Job Title: Telecom Systems and Security Engineer

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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

Telecom Systems and Security Engineer, TEC-ESC (80771)

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

This position forms part of ESA's Advance Recruitment Scheme which is established to provide appropriate staffing resources when requirements materialise.

Appointments are therefore made for an initial duration of two years upon which you may be appointed to a permanent post at the Agency.

Location

ESTEC, Noordwijk, The Netherlands

Description

Telecom Systems and Security 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 signal processing: covering all signal processing techniques
- · Networking techniques: covering telecom satellite networking aspects including security
- Telecom equipment: covering all baseband telecom equipment

Duties

Reporting 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 and security techniques 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 long- and short-term needs;
- fostering new application areas for multidisciplinary activities, placing emphasis on innovative concepts, cuttingedge technologies and system architectures;
- · laboratory activities as required;
- monitoring applicable scientific and technological trends and maintaining a state-of-the-art expertise;

 contributing to the dissemination of the results of 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

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

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

Project support experience in a relevant domain

Experience in laboratory activities and management

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

Communication
Teamwork
Customer Focus
Innovation & Creativity
Planning & Organisation
Continuous Learning

Education

A Master's degree or equivalent qualification in telecommunications or in electrical or computer engineering is required.

Additional requirements

A good knowledge of architectures and technology/techniques for satellite telecommunication systems, covering physical and upper layers as well as network security aspects is required. Knowledge of modern computer systems, programming languages and cryptography techniques is also required.

Expertise in the following fields will be an asset: space asset protection, mission product protection, cryptographic processors and key management.

Some years of professional experience in satellite telecommunication systems analysis and design will be an asset. You must be eligible for security clearance by 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.

The closing date for applications is 25 June 2020.

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, 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. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States. (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.

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.