

## SELECTED AREAS OF COST

### Chapter 73 – Warranty Costs and/or Correction of Defect Costs

**Authoritative Sources**

[FAR Subpart 46.7](#) Warranties

This chapter covers the various warranty clauses that may be used in contracts awarded by the Federal Government.

This chapter also presents general guidance in reviewing estimated and/or actual warranty costs and the various methods in accounting for warranty costs.

This chapter addresses the following topics:

73-1 Warranty Clauses Affecting Warranty Cost

73-2 Definition of Warranty Costs and Accounting for Such Cost

73-3 General Audit Considerations

73-4 Coordination with the PCO/ACO and Technical Staff on Warranty Costs

73-5 Audit Considerations of Warranty Costs in Negotiating Final Price Under Fixed Price Incentive Contracts

#### **73-1 Warranty Clauses Affecting Warranty Cost**

Warranty clauses or correction of defects clauses are included in some contracts to give the Government certain rights and remedies if supplies or service furnished under the contract are found to be defective or deficient within a prescribed period. Generally, a warranty should provide that, for a stated period of time or use, or until the occurrence of a specified event, the Government has a contractual right for the correction of defects (see FAR 46.702). The FAR contains the following warranty clause requirements:

a. Except for clauses governing cost-reimbursement supply contracts (FAR 52.246-3), and cost-reimbursement research and development contracts (FAR 52.246-8), warranties are not included in cost-reimbursement type contracts (FAR 46.705).

b. FAR 46.703 provides criteria for determining whether a warranty is appropriate for a specific acquisition, other than in those situations discussed in paragraph a. above.

c. When a warranty is to be included in a contract, the terms and conditions may vary with the circumstances of the procurement. FAR 46.706(a) requires that the following items be clearly stated in the warranty clause:

- (1) The exact nature of the item and its components and characteristics that the contractor warrants;
- (2) The extent of the contractor's warranty including all of the contractor's obligations to the Government for breach of warranty;
- (3) The specific remedies available to the Government, such as payment of the costs incurred by the Government in procuring the items from another source, the right to an equitable reduction of the contract price, or that the contractor repair or replace the defective items at no additional cost to the Government, and;
- (4) The scope and duration of the warranty.

### **73-2 Definition of Warranty Costs and Accounting for Such Cost**

For purposes of the following guidance, the term "warranty costs" encompasses costs related to:

- (1) the warranty aspects of the Inspection of Supplies clause at FAR 52.246-3 and
- (2) warranty clauses. FAR 46.703(b) states that "Warranty costs arise from the contractor's charge for accepting the deferred liability created by the warranty..."

The acquisition cost of a warranty may be included as part of an item's price or may be set forth as a separate contract line item (see DFARS 246.703(b)). The warranty clauses specify that a contractor's cost of compliance with the provisions of the warranty will be at the contractor's expense with no increase in contract price.

A warranty may cover all costs of repairs regardless of the actual reimbursement for repair costs. For example, the contract may provide for reimbursing the contractor \$50,000 to cover all repairs done during a specified time period. Thus, regardless of how much the actual repairs are (e.g., \$20,000, \$60,000, \$100,000, etc.), the contractor will be reimbursed \$50,000.

Alternatively, warranty may cover the cost of repairs up to a ceiling amount. For example, the contract may provide reimbursement of \$75,000 to cover repairs, with a warranty ceiling of \$175,000 (with any actual costs incurred in excess of the warranty ceiling reimbursed on a dollar-for-dollar basis). Under such an arrangement, if the actual repair costs were \$30,000, the contractor would receive \$75,000. If the actual repair costs were \$125,000, the contractor would still receive only \$75,000. However, if the actual repair costs were \$200,000, the contractor would receive \$100,000 (\$75,000 covered by the warranty agreement, plus an additional \$25,000 of actual repair costs in excess of the ceiling amount (\$200,000 less \$175,000)).

The audit of estimated or incurred warranty costs is dependent upon the terms of the contracts and the contractor's accounting policies and procedures. The contractor should maintain written accounting practices and procedures describing how the warranty costs are accounted for. For CAS-covered contractors, these accounting practices should be part of the disclosure statement. Warranty costs may be accounted for:

- (1) as a direct contract cost,
- (2) as an indirect cost on the basis of actual expenditures in the period of incurrence,  
or
- (3) as an indirect cost on the basis of a reserve.

The use of this last method is similar to that generally used in accounting for bad debt losses.

### **73-3 General Audit Considerations**

The following points should be considered when evaluating warranty costs included in contractors' cost submissions or pricing proposals:

When briefing contracts and/or auditing specific contract costs, the auditor should be alert to whether or not there is a warranty clause, and whether the clause includes a warranty ceiling. If the contract includes warranty coverage, the clause should be examined to determine the period covered by the warranty, the warranty terms, and that the warranty costs reviewed are allowable under the contract. The auditor should communicate with the Contracting Officer to assure a proper interpretation of the warranty provisions.

When express warranties are included in contracts (except contracts for commercial items) all implied warranties of merchantability and fitness are negated by use of the language in the warranty clause (see FAR 46.706(b)(1)(iii)). Under cost-reimbursement type contracts, the Inspection of Supplies clause provides that corrections or replacements are to be made without cost to the Government if the defects are the result of fraud or other causes of the types listed in FAR 52.246-3(h). In the absence of such causes, costs of correcting defects may be allowable if incurred within the period covered by the clause.

Verify actual costs to ensure that contractors have properly segregated warranty costs for the correction of defects from the costs of ongoing performance (such as redesign, rework, test and quality control). In many cases, the department or group tasked with correcting a defect under the warranty requirements will be the same department or group performing the ongoing portion of the contract. The auditor should ascertain whether the contractor has established procedures for reviewing items processed for correction of defects and for determining the reason(s) for the defects and the extent of its responsibility. In some cases, where costs are relatively large, the auditor may obtain technical advice from Government technical personnel prior to accepting such costs.

Determine whether the contractor's policies and procedures for allocating warranty costs are equitable and give effect to any existing significant differences in warranty conditions or costs among the various items or product lines produced by the contractor. For example, if a contractor produces several items or product lines which have significant differences in types of warranties offered, or in the warranty costs incurred, the auditor should ascertain that the basis of allocation to the particular items or product lines appropriately reflects these differences. When warranty costs are included in overhead, the auditor should determine that the base for allocating this expense is made up only of contracts containing warranty provisions. When evaluating direct charges to a contract for warranty costs, the auditor should ascertain that the same type of costs incurred on other Government or commercial products are excluded from allocable overhead unless it is clearly established that a cost duplication does not exist.

Determine whether the contractor's policies and procedures are being followed and properly implemented. To ascertain this, a representative number of transactions should be reviewed. When warranty costs are accounted for under the reserve method, the auditor should ascertain that the periodic charges to overhead and additions to the reserve account are not excessive in relation to actual warranty costs experienced over an appropriate number of years.

When there is a warranty ceiling, the auditor should assure that any claimed repair costs are limited to those in excess of the warranty ceiling.

Some warranty clauses permit the Government to perform the repair work themselves, with the contractor required to reimburse the Government (either through payment or credit) for the work performed. When the contract contains this type of clause, the auditor should coordinate with the PCO/ACO to determine if any amounts owed by the contractor have been recovered. If it is determined that significant monies owed have not been recovered, the auditor should formally notify the PCO/ACO of the amount owed so that the PCO/ACO can take the appropriate collection action.

In estimating costs to provide a warranty, contractors must consider many factors, including the specific warranty terms, the types of defects which may occur, the probability and number of occurrences, and the nature, extent, and cost of the corrective action which will be required. In the evaluation of proposed warranty costs, the following steps should be performed:

- (1) Review the warranty provisions in the request for proposal to ascertain that a warranty is required and to determine the nature and extent of the warranty requirements.
- (2) Evaluate the contractor's accounting policies and procedures for the treatment and segregation of warranty costs. Review the practices to determine if any inequity exists in allocating costs between and among commercial and Government work loads.
- (3) Determine the basis of the proposed warranty costs. The estimates should be based on auditable data such as actual experience, industry-wide experience, actuarial estimates or parametric estimates (see CAM Section 9-1000). If estimated costs are predicated on incurred costs related to isolated events which are nonrecurring, a contingency exists; therefore, attention should be given to FAR 31.205-7, "Contingencies."
- (4) Evaluate the contractor's past experience in the actual incurrence of warranty cost.
- (5) Determine if there are any discernible trends or changes in accounting or operating practices which are likely to affect warranty costs in future periods.
- (6) Determine that warranty costs charged direct on prior contracts are excluded from the base amounts used to project future product costs on follow-on contracts.
- (7) When the examination relates to a proposal for a contract where a warranty may be appropriate (see 73-1), the audit report should include any comments which would assist the contracting officer in determining:
  - (a) whether the best interest of the Government would be served by including a warranty clause in the contract,
  - (b) the approximate cost to the Government for the protection afforded by such clause (the amount not questioned), and
  - (c) whether major subcontracts include warranty provisions.

If so, the report should also include comments on vendor warranty costs, particularly in cases where the express or implied contractor or vendor policy is that vendor warranties will not be passed to the Government. This may require an assessment of (i) the dollar impact of warranty costs included in vendor prices, and (ii) the need for the contractor to have warranty protection when material is purchased for inventory or for other prudent reasons. Where determinable, the report should include a statement to the effect that the contractor's proposal costs include amounts for either vendor or contractor warranty, even though the dollar impact may not be quantifiable.

- (8) When the examination relates to a proposal for a contract not including a warranty clause (see 73-1), comments similar to those provided in (7) above would not be appropriate. However, those contractor proposals may contain an "inspection clause," and should include a reasonable estimate for costs of complying with the requirements of the related contract clause (see FAR 52.246). The omission or understatement of such costs may result in the negotiation of a contract with a built-in overrun factor. If the auditor encounters an apparently inappropriate omission, this should be brought to the attention of the contractor and the appropriate contracting officers. The auditor should not prepare the proposed estimate for the contractor. However, the auditor should disclose any deficiency in the narrative report comments with attention to the appropriate contractor responsibilities addressed at FAR 46.105, 46.202, and 46.3.

**Other Audit Considerations:**

Other areas that may require special consideration in the audit of warranty costs include CAS compliance and the use of offsite indirect expense pools.

- (1) DFARS 246.703(b) provides that warranty costs may be included as a separate contract line item. If the contractor proposes warranty costs as a separate line item, the auditor should verify that this is in compliance with the contractor's disclosed practice. In addition, consideration must be given to the requirements of CAS 402 which requires consistency in the allocation of costs incurred for the same purpose in like circumstances (see CAM Section 8-402).
- (2) Another audit concern resulting from the inclusion of warranty clauses in contracts relates to the use or establishment of offsite overhead pools to accumulate and allocate expenses related to effort of correcting defects at offsite locations (for example, correction of a defect at a Government installation). The audit of costs associated with offsite activities would include a determination of whether the effort is of such magnitude as to justify establishment of a separate cost pool, and whether the allocation method used satisfies the requirements of FAR 31.203 and, if applicable, CAS 418 (see CAM Sections 6-606 and 8-418).

**73-4 Coordination with the PCO/ACO and Technical Staff on Warranty Costs**

The technical nature of the subject matter and the relevancy of interpretation of contract provisions on warranty costs make it especially important that the auditor coordinate with the PCO/ACO and their technical staff.

**73-5 Audit Considerations of Warranty Costs in negotiating Final Price Under Fixed Price Incentive Contracts**

The final total price negotiated under a fixed-price incentive contract containing a warranty clause may consider all costs incurred or to be incurred by the contractor in complying with the warranty clause (see FAR 46.707). When it is the contractor's practice to account for warranty cost as a direct charge or by establishing a reserve (see 73-2), its repricing proposal for the above purpose may include an estimate of warranty costs remaining to be incurred. In such cases the auditor should examine closely the basis for the estimates and their reasonableness.