Job Title: Young Graduate Trainee for Mission Operations (EarthCARE)

Req ID **3961** - Posted **19/01/2018**

EUROPEAN SPACE AGENCY

Young Graduate Traineeship Opportunity in the Directorate of Operations.

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
Young Graduate Trainee for Mission Operations (EarthCARE)
This post is classified F1.

Location
ESOC, Darmstadt, Germany

Our team and mission

The YGT will be part of the Earth Explorer Management Office, Earth Observation Missions Division, Mission Operations Department.

The Earth, Cloud, Aerosol and Radiation Explorer (EarthCARE) satellite will advance our understanding of the role that clouds and aerosols plan in reflecting incident solar radiation back into space and trapping infrared radiation emitted from the Earth's surface.

The EarthCARE operations team is part of the Earth Observation Missions Division, within the Mission Operations Department of the Directorate of Operations. The Earth Observation (EO) Missions Division is responsible for EO missions in preparation and in flight, currently including SMOS, CryoSat-2, Swarm, Aeolus, EarthCARE, Biomass, FLEX, Sentinel-1/2/3/5p/6 (Copernicus missions).

The EarthCARE mission operations team is responsible for the preparation of the Flight Operations Segment for the EarthCARE mission, which is currently planned for launch in the timeframe 2019/2020.

Interested candidates are encouraged to visit the ESA website: http://www.esa.int

Field(s) of activities

Working as a member of the EarthCARE Flight Control Team, the Young Graduate Trainee (YGT) will assist the Spacecraft Operations Manager in the user acceptance testing of the Flight Operations Segment main facilities, namely Mission Control System, Simulator and Flight Dynamics together with the execution of the System Testing activities (e.g. System Validation Tests, Ground Segment Operational Validation campaign). In particular, the trainee will be assigned to the following main tasks:

- Testing of the Mission Control System, Mission Planning System and Simulator. This activity includes review of test cases and test procedures against user defined requirements, test execution at requirement and also operational scenario level plus the associated reporting. In addition, the trainee will support the preparation of the simulator for use during the simulations campaign prior to launch.
- Support the preparation, execution and reporting tasks in the frame of System Validation Tests with the spacecraft as well as Ground Segment Operational Validation campaign activities with all parts of the EarthCARE Ground Segment.
- Support the preparation and validation of flight procedures. This activity includes review of the relevant Flight Operations Manual volumes, generation and review of nominal and contingency recovery procedures, validation of procedures with the simulator as well as the spacecraft.
- Support the Flight Control Team in the analysis for the Ground Station visibility for the LEOP and Commissioning phases and also the impacts of the EarthCARE calibrations on the ground segment.

EarthCARE is currently in the preparation phase, with a launch expected in 2019/2020 timeframe. During the period covered by this training opportunity, updated ground systems will be deployed and tested, several System Validation Tests with the satellite flight model will be executed, and the Ground Segment Operational Validation at system level will be executed. Preparation for the Launch and Early Orbit Phase, Commissioning and routine operations phases will be started.

The traineeship will cover several engineering disciplines, from user requirements review to testing of different ground segment elements and their validation at subsystem and system level. The use of operations tools, potentially including definition and development will be explored, which will be used to support the team during the preparation activities and also the in flight operations phases.

Technical competencies
Knowledge of relevant technical domains
Relevant experience gained during internships/project work
Breadth of exposure coming from past and/or current research/activities
Knowledge of ESA and its programmes/projects

Behavioural competencies
Self Motivation
Communication
Continuous Learning
Cross-Cultural Sensitivity
Teamwork

Education

Applicants should have just completed, or be in their final year of a University course at Masters Level (or equivalent) in a technical or scientific discipline.

Additional requirements

Applicants should be computer literate and able to use scripting languages or other tools to support the activities, but should be aware that this will not be a full-time programming position.

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.

In addition, applicants should demonstrate good interpersonal skills and the capacity to work both independently and as part of a team.

During the interview the candidates' motivation and overall professional perspective/career goals will also be explored.

Other information
For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The closing date for applications is 04 February 2018.

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, and the UK, or Slovenia as an Associate Member, Canada as a Cooperating State, Bulgaria, Cyprus, Latvia, Lithuania and Slovakia as European Cooperating States (ECS).
Priority will first be given to 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