IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)

Enabling safe commercial spaceflight: vehicles and spaceports (3)

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SPACEPORT CONCEPT IN GERMANY

Abstract

Commercial Space Transportation (CST) becomes an international business and requires launching and landing opportunities all over the world. Hence the integration of space vehicles in other airspace than the US NAS is an important topic to be considered. Areas of operation will expand from the current established and well known space ports (e.g. Cape Canaveral, Vandenberg AFB, etc) towards new operational sites. DLR has conducted a study to establish a spaceport in Germany. This study includes topics as the market situation/demand/viability, safety and security for the integration of operations into the airspace, the necessary licensing, the operational requirements, as well as the regulatory framework. The missing European space law is a problem. Instead there are individual laws for each country, which will give a burden for companies concerning liability and licensing in an international market. The selection criteria for a spaceport, ie. population density, workforce availability, ground infrastructure, logistics, road/rail infrastructure, safety/security are discussed with respect to a specific location. The results of the study for a possible Germany spaceport are presented. Further, the constraints with respect to fragmented laws and regulations are examined and recommendations are given for new space laws addressing the problems.