

## ITER 국제기구 공모 직위 직무기술서 (제224차)

### ○ 5개 직위

구분	분야	소속	직위	Job No.	등급
①	건설 (CST)	Construction Department Tokamak Assembly Division	Organizational Support Manager	CST-090	P5
②	중앙통합 (CIO)	Central Integration Office Analysis Section/Division	Structural Analysis Mechanical Engineer	CIO-075	P2
③	안전 (SD)	Environmental Protection & Nuclear Safety Division Safety Analysis & Assessment Section	Environmental Engineer	DS-044	P2
④	플랜트 엔지니어링 (PED)	Electrical Engineering Division Cable Management Sub-Section	Cable Engineering Technician	PED-144	G5
⑤				PED-148	G5

# IO1922 Organizational Support Manager - CST-090

## General information

Job category	Standard
Status	Published
Department	CST / Construction Department
Division	CST / Tokamak Assembly Division

## Job description

Main job	Engineering - Generalist
Title of the position	Organizational Support Manager - CST-090
Job family	Expert Engineer
Grade	P5
Direct employment	Not required
Purpose	<p>In support of the Head of Tokamak Assembly Division (TAD), prepares and implements a robust strategy to ensure that all the Tokamak Assembly and Installation activities are implemented while respecting safety, quality, schedule and constraints.</p>
Main duties / Responsibilities	<p>-Supports the Head of TAD in implementation of all necessary tools and processes to ensure efficient, effective and appropriate organizational management and governance of the Division;</p> <p>-Produces reports, presentations and analyses to the senior management, management / advisory boards and steering committees, communicating and implementing decisions;</p> <p>-Proposes, develops and implements appropriate strategies to ensure timely communication between senior management, regulatory bodies and all staff, Domestic Agencies (DAs) and Contractors as appropriate for a nuclear construction environment and in close relation with communication and line management;</p> <p>-Builds and maintains relationship with internal and external stakeholders, also enhancing the team spirit for all Tokamak Assembly activities;</p> <p>-Continuously monitors all the activities of the team, presenting proposals to the Head of the Tokamak Assembly Division to address or exploit future events, risks and opportunities, and implements them in a timely manner;</p> <p>-Follows-up and contributes when necessary to tendering process;</p> <p>-Leads and implements issues' resolution through analysis of the problem, creation and implementation of the agreed resolution plans;</p> <p>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain. Demonstrates leadership in safety and maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics;</p> <p>-Communicates and collaborates with the Quality Assurance &amp; Assessment Division and Environmental Protection &amp; Nuclear Safety Division to ensure compliance with ITER Quality Assurance program and safety requirements;</p> <p>-May be requested to be part of any of the project teams and perform other duties in support of the project schedule;</p> <p>-May be required to work outside normal working hours, including nights, weekends and public holidays.</p> <p>-Reports to the Head of Tokamak Assembly Division;</p> <p>-In response to requests from the Director-General, or proactively, informs the DG 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>-Implements necessary tools and processes to ensure efficient, effective and appropriate organizational management and governance</p> <p>-Produces high quality reports and proposals within the defined schedule;</p> <p>-Ensures timely identification, communication and resolution of issues and risks within the defined quality, cost and schedule;</p> <p>-Monitors efficiently the implementation of appropriate actions to quality, cost and schedule;</p> <p>-Ensures excellent coordination and communication between all stakeholders.</p>

## Applicant criteria

Technical experience/knowledge	Level of study	At least Master's Degree or equivalent
	Diploma	Mngt & Business combined with engineering
	Level of experience	At least 15 years
		-Master degree or equivalent in Organization Management, Business Administration or other related discipline, combined with a Bachelor's degree in science or engineering.
		-At least 15 years' experience in Organization Management, Strategy Development, Issue Resolution and Communication in an international environment;
		-Understanding of large, complex international engineering projects, including the role of regulatory bodies and appropriate governance and organizational structures;
		-An understanding of the main requirements for assembly of a tokamak and the basic functionality of the machine;
		-At least 10 years' experience in the field of / or related to Project Management;
		-Experience in writing clear and concise reports;
		-Proven ability to analyze extremely complex issues within highly constrained environment and propose acceptable resolution plan.
	Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
	General skills	-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.
	Languages	English (Fluent)
	Specific skills	MS Office professional (Access, Project, Publisher, Visio ), MS Office standard (Word, Excel, PowerPoint, Outlook), Primavera
		-Ability to persist in the face of challenges to meet deadlines with high standards, making and implementing decisions when necessary;
		-Good communicator, with the ability to listen closely to all issues presented by stakeholders and negotiate with influence at all levels to convince;
		-Ability to produce high quality deliverable even under extremely high pressure;
	Others	-Ability to convey clear performance expectations and follows-up consistently;
		-Ability to analyse multiple and diverse sources of information to define problems accurately;
		-Ability to model high standards of diversity, trust, excellence, team mind-set, integrity and loyalty.
		-Excellent skills in using Microsoft Word (reporting) and PowerPoint (presentation);
		-Ability to manage Project Management software such as Primavera or Microsoft Project.

# IO1923 Structural Analysis Mechanical Engineer - CIO-075

## General information

Job category	Standard
Status	Published
Department	CIO/ Central Integration Office
Division	CIO / Analysis Section/Division

## Job description

Main job	Engineering - Mechanics
Title of the position	Structural Analysis Mechanical Engineer - CIO-075
Job family	Engineer - 2
Grade	P2
Direct employment	Not required
Purpose	<p>To contribute the structural analyses and develop solution for the structural verification of ITER mechanical components following requirements and priorities defined by the Analysis Section / Division Head.</p> <p>To support the creation of geometric and computational models derived from Computer Aided Design (CAD) models or drawings and to write reports of the analyses to the standard required for nuclear or non-nuclear safety components.</p> <p>To follow-up and review analyses from other ITER Organization (IO) departments or from Domestic Agencies (DAs).</p>
Main duties / Responsibilities	<ul style="list-style-type: none"><li>-Prepares finite element (FE) or computational models of ITER components;</li><li>-Provides effective support to the Responsible Officer to perform structural (mechanical and thermal) analyses for the verification of the structural integrity of the ITER mechanical components following methodologies and procedures applied to nuclear or non-nuclear safety equipment;</li><li>-Supports the completion of the assembly tools justification files by performs analyses and/or independent verification of calculation notes, with major attention on the integrated assembly tools/equipment analyses;</li><li>-Acts as independent reviewer of VV analysis documents for the completion of the justification file to be presented to the French Nuclear Authority (Agreed Notified Body);</li><li>-Proposes solutions for the demonstration of compliance of components with the design criteria for nuclear or non-nuclear safety equipment;</li><li>-Supports the preparation of detailed and summary analysis reports;</li><li>-Collects input data for analysis by interacting with Systems Responsible Officers, prepares and reviews technical specification for analysis, and review of technical reports;</li><li>-Develops programs, macros and software routines to interface programs for common use across the project;</li><li>-Develops and improves the interface of FE programs with CAD system.</li><li>-Contributes to the update and record of the FE model developed inside the IO and by the DAs;</li><li>-May be required to work outside IO reference working hours, including nights, weekends and public holidays;</li><li>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;</li><li>-Performs other duties in support of the project schedule;</li><li>-May be requested to be part of any of the project/construction teams and to perform other duties;</li><li>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</li><li>-Reports to the Analysis Section / Division Head;</li><li>-Acts as an interface with all other ITER Departments;</li><li>-In response to requests from the Director-General and/or Head of Central Integration Office (CIO), Head of CIO or proactively, informs the DG/ 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.</li></ul>

Measures of effectiveness	<ul style="list-style-type: none"> <li>-Effectively supports the accurate calculations according to the defined schedule;</li> <li>-Develops comprehensive high quality reports and summaries of the performed and revised analyses;</li> <li>-Contributes to cost saving and improvement of work efficiency;</li> <li>-Generates and maintains trustworthy, up to date information related to the machine technical scope.</li> </ul>
	Project Construction Phase

## Applicant criteria

Level of study	Master or equivalent degree
Diploma	Mecahnical Engineering
Level of experience	At least 5 years
Technical experience/knowledge	<ul style="list-style-type: none"> <li>-At least 5 years of experience in structural mechanical calculations and related;</li> <li>-Good experience in the use of finite elements analysis software;</li> <li>-Good experience in finite element analyses for structural mechanical calculations;</li> <li>-Knowledge of design criteria for nuclear and non-nuclear components;</li> <li>-Knowledge of analysis methodologies for normal and extreme events including those that are considered beyond design basis for Nuclear Installations would be advantage;</li> <li>-Knowledge of European and International standards for the design of mechanical equipment;</li> <li>-Experience in one or more of the following analysis areas would be an advantage: fast transient (explicit FEA), fast fracture, advanced thermal;</li> <li>-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.</li> </ul>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <ul style="list-style-type: none"> <li>-Experience of work in an International environment;</li> <li>-Ability to facilitate dialogue with a wide variety of contributors and stakeholders;</li> </ul>
General skills	<ul style="list-style-type: none"> <li>-Ability to analyze multiple and diverse sources of information to define problems accurately within the defined schedule;</li> <li>-Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.</li> </ul>
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> <li>-Good skill in computer usage (super computer, cluster machines, stand-alone work station);</li> <li>-Experience in the use of finite element software (priority given to the software used in IO);</li> <li>-Experience working with Microsoft Office suite of programs.</li> </ul>

# IO1924 Environmental Engineer - SD-044

## General information

Job category	Standard
Status	Published
Department	SD/ Safety Department
Division	SD / Environmental Protection & Nuclear Safety Division
Section	SD / EPNS / Safety Analysis & Assessment Section

## Job description

Main job	Engineering - Environment technologies
Title of the position	Environmental Engineer - SD-044
Job family	Functional Officer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>To support the Environmental Protection &amp; Nuclear Safety Division by providing a technical basis in support of the ITER safety case and the implementation of defined requirements in ITER.</p> <p>To develop the activities related to the environmental protection and prepare the studies and reports requested by the French Authorities.</p> <ul style="list-style-type: none"><li>-Develops and provides safety/environmental analyses, to fulfill the French Safety Authorities requirements (technical prescriptions);</li><li>-Develops and maintains safety data base regarding the application of French nuclear facilities orders and French environmental code;</li><li>-Is responsible, as safety responsible officer, for the surveillance of the application of the regulatory framework related to environmental purposes for all project phases;</li><li>-Gathers and monitors necessary environmental studies for demonstrating the mitigation of the impact of ITER facility on the environment;</li><li>-Follows and coordinates the worksite activities linked with the facilities classified for the environmental protection on the ITER site, aiming at protecting the environment (Installation Classée Pour l'Environnement - ICPE);</li><li>-Monitors the planning, execution and integration of activities responding to the requirements and commitments of/to the French nuclear safety authorities, (e.g. those related environmental studies and ICPE regulations);</li></ul>
Main duties / Responsibilities	<ul style="list-style-type: none"><li>-Participates in safety inspection for environmental studies and ICPE regulations and follow-up recommendations;</li><li>-May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;</li><li>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;</li><li>-May be requested to support any of the project/construction teams and to perform other duties in support of the project schedule;</li><li>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</li></ul> <p>Special notice: May be requested to work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization.</p> <ul style="list-style-type: none"><li>-Reports to the Safety Analysis &amp; Assessment Section Leader;</li><li>-Maintains communications with other organizations and environmental analysis companies within the ITER collaboration;</li><li>-In response to requests from the Director-General/ Safety Department Head or proactively, informs the DG/ Safety Department 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.</li></ul> <ul style="list-style-type: none"><li>-Positive results in the resolution of environmental issues;</li></ul>

Measures of effectiveness	<ul style="list-style-type: none"> <li>-Accurate and relevant responses provided to the nuclear safety or environmental authorities in the issues related to the technical areas relevant to this post;</li> <li>-Successful integration into the ITER project of safety and environmental requirements in the relevant technical areas;</li> <li>-Effective procurement follow-up regarding safety and environmental aspects;</li> <li>-Development and maintenance of trustworthy, up to date information out of the project management tools.</li> </ul> <p>Project Construction Phase SAP ID : 50000127</p>
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## Applicant criteria

Level of study	Master or equivalent degree
Diploma	Nuclear Safety or environmental field or other
Level of experience	At least 5 years
Technical experience/knowledge	<ul style="list-style-type: none"> <li>-At least 5 years of experience in safety related to environmental protection;</li> <li>-High level of experience either in a large nuclear project or in safety/environment ;</li> <li>-Knowledge in the application of French regulations related to environmental protection and to facilities aiming at protecting the environment (ICPE) would be an advantage;</li> <li>-Experience in coordinating and organizing the work done by multiple contributors of different cultures;</li> <li>-Experience with writing technical / scientific reports is desirable;</li> <li>-Ability to have an interrogative attitude to safety problems, a prudent approach to safety questions and are able to communicate and carefully listen to different opinions;</li> <li>-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.</li> </ul>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <ul style="list-style-type: none"> <li>-Ability to dialogue with a wide variety of contributors and stakeholders, adjusting communication content and style to deliver messages;</li> </ul>
General skills	<ul style="list-style-type: none"> <li>-Analyze multiple and diverse sources of information to define problems and issue analyses accurately;</li> <li>-Ability to persist in the face of challenges to meet deadlines with high standards;</li> <li>-Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.</li> </ul>
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	-Working knowledge in French (written and spoken) is considered as an advantage.

# IO1921 Cable Engineering Technician - PED-144-148

## General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Electrical Engineering Division
Section	PED / EED / Cable Management Sub-Section

## Job description

Main job	Engineering - Electricity
Title of the position	Cable Engineering Technician - PED-144-148
Job family	Coordinating Technician
Grade	G5
Direct employment	Not required
Purpose	<p>Two openings</p> <p>To design the cable trays of the ITER site and execute the cable engineering tasks (cable diagram production, cable routing, cable tray network design and cable termination) for the ITER facility, including the following of external contractors.</p> <p>To execute engineering activities required to support the construction team, including monitoring and verification of the onsite construction works.</p> <p>To assure in field design changes as well as in field deviation requests resolution to support with continuity installation activities of cables and cables trays.</p>
Main duties / Responsibilities	<p>-Develops drawing and 3D models of the cable tray network (trays, conduits, supports) with the Standard ITER tools (CATIA), including the associated mechanical supports and accessories;</p> <p>-Performs Cable Engineering activities, using the ITER standard software tools for the cable design and routing, and cable tray design workflow;</p> <p>-Ensures that quality assurance, and safety requirements are implemented in all phase of cable engineering activities;</p> <p>-Assure full design of cables trays and cables routing compatible with Plant lay out, producing all the required output to assure production of Engineering Work Packages;</p> <p>-Monitors the work delivered through the Cable Engineering contracts, covering procurement, data gathering, time schedule, deliverables issues.</p> <p>-Follows up the execution of works related to the installation of cable and cable trays, and manages Field Change Requests, Non Conformities, Deviation Requests, and other issues triggered during the on-site erection activities;</p> <p>-Measures on the field the cables and termination (continuity, isolation, reflectometry, etc);</p> <p>-Operates the Direct Current magnetic test facility and other Electro Magnetic Compatibility (EMC) tests, including the production of the associated test reports;</p> <p>-Manages the interfaces with the cable users, in order to collect the appropriate data for the cable design and execution workflows;</p> <p>-May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;</p> <p>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;</p> <p>-May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule;</p> <p>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>-Under the Supervision of the Cable Engineer and the Cable Management Sub-Section Leader, reports to the Electrical Engineering Division Head;</p> <p>-In response to requests from the Director-General and/or PED Head, or proactively, informs the DG/PED 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>-Completes the cable routing in a timely manner and within the foreseen time schedule, quality and cost;</p>



Measures of effectiveness	<ul style="list-style-type: none"> <li>-Completes the cable tray drawings and 3D models in a timely manner, exploiting all cable engineering guidelines and design documents;</li> <li>-Completes the design verification of plates in the Tokamak complex, in accordance with foreseen work plan, controlling the proper implementation of quality assurance and other safety requirements;</li> <li>-Provides an effective cable field engineering support necessary to complete the installation activities in a timely manner and within the defined quality &amp; costs.</li> </ul>
	Project Construction Phase

## Applicant criteria

Level of study	Post-Secondary or Bachelor degree
Diploma	Electrical Engineering or other discipline
Level of experience	At least 10 years
Technical experience/knowledge	<ul style="list-style-type: none"> <li>-Good knowledge in modelling cable trays and supports in CATIA or similar 3D editor/solid modelling software tool.</li> <li>-At least 10 years' experience in the field of / or related to in cable engineering and installation (cable diagram production, cable routing, cable tray design);</li> <li>-Good experience in the engineering design and installation of electrical systems;</li> <li>-Good experience in testing cables on the field;</li> <li>-Field Experience (cable pulling or cable tray installation and/or supervision) would be considered an advantage;</li> <li>-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.</li> </ul>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <ul style="list-style-type: none"> <li>-Ability to facilitate dialogue with a wide variety of contributors and stakeholders;</li> <li>-Ability to analyze multiple and diverse sources of information to define problems accurately within the defined schedule;</li> <li>-Ability to work under deadline pressures;</li> <li>-Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.</li> </ul>
General skills	
Languages	English (Fluent)
Specific skills	CATIA, MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> <li>-Good knowledge of CATIA or a similar software tool;</li> <li>-Good knowledge of Microsoft suite;</li> <li>-Good knowledge of cable diagram software tools.</li> </ul>