

Open call: Home-on-demand

Forum Virium Helsinki is organising an open call for agile piloting to solve last meter challenges at shopping centre REDI in Kalasatama. As online shopping becomes an everyday and routine activity for more and more people, the need to tackle last mile and last meter challenges increases. Even in cities, people who live close to services desire flexible ordering and delivery options, all the way to their front doors. **How can we tackle the last meter delivery challenges in everyday smart housing?**

Subject of the open call

With this open call, Forum Virium Helsinki is seeking an autonomous courier and supporting service design for carrying out an agile pilot for last meters delivery in REDI center Kalasatama. The purpose is to seek solutions to last meter delivery challenges in REDI in Kalasatama. A tentative route for the autonomous courier is from K-Supermarket REDI to the Majakka residential building. The route will be indoors.

The aim is to carry out a proof of concept experiment that will provide learnings for the development of new service models. The aim of the experiment is to provide learnings particularly from the following perspectives:

- the service experience of residents
- the perspective of service providers
- the perspective of how factors like the unobstructed movement of autonomous couriers
- the possibility of integrating various services in buildings in the future

Furthermore, another aim is to learn about the scalability of these solutions in public environments. Cooperation will also be carried out with the City's own development projects, in which autonomous logistics solutions are used in public spaces, within city service environments.

This open call is run in collaboration with SRV & Kone oyj. The experimentation platform is the REDI center in Kalasatama. SRV is taking housing services to a new level with smart solutions integrated to REDI high-rise residential buildings. Kone Oyj provides developers with access to lift APIs for selected routes in REDI.

Smart Kalasatama is Helsinki's showcase of new, functional everyday life and smart housing. Kalasatama has been developed from the very beginning in close collaboration with the area's businesses and residents. Kalasatama serves as a test platform for new housing and everyday services. Forum Virium Helsinki has also developed an agile piloting model in Kalasatama for co-creating and carrying out agile pilots in collaboration with the City, residents and businesses.

Requirements for a pilot

Following features are expected from an autonomous courier. Some features can be manually supported during the experimentation stage.

- Navigates autonomously, recognises obstacles, accomplishes the route autonomously and smoothly (some assistance with manually opening doors will tentatively be provided during the experimenting period)
- Delivers an order to the end customer's door at the floor that will be agreed later during the design period 04-06/2020
- Communicates with the end customer and service provider before, during and after the delivery

- Sends an automatic alarm if in failure mode or in need of assistance

Role of the service design partner is to develop service experience of the home-on-demand concept, especially from following perspectives. The final plan can be defined in the kick-off and design stage.

- Service experience of the residents / other users
- Service experience of the service providers (e.g. K-Supermarket)
- Unobstructed movement of autonomous couriers
- Business opportunities, scalability of the service from business perspective

Submitting an offer

The maximum total price of the autonomous courier is EUR 20,000 (VAT 0%), while the maximum total price of the supporting service design is EUR 10,000. The aim of the open call is to primarily select one actor to carry out the autonomous delivery pilot and one service design partner. The call for offers may also result in the selection of multiple actors to carry out the experiment. However, the total combined value of the procured experiments cannot exceed EUR 30,000 (VAT 0%).

A single actor can submit an offer for the autonomous delivery pilot, the service design, or both. The service design provides added value to the experimentation stage. The actors carrying out the autonomous delivery pilot and providing the service design are expected to work together. Each offer must include the total price of the experiment and a breakdown of the costs. The call for offers is open to companies and other operators that have a business ID. Offer for the autonomous delivery pilot and/or service design can also be submitted collectively by two or more parties.

The selected actors must provide, upon request, certificates and statements of taxes paid and pension insurance premiums and any necessary insurance policies in accordance with the act on the contractor's obligations and liability when work is contracted out.

The experimentation stage in real life environment has a minimum duration of one month and a maximum duration of two months within the period of August–October 2020. In addition to the experiment period, the offerer commits to the preparatory work necessary for the experiment (kick-off, co-creation and the technical and other preparation necessary for the use case), which will be carried out within the period of April–June 2020. After the experiment period, the offerer commits to the collection of lessons learned within the period of September–October 2020.

Offers must be submitted by 23:59 on 16 April using the online offer form available on Forum Virium Helsinki's website. All the information requested on the form must be filled out.

The offer form is available at <https://forumvirium.fi/en/open-call-home-on-demand/>

Selection and evaluation criteria

The autonomous delivery pilots offered will be evaluated based on the following criteria:

- 1) novelty and innovativeness,
- 2) feasibility and
- 3) impact.

offers will be scored in accordance with the criteria described below. Each evaluation criterion is scored on a scale of 0–4 points. The maximum score that an offer can receive is 12 points.

Scoring

- 0 p. minimum requirement not met
- 1 p. minimum requirement met
- 2 p. requirement met
- 3 p. requirement met well
- 4 p. requirement met excellently

Criteria

Novelty and innovativeness (0-4 p.)

- The service or product has genuine novelty value and it is innovative.
- The agile pilot provides new practices, solutions and perspectives for last meter transport challenges.
- The agile pilot can be used as a basis for assessing the applicability and scalability of similar implementations in other open environments.

Feasibility (0-4 p.)

- The offerer demonstrates that they have sufficient competence and resources to carry out the experiment.
- The description of measures, timetables and resources shows that the experiment can be carried out in a high-quality manner and on schedule.
- The service is user-oriented.

Impact (0-4 p.)

- The service or product creates concrete solutions.
- The solution can also be applied to other environments and with other end users and cooperation parties.

The service design is evaluated via the feasibility of the offer based on the capability of the parties named in the offer as the parties conducting the service design and on the implementation plan. Feasibility is evaluated on a scale of 0–4 points. The maximum score that a offer can receive is 4 points.

Scoring

- 0 p. minimum requirement not met
- 1 p. minimum requirement met
- 2 p. requirement met
- 3 p. requirement met well
- 4 p. requirement met excellently

Criteria

Feasibility (0-4 p.)

- The offerer demonstrates that they have sufficient competence and resources to carry out the experiment.
- The description of measures, timetables and resources shows that the experiment can be carried out in a high-quality manner and on schedule.

- The service is user-oriented.

The offers that receive the highest scores are selected to carry out the experiment. The expert jury reserves the right not to choose any service providers.

Further information

An information event about the open call was held on 5 March 2020 at 13:00–16:00 at the Redi Urban Lab. The presentation slides from the information event are available [here](#)

Any questions regarding the open call should be submitted in writing by 26 March 2020 to the address assi.rautanan@forumvirium.fi (subject line: Home on demand, agile pilots). The questions and answers will be compiled together and published by 2 April 2020 on the open call page at <https://forumvirium.fi/en/open-call-home-on-demand/>

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The 6Aika (Six City Strategy) New Solutions in City Logistics project seeks smart solutions for organising urban logistics as lightly, sustainably and effectively as possible. The project is funded by the European Regional Development Fund as part of the Six City Strategy (6Aika). The funding is granted by the Helsinki-Uusimaa Regional Council, and the project will run from 2018 to 2020. The Helsinki sub-project is coordinated by Forum Virium Helsinki.