Job Title: Control Systems Civil Engineer IO0144

Requisition ID **3806** - Posted **29/03/2021** - (France, 13067 St Paul Lez Durance Cedex) - **Control and Data Acquisition** - **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: 18/04/2021
Domain: Science & Operation
Department: Science,Controls & Operation
Division: Controls
Job Family: Project Engineering
Job Role: Coordinating Engineer
Job Grade: P4
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As a Control Systems Civil Engineer, you will be responsible for the interface with contractors and in-kind delivery engineers regarding control rooms, server rooms (including safety-class cubicles), and access control systems. You will translate the needs of scientific, operational, and control system staff into specifications for civil construction, including provisions for cabling, environmental control, and maintenance, as well as monitor compliance of on-going contractual and in-kind delivery activities within the specifications, and evaluate the impact of design change and supplier deviation requests. While reporting within the Controls Division, you will be strongly involved with work within the Department and in other Project Domains.

Background information:
The Controls Division is responsible for developing all control hardware, infrastructure, and software for facility control, data acquisition, and data archiving. The Division is responsible

for delivery of the Central Safety System (Nuclear and Occupational), Central Interlock System, Access Control System, the facility supervisory controls, and integration of all Plant System Controls into the Central Control System. Upcoming civil construction activity related to this position includes the Main Control Building, the Backup Control Building (Safety qualified), the Hot Cell Complex, and deployment of the Access Control System including the High-Security Fence.

Major Duties/Roles & Responsibilities

- Acts as Responsible Officer for the interface of all control systems within civil construction works, specifically including the Main Control Building, the Backup Control Building, the Hot Cell Complex, the Emergency Response Building, the Tokamak Complex, and site-wide deployment of the Access Control and Security System;
- Translates system and facility operation requirements into specifications for new civil works contracts, including overseeing generation of Engineering Work Packages;
- Participates in design reviews for civil works relevant to controls;
- Assesses the impact of change requests and supplier deviation requests on relevant civil construction works, to also propose and implement alternate solution when necessary;
- Actively engages in field surveillance of installation and commissioning activities in relevant areas, in accordance with plans and regulations;
- Supports Tokamak Complex Commissioning Responsible Officer and Integrated Commissioning Responsible Officer to ensure all control infrastructure within the Tokamak Complex is tracked and completed as required;
- Develops and implements maintenance plan for structures as required;
- 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

- Ensures the timely, reliable, and efficient specification of interfaces with control systems;
- Ensures that all designs comply with regulations and relevant industrial standards, including occupational safety, nuclear safety and environmental protection;
- Monitors and reports work progress and evolving need dates to assure the timely implementation of civil structures and related control infrastructure;
- Contributes to a safe working environment by ensuring all activities are properly authorised and tracked, in addition to monitoring worksite activities;
- Promotes continuous quality monitoring and improvement on projects, in addition to strictly monitoring quality standards and practices;
- Maintains current knowledge of regulatory requirements and status of open hold points, in close relation with Safety and Quality Department.

Experience & Profile

- ***Professional Experience:***
  - At least 10 years of experience working in civil construction and control functions in commercial, industrial, research, or other large-scale facilities.
- ***Education:***
  - Master's Degree or equivalent in Civil Engineering or similar relevant technical degree;

- The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant subjects.

- ***Language requirements:***
  - Fluent in English (written and spoken);
  - Knowledge of French would be advantageous to deal/interact with French Nuclear Safety Authority.
- ***Technical Competencies and Demonstrated Experience in:***
  - Specialized Domains of Work/Technical Expertise (civil construction related to controls):
    - Experience in demands placed by control rooms and server rooms on utilities and structures;
    - Familiarity with quality and safety standards and regulations (e.g., IEC);
    - Understanding of change management systems applied throughout the project lifecycle (design changes, supplier deviations, field changes, operational modifications);
    - Integrating human factors into control room layout and environment;
  - Delivery Execution (execute tasks with consistency, self-testing and feedback, adapting to changing contexts):
    - Combining needs of multiple users into design criteria;
    - Interaction with civil works contractors, including setting of specifications and negotiating mutually acceptable solutions;
    - Participation in design reviews;
  - Project Management and Problem Solving (reporting & control requirements, identify root causes and reach practical solutions):
    - Following civil works contracting, ensuring compliance with specifications, quality, and schedule;
    - Rapidly analyzing change requests for impact;
    - Reporting on progress and issues in a timely manner.
- ***Behavioral Competencies:***
  - Acts proactively and with a high level of autonomy;
  - 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 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.