Job Title: Head of Engineering Design Department IO0012

Req ID **1920** - Posted **02/09/2020** - (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: 01/11/2020
Domain: Engineering
Department: Engineering Design
Job Family: Line Management
Job Role: Director of Department
Job Grade: D1
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As Head of the Engineering Design Department (EDD), you will lead and manage the EDD, under Engineering Domain (ENGN). You will support the Head of ENGN and by ensuring the design, procurement, acceptance, preparation and necessary support needed for the installation, commissioning, and operation of systems to be installed (such as Heating & Current Drive systems, Port plug & Diagnostics systems, Internal Components including Test Blanket Module Program associated activities, Remote Handling systems & Radwaste Management systems and Fuel Cycle systems) in close collaboration and communication with Central Integration Office (CIO), Design Office, other ITER Organization (IO) Domains and Domestic Agencies (DAs).
You will be responsible for providing leadership and leading the Divisions/Sections/Groups under your supervision, in addition to promoting a positive and harmonious work culture throughout the Department and wider IO.

Background

ENGN is established as one of the four Domains within the IO, and is an integrational domain of the ITER Project. Its responsibilities include configuration management, systems engineering and design engineering activities for post-First Plasma components, in close cooperation with both Construction and Science & Operations Domains and DAs, with additional support from the Corporate Domain. As captive components for these systems will be installed before First Plasma, EDD will work with Construction Domain to ensure the proper execution of their installation.

Major Duties/Roles & Responsibilities

- Advises and provides recommendations on any risks issues or opportunities in order to improve project management;
- Develops the corresponding design through proper systems engineering implementation, including design plans, gate reviews, and procurement documentation, oversees hardware procurement, implements technical / quality control, and prepares hand-over packages for installation, assembly, testing and commissioning of the systems, structures and components (SSCs) to ensure a successful operation of the ITER Facilities including the post First Plasma configuration;
- Participates with the Corporate Domain in the project risk mitigation approach for the implementation of each systems design and procurement activities;
- Prepares the final Engineering Dossier duly signed and certified, and delivers it to Science & Operation Domain (together with Installation Certified final Dossier) for activating the integrated commissioning of the Machine and related Auxiliaries;
- Prepares the delivery of the final Integrated Dossier integrating Engineering / Fabrication / Installation and Commissioning to the Regulatory Body, which is aimed at demonstrating the full implementation of licensing requirements in order to obtain authorization for operation;
- Supports and contributes to the project's lifecycle cost saving and avoidance activities;
- Develops the strategy for design engineering activities, in close collaboration with Cabinet in accordance with Project Strategy;
- May be requested to perform other duties in support of the project;
- May be required to work outside ITER Organization reference working hours, including, week-ends and public holidays.

Note: 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;

Measure of Effectiveness

- Contributes efficiently to achieve the ITER Project's objectives, currently in first place First Plasma, wherever EDD has any systems and/or components, including captive components, to be installed for First Plasma;
- Ensures that the IO fulfils its mission and complies with its obligations in the best conditions;
- Develops the final design for post-First Plasma systems to meet the performance requirements within the approved Baseline;
- Monitors efficiently Key Performance Indicators for the Department;
- Produces and approves standard reports and documents for the Department in a high quality fashion;
- Leads the EDD in a harmonized manner, and collaborates with DAs and other IO Domains/Department/Office as one team.

Experience & Profile

- ***Professional Experience:***
  - At least 20 years' experience in engineering or construction of advanced technology project, including 10 years' managerial experience in the role/job function of Management, within a large international engineering or scientific project;
  - Experience of engineering or construction in design and/or integration of large research facilities (fusion, high-energy physics, lasers, space, etc.) is required.
- ***Education:***
  - At least Masters' degree or equivalent in engineering or other relevant discipline related to fusion development;
  - 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:***

- Quality: Ability to lead and ensure all ENGN activities are performed at a level of quality appropriate to achieving the safety, environmental security and performance objectives of the Project defined by IO.
- Technical Expertise: Being recognized internationally as a Subject Matter Expert, and ability to review the scope of the specific area with objective to optimize ITER exploitation, to anticipate technical issues or problems drawing experience and expertise, and to ensure the nuclear safety regulations and quality requirements.
- Design: Ability to manage technical changes across multiple interfaces and systems, and to report and defend design progress and requirements-compliance across multiple systems.
- Project Management: Ability to define reporting and control requirements and methodology, analyze and conclude on overall project status, define and decide actions for recovery with full transparency within the IO, and report to highest levels of stakeholders of the ITER Project.

- ***Behavioural Competencies:***
  - Collaborate: Ability to facilitate and navigate dialogue with a wide variety of contributors and stakeholders in a diversified environment without compromising the discipline;
  - 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 commit and meet deadlines with high standards;
  - Manage Complexity: Ability to analyze multiple and diverse sources of information to define root cause accurately before moving to proposals/solutions;
  - Instill trust: Ability to model highest 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, **r**adioprotection 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 lline management and that may jeopardize the achievement of the Project's objectives.