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The Honorable Howard P. "Buck" McKeon
Chairman, House Armed Services Committee
U.S. House of Representatives
2184 Rayburn HOB
Washington, DC 20515

Subject: Defense Acquisition Reform

Dear Chairman McKeon:

I agree with your statement, yesterday, that "it is time to reset and rebuild our military." However, it is also time to procure weapons more effectively. The Ike Skelton National Defense Authorization Act for FY 2011 (NDAA) includes provisions that can lead towards needed defense acquisition reform. The provisions were marked up by former HASC Chairman Skelton. Now that you are Chairman, I seek your help to continue his initiative.

The provisions concern the use of contractually-required Earned Value Management Systems (EVMS) to manage weapon system acquisitions. Contractors incur high costs to implement EVMS but often fail to provide valid, reliable cost and schedule performance reports to DoD Program Managers.

Background

EVMS is required by FAR and DFARS on cost-type contracts exceeding \$20M. Contractors must submit monthly Contract Performance Reports (CPR) that show cost and schedule performance based on EVMS guidelines in the industry standard, ANSI/EIA-748. This standard, maintained by the NDIA, has loopholes and deficiencies that enable contractors to submit flawed, inaccurate data to the military. Even if a DCMA compliance review determines that a contractor is compliant with the guidelines, the loopholes enable a contractor to overstate progress and understate final costs. Consequently, a DCMA compliance review can provide false assurance to the Program Manager. This is like relying on Standard & Poor's "no risk" ratings of mortgage-backed securities before the financial collapse.

A key deficiency is the lack of a requirement for contractors to link earned value to technical performance or quality. The FAR, DFARS, and ANSI/EIA-748 enable contractors to report earned value that is based only on the *quantity* of work performed and to ignore technical performance or *quality* (Quality Gap). For example, earned value is often based on the quantity of drawings completed or software code written. Although technical performance measures (TPM) are used, such as weight, payload, or software functionality, contractors often ignore these TPMs when calculating earned value. As a result, the CPRs fail to provide early warnings of cost overruns and behind schedule conditions. More accountability and transparency is needed.

Weapon Systems Acquisition Reform Act (WSARA)

Sen. Collins said the following about EVM in the WSARA conference report: "*GAO observed that contractor reporting on EVM often lacks consistency, leading to inaccurate data and faulty application of the EVM metric. In other words, garbage in, garbage out.*"

As required by WSARA and the 2009 NDAA, DoD submitted a report to Congress in September 2009. It concluded the "*Utility of EVM has declined to a level where it does not serve its intended purpose.*" It stated that:

- Contractors may circumvent proper EVM practices to keep EVM metrics favorable and problems hidden.
- Engineering community should establish technical performance measures (TPM) that enable objective confirmation that tasks are complete.
- Systems Engineering and EVM should be integrated, not stove-piped.

2011 NDAA

Two years later, nothing has changed. Neither the program acquisition managers nor the OSD PARCA Office can be assured that a contractor's performance metrics are valid or accurate. To my knowledge, neither the GAO nor any agency has ever validated that a contractor's use of EVM integrates cost, schedule and quality/technical performance or ensures accurate status and Estimate at Completion. There is an urgent need to transform EVM into a cost-effective acquisition management tool that will provide early warning of performance problems on a consistent basis.

The Skelton provisions in 2011 NDAA (Sections 864 a, b, and c) require DoD to:

- Review acquisition guidance, including DoD Instruction 5000.02, to "consider whether measures of quality and technical performance should be included in any EVM system.
- Submit a report to the Armed Services Committees by Sept. 27.

FAR and DFARS Changes

I hope that the pending DoD report will include plans to improve DoD guidance with regard to linking the program technical baseline to the Performance Measurement Baseline and basing earned value on TPMs. Variance analysis should also compare achieved technical performance with TPM planned values.

However, DoD guides apply only to DoD acquisition officials and not to contractors. Revisions to FAR and DFARS are necessary to obtain more reliable CPRs from contractors.

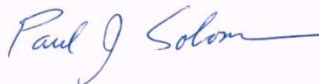
I have first-hand knowledge of the effectiveness and shortfalls of EVM. My credentials include:

- Retired from Northrop Grumman where I performed EVM oversight with DCMA on the F-35, B-2, and Global Hawk programs.
- Received DoD David Packard Excellence in Acquisition Award for teamwork on ANSI/EIA-748.
- U.S. Army Finance Officer during Vietnam War.

For detailed justification and information, please read my articles in recent DoD journals, the *Journal of Software Technology* and *Defense AT&L Magazine*:

- "Improving the Quality of EVM Information" <http://journal.thedacs.com/issue/58/195>
- "Path to EVM Acquisition Reform" <http://www.dau.mil/pubscats/ATL%20Docs/May-June11/Solomon.pdf>

Then, assess the adequacy of DoD's response to the 2011 NDAA requirement and the need for regulatory changes. I would be happy to discuss this with you or your staff. I believe this acquisition reform will benefit the taxpayers and war fighters.



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