General overview of the ITER Procurement Activities

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Disclaimer: The views and opinions expressed herein do not necessarily reflect those of the ITER Organization
1. IO Procurement Procedures
2. IO Quality Assurance Program
3. IO Business Opportunities
4. Hints for Successful Tendering
5. Conclusion
ITER Organization Procurement principles

- International Public Procurement rules: Fairness, Integrity, Accountability, Transparency, Effective competition, Best value for Money.

- ITER Organization (IO) is a First-of-a-Kind Project, demanding the best from Industry at the International level, in order to secure the cost and the schedule of the Project.

- The IO is classified “Installation Nucléaire de Base” = Nuclear Installation under French regulation. Safety and quality requirements shall always be compliant with the French regulation for INB facilities.

- The IO is looking for Industrial Partners, combining the Tokamak scientific knowledge and the industrial know-how.
Depending on the estimated value of the contract to be awarded, different procurement procedures apply:

- Call for Tenders
- Restricted Tender
- Competitive Dialogue
- Negotiated Procedure
- Call for Expertise
- Request for Quotation
- Open Tender

All information on our website: [https://www.iter.org/proc/tenderprocess](https://www.iter.org/proc/tenderprocess)
Call for Tender is a staged procurement process for high value contracts as described below:

Stage 1: Call for Nomination, where Domestic Agencies (DAs) are formally requested to provide the names of potential candidates. The candidates shall liaise with relevant Domestic Agencies to express their interest for a required supplies, services or works. The IO could also add a potential candidate if needed after having informed the DA.

Stage 2: Pre-qualification, where the IO will establish a list of qualified suppliers amongst the nominated candidates. The purpose is to verify the technical and financial capacity of interested suppliers for a specific scope of work. Only those identified as ‘qualified’ are eligible for Stage 3. All nominated candidates receive the pre-qualification package.

Stage 3: Call for Tender (CFT), where only the pre-qualified candidates will receive the tender package from the IO composed of Instructions to Tenderers, IO Technical Specifications, Special and General Conditions of contracts. Tenderers shall submit offers in response to the CFT.
The evaluation of the tenders submitted will follow a two step approach:

- The technical offers are evaluated with respect to the **award criteria** indicated in the Instructions to Tenderers (which are part of the tender package from the IO) and only those obtaining scores higher than the technical threshold indicated shall be considered for the financial evaluation as the next step.

- The financial evaluation is based either on the combined quality and price scoring mechanism (best value) or on the offer which is lowest priced and technically compliant.

The results are published on the IO Procurement Website: [https://www.iter.org/proc/overview#CFT](https://www.iter.org/proc/overview#CFT)
Open Tender

• Open Tender is a competitive procurement process published exclusively on the IO Web Site.

• All suppliers wishing to participate in the competitive process are invited to do so directly with the IO.

• An Open Tender follows the same evaluation process as the Call for Tender with a two-steps approach evaluation (technical and financial).
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The ITER project activities, through all the stages and/or phases of ITER project (e.g. R&D, Design, Procurement, Manufacturing, Construction or Assembly & Installation, Commissioning, Operation & Maintenance, Deactivation), shall be governed by a Quality Assurance Program (QAP) under an integrated Management and Quality Program (MQP), which makes use of the experience gained in similar projects, takes into account the specific nature of fusion and the multi-national, multi-party and multi-disciplinary characteristics of the ITER Project, and combines applicable requirements of:

- ISO 9001 “Quality Management Systems Requirements” (Reference [1] and [2])
- IAEA General Safety Requirements (Reference [3])
- The French Order dated 7 February 2012 relating to the general technical regulations applicable to INB (Reference [4])
- ISO 14001 International standard for environmental management system (Reference [5])
- OHSAS 18001 Standard for Occupational Health and Safety management system (Reference [6])
- Pressure Equipment directive 2014/68/UE (RZ6PAK)
- French Decree 2015-799 (Transposition of [7] in French law called ESP (USTKD4)
- ESPN Order dated 30 December 2015 (SMP384)
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The IO is looking for services, works and supply contracts in the following areas:

- Mechanical assembly contracts (very large works contracts awarded but subcontracting might be an opportunity and small/medium size multi millions contracts still needed), contact points at suppliers will be communicated during session on Installation and Assembly Contract strategy.
- Electrical supply and installation contracts.
- Steel structures and piping installation contracts (largest one already awarded but subcontracting might be an opportunity).
- Architect Engineering contract including coordination across large installation works contracts (Hot Cell Complex, detritiation plant).
- Engineering service support contracts (Stress analysis, isometric/drawing support, specialized engineering contracts).
- Design, prototyping, manufacturing and supply of specialized components.
- Radwaste and remote handling engineering and installation contracts (Hot Cell).
- Material supply contracts (MRO components, piping, valves) with optional short term deliveries solutions.
- Maintenance electrical, mechanical and general services service contracts.
- Scientific collaboration service contracts.
- IT services contracts.
Where to find more information:

❖ IO Website for Industry: [https://www.iter.org/proc/generalinfo](https://www.iter.org/proc/generalinfo)
  ▶ To find general information on how to apply, the tender processes, the publication of:
    ✓ List of ongoing Call for Tenders.
    ✓ List of ongoing Call for Expertise.
    ✓ List of ongoing Open Tenders.
    ✓ Forthcoming Call for Tenders.
  ▶ To ask general questions related to Procurement, contact: [iopcd@iter.org](mailto:iopcd@iter.org)
  ▶ To follow IO Business Events = [https://www.iter.org/businessevents](https://www.iter.org/businessevents)

❖ Industry Liaison Officers
A network from different European countries works together with Fusion for Energy to raise awareness regarding funding schemes and ways to get involved in the ITER project. A series of information days and seminars are planned throughout the year to report on the roadmap of the different procurement packages and facilitate partnerships between companies.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Tender Process</th>
<th>Current Step</th>
<th>Cost range</th>
</tr>
</thead>
<tbody>
<tr>
<td>IO/21/CFT/70000858/JGO</td>
<td>Framework Contract for Supply of Flow Measurements (Lot 1)</td>
<td></td>
<td>Call for Nomination</td>
<td>A</td>
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<tr>
<td>IO/21/CFT/70000862/JGO</td>
<td>Framework Contract for Supply of Humidity and Oxygen Concentration Measurements (Lot 5)</td>
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<td>Call for Nomination</td>
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<tr>
<td>IO/21/CFT/70000883/JGO</td>
<td>Framework Contract for Supply of I&amp;C Mechanical Components (Lot 6)</td>
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<td>Call for Nomination</td>
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<tr>
<td>IO/21/CFT/70000880/JGO</td>
<td>Framework Contract for Supply of Level Switches (Lot 3)</td>
<td></td>
<td>Call for Nomination</td>
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<tr>
<td>IO/21/CFT/70000884/JGO</td>
<td>Framework Contract for Supply of Pressure-Based Measurements (Lot 2)</td>
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<td>Call for Nomination</td>
<td>A</td>
</tr>
<tr>
<td>IO/21/CFT/70000881/JGO</td>
<td>Framework Contract for Supply of Temperature Measurements (Lot 4)</td>
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<td>Call for Nomination</td>
<td>A</td>
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<tr>
<td>IO/21/CFT/70000857/IDE</td>
<td>Framework Supply Contract for Thermal Insulation for Cooling Water System piping</td>
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<td>Call for Nomination</td>
<td>A</td>
</tr>
<tr>
<td>IO/21/CFT/70000826/INJ</td>
<td>Framework Service Contract for Support of Port Integration Engineering</td>
<td></td>
<td>Call for Nomination</td>
<td>C</td>
</tr>
</tbody>
</table>

* In the column "Cost Range", an indication of the cost range of the tender is given in the form of letters A, B, C and D.

- **A** Item range 300 000 – 2 000 000 EUR
- **B** Item range 1 500 000 – 5 000 000 EUR
- **C** Item range 4 000 000 – 12 000 000 EUR
- **D** Item range above 10 000 000 EUR
<table>
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<tr>
<th>Reference</th>
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<th>Tender Process</th>
<th>Current Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>IO/21/CFE/10620504/CPT</td>
<td>Project Integration of 55 BT Neutron Facility and Neutron diagnostics</td>
<td>Call for Expertise</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IO/21/CFE/10620531/INU</td>
<td>Diagnostic Interface Engineer</td>
<td>Call for Expertise</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IO/20/CFE/10620253/BBE</td>
<td>Project Integration of ITER Neutron Diagnostics</td>
<td>Call for Expertise</td>
<td>Closed</td>
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<tr>
<td>IO/20/CFE/10619994/BBE</td>
<td>Spectroscopic Modelling consultancy</td>
<td>Call for Expertise</td>
<td>Closed</td>
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<tr>
<td>IO/20/CFE/10620010/INU</td>
<td>Consultancy on X-ray atomic emission modelling</td>
<td>Call for Expertise</td>
<td>Closed</td>
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<tr>
<td>IO/20/CFE/19935/INU</td>
<td>Mechanical design of the Divertor Flow Monitor components in ISS and PC55</td>
<td>Call for Expertise</td>
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<td>IO/20/CFE/19870/INU</td>
<td>Mechanical engineering support for the disruption mitigation system design focusing on ex-vessel design</td>
<td>Call for Expertise</td>
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<tr>
<td>Reference</td>
<td>Title</td>
<td>Tender Process</td>
<td>Current Step</td>
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<tr>
<td>IO/20/OT/70000645/JLE</td>
<td>ITER Plasma Control System for PPPO-1 Design</td>
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<td>Open Tender</td>
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<td>Status: Ongoing</td>
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<tr>
<td>IO/20/OT/10020088/VM</td>
<td>CAD Quality Check Activities</td>
<td></td>
<td>Open Tender</td>
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<td></td>
<td></td>
<td></td>
<td>Status: Ongoing</td>
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<tr>
<td>IO/20/OT/10020471/FMR</td>
<td>Design and Construction of a laboratory building with overhead crane in CA6</td>
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<td>Open Tender</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Status: Ongoing</td>
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<tr>
<td>IO/20/OT/1002068/VML</td>
<td>CAD Quality Assurance (QA) Quality Check (QC) activities</td>
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<td>Open Tender</td>
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<td>Status: Closed</td>
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<tr>
<td>IO/20/OT/10018393/VML</td>
<td>Supply and Installation of water testing laboratory</td>
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<td>Open Tender</td>
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<td></td>
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<td></td>
<td>Status: Closed</td>
</tr>
<tr>
<td>IO/20/OT/10019321/EBT</td>
<td>ITER ACADEMY SERVICE CONTRACT</td>
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<td>Open Tender</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Status: Closed</td>
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</tbody>
</table>
### Forthcoming Tenders

#### INFORMATION

- At this moment Iter Organization has limited information concerning forthcoming and open tenders, for specific questions please contact [iopcd@iter.org](mailto:iopcd@iter.org)
- The list is published for information purposes.
- The potential tenderers shall declare interest ONLY further Call for Nomination publication or Open tender.

#### In the column "Cost Range", an indication of the cost range of the tender is given in the form of letters A, B, C and D.

<table>
<thead>
<tr>
<th>Estimated Publication Period</th>
<th>Tender Type</th>
<th>Title</th>
<th>Cost range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2021</td>
<td>Call for Tender</td>
<td>Floor Protection for Tokamak supply and service contract</td>
<td>A</td>
</tr>
<tr>
<td>Q1 2021</td>
<td>Call for Tender</td>
<td>Framework Contract IO Ex-Vessel ISS-PCSS manufacturing and assembly for IO Ports</td>
<td>C</td>
</tr>
<tr>
<td>Q1 2021</td>
<td>Call for Tender</td>
<td>Framework Contract CAD QA / QC</td>
<td>A</td>
</tr>
<tr>
<td>Q1 2021</td>
<td>Call for Tender</td>
<td>Cold Box prototype mock-up development and test Contract</td>
<td>A</td>
</tr>
<tr>
<td>Q1 2021</td>
<td>Call for Tender</td>
<td>Supply TCWS DYS ESPN Filter Contract</td>
<td>A</td>
</tr>
</tbody>
</table>
Doing Business in Vicinity of ITER:

• The **Welcome around ITER** network launched in 2013 plays a key role in welcoming and supporting companies having signed ITER contracts and required to operate on the ITER construction site at Cadarache in Saint-Paul-lez-Durance.

• Propelled by the impetus generated around the project, **W@I** also supports companies looking to set up business in the Provence-Alpes-Côte d’Azur (PACA) region or to build bridges with local firms.

• The **W@I** network comprises Agence ITER France, Pôle Emploi (job centre), the Regional Agency for Innovation and Internationalization (ARIi), the ITER industrial committee (C2I), and the French chambers of commerce & industry (CCI). This network offers a broad range of services to meet all corporate needs.

• **Contact:** AIF-WAI@cea.fr

More information @ [http://welcome-around-iter.com](http://welcome-around-iter.com) and for Industrial support with C2I [here](http://welcome-around-iter.com)
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1. Form a consortia if not all the required skills or capacities are present in-house:

- Consortia share “several and joint liability” whilst in the case of subcontracting the main contractor remains end-responsible.

- Contrary to subcontractors, Consortia Members skills and capacity are valued in the assessment of the offers.

- Make sure the consortia configuration is stable at the Pre-qualification level and the consortium agreement is in place prior to contract signature.
2. Smart subcontracting:

- Subcontracting is limited to 30% (unless exceptionally increased up to 50%). The supply of materials is not considered as subcontracting but as a supply.

- Subcontracting is a solution to offer very specialized goods or services.

- Subcontracting is a possibility for SME companies to participate in big tenders. The IO encourages Tenderers to appeal to SME companies.

- Tenderers should ensure that they have back-up agreements with their respective subcontractors and that the IO quality and safety requirements are repeated in those back-up agreements.
3. Submission of an “accurate” Quality Plan:

- Qualification of the resources (adequacy of resources deployment, adequate qualification and skills of assigned resources, consistency and adequacy of the proposed organization...).

- Adequacy (adequate monitoring, recording and problem solving mechanisms...).

- Materials and equipment procurement strategy (supply chain, manufacturing capabilities, qualification, quality management...).

- Reliability of proposed qualification procedures (f.i. with respect to Welding or Non Destructive Tests).

- Respect the ITER Quality Assurance Program.
4. Find the right balance between Risk and Price:

- The Tokamak is a “First of a Kind” project and risks are inherent to the execution of the IO contracts. Hence, it is of utmost importance to make an appropriate Risk Analysis and Risk Mitigation Plan.

- In line with the principle of “sufficiency of Price”, ensure that you build in your price a **realistic margin** to absorb risk impacts.

- Nevertheless, do not over price just to be on the safe side as this will make your offer uncompetitive. More-over does it show that you are not skilled to properly mitigate risk.

- Be creative in proposing/ accepting alternative pricing mechanisms for those activities where the risk cannot be reduced.
5. **Submit competitive and coherent prices:**

- The IO is focused on cost containment. Attractive pricing is a pre-requisite to win a tender.

- Prices need however to be coherent as it does not help to enter a contract which is doubtful.

- Hence, Tenderers are strongly requested to respect the price table format in order for the IO to compare the prices with its own cost estimate and with other offers.

- Abnormally low offers may lead to rejection of the offer if the Tenderer is unable to demonstrate the veracity of the questioned price elements.
6. Submit technical compliant offers:

- In order to be selected an offer needs to be compliant with the technical specifications. Alternative offers are in general acceptable but will only be considered if the Tenderer has been selected on basis of its basic offer respecting the Technical Tender Specifications.

- In case of doubt about whether its offer is technical compliant, Tenderers are encouraged to make requests for clarification.
7. Respect submission deadlines:

- The standard submission delay for a Call for Tender is 6 weeks (42 calendar days). For the IO, it is key to limit any extension of the tender procedure, the more that budgets are allocated on a calendar year basis.

- In order to respect the deadline but also cope with the extensive tender document package, it is recommended that Tenderers distinguish the “Applicable Documents” to be read and applied at tendering stage and at contract execution stage.

- Consortium agreements should ideally be sorted out prior the CFT release in order to avoid the related extra administrative burden during the offer preparation period.
8. Show flexibility during the BAFO process:

- After contract award, the IO has the opportunity to invite the winning Tenderer to optimize its offer and submit a Best and Final Offer (BAFO). This alignment process is important to find a perfect match between the offer and the IO contract implementation expectations.

- Unsuccessful tenders may result in stopping the call for Tender process and so not concluding on any award. In this event, the IO might start a Negotiated Procedure and request BAFO to qualified tenderers.

- The BAFO process is to be perceived as a trade off process allowing Parties to fine tune their respective position on a number of open issues (f.i. payment schedule, warranties, liability coverage, ...).

- As a basic principle, all IP developed under the contract shall belong to the IO and shall be shared with the ITER Members. ITER Members can use it and license it in their respective territories. License regimes depend on the intended use.

- Tenderers are requested to report at the tender stage all their existing protected IP, i.e. so called “Background”, so it can be distinguished from any new developments.

- During contract implementation, the IO and Contractor shall keep track of all developments and results. All developments under the contract belong to the IO and are classified as “Generated IP” (or “Foreground”).

- Contractors may request to use the Generated IP, in which case a license will be put in place by the IO. The type of license will depend on the intended use (internal R&D, commercial, fusion, non-fusion, etc...).
10. Use of IO LSP Contract for Transocean transport:

- IO Council instructed in 2010 the setup of a single global Logistic Services Provider (LSP) contract.

- Following a competitive tendering, the company DAHER has been nominated as preferred IO Transporter.

- Benefits of using the LSP contract are:
  - Import formalities handled through dematerialized custom handling system DESY
  - Land transport between Marseille Harbor and IO site financed by Fusion for Energy
  - Full door-to-door Ad Valorem Insurance
  - Guaranteed application of PIC safety measures
  - Integrated supply chain (single contractor for transport, inspection, import, reception, storage of components).
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In participating to the ITER Project with the IO and/or the Domestic Agencies, the Industry develops competencies that will be key for the next steps of the fusion programme.

The ITER Project and Industry together have to find economically efficient solutions to a great technical challenge requiring high skills, experience in high technologies, nuclear field and construction.

The ITER Project is a unique industrial business opportunity for the Industry, including SMEs and National Laboratories, which are recognized as important players for the Project.
Thank You for Your Attention