

# Earned Value Management — Where Are We Going from Here? Part II



by Mr. Terry Jones, Staff Writer

*In the first installment, we examined a new clause being added to the Federal Acquisition Regulation, mandating Earned Value Management throughout all federal government high-dollar and high-risk programs and how it may affect the Department of Defense. In this second installment, we will review the recent changes to the Department's Earned Value Management policy and how the Earned Value community is wrestling with issues such as third party verification — and where DCMA may play a role.*

**E**arned Value Management (EVM) is a methodology for determining cost, technical and schedule performance of complex programs or projects by comparing work that is planned with work that is accomplished in terms of dollar value assigned to the work. It has been a cornerstone of Department of Defense (DoD) acquisition practices since the mid-1960s. The current DoD EVM application thresholds date from the mid-1990s. This, as well as other factors, led DoD to undertake an initiative to reexamine its application and use of EVM to determine if changes were needed. Among these other factors were government and industry issues concerning inconsistency in the application of EVM; process and technology advancements; and recent Office of Management and Budget

(OMB) initiatives that revised the definition for major capital acquisitions and mandated the use of EVM to manage them. In fact, far-reaching EVM policy additions to the Federal Acquisition Regulation (FAR) were presented for public comment in March 2005. With today's demands for greater accountability in government and the worldwide movement to adopt EVM for complex projects, major waves are cresting in what has traditionally been a calm body of water.

*(Right)* Lockheed Martin X-35, Joint Strike Fighter during flight testing at Edwards Air Force Base, Calif. (U.S. Air Force photo)



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According to Ms. Debbie Tomsic, a senior Acquisition Management program analyst in the Office of the Undersecretary of Defense for Acquisition, Technology and Logistics (AT&L) and the DoD focal point for EVM, the revised DoD EVM policy was developed by the Office of the Secretary of Defense (OSD) in consultation with the DoD stakeholders via the EVM Working Group (military services, defense and intelligence agencies, including DCMA and the Defense Acquisition University). The revision was also coordinated with OMB. Industry input was obtained through the National Defense Industrial Association (NDIA). NDIA is an international association representing 1,100 corporations and 29,000 individuals who sell goods and services to the federal government. The policy changes include new application thresholds to guide military and department program managers on when to use EVM on their projects.

The undersecretary of Defense for AT&L signed a memorandum on March 7, 2005, effecting the new EVM application thresholds and other policy changes (see the OSD EVM Web site at <http://www.acq.osd.mil/pm/>). These changes are not retroactive but must be

implemented on applicable contracts that are awarded based on solicitations or requests for proposals issued on or after April 7, 2005. “Under the previous policy, ‘full blown’ EVM was required on cost or incentive contracts that exceed \$73 million RDT&E [research, development, testing and evaluation] and \$315 million procurement and O&M [operations and maintenance],” Ms.

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Tomsic said. “At the lower end, any cost or incentive contracts above \$6.3 million required cost/schedule status reporting [CSSR] — a less stringent requirement for the application of EVM that is eliminated with the policy changes.”

The revised policy lowers the upper threshold to \$50 million and raises the lower threshold to \$20 million (in then-year dollars) and no longer differentiates between development and procurement. “So, the revised policy requires

that EVM be implemented on any cost or incentive contracts valued at or above \$20 million. That means complying with the ANSI [American National Standards Institute] Standard<sup>1</sup>, conducting integrated baseline reviews and reporting on cost and schedule performance,” Ms. Tomsic said. “In addition, cost or incentive contracts valued at or above \$50 million have the added requirement for an EVM system that not only complies with the ANSI Standard but has also been formally validated and accepted by the cognizant contracting officer,” she added. The application of EVM on cost or incentive contracts valued at less than \$20 million is a risk-based decision left to the discretion of the program manager based on a thorough cost-benefit analysis.

Cost and schedule reporting requirements have also changed under the revised policy. According to Ms. Tomsic, a contract performance report (CPR) (previously designated as a cost performance report) and an integrated master schedule (IMS) are required for cost or incentive contracts valued at or above \$20 million. However, CPR and IMS reporting may be tailored for cost or incentive contracts valued at less than \$50 million. “The CSSR has essentially been replaced with a “tailorable” CPR, which is

<sup>1</sup> ANSI stands for the American National Standards Institute, a private, non-profit organization that coordinates the U.S. voluntary standardization and conformity assessment system and establishes the standards for EVM certification. The compliance standard is a set of 32 criteria.

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now required for contracts valued at \$20 million or above but less than \$50 million,” she said. Guidance on tailoring reporting can be found in the DoD *Earned Value Management Implementation Guide* located on the DCMA EVM Web site.

The Department’s policy on applying EVM on firm-fixed price (FFP) contracts remains unchanged with the exception of an added justification requirement. According to Ms. Tomsic, EVM continues to be discouraged on FFP efforts, regardless of dollar value. “In extraordinary cases where cost/schedule visibility is deemed appropriate, the policy still allows for a waiver from the Milestone Decision Authority. However, waiver requests must now include a business case analysis that provides rationale for why a cost- or fixed-price incentive contract was not an appropriate contracting vehicle,” she said.

#### **Civilian Agencies Turn to DCMA for EVM Assistance**

Even though the changes to the FAR are perhaps months away, many government agencies have already been scrambling to figure out what the changes mean and what they will have to do to be compliant. “A lot of them are coming to DoD, asking us for assistance or for lessons learned,” Ms. Tomsic said. Some agencies are working with DCMA to certify their contractors as EVM-compliant. Organizations such as the National Aeronautics and Space Administration (NASA), the Department of Energy (DOE) and various intelligence agencies are asking DCMA on a fee-for-service basis to certify their contractors as EVM-compliant.

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Last year, DOE retained DCMA to lead its EVM compliance review and certification on projects such as Yucca Mountain. DOE officials are happy with the arrangement, according to Mr. David M. Treacy, DOE director of EVM. “What DCMA brings to the table is consistency and repeatability. They have achieved a consistency when doing these compliance reviews that you are not going to get anywhere else,” Mr. Treacy said. In fact, he would like to see DCMA’s role as executive agent for EV extend across the entire federal government. “The reason I want that across government is that I want a common framework,” he said. “I want to be able to say that when a contractor works for Energy, Defense or NASA, their system has been certified as compliant and

that they are indeed using it. If you have this common framework, all contractors will know what to expect from the federal agencies. DCMA, in my opinion, is the only agency with the credentials that are meaningful.”

Senior Defense and military service EVM officials agree that DCMA does not have the resources to take on the executive agent role for the entire government, and some question whether it should. Ms. Eleanor Haupt is the Air Force EVM focal point at the Aeronautical Systems Command, Wright Patterson Air Force Base (AFB), Ohio. She is also the immediate past president of the Project Management Institute’s College of Performance Management (PMI-CPM), an organization that focuses on the needs of project management professionals throughout the world. “Speaking as the past president of the PMI-CPM, I believe that DCMA can certainly be the focal point for

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DoD EV activities,” Ms. Haupt said. “They also support DOE, NASA and the intelligence agencies. But they simply do not have the resources to be able to support all the other federal agencies. I am very much an advocate for third-party certification and believe that it is a stepping stone to a larger goal of having an international standard for EV.”

Private companies with people qualified to evaluate another company’s EV system would perform third-party certifications. But who would check the checkers? “That is a very good question,” Ms. Haupt said. “I think the answer

Mr. Wayne Abba also recognizes DCMA’s capabilities for providing EVM certification. Mr. Abba is the person who wrote the memorandum that abolished the tri-service committee that previously oversaw EV and appointed the Defense Contract Management Command (predecessor to DCMA) to become the EV executive agent for DoD. At the time he was the senior program analyst for Contract Performance Management in the OSD. Today he is a private consultant in the EV community and a past president of PMI-CPM. “DCMA has been acting as the fee-for-service provider for NASA and DOE, and the other civil agencies need to look to DCMA for leadership,” Mr. Abba said. “But

DCMA is going to be hard-pressed to provide the resources.” He believes that the need to manage programs in a consistent manner has gone well beyond DoD. “You have the Drug Enforcement Administration, the FBI, the IRS and the intelligence agencies,” Mr. Abba said. “If they go off on their own, there is a large concern in industry that we will end up with a ‘Tower of Babel.’ Everyone who thinks he or she can spell ‘Earned Value’ will become an expert. If it ever gets to the point where there is an independent or third-party certification process, DCMA, in my opinion, has to be the key arbiter of who does that and what that means. It is an enormous issue.”

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#### **So, Where do we go From Here?**

According to Mr. Abba, EV is finally moving into the mainstream of government business. “It has always operated around the fringes, but it is really starting to move forward, especially with OMB putting EV into the FAR,” he said.

is that there would be some self-policing in the near term. But, it is going to end up being based on the company’s reputation. One company I know that is pursuing this has set up a very rigorous verification process for its certifiers.” Another expert, Ms. Susan Wood, agrees that there should be specific measures for certification. Ms. Wood is the EVM focal point at the Air Force Air Armament Center in Eglin AFB, Fla., and she is to bombs and missiles what Ms. Haupt is to airframes. “Whether it is a third-party certification or DCMA, the certification should be against the exact same criteria — the ANSI Standard,” Ms. Wood said. She added that she doesn’t have a problem with DCMA validating and certifying contractor EVM systems, nor does she have a problem with third-party certifiers as long as they use the ANSI criteria.

**(Above)** The naval variant of the Joint Strike Fighter, X-35C arrives at Naval Air Station Patuxent River, Md. (U.S. Navy photo by Mr. Vernon Pugh.)

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“That is probably the most significant thing that has happened in years because it will make EV a real mainstream activity. From my perspective, we now have to map out the right model for EV to go forward in an environment that is being strongly influenced by OMB.”

Should that model entail DCMA becoming the executive agent for EV for the entire federal government, or should it use third-party certifiers with DCMA functioning with others in an oversight role? “I don’t know of many folks who are completely averse to the idea of self-validation or third-party validation,” Ms. Tomsic said. “After all, the ANSI Standard is an industry standard. But there are a lot of concerns about how that might happen and how it will be monitored, or policed.” Mr. Treacy believes that third-party companies are certainly capable of doing assessments, but they should not perform certifications. “Although assessment and certification are similar, we should not allow them to use the term ‘certification,’ otherwise it loses its meaning. Then it becomes what Wayne Abba is talking about, a ‘Tower of Babel.’” Ms. Wood believes that the government will have to determine what is acceptable if it allows third-party certifiers, and she believes DCMA should have a role in establishing that criteria. “But they may not have all of the expertise they need either,” she said. “What DCMA could do is pull a team together from the experts that are left within the different services. They have done that before.” But, she also believes that third-party certification is inevitable. “Who is the government to say that Company A can’t get certified from Company B over here, who is

making it their business to do certifications? It is not a government standard that we are getting validated. Whoever does it, DCMA or third-party, the process has to be consistent,” Ms. Wood said.

In addition to OMB mandating EV throughout the federal government, technology is improving the EV software, and contractors are taking the initiative to go after EV of their own volition. Mr. Abba’s former employer, Dekker, Ltd., has created “an EV tool that would be affordable and accessible to anybody,” he said. “We built something around Microsoft® Project<sup>1</sup> that is just terrific. This is actually changing their business model from a high-end tool to a high-volume, low-dollar tool.” Another company, Computer Sciences Corporation (CSC), never had a contract requiring a formal EV validation. However, they have decided to adopt the industry standard across their federal sector and seek government validation. “DCMA provided observers to make sure that the CSC self-assessment is something that the government can agree with,” Mr. Abba said.

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There is an old Chinese proverb, “May you live in interesting times.” This certainly applies to Earned Value. “There are some really remarkable things happening in this area, and there are really good people in government and industry who are committed to doing the right thing,” Mr. Abba said. “And the taxpayers are going to save tons of money.” This is certainly a subject about which we will be hearing much in the future.

<sup>1</sup> Microsoft® Project is a registered trademark owned by the Microsoft Corporation in the United States and/or other countries.