Mission Operations Engineer - Space Systems

Axient Systems B.V., Delft

Turn spacecraft designs into operational missions. Help prepare, validate and fly the next generation of Dutch satellites.

At Axient Systems we are building sovereign Dutch space capability. From Delft, at the heart of the Dutch aerospace ecosystem, we develop advanced satellite systems for the Netherlands Ministry of Defence and other government and commercial customers. Our work spans mission integration, earth observation, secure communications, and space systems engineering. We are responsible for mission integration on PAMI-1, the satellite that will give the Netherlands its own optical space capability.

We are looking for an experienced Mission Operations Engineer to translate spacecraft and payload designs into the operational products and processes required to fly our satellite missions.

The Opportunity

You report to the Mission Operations Lead and work day to day with the Senior Mission Operations Engineer. You will develop operational concepts, flight procedures, mission database requirements and supporting operational products, working closely with the spacecraft engineers, the payload specialists, the ground segment team and the suppliers.

Some procedures you write yourself; others come from the subsystem and payload suppliers or from operations contractors, and you review those against the design and validate them on the simulator and the FlatSat. You also provide operational input to the spacecraft design.

Together with the ground segment engineers you define the database content and displays, the planning tools and the simulator use.

Your involvement extends throughout the mission lifecycle, from spacecraft development and integration through verification and rehearsals to LEOP and commissioning, where you are on console as Flight Controller or Subsystem Operator. After handover you remain the engineering link for procedure updates and anomaly support.

Key Responsibilities

- **Mission operations concept:** develop and maintain the operations concept at subsystem and payload level, translating the mission requirements and the spacecraft design into operational scenarios and plans, and keep it consistent with the design as it matures.
- **Flight procedures:** develop and validate nominal, contingency and recovery procedures covering commissioning, routine operations, calibration, station keeping, anomaly response and end-of-life activities.
- **Technical reviews:** review spacecraft, payload and ground segment documentation and operational deliverables from the engineering teams, suppliers and contractors for operational content, identify deficiencies and coordinate their resolution.
- **Mission database:** define the mission database content from the operations side: telemetry parameters, calibrations, limits, derived parameters and command definitions.
- **Ground segment operator interfaces:** specify the operator displays, monitoring functions and alarm handling with the ground segment engineers.

- **Verification and validation:** verify procedures and database content against the design and the specifications, validate them on the simulator, the FlatSat and the integrated test environments, and keep the record of what was validated against which configuration.
- **Mission planning:** define the activities, timelines, contact plans and command loads for the operational planning, and the constraints behind them.
- **Operability:** provide operational input to the spacecraft, payload and ground segment design, identify operational constraints and propose improvements.
- **Console:** take a console position as Flight Controller or Subsystem Operator in rehearsals, LEOP and commissioning, and support anomaly investigations after handover.

Essential Qualifications

- Bachelor's or Master's degree in Aerospace Engineering, Space Systems Engineering or a related technical discipline
- At least four years of experience in spacecraft operations, mission operations engineering or spacecraft integration and testing
- Demonstrated experience developing and validating procedures used on real spacecraft hardware
- Practical knowledge of spacecraft telemetry and telecommand systems, including packet structures, parameter definitions, calibration and operational limits
- In-depth knowledge of at least one spacecraft subsystem, such as AOCS, electrical power, thermal control, data handling, communications or payload systems
- Fluent English
- On-site work in Delft, limited hybrid working possible
- Willing and able to undergo security screening (VGB-B) by the Dutch security services

Desirable Qualifications

- Working proficiency in Dutch
- Experience participating in LEOP, commissioning or spacecraft operational campaigns
- Experience with Earth observation mission planning and scheduling
- Familiarity with mission control systems such as SCOS-2000, Yamcs or OpenC3 COSMOS
- Familiarity with the ECSS operations standards and PUS
- Experience with procedure automation, spacecraft simulators or FlatSat facilities
- Experience with optical payload operations or laser communication terminals
- Experience working with defence or governmental customers

What We Offer

Work on a mission that matters. Operations engineering on a strategically important national satellite mission.

Influence the spacecraft design. Ensure operational considerations are integrated into the spacecraft development from the earliest stages.

Be involved throughout the mission lifecycle. Work from spacecraft development and operational preparation through launch and commissioning to handover.

A market-aligned salary and benefits, and room to grow as the Dutch organisation scales.

Interested?

Apply via the vacancy on LinkedIn or the registration form on our website.

A positive outcome of Dutch national security screening (VGB-B), conducted by the Military Intelligence and Security Service (MIVD), is a condition of employment. You can read more about this on the website of the MIVD.

In your application, include a short technical example of an operational or test procedure you wrote, reviewed or validated that was later found to be incorrect or incomplete: how the issue was identified, the underlying technical problem, its potential impact on the mission, and the corrective actions. Please also indicate the spacecraft subsystems, operational products and test environments you have worked with.

This example is essential to our selection process and helps us assess your technical judgement and engineering rigour.