TECHNICAL SUMMARY

Call for Nomination

IO/19/CFT/70000479/LLJ

Procurement of building metal-supports for Diagnostic Systems

1. Purpose

ITER Diagnostic Systems require metal-supports in the tokamak buildings infrastructure, on several levels (floors). Several diagnostic systems make use of transmission lines running from the equipment located in an auxiliary building to the port plugs, passing through wall openings and crossing the gallery and port cells. Transmission lines are generally sustained by these supports fastened to the embedded plates on the ceiling of the buildings.

2. Background

The support structures will be fastened to the embedded plates on ceiling or wall, and they will sustain the diagnostic transmission lines. They are composed by several components assembled to form a rigid frame; this modular solution allows compensating possible misalignment of the embedded plates. Pipe clamps will be connected to the frame to hold the lines into position. Depending on the diagnostic system configuration and embedded plates availability, the support dimensions and configuration can vary. The pipe clamp typology may also depend on the accuracy required for the alignment of the transmission lines.

The support structure has to be attached to the embedded plates in the building’s ceiling (see Fig. 1 for the typical example).
Figure 1: Example of interfaces with services for a typical diagnostic system
A drawing of typical case was done and put in Annex at the end of this document.

3. Key requirement

- Components shall be able to fulfil their function during all ITER machine operation phases and all ITER lifetime with no need of change or upgrade (as long as load conditions do not exceed the components damage limits), for several tens of years.
- When operating in "Normal" condition, structure shall hold and allow the alignment of transmission lines according to their precision requirements.
- The choice of material shall be targeting the low content of activation impurities, such as Co, Ta or Nb, which can become active under the ionising radiation.
- A standard design and off-the-shelf components shall be preferred whenever possible.
- Supports structures shall allow for the electrical grounding connection.
- The support structure shall be dismountable from building at the end of the project life-time.
- Support structure shall be packed and prepared for the storage stored on ITER Project site after delivery.
- Support structure shall be properly marked and labelled.

4. Scope of work

This framework contract covers the procurement of supports for diagnostic systems. It shall cover:
- The support structure
- The fixation adapter to the embedded plate.

The material use for the supports is construction steel with a protection against rust.

5. Duration of task
The Contract is scheduled to come into force in the 1st quarter of 2020. The procurement is foreseen in batches which will be covered by different Task Orders lasting about 4 years with an option of extending another 2 years.

6. Procurement Time table

A tentative time table is outlined as follows:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call for Nomination release</td>
<td>Mid of June 2019</td>
</tr>
<tr>
<td>Receipt of nominations</td>
<td>Mid of July 2019</td>
</tr>
<tr>
<td>Issuance of Pre-Qualification Questionnaire</td>
<td>Mid of July 2019</td>
</tr>
<tr>
<td>Receipt of Prequalification Application</td>
<td>End of August 2019</td>
</tr>
<tr>
<td>Notification of Prequalification results</td>
<td>End of September 2019</td>
</tr>
<tr>
<td>Issuance of Call for Tender</td>
<td>Beginning of October 2019</td>
</tr>
<tr>
<td>Tender Proposals Due Date:</td>
<td>Mid of November 2019</td>
</tr>
<tr>
<td>Tender Evaluation &amp; Notification of results</td>
<td>Beginning of January of 2020</td>
</tr>
<tr>
<td>Estimated Contract Award Date:</td>
<td>Beginning of February 2020</td>
</tr>
</tbody>
</table>

7. Experience

The acceptance criteria for the selection of the tender cover a broad range as listed below.

- Experience in the following areas shall be demonstrated by the supplier.
  - Ability to manufacture these components
  - Ability to control the quality
  - Ability to work to specification

- The bidder shall provide customer reference world-wide, where he has executed similar tasks in the past. Customer references & Purchase orders shall be attached along with the bid.

- Management of the quality assurance
  - The contractor shall demonstrate the ability to implement a quality plan relevant with respect to the manufacture of nuclear equipment.

- As the working language of ITER Organization is English so all deliverables shall be provided in English language only. The bidders shall have English speaking persons who should involve in this task who can discuss/communicate in English in various periodic meetings.
The CV of the persons, who will be later involved in the execution of the task orders, may be requested with the tender.

8. Candidature

Participation is open to all legal persons participating either individually or in a grouping (consortium) which is established in an ITER Member State. A legal person cannot participate individually or as a consortium partner in more than one application or tender. A consortium may be a permanent, legally-established grouping or a grouping, which has been constituted informally for a specific tender procedure. All members of a consortium (i.e. the leader and all other members) are jointly and severally liable to the ITER Organization.

The consortium groupings shall be presented at the pre-qualification stage. The tenderer’s composition cannot be modified without the approval of the ITER Organization after the pre-qualification.

Legal entities belonging to the same legal grouping are allowed to participate separately if they are able to demonstrate independent technical and financial capacities. Candidates (individual or consortium) must comply with the selection criteria. The IO reserves the right to disregard duplicated reference projects and may exclude such legal entities from the pre-qualification procedure.
FOR CONSTRUCTION TENDER PURPOSES ONLY

Supports to provided ready assembled, components can be readjusted if needed

8 supports to be used in gallery 8