

## **14 FAH-2 H-350 INDEPENDENT GOVERNMENT COST ESTIMATE**

*(CT:COR-1; 12-20-2005)  
(Office of Origin: A/OPE)*

### **14 FAH-2 H-351 GENERAL**

*(CT:COR-1; 12-20-2005)*

- a. An Independent Government Cost Estimate is the U.S. Government's own estimated cost/price of the proposed acquisition. Its purposes are:
  - (1) To serve as the basis for reserving funds for the contract as part of acquisition planning;
  - (2) To serve as a basis for comparing costs or prices proposed by offerors; and
  - (3) To serve as an objective basis for determining price reasonableness in cases in which one bidder or offeror responds to a solicitation.
- b. The contracting officer's representative (COR), with assistance by the contracting officer, prepares the Independent Government Cost Estimate. The estimate (including work sheets) remains confidential between the COR and the contracting officer. The U.S. Government may not provide this information to contractors.
- c. An Independent Government Cost Estimate is a required element of a proper contract file for supplies or services over the simplified acquisition threshold. For standard materials readily available on the commercial market, catalog or market survey prices may suffice for the estimate. The remaining discussion will consider the estimate when the requirement is for services, or for materials for which catalog or market prices are not available.

### **14 FAH-2 H-352 BASIC COST/PRICE CONSIDERATIONS**

*(CT:COR-1; 12-20-2005)*

- a. The key to a good cost estimate is for the contracting officer's representative (COR) to analyze the requirement from the point of view

of the prospective contractor. From the contractor's perspective, the price of a particular item or service consists of:

- (1) The direct costs incident to its production;
  - (2) A portion of the contractor's indirect or overhead costs (for administrative staff, supervisory staff, rent, heat, lights, and power); and
  - (3) An amount for profit.
- b. In developing the estimate, the COR must estimate the reasonable costs that a contractor may bear in performing the required services or providing the supplies. A cost is considered "reasonable" if it reflects the action that a prudent business person would have taken at the time the cost was incurred.
- c. Direct costs are costs that can be identified with the production of a particular item, process, or service. Typical examples of direct costs include direct labor, equipment, materials, travel, and subcontracts.
- d. Indirect costs (or overhead costs, as they are often referred to) are costs which are not directly identified with a single, final cost objective but identified with two or more final cost objectives. A final cost objective may be a single contract, production item, process, or service. Indirect costs are accumulated in logical groupings according to the areas they benefit. The most commonly identified groupings are labor overhead or fringe benefits, materials overhead, and general and administrative expenses (G&A). Contractors sometimes simplify these by calling the sum of all indirect costs "total overhead" or an "administrative fee." They are usually expressed as a percentage of some base which distributes them equitably among the contractor's projects. The contracting officer is the best source of information regarding this rate. He or she can provide estimates based on historical data from similar contracts.
- e. Profit or fee is an amount that contractors receive for contract performance over and above allowable costs. See 14 FAH-2 H-355.3 for more information on profit.

## **14 FAH-2 H-353 COST MODELS**

*(CT:COR-1; 12-20-2005)*

A cost model is an arithmetic model that, when given labor hours, rates, and other factors, will perform calculations for developing an estimate. It can make elemental cost computations. Exotic cost models may require extensive computer models. Simple cost models are pencil and paper calculations.

## 14 FAH-2 H-354 LUMP-SUM AND DETAILED ESTIMATES

### 14 FAH-2 H-354.1 Lump-Sum Estimates

*(CT:COR-1; 12-20-2005)*

A lump-sum estimate projects the acquisition cost on a "bottom line" basis. This type of estimate may be useful when the ultimate award price can be determined without examining individual cost elements. Two methods of lump-sum estimating are "round table" and "comparison":

- (1) **Round table estimating:** Experts in engineering, manufacturing, contracting, accounting, or related fields develop the estimate based on their technical expertise and knowledge of the market. The degree of accuracy is dependent on the expertise of the participants;
- (2) **Comparison estimating:** A previous acquisition similar to the current requirement is selected. The known costs are adjusted by adding or subtracting elements of material, time, and economic or inflationary changes as necessary. This method is used when relatively few adjustments are needed to develop the estimate. (Whenever a record of prices previously paid for a similar requirement is available, attach a copy of this record to the current estimate.)

### 14 FAH-2 H-354.2 Detailed Estimates

*(CT:COR-1; 12-20-2005)*

- a. Detailed estimates serve as a basis for determining the type of contract, evaluating bids and cost proposals, and conducting negotiations with offerors.
- b. Detailed estimates involve an analysis of the cost elements, i.e., direct labor and materials; applying updated labor rates, overhead amounts or rates (percentages), and material prices; and then adding an amount or percentage for profit.
- c. When the requirement is for services, the detailed estimate should be an assessment of the contractor's price to complete the work assuming reasonable economy and efficiency on the contractor's part. Estimates for services should include an estimate of the direct costs (wages of direct-service providers, equipment, supplies, travel); indirect costs (overhead and general and administrative expenses, such as supervisory and management salaries, office rental, office staff wages, payroll, and

- training, and fringe benefits); and profit.
- d. When the requirement is for supplies or equipment, the estimate should take into consideration the recent price history and current warehouse inventory.
  - e. For manufacturing processes, factors for analysis include costs for direct labor, materials, purchased parts, special tools and dies, material waste and spoilage, and overhead.
  - f. Estimates for labor-hour contracts should identify labor categories and provide ceilings (the maximum number of hours to be worked) for each category.
  - g. For construction contracts, estimate all labor by crew labor hours showing crew composition and applicable contract wage scales, plus fringe benefits. Crew hours should be identified with a specific item of material placed or operation performed. The estimate should be based on the average crew rate hour. If the Bureau of Overseas Buildings Operations (OBO) is involved in the project, then OBO will be the source for the U.S. Government cost estimate.

## **14 FAH-2 H-355 ELEMENTS OF COST**

*(CT:COR-1; 12-20-2005)*

A detailed estimate should contain an estimated amount for each applicable cost element.

### **14 FAH-2 H-355.1 Direct Costs**

#### **14 FAH-2 H-355.1-1 Direct Labor**

*(CT:COR-1; 12-20-2005)*

Identify the tasks and determine the categories of direct labor required for each task, e.g., packer, senior guard, engineer, research assistant, etc. Estimate the total hours for each such labor category by task. Determine the hourly rate for each labor category. (The contracting officer is a good source for this information.) Consider both the actual wages plus all direct fringe benefits (called a "loaded labor rate"). Multiply the number of hours by the rate(s). This will yield the estimated direct labor cost.

## **14 FAH-2 H-355.1-2 Materials**

*(CT:COR-1; 12-20-2005)*

Estimate the type and amount of raw materials, purchased parts, and acquired services that will be required, and the cost of each. To estimate material costs, use conventional product or system units of measure and quantities. Include reasonable material quantities for waste, scrap, or breakage. Take local conditions into consideration. If certain materials are difficult to obtain locally, you may wish to consider making the materials U.S. Government-furnished rather than contractor-furnished. If the U.S. Government chooses to provide vital materials, remember that this decision carries with it a responsibility to make the materials available in a timely manner, or adjust the contract delivery dates accordingly.

## **14 FAH-2 H-355.1-3 Equipment**

*(CT:COR-1; 12-20-2005)*

Identify the cost of equipment needed exclusively for the contract including cost of moving, import duties, set-up, tear down, and amortization. Determine whether equipment is likely to be owned or rented to prevent duplication of costs in overhead or depreciation. Establish whether fuel and operator costs are included in equipment hours or calculated separately.

## **14 FAH-2 H-355.1-4 Subcontracts**

*(CT:COR-1; 12-20-2005)*

If subcontracts are anticipated, identify the tasks to be subcontracted and estimate the cost. Subcontracting is standard procedure in construction contracting worldwide; therefore, construction contracts will generally involve subcontracts.

## **14 FAH-2 H-355.1-5 Travel and Transportation**

*(CT:COR-1; 12-20-2005)*

- a. Estimate travel and per diem costs for off-site travel expressed as the number of round trips per individual. If possible, identify the destination and approximate number of trips.
- b. Ensure that travel and per diem rates will be reimbursed at no more than the rates permitted in U.S. Government regulations, as follows:
  - (1) The Federal Travel Regulations (prescribed by the General Services Administration for travel in the contiguous 48 United States and the District of Columbia);

- (2) The Joint Travel Regulations (prescribed by the Department of Defense for travel in Alaska, Hawaii, the Commonwealth of Puerto Rico, and possessions of the United States); and
- (3) The Standardized Regulations (prescribed by the Department of State for travel in areas not covered by subparagraphs b(1) and b(2) of this section).

## **14 FAH-2 H-355.2 Indirect Costs (Overhead, General and Administrative)**

### **14 FAH-2 H-355.2-1 Overhead Rates**

*(CT:COR-1; 12-20-2005)*

Overhead rates are usually around 100% to 110% of the direct labor rate. (For high technology industries, the rates may be much higher.) General and administrative (G&A) rates, which represent a contractor's costs, such as supervisory quality control, that are difficult to assign to specific contracts, but are necessary for the contractor to remain in business, range generally from 25% to 40% of total costs (direct costs plus overhead). Some contractors have separate overhead and G&A rates; some incorporate all such costs into one overhead rate.

### **14 FAH-2 H-355.2-2 Taxes**

*(CT:COR-1; 12-20-2005)*

Taxes, such as value added tax (VAT), income tax, and foreign sales tax, are also part of indirect costs.

### **14 FAH-2 H-355.2-3 Training**

*(CT:COR-1; 12-20-2005)*

Estimate specialized training costs necessary to accomplish the specific requirement. (General training costs are part of overhead costs.)

## **14 FAH-2 H-355.3 Profit**

*(CT:COR-1; 12-20-2005)*

Profit is generally regarded as remuneration for the risk involved in undertaking the contract tasks. Profit is expressed as a dollar amount which equates to a percentage of the estimated cost. Profits should range from 5% to 15% with 10% to 12% being the average for fixed-price contracts and 5% to 7% being the average for cost-reimbursement contracts.

## **14 FAH-2 H-355.4 Cost Estimate**

*(CT:COR-1; 12-20-2005)*

When this data has been compiled, the detailed cost estimate can be prepared. Set forth in 14 FAH-2 Exhibit H-355.4 are instructions for preparing a cost estimate and a completed sample, which are intended to provide additional guidance regarding the development of a cost estimate; and a worksheet for estimating travel costs.

## **14 FAH-2 H-356 THROUGH H-359 UNASSIGNED**

## **14 FAH-2 EXHIBIT H-355.4A INSTRUCTIONS FOR PREPARING U.S. GOVERNMENT ESTIMATES**

*(CT:COR-1; 12-20-2005)*

### **[ 14 FAH-2 EXHIBIT H-355.4B, 14 FAH-2 EXHIBIT H-355.4C AND 14 FAH-2 EXHIBIT H-355.4D CONTAIN SAMPLE WORKSHEETS ]**

- Line A** List all applicable labor categories, estimated number of hours, and hourly rate. Multiply the number of hours for each category by that category's hourly rate. Add up this amount (hours x rate) for all of the categories to get a total estimated cost for direct labor and enter this number in line A-1 in the right-hand column.
- Line B** Enter an estimated total cost for material and equipment.
- Line C** Enter the sum of lines A-1 and B.
- Line D** Enter the estimated overhead rate (such as 150%); multiply it by the amount in line C, and enter this number in line D in the right-hand column. For example, if line C is \$100,000, and the overhead rate is 150%, then line D should be \$150,000.
- Lines E, F, G** Enter any estimated costs for construction, training, and other direct costs.
- Line H** Enter the sum of lines C through G.
- Line I** Enter the estimated general and administrative (G&A) rate (such as 40%), multiply the rate times the amount in line H, and enter this G&A amount in line I in the right-hand column. For example, if line H is \$250,000, and the G&A rate is 40%, then line I should be \$100,000.
- Line J** Enter the sum of lines H and I.
- Line K** Enter the estimated profit rate, multiply it by line J, and enter the result in line K in the right-hand column. For example, if the profit rate is 10%, then (using the above example), line J should be \$250,000 + \$100,000 = \$350,000, times 10% = \$35,000 in line K.

**Line L** Enter the sum of lines J and K in the right-hand column.  
In this example, the total is \$350,000 + \$35,000 =  
\$385,000.

# 14 FAH-2 EXHIBIT H-355.4B

## SAMPLE INDEPENDENT U.S. GOVERNMENT COST ESTIMATE WORKSHEET FOR SERVICES

*(TL:CORH-2; 11-19-2003)*

Estimate valid to: 00/00/0000 Estimated by: Joe Estimator  
Date: 00/00/0000 Sheet 1 of 1

COST CATEGORIES	HOURS	RATE	TOTAL
<b>(A) Direct Labor</b> (by category)			
Worker Chief	<u>1,000</u> x	<u>\$25.00</u> =	<u>\$25,000</u>
Worker Manager	<u>2,000</u> x	<u>12.50</u> =	<u>\$25,000</u>
Worker A	<u>2,500</u> x	<u>10.00</u> =	<u>\$25,000</u>
Worker B	<u>5,000</u> x	<u>5.00</u> =	<u>\$25,000</u>
<b>(A-1) Total Direct Labor</b>			= <u>\$100,000</u>
<b>(B) Material &amp; Equipment</b>			= <u>0</u>
<b>(C) Total (A-1) + (B)</b>			= <u>\$100,000</u>
<b>(D) Overhead @ <u>150%</u> (Rate (%) x (C) (<u>\$100,000</u>))</b>			= <u>\$150,000</u>
<b>(E) Construction</b>			= <u>0</u>
<b>(F) Training</b>			= <u>0</u>
<b>(G) Other Direct Costs</b>			
Supplies			= <u>0</u>
Equipment Rentals			= <u>0</u>
Travel			= <u>0</u>
Other (Describe)			= <u>0</u>
<b>(H) Direct Costs (no General and Administrative (G&amp;A) Costs) (Add Lines (A-1) through (G))</b>			= <u>\$250,000</u>
<b>(I) General and Administrative Costs (G&amp;A) @ <u>40%</u> (Rate (%) x (H) <u>\$250,000</u>)</b>			= <u>\$100,000</u>
<b>(J) All Costs (Including G&amp;A) (Add lines (H) + (I))</b>			= <u>\$350,000</u>
<b>(K) Profit @ <u>10%</u> (Rate (%) x (J) <u>\$350,000</u>)</b>			= <u>\$35,000</u>
<b>(L) Total Estimated Price (Add lines (J) + (K))</b>			= <u>\$385,000</u>

## 14 FAH-2 EXHIBIT H-355.4C

# SAMPLE INDEPENDENT U.S. GOVERNMENT COST ESTIMATE WORKSHEET FOR MANUFACTURING/CONSTRUCTION

*(CT:COR-1; 12-20-2005)*

Estimate valid to: 00/00/0000		Estimated by: Joe Estimator		Date: 00/00/0000	Sheet 1 of 1
Work Description	Quantity		Material	Labor	Total
	No. Units	Unit Meas.	Per Unit Sub-total	Per Unit Sub-total	
<b>TOTALS</b>					

Transfer Total to Line E on Estimate Worksheet

# 14 FAH-2 EXHIBIT H-355.4D SAMPLE INDEPENDENT U.S. GOVERNMENT COST ESTIMATE WORKSHEET FOR TRAVEL

*(CT:COR-1; 12-20-2005)*

<b>TRAVEL WORKSHEET</b>				<b>RFP NO. _____</b>			<b>PROJECT TITLE</b>		
ROUND TRIP	Number of Trips	Number of Persons	Number of Days	Number of Cars	Airfare x Trips x Persons	Auto Rental @ \$/day x Trips x Days	Communications @ \$/call x Number of Calls	Per Diem @ \$/day x Trips x Persons x Days	Total
<b>SIGNATURE:</b>				<b>DATE:</b>			<b>TOTAL COST:</b>		

Transfer Total to Line G on Estimate Worksheet