

The Air Force Space Command, Space Situational Awareness and Command & Control Capability Team needed to address the needs of a rapidly expanding and evolving sector of DoD, non-DoD, commercial, and foreign SSA Sharing Partners who have become critically dependent upon the United States for space environment information and information provided by space assets. To meet this challenge, the SSA & C2 Capability Team pioneered an innovative object-oriented, architecture-centric method, leveraging industry best-practice Unified Modeling Language, to document current and visionary business processes and IT system requirements with explicit traceability to the needs of this dynamic SSA and C2 community of interest. The resulting architecture provided significant financial and operational impact to the SSA & C2 program.

SSA & C2 architecture played a prominent role in HQ AFSPC's success in defending SSA & C2 program funding resulting in a \$564 million increase in funds allocated to develop and sustain SSA and C2 capabilities – a remarkable achievement in the current austere DoD funding environment. The architecture demonstrated to DoD and Air Force resource managers the interdependent, synergistic, and mission critical capabilities that AFSPC's SSA & C2 portfolio of programs bring to the space community and that all duplication of effort among programs in the portfolio had been eliminated. Serco's architecture approach provided an explicit means to trace national goals and objectives to supporting operational concepts, to required operational capabilities, to system design implementations. This has enabled Space COI stakeholders to take an active role in elaborating system requirements and ensuring fielded solutions achieve stakeholder needs. The SSA & C2 Capability Team has embraced a truly "architecture-centric" culture for defining, integrating, prioritizing, resourcing, delivering, and sustaining national SSA and C2 services and products for the growing and rapidly evolving DoD, non-DoD, commercial, and foreign SSA Sharing Partners who have become critically dependent on the U.S. for space information.