

## Remote Handling Engineer

**TKM-094** 

Reports to Line Manager: Remote Handling Section Leader, Assembly & Maintenance Division, Job Code: TKM-094

Tokamak Division

**Direct Employment:** Not Required **Grade:** P4

### **Purpose**

To support the Leader for the ITER Remote Handling (RH) Section in matters related to ITER RH System design: systems engineering, control system design, remote operations requirements, analytical support, procurement arrangement specifications, procurement project management, and coordinating the ITER RH equipment procurement with the Domestic Agencies (DAs).

# Major Duties/Responsibilities

china

india

japan

korea

russia

usa

• Supports the ITER Remote Handling Section Leader in all matters related to the management and technical coordination/integration of the project;

- Provides a lead on high and low level control system design and implementation activities across the ITER RH systems;
- Manages the administrative aspects associated with the ITER RH control system design, R&D, and procurement arrangement specifications;
- Coordinates horizontal system engineering activities across the ITER Remote Handling systems: Design Process Quality, Standardization, Safety Analysis, Acceptance Tests, and Integration;
- Ensures that the ITER RH systems design meets the requirements for the ITER machine remote maintenance;
- Effectively interfaces with the ITER Domestic Agency Responsible Officers for procurement to address control and systems engineering issues;
- Manages the administrative aspects associated with the ITER Remote Handling control system design, R&D, procurement arrangement specifications;
- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.

# Qualifications and Experience

#### Education:

Degree at least equivalent to 6 years of study after the High School Diploma, in Engineering,
Technology or other relevant discipline.

#### • Technical experience:

- At least 12 years' experience in Remote Handling engineering on a large nuclear fusion facility and having a strong foundation in robotics theory and standards;
- Experience in the design and development of control systems for remote handling/robotic devices for nuclear or fusion facilities;



- Experience in the operation and maintenance of Remote Handling systems while carrying out extended maintenance shutdowns of nuclear fusion facilities;
- Experience with the software and hardware tools required for the high-level coordination and operation of a Remote Handling system: command & control interfaces, master devices, virtual reality, procedure management, equipment management, viewing, condition monitoring;
- Experience with equipment control analysis, performance modelling, and use of simulation tools for system specification and analysis;
- Knowledge of the full life-cycle of ITER Remote Handling systems and the processes for designing a facility for ITER Remote Handling compatibility would be an advantage;
- Experience with the layout and operational requirements of an ITER Remote Handling control room would be an advantage;

## • Project experience

 Demonstrated capability to work in a design team and coordinate the activities of multidisciplinary and geographically dispersed personnel on a complex developmental project;

#### Social Skills

- Experience working in an international environment and ability to co-operate and work as part of a team;
- Excellent capability to interact with experts from different disciplines.

### • Language requirements

- Fluent in English (written and spoken).

### Computer and IT skills

- Consistent with managing a complex developmental project.

## **Direct Supervisor and Interfaces**

- Reports to the ITER Remote Handling Section Leader;
- Interfaces with all other departments within the ITER Organization as required.

# Authority / Approval Levels

This position has authority and approval levels generally defined by the DDG for the Tokamak Department for his/her scope of work.

### Measures of Effectiveness

- Successfully collaborates with the ITER machine component designers to optimize both component and remote maintenance equipment design and performance;
- Successfully supports the ITER Remote Handling & Maintenance team;
- Successful completes the tasks assigned above under "Main Duties/Responsibilities" (particularly, to provide effective cost/schedule/procurement management, and to effectively interface with the ITER DAs).
- Enforces and maintains the ITER Quality Assurance Program and safety requirements.