TITLE: Remote Handling Engineer		TKM-083
<b>REPORTS TO LINE MANAGER:</b> Leader of the Remote Handling Section, Assembly and Maintenance Division, Department for Tokamak		
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE RANGE: P3-P4
DATE WRITTEN: June, 2008	<b>DATE REVISED:</b> July 2008	DATE REVISED:

## **Purpose:**

- To support the Leader for the Remote Handling Section in matters related to Remote Handling design, R&D, procurement specification preparation and procurement project management, including coordination of international cooperation on remote handling equipment procurement;
- To implement and use all the tools necessary to successfully manage the project. To enforce and maintain effective configuration control on associated systems;
- To provide effective cost/schedule/procurement management;
- To enforce and maintain QA program and safety requirements;
- To effectively interface with the Domestic Agencies.

### Main Duties/Responsibilities:

- Supports the Remote Handling Section Leader in all matters related to the management and technical coordination/integration of the project;
- Ensures that the Remote Handling systems design meet the requirements for the ITER machine remote maintenance;
- Technically coordinates horizontal integration activities within the project;
- Executes those Remote Handling equipment design activities needed prior to and following placement of procurement contracts;
- Executes Remote Handling equipment operations and operation logistics assessments;
- Enforces and maintains effective configuration control on Remote Handling equipment interfacing systems;
- Manages the administrative aspects associated with the Remote Handling equipment design, R&D, procurement specification preparation. Effectively interfaces with ITER Domestic Agencies responsible for procurement;
- Maintains a strong commitment to the implementation and perpetuation of ITER safety program, values and ethics.

# **Qualifications and Experience:**

### • Education:

- University degree (preferably higher) in Engineering, Technology or equivalent.
- Experience:
  - At least 5 years' experience in the technical integration/coordination for the construction of large (science or industry) projects;
- Experience in working in an international environment and ability to co-operate and work as part of a team;

- Good technical experience in the field of fusion technology and/or nuclear devices. Working experience at one or more major fusion reactor device(s) is an advantage;
- Experience in the analysis of the requirements of operations to be carried out by remote operated/robotic systems in fusion and/or nuclear devices;
- Experience in the design, development and operation of remote operated/robotic systems for fusion and/or nuclear devices;
- Ability to assess and modify, if required, the existing remote handling equipment design and the ITER machine components design for remote handling equipment maximum operational reliability and efficacy;
- Ability to plan and find effective solutions for the remote handling equipment recovery from failure, regular maintenance and repair;
- Ability to use a) Failure Mode Effect Analysis (FMEA) and rescue for complex systems,
  b) Reliability, Availability, Maintainability, Inspect ability (RAMI) Analysis, c) Fault Tree Analysis (FTA);
- Experience in preparing and monitoring design, research and/or manufacturing contracts in an international environment;
- Experience in the mechanical design and development of remote handling devices;
- Experience in design and development of 3D graphic based interactive simulators for remote handling equipment;
- Experience in design and development of devices for remote inspection. Experience in the design and testing of viewing and inspection devices in the nuclear environment is an advantage;
- Knowledge of radiation hardness requirements and testing experience is an advantage.
- Language requirements:
  - Excellent knowledge of the English language, both written and spoken.

# Work Management structure and Interfaces:

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

### Authority/Approval Levels:

Has authority and approval levels generally defined by the DDG for his/her scope of work.

### **Measures of Effectiveness:**

- Successfully communicates with the ITER machine component designers to optimize both component and remote handling maintenance equipment design and performance;
- Successfully supports Remote Handling Section colleagues;
- Successfully completes the tasks assigned under "Main Duties / Responsibilities" above.