

System Engineer

Job Req ID: 15816

Closing Date: 19 July 2022

Publication: Internal & External

Vacancy Type: Permanent

Date Posted: 21 June 2022

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. 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

The Science programme consists of 3 classifications of missions: Large-(L), Medium-(M) and Fast Small-(F) missions, and these are regularly renewed by open calls. Currently a call for M- and F-class missions is open. Following this call, selected candidate missions will undergo Phase 0/A/B1 studies conducted by the Science Missions Studies Division (SCI-FM), within the Future Missions Department (SCI-F).

As System Engineer, you will report to the Head of the Solar System Missions Section (SCI-FMP) within the Science Mission Studies Division. You will lead the study for one of the selected future mission candidates from phase 0/A/B1 until adoption. You will work within a dedicated team and closely with the Instrument Studies Section for science instrument payload related aspects, the Technology Preparation Section for technology development activities.

Duties

Responsibilities are focused (but not limited) to leading the study activities for the selected candidate mission. Tasks include:

- leading or supporting assessment/definition studies for future Cosmic Vision/Voyage 2050 missions. This covers internal studies carried out by the Agency and the management of study contracts placed with European industry, including invitation-to-tender preparatory activities and the technical follow-up of industrial teams;
- for a given mission study, interfacing with relevant external bodies on technical matters: science study team (in liaison with the Study Scientist), specific technical working groups, for mission operations at ESOC and science operations at ESAC, payload study teams for payload definition and possibly international partner technical teams;
- for a given mission study, leading an internal team consisting of support specialists from technical and operation directorates and from within the Science Future Missions Department itself,
- contributing to the identification, preparation and execution of technology development activities as part of the Science Core Technology Programme in cooperation with the

Technology Preparation Section,

- contributing to technical and programmatic analysis (technical feasibility, schedule, cost and risk assessment) for future science missions and their payloads;
- for Missions of Opportunity in the area of Astrophysics and Fundamental Physics supporting the coordination/execution of ESA contributions to partner space agencies;
- contributing to the renewal of the Science Programme and related calls for themes and missions. That includes preparation of technical call information, proposal evaluation and conduct of phase 0 studies of selected candidates;
- contributing to generic Section, Division and Department tasks as they arise (such as reporting, reviews, evaluations, etc.).

Technical competencies

Extensive experience in space mission studies or projects

Extensive space 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 Science Missions in particular in the field of Solar System Missions

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

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

Additional requirements

Other requirements include:

- the necessary relationship management skills for positive and constructive interactions with ESA stakeholders, scientific institutions, and industry;
- the ability to work both independently and effectively within a team;
- be system- and result-oriented, with an end-to-end view;
- have excellent communications skills.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

For further information please visit: [Professionals](#), [What we offer](#) and [FAQ](#)

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 and Canada, Latvia, Lithuania 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 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 conducted by an external background screening service.

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.