EUROPEAN SPACE AGENCY

Telecom System Engineer

Job Req ID: 13665
Closing Date: 09 December 2021
Publication: Internal & External
Vacancy Type: Permanent
Date Posted: 11 November 2021

Vacancy in the Directorate of Telecommunications and Integrated Applications.

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
ECSAT, Harwell, United Kingdom

Description
Telecom System Engineer reporting to the LunarCom Project Manager, within the Partnership and Opportunity Satellite

Programmes Division, within the Telecom Satellite Programmes Department of the Directorate of Telecommunications and Integrated Applications (D/TIA).

The Moonlight Partnership Programme is a multi-domain activity led by the Telecommunications Directorate, and jointly implemented together with the Navigation and Human and Robotic Exploration Directorates. The Moonlight activity will establish a European-led commercial delivery of Lunar Communications and Navigation Services (LCNS) that will support the current and next generations of institutional and commercial Lunar explorers. As a first assignment, you will work on Moonlight project.

Duties
If appointed to this post, you will report to the Project Manager and will be responsible for the design, development, integration, qualification, as well as on-ground and in-orbit validation and deployment of Telecom satellite system(s), including in for Moonlight, the Lunar & Earth Space segment, Earth Ground segment as well as for further Lunar assets (such as User terminals and potential Lunar Surface segment). In the performance of your tasks, you will coordinate closely with the industry-led consortium.

Your tasks and duties will include:

- leading the end-to-end system engineering, including the design, development, qualification, as well as on- ground and in-orbit validation and deployment covering Space segment, Earth Ground segment as well as for further assets (such as User terminals and potential (Lunar) Surface segment);
- being responsible for mission & system requirements, design drivers, technical and performance indicators, including their consistency with the mission and system specifications;
- leading the tailoring and subsequent application of ECSS, international and industry standards;

- leading the operational concepts, including FDIR strategy and corresponding products;
- leading the system reviews and supporting the other architect in low-level reviews;
- being responsible for the mission and system specification, analyses and system budgets;
- being responsible for system internal and external interfaces definitions, including international and private partner missions, launchers, CFI payloads, ground stations, etc.;
- supporting the definition and performance of a test, verification and validation programme;
- for Moonlight, coordination of other architects from other directorates (Navigation and Human as well as Robotic Exploration);
- supporting the other architects in the definition, trade-off and implementation of segments, subsystem and building block specifications and design solutions;
- evaluating and supporting design and trade-off assessments performed by industry in the process of defining the baseline system concept;
- supporting the Project Manager in the end-to-end implementation of the system, in particular the mission prime contractor procurement, including preparation of the Phase B/C/D Request for Quotation (RFQ), statement of work and technical requirement specifications;
- supporting the negotiation of the relevant contracts with the mission prime and the operator;
- supporting the industrial prime contractor best-practice procurements;
- supervising of design, development, manufacturing, integration and test of European-sourced system elements;
- monitoring the schedule and risks of the relevant European procurements;
- coordinating the specialised engineering support from the Directorates of Technical and Quality Management as well as operations in the appropriate areas of competence;
- contributing to regular reporting to ESA management and national delegations;

You will be working in a cross-functional team which spans the departments of the Directorate and which is supported by technical experts from within the matrix structure. You will also be interfacing closely with the various project teams as well as the related industrial teams.

Technical competencies
Knowledge of Telecom technical domains and related R&D space industry trends
Systems engineering
Satellite telecommunications market
Knowledge of ESA and industrial development and verification processes

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

Education
A Master's degree in engineering or a scientific discipline is required for this post.

Additional requirements
- Strong problem-solving skills to deal with day-to-day operational challenges, together with demonstrated planning and organisational skills;
- Strong result orientation with an ability to set priorities and present practical solutions both orally and in writing;

- Ability to manage challenging situations proactively and constructively and to be customer-focused;
- Direct experience of working with a commercial telecommunications firm and operator and/or a sound understanding of operating within the European Space Agency framework will be a distinct advantage;
- Experience in Public Private Partnership projects would be an asset.

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.

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 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.