

Title: Section Leader (Systems Engineering or Integrated Analysis) IO3333

Description:

Application Deadline: 02/08/2026

Department: Science & Integration Department

Division / Program: Central Integration Division

Section / Project:

Job Grade: P4/P5 (**SALARY SIMULATOR**)

Language Requirements: Fluent in English (written & spoken)

Contract Duration: Initial Employment Contract up to five years with possibility for extension

The selection process will be conducted with the objective of filling up to four vacant positions with also the purpose of drawing up a reserve list of rostered candidates for future vacant positions. The reserve list initially remains valid for two years, with the possibility of extension at the Director-General's discretion.

Overview

Are you looking for an exciting opportunity at the heart of an ambitious fusion energy project?

Within the Science & Integration Department (SID), the Central Integration Division (CID), as the overall system architect and design integrator of the whole ITER Plant, is responsible for the global rationale, coherence and value optimization of the design as well as functional and safety performances of the Project.

The Systems Engineering and Analysis sections provide support to design teams through systems engineering activities including configuration management, requirement management, interface management while simultaneously conducting engineering analyses essential for component and system design verification. This dual function ensures both the systematic integration of technical requirements across all ITER systems and the analytical validation of design solutions through structural, seismic, electromagnetic, and thermal-hydraulic analyses.

Join us as a **CID Section Leader** where your goals will include:

- **Leading the Section** and driving the activities.
- **Establishing and maintaining processes**, procedures and tools/systems required for the systems lifecycle control, configuration management, documents & records, items identification/control and quality control.
- **Providing leadership** by organizing, coordinating, and controlling all activities related to section deliverables.
- **Solve high-level technical, integration, systems engineering and quality control issues**, mitigating risks for the ITER Project milestones by anticipation of problems throughout the implementation of design control.

We encourage applications even if you have not (yet) experience in all areas of specializations listed below:

Systems Engineering: Supports systems engineering activities from requirements through design, integration, management and optimization of complex systems over their lifecycle.

Configuration Management: Provides, propagates and coordinates the execution of procedures and rules to assure the proper management of the technical baselines and the associated technical data, as well as the documentation produced in ITER. Coordinates change management process.

Analysis: Expertise in structural, seismic, electromagnetic, CFD and systems analyses focused both on performing global simulations of ITER and supporting stakeholders on engineering analysis topics.

Integration: Physical design integration of the ITER machine and plant by applying systems engineering approach.

Key Duties & Responsibilities

Depending on your expertise, primary responsibilities:

- Provides inclusive and effective leadership for the Section ensuring team members' activities are monitored and well-coordinated, and staff motivated and constantly developing their skills and experience.
- Establishes and maintains processes, procedures and tools/systems required for the systems lifecycle control, configuration management, documents & records, items identification and control and quality control.

- Coordinates, at the project level, the assessment of the design status, the implementation of the design control, which include design plan preparation, design input control, design verification, design issue/change control and design interface control.
- Lead the functional and physical integration of ITER systems on the basis of a sound and technically competent understanding of a fusion plant, from the establishment of project, systems and interface requirements to their validation during commissioning and operation.
- Develops and maintains the configuration 3D model of the ITER machine and plant, integrating the needed As-built information.
- Defines and implements methodologies for engineering analyses (structural, seismic, fluid dynamics, electromagnetics, etc.) and structural verification criteria.
- Manages and coordinates activities related to structural & seismic analysis, electromagnetic & fluid dynamic analysis, safety analysis & evaluation, and load specifications.
- Manages and coordinates activities related to nuclear codes & standards, and material database throughout the ITER project.
- Monitors activities related to plant and system simulations.
- Participate in the development of engineering design solutions when needed.
- Defines the business needs for the development and maintenance of IT tools allowing to integrate engineering data, documents and models and for establishing the IO engineering data management systems at the project level for design, construction, commissioning and operation phases.

Additional Responsibilities:

- Explores the use of AI tools and methods to increase the efficiency and quality of tasks.
- Coordinates and implements Quality Assurance (QA) and Quality Control (QC) requirements for procured items and engineering services requested mainly by the Engineering Domain.
- Coordinates and controls the appropriate propagation of technical and safety requirements and the implementation of transverse functions.
- In case of delays, defines and implements necessary optimizations, recovery, mitigation, or acceleration actions, develops timely, pragmatic solutions in case of emerging issues.
- Builds and maintains effective relationship with Domestic Agencies and internal and major external stakeholders for the matter of their competence.

Please note that job descriptions cannot be exhaustive, and the staff member may be required to undertake other duties, which are broadly in line with the above primary responsibilities.

This position is shift and/or on-call based, and crucial to maintaining continuous operations and ensuring the highest level of service for our stakeholders. This requires shift rotation and/or availability including day, evening, and night shifts, as well as weekends and holidays, depending upon project or team needs;

Experience & Profile

Essential:

- **Significant experience** in performing design and/or construction and/or commissioning and/or operation engineering tasks within a large complex project for at least one of the following areas:
 - **Systems Engineering:** Defining, implementing, and managing an end-to-end system and its integration, and ensuring the system meets specified requirements throughout its lifecycle.
 - **Requirements Management:** Management of requirements in terms of design and proof of compliance, guiding and/or implementing the development of System Requirement Documents (SRDs) and their maintenance in a database system.
 - **Configuration Management:** Managing the ITER configuration baselines, including configuration identification planning, identification, control, status accounting and verifications and audits.
 - **Engineering Analysis:** Knowledge of seismic analysis, electromagnetic analysis, structural analysis, thermal-hydraulic analysis and related computer code.

Desirable:

- Exposure to requirements and configuration management.
- Experience in engineering analysis of complex systems.
- Technical knowledge of the main components of a Tokamak and fusion principles, including knowledge of nuclear safety and regulatory requirements.
- Project management: Ability to define reporting and control requirements and methodology, analyze and conclude on overall project status, define and decide actions for recovery.
- Familiarity with AI tools/methods to improve efficiency.
 - Familiarity with engineering analysis software such as ANSYS (mechanical, Fluent, Maxwell), OpenFOAM, EcosimPro, MCNP, etc.

- Familiarity with software/programming languages such as C++, Python, MATLAB.
- Organizational Savvy: maneuvering comfortably through complex policy, process, and people related organizational dynamics in a culturally diverse (international) environment;
- Optimizes Work Processes: knowing or identifying the most effective and efficient processes to get things done, with a focus on continuous improvement.

Qualifications

Essential:

- Masters' degree or equivalent in engineering or other relevant discipline.

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

The following items apply to all jobs and job holders for the duration of tenure at ITER Organization:

- **The CARE Values are a framework of principles that guide our actions and define the culture and spirit of the ITER Project:**

Collaboration: We collaborate with commitment and flexibility using the power of teamwork, building partnerships, and working with others to reach shared objectives;

Accountability: We are accountable for the whole project - we take responsibility for our specific actions and are transparent in our daily work, holding self (ourselves) and others accountable to meet commitments;

Respect: We treat each other with respect and dignity at all times, knowing that all of us belong here. We appreciate the value that our multicultural and diverse community brings to the ITER Project;

Excellence: We are driven by excellence; we are agile and innovative while maintaining the highest standards of safety, quality and integrity;

- **ITER Core Technical Competencies:**

1) **Nuclear Safety, Environment, Radioprotection and Pressured Equipment**

2) **Occupational Health, Safety & Security**

3) **Quality Control & 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 perform other duties in support of the project as defined by your line manager, and when relevant upon the request of the matrix manager;
- May be requested to work outside the ITER Organization reference working hours, including nights, weekends and public holidays, due to business needs - this may include on-call, shift work, etc.
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- 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.**
- Informs management of any important and urgent issues that cannot be handled by line or matrix management and that may jeopardize the achievement of the Project's objectives;