# Job Title: System Engineer (Functional Analysis & Integration) IO0767&IO0493&IO0357

Requisition ID **7542** - 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 will 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.

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:** 08/09/2024
**Department:** Science & Integration Department
**Division / Program:** Central Integration Division
**Job Family:** Engineering
**Job Role:** Engineer – 2
**Job Grade:** P2/P3
**Language Requirements:** Fluent in English (written & spoken)
**Contract Duration:** Initial Employment Contract up to five years with possibility for extension
**Overview**

**Do you have an interest in system integration?** Join the Central Integration Division which is in charge of ITER system(s) integration.

**As a System Engineer, your goals include:**
- Performing functional analysis within defined timelines;
- Ensuring functional integration by managing the technical requirements;

**Success in this role includes:**
- Authoring or reviewing the requirements documentation to identify/develop (interface) requirements and demonstrate that they are fulfilled (up to commissioning);
- Supporting the technical teams with the preparation of their Project Gate Reviews;
- Solving transverse technical issues.

**Key Duties, Scope, and Level of Accountability**
- **Primary Responsibilities**:
- Oversees the functional integration of one or several process and/or mechanical systems;

- Leads configuration management tasks, including the technical assessment of Project Change Requests, Deviation Requests and Non Conformance Reports;
- Authors and/or reviews the requirements documentation to manage the comprehensive system life cycle requirements (definition, propagation, verification and validation);
- Authors and/or reviews the interface requirements to ensure that the system of interest is properly integrated with the interfacing systems.
- Reviews and refines of the Input Document Package for the Project Gate Reviews;
- **Additional Responsibilities:**
- Partners with Design Team to prepare the design gate reviews to verify the functional / physical 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;
- Participates in the validation of requirements during commissioning.

## Experience & Profile

- *Demonstrated experience and technical competencies in:*
- **P2: Minimum 5 years'** experience in the field of design and/or implementation of systems within a large international nuclear project
- **P3: Minimum 8 years'** experience in the field of design and/or implementation of systems within a large international nuclear project.
- *Essential competencies and experience required for the success in the role:*
  - Systems Engineering and Integration: defining, implementing, and managing an end-to-end system and its integration, and ensuring the system meets specified requirements throughout its lifecycle, managing associated risks and changes;
  - Safety Analysis: systematically identifying the hazards of a given operation, including a description and assessment of the adequacy of measures taken to eliminate, control, or mitigate the hazards and risks of normal operation, and identification and analyses of potential accidents and their associated risks.
  - Nuclear engineering; applying nuclear principles to engineering activities such as design, analysis, and operation of systems and processes
  - 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;
  - Problem solving: assess problems, identify root causes, and propose solutions to reach project objectives within time and cost;
- *Advantageous competencies and experience:*
  - Knowledge of requirements management software and a plant life cycle management software
  - 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;
- *Education:*
  - **Essential:** Master's degree or equivalent in mechanical, process or nuclear engineering;
  - **Advantageous:** INCOSE certification, PMP certification, or similar.
  - 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).

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*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.