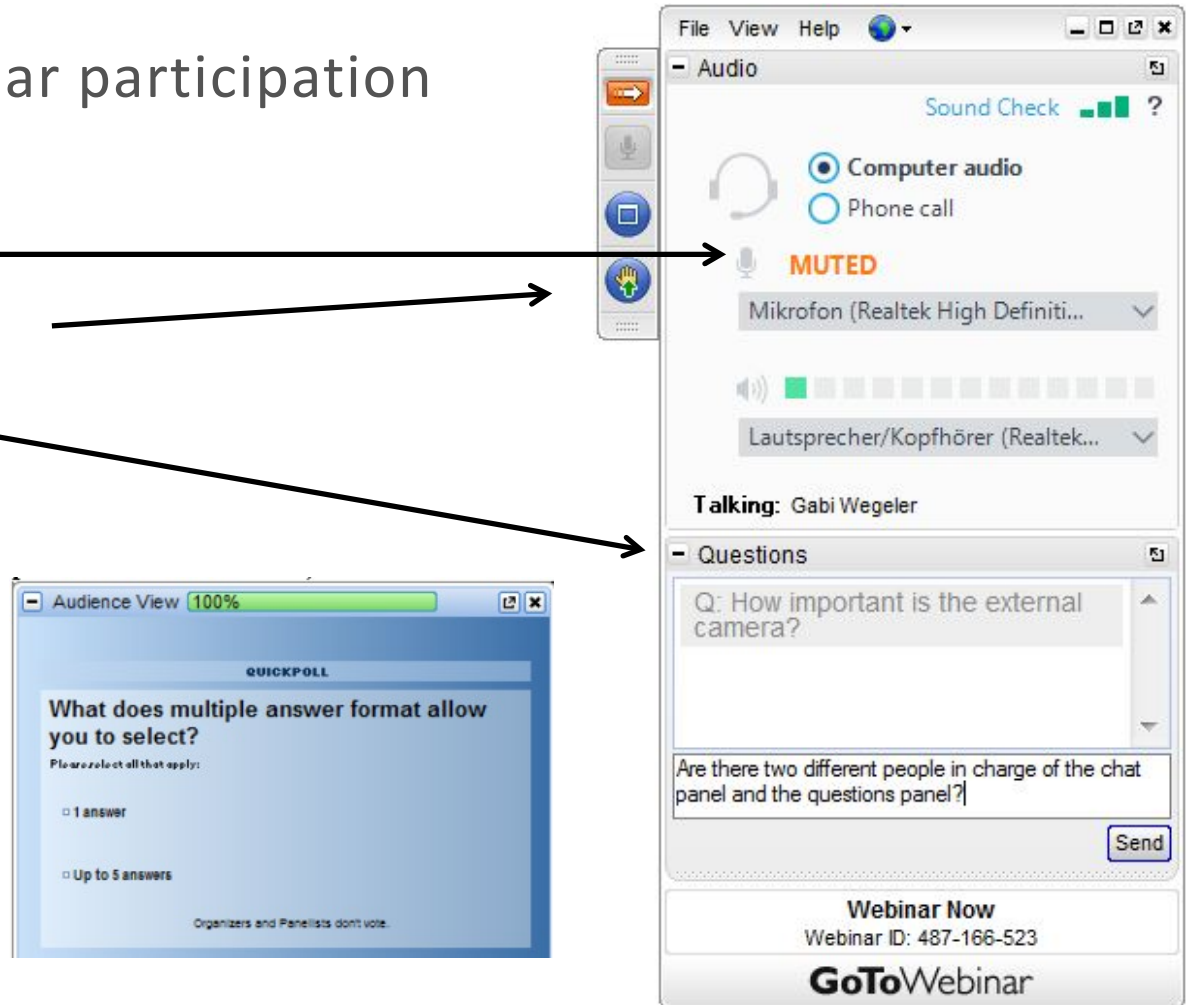
# WEBINAR AGENDA

18.12.2019 from 10.00-11.30 CET

Time	Topic	Presenter
10.00-10.15	<b>Welcome to the webinar &amp; introduction to the project</b> (Follower City role)	<b>Jutta Mäkinen</b> , UBC SCC + <b>Tero Haahtela</b> , Aalto University
10.15-10.30	<b>Using Multi-Actor Simulation Modeling for Sustainable Production Logistics</b>	<b>Amita Singh &amp; Yongkuk Jeong</b> , KTH
10.30-10.45	<b>Mobility Management and the needs of residents in port cities</b>	<b>Marketta Kyttä &amp; Samira Ramezani</b> , Aalto University
10.45-11.00	<b>ITS Network and mini-pilots</b>	<b>Liivar Luts</b> , City of Tallinn & <b>Ralf-Martin Soe</b> , ITL Digital Lab
11.00-11.15	<b>Transferability and Impact Assessment of sustainable mobility solutions</b>	<b>Teemu Surakka</b> , Aalto University & <b>Heike Bunte</b> , City of Hamburg
11.15-11.30	<b>HUPMOBILE Framework and Policy Guidelines</b>	<b>Seyoum Eshetu Birkie &amp; Jannicke Baalsrud Hauge</b> , KTH
11.30	<b>End of the webinar</b>	<b>Jutta Mäkinen</b> , UBC SCC

## Some tips on webinar participation

- Mute
- Raise your hand
- Questions
- Polls



# Poll 1: Are you interested in becoming a Follower City?



# HUPMOBILE Project introduction

## Follower City role

**Tero Haahtela**, Project Manager  
Aalto University

# HUPMOBILE

Holistic urban and peri-urban mobility

A project in the Interreg Baltic Sea Region's third call for proposals in innovation, natural resources and sustainable transport.

Duration: 1.1.2019 – 30.6.2021

Total budget: MEUR 2.0 of which European Regional Development Funding MEUR 1.5

# Hupmobile: learning together, transferring knowledge, and increasing capabilities in the theme of sustainable holistic urban mobility by cooperation of the Baltic cities



HUPMOBILE



# Hupmobile goals

- HUPMOBILE's objective is to provide a **holistic approach to the planning, implementation, optimisation and management of integrated, sustainable mobility solutions** in Baltic Sea port cities.
- Mobility in this context includes **both people and goods** (i.e. freight, cargo logistics and delivery).
- Concrete examples of innovations addressed are
  - greener urban logistics
  - combinations of goods and passenger traffic
  - intelligent traffic systems -based services
  - tools for stakeholder participation and improving stakeholder processes
  - new tools for transportation mobility management
  - Mobility-as-a-Service (MaaS).



# Hupmobile activities and outcomes 1/2



## Improving production logistics and urban logistics

- To develop a planning approach and tools focusing on the flow of goods in the urban areas.
- The participatory simulation tools will analyse the inbound and outbound transport flows and their interaction and impact on other transportation flows.
- Outcomes:
  - Practical simulation models
  - Multi-actor based SUMP scenario model

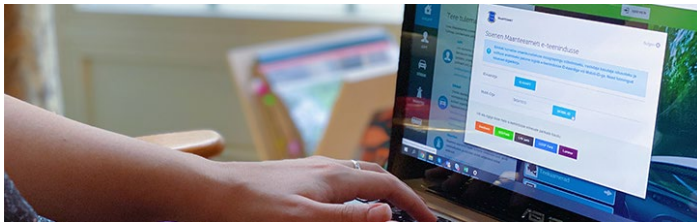
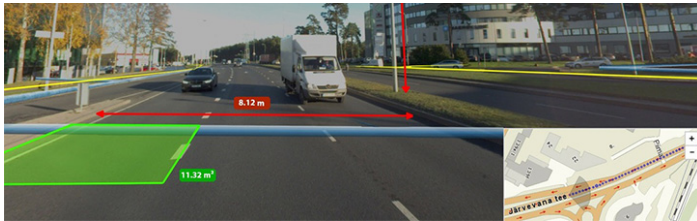
## Mobility Management and the needs of residents

- To understand the overall situation in passenger traffic in and around ports by looking everyday mobility of the residents living close to ports, traffic flows from passenger ports, and commuting to companies in the port area.
- Outcomes:
  - Mobility management guidebook for port areas
  - Report on co-creation with residents





# Hupmobile activities and outcomes 2/2



## Potential of Intelligent Transport System (ITS) solutions and supporting mini-pilots

- Matching public sector challenges with private sector competencies in the field of ITS
- Supporting the development of international competence networks of smart mobility in the Baltic Sea Region.
- Experimental policy-making via mini-pilots: ITS mini-pilots with a real policy roadmap how and why to develop it into a real pilot or service.

## Multimodality in Urban Transport

- To support multimodal transportation, increase the utilization of the existing infrastructure and thereby reduce private car dependency, especially in areas connected to ports with different periodical transport needs.
- Impact assessment of new transport solutions and tools for estimating their transferability to other regions.

# Benefits of becoming a follower city

As a follower city, you can:

1. **give input** to the project process, by **adding your views** on the activities.
2. **give feedback** from the point of view, **under which conditions you would be able to take up** a certain measure/activity.
3. **give input** to the **policy recommendations** as well as in **the validation process of the different outcomes**.

Benefits of becoming a follower city:

- A **unique opportunity** to **exchange information** and **discuss how to improve urban mobility** from different perspectives with other cities dealing with similar problems.
- Opportunity to learn about the **tools** and **models** developed in the project by participating in the **uptake workshops** resulting in **reduced implementation efforts**.
- Follower cities will be invited to all Hupmobile uptake webinars.
- Your feedback on the HUPMOBILE activities ensures that different conditions of application are included in the final result.

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+358 50 577 1690





# Using Multi-Actor Simulation Modeling For Sustainable Production Logistics

## Case: City of Turku

**Amita Singh & Yongkuk Jeong**  
KTH Royal Institute of Technology

# Production logistics and urban logistics

## Goal

Improving production and urban logistics

## Objectives

- Propose a **planning approach** and **tools** focussing on the flow of goods
- Analysing how **inbound and outbound traffic from ports** impact transport flows and their interaction

## Output

- **Simulation-based multilevel optimisation model** that allows stakeholders to model their own flows

## Applications

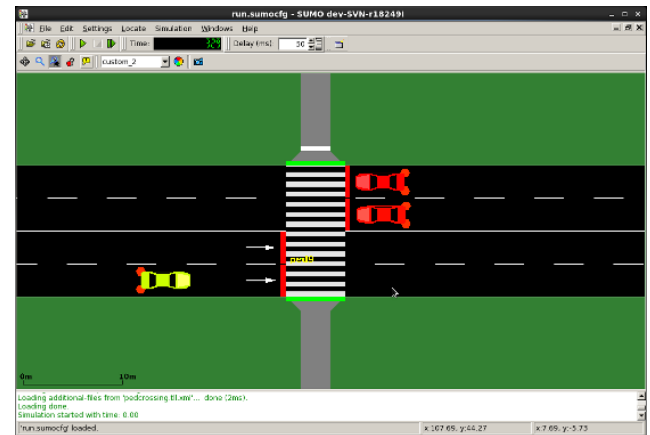
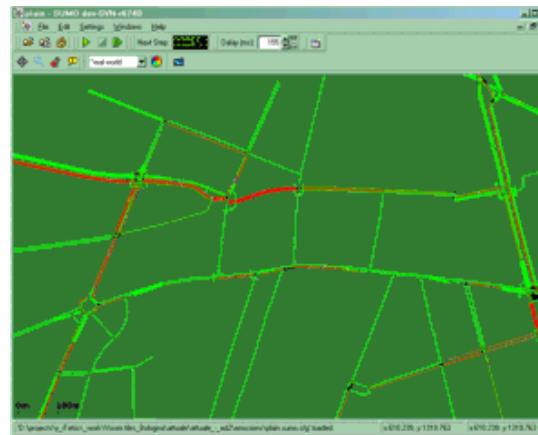
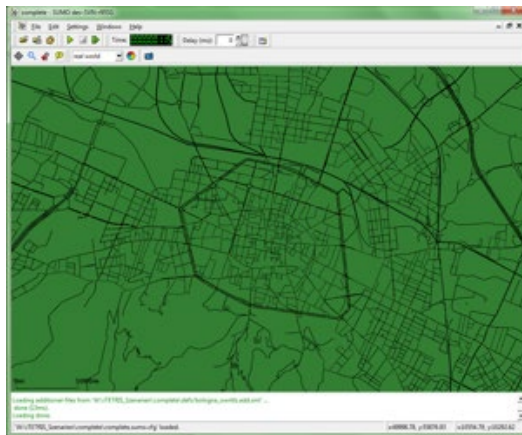
- Optimizing flows for multi stakeholder views
- Active participation is necessary for all stakeholders
- Identifying relevant variables for optimisation and simulation

# SUMO – Simulation of Urban Mobility



**"Simulation of Urban MObility"** (Eclipse SUMO) is an open source, highly portable, microscopic and continuous road traffic simulation package designed to handle large road networks. SUMO is licensed under the Eclipse Public License V2. "Eclipse SUMO" is a trademark of the Eclipse Foundation.

SUMO - <https://sumo.dlr.de/docs/index.html>



# SUMO – Simulation of Urban Mobility

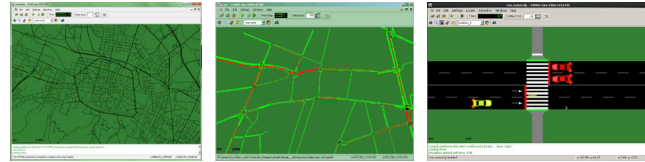


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# SUMO – Simulation of Urban Mobility



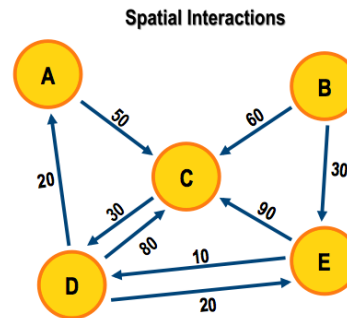
*SUMO simulation model*

*Road network (map)*



*Traffic demand*

- Basic vehicle information
- Origin/destination matrix



Traffic Matrix

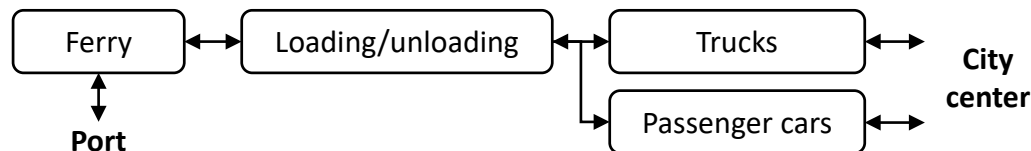
	A	B	C	D	E	Ti
A	0	0	50	0	0	50
B	0	0	60	0	30	90
C	0	0	0	30	0	30
D	20	0	80	0	20	120
E	0	0	90	10	0	100
Tj	20	0	280	40	50	390



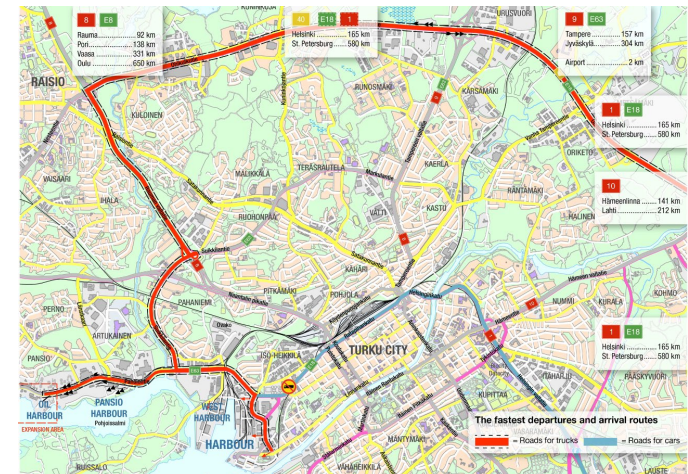
# Turku city case



**Turku city case**



- **Turku city map** imported from OpenStreetMap
- **Truck and passenger car traffic** (from the ferry)
  - # of trucks cargo traffic (import/export) (from Port of Turku cargo statistics)
  - Remaining ferry capacity is assumed to be filled with passenger cars
- **Routes for truck and passenger car**



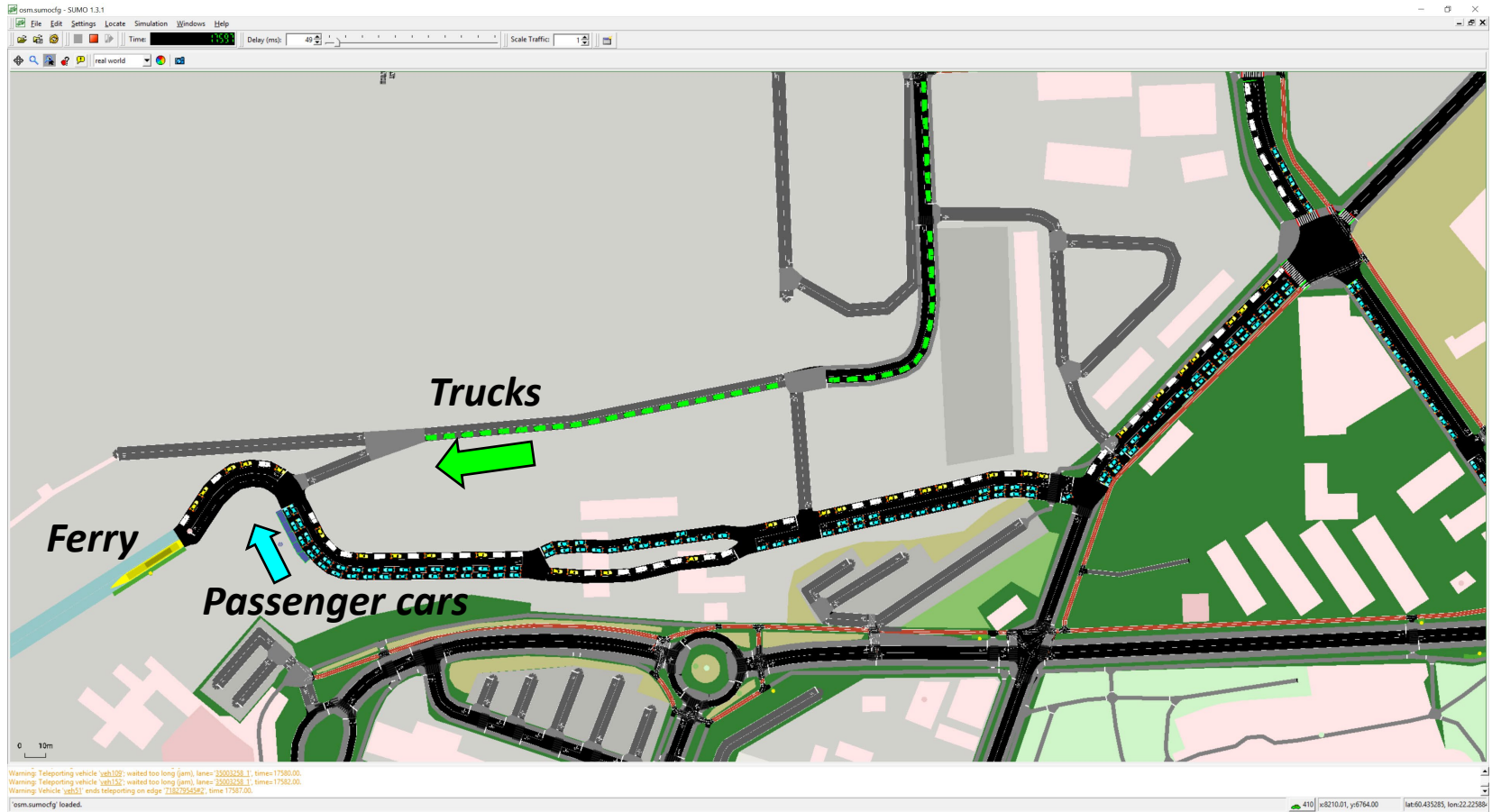
# Turku city case

- Assumptions**
- Trucks start to line up 4 hours before boarding for paperwork and clearance
  - Passenger cars start to line up approximately 1 hour before the ferry arrives
  - Loading and unloading takes 20 minutes each
  - Loading and unloading times are divided equally for each vehicle

## Simulation cases

Variables	Case 1	Case 2
Incoming # of trucks	74	
Outgoing # of trucks	84	
Incoming # of passenger cars	346	
Outgoing # of passenger cars	356	
Engine type for all vehicles	diesel driven heavy duty vehicle Euro norm 5	diesel driven heavy duty vehicle Euro norm 6

# Turku city case





# Turku city case

## Results

(per vehicle)

- Current waiting time [s]
- Total accumulated waiting time [s]
- Emissions (CO<sub>2</sub>, CO, HC, NO<sub>x</sub>, PM<sub>x</sub>) [mg/s]
- Fuel consumption [ml/s]
- Power consumption (electricity) [Wh/s]
- Noise levels (Harmonoise)[dB]

## Required input for future

- New map of the planned area (for road network)
- Vehicle traffic forecasts
- Vehicle distribution (inter arrival time)
- Cargo distribution (periodical demand changes)

vehicle:1630 Parameter			
Name	Value	Dynamic	
lane [id]	216251668#2_1	✓	
position [m]	233.29	✓	
lateral offset [m]	0.00	✓	
speed [m/s]	0.00	✓	
lateral speed [m/s]	0.00	✓	
acceleration [m/s <sup>2</sup> ]	0.00	✓	
angle [degree]	115.88	✓	
slope [degree]	0.00	✓	
speed factor	1.25	✗	
time gap on lane [s]	-1.00	✓	
waiting time [s]	50.00	✓	
waiting time (accumulated, 100.00s) [s]	83.00	✓	
time loss [s]	437.84	✓	
time loss (accumulated, 100.00s) [s]	0.17	✓	
noise (Harmonoise) [dB]	55.94	✓	
devices		✗	
persons	0	✓	
containers	0	✓	
lcState right c overlapping blocked		✓	
lcState left	unknown	✓	



## Contact

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# Mobility Management and the Needs of Residents in Port Cities, A Participatory Approach

## HUPMOBILE Work Package 3

**Marketta Kyttä & Samira Ramezani,**  
Aalto University

## The use of participatory planning GIS tool to collect data on everyday mobility, experiences, attitudes, and preferences in port cities

Place-based person-environment research

SoftGIS  
knowledge  
layers



HardGIS  
knowledge  
layers

# Why "softGIS" knowledge?

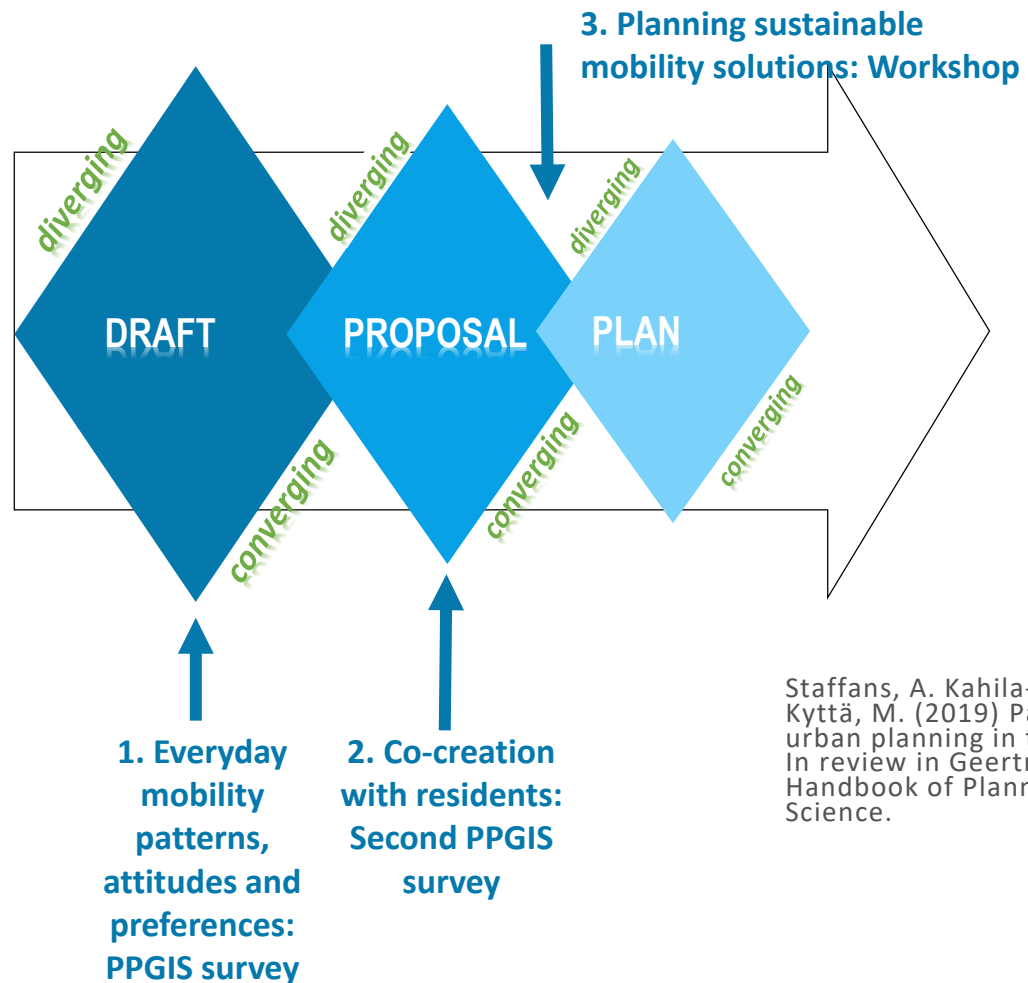
The analysis of  
"soft" geographical  
information  
together with  
"hard" GIS  
knowledge



Linking the user  
knowledge to  
planning and design  
solutions and  
making large-scale  
participation  
possible

What are residents' experiences of services, what service and facility improvements different segments of residents want, and where they want them?!

**Participatory approach: Not a single solution but a process to be adapted for achieving context sensitive solutions**



Staffans, A. Kahila-Tani, M. & Kyttä, M. (2019) Participatory urban planning in the digital era. In review in Geertman, S. (ed.) Handbook of Planning Support Science.

# The Case of City of Turku: general travel patterns and preferences

## My daily travel

Now, we would like to ask you to think about a typical week in your everyday life.

Please mark on the map your common destinations in Turku and its surroundings to which you travel during a typical week.

Please map all kinds of destinations that apply. You may report more than one place under each category if you wish.

- Work or study place
- Place to spend free time  
Recreation, sport, visiting others, restaurants, etc.
- Shopping  
Grocery stores, shopping malls, markets etc.
- Day care, kindergarten, or school  
Place where you bring your children to
- Personal errands and services  
Visiting bank, post office, health care, etc.

## Work or study place

During winter time, what is the primary mode of transportation you usually use to visit this place?

...

Other? Please specify:

During other seasons, what is the primary mode of transportation you usually use to visit this place?

...

Other? Please specify:

How often do you travel to this place?

...

Save

## Your opinions about travel

### Important neighborhood features 1/2

### Background information 1/2

Please let us know a bit more about you. The results will be handled confidentially and no single respondent can be identified.

Gender

...

Age

...

Highest level of completed education

...

What best describes your employment status?

...

Household type

...

Monthly available household income (after taxation)

...

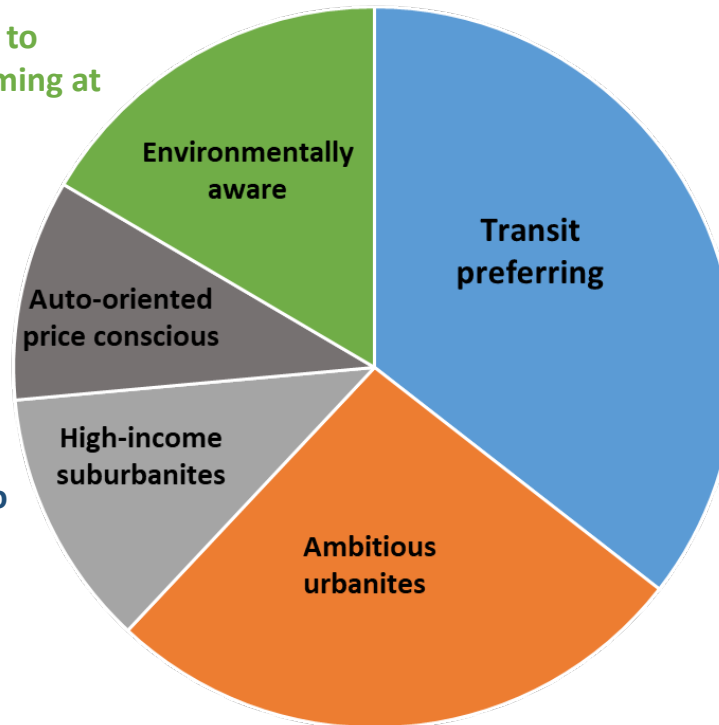
# Results to be used by planners and policy makers

## Grouping residents

What segments of population to target for different policies aiming at increasing sustainable travel behavior:

Information campaigns targeting the auto oriented?!

Attracting residents with a high interest in transit or who shop locally to newly developed TOD neighborhoods?!



What are the characteristics of different groups of residents, where do these different groups reside, and where do they travel?

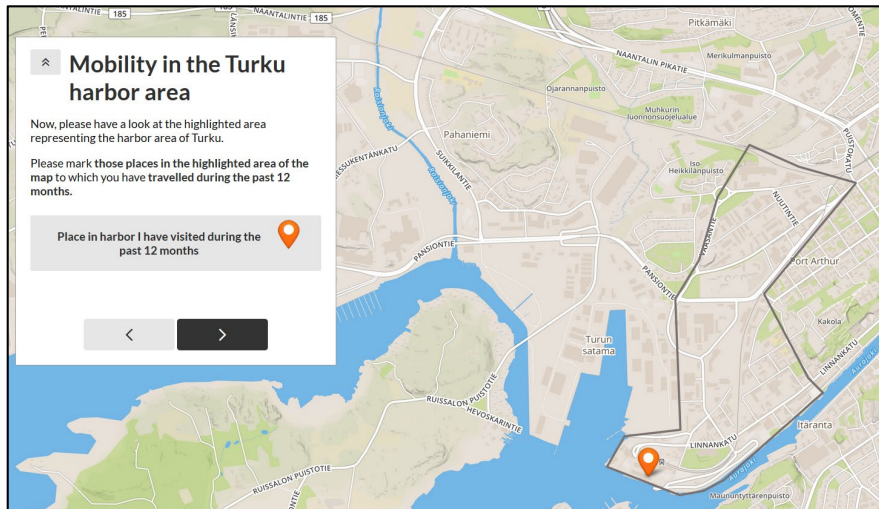
What improvements in services and facilities these different segments want?

Which current neighborhoods have the potential to increase the use of sustainable travel modes if facilities and services are improved?



# The case of City of Turku: more context-based issues

## What mobility service and facility improvements to provide and where!



What is your main purpose for visiting this place?

How often do you travel to this place?

What is the primary mode of transportation you usually use to visit this place?

Other? Please specify:

How satisfied are you in general with this primary mode of transport to this place?

☐ Not at all satisfied  
☐ Not satisfied  
☐ Neutral  
☐ Satisfied  
☐ Very much satisfied

If not satisfied, why?

What is your secondary mode of transport when travelling to this place?

**Your use of possible mobility services in harbor area**

If available, how likely it is that you would use the following mobility services when travelling to the harbor area?

	Not at all likely	Not likely	Neutral	Likely	Very likely
Public transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bicycle sharing service (Föli bicycle)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scooter sharing or electric bicycle service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Car or ride sharing service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Car rental service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If improvements in the walking and cycling infrastructure would be made, how likely it is that you would choose walking or cycling when travelling to the harbor area?

	Not at all likely	Not likely	Neutral	Likely	Very likely
Walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# The case of City of Turku: More context-based issues

What mobility service and facility improvements to provide and where!

**Accessibility of the archipelago and other recreational areas**

In this section we will focus in the accessibility of the Turku archipelago and other recreational areas located in the area highlighted in the map.

Please mark on the map places that you have visited for different leisure time purposes during the past 12 months.

Are there some places in the recreational areas and archipelago where you would like to visit, but which are difficult to reach at the moment?

By which route and mode of transportation would you like to reach those difficult-to-reach locations?

Place I have visited during the past 12 months

This place is difficult to reach

New route to a place that I would like to visit

**Place I have visited during the past 12 months**

What is your main purpose for visiting this place?

How often do you travel to this place?

What is the primary mode of transportation you usually use to visit this place?

Other? Please specify:

**New route to a place that I would like to visit**

What kind of route would you like it to be?

- ☐ Walking route
- ☐ Bicycle route
- ☐ Water bus route
- ☐ City ferry (Föri)
- ☐ Public transportation route
- ☐ Bicycle and pedestrian bridge
- ☐ Driving route

Other? Please specify:

Save

## Contact

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**HUPMOBILE**

# ITS Network and Mini-Pilots

**Ralf-Martin Soe**, ITL Digital Lab  
**Liivar Luts**, City of Tallinn

# INTELLIGENT TRANSPORT SYSTEMS

## 1. ITS competence network that brings

Lead: Maarja Rannama, ITL



## 2. ITS minipilots

Lead: Ralf-Martin Soe, ITL



## 3. Adaptive traffic lights

Lead: Liivar Luts, City of Tallinn



# 1. ITS NETWORK

- This action focuses on developing ITS competence network among public and private sector parties through different local and international actions and events:
- **At least five international webinars and seminars** facing concrete urban mobility challenges (e.g. ensuring better use of transport data, shift towards self-driving and connected transportation, increasing the use of alternative transportation modes etc.) sharing best practices and working out new solutions. ITS Eindhoven 2019; 18.12 webinar; Tartu 13.2; Riga, 4-5 June); 1 left (Finland?/ LA ITS World?
- **5.11.2019 conference** about smart urban mobility (introducing also the outcomes of the pilots worked out in the current WP).



## 2. Adaptive traffic lights

- This action analyses how to increase the mobility flows using the electronic solutions and promoting the switch towards public and green transport. Specifically the aim is to:
- Work out the **pre-feasibility study of adaptive traffic lights** in the case of one city (Tallinn) with aggregated simulation applicable for all Baltic Sea cities;
- **Investigate various adaptive traffic lights market solutions**, especially ones provided by SMEs and startups;
- **Develop specific hot-spots (might be merged by minipilots)** to validate technologies
- **Involvement**  
DIRECTLY TALLINN, AALTO AND ITL DIGITAL  
INDIRECTLY: ALL PARTNERS



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### 3. Experimental policy-making via mini-pilots

- In this action, cities of Tallinn, Hamburg, Turku and Riga will develop at **ITS minipilots** with a real policy roadmap how and why to make it a real pilot or service. After mini-pilots, policy and technology suggestions will be made for all BSR cities. The potential themes of minipilots are:
  - Better use of mobility data in BSR cities
  - Artificial intelligence in BSR cities
  - Using Mobility platform economy
- Based on experiments, a **policy roadmap for all BSR cities** on applying ITS solutions will be developed in order to deal with urbanisation-driven increased mobility and environment challenges
- **Involvement**
  - DIRECTLY TALLINN, HAMBURG, RIGA, TURKU AND ITL DIGITAL
  - INDIRECTLY: ALL PARTNERS





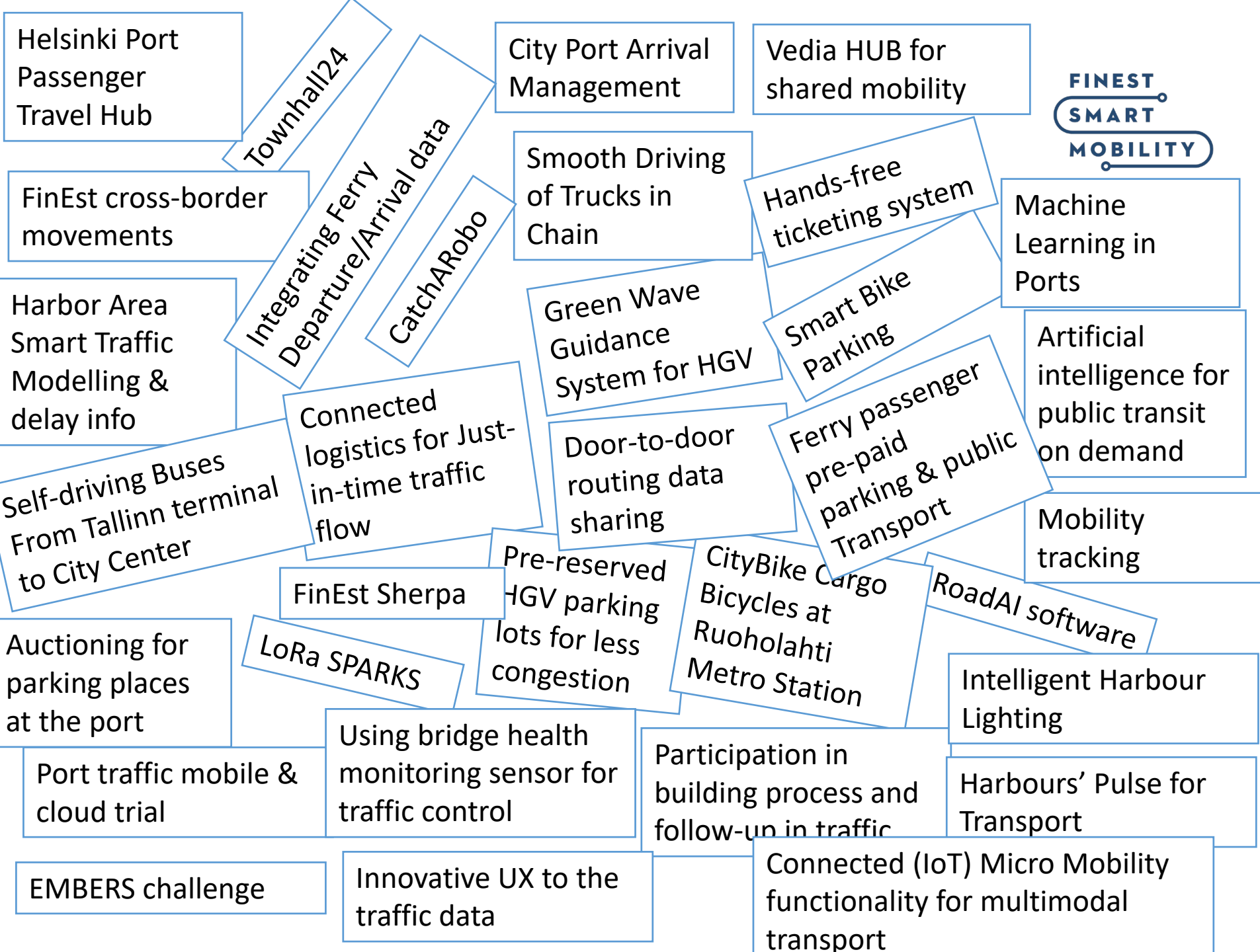
# Types of innovation procurements

- Pre-commercial procurement
- Alliance model
- Innovation partnership
- Negotiated model, competitive negotiated model
- **Fast trials/experiments -> procurement**



# Agile Pilots as small procurements

- Probing the market by giving away small money to answer the pilot's challenges with
  - ■ Concept or prototype
  - ■ Very limited trial (e.g. 1-2 weeks)
  - ■ Test with real people & stakeholders
- Also promote and prepare companies to the real pilots!
- Give positive agile, participatory approach to the project start
- A way to do a bit more open & engaging market consultation, ensure newest innovations, startup participation



# How minipilots can be chosen?

CRITERIA FOR THE EVALUATION	Evaluated in scale of 1-5
<b>Innovativeness of the pilot</b>	<ul style="list-style-type: none"> <li>✓ a genuinely new service idea or product</li> <li>✓ the experiment generates new practices/solutions/aspects to a specific challenge</li> </ul>
<b>Potential for a scalable service</b>	<ul style="list-style-type: none"> <li>✓ usability of the service</li> <li>✓ the functionality of the business model</li> <li>✓ potential for long term solution</li> <li>✓ can be put in practice in Helsinki and Tallinn capital regions area</li> </ul>
<b>Teams and resources</b>	<ul style="list-style-type: none"> <li>✓ Skills and know-how of the executive team</li> <li>✓ other resources of the executive team (e.g. funding, collaboration)</li> <li>✓ potential to continue developing the service after experiment</li> <li>✓ executed by a consortium of more than one organisation or company</li> </ul>
<b>Smart, agile and user-driven</b>	<ul style="list-style-type: none"> <li>✓ service/product utilizes ICT-technology or data</li> <li>✓ use of agile development methods</li> <li>✓ service responds to the needs of users</li> </ul>

# Open competition: joint marketing

Contact person name \*

Contact person full name, title, telephone number, and other contact details

Contact person Email \*

Email will be the main form of communication with the proposers

Organisation name \*

Organisation business ID

Name or topic of the fast innovation trial \*

**Brief description of the fast innovation trial: How would you use the money?**

Maximum 2 paragraphs of text describing your proposal. Please note that we are procuring fast innovation trials: a limited-time service, or a service prototype or a service concept, what with we can better understand the implications of emerging new technologies and business models. Describe your ambition in trial in the maturity level: do you expect to deliver a concept (PPT), prototype (service testable by our project experts in lab or in field), or a real service with real end-users for limited time. For the last option, mention limitations (for example "2 weeks" or "max 10 users").

**Who would execute the trial in your organisation?**

Team members and their roles in the trial. Add in a web-link to a prior reference for the persons, if you think this helps us evaluate better. No CV is necessary.

**Your proposed price of the trial (in EUR, including VAT)**

Total budget including VAT (note: a fixed sum between 2.000€ and 15.000€). Only fixed cost trials are allowed.

**What are the tasks and deliverables, and their schedule**

Maximum one line of text per task and per deliverable. Mention delivery month of the deliverable, and the IPRs for each deliverable. The default will be that all of the IPR ownership of all deliverables remains with you - we buy service trials limited in time. But we will require to have free, open usage rights for any general insights we learned regarding the technology or the business model, as well as a public presentation material about the trial.

**How do you think your proposal would help us plan better smart mobility solutions?**

Does it give any insight in the future procurement of smart mobility solution? Does it give us new ways to think about mobility planning or management? Are the proposed technologies or business models innovative enough?

**What would you need from us in order to execute the trial?**

Do you expect us, or someone else than you, participate in the execution or planning of the trial? How, when, and how much? What else would you expect? Have you identified critical external interfaces you need in order to deliver the trial?

**Do you give us right to use the deliverables in the project next stage planning and promotion? \***

I give my permission to use our pilot and project results as a reference material in communication of FinEst Smart Mobility project.

- ☐ Yes  
☐ No

**Public two paragraph text presentation of your trial**

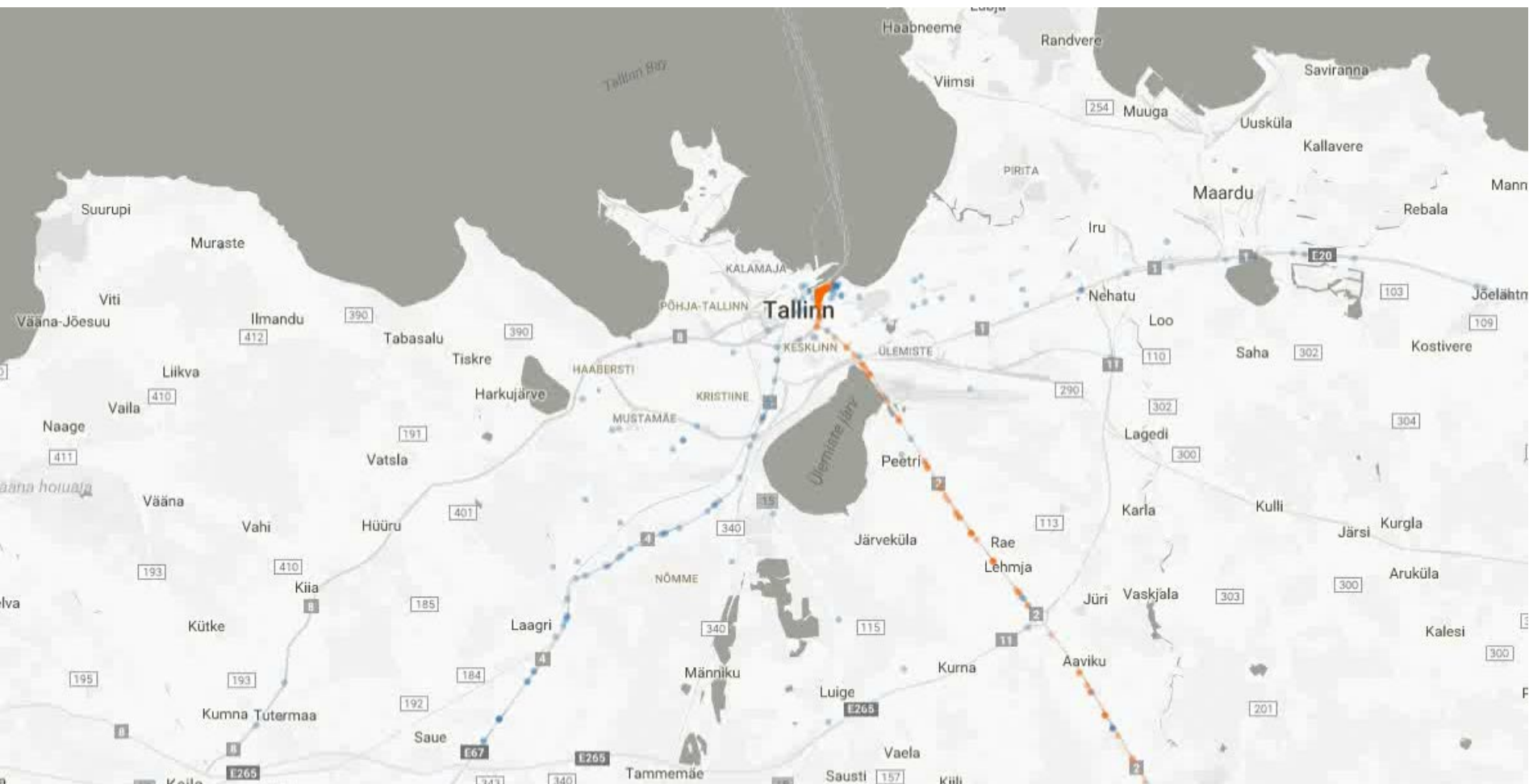
The public introduction of the innovation trial will be published in the project page. Maximum 500 characters.

# Minipilot 1a



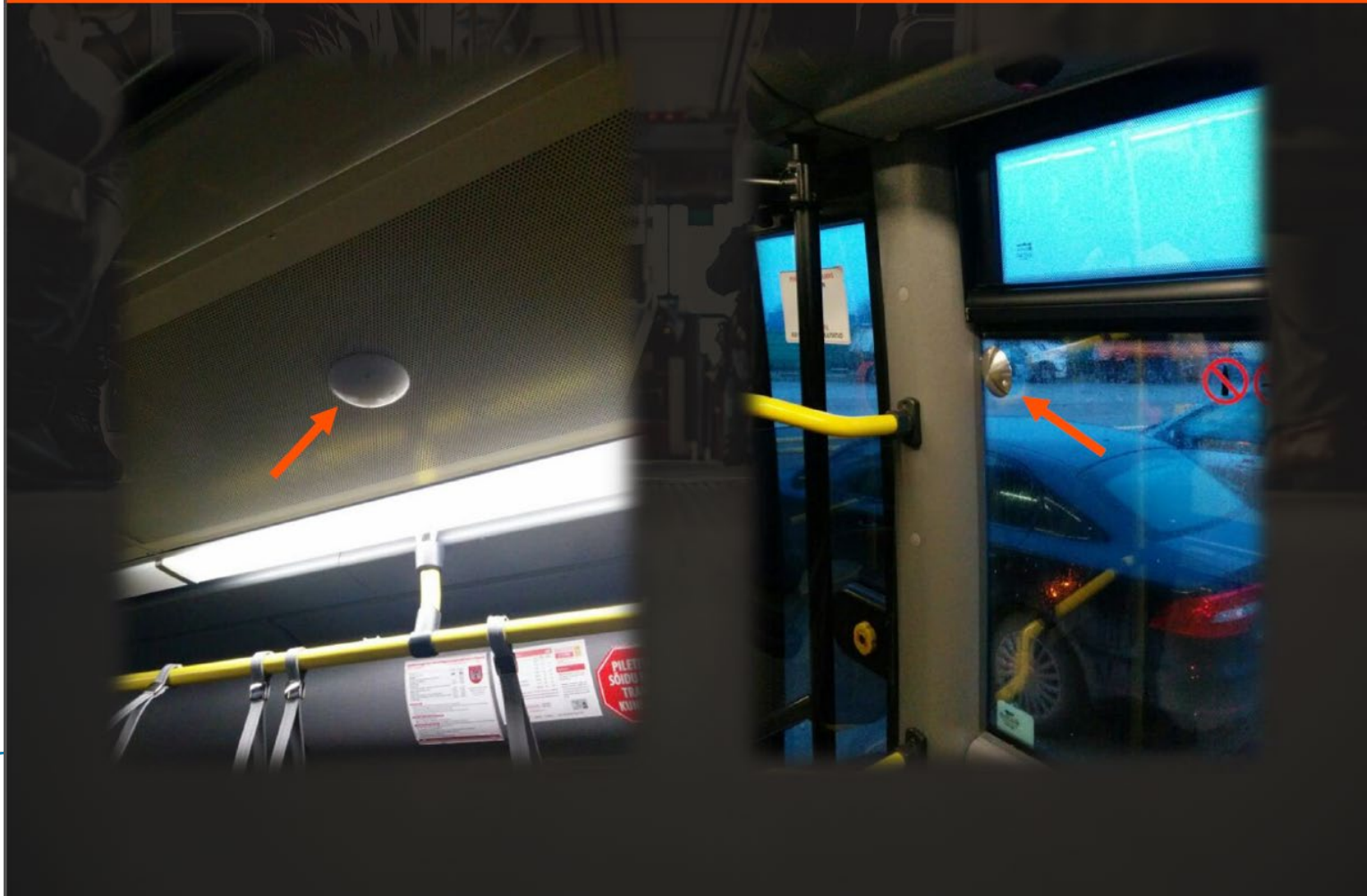


# Minipilot 1b




# Minipilot 2

## BLE beacons and installation





# Minipilot 3

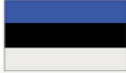


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ActiveX pole lubatud?

cc  
Minu profiil  
Logi välja  
Piirijärjekorrad



Otsing  
☒ borderCrossingPoint.port | ☒ B ☒ C ☒ D ☒ CFS | ☒ Eelbroneerimine ☒ Elav järjekord ☒ Eelisjärjekord  
Märksõna:  Telefon: +  Nimi:  Olek: Kõik  
Piirile suunamise aeg (alates):  Piirile suunamise aeg (kuni):

Lisatud	Piiriületuse aeg	Järjekorra tüüp	Ooteala	Bron. ID	Juhi andmed	Riiklik registreerimismärk	Telefon	Olek	Kopeeri
25.04 18:46	25.04 18:48	Elav järjekord	waitingArea.portwa	C-250417-49775	Kusti Klapste	425JKI		Kutsutud piirile	Kopeeri
25.04 12:59	25.04 13:01	Elav järjekord	waitingArea.portwa	C-250417-93119	Aleksei Aleksin	376HSJ		Tühistatud	Kopeeri
25.04 12:16	27.04 02:00	Eelisjärjekord	waitingArea.portwa	C-270417-48134	Ants Ants	002KMV		Ooteala	Kopeeri
25.04 11:48	25.04 11:50	Elav järjekord	waitingArea.portwa	C-250417-49581	Juhan Juhan	003KMV		Kinnitatud	Kopeeri
25.04 05:30	25.04 05:32	Elav järjekord	waitingArea.portwa	C-250417-13514	Ants Ants	002KMV		Tühistatud	Kopeeri
25.04 05:28	25.04 05:30	Elav järjekord	waitingArea.portwa	C-250417-26754	Juhan Juhan	001KMV		Tühistatud	Kopeeri
24.04 16:44	25.04 08:00	Eelbroneerimine	waitingArea.portwa	C-250417-86732	Stepan Kontroljev	L5645KL		Tühistatud	Kopeeri
24.04 14:07	27.04 03:00	Eelbroneerimine	waitingArea.portwa	C-270417-78060	Juha Kukkila	457TGY	35670928375925 35670928375925	Ooteala	Kopeeri
23.04 22:35	25.04 06:00	Eelbroneerimine	waitingArea.portwa	C-250417-67541	Kellu Pruulisaks	726KUI	372248598459 372248598459	Tühistatud	Kopeeri
23.04 22:23	23.04 22:35	Elav järjekord	waitingArea.portwa	C-230417-16620	Juhan Kraaps	254HJI	372953265 372953265	Tühistatud	Kopeeri

# Minipilot 4



# Minipilot 5

In Nepal, Sherpas are highly regarded as elite mountaineers and experts in their local area. Successfully managed open ecosystems enable new and existing companies to act as Sherpas combining existing services to create better service levels for FinEst passengers as well as motivating them to reduce external costs of their transportation. The aim of the **FinEst Sherpa challenge** is to look at new service models, project the benefits to different stakeholders and find a way to enable the ecosystem. (FLOU Solutions Ltd)



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See also:

[Paper 1](#)

[Paper 2](#)



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# Transferability and Impact Assessment of Sustainable Mobility Solutions

**Heike Bunte**, City of Hamburg  
**Teemu Surakka**, Aalto University



# Sustainable Mobility Solutions

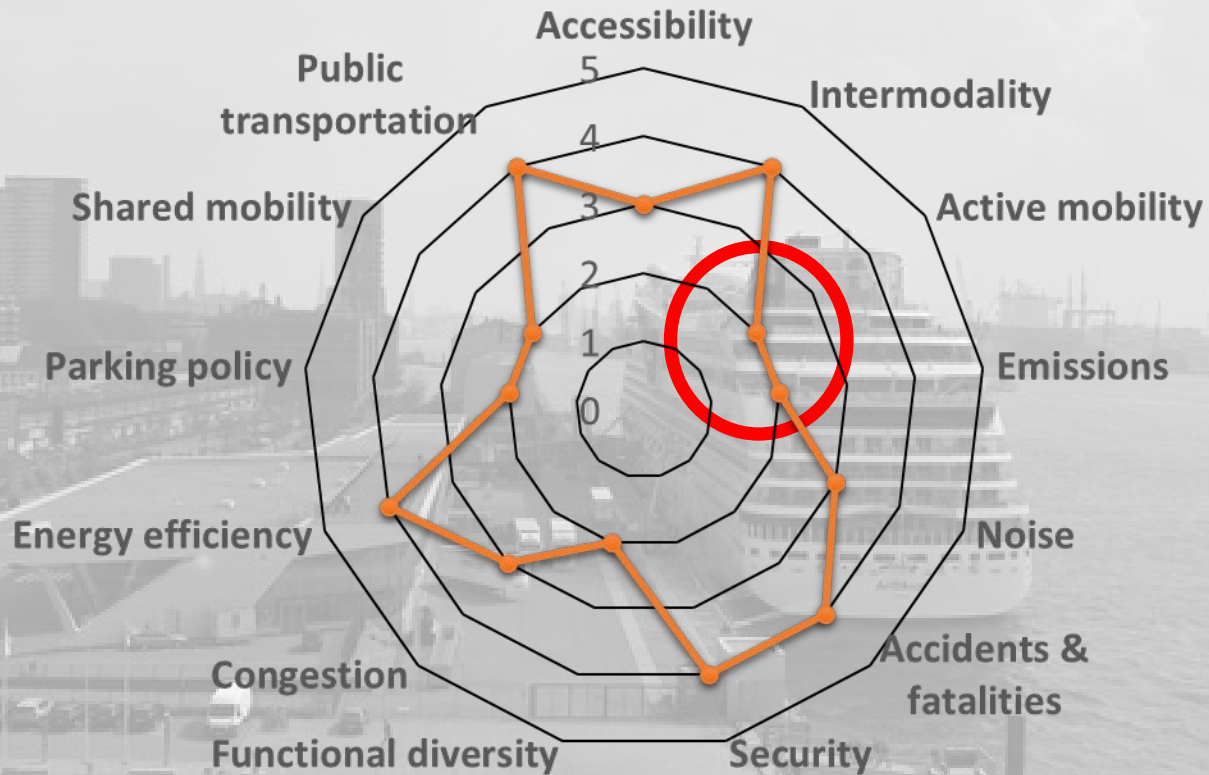


**Mobilität und Verkehr neu denken!**  
im **Haus Drei e.V.**  
Hospitalstraße 107, 22767 Hamburg





# Sustainable Mobility Index



## A 3D white figure holding a large magnifying glass with a red handle, symbolizing investigation or research.






# Activities in Hamburg-Altona

## ...towards: Last Mile – Micro Hub

- Aspects to keep in mind while working with different stakeholders.
- Requirements of a Micro-Hub in areas with high density of population.
- A „Micro-Hub Masterplan“ is needed for the city to develop Sustainable Mobility Solutions.



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# Activities in Hamburg-Altona

## ...towards: MaaS - Mobility as a Service

- Knowledge building about MaaS for administration.
- Minimum and maximum requirements for MaaS.
- How to set up a „MaaS point“ in practice...
- How to develop MaaS and how to increase usage when involving certain data/apps  
PLUS aspects of spacial planning?



Copyright: Borough of Altona



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# Means of contributing

Should you want to share your success stories and best practices:

- a series of regional workshops will be organized, where the use of the impact assessment methodology will be facilitated
- a standalone methodology for assessing mobility solutions will be published Q1/2020
- full tool will be online Q4/2020

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# HUPMOBILE Framework and Policy Recommendations

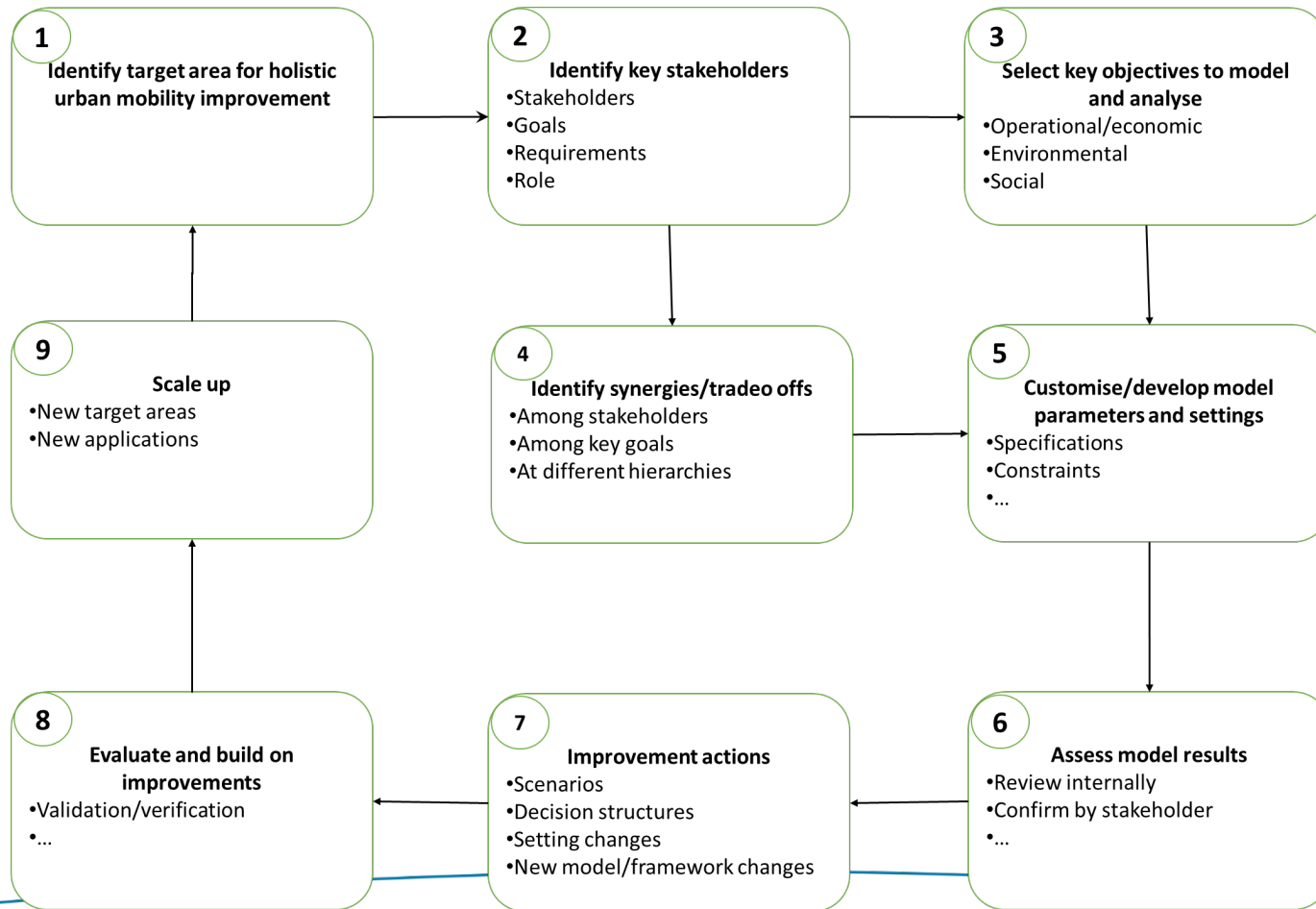
**Seyoum Eshetu Birkie & Jannicke Baalsrud Hauge**  
KTH Royal Institute of Technology

## Use of frameworks in the context of urban mobility

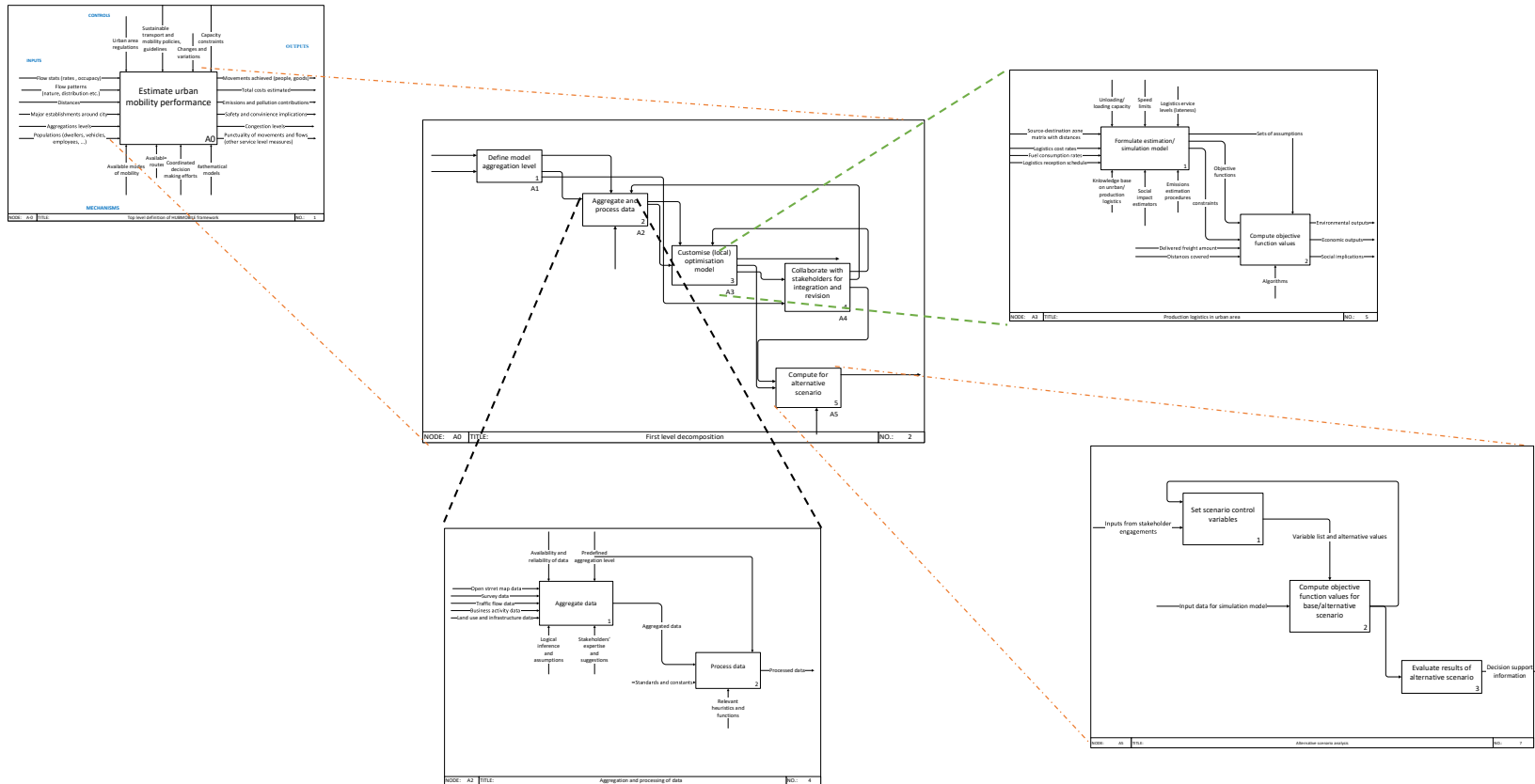
- To guide and foster collaborative efforts among stakeholders for better decision making
- For data fusion and integration based of a common taxonomy
- As a guidance for analytical tasks e.g. simulations for last mile city logistics
- For planning and implementation of initiatives that may require multiple stakeholder engagement

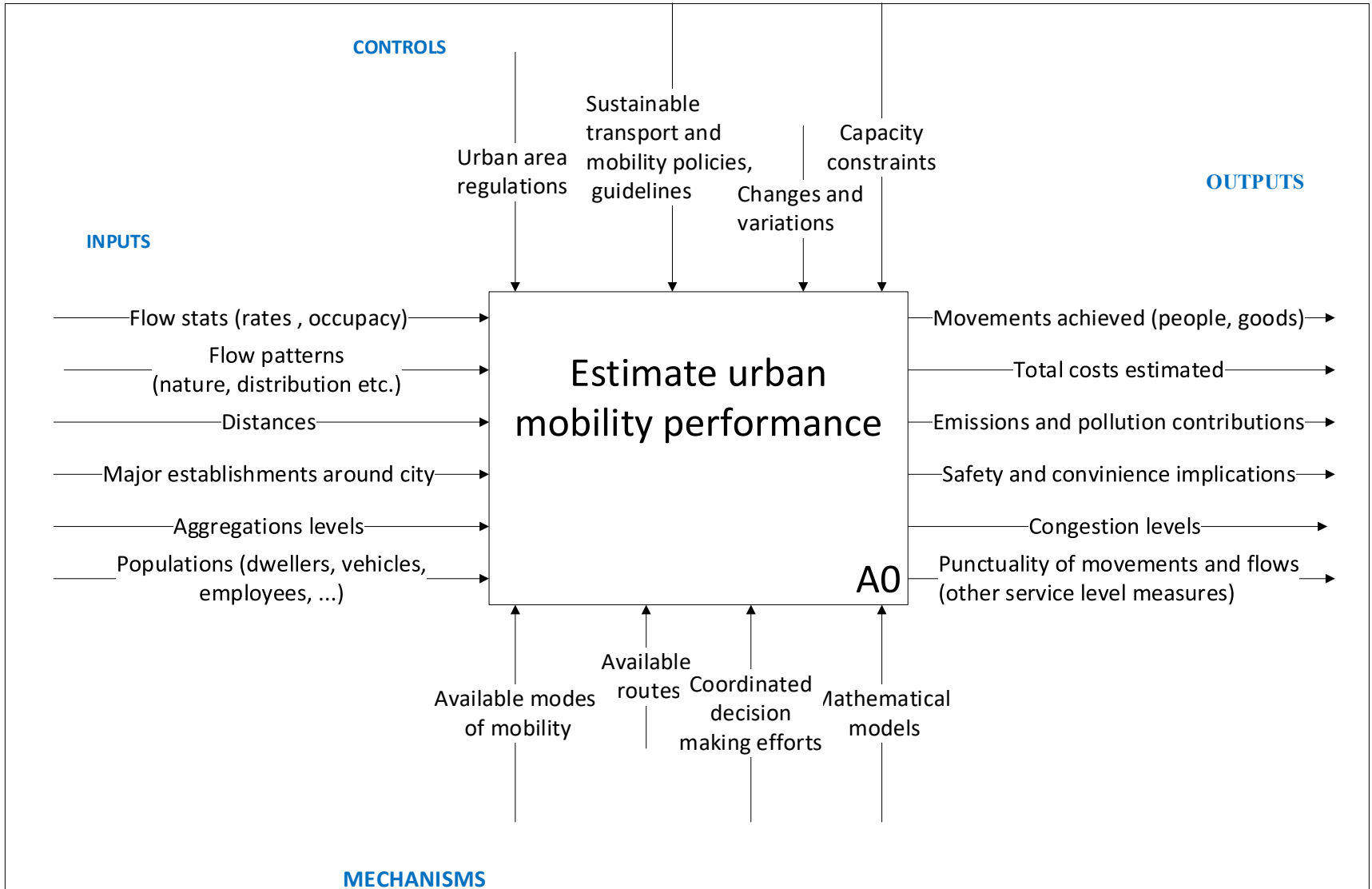


# HUPMOBILE optimisation framework stepwise



# HUPMOBILE optimisation framework as function model (draft)





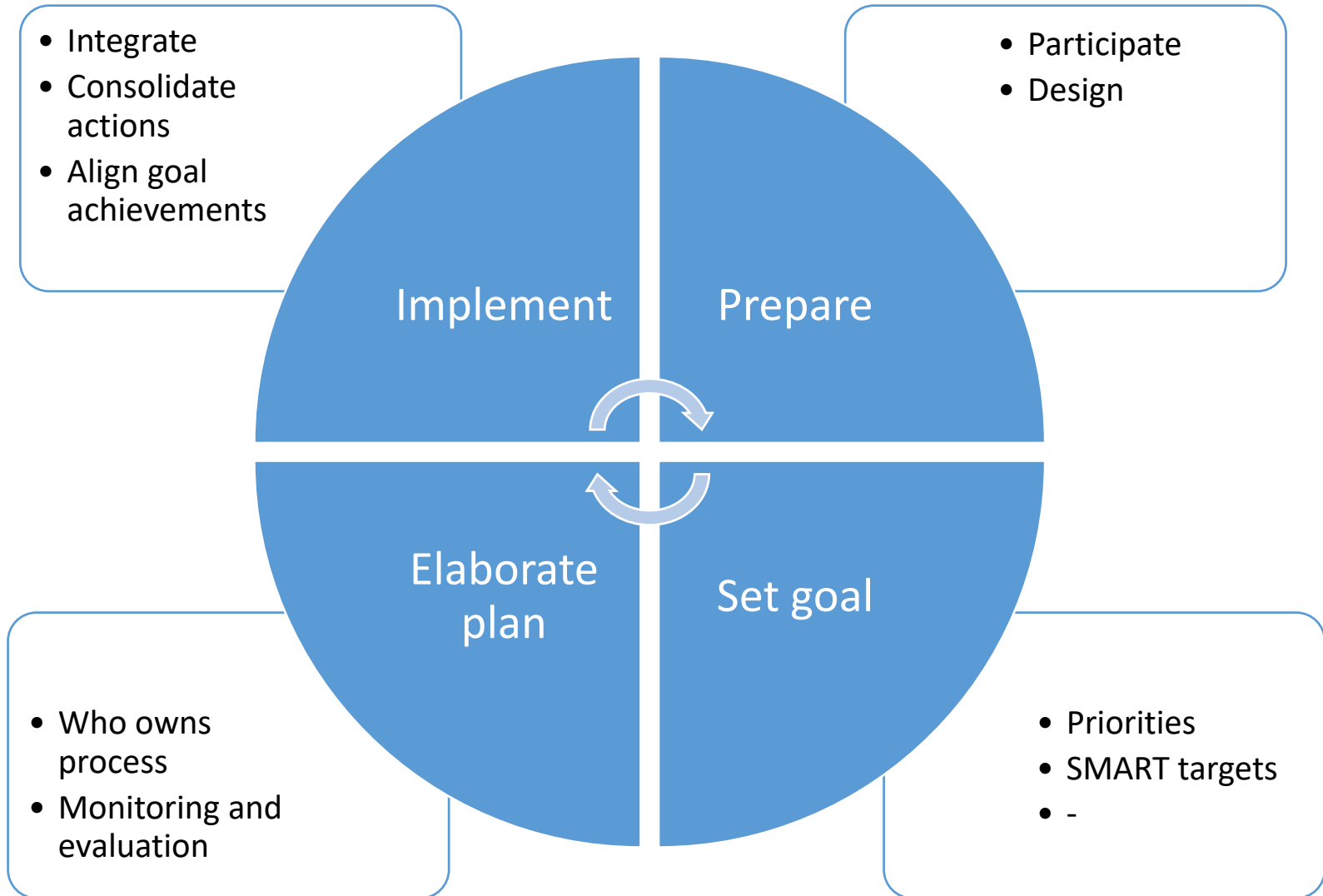
## Towards a HUPMOBILE policy and guideline

- The interactions of stakeholder engagement together with results of simulation analysis help to develop policy directions
- Focuses on providing a ground to propose policy interventions based on informed interactive engagement
- SUMP guidelines and existing policies on reduction of emissions from transportation activities are focused mainly on carbon neutral public transportation, and technological advances for urban mobility
  - Production logistics as well as urban and peri-urban logistics and mobility are seldom considered





## Process adopted from earlier SUMP guidelines



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# Questions & Answers

**Poll 2: Are you interested in  
having a follow-up discussion  
with Work Package leader?**

# Thank you for participating!

[www.hupmobile-project.eu](http://www.hupmobile-project.eu)

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