

## EUROPEAN SPACE AGENCY

### Vacancy in the Directorate of Technical and Quality Management

The European Space Agency is an equal opportunity employer and encourages applications from women

#### **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 (Netherlands).

#### **DUTIES**

The Data Systems Division is responsible for project support and technology development of space applications in respect of on-board data handling and processing systems. As well as 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 with 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's domain of responsibility covers control and data handling computers, low-level software, data transfer interfaces, command and control protocols and buses, solid state mass memories, authentication/encryption modules and 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 proposing, defining and executing of new activities in the area of OBDH. These activities will include:

- spacecraft platform avionics and interaction with the spacecraft payload;
- OBDH system architectures and building blocks (equipment/units, modules and key components);
- on-board communication services and protocols;
- mass memories with file system access;
- on-board communication-related ECSS and CCSDS standards;
- interfaces with telemetry/telecommand (TM/TC) front-ends;
- hardware/software implementation of security concepts for space avionics.

In addition, the postholder will be required to contribute to the diffusion of the results of the activities performed and the transfer of knowledge across the Agency;

## QUALIFICATIONS

Applicants for this post should have a Master's degree or equivalent qualification in computer science, networks, electronics, telecommunications or a related field, complemented with some years of experience in on-board computers 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 on-board data interfaces, buses and networks is mandatory.

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

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

In addition, candidates should have good analytical, organisational and reporting skills, a proactive attitude to 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 languages is required. Knowledge of another Member State language would be an asset.

## CLOSING DATE

The closing date for applications is **28 August 2014**.

Applications from external candidates for this post should preferably be made [online](#) from the ESA website ([www.esa.int/careers](http://www.esa.int/careers)). Those unable to apply online should submit their CV to Human Resources, 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.

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**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 first be given to internal candidates and secondly to external candidates from under-represented 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.**