IO1248 Control System Architect CHD-091

General information

<table>
<thead>
<tr>
<th>Job category</th>
<th>Standard</th>
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<tbody>
<tr>
<td>Status</td>
<td>Confirmed</td>
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<tr>
<td>Department</td>
<td>DIP/Directorate for CODAC, Heating &amp; Diagnostics</td>
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<tr>
<td>Division</td>
<td>CHD / Control System Division</td>
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<tr>
<td>Section</td>
<td>CHD / CSD / CODAC Section</td>
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Job description

Main job: Engineering - Control system

Title of the position: Control System Architect CHD-091

Job family: System Engineer - 2

Grade: P4

Direct employment: Not required

Purpose

To lead the design and implementation effort in the areas of Control, Data Access and Communication (CODAC) operational applications (central supervision, orchestration, automation, distributed feedback control, synchronization, data acquisition, data archiving and scheduling) in a highly collaborative environment;

To manage all interfaces between CODAC operational applications, plant systems and major stakeholders (machine operation and physics operation);

To take full responsibility of delivering CODAC operational applications on schedule and within the allocated budget;

To perform parts of the CODAC final design;

To manage contracts to support above activities.

Main duties / Responsibilities

Takes a leading role in the development of CODAC operational applications involved in automation, distributed feedback control and synchronization;

Establishes good communication channels with all stakeholders (CODAC, operations, plant system responsible officers, Domestic Agencies/DAs- responsible officers and suppliers) involved in automation, distributed feedback control and synchronization;

Participates to the definition of control system requirements and verification methods associated to the control system components of automation, distributed feedback control and synchronization;

Prepares and follows technical audits and critical project reviews associated to the procurement and construction of plant systems involved in automation, distributed feedback control and synchronization;

Mentors and supports external plant system developers in their architecture, detailed design, construction, verification and commissioning activities;

Evaluates standard tools in the CODAC Core System used for automation, distributed feedback control and synchronization to propose/implement improvements when needed;

Monitors external contractors activities relating to implementation of CODAC operational applications;

Contributes to the final design of CODAC by drafting some of the CODAC operational applications final design documents;

Promotes CODAC standards to external stakeholders; external plant system developers, machine operation and physics operation;

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 to CODAC Section Leader;

Interfaces with the plant system responsible officers within ITER Organization;

Interfaces with the DAs procurement and technical teams (suppliers) involved with the construction and delivery of plant control system;

Interfaces with control system developers affiliated with CODAC or external suppliers.

In response to requests from the Director-General and/or Director of CODAC, Heating &
Measures of effectiveness

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.

Implements and delivers the relevant parts of the CODAC final design.

Implements and delivers the relevant parts of CODAC operational applications within schedule and budget.

Develops cost effective integration and commissioning plans.

Develops and maintains effective communications with all stakeholders.

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Applicant criteria

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<tr>
<th>Level of study</th>
<th>Master or equivalent degree</th>
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<tr>
<td>Diploma</td>
<td>Computer science, electronics or relevant</td>
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<tr>
<th>Level of experience</th>
<th>At least 10 years</th>
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<tbody>
<tr>
<td>Technical experience</td>
<td>Experience in the design, development, integration and commissioning of control system of large-scale physics projects; Experience in dealing with control system stakeholders (physicists, control engineers, technical domain experts, etc.); Experience in control theory, analysis and design of digital control systems; Experience in software-intensive distributed real-time control, deterministic communication and synchronization techniques; Experience in software engineering and quality assurance; Experience in using Linux and real-time operating systems; Experience in digital electronics and field programmable gate array (FPGA)</td>
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<th>Project experience</th>
<th>4 to 5 years</th>
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<tr>
<td>Social skills</td>
<td>Ability to work effectively in a multi-cultural environment, Ability to work in a team and to promote team spirit, Ability to work effectively in a multi-disciplinary environment</td>
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<tr>
<td>General skills</td>
<td>Experience in dealing with contractors, managing the procurement of products and services in a competitive manner; Experience in drafting technical and managerial documents.</td>
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| Languages              | English (Working) |