

33rd IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)  
Economics of Procurement in Space Contracting (6)

Author: Mr. Ross Hatley

Space Policy Institute, George Washington University, United States, rosshatley@gmail.com

PROCUREMENT AS VENTURE CAPITAL: THE COTS MODEL OF SPACE STARTUP  
INCUBATION

**Abstract**

This paper analyzes how government procurement agencies can overcome the challenges of high-risk development while efficiently cultivating independent, innovative SMEs. To answer this question, this paper conducts a case study of NASA's Commercial Orbital Transportation Services (COTS) program to determine what unique strengths a government procurement can lend to startup development. A root cause analysis of the COTS program's success is undertaken. Its key features are evaluated to identify the model's limitations and whether the model is replicable for further government needs and space startups. Results show that budding independent, innovative SMEs require the procurement agency to adopt a portfolio-based investing mindset and program structures that encourage strong internal competition. Furthermore, careful maintenance of a constructive supplier-consumer relationship within the is critical to balancing government and market needs. However, the relative novelty of such programs precludes their comparison to the success rates of traditional incubators. From a policy perspective, this study emphasizes the need for government procurement agencies to pair their developmental aids with a simulation of market competition in order to cultivate innovative startups that can eventually grow into independent SMEs.