Job Title: Physical & Functional Integration Division Head IO0066

Requisition ID **3402** - Posted **17/12/2020** - (France, 13067 St Paul Lez Durance Cedex) - **Managerial** - **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: 28/01/2021
Domain: Engineering
Department: Central Integration Office
Division: Physical & Functional Integration
Section: Not Applicable
Job Family: Line Management
Job Role: Head of Division
Job Grade: D1
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As the Physical & Functional Integration Division Head, you will support the CIO Head in assigning duties for physical and functional design integration. You will lead the physical design integration of the TOKAMAK machine and plant throughout the project lifecycle, in addition to managing the Physical & Functional Integration Division (PFI).

You will have the overall responsibility of:

- Assuring the configuration management, design control (for systems engineering implementation), identification and control of all items including missing and non-allocated items;
- Managing and coordinating all activities related to systems functional integration, engineering, control of the interface, implementation of safety and performance requirements, interfaces;
- Managing in the frame of risk mitigation approach the as built database and configuration Model of System, Structure and Components (SSCs) during the manufacturing, construction/assembly phases.

You will be responsible for providing leadership and leading the Sections/Groups under your supervision, in addition to promoting a positive and harmonious work culture throughout the Department and wider IO.

Background

Central Integration Office (CIO), as delegated Design Authority and Integrator of the whole ITER Plant as a nuclear installation, is responsible to the overall coherence of functional and safety performances of the Project.

Physical and Functional Integration Division is in charge of integration studies and reviews for the ITER Project within this Office.

Major Duties/Roles & Responsibilities

- Supports CIO Head to primarily ensure the integrity of Technical Baseline, a proper design control (Systems Engineering implementation), configuration management, design and construction integration, engineering quality control, documents and records, and engineering & nuclear analysis;
- Establishes, maintains and improves a cross-functional scheme to maintain physical design integration of the TOKAMAK machine and plant applicable throughout the project lifecycle including maintenance of Configuration Management Model;
- Supervises staff and coordinates activities of PFI, providing leadership, ensuring that team members are motivated and constantly developing their skills and experience, and managing the resourcing plan;
- Is responsible for implementing systems engineering processes (including project requirements flow-down, interface management, functional analysis for plant systems, design control for transversal functions and commissioning plan of systems) in the project;
- Is responsible for, at the project level, the implementation of the engineering configuration management model, which includes control of the baseline model and control of general arrangement drawings, functional tolerance drawings, and the development and maintenance of the ITER digital mock-up at all stages of the project including incorporation of as-built information;
- Resolves issues associated with external and internal hazards related requirements and participates in the development of alternative engineering design solutions;
- Is responsible for conceptual design of common items;
- Is responsible for establishing and maintaining the ITER fire protection scheme including investment protection;
- Is responsible for establishing and maintaining the ITER Staged Approach including for Hot Cell Complex;
- Is responsible for assessing design change requests and design options affecting the ITER systems and interfaces from the design integration point of view;
- Is responsible for streamlining the existing design integration (including system integration, physical interface control and layout integration) and implementing the integration during the whole life cycle in the project;
- Is responsible for defining and establishing processes, procedures and tools/systems required for the design integration in the project; for implementing the processes; and providing proper training of the processes to the staff;
- Is responsible for defining and establishing a strategic plan for systems engineering, physical integration and functional integration, applied to the project after the start date of Integrated Commissioning and prepare for its implementation;
- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics;
- 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, weekends and public holidays.

Measure of Effectiveness

- Maintains close and bi-directionally communications with Head of CIO in order to maximize the capability and capacity of CIO and in order to stand by for the case of delegation of authority of Head of CIO;
- Builds-up and manages effectively PFI Division to fulfill the duties, roles and responsibilities described above;
- Establishes a constructive, collaborative attitude and effective communication with all involved stakeholders;
- Successfully generates and maintains trustworthy, up-to-date information related to the ITER Facility’s technical scope;

- Successfully supports other ITER Departments in implementing the ITER technical scope and tracking design work progress;
- Assures PFI design outputs meet safety standards without any negative comments made by the French Nuclear Safety Authority (ASN);
- Assures PFI design outputs meet quality, schedule and cost requirements;
- Responsible for adherence as a Division Head to technical and behavioral standards;

Experience & Profile

- ***Professional Experience:***
- At least 15 years' experience in managing systems engineering design and integration of large international nuclear projects (including requirement, interface and configuration management).
- ***Education:***
- Master's degree or equivalent in engineering field 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:***
    - Nuclear plant design, nuclear quality assurance program, especially the design control, configuration management processes and implementation of requirements related to internal and external hazards;
    - All design aspects of the Tokamak systems and experience in the assembly management for similar devices or knowledge of the ITER design & configuration in addition to the engineering aspects of the main Tokamak systems design is advantageous;
    - Team management providing leadership and ensuring development of competencies, coaching the team members and proposing a training plan;
    - Engineering managerial or coordinating position, preferably in a nuclear industry environment interacting with experts in different technical disciplines;
    - Interface management, propagation of requirements in terms of the design and proof of compliance;
    - Implementing nuclear quality assurance program, safety regulations, codes and standards.
- ***Behavioral Competencies:***
- Role model: Ability to behave as a role model by representing the ITER Values and to being fully compliant to the code of conduct with full transparency;
- 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 define problems accurately before moving to solutions;
- Instill trust: Ability to model 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, **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.