

## Ground stations and System IVV Engineer

### Description

We are looking for a Ground stations System IVV Engineer to join our team.

The successful candidate will be based at EUMETSAT headquarters in Darmstadt, Germany, providing service in the field of system engineering. The focus of the work is related to the definition, and implementation of the approach to be applied for radio frequency (RF) testing of space-to-ground interfaces and the planning of related activities, with all needed logistics for the execution of related tests. An associated task is requirements specification and development of needed test tools, such as RF suitcases.

### Responsibilities

Typically, tasks will include:

#### Test preparation and execution:

- Definition of the approach (scope of tests, test cases, key test data / test tools, logistics, ...) for testing of space-to-ground radio frequency interfaces of the Metop-SG and JPSS satellites with relevant ground stations, and generation of the related test plans.
- Generation of test specifications (elaboration of test cases) and of step-by-step test procedures.
- Preparation of a schedule for the test activities, taking into account the development schedule of ground stations, of test tools (such as RF suitcases), etc.
- Support for the coordination of test activities with partners (in particular NOAA for testing for JPSS) and, as relevant, industry.
- Performing reviews of technical documentation provided by Metop-SG industry and by EPSSG ground segment industry, to ensure compatibility of related design and testing with needs of EPS-SG System V&V.
- Coordination of shipments of test tools (such as RF suitcase) to the ground station, execution of the planned tests (e.g. RFCTs), analysis of the results and preparation of test reports (if occurring during the period of the consultancy).

#### Test tools:

- Generation / maintenance of requirements specifications for relevant test tools (e.g., for RF suitcases (S-, Ka- and X-band) and for RF In-Orbit Test (IOT) tools).
- Contribution to the generation / maintenance of Interface Requirements Documents / Interface Control Documents for these test tools.
- Contribution to the development / procurement of test tools:
  - following up the development of RF suitcases (part of Metop-SG development) – review relevant technical documents provided by industry and support acceptance testing.
  - following up the development of RF IOT tools (part of EPS-SG Ground Segment development) – review relevant technical

### Hiring organization

WGS Workgroup Solutions GmbH

### Date posted

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- documents provided by industry and support acceptance testing.
  - development / procurement of further test equipment as needed for testing of space-to-ground RF interfaces.
- Preparation of a plan to ensure that all relevant RF test equipment remains calibrated over the foreseen testing duration.

#### System requirements specification and verification:

- Support for the maintenance of the EPS-SG Space-to-Ground Interface Requirements Document (SGIRD).
- Consolidation of the approach (method, level, phase, etc.) for the verification of the SGIRD and maintenance of the related Verification Control Matrix (VCM) in DOORS.
- Analysis of sub-System level VCMs and associated documentation, to ensure consistency with the verification approach to be applied at sub-System level (Metop-SG Space Segment and EPS-SG Ground Segment).
- Assessment and tracking of results of verification activities done by Metop-SG and EPS-SG Ground Segment industry as relevant for space-to-ground interfaces and recording of relevant results in the VCM.
- Recording of results of executed EPS-SG System tests in the VCM (if tests occurring during the period of the consultancy).
- Preparation of verification control documents for the SGIRD, with the synthetic status of the performed verification.

In addition, the key person will be involved in some more general tasks:

- Participation in relevant internal and external meetings.
- Regular review of EPS-SG V&V documentation and
- Contribution to the preparation of documentation for EPS-SG system level reviews.

#### **Qualifications**

The key person shall have the following mandatory technical experience and background:

- University degree in the domain of engineering, physics or equivalent.
- At least 3 years of hands-on involvement in radio frequency testing of space-to-ground interfaces at satellite and/or ground station level.
- Familiarity with procurement, installation, use and maintenance of relevant test equipment, such as RF suitcases.
- Hands-on experience with the preparation of test documentation (test plans, specifications, procedures, and reports).

The following technical expertise would be beneficial:

- Involvement in the preparation and execution of tests at remote sites.
- Involvement in RF design related to space-to-ground interfaces at satellite and/or ground station level.
- Expertise in Ka-band link design or testing.
- Experience in other areas of System V&V, such as Satellite System Validation Tests (i.e. validation of end-to-end TM/TC chains and of spacecraft operational procedures).

In terms of further skills, the key person shall:

- Be able to fulfil the assigned tasks with a minimum of supervision.
- Have a systematic approach to work.

- Be able to plan his/her work, considering tight schedules and multiple tasks.
- Have good communication skills (verbal and written).
- Be willing to work in a team of engineers and in cooperation with industry and partner agencies.

The official languages of EUMETSAT are English and French. The working language for the position is English, knowledge of French being an advantage.

**Contacts**

Apply online or write us at [vacancies@workgroup-solutions.com](mailto:vacancies@workgroup-solutions.com). We are looking forward to working with you.

The position is open until filled.