ITER 국제기구 공모 직위 직무기술서 (제230차)

❍ 4개 직위

구분	분야	소속	직위	Job No.	등급
①	과학·운전 (SCOD)	Science & Operations Department Plant Control & Instrumentation Section	Control Systems Integration Engineer	SCOD-044	P3
②				SCOD-053	P3
③	프로젝트관리 (PCO)	Project Control Office Component Delivery Project Control Section/Division	In-Kind Management Officer	PCO-012	P3
④	중앙통합 (CIO)	Information Technology Division IT System & Operation Section	IT Operations and Deployment Engineer	CIO-185	G5

IO1942 Control Systems Integration Engineer SCOD-044&053

General information

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

Job description

Main job	Engineering - Control system
Title of the position	Control Systems Integration Engineer SCOD-044&053
Job family	Engineer - 2
Grade	P3
Direct employment	Required
	Two openings
Purpose	To plan, organize and execute the integration and commissioning of some ITER Plant Systems in the central control system composing conventional control (CODAC), Central Interlock System and Central Safety Systems. To take ownership and be responsible for the Instrumentation and Control (I&C) of a set of ITER Plant Systems delivered by ITER Members. To develop detailed I&C integration procedures, execute them and generate the associated test reports. To diagnose errors and implement solutions related to I&C integration. To review and maintain up-to-date the functional and physical interfaces between central control system and ITER Plant Systems. To propose, develop and carry-out solutions in order to allow, ease, improve, support and maintain the Programmable Logic Controllers (PLC) for the ITER Plant Systems in order to ensure their proper integration with the central control system.
	Background information: The Control System Division is responsible for integrating ~170 plant systems, provided by the ITER members, in the Central Control Systems composed of CODAC, the Central Interlock Systems and the Central Safety Systems. I&C standards have been established and software frameworks developed. These are based on Siemens S7 series of PLC, PCIe based fast controllers, Ethernet TCP/IP communication and open source software (Linux, Experimental Physics and Industrial Control System EPICS, Control System Studio, etc.). Integration will start in 2018 and continue up to first plasma.
Main duties / Responsibilities	-Interacts with Plant Systems I&C Responsible Officer and suppliers by supporting their design and acceptances, ensuring compliance to standards developed by Control System Division; -Ensures that physical and functional interfaces between Plant Systems I&C and central control system are maintained up-to-date; -Leads the development of I&C integration plans and procedures for defined Plant Systems I&C; -Ensures that I&C integration procedures are correctly executed, errors are diagnosed, solutions proposed and implemented and test reports generated; -Supports the commissioning and operation of Plant Systems I&C and implements required changes to I&C; -Proposes and implements improvements to Programmable Logic Controller (PLC) used in Plant System I&C; -Maintains up-to-date the Plant Control Design Handbook documentation, especially the PLC Software Engineering Handbook; -May be required to work outside normal working hours, including nights, weekends and public holidays; -May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule; -Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.

Measures of effectiveness	-Reports to the Plant Control and Instrumentation Section Leader; -Interacts frequently with plant system responsible officers within the ITER Organization Central Teams (IO-CT) as well as in the Domestic Agencies (IO-DA), for Plant System Instrumentation and Control matters; -In response to requests from the Director-General and/or Control System Division Head, or proactively, informs the DG/Control System Division 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. -Integrates Plant System I&C in central control system in a successful and timely manner; -Proposes and implements solutions for problems encountered in a timely manner in order to achieve the integration of the ITER plant systems; -Supports the commissioning, operation and maintenance of integrated ITER Plant System I&C; -Maintains up-to-date the documentation related to plant system I&C interface with central control system; Project Construction Phase ID SAP: 50000286

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Electronics / Computer Science or equivalent
Level of experience	At least 8 years
Technical experience/knowledge	-At least 8 years' experience in designing, installing and commissioning of scientific control systems or large scale industrial plant I&C systems; -Extensive practical experience in integration and commissioning of heterogeneous I&C systems, including issues identification and resolution; -5 years of practical experience in the development of Siemens S7 PLC industrial software for conventional and/or safety I&C application, including troubleshooting is considered as an advantage; -Practical experience in instrumentation (sensors, actuators,) is considered as an advantage; -Experience of working/maintaining' facilities or large scale industrial plant systems; -Experience in mounting, wiring and testing electrical enclosures; -Practical experience with common laboratory tools like oscilloscopes, multi-meters and signal generators.
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 capacity to organize and prioritize activities; -Ability to coordinate technical team, listening and adjusting communication content and style to deliver messages; -Ability to work under pressure and deliver in due time; -Ability to implement high standards of trust, excellence, loyalty and integrity.
Languages	English (Fluent)
Specific skills	MS Office professional (Access, Project, Publisher, Visio), MS Office standard (Word, Excel, PowerPoint, Outlook), Sharepoint
Others	-Extensive Practical experience in Siemens Step 7 and TIA portal environments; -Experience in the development with Siemens S7-300, S7-400 and S7-1500 PLCs; -Experience in in the development of TCP/IP communications; -Practical experience in developing PLC software based on CFC, F-System and distributed safety libraries; -Relevant experience in EPICS and/or industrial SCADA systems; -Some experience in Linux, virtualization environments and real-time operating systems; -Excellent computer and IT skills with Microsoft Office Tools (Outlook, Word, Excel, Visio, SharePoint) is mandatory.

IO1940 In-kind Management Officer - PCO-012

General information

Job category	Standard
Status	Published
Department	PCO/ Project Control Office
Division	PCO / Component Delivery Project Control Section/Division

Job description

Main job	Project Management - Generalist
Title of the position	In-kind Management Officer - PCO-012
Job family	Functional Officer - 2
Grade	P3
Direct employment	Not required
Purpose	To prepare and follow up Procurement Arrangements (PAs) and all related Amendments/Agreements between the ITER Organization (IO) and the Domestic Agencies (DAs) for assigned scope. To maintain and develop quality documentation related to Procurement Arrangements. To support, advise and guide technical responsible officers in proper development and implementation of PAs by DAs in respect with Credit, Schedule and Scope Baselines for In-Kind activity. To maintain the Procurement Arrangements Database for assigned IO Central-Team and DAs scope of Procurement.
Main duties / Responsibilities	-Develops PAs for the assigned Department/Office in compliance with Baseline Schedule; -Reviews the technical specifications drafted by the Technical Responsible Officer, ensuring consistency with applicable procedures and templates, in focusing on compliance with the schedule, type of design and contractual type of requirements, with clear definition of list of deliverables and applicable documents, and the overall consistency between the different sections of the PA; -Drafts general and special conditions, participates in the negotiation of the final PA, being responsible for the entire documentation till their final approval stage; -Provides support to the IO Responsible Officers in the management and follow-up of PAs once signed, in accordance with applicable In-Kind Guidelines, Procedures and Templates; -Provides advice and support to IO Project/Construction Teams on PA related matters; -Drafts PA amendments and supports the negotiation of the final amendments documentation, up to the signature by the approving authorities; -Supports the line management with respect to in-kind procurement and in compliance to specifications; -Ensures alignment and compliance of Credit, Schedule and Scope Baselines for In-Kind activity; -Provides support to the development and execution of, Project Planning, Project Progress Tracking, Performance Reporting and Configuration Control; -Maintains the PA Database for in-kind follow-up and tracking in his/her area of responsibility and supports any new development and implementation; -Writes proposals to continuous improvement of PA and In-kind management practices, procedures, tools and templates; -Monitors and reports work progress, analyzes progress reports, measures actual performance against goals on a regular basis and presents results in reports; -Ensures compliance to the change control process, in order to keep PAs under effective configuration control; -Evaluates, prepares and presents standard and ad-hoc status and progress reports for the IO management; -Interfaces effectively with the DAs, aiming at ensuring harmonization of in-kind practices and related processes; -May be requested to be part of any of the Project/Construction Teams and perform other duties in support of the project schedule; -Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, Values and Ethics.

Measures of effectiveness	-Reports to the Component Delivery Project Control Section/Division Head and PA Coordinator; -Acts as an interface between other Departments/Offices within the ITER Organization and Domestic Agencies as required; -In response to requests from the Director-General and/ Project Control Office (PCO) Head or proactively, informs the DG/Head of PCO 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. -Places and follows up efficiently the assigned PAs according to the Cost and Schedule Baselines; -Monitors PA-related matters and activities for assigned PAs in line with in-kind procurement guidelines, principles and best practices; -Liaises with relevant interfaces and Project Control Areas to align the Baseline Cost, Schedule and Scope; -Communicates efficiently with the ITER Departments/Divisions to guarantee excellent performance of the assigned PAs on time and cost; -Communicates with DAs to progress assigned PAs activities and procurement processes; -Provides accurate reports within the defined deadlines; -Maintains and improves the PA Database and data accuracy in line with Project Baselines. ID SAP:50001086 Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	engineering, business management or other
Level of experience	At least 8 years
Technical experience/knowledge	-At least 8 years' experience in procurement and negotiation; -Experience in Project Management is required; -Experience in international projects is essential; -Experience with collaborative or in kind procurements or contracts; -Experience in contract management and/or procurement preferably in the nuclear industry and/or large construction projects would be an advantage.
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 organization skills and coordination skills with the ability to set priorities and meet deadlines; -Ability to facilitate dialogue and negotiate with a wide variety of contributors and stakeholders; -Ability to listen and adjust communication content and style to deliver messages; -Ability to work autonomously, in particular in the management of portfolios; -Ability to implement high standards of team mindset, trust, excellence, loyalty and integrity.
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	-Experience in Business Analysis and interfacing with IT development would be an advantage; -Proven computer skills and usage of databases.

IO1941 IT Operations and Deployment Engineer - CIO-185

General information

Job category	Standard
Status	Published
Department	CIO/ Central Integration Office
Division	CIO / Information Technology Division
Section	CIO / IT / IT System & Operation Section

Job description

Main job	Computer Science - Software
Title of the position	IT Operations and Deployment Engineer - CIO-185
Job family	Functional Officer - 1
Grade	G5
Direct employment	Required
Purpose	To operate and deploy in-house developed software and commercial packages. To oversees the execution and monitoring of the operational activities and events in the IT infrastructure. To improve application availability and reliability of operations.
Main duties / Responsibilities	-Monitors the IT operations, in particular ITER Collaborative Platform (ICP) and participates in the administration of IT services; -Organizes deployment and change management for systems in the production environment (in particular ICP); -Develops, maintains and implements processes for operation, crisis, and change management; -Facilitates communication between suppliers and internal user groups; -Assists in the analysis of IT business needs, security assessment of software usage and monitoring; -Supports IT functional responsible officers on deployment and operation control in their domains; -Coordinates deliverables of contractors in the area of operation control and software deployment; -Works in close collaboration with DevOps often provided by external contracts; -Supports the operation manager in their tasks in order to improve service availability, data integrity and data confidentiality; -Provides user support and guidance from the identification of IT needs till the implementation of the solution;; -Participates in the IT on-call service which might include work outside normal working hours, including nights, weekends and public holidays; -May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule; -Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics. -Reports to the IT System and Operation Section Leader; -Works under the coordination of IT internal coordinators (Operations and Development); -In response to requests from the Director-General and/or Head of Central Integration Office (CIO), or proactively, informs the DG/Head of CIO 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.
Measures of effectiveness	-Systems in operation are correctly monitored and issues are reported with proposed solutions; -Continuous availability of operational systems especially ICP; -Issuance of detailed and comprehensive IT processes for crisis management, disaster recovery, major incidents that are defined on time and properly implemented by the whole IT team; -Successful deployment of software products taking into account availability, integrity of the service while defining an efficient and effective deployment plan. Project Construction Phase

Applicant criteria

Level of study	Bachelor or equivalent degree
Diploma	IT or a relevant field
Level of experience	At least 7 years
Technical experience/knowledge	-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; -Certification on various Microsoft related technologies are considered as an advantage; -Certification on IT service management (like ITIL) and in project management (Prince II or PMI) is considered as an advantage.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	-At least 7 years of experience in IT are required, including at least 4 years of IT user support and operation; -Experience in software development techniques especially agile methods is required; -Experience in IT service management; -Experience in IT project management is considered an asset; -Experience in managing IT contracts is considered an asset.
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	-Ability to facilitate dialogue with a wide variety of contributors and stakeholders; -Ability to listen and adjust communication content and style to deliver messages; -Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.