

References: IO/13/8926/CFE

## Engineering support for the Neutral Beam PMS & ACCC design

(中性粒子ビーム PMS (受動的磁気シールド) & ACCC (能動的補正補償コイル) の設計に関する専門家の技術支援)

締切り 2013 年 4 月 11 日 (木) 18.30 時現地時間、2013 年 4 月 12 日 (金) 01.30 時日本時間

(応募書類は ITER 機構へ直接提出)

### 概要:

イーター機構では、中性粒子ビーム入射装置用 PMS & ACCC の設計に関する技術支援を頂ける専門家 (機械技術者) を ITER 参加極の企業・機関等から募集しています。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。

### ○趣旨

本契約の目的は NB H&CD (中性粒子加熱電流駆動) チームが推進する以下の業務を支援頂くことにあります。

- ・ EU-DA が調達する中性粒子ビーム入射加熱装置用の PMS (受動的磁気シールド) と ACCC (能動的補正補償コイル) のフォローアップの支援。
- ・ 予備設計レビューから最終設計レビューに移行するために必要となる負荷仕様書、開発要求文書の更新。
- ・ インターフェース (取合い) に係るチームや供給者との折衝。
- ・ PMS、ACCC が正確に設置され、組込まれることの確認。
- ・ 最終設計レビューまでのフォローアップ及び PMS 後方の開閉機構や ACCC の支持構造と取出し機構の機械解析。

(※詳しくは添付の英語版技術仕様書「Engineering support for Neutral Beam PMS & ACCC design」をご参照ください。)

### ○主な要件・条件

少なくとも機械設計における実務経験 (5 年以上) を有する機械技術者であり、さらに以下の条件を満たしていることが要求されます。

- ・ 機械設計業務のフォローアップにおいて実務経験を有する。
- ・ 電磁設計機器・磁気パラメータ (電磁場、ヒステリシス、透磁率他) の知識を有する。
- ・ 流体力学解析 (圧力損失の計算、冷却水パラメータの定義) の経験を有する。
- ・ 国際規格やフランス規格及び RCC-MR, ASME E 8 他基準に精通している。
- ・ 技術仕様書・マニュアルを作成した経験を有する。
- ・ 製造工程 (溶接、機械加工、鍛造、他) の経験を有する、他。

(※詳しくは添付の英語版技術仕様書「Engineering support for Neutral Beam PMS & ACCC design」

### ○作業場所

- ・ 100% ITER 機構サイト (仏カダラッシュ)

### ○契約期間

- ・ 契約開始日から 2 年 (220 日実働/年)

### ○その他

・ (※詳しくは添付の英語版技術仕様書「Engineering support for Neutral Beam PMS & ACCC design」をご参照ください。)

### ○提出書類

- ・ 履歴書 (CV)

- ・日当提案書

- ・誓約書

○応募書類提出先

- ・ITER 機構の下記担当者宛に電子メールにて送付

[Tullio.mele@iter.org](mailto:Tullio.mele@iter.org)

○応募書類提出期限

- ・締切り 2013 年 4 月 11 日 (木) 18.30 時現地時間、2013 年 4 月 12 日 (金) 01.30 時日本時間



Date: 12<sup>th</sup> March 2013

**Ref: Call for Expertise No IO/13/8926/CFE  
Engineering support for the Neutral Beam PMS & ACCC design**

The ITER Organization intends to identify experts for the above task. The following documents are attached to allow experts (individuals or companies) to propose their candidacy:

- Technical Specification
- Curriculum Vitae (template)
- Financial Proposal (template)
- Statement of exclusivity and availability
- Confidentiality commitment (to be signed upon contract award)

**Contents of the expected proposal:**

- Curriculum Vitae
- Financial proposal
- Statement of exclusivity and availability

**Deadline for submission of proposals:**

Thursday 11<sup>th</sup> of April 2013 at 18.30 h GMT+1

**Address for submission of proposals** (as one single pdf file):

[tullio.mele@iter.org](mailto:tullio.mele@iter.org)

email containing the proposal must clearly identify in their title: "Call for Expertise No IO/13/8926/CFE"

**Procurement Procedure:**

Call for Expertise

**Evaluation :**

Proposals will be evaluated on the basis of best value for money (60% quality – 40% price)



**Expected start date:**

1<sup>st</sup> May 2013

**Interviews :**

The ITER Organization may arrange for interviews (telephone, video-conference, etc.)

**Price policy:**

There is an upper limit within the ITER Organization of 500€ per day including per diem expenses.

Thanks in advance for your co-operation.

Sincerely,

A handwritten signature in dark ink, appearing to be "FF", is written over a horizontal line. The signature is stylized and cursive.

Françoise FLAMENT  
Head of Procurement & Contracts Division

IDM UID <b>DXHQHH</b>
VERSION CREATED ON / VERSION / STATUS <b>26 Feb 2013 / 1.0/ Approved</b>
EXTERNAL REFERENCE

### Technical Specifications (In-Cash Procurement)

## Engineering support for Neutral Beam PMS & ACCC design

The beam-line components, vessels passive magnetic shield and coils of the ITER heating neutral beam injectors (HNB) are to be supplied by the EU Domestic Agency (EU-DA) as well as the drawings. See Figure 1. The objective of this engineering contract is to support the NB H&CD team in: Following-up of design activities related to the following HNB components: Passive Magnetic Shield and the Active Correction Compensation Coils. (On-going under ITAC53TD55FE\_NBI), to be supplied by the EU- ...

<i>Approval Process</i>			
	<i>Name</i>	<i>Action</i>	<i>Affiliation</i>
<i>Author</i>	<b>Etienne F.- X.</b>	<b>26-Feb-2013:signed</b>	<b>IO/DG/DIP/CHD</b>
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<i>Reviewers</i>	<b>Graceffa J.</b>	<b>06-Mar-2013:recommended</b>	<b>IO/DG/DIP/CHD/HCD/NB</b>
<i>Approver</i>	<b>Boilson D.</b>	<b>06-Mar-2013:approved</b>	<b>IO/DG/DIP/CHD/HCD/NB</b>
<i>Document Security: level 1 (IO unclassified)</i>			
<i>RO: Etienne Francois-Xavier</i>			
<i>Read Access</i>	<b>LG: Procurement &amp; Contracts Division, Ext CHD, LG: PCM, AD: Directorate - CODAC - Heating - Diagnostics, project administrator, RO</b>		



# Engineering support for Neutral Beam

## PMS & ACCC design

### Technical Specifications

	<i>Version 1.0</i>	<i>Date: 22/02/2013</i>
	<i>Name</i>	<i>Affiliation</i>
<i>Author</i>	<b>J Graceffa</b>	<b>CHD/HCD/NB</b>
<i>Reviewers</i>	<b>D Boilson</b>	<b>CHD/HCD/NB</b>
<i>Approver</i>	<b>P Thomas</b>	<b>CHD/HCD</b>

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## 1. Abstract

This document describes technical needs of Neutral Beam Heating and Current Drive (NB H&CD) section in engineering support to design the Neutral Beam Injectors (NBI) including design activities and follow-up of activities.

## 2. Background and Objectives

The Neutral Beam (NB) Heating & Current Drive (H&CD) system is designed to:

- Help in accessing the H-mode and heating the ITER plasma at  $Q > 10$ ,
- Provide steady state current drive capability (on-axis, off-axis) for DT, D, H and He plasmas,
- Modify current density and q profile,
- Provide plasma rotation,
- Provide power to sustain the density during shutdown and allow for controlled transition from H to L-mode at the end of burn.

The H&CD NB system consists of two injectors (see below a view of one injector). Space is available in the building and on the tokamak for a third system. Each H&CD injector will deliver an atomic deuterium beam of 16.5 MW, with an energy of 1 MeV, and will be able to operate for long pulses (up to 3,600 s for “steady state” operation). A system based on negative ( $D^-$ ) ions is used.

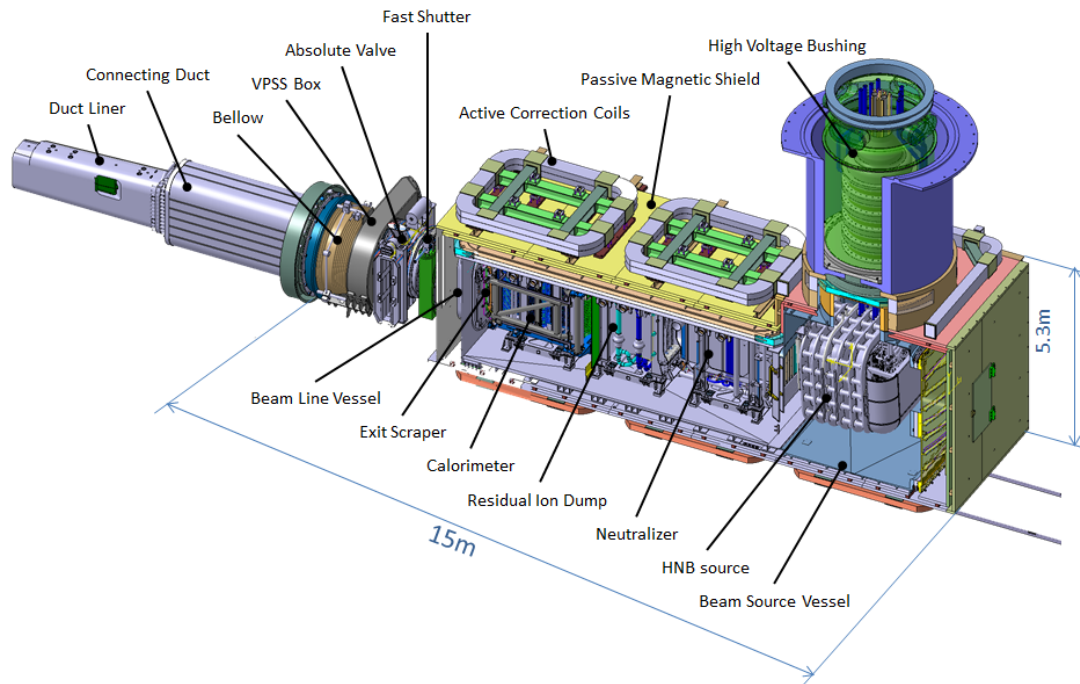
In addition to H&CD, plasma rotation is also provided by the NB H&CD injectors. For the H - He operation phase of ITER, the H&CD injectors can be operated in hydrogen, with beam energy  $\leq 0.87$  MeV and neutral beam power  $\leq 16.5$  MW per injector to the ITER plasma.

**Table NB Heating and Current Drive Parameters**

		H - He	D & DT	Upgrade <sup>(1)</sup>
NB H&CD injection power	MW	$\leq 33$	$\leq 33$	$\leq 50$
Number of heating neutral beam injectors		2	2	3
Injected species		H <sup>0</sup>	H <sup>0</sup> or D <sup>0</sup>	H <sup>0</sup> or D <sup>0</sup>
NBCD beam energy	MeV	0.87	0.87 or 1.0	0.87 or 1.0
NB H&CD - number of allocated equatorial ports		2	2	3
NB tangency radius <sup>(1)</sup>	m	5.31	5.31	5.31
NB lowest beam axis level at the tangency point	mm	417	417	417
NB highest beam axis level at the tangency point <sup>(1)</sup>	mm	+156	+156	+156
Approximate NB e-folding length of beam profile at the tangency point in vertical direction, B <sup>(2)</sup>	m	$\approx 0.32$	$\approx 0.32$	$\approx 0.32$
Approximate NB e-folding length of beam profile at the tangency point in horizontal direction, A <sup>(2)</sup>	m	$\approx 0.22$	$\approx 0.22$	$\approx 0.22$

<sup>(1)</sup>Upgrading the H&CD system to 3 injectors is one of 4 upgrade scenarios proposed for the heating systems.

<sup>(2)</sup>Beam profile at tangency point described approximately as  $\mathbf{P(x,y)} = \mathbf{C}e^{-\left[\left(\frac{x}{A}\right)^2 + \left(\frac{y}{B}\right)^2\right]}$



*Figure 1 3D view of Heating Neutral Beam injector*

### 3. Scope of Work

The beam-line components, vessels passive magnetic shield and coils of the ITER heating neutral beam injectors (HNB) are to be supplied by the EU Domestic Agency (EU-DA) as well as the drawings. See Figure 1.

The objective of this engineering contract is to support the NB H&CD team in:

- Following-up of design activities related to the following HNB components: Passive Magnetic Shield and the Active Correction Compensation Coils. (On-going under ITAC53TD55FE\_NBI), to be supplied by the EU-DA.
- Updating the required documentation (Load Specification and the Development Requirements Document) to bring the maturity of the design from preliminary design review up to final design review.
- Communicating solutions and issues with interfacing teams/suppliers.
- Ensuring correct integration of these components in the NB-cell and the HV-deck room.
- Taking in charge the design, up to final design review, and the mechanical analysis of :
  - The rear PMS opening mechanism.
  - The bottoms ACCC support structure and its extraction system.

### 4. Estimated Duration

The duration shall be up to 2 years (440 working days) from the starting date of the contract. Up to 4 trips within the Europe area are foreseen. The work will be fully based at the ITER Organization Worksite.

### 5. Work Description

#### 4.1 Subtask 1: Following-up of design activities related to ACCC and PMS:

The primary function of the ACCC and the PMS is to limit the magnetic field inside the BLV and BSV to acceptable levels by producing magnetic fields which counter the ITER stray fields.

The ACCC are made of copper and a thin layer made of epoxy is implemented between the pancake and the turns to guaranty an electrical insulation. The ACCCs component are cooled by water and supplied by 800A of current. See Figure 2.

The ACCC has the following functions:

- To shield the injector from external magnetic field (especially where the beam is not neutralized, ACCC shall work in combination with the PMS)
- To compensate the deformation of the tokamak magnetic field (due to the important mass of steel of the PMS)

The PMS for the HNB is an outer 2 layers of ferromagnetic steel 2x75mm thick, enclosing the HNB NB injector, including the HV bushing, the elbow of the transmission line and the HNB high voltage deck. See Figure 3.

The PMS has the following two main functions:

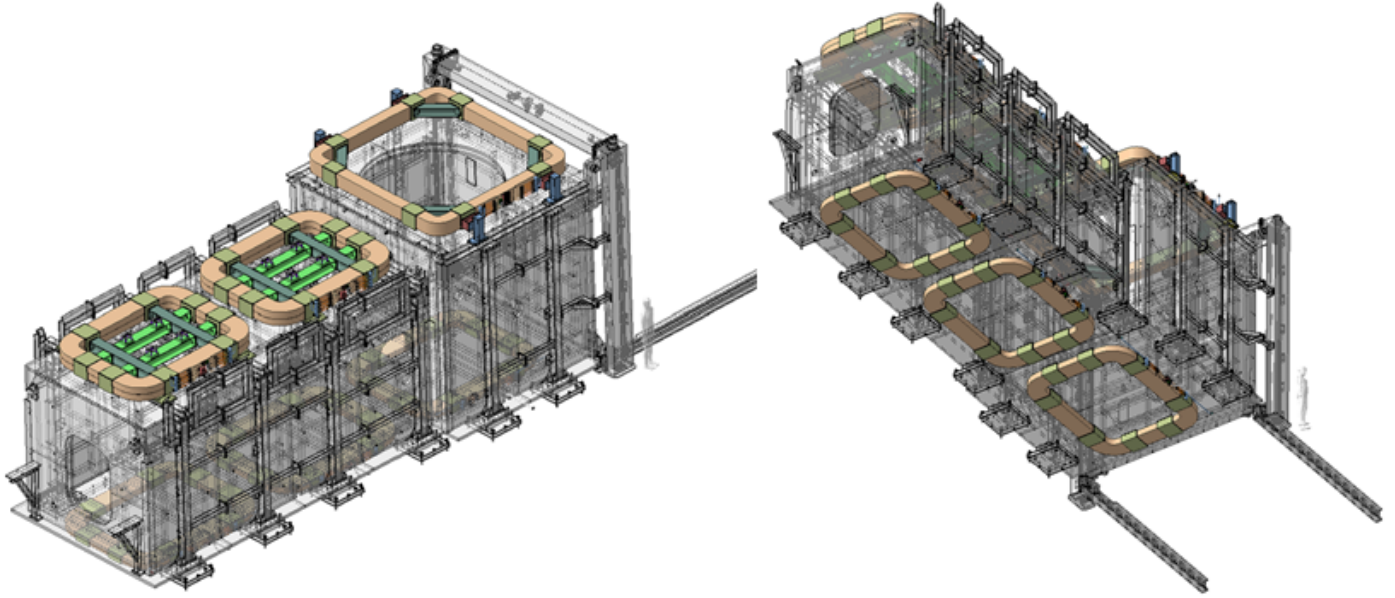
- To form, together with the active correction compensation coils the magnetic field reduction system that shields the injector volume from the tokamak magnetic field; to provide part of the radiation shield of the NB H&CD system.
- To provide part of the radiation shield of the NB H&CD system.

A mechanical engineer is needed

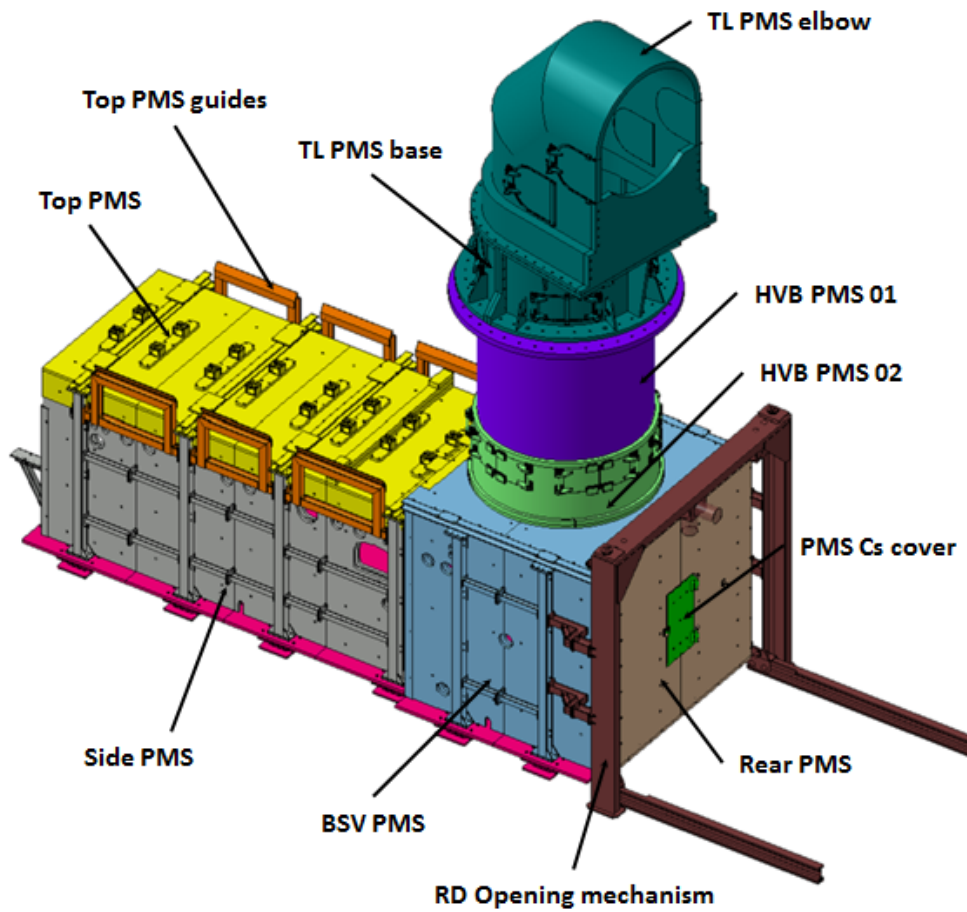
- to oversee the design of the components and the production of the drawings;
- to cross check all design details;
- to ensure correct integration and interfaces inside the NB cell and the HV deck room with all other systems (building, cooling water, power supply and remote handling);
- to review all deliverables produced within ITA ITAC53TD55FE
- to oversee the integration into Enovia;
- to propose mechanical concept for the component, the assembly and/or remote handling tools.

The engineer will have :

- to liaise with the different partners;
- to coordinate all the design exchanges and evolutions and write and/or review all the related technical documentation;
- to update the single loads and the load combinations of the load specifications;
- to update the development requirements documents.



*Figure 2: Active Correction Compensation Coils*



*Figure 3: Passive Magnetic Shield*

#### 4.2 Subtask 2: Taking in charge the design of the rear PMS opening mechanism and the bottoms ACCC structure

The rear PMS door allows the opening of the vessel rear lid to access to the beam source by deploying the BSRHE. The weight of the door is 55 tons.

The bottom coils (1,2,3) consist of a single standard coil. All the support structures will be the same for each of them. The support structure has to guaranty the function of the coil and their stability. The bottom coils are remote handling class 3.Scenario and tools of the 1<sup>st</sup> assembly and maintenance need to be foreseen, hands-on operation are allowed during the maintenance.

A mechanical engineering is needed to develop the mechanical design and to do all the analysis required.

- Follow up designer for the CAD model, 2D drawings
- Write LS/DRD
- Write ICD/IS
- Review PDF/TDF
- Write technical specification and specification for manufacturing
- Mechanical analysis
- Analysis reports
- Prepare SIR
- Prepare design review documentation

#### 4.3 Other objectives

**Other objectives which are common to all tasks described here above must be ensured. They are:**

- **Check of deliverables (technical specifications, drawings, analysis report, and documentation) and ensure traceability of modifications,**
- **Ensuring tasks schedule compliance with NBIs design main milestones,**
- **Organize necessary meeting/discussion between IO and other involved parties when necessary and ensure traceability of the discussions/choices made (Writing of minutes, memo and storage in IDM of all relevant documents),**
- **Organize design review meeting and ensure traceability of the discussions/choices made (Writing of minutes, memo and storage in IDM of all relevant documents),**
- **Ensure compliance with ITER needs, requirements and constraints (design choices done at ITER, codes and standards, maintenance scheme foreseen),**
- **Ensure quality of deliverables as defined by ITER and maintain it all along the progress of the task,**
- **Report activities progress to section leader and interact with NB team.**

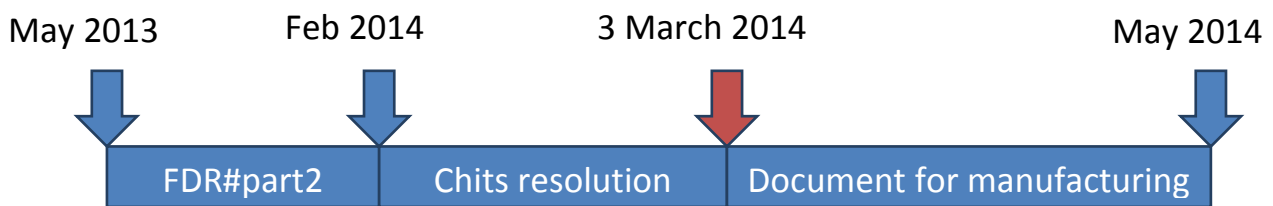
#### 6. Responsibilities

**The engineer will work under IO neutral beam section member responsibility.**

#### 7. List of deliverables and due dates

Subtask	Deliverables	Dates
Overall	Report of on-going activities during each NB section's progress meeting.	Each two weeks

Overall	Report listing all documents/study performed within the contract.	End of the contract
Overall	Any presentations / documents requested by IO to support NB section	When needed by IO
1	Documents of ACCC and the PMS	At each delivery steps of on-going ITAs
2	Presentations and reports of the rear PMS mechanism and the ACCC structure including the extraction system	At the date fixed by IO



## 8. Acceptance Criteria

The selection will be done taking into account the following criteria:

- |              |     |
|--------------|-----|
| 1) Expert CV | 70% |
| 2) Price     | 30% |

## 9. Specific requirements and conditions

The required resource is a mechanical engineer at least 5 years of working experience in mechanical design.

The engineer shall have:

- Experience on mechanical design activities follow up
- Knowledge of electromagnetic design components and magnetic parameters (field, hysteresis, permeability, ect..)
- Experience on hydraulic analysis (calculation of the pressure drop, definition of the cooling water parameters)
- Experience on international and French codes and standards (RCC-MR, ASME 8, ect..)
- Experience on written technical specification and documentation
- Experience in manufacturing processes (welding, machining, forging, ect..)
- Experience on Catia V5 (mechanical design software used in ITER)
- Experience on Enovia V5 (PLM software used in ITER)
- Experience on finite element mechanical and seismic analysis using Ansys-14 (knowledge of the modules: static analysis, modals analysis, transient analysis, response spectrum,)
- English fluent (written and spoken)
- Knowledge of Neutral Beam system is an advantage

## 10. Work Monitoring / Meeting Schedule

Final Reports should be self-contained, and relevant documentation, such as drawings, should be supplied together with it in electronic form. Deviations from the Task Order Specifications, approved by the ITER Organization, shall be recorded in a specific chapter of the relevant final report.

### **Meetings and progress reports**

The work will be managed by means of Progress Meetings and/or formal exchange of documents transmitted by emails which provide detailed progress. Progress Meetings will be called by the ITER Organization, to review the progress of the work, the technical problems, the interfaces and the planning.

A progress meeting is organized by H&CD NB section each week. The engineer will have to report every two weeks in the progress meeting dedicated to mechanical activities.

The main purpose of the Progress Meetings is to allow the ITER Organization/H&CD NB section and the Contractor Technical Responsible Officers to:

- a) Allow early detection and correction of issues that may cause delays;
- b) Review the completed and planned activities and assess the progress made;
- c) Permit fast and consensual resolution of unexpected problems;
- d) Clarify doubts and prevent misinterpretations of the specifications.

In addition to the Progress Meetings, if necessary, the ITER Organization and/or the Contractor may request additional meetings to address specific issues to be resolved.

For all Progress Meetings, a document describing tasks done, results obtained, blocking points must be written by the engineer. Each report will be stored in the ITER IDM in order to ensure traceability of the work performed.

The quarterly Progress Report shall illustrate the progress against the baseline work plan and indicate variances that should be used for trending. Performance indicators suitable to measure the progress of the work as compared to the approved work plan shall also be reported in the Monthly Progress Report.

Experts from the Domestic Agencies may be invited by ITER Organization to participate in the meetings or other involved parties.

## 11. Payment schedule / Cost and delivery time breakdown

Interim monthly payments.

At the end of each month, the Contractor shall submit an invoice for the services rendered. This invoice will be accompanied with a duly signed time sheet. This time sheet will clearly indicate the contract reference number, the name of the assigned person, the dates and the total of the working days and the number of hours worked per day.

## 12. Quality Assurance (QA) requirement

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 document [ITER Procurement Quality Requirements \(22MFG4\)](#)

Prior to commencement of the task, a Quality Plan [Quality Plan \(22MFMW\)](#) 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.

Prior to commencement of any manufacturing, a Manufacturing & Inspection Plan [Manufacturing and Inspection Plan \(22MDZD\)](#) must be approved by ITER who will mark up any planned interventions.

Deviations and Non-conformities will follow the procedure detailed in IO document [MQP Deviations and Non Conformities \(22F53X\)](#)

Prior to delivery of any manufactured items to the IO Site, a Release Note must be signed [MQP Contractors Release Note \(22F52F\)](#).

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, it should fulfil IO document on Quality Assurance for ITER Safety Codes [Quality Assurance for ITER Safety Codes \(258LKL\)](#).

### 13. References / Terminology and Acronyms

IO:	ITER Organisation
ITA:	ITER Task Agreement
NBI:	Neutral Beam Injector
HNB:	Heating Neutral Beam
ACCC:	Active Correction Compensation Coils
PMS:	Passive Magnetic Field
BSRHE:	Beam Source Remote Handling Equipment
DWO:	Design Work Order
ICD:	Interface Control Document
IS:	Interface Sheet
PDF:	Plant Definition Form
TDF:	Task Definition Form
SIR:	System Integration Review
IDM:	ITER Document management

IDM UID <b>2EQ9JM</b>
VERSION CREATED ON / VERSION / STATUS <b>10 May 2012 / 2.0/ Approved</b>
EXTERNAL REFERENCE

## Report

# Working conditions on the ITER Organization site

This document describes the working conditions on the ITER Organization site.

<i>Approval Process</i>			
	<i>Name</i>	<i>Action</i>	<i>Affiliation</i>
<i>Author</i>	<b>Grammatico L.</b>	<b>10-May-2012:signed</b>	<b>IO/DG/ODG/LGA</b>
<i>CoAuthor</i>			
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<i>Approver</i>	<b>Motojima O.</b>	<b>13-Jun-2012:approved</b>	<b>IO/DG</b>
<i>Document Security: level 1 (IO unclassified)</i> <i>RO: Cazenave-Pendaries Francoise</i>			
<i>Read Access</i>	<b>LG: Admin DG, LG: [CCS] Veolia, LG: [CCS] CCS-All for Ext AM, LG: [CCS] CCS-Section Leaders, LG: [CCS] CCS-Doc Control, LG: [CCS] F4E, AD: ITER, AD: External Collaborators, AD: Division - Internal Audit Service, project administrator, RO, LG: DA HR Contacts, GG: DAs Configuration Managers, GG: DA Heads, Co-ordinators and Management, AD: Only-staff, AD: Division - Human Resources - EXT, AD: Division - Human Resources</b>		

<i>Change Log</i>				
<b><i>Title (Uid)</i></b>	<b><i>Version</i></b>	<b><i>Latest Status</i></b>	<b><i>Issue Date</i></b>	<b><i>Description of Change</i></b>
Working conditions on the ITER Organization site (2EQ9JM_v2_0)	v2.0	Approved	10 May 2012	New version to be uploaded in agreement between HR and legal office. Please contact either Laetitia Grammatico or Françoise Cazenave-Pendaries for any further information.
Working conditions on the ITER Organization site (2EQ9JM_v1_1)	v1.1	Approved	06 Mar 2009	
Working conditions on the ITER Organization site (2EQ9JM_v1_0)	v1.0	Signed	14 Jan 2009	

# Working conditions on the ITER Organization site

Document to be provided to all undertaking work at the ITER Organization site<sup>1</sup>

## 1. General

These conditions (hereinafter « Conditions »), and those specified by the ITER Organization Internal Regulations (hereinafter « Internal Regulations »), apply to all contracts or other arrangements for works on the ITER Organization site (hereinafter « Contracts ») excluding those directly executed by IO staff.

## 2. Confidentiality

The entity (hereinafter: "Contractor") shall ensure that the personnel used for the execution of the work shows discretion with respect to any information obtained in connection with the execution of the work and shall treat them as confidential.

## 3. Registration

The Contractor shall ensure that the personnel is registered with Safety and Security Department of the ITER Organization and that all other administrative procedures and formalities to allow them to enter and move across the ITER Organization site have been complied with before they start work at the ITER Organization site. The Contractor shall ensure that access cards and any other items provided by the ITER Organization in connection with the registration shall be returned to the ITER Organization Safety and Security Department of the ITER Organization on the last day of the holder's working at the ITER Organization's site with respect to the ITER Organisation departure procedure for external staff.

## 4. Provision and use of ITER Organization tools, vehicles and other equipment

The Contractor shall use his own tools, vehicles and other equipment required for the execution of the work. If the nature of the work so requires, the Contractor shall provide his personnel with working clothes, clearly bearing the Contractor's name.

Any use of the ITER Organization tools, vehicles and other equipment shall be subject to prior written authorization by the person designated in the contract or arrangement as being in charge for technical matters (hereinafter : IO Responsible Officer) and may be subject to payment.

Items supplied by the ITER Organization shall be returned in good condition, normal wear and tear excepted.

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<sup>1</sup> The ITER site excludes the worksite in this document.

Should the contractor not comply with this obligation; an amount corresponding to the items unreturned would be deducted from the next payment or requested to compensate the same amount separately to the ITER Organization.

## **5. ITER site opening hours**

As provided for in the ITER Organization Internal Regulations, access to the ITER Organization's site shall be open from 7.30 am to 7.30 pm.

For safety reasons, the Contractor shall ensure that whenever work is to be performed between 7:30 pm and 7:30 am and/or on a weekend and/or during any of the ITER Organization site closure days referred to in Article 6 below, the ITER Organization form "Notice of work outside regular ITER Organization working days/hours" shall be filled out and countersigned by the Security Section leader.

## **6. ITER site Closure days**

The ITER site shall be closed during the ITER Organization public holidays as yearly decided by the Director-General.

The Contractor shall not perform work at ITER site during the above-mentioned ITER Organization site closure days, except in case otherwise mutually agreed, and with prior written authorization by the Director General.

## **7. Activities on the ITER Organization site**

The Contractor shall not be allowed to establish offices or other premises on the ITER Organization's site save as otherwise agreed with the ITER Organization.

## **8. Use of the ITER Organization's name and logo**

Any reference to or use of the ITER Organization's name or logo is prohibited, except otherwise agreed by the ITER Organization and subject to prior written authorization by the IO Director-General or his/her representative.

## **9. Laws and regulations**

The Contractor cannot avail himself of the privileges and immunities which have been accorded to the ITER Organization and its staff, by virtue of its status as an International Organization, as laid by the Agreement on Privileges and Immunities of the ITER Organization and the Host State France.

The Contractor shall ensure that general principles of international labour law transposed in the European Community laws and their implementation concerning transnational workers are respected such as in particular:

- maximum work periods and minimum rest periods;
- minimum paid annual holidays;
- minimum rates of pay, including overtimes rates;
- the conditions of hiring-out of workers, in particular the supply of workers by temporary employment undertakings;

- health, safety and hygiene at work;
- protective measures with regard to the terms and conditions of employment of pregnant women or women who have recently given birth, of children and of young people;
- equality of treatment between men and women and other provisions on non-discrimination

The Contractor shall ensure that for the execution of the work, the necessary administrative requirements resulting from the Host State regulations such as visa and working permit procedures shall be respected (Guidelines for foreign companies seconding their employees to the ITER project in France).

**ITER Organization Call for Expertise No: IO/13/8855/CFE/JBN**

**CURRICULUM VITAE**

(max 5 pages)

**Family name:**

**First names:**

**Date of birth:**

**Nationality:**

**Civil status:**

**Education:**

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:

**Language skills:** Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing

**Membership of professional bodies:**

**Other skills:** (e.g. Computer literacy, etc.)

**Present position:**

**Years within the firm:**

**Key qualifications:** (Relevant to the project)

**Specific international experience:**

Country	Date from - Date to

Quality Engineering Coordination  
PR10008855

**Professional experience** (Relevant to the project)

Date from – Date to	Location	Company & reference person	Position	Description

**Other relevant information** (e.g., Publications)

**ITER Organization Call for Expertise No: IO/13/8926/CFE**

**FINANCIAL PROPOSAL**

**Name of Expert:**

	<b>ITER site based year 1</b>	<b>ITER site based year 2</b>
<b>Daily fee rate EUR</b>		
<b>Number of days</b>	220	220
<b>TOTAL PRICE</b>		

- Daily fee rates are calculated on the basis of days actually worked (8 h/day, 5 days/week).
- Travel for mobilisation and remobilisation, missions and other authorised reimbursable expenses will be covered according to IO acceptable standards (cfr. International Civil Service Commission, available at <http://www.theglobalfund.org/documents/perdiem>)

Date

Signature

# STATEMENT OF EXCLUSIVITY AND AVAILABILITY

## Call for Expertise No IO/13/8926/CFE

**Subject: Engineering support for Neutral Beam PMS & ACCC design**

I, the undersigned, hereby declare that I agree to take part in the above-mentioned Call for Expertise.

I further declare that I am able and willing to work:

- for the period(s) foreseen in the Technical Specification attached to the above referenced Call for Expertise for the position for which my CV has been proposed and
- within the execution period of the specific contract

I confirm that I am not engaged in another contract financed by the ITER Organization in a position for which my services are required during the above periods and that I will not charge the same working day under more than one contract.

Furthermore, should this offer be accepted, I am fully aware that if I am not available at the expected start date of my services for reasons other than ill-health or *force majeure*, I may be subject to exclusion from other tender procedures and contracts funded by the ITER Organization and that the notification of award of specific contract may be rendered null and void.

<b>Name</b>	
<b>Signature</b>	
<b>Date</b>	



## **Confidentiality Commitment**

*< contract title and No. >*

I, the undersigned, hereby declare that I agree to undertake the tasks assigned to me under the above mentioned contract.

I undertake to perform my duties honestly and fairly. My contribution to the activities in which I will be involved will be objective and will fully respect the principles of fairness and impartiality.

I undertake to hold in trust and confidence any ITER Project related information or documents. I undertake to use them only for the purposes of executing the tasks assigned to me and not to disclose them to any third party, including my employer.

I will endeavour to avoid any conflict of interest situation, either direct or indirect. Should any such situation arise, I will promptly inform the relevant Responsible Officer. I undertake neither to assist nor be associated with any external entity seeking to obtain contracts under the ITER project.

I understand that I will be held personally responsible for maintaining the confidentiality of any documents or electronic files received and for returning, erasing or destroying all confidential documents or files upon completing the tasks, unless otherwise instructed.

On conclusion of my assignment I will remain obligated to preserve the confidentiality for a period of 5 years.

**Name:**

**Signature:**

**Date:**