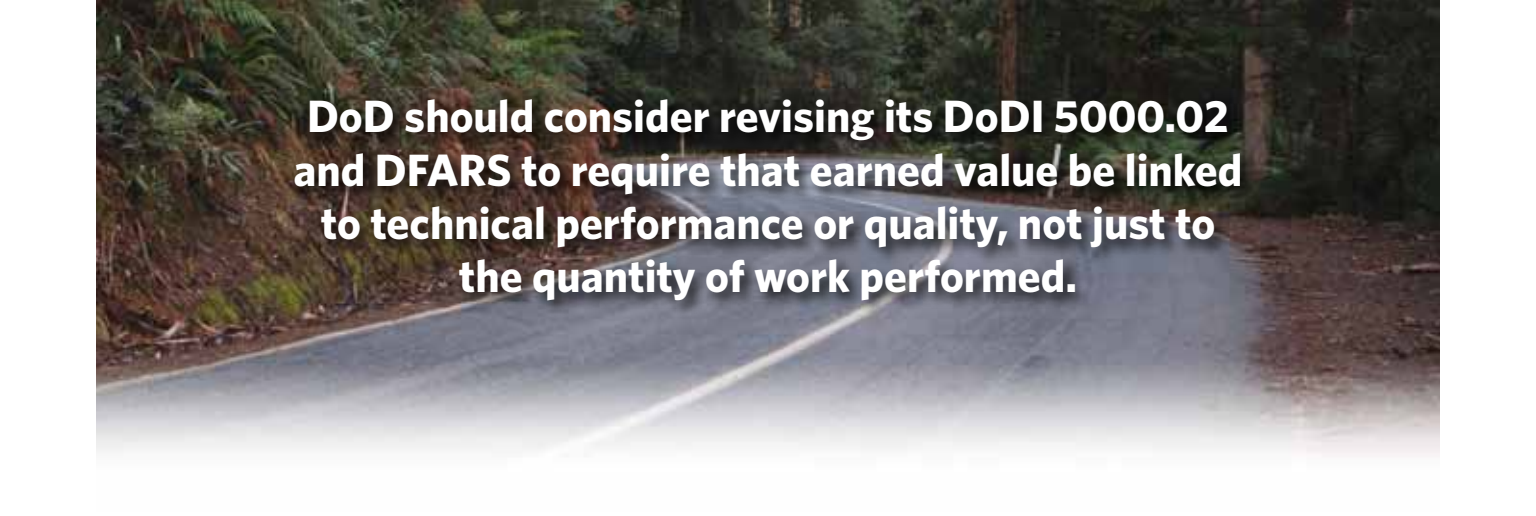




Path to Earned Value Management Acquisition Reform

Paul Solomon

In January 2011, President Obama signed legislation that includes a provision for Department of Defense (DoD) to review its acquisition guidance, including Department of Defense Instruction (DoDI) 5000.02, to consider whether measures of quality and technical performance should be included in any Earned Value Management System (EVMS). DoD must also report to Congress any changes to be made to that guidance. This is just a first step on a path to EVM acquisition reform that should cross federal and DoD regulations and lead to accurate contract performance reports and lower acquisition costs.



DoD should consider revising its DoDI 5000.02 and DFARS to require that earned value be linked to technical performance or quality, not just to the quantity of work performed.

Congressional Action

The legislative provisions are in the Ike Skelton National Defense Authorization Act for FY 2011 (NDAA). They were discussed in the *Defense AT&L* article, “EVM Acquisition Reform” (November-December 2010). That article can be downloaded from <http://pb-ev.com/advanced.aspx> along with three previous articles.

The key messages of those articles were considered by the House and Senate Armed Services Committees. First, EVMS does not serve its intended purpose. Second, if you are measuring the wrong things or not measuring the right way, then EVM may be more costly to administer and may provide less management value. Finally, EVM data will be reliable and accurate only if the right base measures of technical performance are selected and progress is objectively assessed.

The remainder of this article includes four topics. First, DoD acquisition guidance is reviewed, with regard to EVM and technical performance. Second, because contractors are not required to link EV to technical performance or quality by the Federal Acquisition Regulation (FAR), the Defense Federal Acquisition Regulation Supplement (DFARS), and Office of Management and Budget (OMB) policy, the author recommends specific changes to close the quality gap. Third, this article contains a discussion of roadblocks to DoD in implementing its own policy requirements and legislative requirements without EVM acquisition reform. Finally, the author asserts that industry compliance with some EVMS guidelines is non-value-added; it adds to costs, but does not add to quality of product or timeliness of delivery.

DoD Acquisition Guidance

The *Defense Acquisition Guidebook* (DAG) and several other DoD guides provide consistent guidance to integrate the Systems Engineering Plan (SEP) with the Integrated Master Plan, Integrated Master Schedule, Technical Performance Measures (TPM), and EVM. The most explicit guidance is in the *Defense Acquisition Program Support Methodology* (DAPS).

Per DAPS, TPMs compare actual vs. planned technical development and design to report the degree to which system requirements are met in terms of performance, cost, and

schedule. TPMs are used to determine whether percentile completion metrics accurately reflect quantitative technical quality toward meeting Key Performance Parameters and Critical Performance Parameters.

A set of matrices that show DoD guidance regarding technical performance, integrated planning, and pertinent systems engineering objectives is provided at <http://pb-ev.com/DOD-table.aspx>. DAPS references and the relationships between the technical baselines, technical reviews, and TPMs is provided at <http://pb-ev.com/TPM.aspx>.

Ironically, DoDI 5000.02, which is specified in NDAA, provides no guidance to link measures of quality and technical performance with EVM. In DoDI 5000.02, the term “technical performance” is only found once in the enclosure on Test and Evaluation. The term “quality” is found once in the section on Acquisition of Services and once in the section on Habitability.

Unfortunately, the guidance cited in the matrices and DAPS is applicable to DoD acquisition organizations and not to contractors.

Recommended Changes to Policy and Regulations

Although government policies and regulations require that contractors be compliant with the EVMS guidelines, no contractual requirements mandate contractors to integrate technical performance with EVM. These gaps impair the management value, validity, and accuracy of EVM reports. Consequently, DoD should consider revising its DoDI 5000.02 and DFARS to require that earned value be linked to technical performance or quality, not just to the quantity of work performed. The quality objectives should be defined in the technical baseline and linked with the Performance Measurement Baseline.

The EVMS sections of DFARS should be changed to add “product scope” to work scope, and to require that the use of TPMs to measure progress be mandatory, not optional. Specific changes are provided at <http://pb-ev.com/OMB-policyFARDFARS.aspx>, Table 1. The recommended changes are derived from two project management and engineering

standards that should be referenced in DFARS in addition to the EVMS standard. Not only should DoD revise the DFARS as described previously, but OMB policy should be revised as shown in Table 2, also at <http://pb-ev.com/OMBpolicy-FARDFARS.aspx>.

Roadblocks to Implementing DoD Policy and NDAA Requirements

The latest amendment to DoDI 5000.02 requires that the cost, schedule, and performance of the program be evaluated relative to current metrics, performance requirements, and baseline parameters. However, this cannot be accomplished without contractor-supplied metrics. Also, if DoD reports to Congress that measures of quality and technical performance should be included in any EVMS, then changes will be necessary to DFARS, not just to DoD guidance. Table 3, which includes the DoD and legislative requirements and describes the roadblocks to implementing those requirements, is also provided at <http://pb-ev.com/OMBpolicyFARDFARS.aspx>.

Reduce Non-Value-Added Overhead Imposed on Industry

The November 2010 Office of the Under Secretary of Defense for Acquisition, Technology and Logistics "Implementation Directive for Better Buying Power—Obtaining Greater Efficiency and Productivity in Defense Spending," calls for a reduction in non-value-added overhead imposed on industry. Non-value-added tasks add to costs, but do not add to quality of product

or timeliness of delivery. Table 3, at <http://pb-ev.com/OMB-policyFARDFARS.aspx> contains an excerpt from the directive.

In my opinion, industry compliance with some of the 32 EVMS guidelines is non-value-added, as are the auditing and compliance reviews conducted by DoD personnel. Table 3 (<http://pb-ev.com/OMBpolicyFARDFARS.aspx>) also includes recommendations to identify and remove non-value-added EVMS guidelines and to increase management focus on the progress toward meeting the requirements of the technical baseline.

Restatement of Need for EVM Acquisition Reform

As stated in the *Defense AT&L* article mentioned earlier, the acquisition reforms discussed in this article are needed for EVM to serve its intended purpose. A path to EVM and acquisition reform is provided herein. Implementation of the reforms described in this article can enable EVM to integrate a program's technical, schedule, and cost objectives. Implementation can also lead to greater efficiency and productivity in defense spending.

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