

IO1199 Diagnostic Engineer Ex-Vessel CHD-017

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for CODAC, Heating & Diagnostics
Division	CHD / Diagnostics Division
Section	CHD/ DD/ Ex-Vessel Diagnostics Section

Job description

Main job	Engineering - Diagnostics
Title of the position	Diagnostic Engineer Ex-Vessel CHD-017
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	To develop the design of interfaces of diagnostic systems with the main tokamak components, particularly in the ex-vessel area alongside the Diagnostics Team and perform engineering analysis as required. To manage scope, schedule and cost of procurement of diagnostic systems and supporting hardware through specified procurement packages.
Main duties / Responsibilities	Develops the design interfaces of diagnostics with the main tokamak components; Develops conceptual, outline engineering designs for key diagnostic components located in the challenging ITER Organization (IO) environment; Performs any necessary analysis of electro-magnetic and thermal stresses, dynamic analysis, neutronics assessment, and provision for mitigation of environmental factors of diagnostic equipment; Prepares technical specifications of allocated diagnostic procurement packages; Follows procurement of diagnostics through procurement packages interacting with the teams working in the Domestic Agencies (DAs) of the IO partners as necessary Specifies and drives on-going diagnostic design and integration activities and updates and integrates these designs; Develops and uses project engineering tools for the procurement of diagnostic systems; Prepares for the installation of the diagnostic systems; Reports variances on all technical, cost and schedule aspects immediately to the line management; Identifies and manages effectively risks on the ex-vessel; Manages the change control process for his/her scope of work and communicates changes to the line management. Guarantees integration with other technical interfaces; Supports IO and DAs diagnostic engineering designs and specifications; Supports and leads the Design Review processes as appropriate; Maintains related documentation at all times on the ITER Document Management 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; 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 directly to Ex-Vessel Section Leader. Maintains communication with other organizations within the ITER collaboration and the fusion community. In response to requests from the Director-General and/or Director of CODAC, Heating & Diagnostics, or proactively, informs the DG/ Director of CODAC, Heating & Diagnostics 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	Develops interfaces of diagnostics with the main Tokamak components; Develops conceptual engineering designs for key diagnostic components located in the harsh ITER environment;

Prepares for the installation of the diagnostic systems on ITER;
Ensures the Division is well represented from an engineering perspective;
Liaises effectively with Domestic Agencies and other Directorates at IO;
Completes all work in a timely manner and meet agreed deadlines.

SAP ID: 5-318

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Mechanical eng. or other relevant discipline
Level of experience	At least 10 years
Technical experience	Experience in project engineering, preferably with specific design, project management and/or procurement experience in a high technology field such as plasma physics, high energy particle physics, fission reactors or Ultra High Vacuum (UHV) systems; Familiarity with some aspects of mechanical and/or electrical engineering design for tokamak diagnostic systems, such as instrumentation, optical engineering, vacuum systems, microwave and cabled electrical transmission, water cooling systems and mechanical handling schemes, would be an advantage; Familiarity with recognized engineering codes and standards and experience in manufacturing would be an advantage.
Project experience	2 to 4 years
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)