

ITER 국제기구 공모 직위 직무기술서 (제181차)

○ 4개 직위

구분	분야	소속	직위	Job No.	등급
①	중앙통합 (CIO)	Central Integration Office Design & Construction Integration Division	Integration Section Leader	CIO-014	P5
②				CIO-086	P5
③	플랜트 엔지니어링 (PED)	Fuel Cycle Engineering Division Vacuum Section	Vacuum Process Engineer	PED-076	P4
④	과학·운전 (SCOD)	Control System Division Plant Control & Instrumentation Section	Interlock Systems Engineer	SCOD-021	P3

IO1809 Integration Section Leaders - CIO-014 & 086

General information

Job category	Standard
Status	Published
Department	CIO/ Central Integration Office
Division	CIO / Design & Construction Integration Division

Job description

Main job	Executive Management - Executive Management
Title of the position	Integration Section Leaders - CIO-014 & 086
Job family	Section Leader
Grade	P5
Direct employment	Required
Purpose	<p>Opening of two positions to manage, depending on the assignment, the System Integration Section (SIS), or the Design Integration Section (DINS) within the Design & Construction Integration Division (DCIN) as part of the Central Integration Office (CIO) respectively to whole ITER project functional and physical integration.</p> <p>-To support the Head of the Design & Construction Integration Division in all matters related to the design and systems integration;</p> <p>-To manage and coordinate all activities related to systems functional & physical integration, engineering, control of the interfaces, implementation of Safety requirements, interfaces for construction and finally integrated commissioning & operation of the ITER project;</p> <p>-To resolve remaining transverse issues and to develop alternative design options;</p> <p>-To manage Transverse Functions</p>
Main duties / Responsibilities	<p>-Manage System Integration Section or Design Integration Section for the implementations of the roles and responsibilities, for the control of the scope, budget and schedule;</p> <p>-Supervise staff and coordinates and supports the activities of respective System Integration Section and Design Integration Section;</p> <p>-Provide effective leadership for the Sections ensuring team members are motivated and constantly developing their skills and experience, and manages the resourcing plan;</p> <p>-Are responsible for implementing Systems Engineering processes, including transverse functional analysis, propagation of requirements in the design together with design control, implementation of transversal functions and control of respective functional integration (SIS) & physical integration (DINS);</p> <p>-Are responsible for coordinating and controlling the appropriate propagation of all technical and safety requirements in the new staged approach 2016 baseline;</p> <p>-Assure design control and configuration management in line with approved procedures and engineering plan;</p> <p>-Are responsible for controlling and mitigating any major technical risks that could affect performances of the project or its integrated master schedule;</p> <p>-Collaborate closely with the Safety Department for the implementation and validation of the Safety Requirements;</p> <p>-Maximize human capital and people's commitment to achieving the IO goals;</p> <p>-Perform other duties linked to the above purposes upon management request, as necessary.</p> <p>-Provide leadership in safety;</p> <p>-Build and maintains effective relationship with Domestic Agencies, Project Teams and internal and major external stakeholders for the matter of their respective competences;</p> <p>-May be requested to be part of any of the project/construction team and to perform other duties;</p> <p>-Maintain a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>-Reports to the CIO Design & Construction Integration Division Head;</p> <p>-Collaborate closely with Construction Department in line with the new in place Construction Organization of the ITER project.</p> <p>-Collaborate with Science and Operation Department in the preparation and the integrated Commissioning of Tokamak Machine and Plant Systems;</p>

Measures of effectiveness	<ul style="list-style-type: none"> -In response to requests from the Director-General and/or CIO Head, or proactively, informs the DG / CIO Head, of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.
	<ul style="list-style-type: none"> -Builds-up and manages efficiently the respective SIS or DINS sections to fulfill the functions and missions as described above; -Establishes a collaborative attitude with all involved Organizations; -Successfully generates and maintains trustworthy, up-to-date information related to the machine's technical scope; -Effectively manages and promptly resolves respectively functional and physical interface issues; -Successfully supports the DCIN Division Head and other ITER Engineering Departments in implementing the ITER technical scope and tracking design work progress; -Successfully maintains effective communication with all Organizations interfacing with ITER; -Responsible for implementation of safety nuclear regulation and other safety standards of their respective Section's work; -Responsible for adherence to technical standards.
Project Construction Phase	

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Engineering, design & construction fields or other
Level of experience	At least 10 years
Technical experience/knowledge	<ul style="list-style-type: none"> -Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree; -Knowledge of the ITER design & configuration in addition to the functional and engineering aspects of the main Tokamak systems design is considered as an advantage; -Good knowledge of nuclear plant design, quality assurance program, especially the design control and configuration management processes and implementation; -General knowledge of nuclear safety regulations, codes and standards.
Social skills	<p>Ability to work in a team and to promote team spirit, Ability to communicate effectively</p> <ul style="list-style-type: none"> -At least 10 years' experience in the systems engineering design and integration of large scientific and/or nuclear projects; -Experience in the implementation of engineering integration / construction related to nuclear/fusion projects, or excellent familiarity with complex engineering / construction programs; -Experience in design control and/or configuration management processes in nuclear/fusion projects, or equivalent complex projects, Experience in the construction and commissioning of nuclear/fusion facilities,;
General skills	<ul style="list-style-type: none"> -Experience in Quality Assurance and high level nuclear quality standards implementation; -At least 5 years' experience in an engineering managerial position, preferably in a nuclear industry environment; -Demonstrated ability to lead a multidisciplinary team; -Ability to provide effective leadership; -Ability to motivate and develop the team members' skills and experience.
Languages	English (Fluent)
Specific skills	<p>MS Office standard (Word, Excel, PowerPoint, Outlook)</p> <ul style="list-style-type: none"> -Excellent communication skills; -Capable of resolving conflicts and managing technical discussion towards achieving the results desired;
Others	<ul style="list-style-type: none"> --Skills consistent with managing a complex developmental project and databases related to design, engineering and project management like DOORS, ENOVIA, PLM system.

IO1811 Vacuum Process Engineer - PED-076

General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Fuel Cycle Engineering Division
Section	PED / FCED / Vacuum Section

Job description

Main job	Engineering - Vacuum technologies
Title of the position	Vacuum Process Engineer - PED-076
Job family	Coordinating Engineer
Grade	P4
Direct employment	Not required
Purpose	<ul style="list-style-type: none">-To design, procure and prepare the installation and commissioning of the ITER mechanical roughing system.-To implement the necessary vacuum standards.
Main duties / Responsibilities	<ul style="list-style-type: none">-Develops and follows the Procurement Arrangement for the manufacture of the mechanical roughing system;-Manages contracts for mechanical roughing pump development and validation;-Manages the control points in manufacturing and inspection plans;-Identifies and surveys critical activities in the manufacturing of the mechanical roughing systems;-Maintains and coordinates the interfaces of the roughing system;-Prepares schemes and procedures for the installation of the roughing room;-Prepares the commissioning procedures, operational schemes and maintenance scenarios to ensure the roughing system will operate reliably;-Performs and coordinates the commissioning of the roughing system;-Builds the safety cases for the operations of the roughing system;-Performs other duties in support of the project schedule;-May be requested to be part of any of the project/construction teams and to perform other duties;-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	<ul style="list-style-type: none">-Reports to the Vacuum Section Leader;-Acts as an interface between Vacuum and other technical sections in the ITER Organization (IO) and with Domestic Agencies (DAs) and contractors;-In response to requests from the Director-General and/or Plant Engineering Department (PED) Head, or proactively, informs the DG/Director of Head of PED of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.-Progresses contracts according to schedule ;-Achieves components fabrication , installation and testing in line with ITER planning;-Controls interfaces and integrates vacuum components and systems with other pertinent ITER systems;-Coordinates and directs efforts of the IO and the DA's in respect to achieving component deliveries;-Communicates effectively with other Section in ITER on vacuum related issues.
	Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
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Diploma	Mechanical eng. or other relevant discipline
Level of experience	At least 10 years
Technical experience/knowledge	<ul style="list-style-type: none"> -Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree; -At least 10 years' mechanical engineering experience; -At least 5 years' experience in mechanical vacuum pump development or other relevant rotating machines; -Excellent knowledge in vacuum and mechanical vacuum pump design; -Knowledge of gas dynamics and light gas pumping; -Knowledge in the preparation of technical specifications. -Experience of working with pressure equipment directives and standards; -Experience in handling hydrogen or other hazardous gasses; -Experience of engineering for in harsh and nuclear environments; -Experience in commissioning preferable of vacuum systems. -Experience in managing manufacturing contracts for high technology components; -Project Management experience is required.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Fluent)
Specific skills	Computer Aided Design, MS Office standard (Word, Excel, PowerPoint, Outlook)

IO1810 Interlock Systems Engineer - SCOD-021

General information

Job category	Standard
Status	Published
Department	SCOD / Science & Operations Department
Division	SCOD / Control System Division
Section	SCOD / CSD / Plant Control & Instrumentation Section

Job description

Main job	Engineering - Control system
Title of the position	Interlock Systems Engineer - SCOD-021
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>-To contribute to the construction, installation and commissioning of the ITER Central Interlock Systems (CIS).</p> <p>-To coordinate the technical works carried out by the different industrial suppliers. To provide technical expertise to the various plant system responsible officers in IO (Central Team and Domestic Agencies) and their suppliers in order to ease and ensure the correct integration of all the ITER interlock components.</p> <p>-To implement the global dependability analysis, standards and guidelines for the ITER interlock systems within the project, including all the in-fund and in-kind plant systems playing a role in the overall ITER machine protection strategy.</p>
Main duties / Responsibilities	<p>-Leads the Factory and Site Acceptance Tests of the CIS components and sub-systems delivered by industrial suppliers, and takes the necessary steps to ensure that acceptance tests are successfully performed by providing, if required, corrective actions;</p> <p>-Coordinates the CIS suppliers in order to ensure that deliverables are provided in accordance to scheduled milestones;</p> <p>-Maintains and propagates the ITER guidelines and standards for the implementation of interlocks across all the ITER Project;</p> <p>-Develops and updates when necessary a comprehensive and exhaustive dependability analysis of the Interlocks Control System providing input to the design, construction and operation of the CIS and the Plant Interlock Systems;</p> <p>-Participates in the ITER Machine Protection Panel as dependability expert and leader of the overall machine protection reliability analysis, providing technical advices and guidance on the area to the involved plant systems when required;</p> <p>-Supports the Control Systems Division as interlocks instrumentation and controls expert during the reception and integration of the different Plant System I&C, ensuring the correct implementation of investment protection guidelines;</p> <p>-Performs other duties in support of the project schedule;</p> <p>-May be requested to be part of any of the project/construction team and perform other duties;</p> <p>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>-Reports to the Plant Control and Instrumentation Section Leader;</p> <p>-Interacts frequently with plant system responsible officers within the ITER Organization Central Team as well as in the Domestic Agencies;</p> <p>-In response to requests from the Director-General and/or the Head of Science and Operations Department, or proactively, informs the DG/ the Head of Science and Operations Department of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p>
Measures of effectiveness	<p>-Delivers and maintains a complete dependability analysis of the Interlock Control System on schedule;</p> <p>-Conducts efficiently Factory and Site Acceptance Tests of CIS components;</p> <p>-Participates and provides advice to the Machine Protection Panel as dependability expert within</p>

the defined schedule;
 -Contributes effectively to the integration of local plant interlock systems in the Central Interlock Systems;
 -Keeps the relevant documentation up-to-date.

Project Construction Phase

Applicant criteria

Level of study	Master or higher degree
Diploma	Engineering specialized in control systems field
Level of experience	At least 8 years
Technical experience/knowledge	<p>-Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree.</p> <p>-At least 8 years' experience in the field of control systems related to machine protection;</p> <p>-Experience in Validation & Verification methods, RAMI analysis and similar dependability techniques;</p> <p>-Knowledge of international standards applicable to machine protection, e.g. IEC 61508;</p> <p>-Experience in Factory and Site Acceptance testing of control system components and systems;</p> <p>-Experience in integration and operation of fusion devices, particle accelerators, power plants or large scientific facilities;</p> <p>-Experience in the construction/integration/operation of a scientific or technical facility;</p> <p>-Experience working in an international environment;</p> <p>-Good Project Management experience is required.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	-Excellent computer and IT skills are mandatory.
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)