Job Title: Radio Navigation System Engineer

Req ID **8740** - Posted **14/06/2019**

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
Radio Navigation System Engineer
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 the selected candidate may be appointed to a permanent post in the Agency.

Location
ESTEC, Noordwijk, The Netherlands

Description
Radio Navigation System Engineer, Radio Navigation Systems & Techniques Section, Radio Frequency Systems Division, Radio Frequency Systems and Payloads Office, Electrical Department, Directorate of Technology, Engineering and Quality.

The Radio Navigation Systems and Techniques Section provides functional support to ESA projects (e.g. Galileo and EGNOS programmes, as well as ESA missions requiring a GNSS receiver on board) and carries out technological research (R&D) in the fields of radio navigation systems, techniques and equipment for ground and space applications.

Duties
Reporting to the Head of the Section within the technical fields described above, the main tasks and responsibilities of the post holder will incllude:

- Supporting ESA projects, programmes and general studies in the field of satellite navigation, in particular for future navigation and space-based positioning-navigation-timing (PNT) systems (system, signal processing and user equipment technologies) and GNSS space receivers, throughout all project phases;
- Participating in studies and R&D activities supporting the definition, analysis and/or proof-of-concept of future space-based PNT systems (e.g. EGNOS/Galileo evolution) regarding system, signals and user technologies, in particular (but not limited to) solutions aiming for resilient and trusted PNT capabilities;
- Fostering innovative ideas and new application areas in the field of radio navigation placing emphasis on innovative concepts, cutting-edge technologies and system architectures;
- Defining, initiating and managing R&D activities covering both long- and short-term needs and supporting the definition of the Agency's technology programmes in the field of radio navigation;
- Generating technical requirements and statements of work for tasks to be performed by industry, research institutes and laboratories, from early concept studies to full hardware development (for both space infrastructure and user segments);
- Contributing to the development and use of laboratory facilities in support of development testing of radio navigation systems;
- Monitoring relevant scientific and technological trends and maintaining a 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 the post holder's field of competence.

Technical competencies

General background and specific experience in the technical domains covered by the position
Understanding of related technologies, R&D trends and the industrial landscape
Project support experience in a relevant domain
Experience with laboratory or field testing of relevant technical equipment
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

Behavioural competencies

Communication
Teamwork
Customer Focus
Innovation & Creativity
Problem Solving
Results Orientation
Continuous Learning

Education

A Master's degree or equivalent qualification in telecommunication engineering is required.

Additional requirements

An understanding of relevant domains, e.g. space and terrestrial PNT systems, related user segment technologies and their hybridisation, as well as security, is required.

In-depth knowledge of least several of the following topics is required:

- Satellite radio navigation systems and techniques including (but not limited to) those relating to GNSS;
- Advanced processing techniques applied to radio navigation systems (signal and GNSS raw measurement processing, PVT algoritms including high-accuracy such as PPP, hybridisation. etc.);
- Architecture, design, algorithms and technologies for GNSS space reviews;
- Major terrestrial psitioning and radio navigation technologies;
- Systems and techniques (including architectures and digital signal processing aspects) for secure wireless systems (radio navigation, telecommunication, etc.).

Knowledge of RF systems and techniques for applications other than radio navigation (e.g. satellite telecommunication) is considered an asset.

Several years of work experience in a relevant field are required.

Candidates must be eligible for security clearance from their 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 12 July 2019.

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.