

# EUROPEAN SPACE AGENCY

## Telecom Systems Engineer

**Job Req ID:** 12868

**Closing Date:** 06 April 2022

**Publication:** Internal & External

**Vacancy Type:** Permanent

**Date Posted:** 09 March 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

Telecom Systems Engineer in the Telecommunication Systems and Techniques Section, Radio Frequency Systems Division, Electrical Department, Directorate of Technology, Engineering and Quality.

The Telecommunication Systems and Techniques Section provides functional support to ESA projects and carries out technological research (R&D) in the fields of telecommunication network architectures, techniques and algorithms (coding, modulation, access, synchronisation, networking, security, etc.), system tools and telecom equipment.

In particular, the Section is responsible for:

- telecom system engineering tools: covering all aspects related to satellite telecom systems and sub-systems
- telecom architectures: covering both ground and payloads
- telecom signal processing: covering all signal processing techniques
- networking techniques: covering telecom satellite networking aspects including security
- telecom equipment: covering all baseband telecom equipment

### Duties

If appointed to this position 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 telecommunication systems throughout all project phases;
- participating in feasibility studies, project reviews and 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;
- fostering new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cutting-edge technologies and system architectures;
- laboratory activities as required;
- 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.

Your 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

Experience with the design, development and application of relevant tools and methods

Understanding of and practical experience with 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

Experience with Space Engineering Standards and their preparation and implementation

### **Behavioural competencies**

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

### **Education**

A Master's degree in telecommunications or electrical or computer engineering for this post is required.

### **Additional requirements**

Good knowledge of architectures and technology/techniques for satellite telecommunication systems including both ground and payloads. Familiarity with physical and upper-layer protocols, techniques and associated standards is required.

Knowledge of modern computer systems and programming languages is also required.

Several years of professional experience in satellite telecommunication systems analysis and design are required.

Expertise in the following fields will be considered an asset: network security protocols at all layers and architectural design of telecommunication systems targeting safety/security applications.

You must be eligible to obtain security clearance from your national security administration.

### **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.

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 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.