

Job Title: Optical Communications Engineer

Requisition ID 11977 - Posted 28/01/2021



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 Optical Communications Engineer

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

Location
ESOC, Darmstadt, Germany

Description

Optical Communications Engineer in the Optical Technologies Section, Ground Station Engineering Division, Ground Systems Engineering & Innovation Department, Directorate of Operations

Duties

Under the direct authority of the Head of the Optical Technologies Section, you will be responsible for the development and engineering activities related to optical ground stations for communication, surveillance and tracking applications, including optical telescope system design and optical subsystems, and for the following specific tasks:

- Supporting the integration of direct to Earth optical communication systems into ground infrastructure for telecommunication and payload data-download applications;
- Supporting Quantum Key Distribution (QKD) optical ground station technology definition and associated pre-development activities;
- Specification, development, procurement and validation of analogue/digital subsystems required, including trade-off analysis, for passive and active optical systems, in particular optical transmitters, optical detectors, quantum technology and adaptive optics systems;
- Supporting study and technology development and standardisation activities;
- Conducting internal/external studies and prototyping in the field of optical subsystems;
- Managing industrial contracts for the above.

Technical competencies

Systems engineering
Optical free space and fiber communication
Quantum Key Distribution optical system knowledge
Experience in optical frequency and timing distribution

Behavioural competencies

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

Education

A Master's degree in engineering or physics.

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 25 February 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.

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.