



THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

OCT 01 2013

ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: FY 2013 Department of Defense Value Engineering Performance Metrics and  
FY 2014 Value Engineering Program Plans

In order to achieve greater efficiency and to pursue Better Buying Power objectives, the Department of Defense (DoD) uses initiatives such as Value Engineering (VE). DoD Components attain savings by using a simple, flexible, and structured set of tools, techniques, and procedures that challenge the status quo and promote innovation and creativity. Office of Management and Budget (OMB) Circular No. A-131, "Value Engineering," implements VE statute 41 USC §1711. In order for DoD to comply with OMB Circular No. A-131, the Components must have a VE program that meets OMB Circular No. A-131 requirements.

DoD Components are required to submit an annual statistical summary of their VE effort. Please prepare and submit the following not later than December 13, 2013:

1. A report of your FY 2013 VE Metrics using the guidance in attachments 1 and 2 and in the data formats provided in attachments 3 and 4. The data should be aggregated by major commands/centers. For additional details, consult OMB Circular A-131 and DoD Instruction 4245.14 report control symbol DD-AT&L(A) 2510.
2. A report of your VE plans for FY 2014 using the plan format in attachment 5 as a guideline.

Please have your VE Senior Manager submit your report and plan to Mr. Andrew Monje, OASD(R&E), at [andrew.n.monje.civ@mail.mil](mailto:andrew.n.monje.civ@mail.mil) or 703-692-0841. Thank you for your support as we work to improve and expand efficiencies through the use of the Value Engineering program.



Frank Kendall

Attachments:  
As stated

**DISTRIBUTION:**

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**CHIEF OF ENGINEERS AND COMMANDER, US ARMY CORPS OF ENGINEERS**

## **Preparation of Value Engineering (VE) Performance Metrics**

The DoD Components are required to compile and submit an annual statistical summary of their value engineering efforts as outlined below. The data shall be aggregated and broken out by major commands/centers. Present the Component totals for each statistic as a single row or column. The data should cover the entire FY 2013.

1. In-house implemented VE Proposals (VEPs)
  - a) Number of studies implemented.
  - b) What was the net government saving (\$M)?
    - i) Cost savings.
    - ii) Cost avoidance.
    - iii) Life-cycle savings.
  - c) What was the total government investment (\$M)?
  
2. Contractor submitted VE Change Proposals (VECPS)
  - a) Average number of days to process and award the proposals.
  - b) Number of proposals awarded.
  - c) Number of proposals received.
  - d) What was the net government saving (\$M)?
    - i) Cost savings.
    - ii) Cost avoidance.
  - e) What was the total government investment (\$M)?
  - f) What was the net contractor saving (\$M)?
  
3. Estimated Time and cost of submitting this report
  
4. Data for Top Five Projects (VEPS and VECPS)
  - a) Project title
  - b) Expenditures – in-house
  - c) Cost savings – in-house
  - d) Cost Savings – contractor
  - e) Cost Avoidance – in-house
  - f) Statement of quality/non-quantifiable improvement

## 5. Definitions

Cost savings and cost avoidances (\$M) are nets to the government (i.e., less government investment). It is allowable to report savings up to 6 years consistent with the FYDP that is current at the time when the value improving/VE project is implemented. All cost savings and cost avoidances are recorded in base year dollars of the report's fiscal year. One hundred percent of the net government savings over the FYDP period may be reported.

Life cycle savings/cost avoidances are determined by subtracting the Government's cost of performing the VE function over the life of the program from the value of the life-cycle savings generated by the value engineering function. Life-cycle savings result from reliability and maintainability improvements that affect the entire life of a system or facility. DoD allows life cycle savings to be reported up to 10 years.

### Contractor VECPs

Received: Number of VECP received during the current fiscal year.

Awarded: Number of VECP contract modifications made during current fiscal year; does not include secondary settlements.

Avg. days to award: Average number of calendar days to process the VECPs. The start time shall be when the Program Office/MACOM receives VECP. The completion time is when the Contracting Officer modifies the contract. Non-Government processing time is excluded.

Government Savings (\$M): Sum of VECP cost savings and VECP cost avoidances.

Cost savings are savings resulting from the application of a VECP to contracts awarded by the same contracting office or its successor for essentially the same unit. Cost savings include: 1) instant contract savings, 2) concurrent contract savings, and 3) future contract saving.

Cost avoidances are means those measurable net reductions resulting from a VECP in the Agency's overall projected costs, exclusive of cost savings. Cost avoidances can be Agency costs of operation, maintenance, logistic support, or Government-furnished property.

Net Contractor Savings: Equals the total contractor's share from the VECP less the contractor's development and implementation costs, which are those costs the contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the contractor incurs to make the contractual changes required by government. The savings are recorded in base year dollars of the report's fiscal year.

Future Years Defense Plan (FYDP) period covers prior year, current year, budget year (BY), BY + 1, BY + 2, BY + 3, and BY + 4. Savings can not be claimed twice, therefore, prior year reported savings are not claimed in the current report. When the Service/Agency captures actual savings, the savings may be reported in the year they occur for up to six years (ten years for life cycle savings).

Government Investment (\$M): Development and implementation costs are those Government costs that result directly from developing and implementing each value improving project, such as any net increases in the cost of maturing an initial proposal, testing, operations, maintenance, and logistics support. For this metric, include program operation costs are associated with the VEP program in the VEP investment metric, and include program operation costs are associated with the VECP program in the VECP investment metric. These costs are recorded in base year dollars of the report's fiscal year.

In house VEPs:

Implemented: Number of VEPs implemented/settled/approved during the current fiscal year. These VEPs can not be included in subsequent years.

Government Savings (\$M): Sum of VEP cost savings and VEP cost avoidances.

Cost savings are current year dollar savings and other programmed procurement reductions.

Cost avoidances are savings that can not be allotted to "cost saving."

Program Operation Costs are Government costs incurred within the VE program that can not be directly attributed to specific VEPs or VECPs. These costs may originate from personnel salaries, VE Program Requirement Clause administration, studies, travel, training, and workshops, and other direct and indirect costs associated with only the VE program. Include overhead costs that can be reasonable estimated and justified.

Return on Investment (ROI) equals the total Government savings divided by the total Government investment.

VEP is a document that records the use of Functional Analysis to affect changes that improve the value of required functions and determine the best value for the government.

VECP is formal, documented recommendation by a contractor requiring government approval and requiring a modification to the contract.

## **DoD IG Issue Resolution Agreement: Defining Value Engineering (VE) for Reporting Purposes**

### **Background:**

The DoD VE Quality Management Board (QMB) was tasked with developing guidance that differentiates the application of VE techniques and the reporting of VE savings from other cost reduction initiatives. Other initiatives include such efforts as the Navy's AEGIS Affordability Management Program, directed feasibility studies, logistics engineering change proposals, suggestions, and VE savings realized by foreign military sales customers. Additional examples of other initiatives include recent acquisition reform programs, as well as efforts from other cost-reduction initiatives such as the DoD Spare Parts Breakout Program and other activities normally expected in the performance of functions such as inventory management and purchasing.

The DoD Inspector General's Office agreed to work with the QMB to develop this guidance in a consensus building format.

Agreement was reached to clarify guidance in the following areas:

- a) VE definition for accounting purposes
- b) Savings & cost scope & calculation
- c) Savings & cost documentation
- d) VE Integration with or differentiation from other programs

The QMB DoD IG Issue Resolution Working Group reached consensus as follows in the above four areas:

### **A. VE Definition (Criteria) for Accounting (Reporting) Purposes**

The results of value improving activities may be included in annual VE reporting if one of the following two criteria applies:

1. Results from an approved VE Change Proposal (VECP)

OR

2. Results from a change that improves value of required function (where value is a function of performance and cost) using function analysis to determine best value (an example worksheet showing the minimum elements of function analysis is included below).

## **B. Savings and Cost Scope and Calculation**

### **Savings**

All cost savings and cost avoidances that are included will be net savings to the government. It is allowable to report savings up to six years consistent with budget projections in the Future Years Defense Program (FYDP) that is current at the time the value improving project is implemented. Savings may be reported in the years they occur during the FYDP period or as an estimate projected against the FYDP budget profile. Life cycle savings may be reported up to ten years.

VECPs. For acquisition savings, report the government's share during the VECP sharing period; thereafter until the end of the FYDP period, 100% of the net savings may be reported. For collateral savings (life cycle savings other than acquisition), government share of average annual collateral savings for the FYDP period may be reported.

VEPs (value improving projects other than VECPs). For acquisition savings, 100 percent of the net savings for the FYDP period may be reported. For collateral savings (life cycle savings other than acquisition), 100 percent of average annual collateral savings for the FYDP period may be reported.

### **Cost**

On a project by project basis, development & implementation costs are those costs above normal government administrative costs that result directly from developing and implementing each individual value-improving project, such as any net increases in the cost of testing, operations, maintenance, and logistics support. The term does not include the normal administrative costs of processing the value improving project or the costs of running the VE office. The annual report will sum project by project costs and add the annual cost of running the VE office (work force and other required resources) for a total VE program cost.

### **Return on Investment (ROI)**

ROI equals total net VE savings to the government divided by total VE program costs (savings and cost as defined above).

## **C. Savings and Cost Documentation**

To be included in the performance metrics data, each value improving project must be documented and include the following minimum essential documentation elements:

1. Unique project number or identifier

2. Identification of development and implementation costs to the government above normal administrative costs consistent with the Federal Acquisition Regulation. Government costs are those agency costs that result directly from developing and implementing the value-improving project, such as any net increases in the cost of testing, operations, maintenance, and logistics support. The term does not include the normal administrative costs of processing the value-improving project.
3. Description of gross and net savings to the government: acquisition and/or collateral (life cycle cost other than acquisition)
4. Description of technical changes
5. Validation of savings (either through actual documented savings or documented estimate of future savings and/or cost avoidances using established financial analysis procedures - approval and date)
6. Approval of technical change and date
7. Identification of who did the study or analysis or submitted idea
8. Program approval and date
9. Identification of items to which VE proposal applies
10. Date project initiated or proposal submitted for approval
11. Cost and savings figures for each of the years identified
12. Date of construction/etc. - include customized instructions on completing form (applies to construction projects only)
13. Indication of the above VE criteria met (if not VECP, must document minimum elements of function analysis)

**D. VE Integration With or Differentiation From Other Programs**

DoD Components are encouraged to integrate VE with other similar programs. To be reported, projects must meet the minimum criteria and documentation requirements listed above. Savings reported through multiple channels are allowed.



## Function Analysis/Best Value Alternative Worksheet (Examples)

(For reporting purposes, the minimum elements necessary to constitute function analysis required for other than VECPs are: project identification; function definition; alternative(s) identification; and alternative selection.)

### Project Identifier:

- Example 1. Finnigen Pin Sparing.
- Example 2. Mark I Mod O Disposable Coffee Receptacle.
- Example 3. Flag/Senior Management Liquid Containment Vessel.

### Function Definition (Use Verb-Noun Descriptor):

- Example 1. Obtain Finnigen Pins.
- Example 2. Hold Coffee.
- Example 3. Impress Associates.

### Function Performance Alternatives:

- Example 1.
  - a. Purchase from OEM.
  - b. Find alternate source.
  - c. Reverse Engineer for Competition.
- Example 2.
  - a. Paper cups.
  - b. Styrofoam cups.
- Example 3.
  - a. Gold Leaf embossed ceramic.
  - b. Cut Waterford crystal.

### Selected Alternative:

- Example 1. Use alternate source. (other suppliers; lower cost)
- Example 2. Paper Cups. (Biodegradable, no disposal cost)
- Example 3. Gold Leaf Embossed. (Stars don't show well on Crystal)

FY09 DoD VE Statistics

	Army	Navy	Air Force	DFAS	DLA	DIA	DISA	DeCA	DCMA
<b>VE Performance against 1.5% of TOA Goal</b>									
<b>Total TOA (\$M)</b>						-			
<b>VE \$ /Total TOA \$ (%)</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	-	#DIV/0!	#DIV/0!	#DIV/0!
<b>In-House (VEP)</b>									
<b># Implemented</b>									
<b>Net Govt. Savings (\$M)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Cost Savings (\$M)</b>									
<b>Cost Avoidance (\$M)</b>									
<b>Govt. Investment (\$M)</b>									
<b>Contractor (VECP)</b>									
<b>Avg. Days to Award</b>									
<b># Awarded</b>									
<b># Received</b>									
<b>Net Govt. Savings (\$M)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Cost Savings (\$M)</b>									
<b>Cost Avoidance (\$M)</b>									
<b>Govt. Investment (\$M)</b>									
<b>Net Contractor Savings</b>									
<b>Total</b>									
<b>Net Govt. Savings (\$M)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Govn't Invest't (\$M)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>ROI (xx:1)(savings/invest)</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Total Obligation Authority (TOA) (Use your organization's FY13 Budget TOA for Total TOA)  
 Return on Investment (ROI) (Net Government saving over Government investment)  
 Value Engineering Change Proposal (VECP)  
 Value Engineering Proposal (VEP)

**FY 2013 DoD VE Statistics  
Annual Value Engineering Report**

**PART I**

Agency Official Responsible for VE Program:

Name: Mr. Andrew Monje  
 Title: Program Manager, Value Engineering  
 Address: Pentagon Room 3C160, 3090 Defense Pentagon  
 Washington, 20301-3090  
 Phone: 703-692-0841 Fax: 703-614-7040 Email: [andrew.n.monje.civ@mail.mil](mailto:andrew.n.monje.civ@mail.mil)

Agency VE Expenditures (\$'s Invested in VE this fiscal year)(\$M):	
Number of Value Engineering Change Proposals (VECP) Submitted:	
Number of VECPs approved:	
Dollar Share of Savings Provided to Contractors (VECP) (\$M)	
Number of VE Studies performed:	
Return on Investment (annual savings divided by expenditures) (xx:1):	#DIV/0!
Total Annual VE Savings (\$M)	
VE Savings/TOA (Goal 1.5%)	

**TOTAL AGENCY NET LIFE-CYCLE COST SAVINGS ATTRIBUTABLE TO VE**

A. A summary of cost savings and avoidances reported by category (See B. below):

B. Total VE Savings by Category:

Category	Cost Savings (\$M)		Cost Avoidance (\$M)	Total Savings (\$M)
	1 In-House	2 Contractor	In-House	
VEP				0.00
VECP				0.00
<b>TOTAL</b>				

**PART II**

**Component**

List the top five VE projects by name. Describe any quality or other non-quantifiable improvements resulting from VE.

Project Title	VE Expenditures (\$M)		Cost Savings (\$M)		Cost Avoidance (\$M)
	In-House	Contractor	In-House	Contractor	In-House
Project No. 1					
Project No. 2					
Project No. 3					
Project No. 4					
Project No. 5					
	Quality/Non-quantifiable Improvement				
Project No. 1					
Project No. 2					
Project No. 3					
Project No. 4					
Project No. 5					

**VALUE ENGINEERING (VE) PROGRAM PLAN GUIDELINES  
FY 2014**

**I. Strategic Initiatives**

**A. Linkage to Better Buying Power (BBP) 2.0**

1. How your VE program apply to the following BBP 2.0 areas listed below:
  - a. Achieve affordable programs
  - b. Control costs throughout the product lifecycle
  - c. Incentivize productivity and innovation in industry and Government
  - d. Improve tradecraft in the acquisition of services

**B. Value Engineering Change Proposals (VECPs)**

As part of BBP 2.0's emphasis on "aligning profitability more tightly with Department goals," general guidance states that "DoD profit policy and our acquisition strategies should provide effective incentives to industry to deliver cost-effective solutions in which realized profitability is aligned and consistent with contract outcomes." As such, and pursuant to DODI 4245.14 which states "Provide resources necessary for operating the DoD VE program, including training of personnel and means of evaluating proposals. Establish procedures for timely payment of the contractor share of VECP savings that occur in future budget years or in different budget accounts."

1. Look for barriers that prevent:
  - a. Increasing the number of VECP submittals from industry
  - b. Expediting the VECP review and approval process
2. Determine how you will address each of these barriers to (1) promote and (2) incentivize VECPs for:
  - a. Major programs
  - b. Other projects
  - c. Service contracts

**C. Training and Outreach**

1. Determine if there are activities underway to integrate the VE methodology with other cost reduction initiatives (e.g. Continuous Performance Improvement, AFSO 21, lean six sigma, ...) in accordance with DODI 4245.14 which states "DoD Components shall incorporate the VE methodology with continuous process improvement training, pursuant to DoD Directive 5010.42 (Reference (g) to improve the full range of processes and activities that comprise their operations, including

decision-making processes and appropriate engagement with industrial base suppliers.”

2. Determine where people receive VE training and what training that they receive.
3. What activities are underway to inform the workforce about VE principles and benefits.

**D. Other activities**

**II. VE Metrics**

VE activities you should strive to accomplish in FY 2014

	<b>Target for FY2014</b>
Value Engineering Proposal savings	
Number of VECPs submitted	
VECP processing time	
VECP savings	
Total obligation authority for projects/programs/systems/products that meet Component criteria for using VE	
Total obligation authority for waivers associated with projects/programs/systems/products that meet Component criteria for using VE	
People exposed to VE principles	
People exposed to VE benefits	