

Galileo 2nd Generation Ground Segment System Software Engineer

Job Req ID: 14642

Closing Date: 10 May 2022

Publication: Internal & External

Vacancy Type: Permanent

Date Posted: 12 April 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

Ground Segment System Software Engineer in the Ground SW System & Function Verification Section, Software Systems Division, Systems Department, Directorate of Technology, Engineering and Quality.

You will be assigned as integrated support to the function of Galileo 2nd Generation Ground Segment System Software Engineer in the Galileo G2 GS Management Service, Galileo Ground Segment Management Office, Directorate of Navigation.

The System Software Engineer will become part of the team responsible for modernising the existing Galileo ground segment software infrastructure and supporting the enhancement of navigation services through the integration of next-generation Galileo satellites. Using state-of-the-art layered architecture, it is planned to operate software services from a common hardware platform. This ground segment infrastructure is a very software-intensive system with modern software methodologies, tools and processes being required to master the complexity.

The Ground Segment Deployment Platform will use an Agile Release Train (ART) based on the Scaled Agile Framework (SAFe). The G2G Ground Segment System Software Engineer will act as business owner overseeing the continued specification, design and development of the Platform, including suitable data management functions.

You will report to the Head of the Galileo G2 Ground Segment Management Service and will support the procurement and development of the next-generation Ground Segment for Galileo.

Common services to be provided by the platform are:

- IaaS (memory, compute and storage):

- data centre deployment;
- secure network services, including secure WAN;
- high-availability features, including business continuity;
- PaaS:
 - resource abstraction layers (e.g. hyper-convergence, virtualisation, containerisation);
 - scalability; platform management tooling; automated software deployment; software and
 - hardware patching; accredited IT security and protection;
- SaaS:
 - centralised security management (e.g. security monitoring, access control);
 - software service hosting, communication and interfacing (e.g. message queue, service mesh);
 - data.

As integrated support, you will be able to work with a technical team of software specialists who support many ESA missions in the same technical area.

Duties

Leading the specification and procurement of the 2nd Generation deployment platform;

- Supporting management of the 2nd Generation Galileo Ground Segment classified and unclassified Technical Baseline (applicable requirements and standards);
- Supporting definition of the 2nd Generation Galileo Ground Segment Statement of Work according to the applicable ECSS standards and system design objectives;
- Providing support to the 2nd Generation Galileo System design activities as necessary to ensure consistency with the System Operational Concept;
- Reporting regularly to the Head of the Galileo G2 Ground Segment Management Service; Supporting Ground Segment reviews according to SoW milestones, applicable ECSS standards and SAFe ART Program Increment lifecycle.

Technical competencies

Datacentres & Networking

Understanding of IT infrastructure management

State-of-the-art knowledge in area of IT Infrastructure and software development and related IT trends in industry

Knowledge and understanding of cyber security matters

Solid understanding/knowledge of requirements engineering

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A Master's degree in information technology, electrical engineering or another scientific discipline is required for this post.

Additional requirements

- You must have, or be able to obtain, security clearance to the ESA Secret level.

- You should have a good knowledge of Agile software engineering techniques. Knowledge of a scaled agile methodology would be a further advantage.
- Experience and understanding of the following currently used technologies and engineering practices will be considered an asset: MBSE, PaaS, Virtualisation, Containerisation, IaaS, SOA, micro-services, Kubernetes, Kafka.

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.

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 or nationals of Canada, Latvia, Lithuania, Slovenia, Bulgaria, Croatia, Cyprus, Malta or 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*. 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.

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.