

# Job Title: Payload Study Engineer (Planetary)

Requisition ID 11936 - Posted 13/01/2021



## 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. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

### Post

#### **Payload Study Engineer (Planetary)**

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

### Location

ESTEC, Noordwijk, The Netherlands

### Description

The Future Missions Department (SCI-F) is in charge of mission preparation activities for ESA's Science programmes, including mission definition studies (Phases 0/A/B1) and technology development activities.

Within the Department, the Instrument Studies Section (SCI-FIS) is in charge of the overall technical management of payload definition activities for future science missions in early phases, including technical interface with instrument consortia. The section also provides general payload expertise support to other entities within the Directorate.

### Duties

Reporting to the Head of the Instrument Studies Section, your responsibilities will include:

- overall technical management of payload definition activities in early Phases (Phases 0/A/B1) for a given future mission under study, for payload elements provided by ESA, Member States and/or international contributions;
- interfacing technically with the study science teams for instrumentation aspects in early phases;
- analysing the design and architecture of plasma physics, planetary science, astronomical or fundamental physics instruments; with a specific focus on instruments for planetary science and solar system missions.
- coordinating and preparing the Experiment Interface Document – Part A (or equivalent document) as Book-Captain, in close coordination with the study team;
- acting as technical interface with instrument teams in Phase A or B1;
- coordinating and producing payload-related documents for ESA internal reviews, in particular the Preliminary Requirements Review at the end of Phase A, or the System Requirements Review at the end of Phase B1;
- defining and implementing, under the Head of Section's overall supervision and in close collaboration with the PRODEX Office where relevant, ESA-funded payload activities and pre-development, for nationally and/or ESA provided payload elements, to reach the required definition maturity and technology readiness levels at the time of mission adoption;
- defining critical payload validation activities needs for securing mission adoption, and liaising with the Payload Validation Section for their timely implementation;
- identifying and elaborating new instrument technologies required for the Science Directorate's Programmes; participating in the elaborating and implementing the Cosmic Vision and Voyage 2050 technology development plans; following up nationally-funded activities;
- providing payload expertise and support to projects under development as required, e.g. through participation in reviews.

### Technical competencies

Experience with science instruments in all phases

Experience in the design, performance analysis, development and testing of various types of space instrumentation

Experience in dealing with complex space payloads and space science technology development

A well-developed system view and understanding of payload requirements, development needs, knowledge of payload technologies and general space instrumentation

System engineering and understanding of system requirements and interfaces

Expertise with in-situ instrumentation and associated sensor systems for solar system missions

Expertise in remote-sensing instrumentation for planetary missions, including space-optics and detectors, and/or in RF and radar instruments

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## Behavioural competencies

Result Orientation  
Operational Efficiency  
Fostering Cooperation  
Relationship Management  
Continuous Improvement  
Forward Thinking

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## Education

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

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## Additional requirements

You should also:

- have the necessary relationship management skills to balance the interactions with various ESA stakeholders, including scientific institutions and industry
- be self-motivated and a problem solver
- be systems oriented
- be a team player and have excellent planning & organisational skills

## 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 09 February 2021.**

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 at [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, Latvia 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. (<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.