



EuroHPC
Joint Undertaking

Above-threshold public contract for supplies

“LUMI-Q Quantum Computer”

Contracting Authority:

The European High-Performance Computing Joint Undertaking

Registered office: 12, Rue Guillaume J. Croll, L-1882 Luxembourg, Luxembourg,

The entity responsible for conducting the preliminary market consultation:

VSB-Technical University of Ostrava

IT4Innovations National Supercomputing Center

Registered office: Studentská 6231/1B, 708 00 Ostrava, Czechia,
(hereinafter referred to as “IT4Innovations”)

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INVITATION TO THE PRELIMINARY MARKET CONSULTATION

Pursuant to Art. 40 of DIRECTIVE 2014/24/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (hereinafter referred to as “Regulation”)

The Contracting Authority represented by IT4Innovations hereby invites the Economic Operator to participate in the preliminary market consultation related to the subsequent public contract titled

“LUMI-Q Quantum Computer”

1. General information

The Contracting Authority announces that it shall conduct preliminary market consultations (hereinafter referred to as “PMC”) regarding the procurement of a highly specialized computing system – quantum computer. The objectives are to inform the Economic Operator about the Contracting Authority’s needs, and to gather the Economic Operator inputs, feedback, and information regarding the computing system to lay down the award criteria. The Contracting Authority invites the Economic Operator to participate in the PMC.

In order to gather relevant information about the subject matter of the upcoming public contract, and to prevent the award criteria from being determined in a manner which is discriminatory, inadequate, or non-standard on a given market, the Contracting Authority plans to use the PMC to achieve the following:

- validation of the public contract award criteria with respect to the needs of the Contracting Authority and the market opportunities,
- identification of possible alternative ways of meeting the needs of the Contracting Authority, and
- enhancement of the Contracting Authority's awareness of the subject matter of the public contract and the latest market opportunities and potential specific criteria of performance when viewed by the Economic Operators.

The Contracting Authority has set up a preliminary set of requirements regarding the intended “LUMI-Q Quantum Computer” and aims to find an optimal way fulfil the needs. Information about the subject matter of the public contract performance can be found in **Annex 1** of this invitation.

2. Preliminary market consultation conduct

The PMC will be carried out in the English language. The Contracting Authority reserves the right to use another language of the proceedings in the PMC, in particular the Czech language.

Where the final procurement documents contain information that has resulted from the PMC, the Contracting Authority will mark such information in the procurement documents, identify the persons who have taken part in the PMC, and provide all essential information that was the subject of the PMC. In the context of the below-mentioned requirements for the LUMI-Q Quantum Computer design, the Contracting Authority shall give notice that the procurement documents shall include only such information that shall be clearly substantiated and justified by the Contracting Authority.

The PMC is a preparatory phase of the future (subsequent) public procurement. Its purpose is **not** the acquisition of a quantum computer itself. Failure of a supplier to participate in the market consultation shall not result in its exclusion from the subsequent procurement procedure.

2.1 PMC schedule

Invitation sent:	05/07/2023
Visit to the site of performance (site survey)	from 12/07/2023 to 11/08/2023 (cf. Art. 2.3)
LUMI-Q Quantum Computer design	14/08/2023 (could be extended cf. Art. 2.2)

2.2 LUMI-Q Quantum Computer design

The Contracting Authority requires the Economic Operator to submit their response to this invitation by **14th August 2023** via e-mail to the following address: quantum-computer@it4i.cz or via IT4Innovations contracting authority's profile https://zakazky.vsb.cz/contract_display_1805.html. Especially foreign participants are rather recommended to use e-mail. This deadline may be extended upon written request sent to the above e-mail.

In your response, please provide a detailed technical proposal containing full technical solution that satisfies the technical specifications set in the Annex 1 as closely as possible. **In case of deviation, please propose and justify an alternate approach.**

Please follow the structure outlined in the **Art. 7 of the Annex 1** when appropriate.

Only those Economic Operators who submit their response within the required period and to an adequate extent will be included in the PMC.

2.2.1 Inquiries on the technical requirements

Within the required period for submission of the LUMI-Q Quantum Computer design, participants are allowed to submit inquiries via e-mail or IT4Innovations contracting authority's profile about the technical requirements specified in Annex 1 of this invitation, or about other terms and conditions included in this invitation. The Contracting Authority shall answer these inquiries directly in writing or organize meeting in person or using teleconference if necessary.

All inquiries along with answers will be published on the IT4Innovations contracting authority's profile. However, the publication in no way concerns the technical designs themselves or the approach to the technical solution taken by the participants. It is merely intended to ensure equal and non-discriminatory access to information for all participants when the conditions set out in **Annex 1** are modified by the contracting authority as a result of submitted inquiries.

2.3 Visit to the site of performance (site survey)

The Contracting Authority offers to all participants a detailed site survey for the duration of up to 3 working days. The site survey may be used by the possible vendor to assess the environmental conditions on the IT4Innovations data room. This may include placement and operation of instruments for the purpose of detailed measurements and assessment of local environmental conditions. The site survey should be booked at least 5 days in advance.

Date of site survey can be booked via e-mail or IT4Innovations contracting authority's profile. The site survey can take place from 12/07/2023 to 11/08/2023 where 11/08/2023 is the last possible day of the Survey. In case of date collision, the first booking takes the date. The others will be contacted to choose another date in the order in which they booked the collided one.

All participants are strongly recommended to use the possibility of the site survey as it is a crucial source of data on which the technical design should be built on.

2.4 Further conduct of the preliminary market consultation

Based on the received responses, the Contracting Authority shall carry out re-evaluation of the technical requirements and modify Annex 1 accordingly. The modified Annex 1 of the PMC will be provided to the participants, along with an invitation to amend the LUMI-Q Quantum Computer designs and/or provide further inputs. This procedure may be repeated up to the point where the Contracting authority achieves the goals laid down in Section 1.

The Contracting Authority reserves the right to conduct the PMC via written electronic communication means (e.g., Contracting Authority's profile, e-mail, REDMINE communication system), teleconference, or by means of personal negotiations with individual Economic Operators.

Not only minutes but also audio-visual or sound recordings shall be taken from all personal as well as teleconference discussions. Prior the commencement of each negotiation, the Contracting Authority shall seek the consent of the Economic Operator to take such a recording.

Ing. Jan Juřena
IT4innovations
head of the public procurement and legal service

Annexes:

Annex 1 – Technical specification for LUMI-Q quantum computer system