

Abstract

There is a disconnect between balancing multiple appropriations and the modern software development best practices that support continuous delivery of capability. We will address if realigning funding provides a more manageable acquisition path for continuous delivery of capability and how/if the DoD's current software acquisition practices provide a hindrance to continuous delivery of capability.

	Component / Service	Program
1	Air Force / Space Force	Space Command and Control (Space C2) (i.e., Kobayashi Maru)
2	Army	Defense Cyber Operations (DCO)
3	Defense Counterintelligence and Security Agency (DCSA)	National Background Investigation Services (NBIS) (formerly under the Defense Information Systems Agency (DISA))
4	DISA	Global Command and Control System-Joint (GCCS-J)
5	Navy	Maritime Tactical Command and Control (MTC2)
6	Navy	Risk Management Information (RMI)
7	Office of the Secretary of Defense (OSD)	Acquisition Visibility
8	Office of the Secretary of Defense (OSD)	Algorithmic Warfare Cross Functional Team (AWCFT) (i.e., Project Maven)

Congressionally Approved FY 2021 BA-8 Programs


Methods

By analyzing current DoD software acquisition processes and reviewing comparative data provided by the program sponsors and POCS for similar acquisition efforts under the BA-08 structure to:

- Explore the current practices of managing different commercial vendor licenses, subscriptions, and services and how they introduce multiple complexities that make it more challenging to be responsive to the warfighter, deliver at the speed of relevancy, and meet program expectations.
- Explain how the BA-08 Program is built to allow the program to acquire hardware, software, infrastructure, cloud services, tools, and rapid prototyping services that would ordinarily require a mix of RDT&E, Procurement, and O&M.
- Identify if the BA-08 Program is most effective with commercial software, or DoD specific capability.

Results & Their Impact


BA-08 has self-assessed as successful across the 8 programs currently in the pilot. These programs have reported more frequent and improved technical deliveries over time. This is because single appropriation funding is immediately available upon a real and timely need, with the benefit of avoiding program and budget cycle requirements to change color of funding from RDT&E to procurement. Some of that improved efficiency is directly attributable to using BA-08 authority, but the degree of improvement is difficult to assess in isolation as there was significant program restructuring during this period—especially in FY22—which led to a number of program improvements simultaneous with BA-08 execution.

 **RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E)** appropriations finance efforts in developing equipment, materiel or computer software. They also fund developmental test and evaluation performed by government entities and contractors to develop equipment, materiel or computer application software, which includes operational test and evaluation. RDT&E efforts may include purchases of test articles, weapons, equipment, components and materials. Also included are services to develop and test systems, which could be IT systems or weapon systems. Funds may be used for both investments (e.g., laboratory test equipment) and expenses (e.g., salaries of civilian employees at research and development-dedicated facilities). This category has a two-year obligation life.

 **PROCUREMENT** finances investment items, and covers all costs necessary to deliver a useful item intended for operational use or inventory. Within procurement, there are appropriations accounts that include:

- a. Shipbuilding and conversion Navy.
- b. Aircraft procurement Air Force.
- c. Missile procurement Army, etc.

Procurement funds are typically used for system acquisition (production), modifications, major service life extension efforts and initial spares, often including costs of fabricating and installation of modifications to existing items, and comprise "investments." These procurements have a three-year obligation life.

 **OPERATIONS AND MAINTENANCE OR SUSTAINMENT** funding does not finance investments, but things with benefits derived for a limited period of time, i.e., expenses. Examples of costs financed by operations and maintenance funds are headquarters operations, civilian salaries and awards, travel, fuel, minor construction projects of \$750,000 or less, expenses of operational military forces, training and education, recruiting, depot maintenance, spare parts, base operations support, etc. Operations-and-maintenance funding has a one-year obligation life. Adapted from M. Walsh and G. Land. Teaching Note, Building the Program Budget, DAU, Feb. 2010.

*The three appropriation categories primarily used during the acquisition life cycle
Source: <https://asc.army.mil/>*