

ITER 국제기구 공모 직위 직무기술서 (제158차)

○ 2개 직위

구분	분야	소속	직위	Job No.	등급
①	중앙통합 (CIO)	Design Integration Division System Integration Section	Integrated Cryogenic System Engineer	CIO-076	P3
②	토카막 엔지니어링 (TED)	Magnet Division Superconductor Systems & Auxiliaries Section	Superconducting Magnets Officer	TED-091	P2

IO1741 Integrated Cryogenic System Engineer - CIO-076

General information

Job category	Standard
Status	Published
Department	CIO/ Central Integration Office
Division	CIO / Design Integration Division
Section	CIO / DIN / System Integration Section

Job description

Main job	Engineering - Cryogenics
Title of the position	Integrated Cryogenic System Engineer - CIO-076
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<ul style="list-style-type: none">-To oversee the functional integration of the whole Integrated Cryogenic System, including the interfacing systems as clients;-To implement the whole Systems Engineering processes, including the project requirements technical management, the design development, the verification and the validation (including design, installation and commissioning phases) of the integrated system;-To prepare and perform functional test and the integrated commissioning of the Integrated Cryogenic System with clients;-To assume any other duty related to functional analysis, simulation studies and integration of the Integrated Cryogenic Systems.
Main duties / Responsibilities	<ul style="list-style-type: none">-Implements the Systems Engineering processes, including functional, requirements flow-down, design control for the transverse functions, for the Integrated Cryogenic System;-Guarantees the correct and shared update of the functional interfaces for the whole Integrated Cryogenic System;-Is responsible for the integration of the Integrated Cryogenic System in the ITER Plant, taking into account the environmental constraints;-Implements the project requirements in the baseline of the Integrated Cryogenic Systems;-Is responsible for guaranteeing the functional integration of the design deliverables of the Integrated Cryogenic System, e.g. Process Flow Diagrams and Piping and Instrumentation Diagrams, through the whole lifecycle of the integrated system;-Develops and implements the verification and validation plan for the Integrated Cryogenic System;-Develops the organization of the turnover to machine Operation Team through functional test and commissioning plan of the Integrated Cryogenic System in cooperation with the Science and Operation and the Safety Departments;-Coordinates the Document Production Plan for the functional integration of the Integrated Cryogenic System;-Collaborates with the systems Responsible Officers in implementing the functional integration of the Integrated Cryogenic System;-Participates to the systems integration review meetings in order to verify the implementation of the requirements and advises on corrective actions, when necessary;-May be required to work shifts during the ITER assembly and commissioning phase;-Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;-May be requested to be part of any of the project team and perform other duties upon management request;-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics. <ul style="list-style-type: none">-Reports to the System Integration Section Leader;-Interface closely with the Safety Department, Plant Engineering Department, Tokamak Engineering Department and other ITER Departments and Project Teams;-Acts as an interface between the Central Integration Office, the technical responsible officers within IO and Domestic Agencies, and contractors;

Measures of effectiveness	<p>-In response to requests from the Director-General (DG) and/or Central Integration Office (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.</p> <p>-Maintains the functional integration of the Integrated Cryogenic System; -Ensures the proper implementation of the project requirements; -Implements the engineering processes for the Integrated Cryogenic System; -Prepares and performs the functional test of the Integrated Cryogenic System.</p> <p>Project construction phase SAP ID: 50003075</p>
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Applicant criteria

Level of study	Master or equivalent degree
Diploma	Cryogenics, mechanical, nuclear or other relevant
Level of experience	At least 8 years
Technical experience/knowledge	<p>-Good knowledge of cryogenics and nuclear design code and standards; -Good knowledge of functional integration and commissioning of large plant system; -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>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit, Ability to communicate effectively, Good planning and organisational skills</p>
General skills	<p>-At least 8 years' experience in the System Engineering of complex projects; -Large Experience in Cryogenics Engineering of complex systems and projects; -Experience in design, procurement, construction and commissioning; -Good Project Management experience is required; -Knowledge of both international and French nuclear regulation, codes & standards is considered as an advantage; -Knowledge of nuclear safety and regulatory requirements is considered as an advantage.</p>
Languages	English (Fluent)
Specific skills	<p>MS Office standard (Word, Excel, PowerPoint, Outlook)</p> <p>-Excellent capability to interact with experts from different disciplines; -Organizational skills and autonomy for his/her of responsibility; -Ability to work effectively in a multi-cultural environment;</p>
Others	<p>-Ability to work in a team and to promote team work; -Flexible and proactive approach oriented on problem solving</p> <p>-Excellent knowledge of the Microsoft Office package; -Knowledge of computational software for simulation studies.</p>

IO1740 Superconducting Magnets Officer - TED-091

General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Magnet Division
Section	TED / MAG / Superconductor Systems & Auxiliaries Section

Job description

Main job	Engineering - Mechanics
Title of the position	Superconducting Magnets Officer - TED-091
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>Under the supervision of the magnet instrumentation and control responsible officer, to:</p> <ul style="list-style-type: none">-Lead the magnet Low Voltage instrumentation for assembly, test and commissioning activities;-Update and maintain all relevant documentation;-Plan all related assembly and commissioning activities;-Coordinate and guide technicians and monitor deliverables from the service contracts involved in these activities.
Main duties / Responsibilities	<ul style="list-style-type: none">-Takes responsibility of the magnet LV instrumentation procurement contracts;-Leads the magnet LV instrumentation chain reception tests and the integration to the magnet control system including the application software development;-Specifies and oversees the creation and updates of electrical diagrams and cable routing drawings for magnet LV instrumentation;-Leads the definition of the magnet LV instrumentation installation and test procedures;-Leads the quality control tests on magnet LV instrumentation at on-site installation;-Leads the commissioning of the magnet LV instrumentation including the CODAC interfaces;-Checks and ensures maintenance of relevant ITER databases;-Monitors related service contracts including visits and deliverables;-Communicates with other organizations within the ITER collaboration and the fusion community;-Supports effective risk identification and management;-Maintains related documentation at all times on the ITER Document System and ensures it is updated and in the correct formats;-Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;-May be requested to be part of any of the project team and perform other duties upon management request;-Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics. <p>-Under the supervision of the Magnet instrumentation Responsible Officer, reports to the Superconductor Systems & Auxiliaries Section Leader.</p> <p>-Acts as an interface between other Departments as required by the magnet design, in particular with the Electrical Engineering Division and the Control System Division for the magnet LV instrumentation scope.</p> <p>-In response to requests from the Director-General and/or Head of Tokamak Engineering Department (TED), or proactively, informs the DG/ Head of TED 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	<ul style="list-style-type: none">-Work packages completed to agreed deadlines.-Developed and approved interface documentation, schematics plans and databases;-Developed and approved technical documentation for installation and commissioning phase;-Developed and approved installation plans;-Successful collaboration with technical partners in Magnet, Domestic Agencies and other

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Mechanical, Cryogenics, Instrumentation/Electronic
Level of experience	At least 5 years <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 5 years' experience in mechanical instrumentation and/or in cryogenic instrumentation. Experience in the two domains will be an advantage.
Technical experience/knowledge	<ul style="list-style-type: none"> -Documented experience in the domain of mechanical and/or thermodynamic measurement techniques applied in superconducting magnets environments; -At least 3 years' experience in a fusion-related field; -Knowledge of Electromagnetic Compatibility issues for instrumentation and measurements conducted in harsh environments will be an advantage; -Project Management experience is required; -Experience with the technical follow-up of CAD activity; -Familiarity with electrical diagrams and 3D models; -Good understanding of an engineering document plan; -Proven presentation writing skills.
Social skills	Ability to work in a team and to promote team spirit, Ability to communicate effectively
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> -Good command of the Microsoft Office package. -Knowledge of engineering databases will be an advantage.