

EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Technical and Quality Management

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POST

On Board Computers and Data Handling Engineer in the On-Board Computers & Data Handling Section, Data Systems Division, Electrical Engineering Department, [Directorate of Technical and Quality Management](#).

This post is classified in the A2/A4 grade band of the Coordinated Organisations' salary scale.

LOCATION

ESTEC, Noordwijk (The Netherlands).

DUTIES

The Data Systems Division is responsible for project support and technology development of space applications for all that concerns on-board data handling and processing systems. Besides activities related to the specification and validation of data systems, the Division is also actively involved in the design of the required building blocks. These elements must comply with high reliability and availability requirements combined to specific immunity to the space environment, in particular related to radiation-induced effects. The Division also hosts several laboratory facilities (for avionics and payload data systems).

The postholder will report to the Head of the On-Board Computers and Data Handling (OBDH) Section. The section domain of responsibility covers control and data handling computers, low level software, data transfer interfaces, command & control protocols and busses, solid state mass memories, authentication/encryption modules and in general underlying microelectronics devices such as microcontrollers and interface components. The incumbent's duties will mainly consist in providing support to projects and contributing to the research and development (R&D) activities of the section.

In support to projects, the postholder's duties will range from the monitoring of subsystem and equipment specification and procurement activities, through evaluation of detail design and analyses, participation in reviews and meetings, development and qualification of equipment, up to final integration of the avionics and data handling subsystems.

In support of R&D activities, the incumbent will contribute to the proposition, definition and execution of new activities in the area of OBDH. These activities will include:

- OBDH system architectures and building blocks (equipment/units, modules and key components);
- mass memories used at platform level;
- interfaces with Telemetry/Telecommand (TM/TC) front-ends;
- hardware/software implementation of security concepts for space avionics;
- research into OBDH design and verification tools, methods and test and validation benches;

- OBDH communication protocols and standards;
- spacecraft platform avionics and interaction with spacecraft payload data storage and processing.

QUALIFICATIONS

Applicants for this post should have a university degree or equivalent qualification in electronics, computer science, telecommunications or a related field, complemented with some years of experience in the field of on-board computer and data handling systems. A good background in the design, simulation, manufacturing and testing of spacecraft platform equipment, modules, boards and components is also required.

Knowledge and experience of the VHDL/Verilog design languages as well as the design and development of FPGA and ASIC for space applications is mandatory.

Candidates should also be familiar with space applications of computers and data handling and communication systems, and have knowledge of space environment, related ECSS engineering standards and space quality requirements.

Applicants should have good interpersonal and communication skills with the ability to work effectively and cooperatively in a diverse and international team environment and to define and implement solutions in line with team objectives.

In addition, candidates should have good organisational and analytical skills, as well as a proactive attitude towards solving problems and an interest in innovative technologies.

The working languages of the Agency are English and French. A good knowledge of one of these two languages is required. Knowledge of another member state language is an asset.

CLOSING DATE

The closing date for applications is **12 July 2013**.

Applications from external candidates for this post should preferably be made [on-line](#) at the ESA Web Site (www.esa.int/careers). Those unable to apply on-line should submit their CV to the Head of the Human Resources Division, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk ZH (The Netherlands).

ESA staff members wishing to apply for this post should fill in the [Internal Application Form](#) and email it to [Apply2ESTEC](#).

The Agency may require applicants to undergo selection tests.

Under ESA Regulations, the age limit for recruitment is 55. Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada.

Priority will be first given to internal candidates and secondly to external candidates from under-represented member states.

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.