



## Total Ownership Costs

The Under Secretary of Defense for Acquisition, Technology and Logistics (USD [AT&L]) established the Reduction of Total Ownership Costs (R-TOC) initiative in 1999. This effort came about as the result of a growing concern about the continued increase in the cost of acquiring and maintaining equipment. Something had to be done.

### A. Purpose

In an environment that requires resource sponsors to meet budget marks and funding wedges, it is important to not only protect essential current and future systems, it is of major importance to have the ability able to account for full lifecycle costs and cost of ownership. This is done to obtain a concrete analysis and account for the most benefit that can be obtained from the procurement of one system over another or one platform over another. It is also important as decisions are being made at the highest levels of the government to determine the most effective and efficient way to make scarce dollars go farther. The viability of various acquisition programs, weapons systems or weapons platforms, requires a proper accounting for all of the costs (from concept to end of life), and to be able to show true comparative values.

The drive toward and focus on the value gained from capturing Total Ownership Costs (TOCs), allows various levels of the organization to pin point and realize cost savings through the analysis of accurate data, then using that accurate data to support tradeoff decision making, concrete go/no go decision making and end of usable life decisions. This is all done to reach a goal of improving readiness while reducing or making more efficient use of costs, and making a shrinking budgetary environment more effective and viable over the long term.

### B. What are TOCs (also called cost of ownership or ownership cost)?

- a. In general, a TOC analysis is a business case taking into account and estimating all direct and indirect costs associated with an asset or acquisition process over the entire lifecycle of that asset or system. These costs are estimated or counted to include every aspect of an asset or systems' acquisition, sustainment, maintenance, removal from service.
- b. Accounting for TOCs serves as a support to account for and track the costs for platforms and systems over the entire acquisition, planning, sustainment, maintenance and sunseting process.
- c. It provides a cost basis for determining a financial analysis when combined with other modeling tools such as return on investment (ROI), activity based costing, and internal rate of return.
- d. TOC must include an ROI analysis for strategic decision making from all sides. TOC can compare costs associated with complete actions, and coupled with ROI, will help to discern comparative opportunities (efficiencies, gains in effectiveness or wear life, and trade offs in addition to possible cost savings or redirection).

### C. What are Benefits of Implementation?

Accounting for TOC is important because it provides a value-added method to examine costs and total value on a comprehensive basis rather than in a piece by piece or segment by segment way (throwing the



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procurement action over the operators when done then over to the maintainers when done, then over to the decommissioning crew or Foreign Military Sales when done).

Capturing and accounting for the total costs of ownership provides increased visibility to particular cost drivers.

- a. Taking the time to assess and account for the TOCs allows an analysis to be done on all the overt and hidden costs of a platform or system, and contributes to the POMs, PR and QDR budgeting cycles.

Along with the many benefits of pursuing, capturing and using TOC, there are also challenges to address.

- a. Models must be created and continuously refined in order to capture the full combination of estimated and ultimate actual costs.
- b. The organizational structure must be established, whether function, matrix, virtual or some combination, to allow the free flow of information and data, and to allow access to cost data that can be reasonably and accurately replicated.
- c. The organization's leadership may desire to recoup savings immediately, and it may take more time that programmed to realize and align the savings.

#### **D. How are TOCs Captured?**

- a. The TOC model must be designed to completely cover the platform or system that comes as a result of the requirements determination process. The complexity of the program will drive the length of time it takes to complete the analysis as well as the proving the value of effective and efficient cost estimators. Since cost across all functional areas must be captured, tracked or estimated, TOC must take into account the input from all functional teams ranging from requirements determination through sunset.
- b. Capturing and accounting for TOCs and the ensuing analyses is not a "once and done" process, but is iterative and continuous.

#### **E. Possible Organizational Structure for Implementation at an Echelon 1 Activity**

- a. The effective organization for capturing and capitalizing on TOC analyses will be agile and able to flexibly expand and contract around projects and programs at various stages in the life cycle process.
- b. Systems Commands can gather specific data from their echelon commands, consolidate it, categorize it and share it with higher echelon activities. Using a virtual organization that is nimble enough to be engaged with several command organizations on several levels may provide a "hub and spoke" flow of required information and actions.

One advantage of a loosely centralized structure is that there will ultimately be a process that enhances war fighter effectiveness, and allows the most cost effective systems to be approved, built, sustained and ended.