

Job Title: SAR Principal Engineer

Req ID 9542 - Posted 31/03/2020

EUROPEAN SPACE AGENCY

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. Applications from women are encouraged.

Post

SAR Principal Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

SAR Principal Engineer in the Payload Section, Copernicus Sentinel-1 Project, Copernicus Space Components Space Segment Programme, Earth Observation Projects Department, Directorate of Earth Observation Programmes.

You will report to the Sentinel-1 Payload Manager and work within the Sentinel-1 Project Team.

Duties

You will be responsible for monitoring SAR instrument procurement within the Sentinel-1 project, entrusted with controlling the instrument performance and supervising, in particular, the SAR antenna procurement activities within the industrial consortium in close cooperation with payload and project team members. Tasks and responsibilities include:

- monitoring industrial activities related to the Sentinel-1 SAR instrument and in particular the SAR antenna subsystem, ensuring suitable planning and progress of work;
- maintaining Sentinel-1 SAR requirements, ensuring coherent definition and flow-down to system, subsystem and equipment requirements, with support from the respective discipline engineers and the industrial consortium;
- monitoring and controlling correct implementation of the SAR instrument verification process from equipment and subsystems, supporting identification of verification methods and levels, associated model philosophy and verification tools, consistent with spacecraft-level verification;
- supervising the overall SAR instrument characterisation definition and its monitoring of components as required;
- ensuring consistent definition of instrument internal interfaces, in conjunction with other payload team members;
- coordinating SAR-level verification control boards, participating at relevant system/subsystem/equipment level as necessary;
- ensuring the required MGSE and EGSE are suitably defined, developed and verified according to the required specification and programme of work, in particular the instrument simulator;
- monitoring the overall SAR instrument schedule, in cooperation with project team members and the Sentinel-1 SAR contractor, from equipment and subsystem through to spacecraft system level;
- supporting definition of the in-orbit commissioning plan, in cooperation with Sentinel-1 team members and the Launch & Early Orbit Phase (LEOP) plan, in cooperation with FOS;
- participating in SAR-related reviews and relevant system/subsystem project meetings; reviewing relevant project documentation produced over its lifetime.

You will liaise with Technical Directorate support engineers and Sentinel-1 FOS/PDGS teams and will interface with MW principal engineers from other Copernicus Space Component projects.

Technical competencies

Experience in SAR Calibration and Characterisation, both on-ground and in-orbit

Experience in SAR design and verification

Experience in assembly, integration and test processes at SAR instrument level

Experience in definition of In-Orbit Commissioning Plans and execution of In-Orbit calibration, characterisation and performance analyses for SAR systems

Knowledge of SAR architectures and SAR techniques

Knowledge of ESA and industrial development, verification and procurement processes

Behavioural competencies

Communication
Planning & Organisation
Problem Solving
Responsible Decision-Making
Results Orientation

Education

Master's degree or equivalent qualification in a relevant engineering field.

Additional requirements

- Sound understanding of spacecraft systems.
- Knowledge and experience of SAR performance analysis and tools.
- Knowledge and experience of verification practices, notably DOORS, is desirable.

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 28 April 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.