

Chapter 4—Cost Principles

4.1—Overview of Federal Acquisition Regulation, Part 31

State departments of transportation (DOTs) rely on FAR Part 31 for guidance when negotiating costs and reviewing project proposals with engineering consultants. The FAR contains cost principles and procedures for pricing contracts, subcontracts, and modifications to contracts.

The following is a general discussion of applicable cost principles described in FAR Part 31. This discussion is a brief summary only and is not intended to be a complete rendition of all cost principles contained in the FAR.

The provisions apply to commercial organizations, educational institutions, State, local and Federally-recognized Indian tribal governments, and nonprofit organizations. FAR 31.105, dealing with construction and architect-engineering contracts, states that the allowability of costs shall be determined in accordance with FAR Subpart 31.2. Accordingly, the following discussion focuses on Subpart 31.2—Contracts with Commercial Organizations.

The total cost of a contract includes all costs properly allocable to the contract under the specific contract provisions. The allowable costs to the Government are all costs that are reasonable, allocable, and are not prohibited by FAR Part 31.

In some cases, a contracting State DOT may enter into an advance agreement with an engineering consultant to clarify the allocability and allowability of special or unusual costs. FAR 31.109 provides further clarification of advance agreements, including examples of costs for which advance agreements may be important.

In the absence of any advance agreements, the auditor should determine the allowability of costs. To determine the allowability, the auditor should consider the following:

- 1. Any limitations set forth in Subpart 31.2 of the FAR;
- 2. Allocability;
- 3. Cost Accounting Standards (CAS) promulgated by the Cost Accounting Standards Board (CASB); if applicable, otherwise, Generally Accepted Accounting Principles and practices appropriate to the particular circumstances;
- 4. Terms of the contract; and
- 5. Reasonableness.

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4.2—Allowability, Including Reasonableness

[References: FAR 31.201-2 and FAR 31.201-3]

A. Generally

Cost elements must be reviewed for reasonableness in accordance with FAR 31.201-2 and 31.201-3. Reasonableness concerns may arise in any number of cost categories, including indirect labor and fringe benefits, among others. For example, the amount of indirect labor in the indirect cost pool in relation to direct labor may cause concerns regarding a firm's efficiency and the extent to which the Government should reimburse costs through the overhead rate. Additionally, certain categories of fringe benefits also may generate reasonableness concerns, especially in the case of privately-held firms with compensation cost structures not subject to the constraints of stockholders' oversight.

Note: The following section discusses the reasonableness of general cost items. See Chapter 7 for specifics regarding determining the reasonableness of compensation costs.

B. Requirements of FAR 31.201-2 and FAR 31.201-3

FAR 31.201-2, Determining Allowability, provides the following (emphasis added):

- (a) A cost is allowable only when the cost complies with all of the following requirements:
 - (1) Reasonableness.
 - (2) Allocability.
 - (3) Standards promulgated by the CAS Board, if applicable; otherwise, generally accepted accounting principles and practices appropriate to the circumstances.
 - (4) Terms of the contract.
 - (5) Any limitations set forth in [FAR 31.201].

FAR 31.201-3, Determining Reasonableness, provides the framework for addressing the reasonableness of costs (emphasis added):

- (a) A cost is reasonable if, in its nature and amounts, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business. Reasonableness of specific costs should be examined with particular care in connection with firms or their separate divisions that may not be subject to effective competitive restraints. No presumption of reasonableness shall be attached to the incurrence of costs by a contractor. If an initial review of the facts results in a challenge of a specific cost by the contracting officer or the contracting officer's representative, the burden of proof shall be upon the contractor to establish that such cost is reasonable.
- (b) What is reasonable depends upon a variety of considerations and circumstances, including—
 - (1) Whether it is the type of cost generally recognized as *ordinary* and necessary for the conduct of the contractor's business or the contract performance;
 - (2) Generally accepted sound business practices, arm's length bargaining, and Federal and State laws and regulations;
 - (3) The contractor's responsibilities to the Government, other customers, the owners of business, employees, and the public at large, and
 - (4) Any significant deviations from the contractor's established practices.

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C. Methodologies for Applying FAR 31.201-3

While the tests, standards, and other considerations referenced in FAR 31.201-3 entail varying degrees of subjectivity and professional judgment, it is strongly recommended, as a best practice, that primary emphasis be placed on quantitative analysis in addressing the reasonableness of costs. Specifically, ordinary costs are amounts that are common, usual, and otherwise characteristic of the industry segment. When analyzing cost elements for reasonableness, engineering consultants and auditors are strongly recommended to use the concept of ordinary cost as a starting point, as discussed below.

1. Using Quantitative Analysis to Determine Ordinary Cost

The starting point in the analysis of reasonableness of a specific cost element is the establishment of an ordinary level of cost as a baseline for the analysis. The methodology for establishing this baseline may vary depending on the circumstances.

- (a) Ratio Analysis. The methodology may include the use of ratios, for example, the use of mean or median values as a percentage of either direct labor or net revenues by type of engineering services, size of firm, and location, among other parameters. When this methodology is used, the ratios and other comparative statistics may be derived from nationally-published, independent industry surveys.
- (b) Analysis of Trend /Historical Data. The methodology for establishing baseline costs also may include the use of trend analysis and/or analysis of historical cost data. When trend analysis is used, consideration should be given to both the trend within the firm in question as well as the industry overall. Additionally, a combination of both survey and trend analysis, as well as other empirically-based methodologies, may be used.
- (c) Analysis of Variances. Once baselines for specific cost elements are established, variances in excess of benchmark thresholds, if determined to be material based on professional judgment, should be identified, analyzed, and addressed by the engineering consultant and/or in the auditor's workpapers within the context of a multi-factor analysis, in accordance with the considerations outlined by FAR 31.201-3 and other related regulations. If costs with material variances are determined to be reasonable, then the basis for acceptance of the variances in the context of FAR 31.201-3 should be explicitly identified in the audit workpapers, so that the cognizant agency or other reviewer is made fully aware of the facts underlying this determination.

2. Determining Reasonableness: Common Cost Categories

Cost categories of frequent concern with respect to reasonableness include, but are not limited to, executive compensation (see Chapter 7), indirect labor, vehicle costs, travel costs, occupancy costs, pension costs, and the various elements of fringe benefits.

4.3—Allocability

[Reference: FAR 31.201-4]

A cost is *allocable* if it is assignable/chargeable to one or more cost objectives or cost centers on the basis of either the relative benefits received or some other equitable relationship. A cost must be allocated in some reasonable proportion to the benefits derived. A cost is allocable to a Government contract if it:

- 1. Is incurred specifically for the contract (direct cost);
- 2. Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received (direct and indirect cost); or
- 3. Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown (indirect cost only).

4.4—Unallowable Costs

[References FAR 31.201-6, CAS 405 (48 CFR 9904.405)]

Costs that are expressly or mutually agreed to be unallowable, including directly associated costs, must be identified and excluded from any billing, claim, or proposal applicable to a Government contract. A directly associated cost is any cost which is generated solely as a result of incurring another cost, and which would not have been incurred had the other cost not been incurred. When an unallowable cost is incurred, its directly associated costs are also unallowable. The practices to account for and present unallowable costs are described in CAS 405 (48 CFR 9904.405), Accounting for Unallowable Costs.

4.5—Direct and Indirect Costs

[References: FAR 31.202, FAR 31.203]

In evaluating an engineering consultant's overhead, auditors should consider direct as well as indirect costs. A direct cost is any cost that can be identified specifically with a particular contract or project. Costs identified specifically with a contract or project are direct costs and must be allocated/charged directly to the contract or project. All costs specifically identified with a project are direct costs of that project and may not be allocated to another project, either directly or indirectly. Finally, a cost may not be charged as direct and also be included in an indirect cost pool. For reasons of practicality, any small dollar direct cost may be treated as an indirect cost if the accounting treatment is consistently applied to all projects and produces substantially the same results as treating the cost as a direct cost. However, any variances and credits should then also be treated as indirect costs.

Indirect costs should be accumulated by logical cost groupings with due consideration of the reasons for incurring such costs. Commonly, manufacturing overhead, selling expenses, and general and administrative (G&A) expenses are separately grouped. The engineering consultant must record indirect costs in accordance with GAAP and must consistently allocate these costs to intermediate or final cost objectives, as appropriate.

4.6—Applicability of Cost Accounting Standards

Contracts may be subject to the Cost Accounting Standards (CAS) promulgated by the Cost Accounting Standards Board (CASB), an independent board that reports to the U.S. Office of Management and Budget's Office of Federal Procurement Policy. Certain CAS provisions are incorporated into FAR Part 31 and apply to most FAHP projects reimbursed under actual-cost agreements, while other provisions apply only to large contracts. Engineering consultants that are subject to full CAS coverage for Federal contracts also should use full CAS-based cost accounting practices for State DOT contracts.

Note: For details regarding CAS Program Requirements, see FAR Subpart 30.2.

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4.7—Allocation Bases for Indirect Costs

[Reference: FAR 31.203(c)]

Generally. Allocation bases are used to distribute/allocate overhead costs to intermediate or final cost objectives. An allocation base common to all cost objectives or projects should be selected for the allocation of indirect costs. Although most engineering consultants use direct labor as the sole base for developing overhead rates, some engineering consultants have rate structures that are more complex and use multiple allocation bases to allocate costs. A typical example follows:

EXAMPLE 4-1. COMMON ALLOCATION BASES

Cost Pool	Allocation Base
Employee Fringe Benefits	Direct Labor
Overhead Expenses	Direct Labor and Fringe Benefits
General and Administrative Expenses	Total Cost Input*

^{*} When using the Total Cost Input allocation base, the base includes direct labor, indirect labor, fringe benefits, general overhead, unallowable costs, materials, and costs for subconsultants.

Rate Structures and Cost Allocation Methods. Once an engineering consultant establishes an appropriate base for distributing indirect costs, the base should not be fragmented by removing individual elements. Rate structures and cost allocation methods must be applied consistently to all contracting entities, including State DOTs. As an example, a consultant with a single, company-wide cognizant audited rate should not establish and apply a segment rate for a contracting entity when the costs included in the segment rate also are included in the company-wide rate. Likewise, direct costs must be consistently allocated and applied to all benefited objectives/projects, regardless of specific contract provisions.

EXAMPLE 4-2.

Sample Company maintains CADD usage logs and allocates computer costs directly to projects, but one of Sample's customers does not allow computer costs to be billed as direct charges. Sample must consistently allocate CADD costs directly to the project, even though the costs are not billable to the customer.

Base Period for Allocating Indirect Costs. As provided in FAR 31.203(g)(2), "... the base period for allocating indirect costs shall be the contractor's fiscal year used for financial reporting purposes in accordance with generally accepted accounting principles. The fiscal year will normally be 12 months, but a different period may be appropriate (e.g., when a change in fiscal year occurs due to a business combination or other circumstances)." When a contract is performed over an extended period, as many base periods shall be used as are required to encompass the total period of contract performance. In certain instances, an agreed-upon provisional rate may be established for use over the duration of the contract.