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## Questionnaire No. 1

(hereinafter the "Questionnaire") issued for the purposes of a negotiated procedure without publication

initiated pursuant to Act No. 137/2006 Coll., on Public Contracts, as amended  
**for an above-the-threshold public contract for supplies**

### **"Development and delivery of key subsystems of L2 Stage 1 high repetition rate OPCPA beamline"**

(hereinafter "**Negotiated Procedure**")



This Questionnaire has been prepared as means to clarify several issues decisive for the preparation of the final version of the Tender Documentation for the Negotiated Procedure and serves as a preparation instrument for the Negotiation Phase of the Negotiated Procedure. For further reference see the "L2 Stage 1 high repetition rate OPCA beamline - Negotiated Procedure Overview" which has been communicated to applicants as an attachment to the Qualification Documentation (hereinafter the "Overview").

In view of the strict rules applied in the Czech Public Procurement law and in the documentation of the Research and Development for Innovations Operational Programme 2007-2013 (hereinafter the "RDIOP") the Contracting authority has to prepare a detailed Tender Documentation and Contract for Work / Business Conditions for the tender awarded in the process of Negotiated Procedure (hereinafter the "Tender") with highest possible level of risk mitigation on the part of the Contracting authority while ensuring that such conditions are non-discriminatory and acceptable for the applicants in the Negotiated Procedure (hereinafter the "Applicants").

These conditions include economical, legal as well as technical conditions of the Tender. In order to ensure the conditions of the Tender are realistic while also maintaining high level of risks mitigation for the Contracting authority, in the Negotiation phase, open issues shall be discussed with the Applicants on formal and documented basis. The filling in of this Questionnaire shall enable all interested parties to prepare themselves for these discussions.

The Contracting Authority shall proceed in communication with each Applicant directly and separately. The Contracting Authority shall not disclose any information received from an applicant to any other applicant, unless such information is used in the Tender Documentation, further Questionnaires as part of the conditions of the Tender, or unless such information is used for further specification of the set up of the Tender.

The Contracting Authority offers to conclude a standard **Non-Disclosure Agreement** with each of the Applicants to safeguard their interests in the Negotiated Procedure.

The Contracting Authority hereby requests the Applicants **to provide answers to the following questions in writing no later than on 22 January 2014 at EOB (24:00) hours Prague (CET) local time.**

Where appropriate provide your answers with respect to the intended subject of delivery including the reasoning for the chosen concept.

Also please follow the basic structuring of your answers Question Nr. - Question - Answer.

## Questions to be answered:

### 1. Procedure

a) With respect to the very tight schedule of the ELI-Beamlines project the Contracting Authority wishes to proceed as quickly as possible towards concluding this procurement procedure. Please consider the anticipated course and deadlines described in the Overview, especially Chapter 5. During the Negotiated Procedure all relevant data of the Tender Documentation shall be communicated to the participants in as much advance as possible. Please let us know if you see any serious obstacles on your side with respect to the suggested timing of the anticipated phases of the Negotiated Procedure.

### 2. Contract

a) Could you provide confirmation that the delivery of the system in the course of the year 2016 is possible? What may be the key constraints on your side to deliver the system within the expected period – 30 months?

b) Please let us know of any necessary contractual conditions/disclaimers required on your side as ultimate conditions of your participation in the tender (e.g. your founder's requirements, statutory requirements, etc.)

c) As mentioned above with respect to the tight time schedule and the legal and other regulatory environment of the RDIOP it is necessary to maintain high standard of risks mitigation on the Part of the Contracting Authority, which will probably be also subject to external audits of the EU. Therefore, please offer possible risk mitigation/motivation/performance incentives and sanction plan for cases of supplier's wrong or late fulfilment of the Tender contract or its non-conformance. Please note that the intended general principle of the contract shall be:

- payments upon flawless partial deliveries (with reasonable pre-payment, see below);
- combined by a system of limited contractual penalties for delay;
- ongoing review of risk mitigation strategy (plan)

d) In order to insure the availability of sufficient funds for different phases of the project, we need to have a planning of the major expenses. Can you provide us with a cash-flow forecast? Please be informed that if the funding is to be provided in advance by the Contracting Authority, the grounds have to be given to the sponsor of the RDIOP (the "Sponsor"), and that forward payment is accepted only in well substantiated cases (which will have to be documented as a part of the bid in the form of detailed breakdown of necessary procurement and other costs, including price justification, e.g. market comparison).

e) The Contracting Authority requires a solution where the delivery (including installation, activation of the system and its testing) takes place on its premises, and where the Supplier shall be fully responsible for the transport and activation of the system on site. State whether this solution is acceptable.

f) Please note that in accordance with the rules of the RDIOP the following standard rules have to be included in the Tender contract:

- Publicity rules (use of RDIOP logo links on most types of documents, standard information on funding from EU funds etc.);

- Archiving rules (the obligation to archive documentation pertaining to the Tender for a specific period of years);
- Rules binding the contractor to enable inspection from Czech or EU governmental bodies (limited inspection pertaining only to the Tender Contract)
- The Tender contract has to be executed under Czech law with possible international arbitration with the following conditions:
  - Arbitration institution: one of the world renowned arbitration institutions
  - Arbitration Venue: Czech Republic or other EU Country.
  - Arbitration language: Czech or English
  - Costs of arbitration are held in full extent by each party individually, irrespective of the success in the dispute, proceeding costs are held 50/50
  - Each party nominates one judge, the third judge is nominated by mutual agreement of the judges nominated by the parties

These rules are binding and basically non-negotiable. You can however provide any relevant comments or let us know if you require additional information or some special contractual provisions regarding this (e.g. inspection carried out through specialised national body, etc.).

### 3. Risks

- a) Please describe project risks associated with the overall delivery
- b) Please describe major technical risks

### 4. OPCPA repetition rate power amplification chain

- a) Can you comment on the suggested block scheme of the L2 OPCPA beamline shown in Major Performance Requirements?
- b) Can you identify specific performance parameters of Stage 1 (see "Major Performance Requirements") and suggested scheme of Deliverables whose achievement is associated with highest risks? How do you suggest mitigating these risks?
- c) Can you describe your approach in development of each major subsystem (stretcher, OPCPA power chain, optimized frequency doubler of the pump laser, compressor) required to be delivered within this contract?
- d) Can you describe in detail your experience with development of technology for generation of multi-joule class OPCPA systems running at repetition rate  $>1$  Hz, and with diode pumped repetition lasers delivering nanosecond pulses with energy of the order of 10 J?
- e) As mentioned in "Major Performance Requirements", the Supplier will be asked to make available specific equipment necessary to conduct the programme of the technical risk reduction to the Stage 1 development. This equipment notably includes a  $\geq 10$  J pump laser running at the repetition rate of at least 10 Hz,

equipped with frequency doubling providing in excess of 5 J per pulse, and the broadband front end providing millijoule seed pulses to the OPCPA power chain. Can you describe in detail existing equipment and its specifications you are planning to employ? Can you also describe any modifications of the broadband millijoule front end system you will have to make in order to exploit it for the required development of L2 Stage 1?

- f) Can you comment and/or suggest any modifications in the proposed Deliverables and their schedule?
- g) For integration of the L2 Stage 1 system into ELI-Beamlines we will require detailed 3D models in native formats, such as .dxf, and neutral formats such as .sat, or .stp. Can you confirm that you can supply us such 3D model information and to what level of detail?

## 5. Pulse stretcher and pulse compression

- a) Indicate your approach of the stretcher and/or compressor design towards achieving the required temporal contrast of the output pulses.
- b) What is the approach you propose to test the compressor grating performance?
- c) What scheme of cooperation do you suggest with the ELI-Beamlines team to design the L2 Stage 1 compressor, in order to provide L2 Stage 1 compressed pulses for experiments? What strategy in implementation of this L2 Stage 1 pulse compressor do you recommend with respect to implementation of the PW L2 Stage 2 compressor that will be built after 2015?

## 6. Beam and pulse diagnostics

- a) What specific types of beam and pulse diagnostics you propose to deliver along with the required L2 Stage 1 hardware, and what diagnostics do you propose to be supplied by ELI-Beamlines?
- b) How do you suggest cooperating with the ELI-Beamlines team in development of specific beam and pulse diagnostics which are already being developed by ELI-Beamlines for other laser systems?

## 7. Service

- a) Can you provide a list of spare parts and/or consumables that you recommend to be kept at ELI-Beamlines site for regular operation and maintenance of the L2 Stage 1 system?
- b) Can you propose solutions for mitigating the risks associated with availability of the spare parts?