IO1159 Interlock Systems Engineering Officer CHD-082

General information

Job category	Standard
Confidential	No
Status	Confirmed
Department	DIP/Directorate for CODAC, Heating & Diagnostics
Division	CHD / Control System Division
Section	CHD / CSD / Plant Control and Instrumentation Section

Job description

Main job	Engineering - Control system
Title of the position	Interlock Systems Engineering Officer CHD-082
Job family	Project engineering
Duration of the contract	5 years
Contractual hours	Full time
Grade	P3
Direct employment	Not required
Supervised by:	Division Head
Purpose	To work with the Central Interlock System (CIS) Responsible Officer in the design and implementation of the interlock systems at ITER, participating in the definition of the local and central investment protection functions and the integration of the instrument and control (I&C) plant interlocks, providing technical support during the research and development (R&D) and prototyping phases, and, together with the responsible officer, ensuring that the Central Interlock System meets the project requirements and is delivered on time.
Main duties / Responsibilities	Works with the CIS Responsible Officer in the design, construction, installation and commissioning of the Central Interlock System; Provides scientific and technical expertise on all the investment protection-related issues in close contact with the ITER teams and experts responsible for the design of interlock-related systems; Supports the work carried out by the different plant system experts at the ITER Organization (IO) and its Domestic Agencies (DAs) on the identification and implementation of the local investment protection functions; Actively participates in the identification and classification of the central investment protection functions; Coordinates the CIS technical and functional integration between the local interlocks of the different plant systems as well as with the central interlock system and CODAC; Provides technical support on the prototyping and R&D activities required during the design phase of the CIS, working closely with the ITER contractors and associated institutes; Leads the operations and result analysis of different test platforms that will be used for the evaluation of the potential technical solutions for the interlock systems; Provides technical expertise on the studies about radiation and electromagnetic compatibility (EMC) effects on the interlock systems' electronic components; Contributes to the elaboration of technical specifications and participates in the preparation of the CIS design reviews; Performs other duties linked to the above purpose upon management request, as necessary; Maintains a strong commitment to the implementation and perpetuation of the ITER safety and quality programs, values, and ethics.
Measures of effectiveness	Successfully maintains effective communication with all the interfacing teams of the ITER project; Successfully completes tasks assigned under Main Duties / Responsibilities above.

Applicant criteria

Level of study	Master or higher degree
Diploma	Industrial control, Nuclear engineer or relevant
Level of experience	At least 8 years
Technical experience	At least 8 years' relevant experience in the design, construction and/or operation of complex scientific projects; At least 5 years' experience in the design and implementation of research test facilities; Experience coordinating scientific activities carried out by experts from different technical fields; Relevant experience in the use of test automation tools (i.e. Matlab and LabView); Experience with interlock systems preferably in the physics research field; Experience working on radiation effects on electronics; Strong knowledge of I&C interlocks technologies: S7 PLC, FPGA, hardwired protections, etc.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit, Ability to organize and monitor activities, Ability to communicate effectively
General skills	Strong knowledge of different programming languages and simulation tools (e.g. C, C++, Simulink, etc.) Able to provide quality technical and scientific documentation in English; Able to coordinate activities among teams with different technical background;
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)

Origin of the job

Entity	ITER ORGANIZATION
Date of recruitment	5/1/2012
Recruitment reason	New position

HR Follow-up

Email alerts	Every 10 applications
Main recruiter in charge	Hang Wang
Followed by	Emilia Fullmer-Bourree
Alert recipient(s)	Hang Wang
Publication default start date	12/19/2011
Publication default end date	1/22/2012
Automatic update	No