

Technical summary

Contract for procurement of secondary support structures inside and outside of cryostat

Call for Nomination

Purpose

The purpose of this Contract is to supply secondary support structures, which include multiple section profiles, steel plates or any other steel structures to ITER project /Tokamak Cooling Water System (TCWS).

Background

ITER will be the largest and most complex nuclear fusion system yet to be built. Situated in Southern France, adjacent to the French CEA Cadarache site, the ITER facility covers approximately 190 hectares and is designed to study the fusion reaction between hydrogen isotopes, tritium and deuterium.

Hundreds of meters of different types of section profiles, steel plates of different thickness and other secondary structures are required for installation of supports inside and outside of cryostat. Specific requirements to chemical composition of steel are applied based on the location of secondary supports (inside or outside of cryostat). Stainless steel and carbon steel is used for this scope of work.

Scope of work

The Supplier will be required to provide the following:

- Section profiles (BOM to be provided in Technical Specification)
- Steel plates (BOM to be provided in Technical Specification)
- Any other steel profiles related to secondary support structures (BOM to be provided in Technical Specification)

The scope of work for the Supplier includes the delivery of the required items in specified lengths (beams) or total area (steel plates) or any other dimensions, within the agreed time frame.

Full set of requirements, technical and quality related will be provided in Technical Specification. Certification of the material is requested to be provided to IO so as any other dossier for tracking of quality of the supplied items.

Special attention shall be paid to strict requirements of Co, Ta and Nb which become activated. Their activation largely depends on the “impurity content” of each element. ITER has determined based on nuclear analysis the following values for steel materials:

Outside cryostat:

Co = max 0.2%
Nb = max 0.1%
Ta = max 0.05%

Inside cryostat:

Co = max 0.05%
Nb = max 0.1%
Ta = max 0.05%

The Supplier shall have traceability procedures in place that can guarantee traceability between materials delivered and EN 10204 certificate.

Full range of specific requirements will be further provided in the Technical Specification. The required items shall be manufactured to a European harmonized standards and CE marked to 305/2011/EU or relevant.

Timetable

Tentative timetable for tendering process is stated below:

- Call for Nomination launch.....Feb. 2019
- Call for Tender launch (pre-qualification included).....Mar. 2019
- Contract awardAugust 2019

Experience

The Supplier shall demonstrate experience in international project with ability to comply with specific material requirements.

Ability to provide quality assurance level and Supply chain management system required for nuclear components (quality requirements to be provided with the Technical Specification).

Good knowledge of European standards, such as EN 10025 for steel material, EN 10034 for beam dimensions and tolerances, EN 10088 for plates.

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.