



ITER Organization

Date: 16 December 2022

Reference: IO/22/161222

Subject: **Market Survey for Repair of the Vacuum Vessel Sector Field Joint Bevels at ITER Site**

Dear Sir/ Madam,

The ITER Organization (IO) launches a Market Survey and requests information from companies having the interest, knowledge and capacity related to: **Repair of the Vacuum Vessel Sector Field Joint Bevels at ITER Site**.

The main purpose of this Market Survey is to evaluate the market situation and to identify candidate suppliers having the potential capabilities to respond to the IO solicitation.

Please note that this is not a Call for Nomination.

You will find enclosed the Technical Description (draft of the Technical Specifications ref. 8C49AE) related to this Market Survey (**Annex I**) and associated documents. Note that this specification addresses the current IO baseline repair solution. Other solutions are under investigation, but will still require the same technology and expertise. Alternative VV sector orientations may be possible. Suppliers should present their alternative proposals, if any, under section 6 of the Questionnaire. Advantages of any alternative proposal should be clearly explained.

It should be noted that the ITER site is managed by the ITER Organization Coordination Team, that French working laws apply and that the contractor is responsible for obtaining visas and work permits required to work on French territory. The contractor would be required to produce a Specific Health & Safety Protection Plan (PPSPS). More generally, the Contractor will be bound to the IO Site Management regulations. Please find further requirements for work at ITER Site in Appendix 1 (at the end of this letter), please note this is not an exhaustive list of such requirements but rather intended to provide an overview of key considerations. The tentative schedule for start of this repair activity at ITER site would be July 2023. This would require that all preparatory work to qualify the repair has been validated, that the necessary conditions for visas and work permits have been fulfilled by the contractor and that contractor would mobilize their suitably qualified technical teams and equipment at site to be ready to commence by that date.

With this letter, we invite all potential companies, institutions or entities from ITER Member States to participate to this Market Survey through the questionnaire (**Annex II**).



We kindly invite the Domestic Agencies to publish this Market Survey on their websites or through other advertising methods, which will help to retrieve the requested information from a maximum of potential candidates.

Please return a completed questionnaire, **no later than 23<sup>rd</sup> January 2023**, to the following email address [jessica.pilla@iter.org](mailto:jessica.pilla@iter.org), copy to [william.decat@iter.org](mailto:william.decat@iter.org)

Yours sincerely,

William DE CAT  
Section Leader  
Construction, Assembly & Logistics Section  
Procurement & Contracts Division

## **Appendix 1: Work at ITER Site General Requirements**

### **1. Contractor Personnel HSE and Qualification**

French Labour Code, including obligations in relation to, shall bind the Contractor Occupational Health and Safety in the Workplace. The ITER Project is classified as a Category 1 activity, as per Article L4531-1 of the French Labour Code.

The Contractor remains responsible for the Health and Safety requirements of its own staff and has a legal obligation as an employer for the organisation of safety for his own team. Prior to the start of site activity, the Contractor shall submit a Specific Health and Safety Protection Plan for approval by IO Health and Safety Coordinator.

The Contractor remains responsible for obtaining relevant visa and work permit to carry out activity on French territory. The Contractor shall also ensure Suitably Qualified and Experienced Persons as mobilised.

Contractor will have to follow the applicable Environmental requirements at IO site.

### **2. Co-activity / Working Shifts / Cleanliness**

#### **Work Location**

Works to be performed On-site within IO Assembly Buildings (e.g.: Building 13/17, Building 56)

#### **Co-activity**

The Contractor will be expected to work concurrently with other entities in the same geographical area during the performance of the works (e.g.: VV Sector Assembly contractor). IO Coordination team and their representatives will coordinate this interface, and priorities set and respected accordingly. The IO Coordination team is tasked with coordinating all the works performed by the Contractors safely and in such a manner as to achieve schedule optimization, cost reduction and compliance of the Works quality with the requirements established by the IO. For that aim, all works are carried out under the IO Permit to Work management system.

#### **Working Shifts**

Construction activities shall be executed in shifts if and when required, planned according to the IO construction calendars. Each calendar includes rest periods and National Holidays. Each Construction Activities shall be scheduled in the Construction Detail Work Schedule using the appropriate shift calendars.

Per definition the activities follow the here below pattern:

- 2 work shifts, 6 days per week, overall day shifts covers 15 continuous hours;
- Non-Destructive Tests using X-rays performed during 3rd night shift, 6 days per week.

The night shift is limited to the execution of hazardous activities like Radiographic Test.

The Executing Entity is responsible to ensure that their staff are compliant with the relevant French Labour Regulations and the EC Working Time Directive 2003/88/EC.

#### **Cleanliness**

Activities are performed in clean environment close to ISO 8 Cleanroom conditions.

As such contractor will be requested to follow the IO cleanliness protocol and train his staff for such protocol. Personnel Protection Equipment suitable for the related activities will have to be considered by the Contractor.

### 3. Nuclear Safety and Quality

#### Nuclear Safety

The ITER Organisation must observe French national laws and regulations in the fields of public and occupational health and safety, nuclear safety, radiation protection, licensing, nuclear substances, environmental protection and protection from acts of malevolence. The ITER facility is categorized as a Basic Nuclear Installation works (“INB”) under French law (Installation Nucléaire de Base – INB-174). The IO is the nuclear operator of this INB. The construction activities must comply with these authorisations including the applicable regulations, codes and standards and regulatory directives received at various stages of the construction.

Nuclear safety refers to all technical, individual and organizational measures taken in performing the work to ensure that the installation INB 174 will be able to be operated safely under all conditions.

The Contractor shall ensure that all Contractor’s Personnel involved in the provision of the Works for the Employer have demonstrable skills and understand any nuclear safety implications of failure of the product or service.

#### 4. Quality

Quality Requirements shall be in accordance with the “ITER Procurement Quality Requirements” (to be informed at Procurement Stage). The ITER Quality Assurance Program shall be applied to all the work under this Contract. The ITER QA Program is based on IAEA Safety Standard GS-R-3 and on conventional QA principles and integrates the requirements of the INB Order dated 7 February 2012 on the quality of design, construction and operation in Basic Nuclear Installation.

Supplier and Subcontractors carrying out activities placed under the future Contract shall be in compliance with the QA requirements either through an existing IO approved QA Program or an ISO 9001 accredited quality system, complemented with the above mentioned requirements.

In case of Contracts concerning SIC components and/or a Safety Related Activity, or PIC and/or Protection Related Activities, the Quality Assurance Programme of the Supplier shall comply with the requirements of the INB Order dated 7 February 2012 and the subsequent ASN decisions linked to this Order.

### 5. Standard Responsibility Matrix for Onsite Works

**C:** Contractor

**IO:** Employer and Representatives

Title and description	C	IO
<b>Documentation</b>		
Technical Specification and Engineering Work Package		X
Contract Management Documentation	X	

<b>Title and description</b>	<b>C</b>	<b>IO</b>
Manufacturing/Execution Documentation including Quality Control	X	
Mechanical Completion Dossier including ITR/ITP/Survey and NDT Reports/As Builts/etc.	X	
<b>Management &amp; Site Mobilisation</b>		
Construction Insurance (as per IO regulation)		X
Contractor's Project Management of Contractor's works on Site including Site Project Management / Engineering Management / HSE Management (incl. PTW) / Logistic / Nuclear Safety / Quality Management / Construction Management and Supervision	X	
Project Controls (incl. Schedule Control / Change Management) / Reporting	X	
Welding / Welders Qualification	X	
Dedicated site area allocation for the Contractor		X
Office/Welfare facilities		X
Storage of Contractor's materials issued for construction and own equipment, tools and consumables	X	
Site Facilities Mobilisation / Demobilisation	X	
Supply of utilities at site location		X
All duties regarding personal mobilization and housing, insurance, fees, taxes, compensations and VISA processes	X	
<b>Work Execution</b>		
Site Coordination and global Supervision		X
Technical Supervision		X
Contractor's workshop (outside of ITER platform)	X	
Participation in site inspection before handover of the working area, the components, tools and all items provided by IO to the Contractor	X	
Temporary site lighting for working area, if needed	X	
Temporary ventilation of the working areas	X	
Electricity at site distribution boards nearby working areas		X
Logistic and Handling of Permanent Components to work location and removal		X
Installation and removal of Scaffolding for Contractor's Works	X	
Protection of work areas and components	X	
Welding and Machining tools Mobilisation / Installation / Demobilisation	X	
Survey, measures of the environment before/after machining including Metrology Reports	X	
Permanent Component cleaning after welding/machining works	X	
Non-Destructive Examination and Testing (including Reports)	X	
Working Areas cleaning including (safety features such as handrails, cover shall be kept in place unless otherwise agreed)	X	
Site demobilization	X	
<b>Scope of Supply</b>		
Equipment and Tools necessary for execution of the works S: IO supplied tools free of charge as defined in technical specification	X	S
Bulk Material and consumables (sealing compound, tape etc.)	X	
Signage, additional labels such as arrows, identification marks etc. required at site to suit the site specific requirements (temporary)	X	



<b>Title and description</b>	<b>C</b>	<b>IO</b>
Welding materials (filler metal, etc.)	X	
Temporary Adjustable shims	X	
Temporary Supports	X	
Temporary protection means	X	
Required material for welder qualification	X	
Weld test coupons and associated material	X	
All material, equipment for tests unless otherwise specified	X	