

## **Training Opportunity for Irish Trainees**

Reference	Title	<b>Duty Station</b>
IE-2018-OPS-OPC	Cluster operations and OPSWEB development and support	ESOC

## Overview of the unit's mission:

Cluster is a constellation of 4 satellites studying the interaction of Solar Wind and Earth's magnetosphere. The Cluster Spacecraft Operations Unit is responsible for planning and operating the satellites and ensuring their safety and the timeliness and completeness of the science data generated.

## Overview of the field of activity proposed:

Cluster mission, in flight since 2000, is the perfect place to learn all about satellite operations with hands on experience (see more about Cluster at <a href="http://www.esa.int/Our\_Activities/Operations/Cluster\_II\_operations">http://www.esa.int/Our\_Activities/Operations/Cluster\_II\_operations</a>). The trainee will be integrated in the Flight Control Team and will learn and practice the tasks of an Operations Engineer, planning and validating operations and learning how to interact in real time with the spacecraft via simulations and with the real spacecraft. She/He will also contribute to specific on-going development projects, more specifically to OPSWEB.

OPSWEB is a Web-based Operations Timeline representation tool. With a generic backend and a grammatical based configuration which allows user to freely ingest different types of planning data and design any timeline representation they require. Furthermore, the tool allows users to edit the contents of the timelines and plan new Activities.

The tool has been designed to be generic and usable by all missions. Currently the following missions are in the process of adopting it: Cluster, Bepi-Colombo, Sentinel 5P, Aeolus and Sentinel 1.

The Trainee will also be assigned tasks developing new features for the tool as part of the Agile development team, but also adapting it for new missions: creating specific data importers, configuring users and data areas, assisting users with configuration of timelines and providing general support and maintenance, thus exposing her/him to a great variety of mission requirements.

## Required education:

Master's degree in Computer Science or other Engineering field, preferably with proficient knowledge of Javascript (Angular2) and Python (Django).