# Preparing an SBIR Cost Proposal

## The Basics

It's not uncommon for SBIR proposal writers to feel more comfortable with the technical part of the proposal than with cost estimation. However, the cost proposal or budget is an integral part of the total proposal. First, it is important to understand the terms and process of preparing a cost proposal in order to comply with government requirements. Just as significant, an inadequate budget may hamper a firm's ability to perform the work proposed. Some companies omit indirect costs or fee from a proposal due to a lack of understanding of how these items are calculated. However, rent, utilities, fringe benefits and supplies are real costs and must be covered somehow.

The following is an introduction to the basic elements, definitions and rules related to SBIR cost proposals. Although not comprehensive, the information should be helpful to companies in areas where more clarification may be necessary when preparing the budget section of a proposal.

#### Basic Elements of a Cost Proposal:

Although each agency has specific guidelines and format for cost proposals or budgets, the basic elements are as follows:

#### **Direct Materials:**

Costs which are identified specifically with a particular project or contract are called "direct costs." Thus, direct materials are those goods or services which are purchased for and used directly on a specific project. Subcontract costs may be included in this section.

#### Direct Labor:

This is the most important element and frequently the largest dollar amount in a Phase I proposal. Careful estimates must be made of the number of hours the principal investigator, key personnel and other employees will work on the contract or grant if awarded. These hours are multiplied by the relevant hourly rate and the results are totaled.

## **Overhead Rate:**

The overhead rate is the means by which overhead costs are spread among all projects. It is a percentage which is typically calculated by dividing the total of overhead costs (the "pool") by the dollar amount of direct labor (the "base"). Note that the pool and base are period expenses, which means they are calculated for a period of time (usually a year) and not for a specific project. Thus, the base consists of all direct labor expected to be used on all projects during the year.

#### Indirect Costs:

Any costs which are not identifiable with a specific project are called "indirect." Examples are rent, utilities, office supplies, salaries/wages of personnel not working on direct activities, fringe benefits. Some expenses such as tools and travel may be direct or indirect depending on the purpose. In larger companies, indirect costs are broken down between overhead and G&A (general and administrative) costs. In smaller companies, all indirect costs are added together to form the overhead pool.

## Other Direct Costs:

All direct costs not included in direct materials or direct labor are included in this category. Direct travel, consultants and special equipment or testing are typically classified as other direct costs.

General and Administrative Rate:

The G&A rate, as it is commonly known, is the means by which general management and administrative costs are spread among the projects. For companies with less than about 50 employees, it is usually not necessary to calculate a G&A rate. One indirect rate (the overhead rate) is sufficient. The G&A rate is calculated by dividing the total amount of G&A expenses (including management/planning labor costs, accounting and legal expenses and marketing expenses) by the sum of direct labor costs and overhead costs.

Profit or Fee:

A fee or profit, usually calculated as a percentage of total costs, is available to small businesses under the SBIR program. The general requirement is the fee must be reasonable, although some agencies give more specific guidance. For example, the amount of fee approved for awards under the current Public Health Service omnibus solicitation may not exceed 7% of total costs. For all agencies, the sum of the proposed fee plus costs may not exceed the maximum award amount specified in the solicitation.

# General Rules and Guidelines

# Allowable and Unallowable Costs:

In general, costs are allowed if they are reasonable, can be allocated to one or more projects or contracts (either directly or indirectly) and if they are not classified as unallowable in the Federal Acquisition Regulations (FARs). If costs do not meet these criteria, they cannot be included in cost proposals (either as direct costs or in the calculation of indirect rates) and they will not be paid by the government. Some of the most common types of unallowable costs are: interest and other financial costs bad debts most contributions/donations certain entertainment costs fines and penalties organizational expenses unreasonable compensation federal income taxes sales promotion trade shows, conventions most advertising lobbying costs certain legal costs cost of prosecuting a patent (unless required by contract and government will retain patent).

## Travel:

The general rule for travel is that allowable costs are limited to the amounts set by the government for travel by government employees. Travel costs for lodging, meals and incidentals may generally not exceed the per diem rates published by the government in the Federal Acquisition Regulations. The per diem rates are set by locality, so it is necessary to consult these rates when preparing a cost proposal which includes travel. Actual costs which exceed these limits may be allowed on a case by case basis with sufficient written justification.

## Developing an Adequate Accounting System:

From the government's point of view, the main criterion for "adequacy" is: can the business properly segregate and accumulate costs? In other words, does the firm's accounting system distinguish between direct and indirect costs and between allowable and unallowable costs, and is there a system for tracking and accumulating costs by contract (or grant)? The minimum components are a chart of accounts, a timecard system with specific codes for projects and indirect labor, a chart of accounts and the appropriate journals and project cost summaries. A well-constructed, detailed annual budget is an excellent starting point.

# Types of Contracts

Some agencies, such as the Public Health Service of HHS and the National Science Foundation, make awards in the form of grants. The Department of Defense and other agencies award contracts. There are two main forms of contracts used in the SBIR Program: Firm Fixed Price (FFP) and Cost Plus Fixed Fee (CPFF). The great majority of Phase I contracts are FFP; Phase II contracts are either FFP or cost-reimbursement contracts such as CPFF.

The main characteristics of a Firm Fixed Price contract are: The Government and contractor agree to a fixed price which cannot be adjusted due to cost experience. The contractor bears all the cost risk. The contractor is required to deliver the end product(s described in the contract (called the "deliverables"), even if it costs more than the amount of the contract to do so. Therefore, the deliverables must be specified carefully. There is usually more oversight by audit agencies (such as the Defense Contract Audit Agency or DCAA) prior to award with FFP contracts.

Contract financing is generally obtained by submitting Progress Payment requests. FFP contracts are relatively simple to administer.

The main characteristics of a Cost Plus Fixed Fee contract are:

The Government reimburses the contractor for allowable incurred costs plus a fee. Thus, the Government bears the cost risk.

The contractor is required to make satisfactory progress and usually must deliver the end product described in the contract to earn the fee. Legally, the contractor can "put his pencil down" when all costs agreed to in the contract have been incurred and reimbursed. Although a pre-award survey may be performed, there is generally more oversight at the end of a CPFF contract. An "incurred cost" audit is required before the remaining costs and fee are paid. The contractor is paid when an approved invoice (Public Voucher) is submitted.

CPFF contracts are more complex to administer and require compliance with more cost regulations.