

## AOCS and Pointing Systems Engineer

**Job Req ID:** 15008

**Closing Date:** 19 May 2022

**Publication:** Internal & External

**Vacancy Type:** Permanent

**Date Posted:** 21 April 2022

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. We therefore welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

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

### **Location**

ESTEC, Noordwijk, Netherlands

### **Description**

AOCS and Pointing Systems Engineer in the AOCS and Pointing Systems Section, GNC, AOCS and Pointing Division, Systems Department, Directorate of Technology, Engineering and Quality.

The AOCS and Pointing Systems Section provides functional support for space missions in the domains of Earth Observation, Navigation, Science, Telecommunications and Integrated Applications.

The AOCS and Pointing Systems Section carries out technological research and development, harmonisation and standardisation in the field of AOCS and Pointing, with a focus on subsystem competitiveness, improvement and innovation for performance, robustness and process.

### **Duties**

If selected for this post, you will report to the Head of Section and within the technical fields described above, your main tasks and responsibilities will include:

- providing expert technical support and consultancy to ESA projects, programmes and general studies in the field of AOCS and pointing systems (AOCS design and verification - including AOCS applicative software and AOCS FDIR-, AOCS equipment procurement) throughout all project phases;
- participating in feasibility studies, project reviews and the evaluation 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 and addressing AOCS enabling and enhancing concepts and advanced control techniques;
- fostering new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cutting-edge technologies and system architectures;
- laboratory activities for the evaluation and prototyping of new AOCS solutions;
- 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 your field of competence.

### **Technical competencies**

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

Hands-on experience

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

Understanding of related technologies, R&D trends and the industrial landscape Project support experience in a relevant domain

### **Behavioural competencies**

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

### **Education**

A Master's degree in control and aerospace engineering is required.

### **Additional requirements**

You will have at least five years of experience in the development of satellite AOCS subsystem, and procurement engineering of a range of AOCS hardware units.

Preference will be given to candidates with proven expertise in at least two of the following areas with an emphasis as regards technology topics on advanced AOCS techniques and machine learning:

- Advanced control, optimisation and estimation techniques;
- Machine learning techniques;
- Research studies conducted in AOCS functional, robustness and performance fields;
- AOCS subsystem design, testing and verification (including control design algorithms, analysis and simulation);
- AOCS modeling, software coding and spacecraft avionics;
- Model-based engineering tools and techniques.

### **Other information**

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

For further information please visit: [Professionals](#), [What we offer](#) and [FAQ](#)

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.

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance

during the recruitment process. If you would like to discuss this further please contact us email [contact.human.resources@esa.int](mailto:contact.human.resources@esa.int).

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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, Latvia, Lithuania 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\*. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented or balanced Member States\*.

(<https://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 conducted by an external background screening service.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.

\*Member States, Associate Members or Cooperating States.