

## 外部委託業者の募集

References: IO/24/OT/10029061/JLE

### “Development of a Propellant Valve Prototype”

(プロペラントバルブのプロトタイプ開発)

IO 締め切り 2024 年 7 月 13 日(土)

#### 〇はじめに

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小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 の敷地は南フランスにあり、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

本作業範囲は、ITER DMSのシャッター付ペレットインジェクターでペレットを打ち出すための高速ガス圧パルスを提供するための、誘導渦電流駆動バルブの試作と適切な電力供給の開発です。サービス契約の範囲は、推進ガスバルブの設計、製造、およびテストです。

詳細は添付資料Ⅱの技術仕様書ITER\_D\_B5WNG5 v1.2 (添付)を参照してください。

#### 〇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、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。

#### 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	2024 年 7 月 3 日
関心表明フォームの提出	2024 年 7 月 13 日
提案リクエスト（RFP）の IPROC 上での発行	2024 年 7 月 29 日の週
明確化のための質問（もしあれば）	2024 年 9 月 6 日（質問✕切） 2024 年 9 月 11 日（回答✕切）
入札提出（IPROC）	2024 年 9 月 20 日
入札評価と契約授与	2024 年 10 月
契約調印	2024 年 11 月
契約開始	2024 年 11 月

## ○契約期間と実行

IOより契約は2024年の9月に授与されます。予想される契約期間は9か月を予定しています。

## ○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示す必要があります

## 必要な経験と能力

誘導渦電流によって作動する部品の設計と試作、活性部品の機械設計、真空対応部品、高圧ガスシステムの経験が実証できること。

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。

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「**Development of a Propellant Valve Prototype**」をご参照ください。】

ITER 公式ウェブ <http://www.iter.org/org/team/adm/proc/overview> から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)**

## **TENDER SUMMARY**

**IO/24/OT/10029061/JLE**

*for*

### ***Development of a Propellant Valve Prototype***

#### **Abstract.**

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 "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 an Open Tender Procurement Process leading to the award and execution of a 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.

The Domestic Agencies are invited to publish this information in order to alert companies, institutions or other eligible entities to the forth-coming tender, allowing interested parties time to decide whether to participate in the tender or not.

## 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](http://www.iter.org).

## 3 Scope of Work

The scope of work is to develop a prototype of an eddy current driven valve and adequate power supply to provide a fast gas pressure pulse for launching pellets with the Shattered Pellet Injectors of the ITER DMS. The scope of the service contract is the design, the manufacturing and the testing of the propellant gas valve.

The details can be found in the **Technical Specifications ref. ITER\_D\_ B5WNG5 v1.2** (attached to this PIN).

## 4 Procurement Process & Objective

The objective is to award a 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” by the date indicated under paragraph 5 below.

**Special attention:**

**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: <https://www.iter.org/fr/proc/overview>.**

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

➤ Step 2 - Invitation to Tender

The Request for Proposals (RFP) will be published on our digital tool “Iproc”. This stage allows interested bidders 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.**

➤ 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 contract will be awarded on the basis of best value for money according to the evaluation criteria and methodology described in the RFP.

## 5 Procurement Timetable

The tentative timetable is as follows:

Milestone	Date
Publication of the Prior Information Notice (PIN)	3 July 2024
Submission of expression of interest form	13 July 2024
Request for Proposals (RFP) publishing on IPROC	Week of 29 July 2024
Clarification Questions (if any) and Answers	6 Sep 2024 (questions due) 11 Sep 2024 (answers due)
Tender Submission in IPROC	20 September 2024
Tender Evaluation & Contract Award	October 2024
Contract Signature	November 2024
Contract Commencement	November 2024

## 6 Quality Assurance Requirements

For the entire duration of the Contract, the Contractors shall hold, and maintain, a valid and relevant ISO 9001 and/or 14001 certification or comparable equivalent. The missions and tasks executed under this Contract shall be carried out in compliance with the IO Quality Requirements.

## 7 Contract Duration and Execution

The ITER Organization is planning to award the Contract in September of 2024. The estimated contract duration period shall be about 9 months.

## 8 Experience

The tenderer shall demonstrate their knowledge, experience and capabilities in the implementation of provision of service to the IO in accordance with the IO technical requirements.

### **Required experience and competencies**

Demonstrated experience with design and prototyping of components activated through induced eddy currents, mechanical design of active components, vacuum compatible components and high gas pressure systems.

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

## 9 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.

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.**



## **10 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.

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.

### Technical Specifications (In-Cash Procurement)

## Technical Specifications for the Development of a Propellant Valve Prototype

The scope of this contract is to develop a prototype of a propellant valve for the ITER DMS. The work comprises the design, manufacturing and testing of fast eddy current driven valve to deliver high pressure gas upon receipt of a trigger.

This is a contract within the DMS Task Force technology activities.

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## 1 Preamble

This Technical Specification is to be read in combination with the General Management Specification for Service and Supply (GM3S) [1] that constitutes a full part of the technical requirements.

In case of conflict, the content of the Technical Specification supersedes the content of reference [1].

## 2 Purpose

Purpose of this document is to give the technical specifications for the development, manufacturing and testing of a propellant valve prototype for the ITER DMS.

## 3 Acronyms & Definitions

### 3.1 Acronyms

The following acronyms are the main one relevant to this document.

Abbreviation	Description
MTO	Material Take Off
CRO	Contract Responsible Officer
GM3S	General Management Specification for Service and Supply
IO	ITER Organization
PRO	Procurement Responsible Officer

### 3.2 Definitions

Term	Definition/Abbreviation
DMS	Disruption Mitigation System
FAT	Factory Acceptance Test
FDR	Final Design Review
MRR	Manufacturing Readiness Review
NDT	Non-Destructive Testing

## 4 Estimated duration

The estimated duration for the contract is 24 months.

## 5 Applicable Documents & Codes and standards

### 5.1 Applicable Documents

It is the responsibility of the Contractor to identify and request for any documents that would not have been transmitted by IO, including the below list of reference documents.

This Technical Specification takes precedence over the referenced documents. In case of conflicting information, it is the responsibility of the Contractor to seek clarification from IO.

Upon notification of any revision of the applicable document transmitted officially to the Contractor, the Contractor shall advise within 4 weeks of any impact on the execution of the contract. Without any response after this period, no impact will be considered.

Ref	Title	IDM Doc ID	Version
1	General Management Specification for Service and Supply (GM3S)	82MXQK	1.4
2	Requirements for Producing a Contractors Release Note	22F52F	5.0
3	Quality Classification Determination	24VQES	5.2
4	ITER Vacuum Handbook	2EZ9UM	2.5
5	ITER Seismic Nuclear Safety Approach	2DRVPE	1.6
6	A. Savtchikov, K.H. Finken, G. Mank, Rev. of Sci. Instr., Vol. 73, Issue 10 (2002), <a href="https://doi.org/10.1063/1.1505106">https://doi.org/10.1063/1.1505106</a> .	-	-

### 5.2 Applicable Codes and Standards

This is the responsibility of the Contractor to procure the relevant Codes and Standards applicable to that scope of work.

Ref	Title	Doc Ref.	Version
CS1	EN 10204:2005 Metallic products. Types of inspection documents	-	-
CS2	2014/68/EU: Pressure Equipment Directive	-	-

## 6 Background

ITER is a major new device that is under construction at Cadarache, near Marseille, France. This device will study the potential of controlled nuclear fusion to provide safe, clean and virtually limitless energy for humankind. To protect the machine from the consequences of plasma disruptions during high power operations, a DMS is required.

The current DMS is based on the Shattered Pellet Injection technology. This works on the basic principle of a cryogenic pipe gun:

- a pellet consisting of protium or neon is formed inside a cryogenically cooled section of a pipe (the “barrel”),
- the pellet is kept at low temperature ( $\sim 5\text{K}$ ) being ready to be launched,
- high-pressure hydrogen gas shears off the pellet from the barrel walls and propels it down the barrel and the pellet enters a flight line to travel towards the plasma,
- just before the pellet reaches the plasma, it contacts a strike plate or tube bend (the “shatter chamber”) which causes it to shatter.

The high-pressure hydrogen gas is to be delivered by a fast-acting gas valve upon receipt of a trigger request from the central interlock system of ITER. The whole assembly will be installed inside the port cells, where the component will be exposed to ambient magnetic field, radiation and neutron bombardment.

The purpose of this contract is to develop a prototype of an eddy current driven valve and adequate power supply for the ITER DMS. For testing purposes a power supply can be provided by IO if needed.

## 7 Work description

This section defines the specific scope of work, in addition to the contract execution requirement as defined in [1].

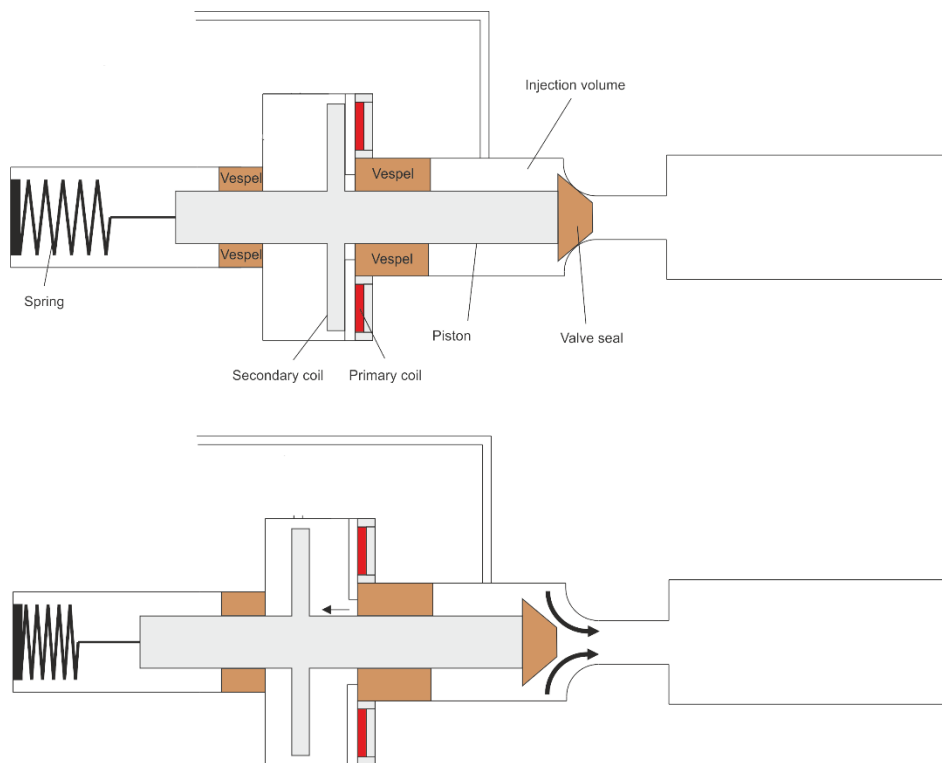
The scope of the service contract is the design, the manufacturing and the testing of the propellant gas valve as detailed in the following sections.

### 7.1 Task #1

#### 7.1.1 *Description*

The task #1 is the detailed design of the propellant valve, including a CAD model and a Design Description Document containing the calculations and reasoning behind the design.

The propellant valve shall be an eddy current valve similar to the valves developed at the Forschungszentrum Jülich [6]. These valves have been operated successfully in magnetic fields without shielding and were therefore chosen as propellant valves for the ITER DMS in the port cell environment. The valve must open within 1 ms with a minimal time jitter and must deliver up to 6 barL Hydrogen. The injected amount shall be controllable through the coil voltage and propellant valve pressure.



For task #1, the Contractor shall deliver the following:

1. Detailed CAD model of the valve
2. Design Description Document of the valve
3. FDR

### 7.1.2 Design Requirements

The valve shall fulfil the following requirements:

- Opening time  $\leq 1 \text{ ms}$
- Delivered gas amount  $\leq 6 \text{ barL}$  (adjustable through coil voltage)
- Operating pressure  $\leq 60 \text{ bara}$  [CS2]
- Valve plenum size  $250 \text{ cm}^3$
- Leak rate over valve seal (at all times)  $\leq 1 \cdot 10^{-6} \text{ mbarL/s}$
- Leak rate to atmosphere (at all times)  $\leq 1 \cdot 10^{-8} \text{ mbarL/s}$
- Operating voltage  $800 \text{ V} - 1200 \text{ V}$
- Vacuum class VQC-1A [4]
- Quality class QC-4 [3]
- Seismic class SC2 [5]
- Mean cycles between failures  $\geq 10,000$

### 7.1.3 Environmental requirements

The valve shall be able to operate in these ambient conditions without additional shielding:

- Operating temperature  $\leq 50^\circ\text{C}$
- Radiation level  $10^6 \text{ Gy}$



- Ambient magnetic field 400 mT

#### 7.1.4 *Interface requirements*

The valve shall have the following interfaces:

- Nozzle diameter 8 mm
- Barrel interface  $d_o = 15 \text{ mm}$ ,  $s = 1.5 \text{ mm}$
- Cryostat interface KF flange with  $d_o = 190 \text{ mm}$
- Propellant gas inlet  $\frac{1}{4}$ " female VCR
- Pellet gas inlets 2x  $\frac{1}{4}$ " male VCR on KF
- Cold cell electric feed throughs 3x 25pin Sub-D female on KF
- Valve size  $D = 130 \text{ mm}$ ,  $L = 180 \text{ mm}$

#### 7.1.5 *CAD requirements*

The CAD model shall fulfil the following requirements:

- The CAD model shall contain all components that will be present in the actual valve with correct dimensions and materials.
- The CAD model shall be submitted in CATIA or .stp format.

#### 7.1.6 *Delivery Time*

The maximum expected duration for this task is 4 months, including a simple FDR.

## 7.2 **Task #2**

### 7.2.1 *Description*

The task #2 is the manufacturing of the propellant valve, including the MRR, the manufacturing drawings and the FAT results.

After successful FDR, the manufacturing drawings have to be prepared and the Factory Acceptance Tests have to be specified. This is then reviewed in the MRR. After successful MRR, the Contractor shall manufacture the valve and perform the FAT.

As part of task #2, the Contractor shall deliver the following:

1. Manufacturing Drawings
2. FAT specifications
3. MRR
4. FAT results

### 7.2.2 *FAT Requirements*

The FAT shall contain at least the following tests:

- Dimensional Test
- PT of pressurized welds

- Volumetric NDT of pressurized welds
- He Leak test against atmosphere
- Pressure test with pressure  $\geq 90$  bara

### 7.2.3 *FAT result Requirements*

The FAT results shall contain at least the following tests:

- Dimensional Drawing with “As manufactured” values
- PT report of pressurized welds
- Volumetric NDT report of pressurized welds
- He Leak test report
- Pressure test report

### 7.2.4 *Delivery Time*

The maximum expected duration for this task is 11 months, including a simple MRR.

## 7.3 **Task #3**

### 7.3.1 *Description*

The task #3 is the testing of the propellant valve, including functional test, test in magnetic field and cycle test.

Under the scope of the task #3, the Contractor shall deliver the following:

1. Test report of the functional test (opening time, valve plate movement, gas release)
2. Test report of the magnetic field test (test setup, gas release at different B-fields)
3. Test report on the cycle test (1000 cycles, gas release over time, inspection for wear)
4. Pellet release test

### 7.3.2 *Functional test Requirements*

The functional test shall at least cover the following items

- Opening time of the valve
- Leak rate over the valve seal
- Movement profile of the valve plate
- The amount gas released
- Gas release and supply voltage relation

### 7.3.3 *Magnetic field test Requirements*

The magnetic field test shall at least cover the following items

- The amount gas released at different magnetic field strengths
- 100 valve cycles at 400 mT and observation of gas release

### 7.3.4 *Cycle test Requirements*

The cycle test shall at least cover the following items

- 1,000 cycles at 60 bar filling pressure without magnetic field
- Leak test over valve seal after cycle test
- Inspection for wear

### 7.3.5 *Pellet release tests*

The propellant valve and its power supply shall be shipped to one of the ITER DMS test laboratories (Budapest/Hungary or Grenoble/France). The choice will depend on the actual operation schedule at the time the propellant valve is available for pellet release tests. In the offer the maximum shipping costs shall be included.

The release of protium (H) pellets and neon (Ne) with H shell pellets shall be tested. As target, the H pellet shall achieve velocities of ~500 m/s. In addition, the lower range, i.e. gas amount is just enough to release the pellet, and upper range (max operational pressure and opening duration) shall be explored for H and Ne with H-shell pellets.

### 7.3.6 *Delivery Time*

The maximum expected duration for this task is 9 months.

## 7.4 **Optional Task #4**

### 7.4.1 *Description*

A power supply, currently being manufactured for the ITER DMS, for providing a fast voltage discharge to energize the primary coil of the eddy current valve can be provided by IO. In case the power supply is not suitable for the design as proposed by the Contractor, an adequate power supply should be specified and built by the Contractor. The additional costs will be covered by releasing the optional task 4.

## 8 **Location for Scope of Work Execution**

The Contractor shall perform the work at their own location.

## 9 **IO Documents & IO Free issue items**

No input nor free issue item is expected from IO.

## 10 **List of deliverables**

The Contractor shall provide IO with the documents and data required in the application of this technical specification, the GM3S [1] and any other requirement derived from the application of the contract.

You can find here below a minimum list of documents, but not limited to, that are required within the expected timing:

#	Task	Deliverable / Technical Design Family	Detailed description	Due date in months (T0+x)*
D1	T1	Design Description Document	Propellant valve Design Description Document	T0+3
D2		Report	FDR Report	T0+4
D3	T2	Drawings	Manufacturing drawings	T0+6
D4		Report	FAT specifications	T0+6
D5		Report	MRR Report	T0+8
D6		Report	FAT results	T0+15
D7	T3	Report	Functional test results	T0+18
D8		Report	Magnetic field test results	T0+21
D9		Report	Cycle test results	T0+24

(\*) T0 = Commencement date of the contract; X in months.

Contractor shall prepare their document schedule based on the above and using the template available in the GM3S [1] appendix II ([click here to download](#)).

## 11 Quality Assurance requirements

The Quality class under this contract is QC-4 and the GM3S section 7 [1] applies in line with the defined Quality Class.

## 12 Safety requirements

No specific safety requirement related to PIC components apply.

### 12.1 Pressure Equipment

The propellant valve is pressure equipment under [CS2]. The design has to be made accordingly, the necessary NDT and marking has to be done and the testing at pressure has to be performed with the necessary safety precautions in place.

### 12.2 Seismic class

The valve is seismic class SC2. The design must show through analysis that it can withstand the accelerations ( $X = 62.8 \text{ m/s}^2$ ,  $Y = 141.6 \text{ m/s}^2$ ,  $Z = 178 \text{ m/s}^2$ ).

## 13 Specific General Management requirements

Requirement for GM3S section 6 [1] applies completed/amended with the below specific requirements:

### **13.1 Contract Gates**

In addition to the contract gates as defined in [1] section 6.1.5, the scope of work call for Contract gates (FDR, MRR) as defined in section 7 of this document.

### **13.2 Meeting Schedule**

The Contractor shall organize regular videoconferences in agreement with IO to present the progress.

### **13.3 CAD design requirements**

This contract requires for CAD activities and GM3S section 6.2.2.2 [1] applies.

# ANNEX I

## EXPRESSION OF INTEREST & PIN ACKNOWLEDGEMENT

To be returned by e-mail to: [Jongeun.Lee@iter.org](mailto:Jongeun.Lee@iter.org) in copy to [alessia.donato@iter.org](mailto:alessia.donato@iter.org) and [takakazu.kimura@iter.org](mailto:takakazu.kimura@iter.org)

TENDER No. **IO/24/OT/10029061/JLE**

TENDER Title: **Development of a Propellant Valve Prototype**

OFFICER IN CHARGE: **Jong-Eun LEE – Procurement & Contracts Division  
ITER Organization**

☐ WE ACKNOWLEDGE HAVING READ THE PIN NOTICE FOR THE ABOVE MENTIONED TENDER

☐ WE INTEND TO SUBMIT A TENDER

☐ WE WILL NOT TENDER FOR THE FOLLOWING REASONS:

.....

### **Contact Person for this solicitation Process:**

Name: ..... Tel: .....

Position: ..... E-mail address: .....

Signatory Name: .....

Company Stamp

Title: .....

Signature: .....

Date: .....