



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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**RESPONSE No.3 TO THE INQUIRIES ON THE INVITATION TO THE
PRELIMINARY MARKET CONSULTATION**

According to Art. 2.2.1 of the invitation to the preliminary market consultation (hereinafter referred to as "PMC"), participants are allowed to submit inquiries about the technical requirements specified in Annex 1 of the invitation to the preliminary market consultation or about other terms and conditions included in this invitation within the required period for submission of the LUMI-Q Quantum Computer design, 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.

IT4Innovations received a set of questions to which it provides the answers below. Some of the responses are based on the individual communication between participants' and IT4Innovations' representatives.

Inquiry No. 1:

The official deadline for the PMC answer has been extended to Sept. 1st, 2023, but you'd appreciate an earlier answer, right?

Response:

Yes. The deadline has been postponed until 1 September 2023. We would appreciate an early answer, preferably on the original deadline 14 August. 2023.

Inquiry No. 2:

We are not convinced that splitting the price estimate according to the sections of the suggested response structure is the best option. Is another division fine, too?

Response:

The division set in the Annex 1 to the invitation to the PMC is not mandatory. Please provide alternate, meaningful division.

Inquiry No. 3:

Redundancy of the power circuit. Are the A & B circuits permanently powered or is there some kind of switching mechanism already? How about the backup generators, are they in addition to the A&B circuit structure? How is the gap covered until they kick in? And do they serve both A & B circuits?

Response:

Both A and B circuits are permanently powered. Both circuits are backed up by DUPS generators. There is no gap, the gap is covered by energy stored in a flywheel that is part of DUPS.

Inquiry No. 4:

Are there redundant cooling water circuits available? Or is each circuit laid out in a redundant way (pumps etc.) already? If there are redundant water circuits, are other installations at IT4I typically making use of this?

Response:

Three cold water circuits are available, SV1, SV2 and SV3, two hot water circuits TV1, TV2 are available. Circuits are also redundant internally, containing redundant pumps and compressors. Other IT4I installations use automatic switch valves, that switch cooling source fx. from SV1 to SV2 in case SV1 pressure drops.

Inquiry No. 5:

Cryostat vendors usually require an electrician (fix a few connectors) and a plumber (connect the compressors to cooling water) to be on site on the installation day. Do you have such people available, or should they be provided by the Economic Operator?

Response:

Economic operator should provide all specialist personnel.

Inquiry No. 6:

My understanding is that LN2 supply and storage will be organized and handled by the hosting site. Is that correct? If not, what's your take here?

Response:

The LN2 storage will be organized and handled by the hosting site.

Ing. Jan Juřena
IT4Innovations
head of public procurement and legal service