



TECHNICAL SUMMARY

Service Framework Contract for the Operation and Maintenance of Lifting and Handling equipment

1. Purpose

ITER is a joint international research and development project aiming to demonstrate the scientific and technological feasibility of fusion power for peaceful purposes. The seven members of the ITER Organization are: The European Union (represented by EURATOM), Japan, the People's Republic of China, India, the Republic of Korea, the Russian Federation and the USA. The ITER Organization is located in Saint Paul lez Durance – France. Further information is available on the ITER website: <http://www.iter.org>.

The assembly of the ITER machine is currently ongoing on the ITER site, involving heavy and complex lifting activities using overhead cranes of up to 750t. Several auxiliary buildings are already in operation, including lifting equipment used mainly for maintenance purpose.

The Purpose of this document is to provide a summary description of the technical requirements of the ITER Organization (IO) associated with a future framework contract, which will be divided in two different Lots:

- Lot 1: Operation and Maintenance of Tokamak Assembly lifting equipment;
- Lot 2: Operation and Maintenance of other lifting equipment.

This document shall apply to the Call for Nomination to be issued by the ITER Organization to the ITER Domestic Agencies.

This document is not the final specifications for the future framework contract, which will contain more detailed requirements.

2. Scope

2.1 Services

The services to provide are intended to support the IO in the Operation & Maintenance of lifting equipment installed on the ITER Site, to ensure that the required performance standards, quality levels and other work requirements are achieved.

For this purpose, the Contractor shall be responsible for providing a complete engineering and management solution including:

- Labor and other personnel with appropriate skills, technical and management expertise,
- Materials, spare parts, plant, tools, transport, handling & access means, test instruments, chemicals, lubricants and other sundry materials.

The services provided under both lots broadly include the following groups of activities:

1. Lifting equipment maintenance (overhead cranes, gantry cranes and monorails);
2. Lifting equipment operation (optional);
3. Additional works (supply & installation of new lifting equipment, modification/refurbishment of existing ones, procurement of lifting accessories);
4. Transversal tasks (call center, on-call duty, Computerized Maintenance Management System, coordination, spare parts management, regulatory checks...).

Each lot will include a specific set of equipment listed below (non-exhaustive):

- Lot 1:
 - 750t and 50t overhead cranes (Building #13);
 - Dual Cranes Heavy Lifting Beam (Building #13);
 - Maintenance hoists (Building #13 and 11);
 - Definitive Cargo lift (Building #11);
- Lot 2:
 - Around 25 lifting devices distributed over the ITER Site, with in particular:
 - 60t mobile gantry crane (Building #17, powered with batteries);
 - 20t screw lift (Building #22);
 - 200t/50t gantry crane (Building #56);
 - Test load system (80t cradle with dividable weights and accessories).

At the start of the services, there will be around 30 lifting devices to operate and maintain, distributed over 14 buildings or areas. Throughout the lifetime of the contract, this number will increase to approximately 45 devices (essentially within Lot 2 scope).

2.2 Lifting equipment maintenance

The maintenance shall include both planned and unplanned maintenance. The Contractor shall perform the maintenance in accordance with the Manufacturer maintenance manual and shall comply as a minimum with the applicable standards ISO 23815-1 and ISO 9927-1.

2.3 Operation of lifting equipment (optional)

The Contractor can be requested to provide (on a permanent or on-demand basis) Suitably Qualified and Experienced Persons to operate the permanent lifting equipment under this Contract, including the support of a qualified banksman to supervise lifting operations.

2.4 Additional works

The IO could issue Task requests in the scope of lifting activities to support Machine assembly and Plants operation. IO could ask the Contractor to supply & install new lifting equipment, modify or refurbish existing equipment or procure lifting accessories.

2.5 Transversal tasks

The services to be provided under the contract include the following transversal tasks:

- Management and scheduling of maintenance (including warranty follow-up and regulatory control), using computerized maintenance management system;
- Management of scope evolution (works follow-up, appropriation of new equipment,

- technical repository management);
- Spare parts management;
- Regulation watch, synthesis, analysis, reporting;
- Call center and on-call duty service.

2.6 Reporting and expected deliverables

The Contractor will be responsible of supplying operation and maintenance documents as expected deliverables, in particular:

- Monthly progress reports;
- Maintenance Plan;
- Maintenance reports in the CMMS (order of magnitude: 12 to 30 work orders per month);
- Preventive and corrective maintenance implementation sheets;
- Diagnosis reports in case of reported anomaly;
- Root Cause Analysis reports in case of incident or repeated anomalies;
- Maintenance logbooks;
- Regulatory registers update.

3. Exclusions and interfaces

The Contractor is responsible of the equipment from its dedicated circuit breaker (included). The rails (welded or bolted) used by the cranes are in the scope of the Contractor. The runway beams are part of the building structure and not included in the scope of this contract.

4. Contract type

Two framework contracts are envisaged, one for each Lot, in order to provide the full range of services required. In case one bidder is awarded both Lots, the Lots will be combined in one single contract. The framework contract will be implemented by means of Task Orders, intended as a self standing engineering activity. The signature of the Framework Contract shall not imply, in any way, any obligation on the ITER Organization to proceed with any purchase through Task Orders further to its signature. Only implementation of the Framework Contract through Task Orders shall be binding on the ITER Organization. The Contractor shall execute the Services requested in each individual Task Order, in accordance with the task specification.

5. Work location

Considering the above description, it is envisaged that the Contractors staff will be authorized to share his activities between his own offices and the ITER site, Cadarache, France. It is estimated that 90% to 100% of the task will be performed on-site in Saint Paul lez Durance (France).

6. Required skills and experience

The ITER Organization is looking for applicants able to demonstrate experience in the areas of expertise listed above.

The applicants shall in addition demonstrate experience in nuclear installations (where procedural rigor and traceability is of key importance).

The quality assurance system implemented by the applicants shall be based on a recognized quality standard meeting the ITER Quality Assurance Program requirements.

It is expected that the resource required fulfilling the Task Orders (TO) will be equivalent to 6 to 13 Full Time Equivalent (FTE) for both Lots combined (13 FTE if cranes operation option is released) at the beginning of the Contract Operational Phase.

Regarding criticality of Tokamak Assembly cranes, the IO pays a particular attention to the capabilities of the Candidates to manage highly complex programming tasks with qualified and experienced Automation engineers and technicians (4 FTE min.). These particular skills and profiles are requested to ensure crane software evolution, support on call duty service and assist/troubleshoot critical lifts.

7. Duration of the Contract

The Framework contract is scheduled to come into force in September 2023. The contract shall start with a ramp-up phase of approximately 3 months, followed by an operational phase of 4 years. During the ramp-up phase, the Contractor is expected to prepare for the operational phase in order to be fully ready to take over the services from the company currently in charge of the operation and maintenance of lifting equipment.

The Contract will include two optional extensions of 1 year each.

8. Timetable

The tentative timetable is as follows:

- Prequalification issuance: September 2022
- Call for tender issuance: December 2022
- Award: June 2023
- Start of ramp-up phase: 1 September 2023
- Start of operational phase: 1 December 2023
- Contract end date (firm part): 30 November 2027

9. Candidature

Participation is open to all companies established in an ITER Member State. A consortium may be a permanent, legally – established grouping or a grouping, which has been constituted informally – but formalized with engagement letters – for a specific tender procedure.

The consortia shall be presented at the prequalification stage, where they will be assessed as a whole. Consortia cannot be modified later without the prior approval of the ITER Organization.

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.