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JOB DETAIL

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Ref. IO1698 - 4/14/2016

Upper Launcher Engineer TED-052

Main job Mechanics Department TED / Tokamak Engineering Department Division TED / Heating & Current Drive Division Section TED / HCD / Ion & Electron Cyclotron Section Job Family Engineer - 2 **Application Deadline** 05/15/2016 (MM/DD/YYYY) Grade P3 Direct employment Not required - To be technical responsible officer (TRO) for the Electron Purpose Cyclotron (EC) Upper Launcher (UL). Furthermore, provide mechanical engineering support to the overall Electron Cyclotron (EC) system and the Equatorial Launcher (EL) developments. This task includes the design finalization of the EC upper launcher, preparation of technical specifications, system requirements, PA preparation and subsequent oversight of the PA activities leading to installation and operation of the UL. The UL TRO will also be responsible for Quality Assurance (QA) support, design and Safety and manufacturing follow-up; development of installation, operation and maintenance plans - Performs the duties of the technical responsible officer for the Electron Cyclotron Upper Launcher (EC UL) procurement, which includes design finalization, Procurement Arrangement (PA) preparation, and oversight during the manufacturing, installation and commissioning phases followed by launcher operation; - Co-ordinates the development of the final design of the EC UL in collaboration with IO-CT (ITER Central Team) Main duties / Responsibilities and IO-F4E (European Domestic Agency); - Documents the design requirements, load specification, Safety functions, requirements propagation and verification, and Quality plans of the UL (in collaboration with the EU-DA); - Ensures design compliance with ITER project requirements and with other ITER systems interfacing with the UL; - Monitors the final design development and prototype tests of the UL; - Co-ordinates the development of the draft qualification and test program of the UL in parallel with the prototype tests of the launcher, leading to a final qualification program associated with the manufacturing, assembly, installation and commissioning of the UL; Assists in the monitoring of Quality Programs associated with the sub-system procurements; - Provides assistance in the above activities for the Equatorial Launcher (EL) development and overall EC system development; - Ensures tasks schedule compliance with EC design and procurement milestones; - Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan; - May be requested to be part of any of the project team and perform other duties upon management request; - Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics - Reports to the Ion & Electron Cyclotron Section Leader; - Acts as an interface between the ITER Organization and the Domestic Agencies in developing/monitoring/evaluating contracts, task agreements and system development management; - In response to requests from the Director-General and/or Head of Tokamak Engineering Department (TED),

	or proactively, informs the DG/ TED 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.
Measures of effectiveness Level of study Diploma Level of experience	 Achieves the development of the UL final design progressing toward procurement as measured by the AWP and SMP milestones; Improves and updates documentation management, quality compliance, system integration associated with the UL; Develops within the defined schedule the technical specifications and procedures to ensure the Upper Launcher are compliant with IO requirements and Safety regulations; Provides an effective technical support for the Electron Cyclotron system and subsystems.T Project Construction Phase Master or equivalent degree Mechanical eng. field or other relevant discipline
Technical experience/knowledge	 At least 8 years mechanical design experience &/or design on Heating Current Drive (HCD) system(s) At least 5 years experience in technical integration of complex mechanical systems; At least 5 years experience in mechanical engineering in areas relevant to the ITER environment (e.g. Remote handling, Ultra High Vacuum (UHV) environment, nuclear environment, high heat flux components);
Project experience	1 to 2 years
Social skills	Ability to work effectively in a multi-cultural environment Ability to work in a team and to promote team spirit
Specific skills	Ansys CATIA MS Office standard (Word, Excel, PowerPoint, Outlook)
General skills	 A solid background in thermal-mechanical applications (including high thermal heat loads & optimized cooling configuration), engineering standards (for example: RCC- MR, SDC-IC, ASME, EN, ASTM), regulation compliances (such as European Directives) & quality management (for example: ISO 9000s, IAEA GS-R-3, ASME NQA-1). Experience in design and development of high power heating system(s) on an existing fusion device (Stellarator or Tokamak) is highly beneficial, although equivalent experience developing a high power heating system in compliance with ITER nuclear & safety requirements would be sufficient; Experience in mechanical & spectral analysis; Participation in an Electron Cyclotron (EC) launcher development program is an advantage; Basic Project Management experience is required. Working knowledge in English (written and spoken); Proficient at writing technical reports and design guidelines Some knowledge of French, Spanish and/or German maybe helpful.
Others	- Experience using analytical programming, and Microsoft
	applications required. - Experience using CATIA, ANSYS and Microsoft Office applications.
Languages	English (Fluent)

or proactively, informs the DG/ TED Head of any

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For more information about ITER, visit our web site : http://www.iter.org