

CALL FOR TENDERS

Refurbishment of the Control System of the EU5.0 Undulator Dyna Chiro Project



Table of Contents

1	Introduction.....	3
1.1	Introduction to CERIC-ERIC.....	3
1.2	Purpose and scope of this procurement.....	3
1.3	Content of the ITT	3
2	Indicative tender timetable	4
3	Instructions to tenderers.....	5
3.1	Formalities.....	5
3.2	Accuracy of proposal	5
3.3	Incomplete proposals.....	5
3.4	Deadline for receipt of tenders	6
3.5	Clarifications about the content of this ITT	6
3.6	Clarifications about the content of proposal submitted.....	6
3.7	Acceptance of proposals.....	7
3.8	Tender signature	7
3.9	Amendments to this ITT.....	7
3.10	Proposal preparation costs.....	7
3.11	Conflicts of interest.....	7
3.12	Confidentiality	8
3.13	Publicity.....	8
3.14	Validity of tenders	8
4	Tender evaluation	8
4.1	Selection questionnaire.....	8
4.2	Award criteria.....	8
4.2.1	Scoring matrix for the technical / quality criteria	10
4.2.2	Pricing evaluation	10
4.3	Debrief.....	11
5	Disclaimers.....	11

1 Introduction

1.1 Introduction to CERIC-ERIC

The Central European Research Infrastructure Consortium (CERIC) ERIC (www.ceric-eric.eu), is an integrated multidisciplinary Research Infrastructure open for basic and applied users in the fields of Materials, Biomaterials and Nanotechnology. With a single-entry point to excellent facilities, it allows structural investigation, analysis and synthesis of materials, using photon, electron, neutron, and ion based techniques.

CERIC has been built by integrating leading national research institutes into a unique international infrastructure at the world level having the status of an ERIC (European Research Infrastructures Consortium), based on the European Regulation 723/2009.

CERIC-ERIC statutory seat, which at present is hosted by Italy in Basovizza, near Trieste, manages the administrative central activities of the Consortium. The scientific activities are realized in a distributed way: each member country contributes to CERIC by making available and supporting a high quality partner facility, which is continuously improved by being exposed to international users competing for access through the selection of their proposals, based on excellence. The partner facilities are based in 8 European countries: Austria, Croatia, Czech Republic, Hungary, Italy, Poland, Romania and Slovenia. They are strongly complementary to each other and act as a whole as an international agency providing support to the best researchers and research projects.

1.2 Purpose and scope of this procurement

CERIC-ERIC is upgrading the research facilities available to CERIC-ERIC users at Elettra-Sincrotrone Trieste and is now seeking proposals for the refurbishment of the control system of a EU5.0 undulator.

The magnetic undulator which is required for the new MOST beamline of Elettra is based on the parameters of an existing undulator EU5.0 developed in 2008 as a prototype for the FERMI radiators.

The undulator must provide variable polarisation (linear horizontal and vertical, elliptical, circular) in the energy range of 200-2000 eV.

The project will investigate the dynamics of free chiral molecules matter, topological insulators (TIs). This innovative research within CERIC-ERIC will exploit different sources of radiation, and develop and consolidate new methodologies. Circular dichroism in photoemission will be applied in both cases.

The project will combine the method of PhotoElectron Circular Dichroism (PECD), used until now only for static studies, with pump-probe spectroscopy. This will extend the range of experimental possibilities available to CERIC users.

1.3 Content of the ITT

This Invitation to Tender (ITT):

- Asks tenderers to submit their tenders in accordance with the instructions set out in the remainder of this ITT;

- Sets out the overall timetable and process for the procurement;
- Provides tenderers with sufficient information to enable them to submit a compliant tender;
- Sets out the award criteria and the tender evaluation model that will be used to evaluate the tenders;
- Explains the administrative arrangements for the receipt of tenders.

2 Indicative tender timetable

This procurement will follow a structured and transparent manner in order to ensure that a fair and level playing field is maintained at all times, and that all tenderers are treated equally.

The key dates for this procurement are currently anticipated to be as follows:

Action	Date
Call for tender published	5 October 2018
Period for tenderers clarification questions	5 October – 23 October 2018 at 17:00 CET.
Deadline for submission of tender proposals	12 noon (CET), 02 November 2018
Validity period of the proposal	90 days from submission
Period of tender evaluation	02 November – 09 November 2018
Target date for provisional award of the contract	12 November 2018
Unsuccessful bidders notified of award outcome	12 November 2018
Contract finalisation with winning bidder	12-23 November 2018
Contract signature	23 November 2018

CERIC-ERIC reserves the right to make changes in the procurement timetable. Any such changes will be notified to all tenderers as soon as practicable.

3 Instructions to tenderers

For the purpose of this ITT, the term 'tenderer' shall mean a 'supplier' or a 'tenderer' within the meaning of the CERIC-ERIC Internal Regulations (section 14 on procurement and pre-procurement). This tender follows the Open Procedure.

3.1 Formalities

The ITT and the instructions are designed to ensure that all tenderers are given equal and fair consideration. It is important that you provide all the information asked for in the format and order specified.

Potential tenderers should read these instructions carefully before completing the tender response. Failure to comply with the completion and submission requirements may result in the rejection of your tender.

The following requirements should be adhered to when submitting tenders :

- The pages of the tender documents must be numbered;
- Any additional pre-existing material which is necessary to support the tender should be included as schedules with cross-references to this material in the main body of the tender;
- The tender must be in English;
- A table of contents should be provided;
- If relevant, a list of supporting material must be supplied.

3.2 Accuracy of proposal

The tender must be clear, concise and complete.

Tenderers are advised to check the accuracy of their submission prior to return, paying particular attention to clerical errors and omissions. Tenderers will not be permitted to amend proposals after the proposal return date except as part of any proposal clarification process initiated by CERIC ERIC.

CERIC-ERIC reserves the right to mark a tenderer down or exclude them from the procurement if its tender contains any ambiguities, caveats or lacks clarity. Tenderers should submit only such information as is necessary to respond effectively to this ITT.

Tenders will be evaluated on the basis of information submitted by their tenders only, before the deadline for submission of tenders.

3.3 Incomplete proposals

Proposals may be rejected if the complete information called for is not given at the time of submission and before the deadline. Please note incomplete or evasive answers may be assessed negatively even if accepted.

3.4 Deadline for receipt of tenders

Tenderers should submit their tender via email to administration@ceric-eric.eu.

Only submissions made in this way will be considered. Any additional documentation submitted outside of this, but not immediately apparent to the evaluator will be at risk of not being assessed.

Tenders should be submitted, electronically via email, to arrive at recipient mailbox no later than:

2 November 2018, 12:00 noon (CET)

Any tender received after the deadline will not be considered unless, in the opinion of CERIC-ERIC, taking into account relevant evidence, the failure to meet the deadline was due to circumstances beyond the control of the tenderer.

CERIC-ERIC may, in its own absolute discretion, extend the deadline and in such circumstances, it will notify all tenderers of any change.

3.5 Clarifications about the content of this ITT

Potential tenderers are advised to read all sections carefully before tendering. All requests for clarification and other communication from tenderers during the period of this procurement exercise should be directed to administration@ceric-eric.eu.

No requests for clarification will be accepted after noon **17:00 CET on 23 October 2018**.

CERIC-ERIC will endeavour to answer all reasonable clarification questions as quickly as possible but cannot guarantee a minimum response time.

In order to ensure equality of treatment of tenderers, CERIC-ERIC intends to publish the questions and clarifications raised by tenderers together with the responses (but not the source of the questions) to all participants.

If a tenderer wishes CERIC-ERIC to treat a clarification as confidential and not issue the response to all participants, it should state this when submitting the clarification question. If, in the opinion of CERIC-ERIC, the clarification is not confidential, CERIC-ERIC will inform the participant and it will have an opportunity to withdraw its clarification question. If the clarification question is not withdrawn, the response will be issued to all participants.

Clarifications by CERIC-ERIC will be communicated, in a suitably anonymous form, by way of email to all tenderers that submitted a proposal for this tender.

Other than the possibility to raise clarification questions, no approach of any kind in connection with this call for tender should be made to any person within, or associated with, CERIC-ERIC. Failure to adhere to this requirement may result in exclusion from the competition. Please note that CERIC-ERIC will not enter into a detailed discussion on the requested services at this stage.

3.6 Clarifications about the content of proposal submitted

CERIC-ERIC reserves the right (but is not obliged) to seek clarification of any aspect of a submitted tender during the evaluation phase where necessary for the purposes of carrying out a fair

evaluation. Tenderers are asked to respond to such requests promptly. Vague or ambiguous answers may have a negative effect in the assessment of your tender.

3.7 Acceptance of proposals

CERIC-ERIC reserves the right to accept or reject any or all proposals. Tenderers may be excluded from further consideration for failure to comply with any specifications of this ITT and any amendments thereto.

3.8 Tender signature

An authorised representative of the tenderer (single tenderer or lead partner in case of a joint tender) must complete and sign **Annex 1** and will be considered to bind the tenderer to the terms included in the tender.

Submission of a tender implies acceptance of the conditions stipulated in this call for tender and the attached draft contract. These conditions will bind the tenderer to whom the contract is awarded during the performance of the contract.

3.9 Amendments to this ITT

CERIC-ERIC reserves the right to amend the enclosed documents, including any attachments and appendices, and other information provided.

Any modification to the tender documentation by CERIC-ERIC will be notified to tenderers prior to the proposal return date. No extensions will be given, unless there is a change to the scope or content of the tender documentation.

3.10 Proposal preparation costs

The tenderer will submit the tender and carry out all necessary activity related to the tender process including supporting any due diligence requirements entirely at its own cost.

CERIC-ERIC will not be liable for any bid costs, expenditure, work or effort incurred by a tenderer in proceeding with or participating in this procurement, including if the procurement process is terminated without an award.

3.11 Conflicts of interest

Any attempt by tenderers or tenderers and their advisors to influence the contract award process in any way may result in the tenderer being disqualified. Specifically, tenderers shall not directly or indirectly at any time:

- Devise or amend the content of their tender in accordance with any agreement or arrangement with any other person, other than in good faith with a person who is a proposed partner, sub-contractor, tenderer, consortium member or provider of finance;
- Enter into any agreement or arrangement with any other person as to the form or content of any other tender, or offer to pay any sum of money or valuable consideration to any person to effect changes to the form or content of any other tender;
- Enter into any agreement or arrangement with any other person that has the effect of prohibiting or excluding that person from submitting a tender;
- Canvass CERIC-ERIC or any employees or agents of CERIC-ERIC in relation to this procurement;

- Attempt to obtain information from any of the employees or agents of CERIC-ERIC or their advisors concerning another tenderer, tenderer or tender.

Any tenderer who fails to comply with this requirement may be disqualified from the procurement process.

3.12 Confidentiality

This ITT is made available on condition that its contents (including the fact that the tenderer has received this ITT) is kept confidential by the tenderer and is not copied, reproduced, distributed or passed to any other person at any time, except for the purpose of enabling the tenderer to submit a tender.

CERIC-ERIC shall treat all tenderers' responses as confidential during the procurement process.

3.13 Publicity

No publicity regarding the services or the award of any contract will be permitted unless and until CERIC-ERIC has given express written consent to the relevant communication. For example, no statements may be made to the media regarding the nature of any tender, its contents or any proposals relating to it without the prior written consent of CERIC-ERIC.

3.14 Validity of tenders

The tenders must be valid for the period of ninety (90) days from the deadline for submission of offers as indicated above. The tenderer shall provide a statement confirming the period of validity of its tender in Annex 1.

4 Tender evaluation

4.1 Selection questionnaire

Tenderers must provide the completed Selection Questionnaire provided in **Annex 2**.

The Selection Questionnaire is used to examine the capability and suitability of potential tenderers to perform the contract. Only tenderers that meet the requirements of the Selection Questionnaire will be considered to be eligible for contract award.

4.2 Award criteria

Following assessment of the Selection Questionnaire, the contract will be awarded on the basis of the offer that is the most economically advantageous to CERIC-ERIC. The Award Criteria are:

- 60 % technical / quality.
- 40 % cost.

Scores are arrived at following the application of the Evaluation Criteria set out below:

Criterion	Weighting
Price	[40]
Technical award criteria (quality of the tender), composed of the following sub-criteria:	[60]
<p><i>Sub-criterion 1: control system: gap and phase precision, avoidance of damage</i></p> <p><i>The system must be designed to achieve and then to maintain the desired gap and phase with a precision of 5 microns or better, including backlash. The 4 gap drives and the 2 phase drives (6 motorised axes in total) must be controlled synchronously using hardware and software which conforms to the guidelines of the draft contract paragraph 1.22 additional Technical documents.</i></p> <p><i>The system must be designed to prevent excessive supporting beams misalignment that could damage the linear rails.</i></p>	[15]
<p><i>Sub-criterion2: control system: gap and phase drive hardware – precision</i></p> <p>All axes must be equipped with synchronous motors, absolute linear encoders with at least 1 micron resolution, adjustable end switches with power cut functionality at both extremes of the working range. The gap and phase changing speed must be adjustable between 0.1 and 2 mm/s.</p>	[15]
<p><i>Sub-criterion 3: control system: cabling and connection box</i></p> <p>The control system rack must be connected to the undulator using 10 m long detachable cables with suitable connectors. A connection box, to be positioned on the undulator frame, must be provided.</p>	[15]
<p><i>Sub-criterion 4: control system: interfaces</i></p> <p><i>The system must allow local operation using industrial style control interfaces (touch screens or similar) from both the control rack and the connection box. It must also allow remote control over TCP/IP, exchanging "datablocks" with a Tango-based accelerator control system.</i></p>	[15]

4.2.1 Scoring matrix for the technical / quality criteria

The technical evaluation will be scored in accordance with the table below.

0	Completely fails to meet required standard or does not provide a proposal.
1	Proposal significantly fails to meet the standards required, contains significant shortcomings or is inconsistent with other proposals.
2	Proposal falls short of achieving expected standard in a number of identifiable respects.
3	Proposal meets the required standard in most material respects, but is lacking or inconsistent in others.
4	Proposal meets the required standard in all material respects.
5	Proposal meets the required standard in all material respects and exceeds some or all of the major requirements.

4.2.2 Pricing evaluation

Bid prices will be scored on a comparative basis with the lowest bid receiving 100% of the available marks (40 marks). All other remaining tenders will be given marks in relation to the lowest price as follows:

$$P = P_{MAX} \cdot \left(\frac{PT_{MIN}}{PT} \right)$$

where

P_{MAX} = Maximal Score for Price (40)

PT = Price of tenderer in EUR

PT_{MIN} = Lowest Price of all received tenders in EUR

4.3 Debrief

The contract award notification will be sent to each tenderer. CERIC-ERIC will inform all unsuccessful tenderers of the identity and relative advantages and characteristics of the successful tender as compared with the addressee's tender.

5 Disclaimers

While the information contained in this tender documentation is believed to be correct at the time of issue, neither CERIC-ERIC nor its advisors will accept any liability for its accuracy, adequacy or completeness, nor will any express or implied warranty be given. This exclusion extends to liability in relation to any statement, opinion or conclusion contained in or any omission from, this tender documentation (including its appendices) and in respect of any other written or oral communication transmitted (or otherwise made available) to any participant by or on behalf of CERIC-ERIC.

Neither the issue of this tender documentation, nor any of the information presented in it, should be regarded as a commitment or representation on the part of CERIC-ERIC (or any other person) to enter into a contractual arrangement.

CERIC-ERIC reserves the right to:

- Waive or change the requirements of this ITT;
- Seek clarifications or documents in respect of a tenderer's submission;
- Disqualify any tenderer that does not submit a compliant tender in accordance with the instructions in this ITT;
- Disqualify any tenderer that is guilty of serious misrepresentation in relation to its tender, expression of interest, the Selection Questionnaire or the tender process;
- Withdraw this ITT at any time, or to re-invite tenders on the same or any alternative basis;
- Choose not to award any contract as a result of the current procurement process;
- Make whatever changes it sees fit to the timetable, structure or content of the procurement process, depending on approvals processes or for any other reason.
- The award of the contract is finalised through the attached draft contract. Any commercial conditions enclosed by the supplier in the tender submission will not be considered and will not form part of the contract.

ANNEX 1 – Form of Tender – Tender Certificate

ANNEX 2 – Selection Questionnaire

ANNEX 3 – Technical Specifications

ANNEX 4 – Draft Contract