

Training Opportunity for Polish National Trainees

Reference	Title	Duty Station
PL-2023-TEC-QQM	ESA Missions Quality Data Analysis	ESTEC, Noordwijk

Overview of the mission:

The Product Assurance Management Section is part of the Quality, Dependability and Product Assurance Support Division of the Product Assurance and Safety Department in the Directorate of Technology, Engineering and Quality.

The role of the Division is to contribute to the success of ESA projects and activities by providing expert support and disseminating knowledge in its areas of responsibility, and establishing quality management systems within ESA. The disciplines covered by the Division are system dependability (i.e. reliability, availability and maintainability), quality assurance and management, software product assurance and product assurance support for all ESA projects.

The Product Assurance Management Section provides independent support and coordination of expertise in the product assurance and safety disciplines for ESA projects and technology development programmes. The Section also supports the development of state-of-the-art technologies and processes and develops technical and managerial competencies in product assurance.

Overview of the field of activity proposed:

As a Polish National Trainee, you will contribute to the Section's efforts in refining product assurance & safety (PA&S) requirements in various disciplines, paying due consideration to different mission requirement profiles as described in the recently approved ESA Mission Classification scheme. In addition, you will support activities related to the exploitation of data on quality (e.g. anomalies during the design, development and testing of ESA spacecraft and in-flight anomalies), with the aim of answering questions such as:

- How do we measure our success and what do we do about failures?

- In what ways can we help European industry?
- Are we collecting enough information, or are we missing an opportunity?
- Are we over-specifying/over-designing?
- What type of problems are the most frequent?

Associated tasks will include:

- helping with the organisation, participation and results analysis of meetings with ESA technical experts and Product Assurance and Project Managers;
- contributing to the preparation of updated standards;
- exploring quality-related data from different ESA databases and building tools/algorithms to exploit that data;
- performing engineering analyses to identify major reasons for problems and recommendations for improvement.

Additional contributions may involve the coordination of training activities managed by the Section, such as gathering inputs, consolidating and updating PA&S training material, promoting PA&S training across ESA directorates, and even disseminating PA&S lessons learned from mission development and operations.

Required education and skills:

- You should have just completed, or be in the final year of your Master' s degree in engineering. Knowledge of spacecraft and their subsystems would be considered an asset.
- Good interpersonal and communication skills
- Ability to work in a multi-cultural environment, both independently and as part of a team
- Fluency in English and/or French, the working languages of the Agency