

Head of the Radio Navigation Systems and Techniques Section

Job Req ID: 14361

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Vacancy Type: Permanent

Date Posted: 18 May 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

Head of the Radio Navigation Systems and Techniques Section in the Radio Frequency Systems Division, Electrical Department, Directorate of Technology, Engineering and Quality.

You will report to the Head of the Radio Frequency Systems Division and be responsible for the management of your Section, its resources and activities. In addition, you will be required to carry out and to contribute to operational activities within the technical domains of the Section.

Duties

Your duties will include:

- ensuring a positive and motivating working environment within the Section;
- managing the Section's workforce and being accountable for all resources and activities delegated to it;
- maintaining and developing the expertise and technical competence of the Section's members in order to meet current and future strategic needs, taking account of their motivation, aspirations and professional development, ensuring appropriate opportunity for laboratory work;
- distributing and allocating tasks to Section members, monitoring and managing their performance and providing timely and regular feedback;
- anticipating and resolving sensitive or difficult situations, liaising with HR as required;
- negotiating, organizing and coordinating the specialist support provided by the Section to ESA projects throughout all phases;
- preparing resource requirements based on needs originating from both inside and outside the Section and resolving conflicting demands on the use of the resources available within the Section;
- establishing, developing and maintaining good working relationships and technical networks with users, project groups and other organizational bodies both inside and outside

the Agency;

- contributing to the continuous improvement of working procedures and to the reflection on the evolution of the Section's role and activities.

The Section covers radio navigation techniques and technologies, elements, and subsystems capable of generating, receiving, exploiting and analyzing the signals from current and future radio navigation systems (GPS, GLONASS, EGNOS, GALILEO, BEIDOU, etc.), including system design tools and navigation equipment, with emphasis on engineering aspects, GNSS system and subsystem evolution, design and low TRL for technological demonstrator prototyping. These include, in particular:

- Navigation system design and tools: covering all aspects related to concepts, architecture, ground, space and hybrid ground/space navigation systems, subsystems, signal in space, performance, security, technologies, techniques, and methodologies, standardization and all associated tools for simulations and analysis;
- Novel navigation techniques, equipment design and prototyping: covering all technologies related to navigation, receivers from RF to baseband processing, including signal processing positioning, navigation and integrity algorithms, integration with other sensors, local augmentation, and integration with telecommunication and Earth observation systems and services, new services, applications and missions;
- On-board receivers: covering all aspects from concept definition to equipment development, related to radio navigation and usage of GNSS signals in space, receivers, algorithms signal processing and all the related technologies;
- Formation flying RF metrology: covering all aspects related to high accuracy RF metrology required for formation flying applications, including on-board real time absolute and relative navigation functions;

Within the terms of reference of the Section, you will be responsible for:

- negotiating, organising and supervising functional support provided by the Section to other sections in the Directorate and to ESA programmes, as well as providing specialised support to other European projects and customers;
- providing proactive, high-quality support to the Agency's projects and programmes falling within the Section's area of competence;
- actively contributing to the Agency's R&D strategy and elaboration of research programmes;
- providing an independent technical assessment capability, at both project and Agency level, and supporting project reviews;
- ensuring the timely execution from SOW to Final Review for R&D activities with the best outcomes;
- ensuring proper dissemination and visibility of our R&D results among projects and industries;
- contributing to the Division's R&D review process and follow-up actions;
- identifying, closely tracking and reporting on achievements of the key topics for the section;
- ensuring the effective use of Corporate funding to investigate innovative ideas, technologies and techniques;
- preparing project support and monitoring of trainees/YGT/NPI/JPP/Research Fellows;
- consolidating and expanding the Division/Section's technical expertise within the terms of reference and ensure that it is well recognised outside TEC-ES, also providing support to other ESA divisions and sections;
- developing cooperation with external stakeholders (universities, companies, satellite operators, research institutes, testing facilities) and support international collaboration (when approved);
- providing support to standardisation bodies within your field of competence;
- ensuring the Section's involvement in ESA working groups, and organising workshops/conferences;

- ensuring that operations comply with ISO 9001;
- supporting the activities of the relevant competence domains;
- maintaining state-of-the-art expertise;
- managing the associated laboratory facilities.

Due to the interdisciplinary nature of the Radio Navigation domain, you will be expected to establish and maintain good working relationships and networks with experts in the Directorate from other related disciplines.

Technical competencies

Knowledge of relevant technical domains

Experience in supporting ESA programmes/projects and knowledge of their technical and programmatic requirements in relevant technical domains

Knowledge of the industrial landscape in relevant technical domains and ability to define technology development roadmaps identifying future trends in technology requirements

Experience in driving R&D activities, as well as knowledge of the ESA technology programmes

Resource management experience

Experience in ESA procurement processes and contract management as well as applied negotiation skills

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A Master's degree in Radio Navigation, Telecommunication, Electronics or equivalent is required for this post.

Additional requirements

Solid experience related to the Section's technical domains is required, as well as in the definition and specification of technology R&D activities. Applicants should also have substantial experience in relevant fields of design and technology development.

- the potential to manage individuals or a team of experts in a project or R&D setting and the ability to organise their activities;
- strong leadership capabilities, with proven relationship management and communication skills;
- the ability to drive your team's performance, developing your people by encouraging learning, delegating responsibility and providing regular and constructive feedback;
- strong problem-solving skills to deal with day-to-day operational challenges, together with demonstrated planning and organisational skills;
- a strong degree of results orientation with the ability to set priorities and present practical solutions both orally and in writing;
- the ability to manage challenging situations proactively and constructively and to be customer focused;
- the ability to represent the Agency in interfaces with industry and government agencies.

Previous people management experience is an asset, as is international experience, i.e. outside your home country, and experience in diverse functional areas relevant to ESA's activities.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

For further information please visit: [Professionals](#), [What we offer](#) and [FAQ](#)

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.

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 or balanced 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 conducted by an external background screening service.

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.

*Member States, Associate Members or Cooperating States.