FinEst Centre
for Smart Cities

SMART CITY CHALLENGE 2024
City Challenge

Max 3 pages
send to smartcity@taltech.ee by May 15, 2024

Challenge Title – *Efficient passenger counting in public buses.*

City/county and country – Jūrmala, Latvia

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1. What is the future urban challenge that would need a solution to?

- **Please describe the challenge of your city.**
  The city provides seven public transportation routes (buses) that connect all neighborhoods of the city. Free city public transport is available to all residents of Jūrmala with the "Jūrmala residents' card". For citizens that don't have "Jūrmala residents' card" or tourists the rides fee is 0,70 EUR. Right now, the ticket validation takes place by applying the card to the card validator or buying the ticket from the driver. The data we can collect from this is ticket validation count and sold ticket count. To make the transport route more efficient (departure times, frequency, etc.) more precise data is needed – how many people get on and off the bus, at what times and routes, however, the method of data collection is provided, must be in accordance with the regulations on data protection of natural persons.

- **Why is it important for your city to solve it? How big of a priority it is for you and why?**
  It's important for the city to address this issue, so that we can adapt the transport route network to the real demand, the needs of citizens and to make Jūrmalas public transport network more efficient and environmentally friendly. By doing that Jūrmalas goal is to make smarter, data driven decisions in mobility field in interaction with climate change, environmental systems, and residents' well-being.

- **Is this a unique challenge/problem of your city, why or is this by your knowledge a challenge/problem that many cities have – which kind of other cities?**
  This is a problem that more cities in Latvia are dealing with, as the public transportation system (or the way citizens buy tickets and validated them) is a bit outdated and differs in each city.

2. Innovation.

- **How have you solved that issue so far? Why aren't the present solutions good enough? Are there legal obstacles, which ones?**
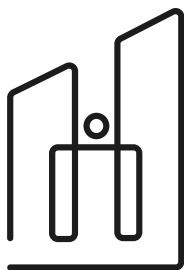
The city introduced card (Jūrmala residents' card) validation when boarding the buses, however, it only provides a limited amount of data – where and when its validated. The city has started brainstorming ideas of how to get data about passenger's boarding and disembarking place, journey duration etc., nevertheless there is gap on knowledge on how to collect the data without invading passengers' privacy and how to accumulate and aggregate data for decision making.

- **What should be the main features, characteristics of the future solution to be potentially best for that challenge or problem?**

  Safe (when it comes to passengers privacy) and effective.

3. Expected impact of your pilot solution.

- **What is the expected impact to your city environment you expect to see if the challenge gets solved?**
  Route optimization and passenger counting system development reduces the number if CO2 emissions that are made, as well as highlights the importance of using public transport as more environmentally friendly mode of transport.
- **What is the expected impact to your citizens you expect to see if the challenge gets solved?**
  Greater satisfaction with the public transport offered by the city.
- **What is the expected impact to your city governance you expect to see if the challenge gets solved?**
  More data driven decision making and understanding the importance of mobility in the city.

4. Piloting

- Why would you be interested to become a piloting partner of a proposed solution to the challenge you are describing here? Describe shortly your capability to participate.

Admistration of Jūrmala local government Development department Mobility division is interested to become a piloting partner of proposed solution and to participate in the workshops for developing solutions for urban challenges.