

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	<p>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.</p> <p>To manage scope, schedule and cost of procurement of diagnostic systems and supporting hardware through specified procurement packages.</p>
Main duties / Responsibilities	<p>Develops the design interfaces of diagnostics with the main tokamak components;</p> <p>Develops conceptual, outline engineering designs for key diagnostic components located in the challenging ITER Organization (IO) environment;</p> <p>Performs any necessary analysis of electro-magnetic and thermal stresses, dynamic analysis, neutronics assessment, and provision for mitigation of environmental factors of diagnostic equipment;</p> <p>Prepares technical specifications of allocated diagnostic procurement packages;</p> <p>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;</p> <p>Develops and uses project engineering tools for the procurement of diagnostic systems;</p> <p>Prepares for the installation of the diagnostic systems;</p> <p>Reports variances on all technical, cost and schedule aspects immediately to the line management;</p> <p>Identifies and manages effectively risks on the ex-vessel;</p> <p>Manages the change control process for his/her scope of work and communicates changes to the line management. Guarantees integration with other technical interfaces;</p> <p>Supports IO and DAs diagnostic engineering designs and specifications;</p> <p>Supports and leads the Design Review processes as appropriate;</p> <p>Maintains related documentation at all times on the ITER Document Management System and ensures it is updated and in the correct formats;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.</p> <p>Reports directly to Ex-Vessel Section Leader.</p> <p>Maintains communication with other organizations within the ITER collaboration and the fusion community.</p> <p>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.</p>
Measures of effectiveness	<p>Develops interfaces of diagnostics with the main Tokamak components;</p> <p>Develops conceptual engineering designs for key diagnostic components located in the harsh ITER environment;</p>

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	<p>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;</p> <p>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;</p> <p>Familiarity with recognized engineering codes and standards and experience in manufacturing would be an advantage.</p>
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)