

## Job Title: Mission Analysis Engineer

Req ID 4802 - Posted 21/12/2017



### 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

Mission Analysis Engineer

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

#### Location

ESOC, Darmstadt, Germany

#### Description

Galileo Mission Analysis Engineer in the Mission Analysis Section, Flight Dynamics Division, Ground Systems Engineering Department, Directorate of Operations. The postholder will initially be assigned as integrated support to the Galileo Project, reporting to the Head of the Galileo System Engineering Unit, Galileo System Procurement Service, Galileo System Office, Galileo Programme Department, Directorate of Navigation.

#### Duties

The postholder will be responsible for mission analysis tasks for the Galileo Programme (IOV, FOC and Galileo Evolutions), defining and coordinating Constellation Mission Analysis related activities within the Programme and industrial consortia and liaising with Agency-internal and -external entities with the objective of ensuring that the space and ground segments fulfil the Agency's mission requirements. Within the project boundaries and constraints, the responsibilities of this post include:

- acting as focal point for all issues related to the satellite constellation geometry, from launch, deployment in the assigned slots, orbit maintenance, replenishment, and disposal of the Galileo satellites;
- providing and updating the Constellation deployment and replenishment plan that maintains service availability taking into account satellite deployment constraints, satellite reliability, spare policy, and satellite and launcher procurement plan;
- ensuring proper implementation of launcher requirements related to the deployment of satellites to the Galileo Constellation, and proper disposal of launcher orbital stages;
- ensuring proper implementation of the critical requirements related to satellite orbit and attitude control from LEOP through satellite end of life and disposal, to ensure navigation service performances;
- following up the definition and actual verification of the spacecraft properties, constraints, and mathematical algorithms that are critical to ensure the proper deployment and maintenance of satellites in the Constellation;
- contributing to the investigation and closure of AR and NCR related to area of expertise;
- performing post and in-flight analyses to tune Mission Analysis assumptions;
- coordinating with the Space Segment team in its area of expertise, in particular the Avionics subsystem, and its contribution to the overall mission objectives and navigation service performances;
- coordinating with the Ground Segment team in its area of expertise, in particular flight dynamics;
- supporting the Operations and Service teams in its area of expertise, in particular flight dynamics and Constellation management;
- procuring and maintaining constellation mission analysis tools to perform the analysis needed to accomplish the tasks described above, and simulations as required by the Programme.
- generating lessons learned and contributing to the Knowledge Management initiatives in the Directorate of Navigation;

In the execution of his/her tasks the Galileo Mission Engineer will coordinate a team of engineers. He/she will cooperate closely with the other team members and particularly with those responsible for Satellite Platform and Ground Segment procurement, and Operations support.

In the execution of the tasks the postholder will be further supported by functional support from the Directorate of Operations.

#### Technical competencies

Experience in mission, spacecraft and/or payload operations

Mission analysis

Astrodynamics software development

ESA Space systems development, verification and review processes and standards

Project and technical management

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

#### Behavioural competencies

Communication

Planning & Organisation

Problem Solving

Teamwork

Integrity

#### Education

Engineering degree (Master level) in Aerospace Engineering.

#### Additional requirements

Applicants for this position should have good leadership, interpersonal and communication skills, and 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. 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 31 January 2018.**

If you require support with your application due to a disability, please email [contact.human.resources@esa.int](mailto:contact.human.resources@esa.int).

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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.

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.