

Job Title: Systems Engineer, Functional Integration IO0218 & IO0252

Requisition ID **8305** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems - New Posting**

Fusion, the nuclear reaction that powers the sun and the stars, is a promising long-term option for a sustainable, non-carbon emitting global energy supply.

The ITER Organization (IO), based in the southern France, welcomes best talents who can together prepare the way to this new energy in a truly multi-cultural work environment.

We offer challenging assignments in a wide range of areas and encourage applications from candidates with all levels of experience. Applications from under-represented ITER Members' nations and women candidates are strongly encouraged, as IO strongly believes that a diversified, equitable, and inclusive workplace is crucial in solving one of the most complex scientific and engineering projects in the world today.

As the IO attracts and retains people coming from a vast array of different backgrounds and cultures, discrimination and exclusion cannot be tolerated. The IO believes it is our diverse perspectives and background 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. The IO is committed to fostering a fair and equitable environment across all areas of the project, including compensation and benefits.

ITER CARE Values (Collaboration / Accountability / Respect / Excellence):

We perform our work with care, we care for the well-being of colleagues, our families and ourselves, and we care about the health of the planet for generations to come. CARE drives our work and our behaviors at ITER.

To see why ITER is a great place to work, please look at this [video](#)

Application Deadline: 12/04/2026

Department: Engineering Services Department

Division / Program: Fusion Technology - I&C Division

Section / Project: Fusion Technologies Section

Job Grade: P1/P2 ([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 the below vacant position 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.

Please note that the entry grade of this position begins at P1 and the final grade offered to the selected candidate is subject to the decision of the IO Director General.

Overview

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

Join our Fusion Technology and I&C Division (FTIC) Division, within the Engineering Service Department (ESD) as a Systems Engineer, Functional Integration

As a **Systems Engineer, Functional Integration**, your goals will include:

- Ensuring functional integration by managing technical requirements.

- Ensuring deliverables are produced according to project schedule and budget, within a quality-assured environment that requires rigor and a systematic way of working.
- Developing, under the leadership of your discipline manager, your skills and experience for the benefit of the Project.

The Engineering Services Department (ESD) provides the required skilled engineering resources or services, which are necessary for the successful completion of the ITER Project.

FTIC Division provides technical support to the ITER project in the field of design, analysis, and lifecycle management of critical fusion and I&C systems.

Being a member of the FTIC Division, you will have the opportunity to share and develop your expertise with other colleagues working in the same discipline on different ITER units.

Key Duties & Responsibilities

Primary Responsibilities

- Is responsible for the functional integration of one or several systems across the entire lifecycle.
- Authors and/or reviews requirements documentation and interface documentation.
- Ensures that the system's design fulfills all technical requirements in the context of the global ITER environment.
- Performs configuration management tasks including the technical assessment of Project Change Requests (PCRs), Design Reviews (DRs), and Non-Conformance Reports (NCRs).
- Identifies and resolves transverse technical issues and functional integration challenges, ensuring compliance with design standards and project requirements.

Additional Responsibilities

- Partners with technical units in preparing design gate reviews to verify the functional integration of the system and the requirements implementation.
- Manages the optimization of design requirements and ensures that transverse requirements are well defined and implemented in the design.
- Supports the validation of requirements during commissioning according to the scope of activity's final design phase.
- Provides expert criteria for functional integration-related problems and follows up on the resolution of the field engineering changes and installation non-conformances.

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 & Competencies

Essential:

- **Proven experience** in design and functional integration of nuclear systems within a large international nuclear project.
- **Systems Engineering and Functional Integration:** defining, implementing, and managing an end-to-end system and its functional integration, and ensuring the system meets specified requirements throughout its lifecycle, managing associated risks and changes.
- **Nuclear engineering;** applying nuclear principles to engineering activities such as design, analysis, and operation of systems and processes.
- **Problem Solving:** assess problems, identify root causes, and propose solutions to reach project objectives within time and cost.
- **Technical Resolution:** Technical coordination of transverse technical topics to ensure global functional integration for the scope of activity.
- **Codes and Standards:** Understanding and applying industry, discipline or job-specific codes, standards, and regulations to ensure that products, services, and processes comply with applicable requirements and legal frameworks.

- **Continuous Improvement:** proposing changes to processes and systems to enhance efficiency, quality, and productivity over time.
- **Quality Management Systems (QMS):** apply the applicable procedures related to your field of activity.

Desirable:

- **Software** for requirements management software and/or plant life cycle management.
- **Reporting, Follow-up, and Management of Actions:** summarize and communicate in writing to a large audience on processes, procedures, reports, technical assessments, engineering documents, record, check and ensure implementation based on evidence.
- **Scope Management:** Defining, controlling, and managing the work scope of a project or activity, planning, measuring, and reporting on progress, including the identification and management of risks and changes.
- **Organizational Savvy:** maneuvering comfortably through complex policy, process, and people related organizational dynamics.
- **Optimizes Work Processes:** knowing or identifying the most effective and efficient processes to get things done, with a focus on continuous improvement.

Qualifications

Essential:

- Master's degree or equivalent in Mechanical, Process of Nuclear Engineering field or other relevant discipline.

Desirable:

- INCOSE certification, PMP certification, or similar.
 - *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;

The ITER Organization (IO) is an Equal Opportunity organization committed to diversity and inclusive in the workplace.