

Job Title: Telecom Systems Engineer

Req ID 601 - Posted 27/07/2017



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Human Spaceflight and Robotic Exploration 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

Telecom Systems Engineer

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

Location

ESTEC, Noordwijk, The Netherlands

Description

Mission Telecommunication System Engineer in the Mission & System Section of the ExoMars Project Division, Development Department, Directorate of Human Spaceflight and Robotic Exploration.

The Mission Telecommunication System Engineer is responsible for the monitoring and control of the design, integration and verification of the Telecommunication Systems of the ExoMars 2020 Mission, hence to ensure that relevant activities are properly implemented within the applicable performance, technical budgets and schedule requirements.

As such he/she will also support the CM-DM Manager and the Rover Manager within the project team.

Duties

Within the project guidelines and constraints set, the post holder's areas of responsibilities include:

- Establishing, in concert with the other project System Engineers, the Mission and System level requirements for the Spacecraft Composite, Carrier Module and Rover Module Telecommunication Systems as well ensuring that their flow down to constituents subsystems/units is properly documented and controlled;
- Consolidating and maintaining the Telecommunication Systems architecture for the Spacecraft Composite, Carrier Module and Rover Module including interfaces between space and ground segments;
- Coordinating the technical discussions between the European industrial Prime and Lavochkin regarding the Telecommunication Systems interfaces with the Descent Module;
- Ensuring, in close cooperation with other system engineers in the project, that the interfaces of the Telecommunication Systems are properly defined, documented and controlled;
- Monitoring and controlling the technical progress and milestones of the industrial work associated with Telecommunication Systems design, development, test and verification of the Spacecraft Composite, Carrier Module and Rover Module as well as of the Telecommunication Systems interface designs with the Descent Module to ensure that technical and programmatic issues are identified and resolved in a timely manner;
- Reviewing the Spacecraft Composite, Carrier Module and Rover Module Telecommunication Systems design and budget while ensuring compliance with the requirements and constraints imposed as well as achievement of mission objectives;
- Supporting the Mission and System Manager in the implementation of Mars proximity communication relay service by TGO and NROs to the ExoMars 2020 Mission landed assets (Rover and Surface Platform) as well as to NASA landers, including participation (as required) in the International Mars Relay Working Group (IMRWG) with NASA and JPL;
- Coordinating, in concert with the Mission Principal System Engineer, ESOC relevant activities related to Space to Ground Communications;

- Evaluating the verification plans to ensure properly verified Telecommunication Systems prior to and after delivery to the next level of spacecraft integration;
- Assisting in the verification of the Telecommunication Systems at higher levels of integration, in cooperation with the AIV Principal System Engineer;
- Supporting the assigned Product Assurance and Safety personnel, to ensure that proper Product Assurance, Safety and Planetary Protection practices are applied throughout the product lifecycle;
- Participate in Tender Evaluation Boards and Project Reviews;
- Participating in, and providing support to other areas of the project where the post holder's experience can be applied.
- The ExoMars Mission Telecommunication System Engineer will be assisted as required by specialist engineers from the Directorate of Technical and Quality Management, from the Directorate of Operations and Infrastructures as well as from available expertise within the project.

Technical competencies

Multidisciplinary knowledge of space and ground telecommunication systems

Cost and schedule aspects related to interplanetary missions

Other technical domain with interfaces to the space and ground telecommunication systems

Project risk management

ESA space systems procurement, development and verification processes and standards (incl. code of best practices and project reviews)

Mission design and operations of interplanetary missions

Behavioural competencies

Results orientation

Problem solving

Planning & organisation

Teamwork

Self motivation

Communication

Additional requirements

- Interaction with industrial suppliers at several levels of procurement
- Interaction with International Partners (e.g. Roscosmos and NASA)

Education

Applicants should have an Engineering degree at Master level.

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 31 August 2017.

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.

Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States.

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.