



# **Co-creation challenge for companies from the City of Helsinki and the Governing Body of Suomenlinna**



Call for tenders 10 March 2021

## Augmented reality (AR) learning path to Suomenlinna

The City of Helsinki and the Governing Body of Suomenlinna invite companies to develop AR content together with users. The aim is to develop AR content for Suomenlinna to enrich history teaching in grades 5–6. Together with users and companies, we want to develop an AR learning path that brings Suomenlinna to life from a historical perspective. The content of the learning path will be co-created with the City of Helsinki's Education Division and Suomenlinna's experts, based on the content of the history curriculum and the history of Suomenlinna.

We are challenging companies to consider how we can activate and enrich the use of the urban environment as a learning environment through augmented reality. Could the AR path make it possible to encounter or see things from the history of Suomenlinna? Will the pupils look for AR treasures or explore the historical environment? Could there be other XR content on the learning path? Tell us your ideas. To help you find the solutions, you will have a group of end users and experts in the field.

We are looking for ideas that will make Suomenlinna not only an excursion destination, but a World Heritage Site that comes to life from a historical perspective. One of the strategic goals of the Education Division is to promote the utilisation of the urban environment as a learning environment. During this co-creation period, we hope to find new ways and ideas for implementing learning in a wider setting than just school buildings, using innovative solutions.

We are looking for a partner for the co-creation period to develop AR content for Suomenlinna with us. The learning path must include at least three to five points where the environment is enlivened with new AR content. It is an advantage if the company already has experience in building XR solutions and a platform on which to build the learning path. We are also interested in your ideas and opportunities to take advantage of XR technologies more broadly. We value the involvement of learners in Helsinki. Therefore, it is an advantage if it is later possible for learners to produce content themselves. Learner involvement can also be reflected in other ways in the proposed solution. We would also like for the proposed solution to contain elements that engage and motivate the learner.

Unleash your creativity and sign up for the trial! Next, we will describe the framework and progress of the trial in more detail.

## What is being procured?

The City is specifically procuring a trial. AR content will be developed together with users during the trial. Suomenlinna's experts will help with content planning from a context perspective, while education experts will help with user orientation.

When participating in the competition, the company should have a platform at its disposal for the development of the solution, in order to be able to achieve the goals successfully. In the tender, we want to hear your ideas and plans for AR content. We value previous references on XR implementations in education, verification of the team's abilities, and knowledge and understanding of operating in the education sector. The end result of the co-creation period must be a functional solution for an augmented reality learning path.

The AR learning path must include three to five content points. By content point, we mean a place with content aimed at students (AR objects or other content). The content can be completely new AR objects, videos or various types of exercises. We value innovative implementations with high pedagogical quality. The active participation and content creation of learners can be made possible at the content points. We would like for the learning path to include new AR objects (at least 50% of the content points). The quality and innovativeness of the content presented in the implementation plan is one of the selection criteria in the competition. Route options for the learning path and examples of material that can be used for the content points are specified in Appendix 1. Most of these locations are outdoors. The use and placement of possible targets or markers will be considered during the co-creation period.

During this co-creation period, we primarily develop augmented reality content for pupils in grades 5–6. The plan is to later develop the AR content to also suit other age groups of schools and educational institutions, as well as visitors to Suomenlinna. These interests should be taken into account in the first trial. When choosing the solution, we will consider it to be an advantage if the solution is scalable. If the content is not suitable for other visitors as it is, the broadening of the target group can be carried out by editing the content points, for example. The content developed in the trial will remain the property of the company. We request that the content developed in the trial remain available to Suomenlinna and the Education Division for at least a year.

The City of Helsinki will pay a maximum of 35,000 euros for the trial period. 50% of the amount will be paid in the first phase. The solution will be evaluated in the middle of the co-creation period, after which an agreement will be made on the completion of the solution and the payment of the rest of the money. The mid-term evaluation will be carried out by comparing the implementation with the implementation plan presented in the agreement and the tender. The City may stop the trial at the mid-term evaluation if the plan has not been implemented or its completion seems unrealistic. The City may launch the trial with 1–3 companies at the same time. The City may also decide not to start the trial and co-creation period with any company. The tender must also indicate the annual operating costs of the product after the co-creation period.



## Background information for the implementation

### **Framework**

The users may include visitors to Suomenlinna and school groups, depending on the content and level of completion of the solution. During the trial period, it will not be possible to collect personal data from the user groups. The company's servers must be located in the EU due to data protection regulations. Proposals participating in the innovation competition must be presented by a company (business ID required). The placement of content must take into account the safety of the users in an age-appropriate manner. We assume that the Client will have access to the content for at least one year from the end of the trial. Please describe the scope of the access rights in more detail in your tender.

### **Please note**

The purpose of this competition is not to build an entirely new application or game. It is therefore advisable for the company to have a platform for developing the content to be able to achieve the goals successfully. There are a few general considerations regarding school use that have been topical in recent teaching technology choices. The following considerations are wishes that would facilitate the implementation of the solution in a school context. They are not criteria that influence the choice of solution. In school use, we generally favour opportunities for learner involvement. It would be great if it were possible to add AR objects designed by the learners themselves at later stages, in possible follow-up projects, for example. In school use, we generally favour browser-based solutions due to their smooth adoption. Suomenlinna is a protected World Heritage Site. We are interested in solutions where elements in the environment can be used as a target or the emergence of an AR object is based on the location of the device used, for example. If you want to use targets or markers for the emergence of the augmented reality solutions, the placement of these will be considered together with Suomenlinna's experts.

The company will have archival material on Suomenlinna at its disposal, for which preliminary information is provided in Appendix 1.

## Schedule

Two to three school groups in grades 5–6 will participate in the co-creation process. In addition to this, workshops related to the preparation and finalisation will be attended by experts from the City and Suomenlinna, who will support the development of the solution. External experts in the field may also be invited to the workshops. The co-creation period will last about 5–6 months (incl. summer holiday months). The process schedule is detailed below. The schedule of the co-creation period can be further modified based on the needs of the parties and observations. An agreement on the co-creation period will be made between the company and the Helsinki City Executive Office’s Economic Development division.

### *Schedule 2021*

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|------------------|---|
| <b>March</b>     | Questions can be submitted until 20 March to <a href="mailto:laura.lindfors(a)hel.fi">laura.lindfors(a)hel.fi</a> . The answers are published by 26 March on the Testbed Helsinki website ( <a href="http://testbed.helsinki/en">testbed.helsinki/en</a> ). |
| <b>April</b>     | The tendering ends on Wed 7 April at 4 pm.<br>The top three to five solutions are invited to the pitching day on 15 April.<br>Evaluation of the tenders<br>The decisions are made by 30 April   |
| <b>May</b>       | Agreement details & signatures<br>Co-creation workshops as a basis for the development<br>Collection of material  |
| <b>June</b>      | The company’s own content development   |
| <b>July</b>      | The company’s own content development   |
| <b>August</b>    | Co-creation with experts<br>The company’s own content development<br>Prototype presentation to customer groups  |
| <b>September</b> | Start of user testing with a few groups of pupils<br>Mid-term evaluation of the product and start of further development<br>The company’s own content development   |
| <b>November</b>  | Final meeting with the team and end of the co-creation period<br>Compilation of follow-up ideas and observations  |



## How do I sign up?

To register for the competition, submit your tender in PDF format by email to [laura.lindfors\(a\)hel.fi](mailto:laura.lindfors(a)hel.fi) by 4 pm on Wednesday 7 April. Late submissions will not be considered. The tender will be considered late if it has not been received electronically at the above address by the deadline.

In the tender, include at least the following:

- Basic details of the company.
- Description of the technology used. Also state if the technology requires specific hardware or other preconditions from the end user.
- Preliminary implementation plan: describe your idea and how the process will be implemented.
- The price of the content to be developed during the co-creation period. In the pricing, also include the costs of any follow-on purchases (e.g. annual operating or maintenance costs).
- Describe the material and usage rights that remain with the client after this period.
- The team working on the project & references suitable for the competition.
- If you estimate that the product development will not be completed during the co-creation period, describe how the product development will progress, including stages of completeness and pricing.

Mark trade secrets as confidential and include your contact information. At the application stage, the solution should not be completely ready. Instead, it will be developed together during the trial. However, describe which parts of the product will be developed during the co-creation period and which parts will utilise existing content.

If you have any questions regarding the tendering, you can send them by 20 March to [laura.lindfors\(a\)hel.fi](mailto:laura.lindfors(a)hel.fi). We will publish the answers to the questions on the Testbed Helsinki website by 26 March. The three to five companies that have submitted the tenders with the greatest potential will be invited to the pitching day, which will be held on 15 April. The pitching day meetings will be approximately 30–40 minutes long and held privately between the Tenderer and the Client.

## Selection criteria:

1. Suomenlinna learning path content, 25 points
  - a. The content is compatible with the content of history teaching, particularly in grades 5–6
  - b. The content is particularly suitable for the surroundings of Suomenlinna and its history
  - c. The usability of the service is appropriate for schoolchildren
  - d. The stage of completion of the content to be developed during the co-creation period
  - e. The plan takes into account the framework and considerations presented
2. Innovativeness of the trial, 15 points
  - a. The quality of the content to be developed during the co-creation period
  - b. The experiment brings new perspectives on the use of XR technology in learning
  - c. The solution enlivens visits to Suomenlinna and encourages the use of Suomenlinna as a learning environment
3. Scalability of the service, 20 points
  - a. Functionality of the service and business model
  - b. Scalability of the service to other user groups
  - c. The content stands the test of time and is easy to update
  - d. The service is intuitive and easy to use
4. Pricing, 20 points
  - a. Possible operating costs after the co-creation period
  - b. The price of the content to be developed during the co-creation period
  - c. Pricing of any further development
  - d. Duration and scope of the usage rights of the product
5. References and suitability of the implementer, 20 points
  - a. The implementer has experience of working in the education and/or museum sector
  - b. The implementer allocates its development resources for the co-creation period
  - c. The implementer has sufficient competence and motivation for the co-creation process
  - d. The implementer has the capability and desire to complete the solution

This trial will not bind the City to the further procurement of the actual solution. If the City of Helsinki or Suomenlinna decides to acquire a learning path as a product or on the SaaS principle implemented by means of augmented reality after the experiences gained from the trial, it will be a separate procurement.

**Requirements relating to the eligibility and suitability of the tenderer**

The evaluation of the tenderer's eligibility will be based on the information provided by the tenderer and the fulfilment of other information required in the call for tenders. The tenderer must submit the documents required by the Act on the Contractor's Obligations and Liability when Work is Contracted Out for inspection if the tenderer's information is not available in the Vastuugroup.fi portal.

The procurement unit will verify the following information:

- supplier's Trade Register entry
- Employer Register entry
- any business prohibition
- VAT liability
- prepayment registration validity
- any tax debt
- employees' pension insurance coverage and payment of pension insurance premiums or, alternatively, creation of a payment plan
- applicable collective agreement
- provision of occupational health services

## More information

**City of Helsinki, Office of Economic Development**

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**The Governing Body of Suomenlinna**

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**Appendices:**

- Appendix 1. Material on Suomenlinna
- Appendix 2. Concise data protection appendix
- Appendix 3. Draft contract