



## JOC-VN185

### Position Title: Responsible Officer in the JET Exploitation Unit

#### Background

The Joint European Torus (JET) is the world's largest magnetic confinement fusion experiment. It is also the only such experiment capable of operating with the combination of deuterium and tritium fuel that will be used in a fusion reactor. JET's primary goal in the next four years is to prepare for the operation of the next-generation fusion device, ITER. JET will do this by optimising the regimes of operation foreseen for ITER and by testing them in a deuterium-tritium experiment.

The JET facilities are operated by the Culham Centre for Fusion Energy under contract from the European Commission and exploited by the EUROfusion Consortium, containing all of Europe's magnetic fusion research laboratories. The contract for JET operation foresees that the JET Exploitation Manager (JEM) shall be in charge of the implementation of the contract on behalf of the Commission. The JEM is supported by a JET Exploitation Unit (JEU). The JEU's duties include setting priorities for the JET Operator and monitoring progress towards these goals as well as ensuring that the scientific programme developed by EUROfusion is efficiently implemented on the JET facilities.

#### Responsibilities

A responsible officer is required in the JEU to monitor the Operator's activities in the areas of Control & Data Acquisition Systems (CODAS) and plasma diagnostics. The Officer's responsibilities will include:

- Monitor and suggest priorities for the Operator's control and data acquisition activities.
- Monitor and suggest priorities for Operator support to codes and modelling.
- Define and manage the special diagnostic resources required for the day-to-day implementation of the JET programme.
- Identify the requirements for future code developments and diagnostic capabilities for JET, especially for preparation of DT operation.
- Oversee diagnostic readiness-for-operation in restart periods.
- Define, in collaboration with the Operator, shutdown diagnostic calibration requirements.
- Manage the control room rosters for Diagnostic Coordinators, Visible System Operators and MHD Experts. Manage any training required for these roles.
- Monitor the compatibility of diagnostic capabilities, including real-time applications, with programmatic needs.
- Other duties as defined in agreement with the Group Leader and the JET Exploitation Manager.

#### Requirements

The Responsible Officer will have to use technical and scientific abilities as well as human skills to help resolve difficult issues when they arise.

- BSc in physics or engineering or equivalent (PhD preferred).

- At least three years post-graduate experience at the research level.
- Experience in the implementation and use of diagnostics and/or data acquisition for fusion plasmas.
- Proficiency in English in a technical environment.

### **Qualifications / Competencies**

The following skills would be an advantage and will be considered as qualifying elements in the selection process:

- Ability to work in an international team.
- Familiarity with the JET programme and its existing set of diagnostics.
- Experience in the integration of diagnostics into real time and protection systems.

The successful candidate will work in Culham, U.K. and report to the Leader of the JET Operations Group.

**General Contact:** Lorne Horton ([Lorne.Horton@jet.uk](mailto:Lorne.Horton@jet.uk)) JET Exploitation Manager

**Technical Contact:** George Sips ([George.Sips@jet.uk](mailto:George.Sips@jet.uk)) JEU Operations Group Leader

Applications should be made through the EUROfusion Head of Research Unit to the JET Operations Contract Senior Manager Tim Jones by 14 November 2014. Later applications will be considered if the post remains unfilled.

The post will be available from 1 January 2015.

Note that candidates who are not EU nationals will need to obtain a visa to work in the UK. The JET Operator can provide advice on the issues involved and candidates are recommended to investigate before interview.