

IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
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STANDARD DOCKING INTERFACE DEVELOPMENT FOR ESA'S POC1 MISSION

Abstract

In the frame of the future European space transportation ecosystem and space logistics scenario, OHB Italia is leading the development of the Standard Docking Interface, to be the primary technology demonstration objective of ESA's In-Space Transportation Proof of Concept-1 mission (POC1). The active unit of the standard docking interface is part of the In Space Transportation Vehicle (ISTV), while the passive unit is part of the client satellite platform. The docking interface shall be capable of capturing and latching a cooperative client satellite, demonstrating umbilical transfer, and providing the load capacity for orbital transfer maneuvers. This paper presents the development of the standard docking interface, the realization of the breadboard models, and the air-bearing test campaign.