## IO1428 Detritiation System I&C Engineer PSE-142

## **General information**

Job category	Standard
Status	Published
Department	DIP/Department for ITER Project
Division	PSE/Fuel Cycle Engineering Division
Section	PSE/ FCED/ Tritium Plant Section

## Job description

	Factor state - October -
	Engineering - Control system
	Detritiation System I&C Engineer PSE-142
Job family	Engineer - EC
Grade	P1
Direct employment	Not required
	To provide engineering support in the field of Tritium Plant processing systems and confinement systems Instrumentation and Control (I&C), design and procurement, fabrication and on-site installation, commissioning and testing. To perform I&C work associated with atmosphere Detritiation Systems and Water Detritiation Systems packages. To support the classification of I&C important for safety, and development of control loops consistent with the given class.
	Defines I&C of atmosphere Detritiation System and Water Detritiation System;
Purpose	Reviews I&C design of other Tritium Plant systems; Supports preparation of Pipe & Instrumentation Diagrams (P&IDs) for implementation of specific I&C functions; Participates in plant systems Functional Analysis, using methodologies such as FMEA and RAMI; Follows up the preparation of CAD drawings and diagrams by ITER Organization, Domestic Agencies (DAs) or suppliers for the I&C design such as control loop diagrams, control logic diagrams, and 3D layout models for the components and systems under her/his scope of work; Prepares documents on process control software definition for atmosphere Detritiation System and Water Detritiation System in accordance with their safety class; Supports Air Detritiation Centralized Procurement;
Main duties / Responsibilities	Specifies interfaces with the ITER Central Control system and building nuclear Heating Ventilation Air Conditioning (HVAC) as part of the confinement systems; Follows up design, manufacturing, testing, installation and commissioning activities of I&C Ensures the implementation of Quality Assurance procedures for design, manufacturing, testing and commissioning; Ensures Quality Control implementation during the whole process of the supply completion, from the design up to the commissioning moving through procurement and fabrication / assembly; Updates when required the Project Schedule associated with the fabrication, installation, testing and commissioning related to I&C and electrical engineering; Performs other duties in support of the project schedule as described in the Detailed Work Schedule or Strategic Management Plan; 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 Program, values and ethics.
	Reports to the Tritium Plant Section Leader; Acts as an interface between all technical divisions, DAs and suppliers to support integration of atmosphere Detritiation Systems and other Tritium Plant systems I&C In response to requests from the Director-General (DG) and/or Director of Plant System Engineering (PSE) Directorate, or proactively, informs the DG/Director 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. Clarity and thoroughness of documents on design, fabrication, installation and commissioning of

I&C for atmosphere Detritiation Systems and Water Detritiation System; Quality and timeliness of work products; Ability to find practical, cost-effective, manageable and efficient solutions to issues; Ability to communicate and to work effectively in teams and to contribute to the overall success of the Fuel Cycle design/build project; Performing work safely and with regard for safety in designs; Coordinating and directing efforts of the ITER Organization and the Domestic Agencies in respect to design, manufacturing, installation and commissioning of the atmosphere Detritiation System and Water Detritiation System.
Project Construction Phase

## Applicant criteria

Level of study	Master or equivalent degree
Diploma	Engineering (Instr.&Control/Chemical process, etc)
Level of experience	At least 2 years
Technical experience	At least 2 years of experience in chemical industry, preferably with experience in multidisciplinary systems or first experience in nuclear industry, comparable with those mentioned above in the main key duties & responsibilities; Basic experience in large science or industrial facilities - preferably in an international environment - 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
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	Good knowledge required of applicable industrial Codes and Standards. Good knowledge of I&C diagrams (PFDs, P&ID, loop diagrams) standards; Experience in PLC programming (Preferably Siemens S7) would be considered as an advantage.