The main purpose of this framework contract is to provide the ITER Diagnostics Program, and specifically the Visible Spectroscopy Reference System of this Program, with specialized opto-mechanical and electrical components and associated acceptance and qualification tests to support its manufacturing and construction.

Due to the diversity of the required components, the ITER Organization reserves the right to award this contract to more than one contractor.

The ITER Project is an international effort aimed at demonstrating the scientific and

Manufacturing, assembly and testing of pressurized circuits (e.g. for water cooling or pneumatic actuators);

Thermal cycling tests;

Mechanical testing, incl. vibration table tests (resonance, sine or random), motion in vacuum tests, pulling / pushing tests;

Radiography, Ultrasonic testing and dye penetration testing of welded joints;

Metrology and optical alignment (e.g. with laser tracking);

Manufacturing of custom optical surfaces (e.g. by diamond turning) and optical precision polishing;

Uniform coating (e.g. by Physical Vapour Deposition) of multiple materials (Copper, Rhodium, Platinum, Aluminium, Zirconium- and Silicon-Oxide, Boron Carbide, Titanium Oxide, Dielectric coatings etc.) with coating thicknesses up to 10 µm, on several substrate materials (Stainless Steel, Copper, Aluminium, Alumina, Aluminium Nitride etc.) of sizes up to 300x300mm (potentially outsourced).

Optical testing (transmission, specular/diffuse reflectivity and BRDF , contrast, wavefront error, stray light characterization …) in the infrared and visible (and if possible ultraviolet and X-ray wavelength bands).

The Contract is expected to come into force by the end of 2024 for a firm duration of four (4) years, with an option to extend for a further period of 2 years.

The indicative Call for Tender milestones are:

Call for Nomination	**End of May 2024**
Issuing of Prequalification invitations	**Beginning of July 2024**
Issuing of Call for Tender	**End of August 2024**
Submission of Tenders	**Mid of November 2024**

The selection process will be based on the following past experiences and facilities:

Supplying of ITER grade materials with (3.1 and 3.2) certification;

Supplying of Ultra-high vacuum-compatible mechanical components or systems;

Machining of UHV-compatible mechanical components;

Supplying and machining of non-UHV mechanical components;

Supplying of Optical components (mirrors, lenses, coatings, polishing) both UHV compatible and non-vacuum;

Computer Aided Design;
Machining facilities;
Test facilities including UHV testing, electrical testing, optical testing, alignment and metrology testing;

Participation is open to all legal persons participating either individually or in a grouping (consortium) which is established in an ITER Member State. A legal person 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 cannot be modified later without the approval of the ITER Organization. Legal entities belonging to the same legal grouping are allowed to participate separately if they are able to demonstrate independent technical and financial capacities. Bidders' (individual or consortium) must comply with the selection criteria. IO reserves the right to disregard duplicated references and may exclude such legal entities form the tender procedure.

Further information on the ITER Organization procurement can be found at:
http://www.iter.org/org/team/adm/proc