

Understanding Cost Volume Terms

Proposers should follow the instructions in the solicitation and comply with Cost Principles and Procedures at FAR Part 31 (see www.acquisition.gov/far/current/html/FARTOCP31.html#wp253693) and Chapter 3 of the DCAA Publication entitled "Information to Contractors" (see www.dcaa.mil). Below is a brief description of cost volume terms to get you started and examples of how to calculate indirect rates. A sample cost volume using the figures from the indirect rate example is also available on this site.

Direct Cost - Any cost that is associated specifically to the project (i.e. labor, travel, material, etc.) being proposed. A direct cost is an expense (cost) that is incurred to support a specific contract, job, or project. Without that specific contract, the expense would not normally be incurred. These costs are billed directly to the contract and are generally increased by application of a multiplier intended to recover a firm's operating costs (Indirect Costs).

Indirect Cost - All other expenses or costs incurred during the course of doing business, which are not directly related to a project or contract (i.e. office rent, employee benefits, utilities, insurance, furniture and equipment, accounting and legal expenses etc.). These costs may be referred to as Operating Costs, Fringe Benefits Costs, Overhead Costs and/or General and Administrative Costs. A Firm recovers its Indirect Costs under contract by "loading" or "burdening" the Direct Costs with a share of the Indirect Costs. This is normally handled by applying pre-determined multiplier(s) to the Direct Costs, which are created by the firm to recover its Indirect Costs by fair distribution over all projects. An indirect cost shall not be allocated to a contract if other cost incurred for the same purpose in like circumstances have been included as a direct cost of that or any other contract. The intent is to have every contract recover its "share" of the cost to run a business.

EXAMPLE - Direct or Indirect?: Office rent - normally considered an Indirect Cost. An exception might be if the office space was only utilized during contract performance or was a specific requirement of the project.

Direct Labor - All labor hours directly associated with the performance of the project being proposed.

Indirect Labor - Any labor hours not directly related to the project. This would be personnel assigned to tasks not directly related to a specific project or contract.

Direct Materials/Other Direct Costs - Materials and other purchases (including travel) required specifically for performance of a project. These costs can be traced directly to the project.

Indirect Materials/Costs - Materials, purchases, and supplies (including travel) required for the operation of a business. These costs are not directly associated with a specific contract or project.

Cost Pools - A company may choose to apportion its Indirect Cost dollars (or "pool") by the amount utilized to support specific business functions. Splitting up the total Indirect Cost pool may be considered a better way to fairly distribute costs over individual contracts. For instance, it may be determined that X% of all Indirect Costs are related to the administration of the company's business functions. In order to recover the associated dollars, the company may decide that X% for G&A recovery must be applied to all Direct Costs OR only Direct Materials Costs, or etc., on all/some/certain contracts. *[Sorry, there's no simple guidance on how a company might choose to apply its Indirect Costs to its contracts!]* The following outlines some standard cost pools. Not all companies will utilize multiple cost pools:

G&A Cost Pool - A portion of a company's Indirect Costs identified with the administration of the business. This is generally a percentage of all Indirect Cost dollars, but can also be calculated by using specific costs items if deemed appropriate. G&A may also be referred to as Handling.

Overhead Cost Pool - "Overhead" (O/H) can identify ALL Indirect Costs of a company or only a portion of that cost, depending on corporate structure. Some companies have several Overhead pools. This pool may be the balance of all Indirect Cost dollars not identified in other pools.

Fringe/Employee Benefits Cost Pool - A portion of a company's Indirect Costs identified specifically as employee-related costs for Direct Labor staff (indirect labor benefits would be included within the associated indirect pool). This pool generally contains specific cost items in the total Indirect Cost pool, since they are easily identifiable. Items included in the Fringe Pool might be health care insurance, disability insurance, employer FICA, unemployment insurance, retirement funds, etc.

"Other" Cost Pool(s) - The above titles of cost pools are common in the Defense Contracting industry. Since all companies are not alike, a firm should set up its Indirect Rate structure based on their own business type and philosophies. HOWEVER, since many DoD procurements are set around this standard format, it is probably advisable to stick within these titles whenever possible, even if it doesn't exactly fit the pool (what the firm considers to be the appropriate pool title might be identified as a subtitle for internal identification).

Indirect Rate Calculations/Determinations - After individual Indirect Cost Pools are identified, the Indirect Rates can be calculated. The Indirect Rates are the multipliers applied to a Direct Cost to recover Indirect Costs. One way to project or predict Indirect Rates is by working from a Budget for the upcoming year. Another would be to base the rates on prior experience (year-end or quarterly financials).

Examples of how Indirect Rates may be created.

THIS IS ONLY AN EXAMPLE. THIS MAY NOT REFLECT YOUR BUSINESS STRUCTURE. THE DOLLARS AND RATES USED IN THE EXAMPLE ARE RANDOM AND DO NOT REFLECT ANY SORT OF INDUSTRY STANDARD. THIS IS INTENDED FOR GUIDANCE PURPOSES ONLY.

Example 1:

Company A Budget for 2003

Total Direct Cost = \$60K

Direct Labor = \$50K

Direct Materials = \$10K

Total Indirect Cost = \$75K

Fringe Pool = \$25K

Overhead Pool = \$35K

G&A Pool = \$15K

Fringe Rate - Generally calculated by dividing total Fringe Pool by Total Direct Labor. Example:

$\$25K / \$50K = 50\%$ Fringe Rate

Labor Overhead Rate - Generally calculated by taking the total Overhead pool dollars, divided by total Direct Labor dollars (if a Fringe Pool is being used, as in our Sample, then Fringe and Direct Labor might be added together). Example:

$\$35K / (\$50K + \$25K) = 46.7\%$ overhead rate

G&A Rate - *[this example assumes costs within this pool are applicable to all company costs]* Generally calculated by taking total G&A pool dollars, divided by all other costs. Example:

$$\$15K / (\$50K + \$10K + \$25K + \$35K) = 12.5\% \text{ G\&A rate}$$

Using the above Rates, bid Labor might look like this:

$$\$50K \text{ direct labor} * 1.50 \text{ fringe} * 1.467 \text{ O/H} * 1.125 \text{ G\&A} = \$123,778 \text{ (before profit)}$$

And bid ODCs might look like this:

$$\$10K \text{ ODCs} * 1.125 \text{ G\&A} = \$11,250 \text{ (before profit)}$$

Example 2:

Material Overhead Rate - A separate pool may be identified for Material Handling. In that case, X% of the Overhead Pool may be called Material Overhead and applied only to ODCs. If \$5K of the Sample Overhead Pool were moved to Material Overhead pool, then the numbers might work like this:

Company A Budget for 2003

Total Direct Cost = \$60K

Direct Labor = \$50K

Direct Materials = \$10K

Total Indirect Cost = \$75K

Fringe Pool = \$25K

Overhead Pool = \$30K

Material Overhead Pool = \$5K

G&A Pool = \$15K

Fringe: $\$25K / \$50K = 50\%$

Labor Overhead: $\$30K / (\$50K + \$25K) = 40\%$

Material Overhead: $\$5K / \$10K = 50\%$

G&A: $\$15K / (50+10+25+30+5) = 12.5\%$

Using this example, bid Labor might look like this:

$$\$50K \text{ direct labor} * 1.50 \text{ fringe} * 1.40 \text{ O/H} * 1.125 \text{ G\&A} = \$118,125 \text{ (before profit)}$$

And bid ODCs might look like this:

$$\$10K \text{ ODCs} * 1.50 \text{ Material O/H} * 1.125 \text{ G\&A} = \$16,875 \text{ (before profit)}$$

Fee or Profit - Amount applied to all proposed costs (if allowable on all costs) which will (hopefully) be realized as a profit for the firm. For DoD contracts, the profit/fee calculation is usually based on the record of weighted guidelines method focused on four profit factors: performance risk, contract type risk, facilities capital employed, and cost efficiency. See Paragraph E of Part VII of the SBIR Desk Reference at www.acq.osd.mil/osbp/sbir/sb/resources/deskreference/07_nego.shtml for more details.