# Job Title: System Performance Engineer

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## **EUROPEAN SPACE AGENCY**

Vacancy in the Directorate of Navigation.

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**

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

### Location

ESTEC, Noordwijk, The Netherlands With a resident assignment to Toulouse

### **Description**

System Performance Engineer in the Radio Navigation Systems & Technology Section, Radio Frequency Systems Division, Electrical Department, Directorate of Technology Engineering & Quality.

#### **Duties**

The postholder will be assigned as integrated support in the function of System Performance Engineer in the System Engineering Section of the EGNOS and SBAS Division, Strategy and Programme Department, Directorate of Navigation. Training and familiarisation with the parent Department's mandate, processes and procedures will be provided at the start of this assignment.

The postholder will report to the Head of the System Engineering section and will be primarily responsible for following and support managing the industrial work packages for EGNOS V2 and V3 performances and for contributing to all mission evolutions. Duties include:

- ensuring the consistency of EGNOS system performance requirements specification (Integrity, Continuity, Accuracy, Availability) compliance and qualification across the division especially with Mission, PA/Safety/Security and Development teams;
- supporting the division for all aspects concerning EGNOS system performance requirements, navigation algorithms, compliance and qualification in particular for Mission, Standards and User Segment aspects;
- supporting the traceability, statements of compliance and deviations to higher level requirements documents including MRD and SPRD and applicable EC technical standards for what concerns EGNOS performance requirements;
- supporting the system technical external interfaces related to EGNOS performance qualification (e.g. CFIs for scenarios, real data, feared events definition);
- supporting the EGNOS procurement process and following-up industrial activities for all what concerns performance related aspects, including for performance requirements compliance and qualification, flow down of the performance requirements, design description and justification;
- supporting the various EGNOS project change control boards (MRD CCB, Project CCB, OR Panel, SE Board, Programme CCB, etc);
- responsible for ensuring EGNOS qualification with respect to performance requirements
- coordinating the EGNOS performance simulation and analysis tools roadmap and its implementation plan to support specific EGNOS releases and evolutions;
- preparing and following-up industrial tasks and developments in support to EGNOS system performance
  engineering from early concept to system qualification including development of performance simulation and
  analysis tools;

- contributing to specific EGNOS Navigation task force processes related to compliance to applicable baseline requirements;
- contributing as panel chairman/secretary for all major reviews linked to EGNOS performance matters;
- preparing reports for internal and external entities such as ESA management, GSA, ANSP Working Group and MRD CCB:
- coordinating with the GSA for all aspects related to EGNOS performances;
- contributing to the dissemination of results of activities performed and knowledge transfer across the Agency and external to the Agency in accordance with management approval;
- participating in periodic meetings with the parent section, contributing to the transfer of technical knowledge and lessons learned across the Agency.

### **Technical competencies**

Capability to evaluate performance at mission level

Navigation accuracy analysis

Solid understanding/knowledge of requirements engineering

ESA space systems procurement, development and verification processes and standards (incl. code of best practices and project reviews)

Radio navigation principles, systems and technology

Experience in analysis and simulation of complex systems

# Behavioural competencies

Communication Results Orientation Problem Solving Teamwork

#### Education

Engineering degree (Master level) in telecommunications or electronic engineering

### Additional requirements

Applicants for this position should have a good background in satellite navigation systems together with several years' working experience in these fields. Experiences in procurement of industrial activities, in navigation algorithms and navigation standards (MOPS, SARPS) are distinct advantages; Experience in Mission requirements analysis, system design and performance engineering, and in procurement preparation and implementation (preparation of technical requirements and SoW, negotiation with Industry, Implementation technical follow up, acceptance and qualification reviews, etc..) is required.

Candidates should have good interpersonal and communication skills. They should be able to work autonomously, effectively and cooperatively in a diverse and international team environment and to define and implement solutions in line with team and individual objectives and project deadlines.

Applicants should also have good analytical, organisational and reporting skills, a proactive attitude to solving problems and an interest in innovative technologies.

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 01 May 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

Please note that applications are only considered from nationals of one of the following States: Austria, Beigium, 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 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.