

## Call for Nomination

### **Framework Contract for Supply of Flow Measurements (Lot 1)**

#### **1 Purpose**

This Call for Nomination is for the selection of companies to bid for supply of the Flow Measurements.

#### **2 Background**

ITER is a joint international research and development project that aims to demonstrate the scientific and technical feasibility of fusion power. For the construction of its experimental reactor, the IO needs to purchase construction components, and this Call for Nomination is to procure the Flow Measurements.

#### **3 Scope**

IO will put in place a framework contract with the selected supplier in order to procure Flow Measurements.

Suppliers may propose flow sensors based on the differential pressure measurement or any other technology.

In case of flow sensors based on the differential pressure measurement, the Supply will normally consist of items such as but not limited to:

- Primary element (orifice plate, Venturi tube, or any other suitable element)
- Delivery of the required components to the ITER Organization.

The proposed solution shall take into account that due to very congested space and a complex piping layout the straight pipe lengths might be limited for some measurement points.

In case of flow sensors based on a technology other than differential pressure measurement, the Supply will normally consist of items such as but not limited to:

- Flow sensor,
- Specification of signal connection (from the sensor to the transmitter, definition of electrical connection type, definition of junction box type),
- Signal transmitter,
- Delivery of the required components to the ITER Organization.

There will be mainly two categories of Flow Measurements:

- 1) Safety classified (SIC)
- 2) Conventional (Non-SIC)

All components shall be designed and tested for the environmental conditions defined for the locations where the components shall be installed:

	<b>Flow sensors</b>	<b>Transmitters</b>
Ambient Room temperature	5 °C - 130°C	-15 °C – +60 °C
Static Magnetic field (Modulus)	< 150 mT	< 20 mT
Total Ionizing dose (TID, silicon based)	< 10 MGy	< 10 Gy
Zero period acceleration (seismic)	< 6.5 g	< 6.5 g

The selected supplier will be in charge of:

- a) Manufacturing and factory acceptance testing
- b) Equipment Qualification of the safety classified equipment
- c) Packing and delivery of the required goods to the ITER Organization
- d) Submission of the relevant documentations
- e) Onsite start-up and commissioning assistance (Proposed as an option at an hourly rate)
- f) Comprehensive list of manufacturer recommended Spare Parts

#### **4 Required Experience and Skills**

The candidates shall need to demonstrate that they have the capabilities to supply the required goods in full compliance with the applicable standards as well as with the ITER quality and safety requirements.

#### **5 Tentative Schedule**

<b>Milestone</b>	<b>Dates</b>
Pre-Qualification	February 2021 – March 2021
Call for Tender	April 2021 – May 2021
Award / signature	June 2021

#### **6 Candidature**

Participation is open to all legal entities established in an ITER Member State, which is:

- European Union including Switzerland (EURATOM Members),
- Republic of India,
- Japan,
- People's Republic of China,
- Republic of Korea,
- Russian Federation, or
- United States of America.

Entities can participate either individually or in a consortium. A legal entity cannot participate individually or as a consortium partner in more than one application or tender. 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.

The consortium groupings shall be presented at the pre-qualification stage. The tenderer's composition cannot be modified without the approval of the ITER Organization after the pre-qualification.

Legal entities belonging to the same legal grouping are allowed to participate separately if they are able to demonstrate independent technical and financial capacities. Candidates (individual or consortium) must comply with the selection criteria. The IO reserves the right to disregard duplicated reference projects and may exclude such legal entities from the pre-qualification procedure.