Passionate about people and passionate about space


**HE Space** is a successful international space company. For 40 years, we have been supporting our customers with qualified experts in the field of engineering, science and administration. HE Space has joined forces with CS Group to lead the engineering and digital space market in Europe and to provide highly skilled consulting.

# RF Navigation Payloads Engineer

**Key Tasks and Responsibilities**

As part of the Directorate of Technology, Engineering and Quality, you will have the following responsibilities:

- Support the procurement of the LEO-PNT payload elements;
- Manage and control Navigation payload(s) requirements;
- Monitor and control Navigation payload performance allocation and Budgeting;
- Participate to the Navigation payload procurement process;
- Monitor all aspects of the Navigation payload development (design implementation and verification/testing);
- Follow-up the qualification and acceptance verification activities;
- Identifying also the necessary breadboarding and model-philosophy approach;
- Assess payload and system navigation performance during all project Phases;
- Interact with ESA unit-equipment specialists as necessary for the navigation payload complete development.

Support section's activities, in particular:

- Contribute to internal R&D activities for the design, modelling, architectural trade-off and performance assessment of navigation payloads with main emphasis on payloads based on digital signal processing and active antennas;
- Perform technical management of R&D activities with industry/institutions in the field of advanced payload concepts and sub-systems/equipment development for navigation payloads;
- Contribute to the generation and promotion of innovative ideas for future satellite missions in the field of RF payloads, including the definition of ESA R&D programmes;
- Define technical requirements and statements of work for R&D activities to be performed by industry, from early conceptual studies to full hardware development;

- Carry out computer simulations at system/subsystem level for the assessment of end-to-end payload performance, with particular emphasis on signal quality for navigation payloads;
- Contribute to the development/usage of internally developed analysis/simulation tools;
- Maintain state-of-the-art expertise by monitoring the RF/Microwave systems technological trends and applying them in the day-to-day tasks.

**Skills and Expierence**

You will have the following qualifications and relevant experience:

- University Master's degree in Telecommunications, Microwave or RF or Electronics Engineering;
- Good background and working experience on design and development of Radio Frequency Payloads in the domain of Navigation Satellite communications, or any other relevant space domain;
- Solid, hands-on experience in RF and digital Payload development (and relevant subsystems) integrated into a project/procurement environment is required;
- Radio frequency and microwave payloads architectures and technologies;
- Two-way time and frequency transfer and synchronisation techniques and relevant technologies;
- Simulation of RF Payloads, communication systems and performance assessment (with e.g. Matlab, Phyton);
- Digital signal processing techniques;
- End-to-end payload performance and signal quality analysis;
- Promoting cooperation and team-working, problem solving;
- Fluency in English is mandatory; knowledge of another European language is an advantage.

This job is located in ESTEC, **Noorwijk, The Netherlands**.

If you think you have what it takes for this job, please send your CV (in English and in Word or PDF) to Vicente Gracia, by clicking on the button "Apply for this job" quoting job **NL-HP-5201.**

An exciting and dynamic international working environment awaits you!

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HE Space recruiting for ESA