外部委託業者の募集

References: IO/24/OT/10028053/JGO

"Service Contract for Maintenance for Toroidal Field Coil In-Pit Installation Tool"

(トロイダルフィールドコイルのピット内据付ツールの保守に関するサービス契約) IO 締め切り 2024 年 3 月 1 日(金)

○はじめに

本事前情報通知 (PIN) は、作業契約の入札授与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。

本文書の目的は作業範囲と入札プロセスに関する技術的な内容の基本的な要約を提供することです。 国内機関は本情報を入札に先立って、以下のサービスを提供できる企業、研究機関その他の法人に入 札プロセスの詳細について周知をお願いします。

〇背景

ITER は平和利用の核融合発電の科学的および技術的な実現可能性の実証を目的とした、国際共同研 究開発プロジェクトです。ITER 機構の7つのメンバーは、;欧州連合(EURATOM が代表)、日本、 中華人民共和国、インド、大韓民国、ロシア連邦、および米国です。

ITER の敷地はフランス南東部のブーシュデュローヌ地区にあり、ITER 本社(HQ) もあるフランス CEA サン・ポール・レ・デュランス に近いところに位置しています。詳細については、ITER のウ ェブサイト http://www.iter.org を参照して下さい。

〇作業範囲

今回の入札プロセスでは、トロイダルフィールドコイルピット内据付ツールの保守サービス契約の締結を目 指しています。

契約者は、TIPIの予防及び是正保全をカバーするために、完全なエンジニアリング及び管理ソリューション を提供するものとし、これには以下が含まれます。

-

- 計測を確立し、予防および/または修正メンテナンスを実行するための適切な技術および管理スキルを持つマンパワーの提供。
- 「契約者の設備」:工事の実施及び完成並びに瑕疵の是正に必要なすべての装置、機械、輸送手段、 消耗品その他のものを示します。
- スペアパーツの供給

- 活動の適切な計画、文書化、IOへの報告、および第三者検査員(該当する場合)との調整。 詳細については、附則IIの技術仕様を参照してください。

○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<u>公開入札</u>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、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添付の関心表明フォームの情報を提出し、競争プロセスへの関心を示すよう正式に要請します。

<u>特に注意:</u>

<u>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</u> 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。

<u>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ます。</u>

- ▶ 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。

〇概略日程

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	2024年2月15日	
関心表明フォームの提出	2024年3月1日	

入札発行	2024年3月8日	
明確化のための質問(もしあれば)	入札提出締め切りの5日前	
入札提出	2024年4月19日	
入札評価と契約授与	2024年Q2	
契約調印	2024年Q2	

○契約期間と実行

IOより契約は2024年の第2四半期に授与されます。契約期間はオプショナル期間2年の延長を伴い、4年を予定しています。

○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。

コンソーシアムとして許可されるために、その点で含まれる法人はコンソーシアムの各メンバーをま とめる権限をもつリーダーをもたなければなりません。このリーダーはコンソーシアムの各目メンバ ーのために責任を負わなければなりません。

指名されたコンソーシアムのリーダーは、入札段階で、コンソーシアムのメンバーの構成を説明する 予定です。その後、候補者の構成は、いかなる変更も ITER 機構に通知することなく変更してはなり ません。かかる認可の証拠は、すべてのコンソーシアムメンバーの法的に授権された署名者が署名し た委任状の形式で、しかるべき時期に IO に提出しなければなりません。

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「Service Contract for Maintenance for Toroidal Field Coil In-Pit Installation Tool」をご参照ください。】

ITER 公式ウェブ <u>http://www.iter.org/org/team/adm/proc/overview</u>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。

イーター国際核融合エネルギー機構からの外部委託 に関心ある企業及び研究機関の募集について

<ITER 機構から参加極へのレター>

以下に、外部委託の概要と要求事項が示されています。参加極には、提案された業務 に要求される能力を有し、入札すべきと考える企業及び研究機関の連絡先の情報を ITER 機構へ伝えることが求められています。このため、本研究・業務に関心を持たれる企業及 び研究機関におかれましては、応募書類の提出要領にしたがって連絡先情報をご提出下 さい。



PRIOR INFORMATION NOTICE (PIN)

OPEN TENDER SUMMARY

IO/24/OT/10028053/JGO

for

Service Contract for Maintenance for Toroidal Field Coil In-Pit Installation Tool

Prior Indicative Notice annexes:

- Annex I: Expression of Interest
- Annex II: Technical Specification

<u>Abstract</u>

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

1 Introduction

This Prior Information Notice (PIN) is the first step of an Open Tender Procurement Process 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 Work

The present tender process is aiming to set up a Service Contract for Maintenance for Toroidal Field Coil In-Pit Installation Tool.

The Contractor shall provide a complete engineering and management solution in order to cover the preventive and corrective maintenance of the TIPI, this will include:

- Man power with appropriate technical and management skills to establish the diagnostic and perform the preventive and/ or corrective maintenance,
- Contractor's Equipment: means all apparatus, machinery, vehicles, consumables and others things required for the execution and completion of the Works and the remedying any defects,
- Supply of Spare parts,
- Proper planning, documenting and reporting of the activities to the IO and coordination with the third party inspector (as applicable).

For more details, please refer to Annex II – Technical Specification.

4 **Procurement Process & Objective**

The objective is to award a Service Contract through a competitive bidding process. The Procurement Procedure selected for this tender is called the Open Tender procedure. The Open Tender 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 Open Tender process. The IO formally invites interested Suppliers to indicate their interest in the competitive process by returning to the Procurement officer in charge the attached "Expression of Interest and PIN Acknowledgement" (Annex I) by the date indicated under the procurement timetable.

<u>Special attention:</u>

Interested tenderers are kindly requested to register in the IO Ariba e-procurement tool called "IPROC". You can find all links to proceed along with instruction going to: <u>https://www.iter.org/fr/proc/overview.</u>

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

<u>Request for Proposal and will then be able to forward the tender documents to colleagues if</u> <u>deemed necessary.</u>

Step 2 - Invitation to Tender

The Request for Proposals (RFP) will be published on our digital tool "Iproc" after the submission of Expression of Interest. This stage allows interested bidders who have indicated their interest to the Procurement Officers 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.

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

A Service Contract will be awarded on the basis of best value for money or lowest price technically compliant method, according to the evaluation criteria and methodology described in the RFP.

Procurement Timetable

The tentative timetable is as follows:

Milestone	Date
Publication of the Prior Indicative Notice (PIN)	15 Febuary 2024
Submission of Expression of Interest form	No later than 1 March 2024
Tender launch	8 March 2024
Clarification Questions (if any) and Answers	5 days before submission deadline
Tender Submission	19 April 2024
Tender Evaluation & Contract Award	Q2 2024
Contract Signature	Q2 2024

5 Quality Assurance Requirements

Prior to commencement of any work under this Contract(s), a "Quality Plan" shall be produced by the Supplier and Subcontractors and submitted to the IO for approval, describing how they will implement the ITER Procurement Quality Requirements.

6 Contract Duration and Execution

The ITER Organization shall award the Service Contract in Q2 2024. The estimated contract duration should be 4 years with the possibility to extend of maximum 2 years as option.

7 Candidature

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

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.

8 Sub-contracting Rules

All sub-contractors who will be taken on by the Contractor shall be declared with the tender submission in IPROC. Each sub-contractor will be required to complete and sign forms including technical and administrative information which shall be submitted to the IO by the tenderer as part of its tender.

All declared sub-contractors must be established within an ITER Member State in order to participate.

The IO reserves the right to approve (or disapprove) any sub-contractor which was not notified in the tender and request a copy of the sub-contracting agreement between the tenderer and its subcontractor(s). Rules on sub-contracting are indicated in the RFP itself.

ANNEX I

EXPRESSION OF INTEREST & PIN ACKNOWLEDGEMENT

To be returned by e-mail to: jingyu.gao@iter.org_and cc: aurelie.dubuc@iter.org

Tender re	eference:	IO/24/OT/10028053/JGO	
Description: Procurement Officer:		Service Contract for maintenance for Toroidal Field Coil In-Pit Installation Tool Jingyu Gao	
	WE ACKNO MENTIONEI	WLEDGE HAVING READ THE PIN NOTICE FOR THE ABOVE D TENDER	
	WE INTEND	TO SUBMIT A TENDER	
	WE ARE AL	READY REGISTERED IN IPROC	
	WE INTEND	TO REGISTER IN IPROC	

.....

COMPANY STAMP

Signature:
Name:
Position:
Tel:
E-mail
Date:



IDM UID 88A6Y2

VERSION CREATED ON / VERSION / STATUS 08 Jun 2023 / 2.3 / Approved

EXTERNAL REFERENCE / VERSION

Technical Specifications (In-Cash Procurement)

Maintenance technical specification for TIPI TFC in pit installation tool

Maintenance technical specification for TIPI TFC in pit installation tool

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1 Purpose

This document defines the Technical Specifications applicable to the maintenance activities for the Toroidal Field Coil In-Pit Installation tool (hereinafter referred as "TIPI" or "The Tool").



2 Scope

2.1 In the scope of supply

The Contractor shall provide a complete engineering and management solution in order to cover the preventive and corrective maintenance of the TIPI, this will include:

- Man power with appropriate technical and management skills to establish the diagnostic and perform the preventive and/ or corrective maintenance,
- Contractor's Equipment: means all apparatus, machinery, vehicles, consumables and others things required for the execution and completion of the Works and the remedying any defects,
- Supply of Spare parts,
- Proper planning, documenting and reporting of the activities to the IO and coordination with the third party inspector (as applicable).

2.2 Out of the scope of supply

The access means in pit are supplied by the IO, The lifting equipment in pit are supplied by IO

3 Definitions

3.1 Maintenance

"Maintenance" is defined in this document as the activities required to keep The Tool in good operational conditions during on site use in the pit in bdg 11. This means to perform the planned

maintenance activities and to perform the corrective maintenance as necessary to keep the tool in good operational conditions.

The boundaries of the scope starts after reception of The Tool from storage and stops once The Tool is evacuated from the pit to be sent back to storage.

3.2 Spare parts

"Spare parts" are defined as the individual pieces of equipment which constitute The Tool and that need to be supplied by The Contractor to fulfil his obligation of the contract.

e.g. electrovalves, bolt, washer, nuts.

3.3 Consumables

Working consumables are defined lubricants, swabs, etc.

3.4 Abbreviations

ARIF:	Access Request Information Form
CIS:	Company Identification Sheet
CMA:	Construction Management As agent
I&C:	Instrumentation and Control system
ITP:	Instruction to proceed
TIPI:	TFC in pit Installation tool
VVTS	Vacuum Vessel Thermal shield
VGP	Vérifications Générales Périodiques
HPU	Hydraulic Power Unit
HMI	Human Machine Interface
PPE	Physical Protection Equipment
PGS SPS	Health and Safety General Coordination Plan for the
construction o	f ITER Project
PPSPS:	plan particulier de sécurité et de protection de la santé
FM	Facility Management
SAF:	Subcontractor Acceptance Form
WAR	Work Authorization Request
CANECO	Name of software developed by ALIPI

4 References

4.1 General references

- ITER Site access Procedure (S3893D v3.1) [1]
- [2] How to request access to and within the ITER Site (WRWQRG v3.1)
- [3] Internal Regulations (27WDZW v3.1)
- [4] Contractor Safety Management Procedure (Q2GBJF v1.4)
- PGC SPS Vol. 1 IO&F4E (T6V4RP v4.1) 4.4 [5]
- ITER Site Permit to Work Overarching Procedure (3E8289 [6] v2.5) 3.1
- ITER Lock-Out Tag-Out Instruction ITER D 34Q3GJ 3.2 [7]
- ITER D PVJLAJ 2.11 [8] All site maintenance plan
- [9] Sam-FM WAR Management and User Guide ITER D BH43H2 3.6
- Procedure_CMA_Permit to Work Daughter Procedure -[10] Deliverable 5.1 (UBET39 v9.5) (current)
- **ITER Site Permit to Work Overarching Procedure (3E8289** [11] v3.1) (current)
- ITER_D_Y4CTM6 A7 Global ITER Worksite Synthesis Drawing [12] (Spie deliverable)
- [13] Electrical safety procedure ITER D 3XULVS 3.1 [14] Site network diagram – PAS ITER D PVJRYL 8.1
- [15] Plant Control Design Handbook (PCDH)
- [16] **Operations Handbook**
- Electrical Design Handbooks (EDH): [17]
 - i. Part I: Introduction
 - ITER D 2F7HD2 1.4 ii. Part II: Terminology and Acronyms ITER D 2E8QVA 1.4

ITER D 27LH2V 7.0

ITER_D_2LGF8N 1.3

ITER D 9PSPTY

ITER D VE3CZC 1.3

1.3

- iii. Part III: Codes and Standards
- ITER D 2E8DLM iv. Part IV: Electromagnetic Compatibility ITER D 4B523E 3.0
- v. Part V: Earthing and Lightning Protection ITER D 4B7ZDG 3.0
- [18] Pre works Briefing Procedure 2.5
- [19] ITER Site Roads & Parking Data ITER D VQ6Q2M 2.0
- List of ITER Buildings and Areas [20]
- Guideline for CANECO calculation notes for ITER project [21] ITER_D_VZKRDC 1.2
- Procedure for management of Nonconformities (22F53X v8.2) 9.1 [22]
- [23] IO / In-Cash Contractor Documentation Exchange and Storage Working Instruction (G8UMB3 v4.1)
- How to use the SMDD application (XSXCL2 v1.0) [24]
- [25] Working Instruction for the Delivery Readiness Review (DRR) (X3NEGB v2.0)
- [26] Procedure for the management of Deviation Request (2LZJHB v8.1)
- [27] Deviation Request Template (2LRNQP v4.0)
- [28] TO1-1 Design description document (V3EJ3W v2.1)
- [29] TO1-1 User manual (V3EVXA v5.0)
- [30] TO1-1 Maintenance Plan (V3ELUK v3.0)
- Full list of drawings applicable : https://user.iter.org/?uid=V3PTRU [31]

5 Estimated Duration

The contract duration is set to 4 years with the possibility to extend of maximum 2 years as option.

6 Work Description

6.1 Special Skills and expertise applicable

Hydraulic: The Contractor shall identify and allocate a skilled Hydraulic Engineer able to assist the on-site team in the expertise of the Machine. The personnel shall be able to read the single line diagram, identify the components on site and establish the tests procedure to be followed to establish the diagnostic and perform the maintenance tasks. The personnel operating The Tool shall be trained to the hydraulic risks.

Electric: The Contractor's personnel allocated to this Contract shall have the necessary training to be able to open the HPU electrical cabinet, perform some diagnostic and test and replace the components that are not operational.

I&C: The Contractor's personnel proposed shall contain an I&C engineer able to connect to the HPU, establish the diagnostic, propose the repair to be done and perform the repair.

6.2 Environment of work in pit and associated documentation

- [Req.1] The Contractor shall work in pit respecting the references [1] to [6].
- [Req.2] Prior to any work on site, the Contractor shall develop the following:
 - a. Company Identification Sheet "CIS" (to be filled At least 72 hours prior to the access, before 11h00) to be submitted to CMA,
 - b. If some tasks needs to be sub-contracted on IO site, the contractor shall Complete Subcontractor Acceptance Form "SAF",
 - c. Request for access to the site: fill the Access Request Information Form "ARIF",
 - d. Work permit request,
 - e. Participation to training on safety on IO site,
 - f. Participation to training on cleanliness protocol in the building and safety on site,
 - g. PPSPS to be submitted directly from the contractor to the IO HSPC at least 15 days before the work on site,

h. During site works, participation to the coordination meetings.

6.3 Work description part of the basic scope of supply

- [Req.3] Taking into account the inputs from the TIPI manufacturer's documentation from ref [28],[29] and [30]. The Contractor shall establish his maintenance plan and submit it to the IO.
- [Req.4] Based on the excel maintenance sheets from the TIPI manufacturer's documentation in attachment to the IO IDM [21], The contractor shall establish and maintain his own detailed maintenance procedures including the list of Contractor's Equipment.
- [Req.5] The first version of the Contractor's detailed maintenance procedures shall be submitted to the IO 3 months after the KOM maximum.
- [Req.6] Based on the manufacturer maintenance plan Ref[30], the contractor shall establish the recommended spare part list with lead time and associated quotations (minimum 3 to be submitted), this shall enable to perform the preventive maintenance over the Contract duration.
- [Req.7] Based on the manufacturer maintenance plan Ref[30], the contractor shall establish the recommended spare part list with lead time and associated quotations (minimum 3 to be submitted), for the corrective maintenance.
- [Req.8] Based on the established Contractor's maintenance plan, The Contractor shall perform the maintenance operations and record it in the maintenance log of The Tool and Maintenance report and upload it to IDM within 5 working days after the maintenance is done.
- [Req.9] At the start of the contract, the Contractor shall perform a first inspection of the Tool to control the initial record of information on the maintenance log.
- [Req.10] The Contractor shall provide and maintain the necessary Contractor's equipment to perform the maintenance operations as planned, this may include but is not limited to:
 - a. Mechanical tool box: Basic hand tools such as spanner set, hammers, chariots
 - b. Electrical Tool box,
 - c. Hydraulic tool box: the necessary equipment to connect and purge a line
 - d. Cleaning set: Vacuum cleaner, with cloth, VQC allowed cleaning fluid,
 - e. Calibrated numeric Dial Gauge, calibrated gauge blocks, meters, calibrated pressure gauges,
 - f. Safety materials and PPE,

- [Req.11] During works on site on the TIPI Machine, as defined in the work permit, the Contractor is responsible for keeping the site safe and shall clean the area at the end of the task.
- [Req.12] The Contractor shall dispatch at least one safety controller to the site during the maintenance period.

6.4 Work description based on instructions to proceed

- [Req.13] The Contractor shall establish rates for electrical trouble shooting, hydraulic or mechanical.
- [Req.14] Once notified by the IO through an "intervention request", based on the severity the Contractor shall mobilize a resource within a maximum deadline:
 - a. Severe: intervene within 3 hours and establish the report within a day,
 - b. Medium: intervene within 5 working days and establish the report within 2 weeks,
 - c. Light: intervene within a week and establish the report within 1 month,
- [Req.15] Once the troubleshooting done, the Contractor shall submit to the IO the necessary quotations (3 necessary above 1000 EUR) and attach it to the report of intervention.
- [Req.16] The IO shall send the approved ITP to the Contractor to launch the Corrective maintenance tasks.
- [Req.17] Following the reception of the ITP, the Contractor shall perform the supply and the repair work within the agreed schedule.

7 List of deliverables and due dates

- [Req.18] Based on this specification, the Contractor shall establish the list of deliverables with identification, description and due date.
- [Req.19] This shall be established at maximum 3 months after the KOM after completion and shall be approved by the IO.

D#	Deliverable	Due date	
	Preparatory tasks		
D1.1	Quality plan Organization chart Detailed maintenance plan approved [Req.2] achieved	T0+ 2 months	
D1.2	Detailed Maintenance plan and detailed maintenance sheet with equipment necessary established [Req.3] to [Req.5], [Req.10] achieved	T0+ 3 months	
D1.3	The recommended spare part list with lead time and associated quotations (minimum 3 to be submitted) is approved by IO for preventive maintenance and for corrective maintenance.	T0+ 6 months	
Execution tasks for preventive maintenance			
D2.1.1	Initial verification: First maintenance done on the TIPI machine and maintenance log verified [Req.8] to [Req.9] achieved	T0+ 4 months	
D2.1.2	Preventive maintenance done for full first year	T0+ 12 months	
D2.2.1	Preventive maintenance done for 6m the second year	T0+18 months	
D2.2.2	Preventive maintenance done for 6m the second year	T0+ 24 months	
D2.3.1	Preventive maintenance done for 6m the third year	T0+ 30 months	
D2.3.2	Preventive maintenance done for 6m the third year	T0+ 36 months	
D2.4.1	Preventive maintenance done for 6m the fourth year	T0+ 42 months	
D2.4.2	Preventive maintenance done for 6m the fourth year	T0+ 48 months	

Option preventive maintenance			
DO1.1	Preventive maintenance done for 6m the fifth year	T0+54 months	
DO1.2	Preventive maintenance done for 6m the fifth year	T0+ 60 months	
DO2.1	Preventive maintenance done for 6m the sixth year	T0+ 66 months	
DO2.2	Preventive maintenance done for 6m the sixth year	T0+ 72 months	

8 Acceptance Criteria

- [Req.20] The contractor shall upload the deliverables to the IO document management system called IDM.
- [Req.21] The Contractor's deliverables shall be approved by IO in IDM, refer to [24].

9 Specific requirements and conditions

Working hours: The IO site availability for working hours referred to in this document are (unless specified otherwise for the specific activities):

From 7.00 am to 7.00 pm throughout the entire site on week days,

From 07:30 to 13:30 on Saturdays (including on-call service and technical team).

10 Work Monitoring / Meeting Schedule

[Req.22] The Contractor shall plan for a yearly monitoring meeting presenting the main results of the contract, the maintenance done vs planned.

11 Quality Assurance (QA) requirements

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

The general requirements are detailed in <u>ITER Procurement Quality Requirements</u> (<u>ITER_D_22MFG4</u>).

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 <u>Procurement Requirements for Producing a Quality Plan</u> (<u>ITER_D_22MFMW</u>)).

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 Quality Assurance for ITER Safety Codes (ITER D 258LKL).

12 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 [20].

[Req.23] Only the management of wastes shall be considered as a PIA for this contract

13 Cleaning and cleanliness preservation

Cryostat surfaces in PIT are classified as vacuum components VQC2A according to the ITER Vacuum Handbook (2EZ9UM).

In general, any fluid or material in permanent, potential contact or accidental contact with the Vacuum cryostat surface shall be previously approved by IO. A list of approved fluids is available in IDM (Fluid and Processing Material Approval Request, ITER_D_VH2KDW).

[Req.24] If the Contractor proposes to use a different product, it shall be sent for IO approval though a dedicated FAR (ITER_D_2MGWR4).

List of Prohibit products:

• Direct contact with lead or other materials with low melting point

(such as tin, antimony, mercury, zinc, arsenic, cadmium, etc...) is prohibited.

- The use of halogenated solvents is prohibited (e.g. trichloroethylene, perchloroethylene...)
- The use of phosphoric acid on final surfaces is prohibited
- Chlorine-based lubricants is prohibited during manufacturing or completely removed from internal and external surfaces by cleaning in order to preserve a stainless steel vacuum system from corrosion during the entire lifetime of the machine.
- Direct contact of the components with handling device in carbon steel is prohibited.

These requirements applies to any phase of the work (repairing, cleaning, protection for cleanliness preservation...)

[Req.25] The Contractor shall define:

- Cleaning procedure in compliance ITER Vacuum Handbook requirements.
- A protection/preservation plan for cryostat surface cleanliness preservation during the work.
- A preservation plan for the working area in compliance with the Cleanliness strategy (WW78E8).