

+Call for Expertise: エキスパート募集

IO References: IO/22/CFE/10024923/AJI

Diagnostics Design Review and Testing Follow Up

(計測デザインレビューとテストングフォローアップ)

IO 締め切り 2022 年 12 月 16 日(金) 17 時現地時間、

(応募書類は ITER 機構へ直接提出のこと)

概要：

イーター機構（IO）では、上記タスクの支援をいただく作業を ITER 参加極の企業・機関等から募集します。応募を希望される企業・機関等は、所定の期限までに応募書類を直接 ITER 機構の下記担当までご提出下さい。

○ 今回の募集に関する書類は以下の通りです。

- ・ 招待状
- ・ 技術仕様書
- ・ 履歴書（CV）テンプレート
- ・ 見積もり提案書テンプレート
- ・ 誓約書
- ・ 守秘義務に関する誓約書(契約締結時に署名されること)

○ 応募者は、以下の申込用紙を ITER 機構に直接送付願います。

- ・ 履歴書（ITER 機構の招待状と技術仕様書で規定した要求事項と基準を満足していることを示す経験について明記されていること）
- ・ 誓約書（署名入り）
- ・ 見積もり提案書

(※提出書類は pdf ファイル 1 本にまとめて送付願います。)

○ 応募書類の提出先

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○はじめに

この事前情報通知 (PIN) は、供給契約の審査および実行につながる公開入札調達プロセスの最初のステップです。この文書の目的は、作業範囲と入札プロセスに関する技術的内容の基本的な概要を提供することです。

○背景

ITER プロジェクトは、欧州連合 (EU) (EURATOM を代表とします)、日本、中華人民共和国、インド、韓国、ロシア連邦、米国の 7 カ国が共同出資する国際的な研究開発プロジェクトで、ITER 機構 (IO) の本部 (HQ) があるヨーロッパ、フランス南部のサン・ポール・レ・デュランスで建設されています。

ITER プロジェクトの組織面および技術面の詳細については、www.iter.org を参照してください。

○作業範囲

「計測デザインレビューとテストングフォローアップ」と題された本契約の目的は、技術仕様書に記載されたサービスの提供を調達することです。 8BKEVK_v1.0 (本 PIN 文書の附則 I)を参照下さい。

○調達プロセスと目的

目的は、競争入札プロセスを通じて供給契約を落札することです。

この入札のために選択された調達手続きは公開入札手続きと呼ばれます。

オープン入札手順は、次の 4 つの主要なステップで構成されています。

➤ ステップ 1-事前情報通知 (PIN)

事前情報通知は公開入札プロセスの第一段階です。IO は、関心のある候補企業に対し、10 暦日以内に、以下の概略日程に示された期日までに担当調達担当官に以下の情報を提出し、競争プロセスへの関心を示すよう正式に要請します。

-候補会社の名称

-登録国

-連絡先の名前、電子メール、タイトル、電話番号。

特に注意:

関心のある候補企業は、IO Ariba の電子調達ツール「IPROC」に登録してください (まだ登録していない場合)。手順については、<https://www.iter.org/fr/proc/overview> を参照してください。

Ariba (IPROC) に登録する際には、お取引先様に最低 1 名の担当者の登録をお願いします。この連絡担当者は、提案依頼書の発行通知を受け取り、必要と思われる場合は入札書類を同僚に転送することができます。

➤ ステップ 2-入札への招待

関心のある候補企業の完全登録後、提案依頼書 (RFP) を「IPROC」に掲載します。この段階では、担当の調達担当者に関心を示し、かつ IPROC に登録している関心のある候補企業は、RFP が公表された旨の通知を受けることができます。その後、RFP に詳述されている入札説明書に従って提案書を作成し、提出します。

このツールに登録されている企業のみが入札に招待され、登録されている企業は、自社の名前でのみ提案を提出できます。

➤ ステップ 3-入札評価プロセス

入札者の提案は、IO の公平な評価委員会によって評価されます。入札者は、技術的範囲に沿って、かつ、RFP に記載された特定の基準に従って作業を実施するために、技術的遵守を証明する詳細を提供しなければなりません。

➤ ステップ 4-落札

認定は、公開されている RFP に記載されている、コストに見合った最適な価格または技術的に準拠した最低価格に基づいて行われます。

○概略日程

概略日程は以下の通りです：

マイルストーン	暫定日程
事前指示書 (PIN) の発行と IO の Web ページへ掲載	2022 年 12 月 6 日
関心表明フォームの提出	2022 年 12 月 16 日
IPROC での提案リクエスト (REP) の発行	2023 年 1 月 4 日
IPROC で入札提出	2023 年 1 月 19 日
入札評価と契約授与	2023 年 1 月 27 日
契約調印	2023 年 2 月 3 日
契約開始	2023 年初期

○契約期間

予想される契約期間は、12 か月です。

○経験

入札者は、IO の技術的要件に沿った期待される支援を提供するにあたり、その知識と経験と能力があることを英語で示す必要があります。ITER での使用言語は英語です。流暢でプロレベルが必要です（スピーキングとライティング共に）。

○候補

参加は、個人またはグループ/コンソーシアムに参加するすべての法人に開放されます。法人とは、法的権利及び義務を有し、ITER加盟国内に設立された個人、企業又は機構をいいます。

法人は、単独で、またはコンソーシアムパートナーとして、同じ契約の複数の申請または入札に参加することはできません。共同事業体は、恒久的な、法的に確立されたグループ又は特定の入札手続のために非公式に構成されたグループとすることができます。

コンソーシアムのすべての構成員(すなわち、リーダーと他のすべてのメンバー)は、ITER 機構に対して連帯して責任を負います。

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どのコンソーシアムメンバーも IPROC に登録する必要があります。

【※ 詳しくは添付の英語版技術仕様書「**Diagnostics Design Review and Testing Follow Up**」をご参照ください。】

ITER 機構のウェブサイト

<http://www.iter.org/org/team/adm/proc/overview> からもアクセスが可能です。

「核融合エネルギー研究開発部門」の HP : <http://www.fusion.qst.go.jp/ITER/index.html> では ITER 機構からの各募集 (IO 職員募集、IO 外部委託、IO エキスパート募集) を逐次更新しています。ぜひご確認ください。

PRIOR INFORMATION NOTICE (PIN)

IO/22/CFE/10024923/AJI

Diagnostics Design Review and Testing Follow Up

Procurement Officer in charge:

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Abstract.

The purpose of this PIN is to provide prior notification of the IO's intention to launch a competitive Call for Expertise process in the coming weeks. This PIN provides some basic information about the ITER Organisation (the "IO"), the technical scope for this tender, and details of the tender process.

1 Introduction

This Prior Information Notice (PIN) is the first step of a Call for Expertise Procedure leading to the award and execution of a Service Contract.

The purpose of this document is to provide a basic summary of the technical content in terms of the scope of work, and the tendering process.

2 Background

The ITER project is an international research and development project jointly funded by its seven Members being, the European Union (represented by EURATOM), Japan, the People's Republic of China, India, the Republic of Korea, the Russian Federation and the USA. ITER is being constructed in Europe at St. Paul–Lez-Durance in southern France, which is also the location of the headquarters (HQ) of the ITER Organization (IO).

For a complete description of the ITER Project, covering both organizational and technical aspects of the Project, visit www.iter.org.

3 Scope of Service

The purpose of this Contract titled “**Diagnostic development and coordination**” is to procure the provision of services described in the Technical Specifications, ref. **8BKEVK_v1.0 (ANNEX I in this PIN document)**.

4 Procurement Objective & Process

The objective is to award a Contract through a competitive bidding process.

The procedure is comprised of the following four main steps:

- Step 1- Prior Information Notice (PIN)
The Prior Information Notice is the first stage of the process. The IO formally invites interested candidate companies to indicate their interest in the competitive process, within **10 calendar days**, by returning to the Procurement officer in charge the following information by the date indicated under paragraph 5 below:
 - Name of candidate company
 - Country of registration
 - Point of contact name, email, title, and phone number.

Special attention:

Interested candidate companies are kindly requested to register in the IO Ariba e-procurement tool called “IPROC”, if not so done yet. The process on how to do is described at the following link: <https://www.iter.org/fr/proc/overview>.

When registering in Ariba (IPROC), suppliers are kindly requested to register at least one contact person. This contact person will be receiving the notification of

publication of the Request for Proposal and will then be able to forward the tender documents to colleagues if deemed necessary.

- Step 2 - Request for Proposals
After the full registration of interested candidate companies, the Request for Proposals (RFP) will be published in “IPROC”. This stage allows interested candidate companies who have indicated their interest to the Procurement Officer in charge AND who have registered in IPROC to receive the notification that the RFP is published. They will then prepare and submit their proposals in accordance with the tender instructions detailed in the RFP.

Only companies registered in this tool will be invited to the tender and registered company can only submit a proposal in their name.

- Step 3 – Tender Evaluation Process
Tenderers proposals will be evaluated by an impartial evaluation committee of the IO. Tenderers must provide details demonstrating their technical compliance to perform the work in line with the technical scope and in accordance with the particular criteria listed in the RFP.
- Step 4 – Contract Award
The award will be done on the basis of best value for money or lowest price technically compliant offer as described in the published RFP.

5 Procurement Timetable

The tentative timetable is as follows:

Milestone	Date
Publication of the Prior Indicative Notice (PIN) on IO Webpage and communications with DAs	06 Dec 22
Deadline for Submission of expression of interest form	16 Dec 22
Request for Proposals (RFP) publishing on IPROC	04 Jan 23
Tender Submission in IPROC	19 Jan 23
Tender Evaluation & Contract Award	27 Jan 23
Contract Signature	03 Feb 23
Contract Commencement	Early 2023

6 Contract Duration and Execution

The estimated contract duration shall be 12 months.

7 Experience

The tenderers shall demonstrate their knowledge, experience and capabilities in the implementation of providing expected supports in accordance with the IO technical requirements.

The working language of ITER is English, and a fluent professional level is required (spoken and written).

8 Candidature

Participation is open to all legal entities participating either individually or in a grouping/consortium. A legal entity is a company, or organization that has legal rights and obligations and is established within an ITER Member State.

Legal entities cannot participate individually or as a consortium partner in more than one application or tender of the same contract. 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.

In order for a consortium to be acceptable, the individual legal entities included therein shall have nominated a leader with authority to bind each member of the consortium, and this leader shall be authorised to incur liabilities and receive instructions for and on behalf of each member of the consortium.

It is expected that the designated consortium leader will explain the composition of the consortium members in its offer. Following this, the Candidate's composition must not be modified without notifying the ITER Organization of any changes. Evidence of any such authorisation shall be submitted to the IO in due course in the form of a power of attorney signed by legally authorised signatories of all the consortium members.

Any consortium member shall be registered in IPROC.

9 Sub-contracting Rules

No subcontracting is allowed for this package.



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8BKEVK

VERSION CREATED ON / VERSION / STATUS

25 Oct 2022 / 1.0 / Approved

EXTERNAL REFERENCE / VERSION

Technical Specifications (In-Cash Procurement)

Diagnostics Design Review and Testing Follow Up

CFE for:

This document describes the technical needs for an expert specialist in engineering of Diagnostics. Specifically the technical needs of the Diagnostics Division with particular reference to design development and construction preparation

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1 Purpose

This document describes the technical needs for an expert specialist in engineering of Diagnostics. Specifically the technical needs of the Diagnostics Division with particular reference to design development and construction preparation, predominantly in the following areas:

- Mechanical design and integration
- Assessment and appraisal of engineering designs
- Follow-up of prototyping, testing and manufacturing
- Construction (realization) and installation preparation

2 Scope

The work aligns with the ITER project, currently under construction in France. This device will study the Fusion concept on a scale previously unequalled on earth. To study the behaviour of this device, a set of monitoring systems (called diagnostics) are required. This will provide all the information to show and understand the performance of the device. The work involves technical expertise for supporting multiple diagnostic projects.

NOTE: Some of the tasks associated with this contract are Protection Important Activities (PIAs).

3 Definitions

CAD	Computer aided design
CMM	Configuration and management model
DA	Domestic Agency
DM	Detailed model
IO	ITER Organization
IO-TRO	ITER Organization Technical Responsible Officer.
UHV	Ultra High Vacuum

For a complete list of ITER abbreviations see: [ITER Abbreviations \(ITER_D_2MU6W5\)](#).

4 References

Links inserted in text

5 Estimated Duration

The duration shall be for an initial 12 months from the starting date of the contract. Services shall be provided approximately 15% at the IO work site. The IO expect some missions within Europe (to DA and other premises) and they will be defined in the course of the contract.

Services shall be provided by 0.6 FTE.

6 Work Description

The work involves technical expertise for multiple ITER diagnostic projects working in close collaboration with the IO-TROs. It involves many areas of activity, including but not limited to:

- Supporting IO design reviews as an expert Panel Member or Chair
- Generating meeting preparatory notes, including agenda and draft attendee selection;
- Producing notes for IO meetings called by interfacing systems and review bodies;
- Drafting minutes for IO and DA meetings;
- Technical input in support of project change requests and other actions;
- Reviewing draft interface sheets;
- Reviewing draft assembly/installation procedures;
- Input documents, presentations and meeting notes related to Interface meetings.
- Technical review notes for DA technical documents in IO IDM. Documents include technical reports, draft deviation requests, compliance and requirements matrixes etc. Several technical documents per month need to be reviewed;
- Engineering design proposals, produced in consultation with interfacing parties and stakeholders (e.g. Design Integration, Safety)
- Input documents, presentations, meeting notes related to Monthly IO or DA meetings;
- Implementation reports for IO-related actions from IO or DA meetings;
- Implementation reports for Chit resolution from IO and DA design reviews; Amended and reviewed sections of IO schedule;
- Record of progress against schedule;
- Schedule improvements and fix scheduling problems;
- Input documents, presentations, meeting notes related to meetings of DA representatives with IO experts;
- Guidance notes for DAs on execution of PA technical activities;
- Updated and re-evaluated loads, including nuclear loads and other engineering specifications;
- Contributions to design workshops on specific topics (e.g. shutters, neutronics);
- Technical requirements collection and production of Technical Specifications, including follow up/oversight of Third Parties (e.g. DAs, manufacturers, etc.);
- Review and iteration of 2D drawings and diagrams (e.g. cabling diagrams, P&IDs) produced by Third Parties;
- Review and iteration of technical documents (e.g. Design Description Documents, Maintenance and Inspection procedures, Technical Specifications) produced by Third Parties;
- Input documents, presentations, meeting notes related to workshops and conferences. Travel to the DA or other sites in Europe may be required to carry out the work.

Within the broader tasks listed above, the work will predominantly focus on the following four main topics:

6.1 Topic 1: Design Reviews and DPI-PT Topical Reviews

The ITER machine includes over 60 diagnostic systems, to measure a vast range of parameters related to initiating, controlling and understanding the plasma pulse. In order to ensure that the design of these systems is robust, fit for purpose and satisfying the associated requirements, ITER performs rigorous Design Reviews at different stages of the project lifecycle (e.g. Conceptual Design Review, Preliminary Design Review, Final Design Review).

The Contractor shall act as Design Review Chair or as an expert Panel Member, as per the ITER Design Review Procedure (ITER_D_2832CF), for reviews on systems within the following diagnostic families:

- 55.A Magnetic Diagnostics
- 55.B Neutron Diagnostics
- 55.C Optical Diagnostics
- 55.D Bolometric Diagnostics
- 55.E Spectroscopic Diagnostics
- 55.F Microwave Diagnostics
- 55.G Operational Diagnostics
- 55.N Diagnostic Services
- 55.L/Q/U Diagnostic Ports

In addition, within the scope of 55.L/Q/U, there is a specific activity (known as the Diagnostics Port Integration Project Team, DPI-PT), which is responsible for the integration of the multiple and complex Diagnostic Ports. As part of this scope, the Contractor shall perform or lead expert reviews of key aspects affecting the design, manufacturing and operation of the ports, including:

- assessment of technical and design proposals
- document and drawing reviews
- integration aspects such as access to components for maintenance or repair
- component standardisation possibilities
- assessment of compliance with transversal functions (HELB, Fire, ORE, RAMI, etc.)
- ergonomics and occupational safety aspects

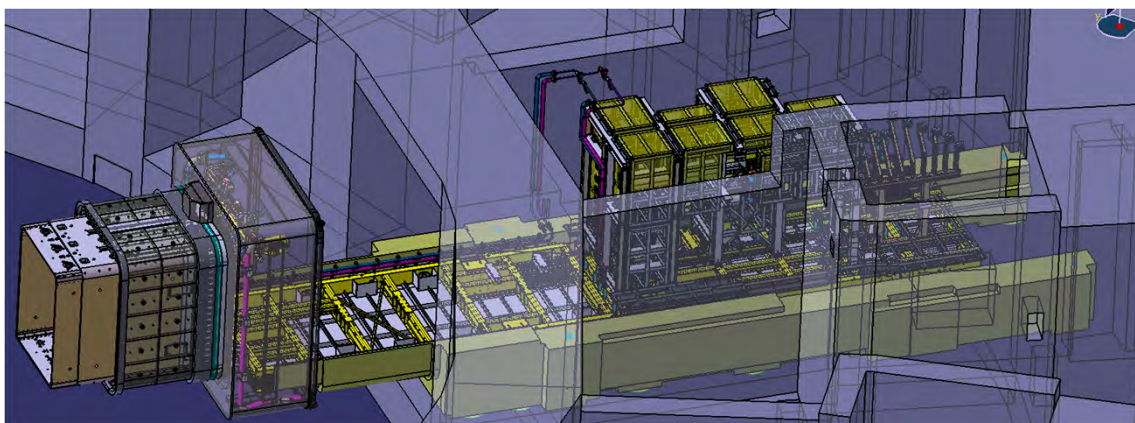


Figure 1: Example of ongoing port integration (some components hidden in this view)

6.2 Topic 2: Follow-up of Diagnostic Windows prototyping, manufacturing and testing

Several of ITER's diagnostics will be provided with viewing lines (optical, microwave, spectroscopic) for monitoring key characteristics of the plasma. The nature of the physical signal transmitted through the viewing lines requires the implementation of window assemblies incorporating a non-metallic window.

These windows form part of the nuclear and vacuum confinement barrier, and are therefore Protection Important Components (PIC).

The Safety function achieved by the diagnostic window assemblies is the confinement of toxic and radioactive products inside the vacuum vessel and attached vacuum extensions.

Each window assemblies is composed by:

- A structural body provided with a bolted flange, for the mechanical and vacuum tight attachment on a vacuum extension also called "mating flange".
- Two transparent discs (with or without an Anti-reflective coating, depending on optical requirements from each system) assembled into metallic ferrules by aluminium diffusion bonding.
- An interspace volume between both discs, whose pressure is permanently monitored by the Service Vacuum System (SVS).

An example of a Fused Silica window can be seen in Figure 2.

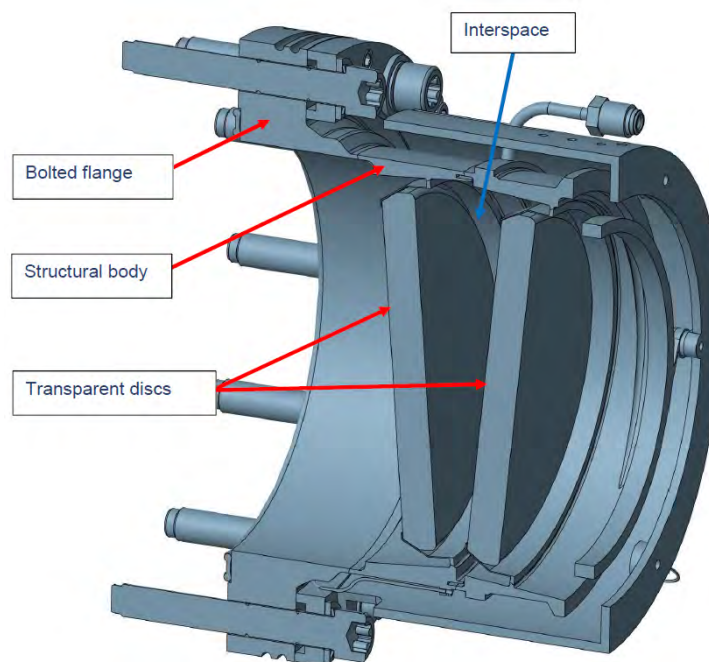


Figure 2: Section of Window Assembly

The design of the bolted flanges is similar to the one of the ITER standard vacuum flange. The size of the bolted flange is tailored to the clear aperture.

Currently IO is developing the Fused Silica variation windows through the following tasks (outside the scope of this present contract):

1. Validation of titanium windows in ITER environment
2. Qualification Welding Operations for the manufacturing of ITER windows

3. Characterization of the Sub-critical crack growth parameters of AR coated Samples
4. Qualification of Fused Silica windows
 - a. Manufacturing windows to be tested
 - b. Testing Aged window assemblies (with exception of irradiation)
 - c. Validation of aged specimens against cat 4 events
5. Manufacturing of First Plasma Fused Silica Windows

All of these activities require close follow-up due to the complex design and safety requirements of the windows. The contractor shall work with the Diagnostics Windows team and perform the following tasks:

- Follow up the manufacturing activities for mock-ups (including visits to the supplier)
- Review of documentation related to testing and manufacturing
- Witnessing of hold points for both the welding qualification, testing and final manufacturing (including visits to the supplier)

NOTE These tasks include Protection Important Activities (PIA)

6.3 Topic 3: Production of documentation and drawing packages for installation

Installation of ITER diagnostic systems, including the in-vessel electrical services, will commence in the near future. In preparation for these activities, IO is producing detailed installation documents (e.g. technical specifications, Scope of Work lists), drawings and diagrams, which will be studied and further elaborated by IO's installation contractor.

The Contractor shall coordinate the production of the documentation and drawing packages (by Third Party resources), perform a peer review of generated input documents and drawings, to ensure they are consistent and easily understandable by Third Parties, and provide regular status and progress updates to ensure the production of the required documents is tracked and on-time.

The Contractor shall also respond to comments from reviewers of the various documents, issuing or arranging for clarifications and document updates as required. If modified or further elaborated versions of the documents are received (e.g. from the installation contractor), the Contractor shall review them, including a comparison with the original IO documents and checking the validity of any additional procedures, tests or modifications proposed by e.g. the installation contractor.

6.4 Topic 4: Follow-up of Diagnostic Upper Port Plug Remote Handling compatibility trials

The diagnostic upper port plug is at the final design phase. To demonstrate the Remote Handling (RH) compatibility of the generic DFW/DSM removal and reinstallation in the hot cell, IO has launched a contract (Implementation Agreement #12) with RACE (Remote Applications in Challenging Environments). The purpose of the mock-up trials is to assess the use of a rigid extraction system (tower crane) to interface with the GUPP design and determine any impact on GUPP or Tower Crane design.

This contract has already started in 2020. The design of the mock-up (lifting tower crane, DFW, DSM, GUPP mock-up), including the control I&C has been finalized and now these components are under manufacturing. After manufacturing, the commissioning of the facility

and the mock-up trials for DFW/DSM removal/reinstallation will follow. The mock-up trials will be done based on the operation sequence already prepared and agreed. But if necessary, it would be possible to modify and add the trials under the agreement with RACE.

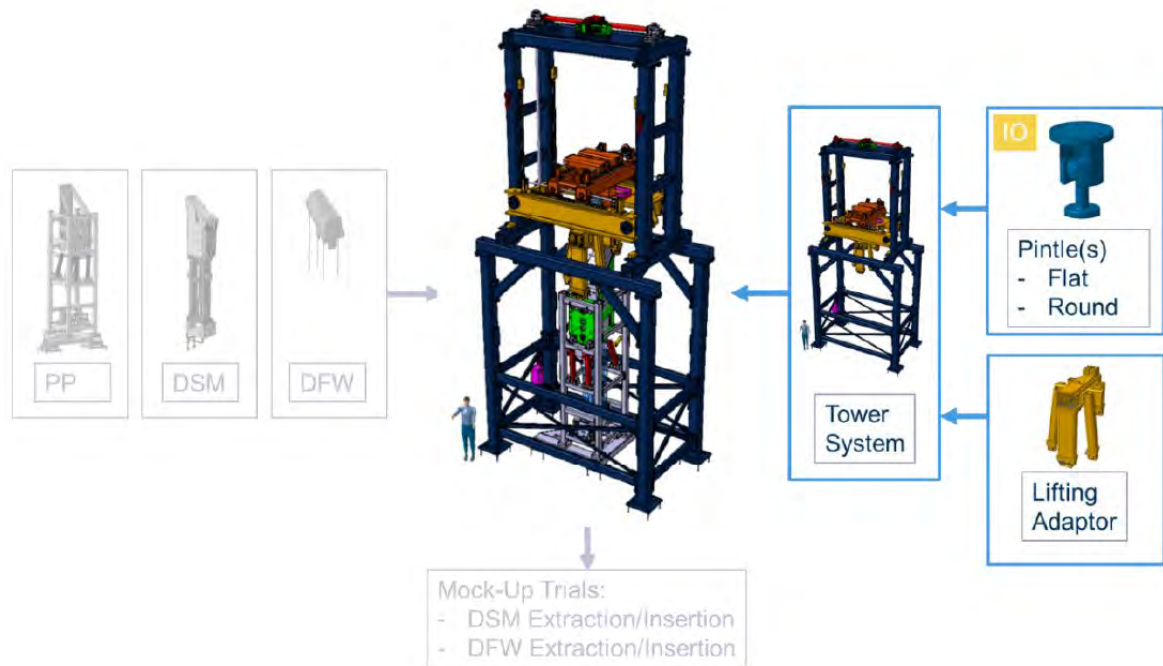


Figure 3: Mock-up of tower crane for upper DFW/DSM removal/reinstallation

The contractor shall work with the IO diagnostic upper port integration team with the following activities to follow up the UPP RH mock-up work under the collaboration with IO RH team and RACE:

- Follow up the fortnight progress meeting with RACE
- Review of mock-up manufacturing issues
- Review of documentation related to mock-up trials
- Witnessing mock-up trials and reporting of the outcomes to the IO diagnostic upper port integration team (including visits to the supplier)

7 Responsibilities

7.1 Contractor's Responsibilities

In order to successfully perform the tasks in these Technical Specifications, the Contractor shall:

- Strictly implement the IO procedures, instructions and use templates;
- Provide experienced and trained resources to perform the tasks;
- Provide monthly schedule updates for the tasks being worked on by the Contractor;
- Contractor's personnel shall possess the qualifications, professional competence and experience to carry out services in accordance with IO rules and procedures;
- Contractor's personnel shall be bound by the rules and regulations governing the IO ethics, safety and security rules.

7.2 IO's Responsibilities

The IO shall:

- Nominate a Responsible Officer to manage the Contract;
- Organise a monthly meeting(s) on work performed;
- Provide offices at IO premises during scheduled visits;
- Review documents in a timely fashion

8 List of Deliverables and due dates

D#	Description	Due Dates
D1	Progress report on Topics 1 and 3 (including monthly reports on each topic, a list of reviews performed and a list of documentation/drawing packages produced, their status, and any outstanding issues)	T0 + 3 months
D2	Progress report on Topics 2 and 4 (including monthly reports on each topic, a list of topics addressed and visit reports)	T0 + 6 months
D3	Progress report on Topics 2 and 3 (including monthly reports on each topic, including a list of the documents and drawings produced, their status, and any outstanding issues)	T0 + 9 months
D4	Progress report on Topics 1 and 4 (including monthly reports on each topic, a list of reviews performed, a list of topics addressed and visit reports)	T0 + 12 months

9 Acceptance Criteria

The deliverables will be posted in the Contractor's dedicated folder in IDM, and the acceptance by the IO will be recorded by their approval by the designated IO TRO. These criteria shall be the basis of acceptance by IO following the successful completion of the services. These will be in the form of reports as indicated in Section 8.

10 Specific requirements and conditions

The personnel proposed by the Contractor to carry out the work described in Section 6 must have:

- A professional qualification in engineering with relevant experience in engineering design in a complex technical environment;
- Good technical writing skills;
- Good inter-personal skills;
- The ability to be consistent and work well under pressure with good attention to detail;
- Capability to work in English language, both verbally and written;
- Able to work with partners and the ITER host to define critical needs;
- Ability to align work priorities with overall project schedule;

Experience in the following areas is required:

- Design of diagnostics for large fusion installations and knowledge of tokamak diagnostic systems;
- Design of mechanical or electrical components for high vacuum environments;
- Design and manufacturing of optical transmission components for tokamak diagnostic systems;
- Design of equipment compatible with Remote Handling tools;
- Development of equipment designs for fusion facilities;
- Operational experience of large fusion devices;
- Installation preparation and oversight experience;
- Schematics definition;
- Design organisation;
- Technical document generation;
- System requirements management;
- Technical risk analysis

11 Work Monitoring / Meeting Schedule

Work is monitored through monthly project meetings as required (the frequency of meetings can be increased through agreement between the Contractor and the IO TRO).

12 Delivery time breakdown

See Section 8, "List of Deliverables and due dates".

13 Quality Assurance (QA) requirements

The organisation conducting these activities should have an ITER approved QA Program or an ISO 9001 accredited quality system.

The general requirements are detailed in [ITER Procurement Quality Requirements \(ITER_D_22MFG4\)](#).

Prior to commencement of the task, a Quality Plan must be submitted for IO approval giving evidence of the above and describing the organisation for this task; the skill of workers involved in the study; any anticipated sub-contractors; and giving details of who will be the independent checker of the activities (see [Procurement Requirements for Producing a Quality Plan \(ITER_D_22MFMW\)](#)).

Documentation developed as the result of this task shall be retained by the performer of the task or the DA organization for a minimum of 5 years and then may be discarded at the direction of the IO. The use of computer software to perform a safety basis task activity such as analysis and/or modelling, etc. shall be reviewed and approved by the IO prior to its use, in accordance with Software qualification policy ([Software Qualification Policy \(ITER_D_KTU8HH\)](#)).

14 CAD Design Requirements

For the contracts where CAD design tasks are involved, the following shall apply:

The Supplier shall provide a Design Plan to be approved by the IO. Such plan shall identify all design activities and design deliverables to be provided by the Contractor as part of the contract.

The Supplier shall ensure that all designs, CAD data and drawings delivered to IO comply with the Procedure for the Usage of the ITER CAD Manual ([ITER_D_2F6FTX](#)), and with the Procedure for the Management of CAD Work & CAD Data (Models and Drawings [ITER_D_2DWU2M](#)).

The reference scheme is for the Supplier to work in a fully synchronous manner on the ITER CAD platform (see detailed information about synchronous collaboration in the [ITER_D_GNIX6A](#) - Specification for CAD data production in ITER Contracts.). This implies the usage of the CAD software versions as indicated in CAD Manual 07 - CAD Fact Sheet ([ITER_D_249WUL](#)) and the connection to one of the ITER project CAD data-bases. Any deviation against this requirement shall be defined in a Design Collaboration Implementation Form (DCIF) prepared and approved by DO and included in the call-for-tender package. Any cost or labour resulting from a deviation or non-conformance of the Supplier with regards to the CAD collaboration requirement shall be incurred by the Supplier.

15 Safety requirements

ITER is a Nuclear Facility identified in France by the number-INB-174 (“Installation Nucléaire de Base”).

For Protection Important Components and in particular Safety Important Class components (SIC), the French Nuclear Regulation must be observed, in application of the Article 14 of the ITER Agreement.

In such case the Suppliers and Subcontractors must be informed that:

- The Order 7th February 2012 applies to all the components important for the protection (PIC) and the activities important for the protection (PIA).
- The compliance with the INB-order must be demonstrated in the chain of external contractors.
- In application of article II.2.5.4 of the Order 7th February 2012, contracted activities for supervision purposes are also subject to a supervision done by the Nuclear Operator.

For the Protection Important Components, structures and systems of the nuclear facility, and Protection Important Activities the contractor shall ensure that a specific management system

is implemented for his own activities and for the activities done by any Supplier and Subcontractor following the requirements of the Order 7th February 2012 ([PRELIMINARY ANALYSIS OF THE IMPACT OF THE INB ORDER - 7TH FEBRUARY 2012 \(AW6JSB v1.0\)](#)).

Compliance with [Defined requirements for PBS 55 - Diagnostics \(NPEVB6 v2.0\)](#) or its flowed down requirements in [SRD-55 \(Diagnostics\) from DOORS \(28B39L v5.2\)](#) is mandatory.

NOTE: Some of the tasks associated with this contract are Protection Important Activities (PIAs), particularly related to the Design Reviews and work with the windows.

Expression of Interest

To be returned by e-mail to: amankumar.joshi@iter.org copy lijun.liu@iter.org before
16 December 2022

ITER Organization / ITER Headquarters
Procurement & Contracts Division
Route de Vinon-sur-Verdon
CS 90 046
13067 St. Paul Lez Durance Cedex
France

TENDER No. **IO/22/CFE/10024923/AJI**

TENDER Title: **Diagnostics Design Review and Testing Follow Up**

Officer in charge: **Aman Kumar JOSHI - Procurement & Contracts Division ITER**

☐ We acknowledge receipt of all tender documents for the above mentioned tender.
(In event of missing documents, contact the ITER Officer in charge)

☐ We intend to submit a tender

Contact Person for this solicitation Process:

Name: Tel:

Position: E-mail address:

Signatory Name:

Company Stamp

Title:

Signature:

Date: