Switzerland-Geneva: Research and development services and related consultancy services
2016/S 107-192143

Contract notice

Services

Directive 2004/18/EC

Section I: Contracting authority

I.1) Name, addresses and contact point(s)
European Organization for Nuclear Research (CERN)
Genève 23
Contact point(s): CERN
For the attention of: Chrisophe Veys
1211 Geneva
SWITZERLAND
E-mail: HL-Quaco-procurement@cern.ch
Internet address(es):
General address of the contracting authority: http://www.cern.ch/
Electronic submission of tenders and requests to participate: https://quaco.web.cern.ch/
Further information can be obtained from: The above mentioned contact point(s)
Specifications and additional documents (including documents for competitive dialogue and a dynamic
purchasing system) can be obtained from: The above mentioned contact point(s)
Tenders or requests to participate must be sent to: The above mentioned contact point(s)

I.2) Type of the contracting authority
Body governed by public law

I.3) Main activity
Other: European Organization for Nuclear Research (CERN)

I.4) Contract award on behalf of other contracting authorities
The contracting authority is purchasing on behalf of other contracting authorities: yes
Narodowe Centrum Badań Jądrowych (NCBJ)
ul. Andrzeja Sołtana 7, Świerk
05-400 Otwock
POLAND
Le commissariat à l’énergie atomique et aux énergies alternatives (CEA)
Centre d’études nucléaire de Saclay
91400 Saclay
FRANCE
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT)
Avenida Complutense, 40
28040 Madrid
SPAIN

Section II: Object of the contract

http://ted.europa.eu/TED
Supplement to the Official Journal of the European Union
II.1) Description

II.1.1) Title attributed to the contract by the contracting authority:
Quadrupole Corrector First-of-a-kind for HL-LHC (QUACO Pre-commercial Procurement).

II.1.2) Type of contract and location of works, place of delivery or of performance

Services

Main site or location of works, place of delivery or of performance: R&D-services will be executed at the Tenderers premises and delivered to the CERN site.

NUTS code

II.1.3) Information about a public contract, a framework agreement or a dynamic purchasing system (DPS)
The notice involves the establishment of a framework agreement

II.1.4) Information on framework agreement

Framework agreement with several operators

Number of participants to the framework agreement envisaged: 4

Duration of the framework agreement

Duration in months: 39

Estimated total value of purchases for the entire duration of the framework agreement

Estimated value excluding VAT: 4 656 000 EUR

II.1.5) Short description of the contract or purchase(s)

To extend its discovery potential, the Large Hadron Collider (LHC) will need a major upgrade in the 2020s to increase its luminosity. The integrated luminosity goal is a 10-fold increase of the nominal design value. As a highly complex and optimized machine, such an upgrade must be carefully studied. The necessary developments will require many years of prototyping, testing and implementing. The new configuration of the machine, HL LHC, among other things, will be based on a new generation of magnets in the two high-luminosity interaction regions, aiming to provide a stronger beam focusing. All of these magnets constitute a significant technical challenge at the edge and beyond the actual state-of-the-art technology. The technical challenges range from materials (i.e. NbTi and Nb3Sn superconductor cables with unprecedented current carrying density), process (i.e. 3D printing to precision manufacture magnet subcomponents), design techniques (i.e. extensive use of prototype and testing to retro-fit the design production).

This Pre-Commercial procurement focuses on the realization of R&D services to develop MQYY superconducting quadrupole magnets that will be used in the Q4 Cryoassembly on the HL-LHC project. The MQYY will be part of the Insertion Region (IR) magnets delivering the beams to the CMS and ATLAS experiments.

II.1.6) Common procurement vocabulary (CPV)

73000000, 73300000, 31630000

II.1.7) Information about Government Procurement Agreement (GPA)
The contract is covered by the Government Procurement Agreement (GPA): no

II.1.8) Lots

This contract is divided into lots: no

II.1.9) Information about variants

Variants will be accepted: no

II.2) Quantity or scope of the contract
II.2.1) **Total quantity or scope:**
This Pre-commercial procurement for the development of superconducting quadrupole magnets will be deployed in 3 phases:
— Phase 1 — Solution Design with a budget of 399 000 EUR;
— Phase 2 — Engineering Detailed Design with a budget of 1 800 000 EUR;
— Phase 3 — First-of-a-kind Manufacturing and testing with a budget of 2 457 000 EUR.
Estimated value excluding VAT: 4 656 000 EUR

II.2.2) **Information about options**
Options: no

II.2.3) **Information about renewals**
This contract is subject to renewal: no

II.3) **Duration of the contract or time limit for completion**
Duration in months: 39 (from the award of the contract)

**Section III: Legal, economic, financial and technical information**

III.1) Conditions relating to the contract

III.1.1) **Deposits and guarantees required:**
Provided that CERN makes advance payments to the Contractor under Phase 3, the payment of any invoice by CERN under Phase 3 shall be subject to the provision by the Contractor of a bank guarantee for the performance of his obligations under Phase 3. The bank guarantee, in favour of CERN, shall be issued by a bank approved by CERN, for an amount corresponding to 10 % of the amount stipulated in the Work Order for Phase 3.

III.1.2) **Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them:**
See Request for Tenders.

III.1.3) **Legal form to be taken by the group of economic operators to whom the contract is to be awarded:**
No particular legal form required.

III.1.4) **Other particular conditions**
The performance of the contract is subject to particular conditions: yes
Description of particular conditions: The PCP is carried out under the explicit exemption for R&D services set out in art.16(f) of Directive 2004/18/EC of the European Parliament and of the Council and art.14 of Directive 2014/24/EC of the European Parliament and of the Council. Tenderers are asked to observe that the main object of the tender has to cover R&D services and not products or supplies, or commercial development activities.

III.2) **Conditions for participation**

III.2.1) **Personal situation of economic operators, including requirements relating to enrolment on professional or trade registers**
Information and formalities necessary for evaluating if the requirements are met: See section 3.3 Selection Criteria of the Request for Tenders.

III.2.2) **Economic and financial ability**
Information and formalities necessary for evaluating if the requirements are met: See section 3.3 Selection Criteria of the Request for Tenders.
Minimum level(s) of standards possibly required: See section 3.3 Selection Criteria of the Request for Tenders.
III.2.3) **Technical capacity**
Information and formalities necessary for evaluating if the requirements are met:
See section 3.3 Selection Criteria of the Request for Tenders.
Minimum level(s) of standards possibly required:
See section 3.3 Selection Criteria of the Request for Tenders.

III.2.4) **Information about reserved contracts**

III.3) **Conditions specific to services contracts**

III.3.1) **Information about a particular profession**
Execution of the service is reserved to a particular profession: no

III.3.2) **Staff responsible for the execution of the service**
Legal persons should indicate the names and professional qualifications of the staff responsible for the execution of the service: yes

**Section IV: Procedure**

IV.1) **Type of procedure**

IV.1.1) **Type of procedure**
Open

IV.1.2) **Limitations on the number of operators who will be invited to tender or to participate**

IV.1.3) **Reduction of the number of operators during the negotiation or dialogue**

IV.2) **Award criteria**

IV.2.1) **Award criteria**
The most economically advantageous tender in terms of the criteria stated in the specifications, in the invitation to tender or to negotiate or in the descriptive document

IV.2.2) **Information about electronic auction**
An electronic auction will be used: no

IV.3) **Administrative information**

IV.3.1) **File reference number attributed by the contracting authority:**
IT-4191/TE/HL-LHC

IV.3.2) **Previous publication(s) concerning the same contract**
Prior information notice

IV.3.3) **Conditions for obtaining specifications and additional documents or descriptive document**
Time limit for receipt of requests for documents or for accessing documents: 29.6.2016 - 12:00
Payable documents: no

IV.3.4) **Time limit for receipt of tenders or requests to participate**
18.8.2016 - 12:00

IV.3.5) **Date of dispatch of invitations to tender or to participate to selected candidates**

IV.3.6) **Language(s) in which tenders or requests to participate may be drawn up**
English.

IV.3.7) **Minimum time frame during which the tenderer must maintain the tender**
in days: 180 (from the date stated for receipt of tender)

IV.3.8) **Conditions for opening of tenders**
Section VI: Complementary information

VI.1) Information about recurrence
This is a recurrent procurement: no

VI.2) Information about European Union funds
The contract is related to a project and/or programme financed by European Union funds: yes
Reference to project(s) and/or programme(s): Funded by the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 689359.

VI.3) Additional information
An information session will be organised at CERN on the 7.7.2016 (additional information on the website). Questions or requests for clarification concerning the Tender Documents must be asked in English before the 30.6.2016. All questions received will be dealt with and answered during the information session. After the information session, no additional questions will be allowed nor answered for Phase 1.

VI.4) Procedures for appeal

VI.4.1) Body responsible for appeal procedures
The Arbitration Tribunal of Geneva
SWITZERLAND

VI.4.2) Lodging of appeals

VI.4.3) Service from which information about the lodging of appeals may be obtained

VI.5) Date of dispatch of this notice:
31.5.2016