

Job Title: Galileo Signal Authentication Engineer

Req ID 5205 - Posted 26/03/2018



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Navigation.

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Post

Galileo Signal Authentication Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

Galileo Signal Authentication Engineer in the in the G2G System Engineering Unit, Galileo System Procurement Service, Galileo System Office, Galileo Programme Department, Directorate of Navigation.

Duties

The postholder will be responsible for Galileo Signal authentication tasks for the Galileo Programme (Full Operational capability and Galileo Evolutions), defining and coordinating activities leading to the authentication of the Open Service and Commercial Service within the Programme and industrial consortia, and liaising with Agency-internal and -external entities with the objective of ensuring that the space, ground and test user segments fulfil the Agency's mission requirements.

Within the project boundaries and constraints, under the supervision of the G2G System Engineering Head of Unit, the responsibilities of this post include:

- Leading the definition, analyses and consolidation of the Galileo Signal-In-Space authentication capabilities and their evolution, in a system-wide fashion based on mission inputs and interactions with Programme stakeholders;
- Acting as focal point for all topics related to Galileo Signal-In-Space authentication concepts within the Agency and with external entities;
- Contributing to the Galileo system architecture definition of the Galileo Signal-In-Space authentication and its evolution;
- Ensuring proper specification and implementation of Galileo Signal-In-Space authentication into Space, Ground and Test User Segments, including the usage of receiver-based techniques against spoofing and jamming (e.g. additional sensors and aiding means);
- Performing prospective analyses about new ways to authenticate the Galileo Signal-In-Space considering the evolution of the threats at user level.
- Contributing to the definition and implementation of testbeds to demonstrate and prototype novel Galileo Signal-In-Space authentication concepts;
- Procuring and maintaining authentication tools to perform the analysis needed to accomplish the tasks described above, and simulations and tests as required by the Programme.
- Following up and supporting the verification activities related to the area of expertise;
- Coordinating with the Space Segment team, the Ground Segment team and the GNSS Evolution team in its area of expertise;
- Supporting the Operations and Service teams;
- Generating lessons learned and contributing to the Knowledge Management initiatives in the Directorate of Navigation;

In the execution of his/her tasks the Galileo Authentication Engineer will coordinate an industrial support team and cooperate closely with the other team members working on System design and verification, in particular with Signal-In-Space, system security, performance, receiver engineers and system architects. He/She will also cooperate with Space Segment, Ground Segment, Operation support and the GNSS Evolution team.

Technical competencies

Radio navigation principles, systems and technology

Experience in analysis and simulation of complex systems

Experience with laboratory or field testing of relevant technical equipment

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

Project and technical management

Behavioural competencies

Communication

Planning & Organisation

Problem Solving

Teamwork

Integrity

Education

Master's degree or equivalent qualification in Telecommunications Engineering or similar.

Additional requirements

Applicants should have a background in Telecommunications Engineering or similar and a strong knowledge of GNSS, signal processing and receivers, GNSS authentication and cryptography.

They should have managerial potential and be able to coordinate a team of engineers and organise their activities. They should be able to handle pressure and conflict as may typically occur in a project team. They should be results-oriented, able to set priorities, capable of presenting practical solutions both verbally and in writing.

Candidates should have good leadership, interpersonal and communication skills. They should have the ability to work autonomously, effectively and cooperatively in a diverse, international team environment, defining and implementing solutions in line with team and individual objectives and project deadlines. They should also have good technical, analytical, organisational and reporting skills, a proactive attitude to solving problems and an interest in innovative technologies.

The applicants shall be ready to take security clearance from the national relevant authority.

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 09 April 2018.

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 and Canada and Slovenia and in addition of Member States of the European Union not members of ESA: Bulgaria, Croatia, Cyprus, Latvia, Lithuania, Malta and Slovakia.

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. Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States when short-listing for interview. (<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.