IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Launch Services, Missions, Operations, and Facilities (2)

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GERMAN OFFSHORE SPACEPORT ALLIANCE – AGILE AND FLEXIBLE LAUNCH SOLUTIONS FOR SMALL LAUNCHERS

Abstract

Germany profits from the boom of the New Space movement, a growing number of startups and small and medium-sized companies offering space-based solutions stimulates the space industry in Germany. With HyImpulse, ISAR Aerospace and Rocket Factory Augsburg, three of the most promising European Minilauncher companies are located in Germany. A German spaceport enabling launch of small satellites to Polar or Sun Synchronous Low Earth Orbits provides the opportunity for this growing New Space location to develop a cluster in a future market and thereby create an economic eco system, which spans everything from the manufacturer of the smallest screw to the complete application of the product. Bremen as the German "City of Space" is the perfect host for the Spaceport: In Bremen's aerospace sector, more than 140 companies and 20 institutes with around 12,000 employees generate over 4 billion euros per year. In 2020, the companies DOC Offshore, Media Mobil, OHB and HarrenPartner joined their forces in the German Offshore Spaceport Alliance on the basis of their unique competencies in their respective fields of activity in maritime offshore and space projects. The concept foresees a preparation area in Bremerhaven, Germany, and a mobile launch and control infrastructure on two ships. The fully integrated launcher is transported to the launch site in the offshore German exclusive economic zone where the launcher is erected and prepared for a launch. The infrastructure and the operational concept is kept flexible and agile to be able to serve different type of launchers and to offer rapid turnaround between two launches. The project has the ambitious target be ready in 2023 to offer launch possibilities

for the European and international mini launcher provider to serve the worldwide growing small satellite market. This paper will give an overview on the infrastructure and the operational concept, it will cover topics like airspace and maritime safety and it will show the recent progress in the implementation of the German Offshore Spaceport with regard to technical, licensing and economic aspects.