Job Title: System Engineering and Operations Manager (CHIME and LSTM)

Req ID **9361** - Posted **20/02/2020**

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
System Engineering and Operations Manager (CHIME and LSTM)

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

Location
ESTEC, Noordwijk, The Netherlands

Description
Following successful subscription by ESA Member States at the November 2019 Ministerial Council (Space19+) and the ongoing tendering process to select the consortia in charge of space segment development activities for each mission, it is planned to kick off Phases B2/C/D/E1 of the six Copernicus expansion missions this summer.

This recruitment is for the CHIME (Copernicus HyperSpectral Imaging Mission for the Environment) and LSTM (Land Surface Temperature Monitoring) missions.

The recruitment of the System, Operations and Performance Manager for the above missions is implemented via a single recruitment process, where the candidate will be asked to specify a) preference and b) exclusions for any of these two missions.
You will report to the respective Project Manager for all technical, programmatic and financial matters.

Duties
Principal tasks and responsibilities include:

- consolidating, maintaining and implementing system and mission requirements;
- consolidating the system definition (space segment architecture, level-1 data processing, flight operations segment, payload data segment, other external elements) and associated mission analysis, ensuring compliance with space debris mitigation requirements;
- managing mission- and system-related industrial work to ensure suitable performance of all satellite functional chains for the mission;
- coordinating with other Project Team Sections to ensure consistency of requirements, design, testing and performance levels (including end-to-end) with system-level needs;
- ensuring the definition of mission-specific elements is properly maintained, updated and validated in liaison with the Payload Data Ground Segment (PDGS) and Flight Operations Segment (FOS) coordinators and other relevant teams within ESA and with external partners;
- bearing for LSTM, CHIME, CIMR and S3 technical responsibility for aspects related to onboard software development and validation, liaising with the Engineering & AIV Manager for aspects related to SW/HW verification;
- monitoring industrial activities associated to procurement and use of ground processing prototype processors;
- establishing a coherent Satellite System Validation Test (SSVT) programme for the purpose of combined satellite/ground segment operations verification and coordinating its implementation;

- monitoring, with Payload Manager support, the end-to-end data flow from geophysical parameters, through the instruments and satellite systems up to the final data products, ensuring availability of all required models and tools;
- organizing, during the Commissioning phase, the resolution of in-orbit anomalies involving appropriate expert support;
- establishing, in cooperation with the FOS and PDGS, the Launch & Early Orbit Phase (LEOP) and the in-flight satellite commissioning and verification;
- coordinating, together with the PDGS and relevant parties, the instrument and level-1 product verification (Cal/Val activities) during the commissioning phase;
- maintaining, updating and controlling, from the satellite systems point of view, the interfaces to the ground segment elements involved in operating the satellite or processing the provided data;
- ensuring, with the Engineering & AIV Manager, suitable commonality between AIT and operations procedures and databases;
- liaising, in combination with the Payload Manager, with the Mission Science Division for the maintenance and evolution of mission requirements;
- acting, if/when required depending on the mission, as main technical interface point between the Sentinel project and partner organisations (e.g. EUMETSAT);
- defining and implementing ground tools supporting satellite commissioning activities;
- liaising closely with other project sections to ensure a consistent approach to satellite procurement, verification, launch and in-orbit operations preparations;
- providing regular reporting to the Project Manager on all aspects of the System, Operations and ground segment development, identifying risks and problem areas and proposing mitigation actions where appropriate
- supporting the general project reporting tasks (monthly, QSR/QIR) and other Department- level support activities as required.

Technical competencies

Experience in the management and monitoring of industrial activities, including participation in reviews
Experience in mission, spacecraft and/or payload operations
Experience in satellite in-orbit commissioning and performance verification methodologies
Experience with definition and review of payload and spacecraft calibration programs
Knowledge and experience of ground segment, simulators and early operations (especially Launch and Early Orbit phase and in-orbit commissioning)
Knowledge of all phases of the software development lifecycle
Capability to evaluate performance at mission level
Satellite systems and ground segment architecture

Leadership competencies

Driving performance
Developing & motivating people
Fostering cooperation & effective team-working

Behavioural competencies

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

Education

Master’s or equivalent qualification in a relevant engineering field.

Additional requirements

You will lead a Section of engineers and liaise closely with other Project Sections and other relevant Copernicus entities. You will be supported by a team of engineers shared among the Copernicus Space Component and by specialised engineering support from the Directorate of Technical & Quality Management.

You will also have to:

- have proven experience of leading, motivating and developing a team in a project;
- provide strategic direction to the individuals and teams within the Project and relate team objectives to the overall and evolving organisational goals and context;
- drive performance and foster cooperation within and across teams throughout the organisation;

- have demonstrated excellent leadership, relationship management and communication skills, oral and written;
- have a proven track record of representing the Agency's interests to external interfaces;
- have excellent cognitive, analytical, delegation, planning and organisational skills;
- anticipate problems, solve complex issues and relate situations to their context;
- reach solution-oriented, pragmatic and timely decisions of high standard and integrity as well as supporting others (team members, upper management, other stakeholders) in this process.

Experience of managing managers and multiple teams is an asset, as is international experience, i.e. outside your home country, as well as experience in diverse functional areas relevant to ESA
activities.

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 19 March 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.