

# Subpart 48.1 - Policies and Procedures

Parent topic: [Part 48 - Value Engineering](#)

## 48.101 General.

(a) *Value engineering* is the formal technique by which contractors *may* (1) voluntarily suggest methods for performing more economically and share in any resulting savings or (2) be required to establish a program to identify and submit to the Government methods for performing more economically. *Value engineering* attempts to eliminate, without impairing essential functions or characteristics, anything that increases *acquisition*, operation, or support costs.

(b) There are two *value engineering* approaches:

(1) The first is an incentive approach in which contractor participation is voluntary and the contractor uses its own resources to develop and submit any *value engineering* change proposals (VECP's). The contract provides for sharing of savings and for payment of the contractor's allowable development and implementation costs only if a VECP is accepted. This voluntary approach *should* not in itself increase costs to the Government.

(2) The second approach is a mandatory program in which the Government requires and pays for a specific *value engineering* program effort. The contractor *must* perform *value engineering* of the scope and level of effort required by the Government's program plan and included as a separately priced item of work in the contract Schedule. No *value engineering* sharing is permitted in architect engineer contracts. All other contracts with a program clause share in savings on accepted VECP's, but at a lower percentage rate than under the voluntary approach. The objective of this *value engineering* program requirement is to ensure that the contractor's *value engineering* effort is applied to areas of the contract that *offer* opportunities for considerable savings consistent with the functional requirements of the end item of the contract.

## 48.102 Policies.

(a) As required by [41 U.S.C. 1711](#), agencies *shall* establish and maintain cost-effective *value engineering* procedures and processes. Agencies *shall* provide contractors a substantial financial incentive to develop and submit VECP's. *Contracting activities* will include *value engineering* provisions in appropriate supply, service, architect-engineer and *construction* contracts as prescribed by [48.201](#) and [48.202](#) except where exemptions are granted on a case-by-case basis, or for specific classes of contracts, by the *agency head*.

(b) Agencies *shall*-

(1) Establish guidelines for processing VECP's,

(2) Process VECP's objectively and expeditiously, and

(3) Provide contractors a fair share of the savings on accepted VECP's.

(c) Agencies *shall* consider requiring incorporation of *value engineering* clauses in appropriate

subcontracts.

(d)

(1) Agencies other than the Department of Defense *shall* use the *value engineering* program requirement clause (52.248-1, *Alternates I or II*) in initial production contracts for *major system* programs (see definition of *major system* in 34.001) and for contracts for *major systems* research and development except where the *contracting officer* determines and documents the file to reflect that such use is not appropriate.

(2) In Department of Defense contracts, the VE program requirement clause (52.248-1, *Alternates I or II*), *shall* be placed in initial production *solicitations* and contracts (first and second production buys) for *major system acquisition* programs as defined in DoD Directive 5000.1, except as specified in subdivisions (d)(2)(i) and (ii) of this section. A program requirement clause *may* be included in initial production contracts for less than *major systems acquisition* programs if there is a potential for savings. The *contracting officer* is not required to include a program requirement clause in initial production contracts-

(i) Where, in the judgment of the *contracting officer*, the prime contractor has demonstrated an effective VE program during either earlier program phases, or during other recent comparable production contracts.

(ii) Which are awarded on the basis of competition.

(e) *Value engineering* incentive payments do not constitute profit or fee within the limitations imposed by 10 U.S.C. 3322(b) and 41 U.S.C.3905 (see 15.404-4(c)(4)(i)).

(f) Generally, profit or fee on the *instant contract* *should* not be adjusted downward as a result of acceptance of a VECP. Profit or fee *shall* be excluded when calculating instant or future contract savings.

(g) The *contracting officer* determines the *sharing periods* and sharing rates on a case-by-case basis using the guidelines in 48.104-1 and 48.104-2, respectively. In establishing a *sharing period* and sharing rate, the *contracting officer* *must* consider the following, as appropriate, and *must* insert supporting rationale in the contract file:

(1) Extent of the change.

(2) Complexity of the change.

(3) Development risk (*e.g.*, contractor's financial risk).

(4) Development cost.

(5) Performance and/or reliability impact.

(6) Production period remaining at the time of VECP acceptance.

(7) Number of *units* affected.

(h) Contracts for *architect-engineer services* *must* require a mandatory *value engineering* program to reduce total ownership cost in accordance with 48.101(b)(2). However, there *must* be no sharing of *value engineering* savings in contracts for *architect-engineer services*.

(i) Agencies *shall* establish procedures for funding and payment of the contractor's share of *collateral savings* and future contract savings.

## **48.103 Processing value engineering change proposals.**

(a) Instructions to the contractor for preparing a VECP and submitting it to the Government are included in paragraphs (c) and (d) of the *value engineering* clauses prescribed in [subpart 48.2](#). Upon receiving a VECP, the *contracting officer* or other designated official *shall* promptly process and objectively evaluate the VECP in accordance with agency procedures and *shall* document the contract file with the rationale for accepting or rejecting the VECP.

(b) The *contracting officer* is responsible for accepting or rejecting the VECP within 45 days from its receipt by the Government. If the Government will need more time to evaluate the VECP, the *contracting officer shall* notify the contractor promptly *in writing*, giving the reasons and the anticipated decision date. The contractor *may* withdraw, in whole or in part, any VECP not accepted by the Government within the period specified in the VECP. Any VECP *may* be approved, in whole or in part, by a *contract modification* incorporating the VECP. Until the effective date of the *contract modification*, the contractor *shall* perform in accordance with the existing contract. If the Government accepts the VECP, but properly rejects *units* subsequently delivered or does not receive *units* on which a savings share was paid, the contractor *shall* reimburse the Government for the proportionate share of these payments. If the VECP is not accepted, the *contracting officer shall* provide the contractor with prompt written notification, explaining the reasons for rejection.

(c) The following Government decisions are unilateral decisions made solely at the discretion of the Government:

(1) The decision to accept or reject a VECP.

(2) The determination of *collateral costs* or *collateral savings*.

(3) The decision as to which of the sharing rates applies when Alternate II of the clause at [52.248-1](#), *Value Engineering*, is used.

(4) The *contracting officer's* determination of the duration of the *sharing period* and the contractor's sharing rate.

## **48.104 Sharing arrangements.**

### **48.104-1 Determining sharing period.**

(a) *Contracting officers must* determine discrete *sharing periods* for each VECP. If more than one VECP is incorporated into a contract, the *sharing period* for each VECP need not be identical.

(b) The *sharing period* begins with acceptance of the first *unit* incorporating the VECP. Except as provided in paragraph (c) of this subsection, the end of the *sharing period* is a specific calendar date that is the later of-

(1) 36 to 60 consecutive months (set at the discretion of the *contracting officer* for each VECP) after

the first *unit* affected by the VECP is accepted; or

(2) The last scheduled delivery date of an item affected by the VECP under the *instant contract* delivery schedule in effect at the time the VECP is accepted.

(c) For engineering-development contracts and contracts containing low-rate-initial-production or early production *units*, the end of the *sharing period* is based not on a calendar date, but on acceptance of a specified quantity of future contract *units*. This quantity is the number of *units* affected by the VECP that are scheduled to be delivered over a period of between 36 and 60 consecutive months (set at the discretion of the *contracting officer* for each VECP) that spans the highest planned production, based on planning and programming or production documentation at the time the VECP is accepted. The specified quantity begins with the first future contract *unit* affected by the VECP and continues over consecutive deliveries until the *sharing period* ends at acceptance of the last of the specified quantity of *units*.

(d) For contracts (other than those in paragraph (c) of this subsection) for items requiring a prolonged production schedule (*e.g.*, ship construction, major system acquisition), the end of the *sharing period* is determined according to paragraph (b) of this subsection. Agencies may prescribe sharing of future contract savings on all future contract *units* to be delivered under contracts awarded within the *sharing period* for essentially the same item, even if the scheduled delivery date is outside the *sharing period*.

## 48.104-2 Sharing acquisition savings.

(a) Supply or service contracts.

(1) The *sharing base* for *acquisition savings* is the number of affected end items on contracts of the *contracting office* accepting the VECP. The sharing rates (Government/contractor) for *net acquisition savings* for supplies and services are based on the type of contract, the *value engineering* clause or *alternate* used, and the type of savings, as follows:

### Government/Contractor Shares of Net Acquisition Savings (Figures in Percent)

Contract Type	Sharing Agreement			
	Incentive (Voluntary)		Program Requirement (Mandatory)	
	<i>Instant contract rate</i>	Concurrent and future contract rate	<i>Instant contract rate</i>	Concurrent and future contract rate
Fixed-price (includes fixed-price-award-fee; excludes other fixed-price incentive contracts)	*50/50	*50/50	75/25	75/25

## Government/Contractor Shares of *Net Acquisition Savings* (Figures in Percent)

Incentive (fixed-price or cost) (other than award fee)	(**)	*50/50	(**)	75/25
Cost-reimbursement (includes cost-plus-award-fee; excludes other cost-type incentive contracts)	***75/25	***75/25	85/15	85/15

\* The *contracting officer* may increase the contractor's sharing rate to as high as 75 percent for each VECP. (See [48.102\(g\)](#) (1) through (7).)

\*\* Same sharing arrangement as the contract's profit or fee adjustment formula.

\*\*\* The *contracting officer* may increase the contractor's sharing rate to as high as 50 percent for each VECP. (See [48.102\(g\)](#) (1) through (7).)

(2) *Acquisition savings* may be realized on the *instant contract*, concurrent contracts, and future contracts. The contractor is entitled to a percentage share (see paragraph (a)(1)) of any *net acquisition savings*. *Net acquisition savings* result when the total of *acquisition savings* becomes greater than the total of *Government costs* and any *negative instant contract savings*. This may occur on the *instant contract* or it may not occur until reductions have been negotiated on concurrent contracts or until future contract savings are calculated, either through lump-sum payment or as each future contract is awarded.

(i) When the *instant contract* is not an incentive contract, the contractor's share of *net acquisition savings* is calculated and paid each time such savings are realized. This may occur once, several times, or, in rare cases, not at all.

(ii) When the *instant contract* is an incentive contract, the contractor shares in *instant contract* savings through the contract's incentive structure. In calculating *acquisition savings* under incentive contracts, the *contracting officer* shall add any *negative instant contract savings* to the target cost or to the target price and ceiling price and then offset these *negative instant contract savings* and any *Government costs* against concurrent and future contract savings.

(3) The contractor shares in the savings on all affected *units* scheduled for delivery during the *sharing period*. The contractor is responsible for maintaining, for 3 years after final payment on the contract under which the VECP was accepted, records adequate to identify the first delivered *unit* incorporating the applicable VECP.

(4) Contractor shares of savings are paid through the contract under which the VECP was accepted. On incentive contracts, the contractor's share of concurrent and future contract savings and of *collateral savings* shall be paid as a separate firm-fixed-price *line item* on the *instant contract*.

(5) Within 3 months after concurrent contracts have been modified to reflect price reductions attributable to use of the VECP, the *contracting officer* shall modify the *instant contract* to provide

the contractor's share of savings.

(6) The contractor's share of future contract savings *may* be paid as subsequent contracts are awarded or in a lump-sum payment at the time the VECP is accepted. The lump-sum method *may* be used only if the *contracting officer* has established that this is the best way to proceed and the contractor agrees. The *contracting officer* ordinarily *shall* make calculations as future contracts are awarded and, within 3 months after award, modify the *instant contract* to provide the contractor's share of the savings. For future contract savings calculated under the optional lump-sum method, the *sharing base* is an estimate of the number of items that the *contracting officer* will purchase for delivery during the *sharing period*. In deciding whether or not to use the more convenient lump-sum method for an individual VECP, the *contracting officer shall* consider-

(i) The accuracy with which the number of items to be delivered during the *sharing period* can be estimated and the probability of actual production of the projected quantity;

(ii) The availability of funds for a lump-sum payment; and

(iii) The administrative expense of amending the *instant contract* as future contracts are awarded.

(b) *Construction contracts*. Sharing on *construction* contracts applies only to savings on the *instant contract* and to *collateral savings*. The Government's share of savings is determined by subtracting *Government costs* from *instant contract* savings and multiplying the result by (1)45 percent for fixed-price contracts or (2)75 percent for cost-reimbursement contracts. *Value engineering* sharing does not apply to incentive *construction* contracts.

### **48.104-3 Sharing collateral savings.**

(a) The Government shares *collateral savings* with the contractor, unless the *head of the contracting activity* has determined that the cost of calculating and tracking *collateral savings* will exceed the benefits to be derived (see [48.201\(e\)](#)).

(b) The contractor's share of *collateral savings may* range from 20 to 100 percent of the estimated savings to be realized during a typical year of use but *must* not exceed the greater of-

(1) The contract's firm-fixed-price, target price, target cost, or estimated cost, at the time the VECP is accepted; or

(2) \$100,000.

(c) The *contracting officer must* determine the sharing rate for each VECP.

(d) In determining *collateral savings*, the *contracting officer must* consider any degradation of performance, service life, or capability.

### **48.104-4 Sharing alternative-no-cost settlement method.**

In selecting an appropriate mechanism for incorporating a VECP into a contract, the *contracting officer shall* analyze the different approaches available to determine which one would be in the Government's best interest. *Contracting officers should* balance the administrative costs of negotiating a settlement against the anticipated savings. A no-cost settlement *may* be used if, in the

*contracting officer's* judgment, reliance on other VECP approaches likely would not be more cost-effective, and the no-cost settlement would provide adequate consideration to the Government. Under this method of settlement, the contractor would keep all of the savings on the *instant contract*, and all savings on its concurrent contracts only. The Government would keep all savings resulting from concurrent contracts placed with other sources, savings from all future contracts, and all *collateral savings*. Use of this method *must* be by mutual agreement of both parties for individual VECPs.

## **48.105 Relationship to other incentives.**

Contractors *should* be offered the fullest possible range of motivation, yet the benefits of an accepted VECP *should* not be rewarded both as *value engineering* shares and under performance, *design-to-cost*, or similar incentives of the contract. To that end, when performance, *design-to-cost*, or similar targets are set and incentivized, the targets of such incentives affected by the VECP are not to be adjusted because of the acceptance of the VECP. Only those benefits of an accepted VECP not rewardable under other incentives are rewarded under a *value engineering* clause.