

**Job Req ID:** 11985  
**Agency:** ESA

## Space Debris System Engineer



### EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Operations.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

#### **Post**

#### **Space Debris System Engineer**

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

#### **Location**

ESOC, Darmstadt, Germany

#### **Description**

Space Debris System Engineer in the Space Debris Office in the Space Safety Programme Office, Directorate of Operations.

#### **Duties**

Reporting to the Head of the Space Debris Office, you will have the following responsibilities:

- Supporting the management of debris-related activities under ESA's Space Safety Programme, especially activities for space-based payloads in the Core element and the CREAM cornerstone;
- Supporting the Office's involvement in the Spanish Space Surveillance and Tracking (S3T) project;
- Specification, procurement and management of contracts, and related proactive interfacing with contractors and customers;
- Supporting interfaces with stakeholders;
- Supporting the maintenance and further upgrading of space debris software and databases;
- Contributing to the development of international space debris mitigation standards, and the verification of compliance;
- Supporting and managing outreach and training activities addressing space debris;
- Participating in operational support activities;
- Managing quality assurance tasks in the area of responsibility.

#### **Technical competencies**

System engineering methods for space-related projects

Management of industrial activities through review processes and the application of service level agreements

Management of service contracts  
Requirements engineering and interface definition  
Knowledge of space debris tools and database systems, as well as orbital mechanics  
Software engineering methods and tools  
ECSS standards

### **Behavioural competencies**

Result Orientation  
Operational Efficiency  
Fostering Cooperation  
Relationship Management  
Continuous Improvement  
Forward Thinking

### **Education**

Master's degree in systems engineering, aerospace engineering, physics, sciences.

### **Additional requirements**

An excellent, broad background in modern systems engineering methods is mandatory, preferably applied to space debris aspects, with several years' demonstrated relevant work experience.

- Demonstrated broad experience in design, test, and operation of different space-based instruments, especially with optical, electro-optical, or impact detector systems.
- Demonstrated knowledge of mission analysis, spacecraft design, ground segments, and mission operation.
- Demonstrated knowledge of modern project and risk management methods.
- Deep knowledge of the European industrial landscape and ability to define technology development roadmaps identifying future trends in technology requirements.
- Knowledge of ESA's programmatic environment, technology programmes, and the organisation of R&D activities.
- Knowledge of cost and schedule aspects related to the area of responsibility.
- Knowledge of ESA procurement processes.

Previous experience with ground-based sensor systems observing space debris will be considered an asset, as will previous experience with astrodynamics software development. Experience with public-private partnerships is also 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 07 April 2021.**

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 at [contact.human.resources@esa.int](mailto: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, Latvia 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 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.

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.