Job Title: Program Managers (Tokamak/Plant/Electric Power Systems/ Buildings & Site Management) IO3333

Requisition ID **7119** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Construction and Installation - 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.

ITER Organization (IO) is an Equal Opportunity/Inclusive organization committed to diversity in the workplace, with diversity and Inclusiveness being one of the ITER Values.

As IO attracts and retains people coming from a vast array of different backgrounds and cultures, bias and exclusion cannot be tolerated. IO believes it is our diverse perspectives and backgrounds that gives unique strength and value to the ITER mission, regardless of race, member nation, gender, religion, status, sexual orientation, or disability - all are welcome and respected at ITER.

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: 20/08/2023
Department: Plant Construction Department
Division: Mechanical Implementation Division
Section: Not applicable
Group: Not applicable
Job Family: Line Management and Group Leaders
Job Role: Head of Division
Job Grade: D1
Language Requirements: Fluent in English (written & spoken)
Contract Duration: Up to 5 years

Four openings

Purpose

The individual “Programs” concerned by this vacancy are:

1. Tokamak Delivery
2. Plant Delivery
3. Electric Power Systems
4. Buildings & Site Management

As Program Manager you will report to the Head of ITER Construction Project (HCP), and supervise a team of project leaders each managing a subset of the Program. Programs and projects will be up to ITER First Plasma phase, including activities necessary for post First Plasma integrated commissioning.

Overall, you will be responsible for achieving the objectives of the Program in terms of cost, schedule, and scope, including quality and performance, from design, procurement, assembly and installation of all components and systems, and commissioning to the integrated commissioning, in order to achieve successfully the critical milestone of First Plasma, in preparation of operation phase of the ITER project.

Background

The ITER Organization (IO) was established in 2007 by a formal agreement among seven Members (People's Republic of China, European Union, Republic of India, Japan, Republic of Korea, Russian Federation, and United States of America), for the joint implementation of the ITER Project. The ITER Headquarters is located at the ITER Project Site in St Paul-lez-Durance, France, and its staff of over 1,000 people come from the seven ITER Members.

ITER's mission is to demonstrate the scientific and technological feasibility of fusion energy for peaceful purposes, an essential feature of which would be achieving sustained fusion power generation. The IO is an international independent legal entity, which as the Design Authority and Owner-Operator of the ITER facility is responsible to the French Nuclear Safety Authority (ASN) for compliance with all French laws and regulations that govern nuclear safety. The IO and its industrial contractors are presently engaged in the overall construction of the ITER facility, which is truly a "mega-project" that involves not only an enormous scale of civil construction, but also the assembly and installation of various contributions of technically sophisticated components, mostly first-of-a-kind, and equipment provided by the ITER Members.

Once the ITER facility commences research operations, the IO will transition to being responsible for carrying out, together with researchers from the seven Members, the ITER Research Plan to achieve its science and technological mission.

Key Duties, Scope, and Level of Accountability

- Actively fosters integration between the IO and Members' DAs in the spirit of "one project – one team" , i.e. the ITER Integrated Project Team (IPT);
- Leads the part of the ITER IPT which belongs to the specific Program, in the construction of the ITER facility up to and including first plasma commissioning in accordance to the ITER Project Specifications and Requirements;
- Develops and maintains plans and cost estimates to completion for the whole of the Program together with the subsystems projects;
- Controls cost, schedule, and scope performance/quality of the Program;
- Assure implementation of duties / rules of Occupational and Nuclear Safety Security in all Plant Areas governed by the Program Managers Function propagating the program responsibility actions into Project leaders actions;
- Reports progress to the HCP and when required also to the Executive Project Board, formed with the Director-General (DG), Deputies to DG and the heads of the Domestic Agencies (DAs);
- Develops strategy and maintains the plans for Design, Procurement, Assembly and Installation, Commissioning and Integrated Commissioning in close collaboration with IO and DAs senior management;
- Manages the Project Breakdown Structure and the matrixed teams therein, leveraging the resources made available by the IO and any other DAs participating in the IPT;
- Ensures ITER site and configuration are managed as per the ITER Configuration Management Plan and as-built designs are recorded and maintained, in collaboration with ITER Design Integration;
- Follows up on DAs' in kind procurement activities and well as the procurement activities directly implemented by the ITER organization in collaboration with the Administrative units;
- Prepares and implements strategies, and updates real time installation plan according to the in kind contribution delivery dates, the development of processes and procedures for efficient construction management;
- Establishes and maintains a detailed construction baseline (scope, time schedule and cost), assuring surveillance, management of the execution of works, control of the cost and quality, and reporting systematically to HCP in collaboration with Safety & Quality team;
- Ensures preparation of tenders, and manages contracts within the planned production at costs respecting the authorized Contracts Values to execute the Tokamak Machine Assembly and Plant Installation, if applicable also including support to additional transversal support services such as lifting, storage and transportation;

- Executes or supports, Commissioning and Integrated Commissioning of the Tokamak Machine and Plant, following completion of leak tests, together with integrated dossier of installation completion supported by all in field engineering dossier certifying resolution of in field Non- Conformities, in field deviation request as well as in field design changes;
- Contributes to make sure that all the Plant Installation activities and the Machine Assembly are carried out in accordance with the ITER Nuclear Safety, the Environment Protection and the Occupational & Health Safety standards;
- Exercises strategic vision and sets major priorities for the Program from an engineering perspective in close collaboration with Engineering Services Department;
- Responds to emerging issues and opportunities with timely, pragmatic, and effective solutions;
- Analyzes and alerts the HCP promptly on any issues that would jeopardize the on-time accomplishment of major construction schedule milestones, scope, or impact to quality and nuclear safety requirements, while implementing appropriate risk mitigation strategies for the project in a pragmatic and proactive manner;
- May be required to work outside ITER Organization reference working hours, including nights, week- ends and public holidays.

Measure of Effectiveness

- Provides solid leadership, builds-up and manages the team to maximize human capital/people's commitment to achieving the ITER Project goals;
- Manages the Program safely, within the defined quality, scope, cost and schedule needed to construct parts of the ITER facility;
- Solves efficiently high level technical and quality control issues, mitigating risks for the Project;
- Actively represents and propagates the spirit of "one project – one team" and ensures a highly collaborative approach with the IO senior management and DAs leaders in order to manage and propel the whole ITER Project forward;
- Designs KPIs for project progress and prioritizes standards of performance, anticipating and solving major issues of engineering activities;
- Models the values and vision of the ITER project including expectations from the Code of Conduct.

Experience & Profile

- ***Professional Experience:***
  - Demonstrated engineering capacity in construction & project management abilities and successful experience within large construction, scientific or technical international projects.
  - Ability to obtain and maintain French Security clearance only for specific Programs.
- ***Education:***
  - Masters' degree or PhD degree or equivalent in engineering or management 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:***
  - Design, manufacturing in the following topics with proven high level technical competencies is considered essential, and in particular in the following subjects for each type of Program:
    - For the Tokamak Delivery Program:
      - Superconductivity and magnet technology
      - Metallic Carpentry and large structure fabrication
      - Tokamak Engineering
    - For the Electrical Power Systems Program:
      - Power supplies and converters used in superconducting magnets
      - Power Distribution systems
      - Electro-magnetic / Static Magnetic field compatibility
    - For the Plant Delivery Program:
      - Heat Rejection Systems in the nuclear field
      - Water cold sinks (nuclear primary and secondary conventional sides)

        - Vacuum System
        - Auxiliary systems of the buildings
        - Cryogenic Technologies
    - For the Buildings and Site Management Program:
        - Concrete infrastructures in the nuclear field
        - Site management of a nuclear field large installation
        - Auxiliary systems of the Buildings (HVAC, Electrical Power, gas /water lines)
        - Buildings design and erection (Concrete and steel frames)
  - Construction of research infrastructures, preferably in the nuclear fusion field including nuclear licensing process;
  - Technical project management in nuclear construction;
  - Program Management experience in large construction project with multi-national collaboration, in-kind procurement, planning, measuring progress, managing risks and costs, and reporting on progress to manage programs or initiatives within the constraints of human and financial constraints;
  - Inclusive leadership (maintaining healthy working environment), with a high level of headship for motivating and developing staff;
  - Creating an inclusive environment that promotes cross-functional analysis and effective decision making so that leaders are empowered to place decision making at the most appropriate level; Building strong partnerships and working collaboratively positively with all Project stakeholders, being force of proposal & solutions' oriented to reach consensus applied to large nuclear, fusion, fission or highly technical projects in compliance with quality, safety, security and technical applicable standards;
  - Coordinating and overseeing complex construction projects from design to operation phases while providing effective leadership in management structures in similar international or intergovernmental settings;
  - High-level strategic negotiations and influencing abilities with multi-national internal and external partners, including the ability and willingness to solicit and consider varying inputs and opinions and make appropriate recommendations/ tough decisions aligned with the ITER project's objectives;
  - Leading Quality Control (QC) within a heavily regulated nuclear environment would be beneficial;
  - Driving a project culture that underpins and maintains safe and secure working conditions and enforces the highest standard of safe, healthy, and secure work practice;
  - Knowledge of the ITER project is considered as essential.
- ***ITER Core 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 (Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members) :
  1) Nuclear Safety, Environment, Radioprotection and Pressured Equipment
  2) Occupational Health, Safety & Security
  3) Quality Assurance Processes

- 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 or Department 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.
- For staff expected to perform on-call, shift hours, or other work outside ITER Organization reference working hours, including nights, weekends, and public holidays, the possession of a driving license valid in France is required. No commuting vehicle will be provided by the ITER Organization.