

Experiment System Engineer

Job Req ID: 14654

Closing Date: 10 March 2022

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Vacancy Type: Permanent

Date Posted: 10 February 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 qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, a 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

We are looking for an Experiment System Engineer for the Astrophysics & International Collaboration Mission Section (SCI-FEA) within the PRODEX Office (SCI-FE), Future Missions Department (SCI-F), Directorate of Science.

PRODEX is an optional programme dedicated to the development of scientific instruments and experiments for space science missions. The Astrophysics & International Collaboration Missions Section (SCI-FEA) is responsible for a subset of PRODEX activities, including implementing and monitoring activities and developments related to astrophysics and fundamental physics science missions (e.g., ATHENA, LISA, ARIEL, etc.), as well as those involving international external partners, some of which have export control constraints. Other domains within the Office may also be entrusted to the Section (e.g., Earth observation-related developments). Besides the PRODEX Programme, the Future Missions Department is responsible for preparing future missions, as well as defining and implementing Small/Fast missions within the Directorate of Science (e.g., SMILE, Cornerstone Interceptor).

Duties

You will be responsible for implementing and monitoring several PRODEX activities assigned to you, with an emphasis on scientific space instrumentation development. These developments may involve industry and/or scientific institutes and may cover either a full instrument or instrument contributions or subsystems.

Specific duties include:

- establishing the overall work programme for the development of PRODEX experiments within the scientific institutes in line with the instructions from the relevant delegation
- monitoring the technical, schedule and financial status of experiment development, identifying potential problem areas and proposing remedial actions

- supporting the review of project implementation proposals and implementing n development activities as assigned;
- liaising between the relevant scientific institutes and industry for the duration of contracts; interfacing with internal ESA project teams or specialists technical/programmatic matters and with the relevant financial and procurement experts on financial and contractual matters;
- acting as the focal point for technical and administrative interfaces between PRODEX experiments and your Head of Section;
- regular reporting to your line manager on the status of the activities and any difficulties encountered, including written input as requested.

Technical competencies

System Engineering and AIV

Hands-on hardware development experience

Design, development, and verification of Scientific (Space) Instrumentation including optic detection and electronics, mechanical and thermal aspects

Management of industrial activities including reviews

Knowledge of cost and schedule elements of hardware development contracts

Experience in managing scientific space hardware developments with multiple interfaces (scientific consortium, project, industry)

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A PhD or master's degree in physics or space engineering, or equivalent qualification is required.

Additional requirements

You should also demonstrate an ability to:

- apply a systems-oriented approach to the specifics of each project and partners, taking into consideration technical, financial and schedule aspects;
- proactively engage and coordinate a diverse range of internal technical experts and work with external partners with the scientific institutes/industry, while considering programmatic constraints;
- anticipate problems and propose solutions bearing the overall goals of the PRODEX Office in mind;
- show flexibility in dealing with day-to-day operational challenges, while demonstrating strong planning and organisational skills;
- show a high level of motivation and dedication, taking ownership and acting proactively;
- work independently while providing your line manager with regular feedback and asking for support where necessary;
- have excellent communication skills, both written and verbal to be able to present complex technical issues clearly and convincingly

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. Where 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 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 adequate distribution of posts among nationals of the ESA Member States*. When shortlisting for an interview, priority will first be given to internal candidates and secondly 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.