

Job Title: On-Board Payload Data Processing Engineer

Req ID 4723 - Posted 19/12/2017



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Technology, Engineering and Quality.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Post

On-Board Payload Data Processing Engineer

This post is classified A2-A4 on the Coordinated Organisations' salary scale.

Location

ESTEC, Noordwijk, The Netherlands

Description

On-board Payload Data Processing Engineer in the On-Board Payload Data Processing Section, Data Systems & Microelectronics Division of the Electrical Engineering Department, Directorate of Technical and Quality Management.

The On-Board Payload Data Processing Section provides functional support to ESA projects and carries out technological research (R&D) in the field of on-board payload data acquisition, handling, processing and storage. This domain covers the functions between the signal acquisition sensor and the modulator for the data transmission, including, but not limited to, data acquisition chains, data processing units, instrument controllers, mass memories and high speed networks for data transmission and command and control.

Duties

Reporting to the Head of the Section and within the technical fields described above, the main tasks and responsibilities of the post holder will include:

- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of on-board payload data acquisition, handling and processing, throughout all project phases;
- participating in project reviews and evaluations of procurement proposals;
- identifying critical development problems and assisting in their resolution;
- contributing to the definition of technology development requirements and work plans for the Agency's technology programmes;
- defining, initiating and managing R&D activities covering both long- and short-term needs;
- fostering new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cutting-edge technologies and system architectures;
- defining data handling, storage and processing system architectures, optimising high-accuracy as well as high-speed data acquisition chains up to and including their validation in a laboratory environment;
- monitoring applicable scientific and technological trends and maintaining state-of-the-art expertise;
- contributing to the dissemination of the results of the activities performed and the transfer of knowledge across the Agency.

Duties may also include supporting other activities within the post holder's field of competence.

Technical competencies

General background and specific experience in the technical domains covered by the position

Hands-on hardware experience

Understanding of related technologies, R&D trends and the industrial landscape

Project support experience in a relevant domain

Experience in the preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation, etc)

Experience in the management and monitoring of industrial activities, including participation in reviews

Behavioural competencies

Communication

Teamwork

Innovation & Creativity

Customer Focus

Results Orientation

Planning & Organisation

Education

A Master's degree or equivalent qualification in signal/image processing techniques or digital electronics design is required.

Additional requirements

- Knowledge in on-board data acquisition, handling, processing and storage, as well as in signal processing techniques and devices is required;
- Hands-on experience in the design, manufacturing, test and qualification of digital electronics is required;
- Industrial experience as technical expert in space projects and reviews would be an asset.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

The Agency may require applicants to undergo selection tests.

The closing date for applications is 30 January 2018.

If you require support with your application due to a disability, please email contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States when short-listing for interview.

<http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf>

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.