

Job Title: System Engineer

Req ID 10071 - Posted 01/07/2020



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Science.

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 Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

The Laser Interferometer Space Antenna (LISA) was selected in 2017 by the Science Programme Committee for the Science Programme's L3 launch opportunity.

As System Engineer, you would report to the Head of the Astrophysics and Fundamental Physics Missions Section (SCI-FMA) in the Mission Studies Division (SCI-FM), under the Future Missions Department (SCI-F), Directorate of Science. The Section works closely with the Instrument Studies Section (SCI-FIS) on payload-related aspects, and the Technology Preparation Section (SCI-FT) on technology development activities.

Duties

As System Engineer, you would handle all aspects of Mission System Studies (assessment/definition Phase 0/A/B1) for future astrophysics and fundamental physics science missions. Initially, you would be assigned to LISA.

The duties focus on (but are not limited to) the preparatory studies for future missions under ESA's Science Programme. Your specific tasks would include:

- Supporting LISA system engineering activities during the assessment/definition phase in close collaboration with the LISA Study Manager. This covers internal studies done by the Agency and the technical management of study contracts placed with European industry, including invitation- to-tender preparatory activities and the technical follow-up of industrial teams;
- Interfacing as requested with relevant external bodies: LISA science study team (in liaison with the study scientist), specific technical working groups, ESOC and ESAC, payload study teams (LISA consortium) for payload definition, including industrial partners and LISA international partner technical teams;
- Supporting the elaboration and execution of the LISA-related technology programme in partnership with the Technology Preparation Section, the Instrument Studies Section and the relevant Sections/Divisions in the Directorate of Technology, Engineering and Quality;
- Contributing to technical and programmatic analysis (technical feasibility, cost and risk assessment) for future science missions and their payloads, with the focus being LISA;
- Monitoring the developments of relevant astrophysics and fundamental physics missions within and outside the Agency for cross-fertilisation with the Future Missions Department activities;
- Contributing to renewal of the Science Programme and related calls for themes and missions, including preparation of technical call information, proposal evaluation and conduct of phase 0 studies of selected candidates.
- Contributing to generic section, office and department tasks as these arise (such as reporting, reviews, evaluations).

Technical competencies

Extensive experience in space mission studies or projects

System engineering and understanding of system requirements and interfaces (including payloads)
Management of industrial activities including reviews
Knowledge of cost estimation, including industrial costs and schedule aspects
Knowledge on astrophysics and fundamental physics missions
Good knowledge and understanding of physics

Behavioural competencies

Problem Solving
Innovation & Creativity
Results Orientation
Planning & Organisation
Communication
Teamwork

Education

A PhD or Master's degree in engineering or applied physics is required.

Additional requirements

You should demonstrate a good balance between interacting with ESA stakeholders, scientific institutions and industry. You should be self-motivated and systems oriented.

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 30 July 2020.

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.

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.