30th IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
The Demand Side of the Space Economic Equation: Understanding and Evaluating the Changing Market Dynamics in Space Activities (3)

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DO SMALL SATELLITES HAVE THE POTENTIAL TO DISRUPT A $109 BILLION SATELLITE INDUSTRY SEGMENT?

Abstract

Small satellite providers have experienced exponential growth in the past decade, gaining market share in the imaging, ship-tracking, and weather data industries with the intention of delivering a lower-cost and higher time-resolution product. However, it is unclear whether this business model can be successfully applied to the telecom segment of the satellite industry. Telecom is the largest segment of the satellite industry, and currently it is dominated by large satellites due to the energy requirements of high-throughput radios and the inherently space-restrictive design of small satellites. Companies such as OneWeb, SpaceX, and Astranis are working to create constellations of small communications satellites with the intent of providing global coverage. Is there enough demand within the telecom sector to support this new wave of small satellites? Will small satellites be able to capture a substantial market share of the $109 billion telecom industry segment, perhaps by creating new markets in previously under-serviced continents? Or, do larger satellites have the competitive advantage due to their heritage and form-factor? I intend to research the feasibility of using small satellites in the telecom satellite industry and answer these questions.