

2. Sponsored Programs Basics

Introduction

The federal government issues awards using the following instruments:

Assistance

- Grants
- Cooperative Agreements

Procurement

- Contracts

Other Transaction Agreements

- Awards not subject to any of the standard federal requirements

For more detail on each of these types of awards, see Chapter 1, Types of Sponsored Agreements. The vast majority of awards to MIT are classified as assistance, although the greater dollar value resides in contracts received by MIT (including Lincoln Laboratory).

The Institute uses the following federal requirements in establishing its Institute procedures for administering all awards for research and other sponsored agreements:

- **OMB Circular A-21:** Cost Principles for Educational Institutions
- **OMB Circular A-110:** Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations
- **OMB Circular A-133:** Audits of Institutions of Higher Education and Other Non-Profit Institutions
- **FAR:** Federal Acquisition Regulations: Contracting Requirements

The provisions of the OMB Circulars and the FAR are applicable to all agencies that award federal dollars. MIT has translated these principles into its Institute policies.

What is OMB Circular A-21?

The Office of Management and Budget (OMB) is one of the agencies of the Executive Branch of the U.S. Government. OMB's predominant mission is to assist the President in overseeing the preparation of the federal budget and to supervise its administration in Executive Branch agencies. OMB evaluates the effectiveness of agency programs, policies, and procedures; assesses competing funding demands among agencies; and sets funding priorities.

Working cooperatively with federal agencies and non-federal parties, OMB establishes government-wide grants management policies and guidelines through circulars and common rules. These policies are adopted by each grant making agency and inserted into their regulations.

One of the OMB Circulars, designated as OMB Circular A-21, is titled *Principles for Determining Costs Applicable to Grants, Contracts, and Other Agreements with Educational Institutions*. The cost principles in Circular A-21 provide the general accounting "rules" for colleges and universities. These principles define those costs that are allowable and allocable to the federal government.

MIT receives funding from over 250 different sponsors, including federal agencies, foundations, not-for-profit institutions and for-profit companies. Each of these has the right to establish its own terms and conditions for its awards. In addition, each individual award may include specific terms applicable to that award.

The terms of an individual award take precedence over the general provisions of Circular A-21. For example, although travel is identified as an allowable cost in Circular A-21, a particular award may designate travel, or more likely, foreign travel, as unallowable. In that case, MIT may not charge those travel expenses to that project. A sponsor may also permit business class travel as appropriate for its award even though A-21 specifies that only coach class travel is normally allowable. Similar types of provisions may pertain to the acquisition of permanent equipment.

Some awards contain provisions for "pre-approvals" of specified expenses, particularly on contracts. Where required by the terms of the award, MIT **must** get the writ-

ten approval of the sponsor's OSP Representative before charging those expenses.

 **Key References** - See website links in Appendix and on the OSP home page

- ▶ List of OMB Circulars
- ▶ Federal Acquisition Regulations
- ▶ Basics of Post-Award Sponsored Program Administration

Cost Principles

Four Cost Principles: Allowable, Allocable, Reasonable, Consistent

1. A cost is **allowable** when:

- It serves an Institute business purpose, including instruction, research, and public service.
- It is permissible according to MIT policy and federal regulations (regardless of whether or not it is a sponsored project).
- It is permissible (for a sponsored project) according to the terms and conditions of the Sponsored Agreement.
- Rules for allowability are covered in OMB Circular A-21 and illustrated by CAO documents referenced in “Key References” found at the end of this section.

2. A cost is **allocable**:

- For a sponsored project the cost must provide “benefit” to the project.
- For a gift, it must correspond to the intent of the donor.

3. A cost is **reasonable** if a prudent person would purchase the item at that price. Determine whether a cost is reasonable by considering whether:

- The cost is necessary for the performance of the activity.
- Incurrence of the cost is consistent with established Institute policies and practices.

4. A cost is **consistent** when like expenses are treated in the same manner in like circumstances. For the sponsored projects, consistency means that sponsors pay for costs either as a direct charge or as an F&A cost, not both directly and indirectly. The Institute establishes policies that, if followed, ensure consistency.

What costs are specifically unallowable?

For costs reimbursed by the Federal government and other sponsors, costs are specifically unallowable under two general conditions:

- 1) They are for an unallowable ACTIVITY (a function that is prohibited for reimbursement by Federal regulations and typically recorded in a separate cost object or identified by the department), or
- 2) They are for an unallowable TRANSACTION (something you buy, a line item general ledger code that is recorded in a cost object that is otherwise allowable).

Unallowable Activities Include:

- Alumni Activities
- Organized fund raising
- Lobbying
- Commencement and Convocation
- General public relations and alumni activities
- Student activities, e.g., intramural activities, student clubs.
- Managing investments solely to enhance income
- Prosecuting claims against the federal government
- Defending or prosecuting certain criminal, civil, or administrative proceedings
- Housing and personal living expenses of Institute officers
- Selling or marketing of goods and services (does not include selling goods or services internal to the Institute by its service centers)

All expenses in support of these activities are unallowable for Federal reimbursement. Unallowable activities are generally recorded in separate cost objects specifically designated for these purposes. The federal government will not reimburse the Institute for these costs. However, these activities may be entirely appropriate and permis-

sible Institute activities. In fact, many are necessary to the Institute's survival.

Unallowable Transactions

In addition to the unallowable activities described above, certain costs are always unallowable, regardless of the activity they support. These "expressly unallowable" costs are listed in OMB Circular A-21. These costs are identified as unallowable by general ledger expense codes designed to segregate these costs from allowable costs. Expenses which are unallowable for federal reimbursement include the following:

- Advertising (only certain types are allowable)
- Alcoholic beverages
- Entertainment
- Fundraising or lobbying costs
- Fines and penalties
- Memorabilia or promotional materials
- Relocation costs if employee resigns within 12 months
- Certain recruitment costs, e.g., color advertising
- Certain travel costs, e.g., first-class travel
- Cash donations to other parties, such as donations to other universities
- Interest payments, except certain interest specifically coded as paid to outside parties and authorized by the Office of Finance
- Membership in civic, community or social organizations, or dining or country clubs (seldom reimbursable by MIT)
- Goods or services for the personal use of employees, including automobiles
- Insurance against defects in MIT's materials or workmanship

NOTE: Costs which are unallowable for federal reimbursement purposes may be allowable as a direct cost on a non-federal project with the explicit written approval of the sponsor.

Specific general ledger codes that are used to identify unallowable costs are as follows:

- 420080 Travel—Unallowable Cost

- 420166 Entertainment
- 420254 Non-Reimbursable Expense
- 420302 Promotion and Memorabilia
- 420304 Public Relations
- 420306 Publicity
- 420318 Recreation and Related Expenses
- 421205 Alcoholic Beverages
- 421584 Membership & Dues, Social
- 421000 Meetings - Food and Beverages

It is crucial to code and categorize expenses correctly to comply with MIT's obligation to the federal government for both direct and F&A (indirect) cost recovery. The Institute's ability to obtain federal grants and contracts is dependent upon its performance in meeting federal requirements.

The distinction between allowable and unallowable costs must be understood whenever Institute expenses are recorded. The integrity of the Institute's financial systems depends on the knowledge and skill of each of the individuals who process the thousands of daily financial transactions.

A particular concern at MIT is the classification of travel and meeting expenses. MIT's policy and procedures for charging such expenses appears on the OSP website and is entitled "Classification of Unallowables vs. Allowable Costs" (see Appendix for link).

In many cases the issue of determining whether a particular cost is allowable or unallowable is a complex matter. When in doubt, consult with your local fiscal officer or an OSP representative.

Terms and Conditions of a Sponsored Project

Unallowable costs may also be identified in the specific terms and conditions of a sponsored project. These can be more specific than those outlined in OMB Circular A-21.

For example, if a sponsor specifies that international travel costs cannot be charged to a particular project, then those costs may NOT be charged to that project, even though MIT and federal regulation may allow them.

Example A

Costs unallowable for reimbursement by MIT and the federal government

A Senior Research Associate purchases a leather brief case and would like to use Institute funds to pay for the item. The briefcase costs \$400.

Explanation: The cost is not reasonable. It is not necessary for the performance of the person’s job and is not permitted by Institute policy because it is a personal item. It must be paid for by the individual.

Example B

Costs unallowable for reimbursement from the federal government but allowable for reimbursement by MIT

An important faculty member is retiring from MIT after 35 years of service to the Institute. A party is given in his honor.

Explanation: Although this is something the federal government should not pay for as a direct or F&A (indirect) cost, it may be an appropriate institutional expense. The expenditure must be classified in a general ledger account

type designated unallowable for reimbursement by the federal government.

Example C

Costs unallowable for reimbursement by the sponsor but allowable for reimbursement by MIT

Your grant explicitly states NO TRAVEL OUTSIDE OF MASSACHUSETTS. You would like to travel outside the state to present a paper about your research.

Explanation: The expense is **unallowable** as a direct charge to the sponsor per the award terms and conditions. If you do travel for this purpose, the expense must be charged to a source where the travel is Allowable, Allocable, and Reasonable.



Key References - See website links in Appendix and on the OSP home page

- ▶ Unallowables and Screening Process for Unallowables
- ▶ Meeting Expenses
- ▶ Post-award Basics

Figure 2.1: Unallowable Costs Can Be

<p>- Unallowable by MIT [see Example A]</p>	<p>- Allowable by MIT - Unallowable for reimbursement by the Federal Government [see Example B]</p>	<p>-Allowable by MIT -Unallowable by Sponsor [see Example C]</p>
<p>Institute expenses that are</p> <ul style="list-style-type: none"> ■ NOT reasonable ■ NOT necessary ■ NOT allocable ■ NOT permitted by Institute policy 	<p>Institute policy Institute expenses that are</p> <ul style="list-style-type: none"> ■ reasonable ■ necessary ■ allocable ■ permitted by Institute policy <p>but are unallowable for federal reimbursement</p>	<p>Expenses that do not conform to the sponsor’s terms and conditions and OMB Circular A-21 (if applicable), or are</p> <ul style="list-style-type: none"> ■ NOT reasonable ■ NOT necessary ■ NOT allocable
<p>These expenses will not be paid for by MIT.</p> <p>If incurred, they must be paid for by the individual.</p>	<p>These expenses</p> <ul style="list-style-type: none"> ■ can be paid for by MIT ■ must be coded as unallowable 	<p>These expenses will not be paid for by the sponsor.</p> <p>MIT may pay for the expenses; code as appropriate.</p>

- ▶ OMB Circular A-21
- ▶ Classification of Unallowable vs. Allowable Costs and Related Issues of Travel and Meeting Expenses

Cost Accounting Standards

In addition, MIT is required to describe to its federal auditors practices that the Institute employs in seeking reimbursement of costs associated with its sponsored projects to comply with Federal Cost Accounting Standards (CAS) included in OMB A-21. The four standards required of institutions of higher education are the following:

- **Consistency in estimating, accumulating and reporting costs**

- The purpose of this standard is to ensure that each educational institution’s practices used in estimating costs for a proposal are consistent with cost accounting practices used by the educational institution in accumulating and reporting costs.

- **Consistency in allocating costs incurred for the same purpose**

- The purpose of this standard is to require that each type of cost is allocated only once and on only one basis to any sponsored agreement or other cost objective. The objective of this standard is to insure that costs which are charged to sponsored agreements are either a direct cost or indirect cost.

- **Accounting for unallowable costs**

- The purpose of this standard is to facilitate the negotiation, audit, administration and settlement of sponsored agreements by establishing guidelines covering...the identification of costs specifically described as unallowable...to ensure that unallowable costs are not charged to sponsors.

- **Accounting period**

- The purpose of this standard is to provide criteria for the selection of the time periods to be used as cost accounting periods for sponsored agreement cost estimating, accumulating, and reporting.

Project Workflow

A sponsored project is composed of a number of individual activities or steps:

- Identifying the opportunity
- Preparing the proposal
- Reviewing and submitting the proposal
- Negotiating the award
- Establishing the cost object in the Institute’s accounting system
- Expending funds to carry out the activities for which the award was made
- Reporting and close-out
- Audit


Each of these activities is discussed in detail, but the basic workflow is presented here:

- Identifying the opportunity

Generally a PI is aware of funding sources for his/her research but needs access to the appropriate application forms. In some cases, a research opportunity for a contract appears on the website “Federal Business Opportunities” (see Appendix for link), formerly known as the Commerce Business Daily. In all cases, an agency is required to post its Notice of Research Opportunity in some format, generally as a web announcement. MIT maintains a subscription to “**ResearchResearch**,” (see Appendix for link) through which most federal and non-federal research opportunities can be accessed. At this site, individuals may register their fields of interest and receive daily tailored email messages of opportunities.

In addition, the federal government has developed a link to federal funding sources (see Appendix for link to Federal Funding Sources). Over time, all agencies will use this grants.gov portal to post federal research opportunities.

Individuals may also search for funding opportunities by clicking on the particular sponsor’s web site and searching within that agency.

 **Key References** - See website links in Appendix and on the OSP home page

- ▶ Federal Business Opportunities
- ▶ Federal Funding Sources
- ▶ ResearchResearch
- ▶ Basics of Proposal Preparation
- ▶ Government Printing Office Access (GPO Access)
- ▶ Preparing the Proposal (Application)

What is a Proposal?

A proposal is a detailed request for funding prepared in accordance with the sponsor's instruction. A proposal must comply with Institute policies, as well as sponsor policies. It becomes an official offer and a record of what was promised by MIT to a sponsor. The Principal Investigator is responsible for preparing the proposal but normally does so in conjunction with an administrative or fiscal officer.

A proposal must contain, as a minimum, three components:

1. The OSP Summary Form. This form is for MIT use only and includes the following:

- Key information about the project, including the budget,
- Sponsor deadline,
- Confirmation that the proposal has been reviewed and approved in accordance with appropriate procedures,
- Certifications by the principal- and co-investigators.

2. Statement of Work

The Statement of Work is the “what” and “why” of the project. Why should the work be done? It also contains the “how,” “where,” “when” and “who” of the project. What is the plan of action? How will the work be done? Where will the work be done? Who will do the work?

3. Budget

The budget is the financial expression of the project and must include the following:

- Estimated costs for the entire project period broken into “Direct” and “F&A” costs.

- Justification for all costs, and especially administrative charges, when applicable.
- Separate budgets for all collaborating institutions or entities (“Subawardees”).

Often the budget is the most confusing portion of the proposal to prepare. The budget should include all direct costs and F&A costs required to carry out the activity. Normally, budget categories include the following:

- Personnel costs
 - Faculty
 - Other research professionals
 - Graduate student research assistants
- Employee Benefits and vacation accrual costs
- Equipment
- Materials and Services
- Travel
- Meeting Expense
- Subawards
- Consultants
- Allocation Costs (where rates have been approved)
- F&A Costs

The budget must also differentiate those direct costs that are subject to F&A costs and those that are not. Since F&A costs are applied on a modified total direct cost (MTDC) base, the non-F&A bearing costs in the budget must be identified so that project F&A can be calculated. Non-F&A “modifiers” include tuition, capital expenditures, equipment, and sub-award expenditures in excess of \$25,000.

Note that MIT does not waive or reduce the F&A costs of any sponsored research project, although DLCs may choose to use their unrestricted funds for the difference between the federally negotiated rate and the rate allowed by the sponsor.

The difference between the current negotiated F&A rate that MIT charges to a research project, and the rate that the project's sponsor is willing to pay, is referred to as underrecovery. For example, if MIT's F&A rate is 65%, and a sponsor agrees to pay only 50%, there is a 15% under-

recovery of full F&A. (See also the Underrecovery page on the Controller's Sponsored Projects Accounting website.)

■ **Reviewing and submitting the proposal**

Proposals, although prepared in the academic units, are submitted by the Institute and not by individual PIs. The OSP Summary Form is used to identify key elements of the proposal and to secure DLC and, as appropriate, school approvals before the proposal is routed to OSP.

PIs and departments should allow adequate time for proposal review. Note that OSP requests five business days in order to provide a full and comprehensive proposal review, and academic units may add review time to that. In addition, in the review process special approvals and requirements may be necessary. For example, training in the use of humans as subjects for NIH proposals, and financial conflict of interest disclosures for NIH and NSF proposals.

A key element in proposal submission is whether or not the sponsor requires a paper or electronic proposal. It is becoming far more common for institutions to submit electronic proposals, and sufficient time to prepare a proposal according to individual agency electronic guidelines is critical. Proposers should advise their OSP administrator when electronic submission is required.

■ **Negotiating the Award**

Awards are negotiated by OSP on behalf of MIT. PIs and DLC personnel are not authorized to negotiate on behalf of the Institute or to sign sponsored agreements.

In negotiating awards, OSP ensures that the terms and conditions are appropriate for the Institute and do not compromise the fundamental policies of the Institute. In certain circumstances, the Institute may not be able to negotiate acceptable terms and the award is refused.

■ **Establishing the cost object in the Institute's accounting system (SAP)**

Accounting services are provided via the Controller's Office using MIT's enterprise accounting system, SAP. Sponsored project awards are entered into SAP by OSP, normally within one working day of the receipt of an award or the negotiation of acceptable terms and conditions. Award information is fed from COEUS to SAP on a daily basis.

■ **Expending funds to carry out the activities for which the award was made.**

The principal investigator (PI) is responsible for the appropriate expenditure of funds, even when (s)he delegates that responsibility to others. At MIT, a primary responsibility of an administrator is helping the PI determine which costs are allowable, reasonable, and in accordance with the project budget, and which are not. It is important to recognize that the final responsibility, however, lies with the PI.

■ **Reporting and close-out**

COEUS includes information about project reporting and close-out requirements. Responsibilities for submitting documents to meet award terms and conditions are split at MIT, although ultimately the PI has the respon-

Figure 2.2: Formal Submission Schedule

Type of Report	Submitted By	Typical Submission Dates During Award Period			Final Reports
		Grant	Coop. Agree.	Contract	
Technical (Progress)	PI	Annually	Quarterly	Monthly	Within 90 days
Fiscal (Financial)	CAO or DLC	Quarterly	Quarterly	Monthly	Within 90 days
Property (Equipment)	Property Office (CAO)	Annually	Quarterly	Quarterly	Within 90 days
Intellectual Property (Invention)	OSP, based on information provided by the PI	Annually	Annually	Annually	Within 90 days

sibility for timely submission. Depending upon the type of award (grant, cooperative agreement, contract, other transactions), reports are due on a recurring basis during the life of the award (normally within 90 days of the final expiration date for all final documents). This information will be indicated in COEUS. There are generally four types of reports, and the responsibility for preparing those reports, along with the formal submission schedule at the Institute is described in Figure 2.2.

Life Cycle of a Project

At MIT, the principal investigator (PI) has overall responsibility for the technical and fiscal management of a sponsored project. This includes the management of the project within funding limitations, and assurance that the sponsor will be notified when significant conditions related to the project status change.

This section addresses specific responsibilities involving the financial management of sponsored projects. Again, while responsibility for the day-to-day management of project finances may be delegated to administrative or other staff, accountability for compliance with MIT policy and sponsor requirements ultimately rests with the PI.

The life cycle of a project is depicted in Figure 2.3.

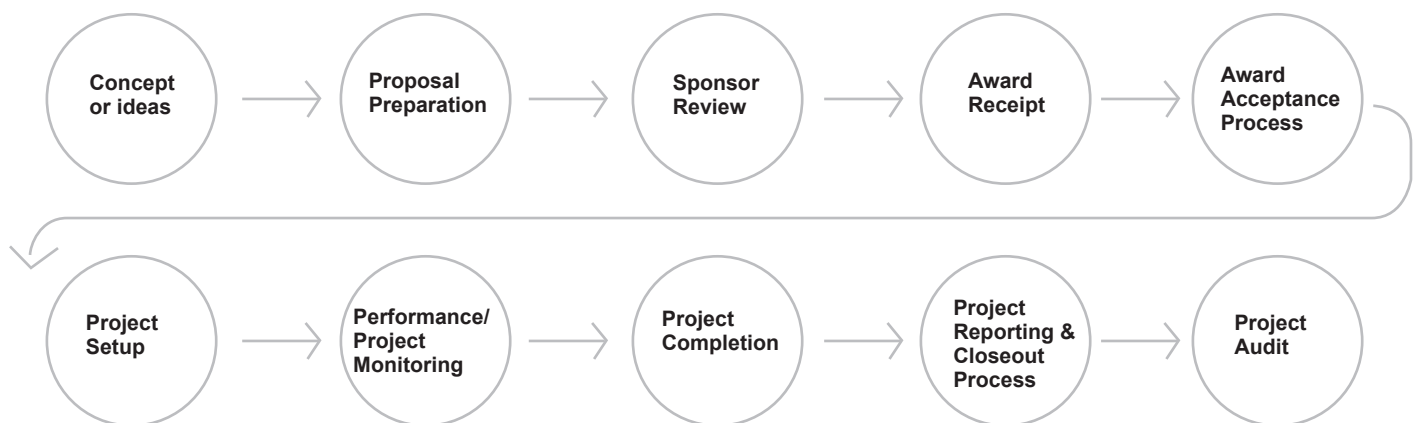
Preparation and Submission of the Proposal

The PI carries primary responsibility for the preparation of a proposal to an outside sponsor. At MIT, generally the technical proposal is prepared by the PI, often with the help of other research personnel in the PI's laboratory. In large DLCs, the budget and administrative details of the proposal are generally handled by the Administrative Officer/Fiscal Officer or other support personnel. In all cases, however, the PI—who certifies to the accuracy of the proposal—is the formally responsible party.

The Q&A that comprises the Basics of Proposal Preparation and Review (see online resource noted in Appendix) is MIT's primer on preparation and submission of the proposal. Attention is drawn specifically to the following sections:

- What are the common components of a proposal?
- What certifications from MIT are required on proposals?
- What issues should be considered when preparing the proposal budget?
- Should cost sharing be included in the proposal?
- What is the MIT internal routing and review process?
- What MIT forms are used in the routing and review process?
- What special reviews may be necessary?
- Does the sponsor require electronic proposal submission?

Figure 2.3: Life Cycle of a Project



- What are MIT's procedures for review and resubmission of proposals?



Key References - See website links in Appendix and on the OSP home page

- ▶ OSP Summary Form
- ▶ OMB Circular A-21
- ▶ Basics of Proposal Preparation and Review
- ▶ Employee Benefit Rates
- ▶ Policy on Faculty Effort Reporting
- ▶ Underrecovery/Sponsored Projects Accounting

Proposal Budgeting

In proposing budgets for sponsored projects, the PI assures MIT and the potential sponsor that project finances are represented as accurately as possible. In addition, specific requirements, including cost principles as defined by the federal government in the Office of Management Budget (OMB) Circular A-21, must be adhered to at the proposal stage, as well as when funds are expended. It is important that actual project expenditures are consistent with the budget approved by the sponsor.

A. Allowability

Proposals should not include expenses which the federal government (in OMB Circular A-21 or other regulations), or the sponsor has identified as unallowable. Similarly, expenses which are normally to be considered as F&A (indirect) expenses, e.g., administrative and clerical salaries, may not be proposed and budgeted as direct expenses, unless they meet the criteria identified in Exhibit C to OMB Circular A-21, and written justification is included in the research proposal.

B. Commitment of Effort

Proposals should accurately represent the amount of time that key personnel are committing to the project. In preparing proposals, PIs must be careful not to over-commit themselves or others. Commitment of effort must take into account the time required for teaching and service.

Federal regulations require a commitment of some effort on the part of the principal investigator during each project year. This effort may be expended during the academic year or summer and may be charged to the project or paid by the Institute and treated as cost sharing.

This requirement does *NOT* extend to

- equipment grants
- dissertation support
- limited-purpose awards characterized as Other Sponsored Activities, including, for example, travel grants, conference support, etc.

MIT discourages faculty from identifying effort to a project during the academic year if no salary is to be charged. In some cases, the sponsor may require a specific commitment of effort even though salary is not requested by the PI. Otherwise, a general statement that the PI will support the project during the academic year, but makes no explicit commitment of effort, should be included in the proposal, for example, "MIT fully supports the academic year salaries of Professors, Associate Professors, and Assistant Professors, but makes no specific commitment of time or salary to this particular research project." (See MIT Policy on Cost Sharing.)

C. Cost Sharing

Proposed budgets should delineate the complete committed cost of the project, identifying the amount requested from the sponsor, and other costs that MIT explicitly commits to pay. A commitment to use MIT resources to pay any portion of project costs that would otherwise be borne by the sponsor must be identified and tracked as cost sharing. At the time such awards are finalized, PIs must assure that adequate funds are identified and separately budgeted to pay for the cost sharing of expenses. Voluntary effort above and beyond what was committed does not have to be treated as cost sharing and tracked in MIT's accounting system. This effort is considered to be "voluntary uncommitted cost sharing" and is outside any effort that needs to be documented in the Institute's accounting system. (See OMB Cost Sharing Guidance Document dated January 6, 2001.)

D. Estimating Methods

When estimating project costs, methods must be consistent with MIT accounting practices and must allow expenditures to be accumulated and reported consistent with the estimate.

E. Budget Justifications

MIT is obligated to treat types of expenses consistently as either direct or F&A (indirect) costs. If a proposed budget includes the direct expenditure of project funds for costs that would normally be charged indirectly, e.g., clerical and administrative expenses, general-purpose equipment, or operations and maintenance, then those items must be supported in the proposal by an explicit written budget justification. In addition, when administrative and clerical costs are being proposed to a federal sponsor as a direct cost, the proposal must include an explanation of the activities and a justification which is consistent with the OMB A-21 description of "Major Project." (See Exhibit C to OMB Circular A-21.)

Budget Preparation

The largest category of expense on any sponsored program budget is normally personnel expense. Care should be taken in budgeting personnel to use current salaries as a starting point, with increases of normal increments for additional years of proposed effort. This is also the expense area most closely reviewed by sponsors and auditors. Special attention should be paid to the following:

- Faculty effort, when requested, should be separated into academic year and summer effort. Note that when academic year effort is shown and not charged to the sponsor, this creates a cost-sharing obligation on the part of the Investigator and the Institute's department (See the MIT Policy on Faculty Effort Reporting and the MIT Cost Sharing policies for further information). MIT discourages faculty from making an explicit commitment of Academic year effort to a project unless it is required by the sponsor. This will avoid a commitment that must be treated as Cost Sharing.
- Employee Benefit and Vacation Accrual Costs. The OSP provides a table on Employee Benefit and Vacation Accrual rates on the OSP website for current and proposed rates which are the rates to use in any proposal (see link for Facilities & Administrative

Rates: Indirect Costs, in the Appendix). Particular attention should be paid to the method for including vacation time expenses in proposal budgets. (See link for Research Proposal Budgets and Vacation Time Expense in the Appendix). The basic policy is that for research staff, vacations are paid from the vacation accrual pool and not directly paid from the research award. Therefore, when budgeting research staff on a percentage of effort basis, the total projected salary should be reduced by the projected vacation time salary included in the total before applying the proposed percentage of effort. When budgeting for that same individual in terms of person months, only the person months to be spent at work should be committed in the proposal budget. The salary of 11 months plus one month of vacation will represent a total of 12 months.

Example Equation:

(Annual Salary-vacation) % effort to project=Total
(48K-4K) (.25) = 11K Total (reference table below)

% of Effort	Person Months
Projected 12 month salary: \$48K	# months = 12
Salary for 1 month vacation: \$4K	# months vacation = 1
Base 12 month salary requested: \$44K	Total person months budget = 11

Budgeted 25% effort of 12
month effort: \$11K

■ Subawards

Subaward is the term used when MIT issues an award to another institution to help carry out the technical and scientific aspects of a project awarded to the Institute. Subawards are calculated with only the first \$25K of the subaward (agreement) subject to the assessment of MIT F&A costs. The proposed subawardee, however, includes its total costs (Direct Costs + F&A) in its submission to MIT for inclusion in the MIT proposal. (See link for Subawards in the Appendix). It is important to recognize that the subawardee must submit a full proposal to MIT,

including the signature of the subawardee's authorized institutional official.

■ Allocation Costs

The lab/center allocation account process is unique to MIT and allocation rates are approved annually by DCAA/ONR (MIT's cognizant federal auditors and Administrative Contracting office). In this system, certain laboratories and centers at MIT have federally approved allocation rates which are included in every proposal and which cover the central costs of administering the laboratory or center's sponsored activities. Proposals submitted through allocation units typically have separate rates for salary and for materials and supplies (M&S). Allocated units must include these allocation rates (which are exempt from the application of F&A) in all proposals.

■ Direct Costs

Direct costs are expenses that can be identified specifically with a particular sponsored project or other direct cost objectives, such as Instruction, and can be directly assigned to such activities easily with a high degree of accuracy.

Example: cost of materials required for the performance of a project

■ F&A Costs

F&A costs are those that are incurred for common or joint objectives and therefore cannot be identified readily with a particular sponsored project. F&A costs are sometimes called indirect (IDC) or overhead costs. F&A costs are recovered from sponsors as a rate applied to grants and contracts.

Current and proposed future rates for F&A are available on the OSP website (see link for Facilities & Administrative Rates: Indirect Costs, in the Appendix). Costs which are similar in purpose and circumstance as the costs included in the F&A rate should not be budgeted as direct costs. You should contact the Office of Cost Analysis or your OSP Representative for more information.

Example: costs of buildings or utilities



Key References - See website links in Appendix and on the OSP home page

- ▶ Facilities & Administrative Rates (Indirect Costs)
- ▶ Research Proposal Budgets and Vacation Time Expense

- ▶ Subawards

Management of Project Expenditures

A. Authorization of Direct Charges

To authorize the expenditure of funds to be charged directly to sponsored projects, the originating department must assure that:

- The estimated charge is reasonable and necessary for the performance of the project.
- The expenditure is allowable by the sponsor, OMB Circular A-21 and MIT policy.
- The expenditure is allocable to the project, i.e., provides benefit to the project, and is incurred within the period of performance.
- The funds are available within the authorized award amount and funding limitations.
- The justification for the expenditure is documented, including the relationship of the expenditure to the project.
- The method for distribution of costs is appropriate and documented.
- The charge is coded with the correct General Ledger code and charged to the correct award.
- The charge has been processed through the appropriate Institute offices, where applicable.

B. Review of Project Expenditures

Monthly SAP Summary Statements are the official record of project expenses and the basis for cost reimbursements from the sponsor to MIT.

SAP Summary Statements for sponsored projects (including cost sharing cost objects) must be reviewed each month by a knowledgeable individual - i.e., the principal investigator or designee - so that adjustments can be made in a timely manner, and that rates of expenditures can be monitored to assure availability of funds. (See the Guidelines for Financial Review and Control issued by the Controller's Office.)

Any questionable charges must be brought promptly to the PI's attention, and if needed, corrected by an appropriate transfer. Transfers should be initiated as

soon as possible after a need has been identified. Whenever expenses are moved to or between sponsored WBS elements, the PI must assure that the project which ultimately pays the expense is the project which benefited from that expense, and that there is adequate documentation to support the appropriateness of the transaction. These transfers must be in a timely way in accordance to policy. See section on cost transfers.

C. Substantiation and Verification of Project Expenditure

Adequate explanation and documentation for all project charges must be maintained for three years after the submission of the final financial report. Where documentation and justification cannot be provided to confirm the allowability, allocability and reasonableness of any project expense, the sponsor may deny reimbursement or the expense may be questioned during audit. In this case, the PI, department, laboratory, center or school will be expected to cover the expense from unrestricted sources.

Each DLC must maintain a system to retain support documentation for expenditures where they are the office of record. The Controller's Office "Financial Review & Control" guidelines provide information as to which documents must be retained by the DLC, and the related retention periods. Difficulties regarding the timely certification of expenditures should be discussed with the department Administrative Officer/Fiscal Officer and the appropriate CAO or OSP representative.

D. Charging Salary to Projects

Salary being charged to sponsored projects and committed cost sharing must be supported by documentation of corresponding appropriate level of effort. Appropriate certification with required documentation via the ESDS/DACCA is a requirement.

E. Charging of Vacation Accrual to Projects

Direct charging of vacation to a sponsored project is not allowable. MIT accrues for the vacation of staff charged to sponsored research projects. When a staff member takes vacation, the cost of the salary is charged to the project. The project is then reimbursed by the MIT Vacation Accrual Pool for the time charged.

F. Charging Proposal Expenses to Ongoing Projects

Proposal preparation costs may not be charged to sponsored projects unless the proposal is being prepared for submission to a current sponsor for non-competing extension or continuation of its ongoing project. In those circumstances, it is appropriate to charge those proposal development costs directly to current projects. Costs for development of proposals for submission to other sponsors, or for work that is not a continuation of an existing project is not allocable to current projects and may not be charged to those projects.

G. Monitoring of Funds Within Sponsor Funding Limitations

PIs are responsible for the ongoing fiscal management of sponsored projects, including regular monitoring against project period budgets. Federal grants policy OMB Circular A-110 establishes the approved project budget as the financial expression of the project, and sponsors may evaluate the project against the budget at any time. Although sponsors allow certain flexibilities with respect to rebudgeting, unobligated balances, and preaward costs, both MIT and sponsors expect expenditures to be consistent with the approved project and budget. Some sponsors may question or restrict expenditures that appear inconsistent with the project plan and budget. PIs are obligated to request prior approval when budget and program plan revisions indicate a significant change in scope, change in PI or other key person or the absence of the principal investigator for more than three months. Indicators of a change in scope can include, for example, significant expenditures beyond the amount authorized on the award, or requests for additional funding.

It is MIT's expectation that projects will be managed within their established budgets. If, as a result of unusual circumstances or unanticipated project expenses, a cost object is in overrun upon expiration of the term of the sponsored project, and if additional funds are not available from the sponsor, the PI must identify an appropriate source of unrestricted funds (e.g., gift, endowment, or operating budget) to cover the excess expense.

Since charges to clear overruns reflect direct project costs, they must not be transferred to other projects or be incorporated into cost pools which lead to F&A (indirect) cost recovery. These dollars represent project costs being borne by MIT and, therefore, must be accounted for in the same manner as cost sharing. The responsible DLC must identify the source of funds to

be used for the overrun to the Controller's Office or the Office of Sponsored Programs. The DLC may then initiate the necessary funding entry, using the GL account "record project overrun," 420314, to bring the project into balance.

The DLC, and ultimately the school, is responsible for the timely clearance of any such unfunded expenditures from within its resources.

H. Project Close-Out

In addition, PIs are responsible for overseeing the proper close-out of sponsored projects, including the timely submission of all required reports (including final technical reports and data needed by OSP to file the necessary patent/intellectual property reports). While central offices prepare and submit final administrative reports, including financial and property reports, they do so on the basis of documentation created in the unit. PIs must assure that such documentation is accurate, adequate and readily available. In addition, some financial reports may require the PI's signature.

If final technical reports are to be completed after the project end date, and funds from the project are available to pay these expenses, a No-Cost Extension should be obtained prior to termination from the sponsor to cover the expense of producing and distributing those reports. If funds are not available from the project, then the PI or the responsible DLC must identify unrestricted funds to pay the final report costs.

Special Requirements Related to Sponsor Notifications and Prior Approvals

Remaining in communication with sponsors and with MIT administrative offices is an important part of project management.

In all cases, required notifications or requests for prior approval of contract or grant actions, including those described in the sections below, should be made in writing or via an electronic request to both the administrative and technical officials in the sponsoring agency. **Such requests must be coordinated through the Office of Sponsored Programs.**

A. Communication related to project and funding status

Separate regulatory requirements exist for notification to the sponsor in the case of federal contracts and in the case of federal grants. In all cases, such notifications must be made on a timely basis, in coordination with the Office of Sponsored Programs, in order to allow sufficient time to arrange for and process additional funds, or for the reduction in spending and effort in order to phase out the program in an orderly fashion if additional funds are not available. The principal investigator's department head and/or lab director and School Dean (or their designees) should also be informed, in advance, of potential funding problems.

1. Financial status of federal cost-type contracts

In the case of federal cost-type contracts (as opposed to grants), principal investigators must assure compliance with the Limitation of Funds and/or Limitation of Cost clauses which include the requirements that:

- a. The Contractor (MIT) notify the sponsoring agency in writing at any time that there is reason to believe the total cost to the Government for the performance of the project will be greater or substantially less than the estimated cost, and further,
- b. The Contractor (MIT) notify the sponsoring agency if, at any time, there is reason to believe that the costs which are expected to be incurred in the next succeeding 60 days, when added to all costs previously incurred, will exceed 75% of the amount allotted to date under the contract.

Failure to provide such notice may preclude MIT from receiving additional funding on that contract.

2. Project and financial status of federal grants

OMB Circular A-110 lists administrative requirements for federal grants and establishes that prior written approval by the sponsor is necessary in the following circumstances:

- a. Change in the scope or the objective of the project or program (even if there is no associated budget revision).
- b. Change in a key person specified in the application or award document (see discussion of changes in PI status below).
- c. Need for additional federal funding.

- d. Transfer of funds allotted for training allowances (direct payment to trainees including participant support) to other categories of expense.

Prior written approval must be requested of granting agencies when either a significantly accelerated rate of project expenditures, or expenditures that are significantly behind budget projections, indicates that the scope of the project has been changed.

In addition, the specific award notice or the agency's policy manual or administrative guide may also establish requirements for communication with the sponsor during the course of the project.

B. Changes in Principal Investigator status

In addition, sponsors often have requirements regarding notification or prior approval of changes in availability of the principal investigator.

For FEDERAL CONTRACTS AND NON-FEDERAL PROJECTS, the terms and conditions of the particular agreement will govern.

For FEDERAL GRANTS, OMB Circular A-110 requires prior written approval from the awarding agency for either of the following circumstances involving the principal investigator or approved project director:

1. A reduction in time devoted to the project of 25% or more from the proposed and awarded level.
2. An absence from the project for more than three months.

While OMB Circular A-110 provides general terms and conditions related to PI absences, some federal awards require sponsor notification and prior approval for PI absences of greater than 30 days. The PI and his/her DLC administrator should review each notice of award for special terms and conditions.

The principal investigator, department head, lab director, or administrative officer should contact the Office of Sponsored Programs to coordinate securing required approvals in either of the circumstances above. If, in the original award, MIT had committed to fund some of the principal investigator's effort as cost sharing and the PI reduces the overall committed level on the project, OSP will also negotiate reductions in levels of the cost-shared component of effort, as appropriate.

In addition, when a Principal Investigator's faculty appointment will terminate prior to or during a project's period of performance, the PI and the PI's DLC must

inform the Office of Sponsored Programs to initiate contact with the sponsor.

Questions about these sponsor notifications should be directed to the appropriate OSP representative in the Office of Sponsored Programs.

C. Transferring an award: Change in Institution; Change in Principal Investigator

Sponsor notification and prior approval is usually required when a PI moves from one institution to another. In many instances, the sponsor will approve a transfer of the award. When a DLC anticipates the transfer of an award (either to or from an MIT PI), they should consult with their OSP representative for guidance in requesting approval from the sponsor. Typically a written request to transfer the award is made and a subsequent revised application (i.e., budget request and justification) is submitted by the new institution.

Occasionally, the sponsor may determine that for the success of the project, the work must take place at the original institution. When that occurs, it may be possible for the work to continue under the direction of a different PI.



Key References - See website links in Appendix and on the OSP home page

- ▶ Guidelines for Financial Review and Control
- ▶ Personnel Leave Policies