ITER Organization

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1. Overview of the IO Procurement System
2. Business Opportunities
3. IO Procurement Processes and Procedures
   Practical Tips for Potential Suppliers
First TF conductor has been manufactured
1. Overview of the IO Procurement System

PF COILS Facility is under Construction

The ITER Project entered into the Construction Phase
1. Overview of the IO Procurement System

**ITER Project Organization**

- **ITER Council**
  - Management Advisory Committee (MAC)
  - Scientific & Technical Advisory Committee (STAC)

- **ITER Organization**
  - In Cash Budget
  - Suppliers

- **Procurement Arrangements**
  - In Kind Contribution

- **Domestic Agencies**
  - In Kind Budget
  - Suppliers

**7 Members:**
- China
- Korea
- Europe
- India
- Japan
- Russian Fed.
- United States

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*Journée ITER/CEA 01/12/2010*
A unique feature of ITER is that almost all of the machine will be constructed through in kind procurement from the Parties.
1. Overview of the IO Procurement System

*ITER Project Procurement Sharing*

**China:** magnet conductor, correction coils, feeders and supports, blankets, remote handling transfer casks, gas injection system, electrical switchgear, some diagnostics.

**India:** vessel ferromagnetic inserts, cryostat, cryolines and cryodistribution, heat rejection system, ion cyclotron and startup electron cyclotron heating power supplies, diagnostic neutral beam, some diagnostics.

**Japan:** half the TF coils, most of the TF coil structure, part of the TF and all the CS conductors, part of the first wall, divertor outer target, blanket remote handling equipment, atmosphere detritiation, equatorial electron cyclotron launchers and power supplies, neutral beam components, some diagnostics.

**Korea:** some conductor strand, part of the vessel and vessel ports, blankets, assembly tooling, thermal shield, tritium storage, part of the power supplies, some diagnostics.
1. Overview of the IO Procurement System

**ITER Project Procurement Sharing**

**Russian Federation:** PF coils 1 and 6 and some PF and TF coil conductor, some vacuum vessel ports, blankets and connectors, divertor dome and testing, electrical switchgear, some klystron tubes, some plasma diagnostics.

**USA:** wind CS coils, some TF conductor, some blankets, port limiters, part of the cooling system, part of the vacuum pumping and fuelling system, tokamak exhaust processing, part of the steady power supplies, RF transmission lines, some plasma diagnostics.

**Europe:** the remainder, including sharing in most of the above procurements, plus the buildings.

**IO-funded items:** magnet feeder sensors, diagnostic first wall, assembly operations and tooling, hot cell maintenance equipment, on-site assembly of the tritium, vacuum, heating, cooling and cryoplant systems, control and data acquisition, some plasma diagnostics.
1. Overview of the IO Procurement System

**Different Steps of Procurement Arrangements (PA)**

- **Step 1**  
  - Concept Design & Engineering studies
  - Concept Control Documents/Specifications
  - Concept Design Review  
  - Signature of PA (Hand Over)

- **Step 2**  
  - Preliminary Design & Engineering studies
  - Preliminary Control Documents/Specifications
  - Preliminary Design Review
  - Final Design & Engineering studies
  - Final Control Documents/Specifications
  - PA Documents (Main, Annex A & Annex B)
  - Final Design Review  
  - Signature of PA (Hand Over)

- **Step 3**  
  - Functional Specifications
  - Detailed Design
  - Build to Print
  - Manufacturing Drawings
  - Manufacturing / Readiness Review
  - PA

Time
1. Overview of the IO Procurement System

**PA Breakdown per DA in kIUAA (ITER Unit of Account) and percentage of signed PAs**

- CN 256: 39% signed
- EU 1139: 68% signed
- US 257: 60% signed
- JA 530: 48% signed
- IN 260: 57% signed
- KO 240: 71% signed
- RF 263: 39% signed

CN
EU
IN
JA
KO
RF
US
1. Overview of the IO Procurement System

**Procurement Arrangement Status**

- The IO and DAs have signed 46 PAs,
  - totaling 1767kIUA,
  - representing approximately 60% of the total procurement value for the construction of ITER
  - and 35% of the total number of PAs;

- PAs are prioritized according to the Integrated Project Schedule (IPS); approximately 20 more PAs are scheduled to be signed by spring 2011;
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2. Business Opportunities

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   Practical Tips for Potential Suppliers
**IO Procurement: Implementation of the Baseline Short and Medium Term Objectives**

- The IO management’s main objective is to keep the schedule and conduct a project-wide campaign on cost containment and cost savings;

- The priority for the IO is to finalize the design to support the “Procurement Arrangements” signed with the Domestic Agencies in order for them to place the contracts for the in Kind contribution → launch contracts in the Members' countries,

- The IO’s DG identified the top priorities for the design:
  → magnet coil feeder; cryostat; vacuum vessel; central solenoid conductor, TF coil and PF coils.
IO Procurement: the Sub-systems under IO’s responsibility

- CODAC: Control and Data Acquisition and Communication,
- Magnets Feeders Sensors,
- Hot cells maintenance Equipment,
- Part of the Cooling Water System: engineering and on-site assembly,
- Part of the Thermal Shield,
- Part of the Vacuum Pumping & Fuelling,
- Part of the Tritium Plant,
- Part of the Cryo Plant,
- Part of the Heating and Current Drive,
- Diagnostics of the First Wall.
- Assembly Operations and Tooling,

About 900M€ Budget
Including the R&D
Ongoing Significant Call for Tenders

- Global Transport for all ITER components (joint tender with all DAs)
  → Contract signature in February 2011
- Engineering Support for Machine Assembly and Installation
  → Contract signature February 2011
- Vacuum Vessel Assembly Welding
  → Tender to be launched in December 2010
- Cable management
  → Tender to be launched in January 2011
- Financial Administrative Support
  → Tender to be launched in January 2011
- Cryogenic Plant (for the liquid Helium plant)
  → Tender to be launched in April 2011
Forthcoming Significant Call for Tenders

- Renewal of the contracts for the Engineering support for the finalization of the design
  → Call for Nomination to be launched in December 2010

- Design and Engineering for the Tritium Plant
  → Call for Nomination to be launched in February 2011

- Engineering support for electrical power distribution and installations
  → Call for nomination to be launched in January 2011

- Facility Management (joint tender with EU-DA)
  → Call for Nomination to be launched in March 2011

- Access Control for the sites
  → Call for nomination to be launched in April 2011,
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Different Types of Solicitation

- Average thresholds for the different types of solicitation:
  - Up to 100k€: Request for Quotation (duration: 3-4 weeks)
  - Above 100k€: Call for tenders (duration: 5-6 months)

- Specific tenders:
  - Competitive Dialogue
  - FIDIC Contracts

- Award Criteria
  - Best value for money (most of the awards).
  - Lowest-priced technically compliant offer,

- IO Evaluation Committee established to assess the offers and recommend the award.
**Steps of IO Call for Tenders (1/5)**

- **First Step: Call for Nomination** (One month)
  - IO formally invites the Domestic Agencies to nominate several potential suppliers.

- **Second Step: Pre-qualification** (One Month)
  - Ensure that offers are sought only from suppliers who have the requested resources and experience to perform the technical requirement and perform the work at the highest satisfactorily.
  - Pre-qualification Questionnaire includes a summary of the technical requirements and the financial statements

**List of Companies Qualified to participate to the tender**
**Steps of IO Call for Tenders (2/5)**

- **Third step:** **Call for Tender** (Duration: 6 weeks to 3 months)
  - IO Instructions to Tenderers (ITTs):
    - Procurement schedule,
    - Submission procedure,
    - Commercial requirements,
    - Price breakdown requirements.
  - Award criteria to be used for assessing the tenders.
  - Technical specifications,
  - Draft contract (Special and General conditions),
Submission and Receipt of Tenders:

- A two-envelope procedure is used where the technical and financial tenders are submitted in separate sealed envelopes,

- The Tenderers are responsible that their tenders arrive at ITER site or other location mentioned in the ITTs on time (local time at ITER site). Late Tenders are not considered,

It is important that the Tenderers strictly follow the provisions given in the Instructions to Tenderers.
Clarifications:

- In principle, tenders have all the information in the tender package and they are evaluated based on the information they submitted.

- However, Tenderers may request from the IO clarifications through written correspondence before the submission of the offers.

The questions/answers are anonymously distributed as a single response to all Tenderers.
Steps of IO Call for Tenders (5/5)

- **Technical evaluation:**
  - Determine whether each tender meets all technical requirements and specifications: based on individual grids signed by each voting member and a strengths and weaknesses table signed by each voting member.
  - The Evaluation Committee may require a presentation from the companies/consortia to clarify the technical aspects of the tender.

- **Financial evaluation**
  - If a minimum threshold for technical compliance is set in the Instructions to Tenderers, only the tenders meeting this requirement can proceed to the financial evaluation,
  - Financial proposals are analysed according to the award criteria given in the Instructions to Tenderers.

Technical and financial scorings are combined in order to select the offer representing the best value for the IO.
Rules for Consortia

- Clarification concerning Consortia:
  - The IO encourages the companies to create consortia,
  - Once the prequalification is completed for a consortium in a whole the composition of the consortium cannot be modified during the tender process.
  - The members of a consortium have a joint liability towards the IO for the tender and the performance of the contract,
  - The Consortium Leader is the signatory Party of the contract and represents the other members.
In 2010 (as of 22 November 2010):

- 93% contracts are signed through a competitive process,
- 2% are placed with the Domestic Agencies (Task Agreements),
- 2% are single source,
- 3% are Agreements (CERN, CEA)

Solicitation Types in Figures

CFT: Call for Tender
RT: Restricted Tender
RFQ: Request for Quotation
SGS: Single Source
TA: Task Agreement
AGT: Agreement
IO Global Marketplace

- In 2010 (as of the end of November):
  - 630 contracts signed with suppliers from all Members’ Countries,
  - 190M€ total contracts value.

- Evolution of the total value of the contracts signed since 2008

![Bar chart showing the evolution of contracts values from 2008 to 2010 (as of 11/2010).]
Practical Tips for Potential Suppliers

- Registration on line on IO web site:
  - Identification of the suppliers per business activities,
  - ~ 400 suppliers registered since September 2009,
  - No prequalification at this stage,
  - [www.iter.org](http://www.iter.org) – Procurement / General information / On-Line Registration
  - Point of contact: iopcd@iter.org

Maintain normal marketing activities and regularly scan procurement information available on the IO and DAs websites.
Thank You