
Name(s):	Richard VanderMeulen
Title(s):	Vice President, Government Satcom
Company/ Organization Name:	ViaSat, Inc
Paper Title:	High Capacity Satellite Communications - cost-effective bandwidth technology
Abstract:	<p>The 2013 report from the Defense Business Board (DBB), "Taking Advantage of Opportunities for Commercial Satellite Communications Services," states, "as the demand for service increases in the future, the cost of communications satellite services purchased by Defense Information Systems Agency is projected to grow to \$3B–\$5B over the next 15 years."</p> <p>This paper will assess if modern technologies, such as High Capacity Satellites (HCS), may provide cost-effective bandwidth options to meet the Department's growing communications requirements and whether existing satellite communications acquisition processes and authorities are conducive to acquiring such technologies.</p> <p>HCS are specifically designed to optimize the economics of two-way broadband communication, meaning maximizing the amount of user speed and capacity, or pool of bits, that are generated for a given total end-to-end investment including satellite, launch, insurance, ground segment and operations.</p> <p>This paper will evaluate DoD's requirements for two-way broadband and the existence of proven higher speed, higher capacity, improved AJ, and lower cost HCS services to determine if these technologies provide a cost-effective bandwidth option for improved performance and affordability. In general, the DoD has two primary authorities responsible for the acquisition of raw bandwidth and multiple authorities responsible for the acquisition and operations of the satellite networks that operate on the raw bandwidth. Acquisition authorities like US AFSPC and DISA acquire the raw bandwidth in the form of satellites like WGS or leased bandwidth. Then acquisition authorities like PEO C3T, SPAWAR, DISA, AF ESD, SOCOM, JSOC, etc. build networks that operate on this raw bandwidth using a variety of technology solutions.</p> <p>This paper will also analyze the DoD's satellite communication acquisition processes and authorities with respect to this HCS end-to-end structured investment approach to determine if they are conducive of acquiring such technologies.</p>
