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OTTER NANOSATELLITE: STREAMLINING SATELLITE DEVELOPMENT FOR FAST
SPACE-BASED CAPABILITIES

Abstract

The Responsive Space Capabilities recognizes the critical importance of quick deployment of new satellites for disaster monitoring, maritime situational awareness, and various other applications. German Orbital Systems contributes to a Responsive Space Capabilities demonstrator of DLR's Responsive Space Cluster Competence Center (RSC) by developing the OTTER nanosatellite to optimize the satellite engineering process for fast delivery of space-based capabilities. As a key partner in this initiative, German Orbital Systems is developing the OTTER nanosatellite to optimize the satellite engineering process for fast delivery of space-based capabilities. The OTTER project focuses on using earth observation and AIS payloads for maritime situational awareness and disaster monitoring and aims to demonstrate the possibilities of small satellites for these applications. German Orbital Systems is using a modular approach to reduce development time and cost, and developing standardized, flexible space hardware and software for plug play payload integration, with a focus on automating mission operations. The insights gained through this project are expected to contribute significantly to advancing the field of responsive space capabilities, and to support the DLR-RSC's efforts to enhance monitoring and response.