Job Title: Port Integration Officer IO1007

Requisition ID **4480** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems** - **New Posting**

The ITER Organization brings together people from all over the world to be part of a thrilling human adventure in southern France—building the ITER Tokamak. We require the best people in every domain.

We offer challenging full-time assignments in a wide range of areas and encourage applications from candidates with all levels of experience, from recent graduates to experienced professionals. Applications from under-represented ITER Members and from female candidates are strongly encouraged as the ITER Organization supports diversity and gender equality in the workplace.

Our working environment is truly multi-cultural, with 29 different nationalities represented among staff. The ITER Organization Code of Conduct gives guidance in matters of professional ethics to all staff and serves as a reference for the public with regards to the standards of conduct that third parties are entitled to expect when dealing with the ITER Organization.

The south of France is blessed with a very privileged living environment and a mild and sunny climate. The ITER Project is based in Saint Paul-lez-Durance, located between the southern Alps and the Mediterranean Sea—an area offering every conceivable sporting, leisure, and cultural opportunity.

To see why ITER is a great place to work, please look at this video

Application deadline: 17/10/2021
Domain: Engineering
Department: Engineering Design
Division: Port Plugs & Diagnostics
Section: Diagnostic Engineering
Job Family: Engineering
Job Role: ENGN Project Officer – 1
Job Grade: P3
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As the Port Integration Officer, you will lead and follow-up on integration and procurement of diagnostic ports in ITER. During procurement process, you will also follow-up interfaces for integration of diagnostics inside diagnostic ports within ITER Organization (IO) and through Domestic Agencies (DA). You will be expected to provide engineering solutions that fulfils integration and manufacturing requirements.

Background

On ITER, a large set of plasma diagnostics and other equipment are integrated in the upper (x14), equatorial (x8) and lower (x3) ports, into dedicated housing structures incorporating support equipment.
The integrated ports, i.e. the port housing structures assembled with diagnostic systems, are also subject to the harsh ITER environment, must comply with defined (safety) requirements, and must also be installable, operable and maintainable consistent with the ITER facility requirements, i.e. with the highest possible level of standardization and commonality.
To design and build the diagnostic systems, the 7 Domestic Agencies (DAs) are contributing in-kind, under functional specifications Procurement Arrangements (PAs) while IO-CT also undertakes directly parts of the ITER diagnostics and integration scope. Diagnostic Engineering Section provides engineering justification and support to diagnostic developers at IO and DAs. Also, DE section supports technical interface development with other PBSs to ensure that diagnostic systems are designed and developed to fulfil their mission.

Key Duties, Scope, and Level of Accountability

- Identifies, defines, and follows in-kind and in-cash procurement strategy for diagnostic ports with Procurement and Contracts Division;
- Designs and builds the populated diagnostic ports in collaboration with DAs contributions, following functional specifications of Procurement Arrangements (PAs), while collaborating with IO stakeholders directly managing parts of the ITER diagnostics and port integration scope;
- Prepares technical specifications and documents as required for manufacturing of diagnostic port components and associated tooling, following necessary practises, codes and standards;
- Ensures requirements and interfaces for diagnostic port integration are followed, and resolves common engineering and maintenance solutions for the ports;
- Develops the engineering design of diagnostics ports towards their manufacturing together with experts at IO and DAs;
- Performs and supervises necessary quality control (QC) with industry during manufacturing and acceptance of diagnostic port components;
- Checks analysis of mechanical and thermal stresses, stresses due to electro-magnetic forces, dynamic analysis, and neutronics assessment for port-based components to ensure that ports are manufactures according to design margins;
- Leads the development of operational and safety procedures for integrated diagnostic ports;
- Leads acceptance tests of integrated diagnostic port components before they are installed on ITER;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

Measure of Effectiveness

- Develops and follows up work packages for procurement of diagnostic ports to agreed deadlines;
- Develops and approves interface documentation, schematics plans and databases for diagnostic ports;
- Develops, follows up and approves technical documentation for drawings during manufacturing and procurement of diagnostic ports with industry;
- Collaborates successfully with technical partners in Domestic Agencies and other Directorates at IO.

Experience & Profile

- ***Professional Experience:***
- Minimum 8 years' experience in mechanical engineering, nuclear engineering or diagnostic engineering in the field of fusion installations within complex international environments or projects.
- ***Education:***
- Masters' degree or equivalent in mechanical engineering, nuclear engineering, diagnostic engineering or other relevant discipline;
- The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
- ***Language requirements:***
- Fluent in English (written and spoken).
- ***Technical competencies and demonstrated experience in:***
- Manufacturing of mechanical or diagnostic components following dedicated codes and standards, such as ASME and/or RCC-MR(x);
- Technical follow-up and quality control of mechanical components within nuclear industry;
- Technical follow-up of CAD activity (familiarity with CAD oversight, familiarity with P&I Diagrams, familiarity with 2D manufacturing and assembly drawings);
- Procurement and contract management: define needs and requirements, author technical specifications, evaluate tender submissions, monitor contract execution, costs, risks and reporting, and manage external resources to ensure implementation within contractual requirements;

- Quality management: knowledge of requirements and international quality standards, methods and practices;
- Proven planning and costing ability for mechanical systems.
- ***Behavioral Competencies:***
    - Collaborate: Ability to facilitate dialogue with a wide variety of contributors and stakeholders;
    - Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;
    - Drive results: Ability to persist in the face of challenges to meet deadlines with high standards;
    - Manage Complexity: Ability to analyze multiple and diverse sources of information to understand/define problems accurately before moving to proposals;
    - Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.

The following important information shall apply to all jobs at ITER Organization:

- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, ITER Values (Trust; Loyalty; Integrity; Excellence; Team mind set; Diversity and Inclusiveness) and Code of Conduct;
- ITER Core technical competencies of 1) Nuclear Safety, environment, radioprotection and pressured equipment 2) Occupational Health, safety & security 3) Quality assurance processes. Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members;
- Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;
- May be requested to work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- Informs the IO Director-General, Domain Head, or Department/Office Head of any important and urgent issues that cannot be handled by line management and that may jeopardize the achievement of the Project’s objectives.