+Call for Expertise: エキスパート募集

IO References: IO/25/CFE/10032397/CMA

“IMAS DevOps Support"

（統合モデリングと解析スイート IMAS の開発デプロイサポート）

IO 締め切り 2025 年 7 月 30 日(水)

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

ITER 機構の下記担当者宛に電子メールにて送付：

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〇はじめに

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。

〇背景

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。

〇作業範囲

この「IMAS DevOps Support」と題したソフトウェアエンジニアリングサービス契約の目的は、統合モデリング＆解析スイート（IMAS）の開発および展開を支援することにあります。特に、IMAS のインストールと展開を円滑に行えるようにすること、ITER データの検索および取得手段として堅牢に機能することを保証すること、ITER 研究計画を支援するために必要な物理ワークフローの実行を、新しいソフトウェアコンポーネントのタイムリーなリリースを通じて支援すること、既存のコードベースの拡張、簡素化、リファクタリングを通じて（他の遠隔地での保守も含め）保守作業を容易にすることを目的としています。詳細は技術仕様書の E2RMD2 v1.1 (本 PIN 文書の附則 I)を参照下さい。

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、10 作業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。

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
IOWeb ページと DA との連絡により 事前指示書（PIN）の発行	2025 年 7 月 15 日
関心表明フォームの提出	2025 年 7 月 30 日
IPROC での提案リクエスト（REP）の発行	2025 年 8 月 6 日
IPROC で入札提出	2025 年 8 月 20 日

入札評価と契約授与	2025 年 9 月中旬
契約調印	2025 年 7 月 E
契約開始	2025 年 8 月最初の週

〇契約期間

予想される契約期間は、12 か月です。

〇経験

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)。

〇候補

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、入札段階でのカバーレター(入札への招待)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「**IMAS DevOps Support**」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/25/CFE/10032397/cma

IMAS DevOps Support

Procurement Officer in charge:

Cécile Mendoza - EXT
cecile.mendoza@iter.org
cc. jongeun.lee@iter.org

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 Organization (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, please visit www.iter.org.

3 Scope of Service

The purpose of this software engineering service contract titled "**IMAS DevOps Support**" is to support the development and deployment of the Integrated Modelling & Analysis Suite (IMAS), with particular emphasis on facilitating its installation and deployment; ensuring it can robustly function as the means for finding and retrieving ITER data; supporting the execution of physics workflows required to support the ITER Research Plan through the timely release of new software components; facilitating the maintenance (including at other remote sites) through the extension, simplification and re-factoring of the existing code base, as fully described in Technical Specifications ref. **E2RMD2 v1.1 (Annex I to 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 (given in section 5).

- 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	15 July 2025
Deadline for Submission of expression of interest form	30 July 2025
Request for Proposals (RFP) publishing on IPROC	6 August 2025
Tender Submission in IPROC	20 August 2025
Tender Evaluation & Contract Award	Mid-September 2025
Contract Signature	Late September 2025
Contract Commencement	Mid-October 2025

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 support 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.

IDM UID
E2RMD2

VERSION CREATED ON / VERSION / STATUS
11 Jun 2025 / 1.1 / Approved

EXTERNAL REFERENCE / VERSION

Technical Specifications (In-Cash Procurement)

Technical Specifications for IMAS DevOps

Technical Specifications for Software Engineering services to support the development and deployment of the Integrated Modelling & Analysis Suite (IMAS)

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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) – [Ref 1] that constitutes a full part of the technical requirements.

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

2 Purpose

The ITER Organization has established an Integrated Modelling Programme to meet its scientific modelling needs that is built upon expertise from across all the ITER Members. The underlying infrastructure needs to be flexible and robust, and to follow an agile development approach to best meet the needs of the ITER Organisation during the development and implementation of the many physics workflows that are needed.

This document describes the technical needs of the ITER Science Division for Software Engineering services to refine and further develop the Integrated Modelling & Analysis Suite (IMAS) to meet the needs of the ITER Integrated Modelling Programme and address development requests from other ITER Divisions who wish to use IMAS to support their activities.

The purpose of this contract is to support improvements in the quality of ITER's scientific software through refactoring to adopt modern best-practices, to improve builds and package the software to facilitate distribution and installation, and to implement Continuous Integration (CI) / Continuous Delivery / Continuous Deployment (CD) pipelines to prevent regressions, track performance evolution, support portability and facilitate deployment by users at other sites and using other systems.

3 Acronyms & Definitions

3.1 Acronyms

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

Abbreviation	Description
CI	Continuous Integration
CD	Continuous Deployment
CRO	Contract Responsible Officer
GM3S	General Management Specification for Service and Supply
IO	ITER Organization
IMAS	Integrated Modelling & Analysis Suite
PRO	Procurement Responsible Officer
SDCC	Scientific Data & Computing Centre

3.2 Definitions

Contractor: shall mean an economic operator who have signed the Contract in which this document is referenced.

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Integrated Modelling: A component-based approach to modelling in which separate codes are combined to produce a more holistic description of a system.

Integrated Modelling & Analysis Suite: Infrastructure and suite of codes used for Integrated Modelling at ITER.

Scientific Data & Computing Centre: Cluster infrastructure used to host data and run modelling and analysis workflows.

4 Applicable Documents & Codes and Standards

4.1 Applicable Documents

This 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, this 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	0.0
2	The ITER Integrated Modelling Programme	2EFR4K	3.2

4.2 Applicable Codes and Standards

No Codes and Standards are applicable to this scope of work.

5 Scope of Work

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

This contract concerns the development and further refinement of the ITER Integrated Modelling & Analysis Suite. It adds to and extends the functionality of the existing IMAS implementation to deliver a framework that meets the needs of the ITER Integrated Modelling Programme.

Specifically, this contract will refine and develop the IMAS infrastructure to: facilitate its easy installation and deployment; ensure it can robustly function as the means for finding and retrieving ITER data; support the execution of physics workflows required to support the IRP through the timely release of new software components; facilitate the maintenance (including at other remote sites) through the extension, simplification and re-factoring of the existing code base.

5.1.1 Description

The work consists of developing and refining the software tools to manage the installation and use of IMAS on the ITER SDCC cluster and the computing resources of collaborators within the ITER Members, their Domestic Agencies and their research institutes.

The performance and implementation of the installation of IMAS and the Integrated Modelling infrastructure as a whole shall be continuously reviewed and opportunities to implement

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alternative approaches (using best programming practices) exploited to deliver an enhanced experience for IMAS users.

IMAS functionality and best practices will be continually reviewed and updated as part of an agile continuous development and release cycle, working closely with other on-site colleagues.

The work shall include the following specific activities:

- Analysis of scientific software and creation of suggestions for improvements for quality, maintainability, and/or performance;
- Implementation of standard installation mechanisms to facilitate the widest possible installation and use of IMAS software;
- Preparing and installing scientific software packages on SDCC via EasyBuild package management system;
- Implementation of CI pipelines to maintain and/or improve code quality and prevent regressions;
- Implementation of CD pipelines to support software access and usage;
- Production of documentation and guidelines for software development and deployment;
- Setting up of continuous monitoring of functionalities and performance for the most critical scientific software/services.

To deliver the above services, it is expected that the Contractor will meet the following requirements:

- Extensive experience with software development in a Linux operating system, with familiarity with Windows and Mac OS an advantage;
- Extensive experience with revision controlled collaborative software development using Git;
- Familiarity with build and package management tools including PyPI and EasyBuild;
- Proficiency with Python and/or other relevant scripting languages;
- Familiarity with other programming languages such as C/C++, Fortran and Java an advantage;
- Demonstrable experience with CI/CD automation pipelines;
- A scientific background or experience is considered an advantage;
- Ability to work independently and propose new ideas within a multi-disciplinary international research team;
- Fluent in written and spoken English.

5.1.2 Service Duration

The maximum expected duration for this activity is 12 months.

6 Location for Scope of Work Execution

The contractor shall perform the work in the ITER Headquarters building at the ITER site.

7 IO Documents

No input documents expected from IO.

8 List of deliverables and due dates

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

The following minimum list of documents will be delivered with the associated due dates:

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Technical Design Family (TDF)	Generic Document Title (GTD)	Further Description	Expected date (T0+x) *
Review or Decision or Recommendations Report	Progress Report	Quarterly written report documenting activities carried out in the areas enumerated below	T0 + 3 months
			T0 + 6 months
			T0 + 9 months
			T0 + 12 months

(*) T0 = Date of the Kick-Off Meeting; X in months.

Activities to be described in quarterly reports:

1. Improvements to IMAS installation and testing;
2. Extensions of IMAS functionality as required to address foreseen Use Cases [1];
3. Refactoring of IMAS software to improve performance and facilitate maintenance;
4. Reproduction and solution of reported software errors;
5. Creation of documentation to facilitate use of IMAS by beginners and experts;

A revision-controlled copy of all software delivered shall reside in the ITER source code repositories (Stash / GitHub) together with a full record of all work undertaken in the appropriate issue management system (JIRA / GitHub). All software shall be delivered with an open-source licence that allows open access by third parties within the ITER Members' territories.

The supplier is requested to prepare their document schedule based on the above and using the template available in the GM3S Ref [1] appendix II (click here to download).

9 Quality Assurance requirements

The Quality class under this contract is Quality Class 4, [Ref 1] GM3S section 8 applies in line with the defined Quality Class.

10 Safety requirements

No specific safety requirement related to PIC and/or PIA and/or PE/NPE components apply.

11 Special Management requirements

Requirement for [Ref 1] GM3S section 6 applies as amended with the specific requirements below.

11.1 Contract Gates

There are no contract gates for this work.

11.2 Work Monitoring

The detailed work programme shall be assigned and monitored using the IO's issue management systems (JIRA / GitHub) and shall be continuously prioritized by the CRO in consultation with the Contractor.

11.3 Meeting Schedule

Weekly reporting at IMAS technical development meetings to facilitate prioritization by CRO.

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11.4 CAD design requirements

This contract does not imply CAD activities.

Expression of Interest

To be returned by e-mail to cecile.mendoza@iter.org (copy jongeun.lee@iter.org)
before 30 July 2025, 17.00 CET

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

TENDER No. **IO/25/CFE/10032397/cma**

TENDER Title: **IMAS DevOps Support**

Officer in charge: **Cécile Mendoza – EXT - Procurement Division, ITER Organization**

☐ 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: .....