EUROPEAN SPACE AGENCY

CIMR Instrument Principal Engineer

Job Req ID: 14965

Closing Date: 31 March 2022 Publication: Internal & External Vacancy Type: Permanent Date Posted: 03 March 2022

Vacancy in the Directorate of Earth Observation Programmes.

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

Instrument Principal Engineer for the CIMR (Copernicus Imaging Microwave Radiometer) mission, presently in B2 phase.

If selected for this post, you will report to the CIMR Payload Manager for all technical and programmatic matters and will work within the CIMR Project Team.

The assignment covers the activities related to Phases B2/C/D/E1 for prototype and recurrent satellites, including storage, where applicable.

Duties

You will be technically responsible for the CIMR Instrument definition, implementation and verification/validation, and be entrusted with controlling the instrument interfaces, performances and the related critical technologies.

Your responsibilities will include proactive monitoring of the instrument procurement within the CIMR Project, supervising, in particular, the CIMR Antenna procurement activities within the industrial consortium in close cooperation with the Payload and the Project Team members.

The main tasks and responsibilities include:

 monitoring industrial activities related to procurement of the Instrument and associated equipment, in particular the Antenna and other critical subsystems, ensuring suitable planning and progress of work, its timely availability to the Spacecraft, and full compliance with technical and programmatic requirements;

- consolidating and maintaining Instrument requirements, ensuring their consistent definition and flow-down to subsystem and equipment levels, with support from the respective disciplines' engineers and the industrial consortium;
- supervising the Instrument definition process, ensuring that a robust architecture, design, interfaces and engineering budgets are established, consistently and cost-effectively;
- monitoring performance evolution at Instrument level down to lower levels, ensuring requirements are met at Instrument and system levels during all programme phases up to in-orbit commissioning;
- ensuring the correct definition and controlling the suitable implementation of the Instrument development, AIV and AIT processes from equipment and subsystem level, consistent with spacecraft-level verification;
- ensuring timely development and maintenance of the models, GSE, simulators, tools and documentation required for the definition of technical Instrument budgets and evaluation of Instrument performance;
- supervising the definition of instrument characterisation and validation and execution of related activities on- ground and in-orbit;
- monitoring the definition and execution of instrument calibration, ensuring the availability of key data for processing;
- supporting the satellite AIV activities, preparation of the launch campaign and in-orbit operations until end of commissioning;
- working with other project members and coordinating the technical specialists to ensure timely and consistent support through the Instrument definition, procurement and verification phases;
- providing regular reporting and support to the Payload Manager on all the relevant aspects of Instrument design, development, procurement and scheduling;
- identifying risks and potential problem areas, proposing mitigation actions where appropriate.

Technical competencies

Multidisciplinary knowledge of area of responsibility, in particular In the RF and Antenna domains

Experience in design, development, verification, characterization and testing of microwave Instrument, in particular for the RF and Antenna aspects

Knowledge of radiometer architectures and radiometer techniques

Experience of managing technical interfaces between subsystems both within ESA project team environment and for the industrial consortium

Experience in project environment working on procurement, monitoring of industrial activities, coordinating meetings and reviews

Knowledge/experience of technical support within ESA, ensuring best level technical support for the Project

Knowledge of ESA and Industrial procurement processes and standards for Instrument/Antennas development, verification and PA

Complex project risk management processes

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A Master's degree in a relevant engineering discipline is required.

Additional requirements

For this position, specific expertise and working experience in the antenna and RF domains is an asset.

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.