

Call for tender: Study on the future of Helsinki's Urban Air Mobility

1. Description of tender

The City of Helsinki is seeking a provider to execute a vision study for the future of Urban Air Mobility in Helsinki. It will focus on different scenarios for future air mobility and its implications for the city, its various departments and subsidiaries. The study will especially focus on the role and actions arising from the different development paths and new services, while also considering the up- and downsides of actions taken or not taken.

The study will take a look at the future trends of the UAM services and define expected pathways for Helsinki's UAM developments, and their impact on the city and its environment. Such analysis will identify crucial actions that the city will need to take in the short and mid-term, in order to cope with and prepare for these developments. The study aims to be a discussion starter and its main emphasis should be on a vision, roadmap and recommendations. Tenderers should keep in mind that the audience may have little existing knowledge on the UAM topic.

Expected impacts of different actions will be further analyzed and potential benefits underlined. Tenderers will categorize expected development paths and present different scenarios of the role of the city. For example, the city as a passive actor in urban air mobility scene, letting the market handle the execution; the city as a follower, overseeing the trends and actions in other major cities and implementing necessary strategies to manage the change; the city as an active promoter of new UAM solutions and one of leading cities in the world in creating functioning platforms for UAM solutions.

The tender is divided into 4 blocks. A tenderer can apply for one or more blocks. Due to the different expertise required by each of the blocks, the expectation is that consortia will need to be formed to carry out successful analyses. In that case, a coordinator should be appointed, and some budget should be reserved for this task. The end result is expected to be one cohesive study. Procurer reserves the right to cancel the tender in case some of the blocks receive no proposals.

The work is expected to cover:

Block 1: Policy implications; Role of the city departments

This block encompasses the effect that UAM is expected to have on the city organization, such as its traffic and city planning and related policies. The potential for integration into existing transport planning should be described. The study needs to cover short, medium and long term. It should also include the potential role of the city in managing its lower airspace and it should describe envisaged infrastructure requirements, incl. for example connectivity or landing site needs.

Block 2: Legal implications

This block should lay down the formal role of the city under current regulations (local, national and European) and should clarify the role of and relation with Traficom (as Civil Aviation Authority) and Fintraffic Air Navigation Services, as well as EASA and Eurocontrol on an EU level. Upcoming regulations relevant to the role of the city (or its subsidiaries) should be described and a timeline of those should be provided.

Block 3: Economic implications of UAM

This block should briefly describe the different (existing and expected) categories of UAM use cases in the city and distinguish between activities by the city itself (and its subsidiaries), other public entities (with operations within the city boundaries) and commercial activities. It should cover both smaller and larger drones and passenger drones. Business opportunities should be described, including also possible attractions of investments & talent. A cost-benefit analysis for

Urban Air Mobility should be included, covering cost reductions versus required investments. Ways for the city to monetize its lower level airspace should be included.

Block 4: Social and environmental implications; UAM in the city

This block should describe the expected effects of UAM on citizens, on transport equity (fairness for all people), accessibility, security as well as on the environment, incl. urban wildlife. The topic of public acceptance should be included too and be linked to the role of the city. UAM's potential contribution to Helsinki's carbon neutrality goals should be described.

In each of these 4 blocks, implications of Kivikko's (helicopter) landing site should be incorporated. Additionally, each of the blocks should refer to relevant international benchmarks where possible.

2. Contracting authority

City of Helsinki, Economic development division

3. Price

The maximum price limit for the study is 40.000€ (vat 0%). This sum is expected to be divided over the 4 blocks in a reasonable way and include possible coordination costs.

4. Format of the tender

Tender must be submitted in writing in English.

5. Quality requirements and Requirements for tenderer

As a result of the work, the consortium is expected to produce a study that gives a good overview into the four different blocks of the tender from the potential different City roles given in the description. Consortia are not expected to prioritize or rank the different roles but rather establish an objective vision of the pathways that a given role implicates. Each of the roles should have clear indications as for the required actions and expected impact to the development of UAM practices in the city.

To ensure validity of the results, the study must include interviews with at least the following organizations: Traficom and Fintraffic ANS.

Additionally, interviews with the following organizations may be relevant for the study: FinnHEMS; Police; Helsinki Vantaa Airport; Oulu Hartaanselänranta (asuntomessut); Port of Helsinki; Pelastuslaitos.

The tenderer can propose extra interviews to be included in the process. Tender is expected to cover the working methods as well as proposals to which block a given interviewee is expected to provide additional value to.

The end result is expected to be high in quality. The exact format of the report could be a pdf-file but the tenderer can propose other means of delivery. The tenderer is expected to produce a compressed version of the results to be used for simple forms of communication. The tenderer should propose a best format to communicate the results of the study for this purpose.

For the sake of evaluation tenderer must include in addition to the aforementioned the following information:

- General information about the tenderer
- CVs of the persons responsible for the delivery of the service

- Similar service references of the companies responsible for the delivery of the service (max 5/consortium)
- Detailed plan about the service process, project management, proposed working methods, included interviews, structure and schedule (work plan)
- Description of division of labor between responsible persons in different stages of the process and labor costs (price per person/hour)
- Description of exact form of the end results

6. Award criteria

Contract will be awarded in accordance to selected award criteria of:

- 1) Plan for project management, proposed working methods and execution (weight 40%)
- 2) Competence of the tenderer, composition of the consortium, composition of the team (weight 40%)
- 3) References of similar work; maximum of 5 references (at consortium level) (weight 20%)

7. Submitting the tender, validity of the tender and additional information

Potential questions in regard to this call for tender must be send via email to kalle.toivonen@hel.fi by 10.11.2022. Questions received after the deadline will not be answered. Answers to the questions will be provided for all the parties that have confirmed their interest in the call and provided their contact information to the procurer.

The closing date for tenders is 21.11.2022. Tender must be sent via email to kalle.toivonen@hel.fi. The email should include the topic "Tender: Study on the future of Helsinki's Urban Air Mobility"

Tender must be valid until 12.12.2022.

8. Expected duration of the work

The contract period is expected to start early December.

A first draft of the overall study should be available on 25.1.2023. A finalized version is expected to be delivered during the early spring of 2023. This schedule should be treated as informative and is open for negotiation.

9. Conditions of Contract

The agreement shall be governed by JYSE Palvelut (2022).