# Job Title: Systems Engineer

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# **EUROPEAN SPACE AGENCY**

Vacancy in the Directorate of Technology, Engineering and Quality.

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 Systems Engineer

This post is classified A2-A4 on the Coordinated Organisations' salary scale.

#### Location

ESTEC, Noordwijk, The Netherlands

# Description

Systems Engineer in the Systems & Concurrent Engineering Section, Systems Engineering Division, Systems Department, Directorate of Technology, Engineering and Quality.

The Section provides functional support to ESA projects, performs feasibility studies of potential future space missions using the Concurrent Design facility (CDF) and carries out technological research (R&D) in the field(s) of systems and concurrent engineering, as well as developing models, methodologies and digitalisation of systems engineering.

#### **Duties**

Reporting to the Head of Section and within the technical fields described above, the postholder will perform main tasks and responsibilities including:

- providing expert technical support and consultancy to ESA projects, programmes and studies in the systems and concurrent engineering fields throughout all project phases;
- participating in feasibility studies, project reviews and evaluation of project proposals;
- developing and improving tools and methods for systems and concurrent engineering;
- contributing to improvement of standardisation in systems engineering;
- developing and promoting digitalisation of systems engineering, model-based systems engineering (MBSE) and infusing them into projects;
- contributing to the definition of technology development work plans and activities for ESA's Technology programmes;
- initiating and managing R&D activities covering long/short-term needs in systems and concurrent engineering;
- proposing, developing and encouraging new applications of the concurrent engineering approach, fostering multidisciplinary activities with emphasis on innovative concepts, cutting-edge technologies and systems architectures;
- monitoring scientific and technological trends for systems and concurrent engineering and maintaining corresponding state-of-the-art expertise;
- participating in TEC Competence Domain (CD) activities;
- contributing to improve knowledge of systems and concurrent engineering across the Agency and for its partners;
- supporting the Directorate's activities as requested within the engineer's field of competence;
- contributing to transfer of knowledge across the Agency.

Duties may also include supporting other activities within that field.

## **Technical competencies**

General background and specific experience in the technical domains covered by the position

Experience with the design, development and application of relevant tools and methods

Project support experience in a relevant domain

Spacecraft systems knowledge

Experience in the preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation, etc)

Experience in the management and monitoring of industrial activities, including participation in reviews

Experience with Space Engineering Standards and their preparation and implementation

## Behavioural competencies

Communication
Teamwork
Customer Focus
Innovation & Creativity
Problem Solving
Results Orientation
Continuous Learning

#### Education

A Master's degree or equivalent qualification in aerospace engineering or physics is required.

## Additional requirements

Knowledge of the following technical domains is required:

- · space field, including solid background in spacecraft systems and architecture design
- systems engineering, mission analysis and design, multidisciplinary design environment, design methodologies and systems modelling, concurrent engineering processes and related IT tools/infrastructure, mission feasibility studies
- space project life-cycles, including mission/systems conceptual design and trade-offs, design and development phases, reviews, requirements flow
- years of relevant experience in at least one of the above fields/activities is considered an asset; proficiency in Model Based Systems Engineering (MBSE), development/ infusion of digitalization and agile software engineering would be highly considered.

#### Other information

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

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.

The Agency may require applicants to undergo selection tests.

#### The closing date for applications is 10 June 2019.

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, the United Kingdom and Canada and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States. (<a href="http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf">http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf</a>)

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.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.