



PRIOR INFORMATION NOTICE (PIN)

TENDER SUMMARY

IO/20/OT/70000648/JLE

for

ITER Plasma Control System for PFPO-1 Design

Abstract.

The purpose of this summary is to provide prior notification of the IOs 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 for the provision of service for ITER Plasma Control System for PFPO-1 Design.

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.

The Domestic Agencies are invited to publish this information in advance of the forth coming tender giving companies, institutions or other entities that are capable of providing these services prior notice of the tender details.

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 ITER Research Plan describes the evolution of ITER operation and the research programme through these stages. At each stage, new operation scenarios, new or upgraded actuators and diagnostics, will require control functions to be upgraded or entirely new control functions to be designed. Hence, the PCS will have to be developed following the ITER staged approach as well. Following the Final Design of PCS for First Plasma (FP) operation in 2020, the Final Design of PCS for PFPO-1 will be developed, which is the subject of this contract.

The technical specification, provide a detailed breakdown of the required functionality that need to be designed. These can, at the highest level be broken down, into functions: related to: 1) magnetic control, 2) fuelling control, 3) error field control, 4) Electron Cyclotron (EC) heating and Neo-classical tearing mode control, 5) first wall heat load control, 6) functions needed for EC wall conditioning (ECWC), 7) disruption and runaway control, 8) control functions related to H-mode operation and ELM control. Of these, the work on ECWC will not be included in this contract.

The design is to be carried out in a systematic and integrated way, ensuring that the overall design is complete, properly assessed and documented. That means that beside the tasks to design the functions, there are a number of other general design tasks, such as 1) to provide the PCS design description in the PCS system engineering DataBase (PCSDB), 2) to provide the controllers in

the PCS Simulation Platform (PCSSP) and carry out the assessment if they function conform their requirements, 3) to manage, document and assess the Exception Handling (EH), 4) to manage and document the commissioning required to deploy the new PCS functions, done in collaboration with the ITER Operation Division (OPD), 5) to ensure that functions related to the PCS first line-of-defence on investment protection can also be implemented by the Advanced Protection System (APS), done in close collaboration with the Central Interlock System (CIS) team, 6) Present the design at the Final Design Review. These integrated design tasks are the same as those carried out for the Final Design for FP, but more extensive due to the larger functional scope of the PCS for PFPO-1. Because the tasks require a very close collaboration with other IO teams, tasks 4) (commissioning) and 5) (APS) will not be part of this contract by done by the IO team itself. The control assessment (task 2) is done as part of the design of the main functions itself, thus part of the contract, while the integrated assessment, is carried out by the IO itself. The PCS for PFPO-1 design should be provided on time for the Final Design Review, scheduled for the end of 2024, also to allow ample time for implementation and system commissioning prior to the start of PFPO-1 operation. It is expected that the design is presented at the FDR by the IO PCS team and experts from the contractor team.

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 the Domestic Agencies to publish information about the forth coming tender in order to alert companies, institutions or other entities about the tender opportunity in advance. A Prior Information Notice is published on the IO web site.

Interested tenderers are kindly requested to return the expression of interest form (Annex I) by e-mail by the date indicated in the procurement time table below.

➤ Step 2 - Invitation to Tender (ITT) :

With 10 working days (excludes the IO close-out period from 21 Dec 2020 to 1 Jan 2021) of the publication of the Prior Information Notice (PIN), the Invitation to Tender (ITT) will be advertised. This stage is allow interested bidders who have seen the PIN to obtain the tender documents and to prepare and submit their proposals in accordance with the tender instructions.

➤ Step 3 – Tender Evaluation Process :

Tenderers proposals will be evaluated by an impartial, professionally competent technical evaluation committee of the IO.

➤ Step 4 – Contract award.

A service contract will be awarded on the basis of best value for money according to the evaluation criteria and methodology described in the Invitation to tender (ITT).

5 Procurement Timetable

The tentative timetable is as follows:

Milestone	Date
Publication of the Prior Information Notice (PIN)	15 December 2020
Submission of expression of interest form	11 January 2021
Invitation to Tender (ITT) advertisement	13 January 2021
Clarification Questions (if any) and Answers deadline	17 March 2021
Tender Submission	31 March 2021
Tender Evaluation & Contract Award	April and May 2021
Contract Signature	June 2021
Contract Commencement	July 2021

6 Contract Duration and Execution

The ITER Organization shall award Service Contract in the second quarter of 2020. The estimated contract duration is 3.5 years.

ITER may require the contractor to perform the work either at remote locations such as the contractor's usual place of business, or at the ITER site, or at a location to be established and maintained by the contractor within easy reach of the ITER site.

7 Experience

The tenderer shall demonstrate their knowledge, experience and capabilities in the implementation of providing the service for "ITER Plasma Control System for PFPO-1 Design" 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 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 lead will explain the composition of the consortium members in a covering letter at the tendering stage (the Invitation to Tender). 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.

BREXIT CLAUSE

On 31 January 2020, the UK left the EU and Euratom with a transition period from 1st February to 31 December 2020 to be used to determine the conditions of their future relationship. Euratom is the ITER Member and the withdrawal of the UK from Euratom leads to the fact that UK is not anymore party to the ITER project.

Until the 31 December 2020, current end date of the transition period, UK entities retain the right to participate in IO procurement procedures.

9 Sub-contracting Rules

All sub-contractors who will be taken on by the Contractor shall be declared with the tender submission. 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 any sub-contractor which was not notified in the tender and request a copy of the sub-contracting agreement between the tenderer and its sub-contractor(s). For each Contract, sub-contracting is allowed but it is limited to one level, and its cumulated volume is limited to 30% of the total Contract value. Two levels of sub-contracting may be considered for very specific activities which will be mentioned by the IO in the Tender documentation.

At the tender stage, the capacity of sub-contractors may be considered for special cases duly mentioned in the tenderers proposal. In such cases, a letter of intention will be required for the sub-contractors.