

## **Training Opportunity for Portuguese Trainees**

Reference	Title	<b>Duty Station</b>
PT-2017-OPS-GI	Software Engineering	ESOC

## Overview of the Unit missions:

The Data Systems Infrastructure Division (OPS-GI) is in charge of developing and maintaining all software applications for the operation infrastructure (in other words, all the software that is not mission-specific). This spans from the mission control applications, to the simulators, to the software for the ESA ground Stations. OPS-GI is also in charge of defining and maintaining the software development environment for the infrastructure, as well as the test and validation infrastructure.

## Overview of the field of activity proposed:

The trainee will be involved in one of the technical tasks describe below:

- Development and Acceptance of generic ground data systems deployed as the basis for mission operations centres. This includes a large variety of applications supporting the preparation, planning, simulation, execution and evaluation of mission operations;
- Automated Ground Testing: By the complexity of the Ground Segment Systems, it is necessary to test the ground data systems infrastructure on realistic mission environment;
- In particular the trainee will familiarise and develop competences in the European Ground System Common Core (EGS-CC) and related applications. The EGS-CC is a strategic initiative between ESA, national Agencies and industry to define and develop a common infrastructure which can be used as the basis for both EGSE and Mission Control Systems. The trainee will be involved in the on-going development, integration and validation activities of the EGS-CC based monitoring and control applications at ESOC (referred to as EGOS-CC).

## **Required Education**

The applicant shall have a solid back-ground in software engineering and be able to quickly learn and apply new software technologies. Knowledge on component based and distributed architectures (OSGi, BluePrint, Karaf, JeroMQ, etc.), noSQL databases (Hadoop), scripting and Eclipse related technologies (Equinox, EMF, etc.) is desirable.

Experience of the Java programming language and platform as well as Linux is required.