

3. Direct Charging

Introduction

Direct charging of appropriate expenses to research awards is the normal process by which research expenses are incurred and the Institute reimbursed by the sponsor. Direct costs are those which can be identified readily and specifically with a particular sponsored project with a high degree of accuracy.

General categories of direct expense include:

- Personnel (faculty, graduate student research assistants, postdoctoral and research associates, project support staff)
- Employee Benefit and Vacation Accrual Costs
- Capital and minor equipment
- Materials and Services
- Travel
- Tuition for Graduate Student Research Assistants

and may include:

- Meeting Expenses – Food and Beverages (only if explicitly approved by the sponsor)
- Subawards
- Consultants
- Allocation Costs (for allocation units with approved rates)
- Service Center Charges

Each of these categories is more fully described further in this chapter.

Direct expenses charged to sponsored projects should be consistent with those included in the approved project budget. Direct charging of expenses at MIT is accomplished by incurring expenses and assigning these to the appropriate research cost object(s) (WBS element) in the Institute's accounting system, SAP. The expenses posted to WBS cost objects in SAP are the official source of research project costs at MIT. There are a number of quick references to MIT's SAP financial system and an explanation of each of the systems and how one accesses the system. First time users are advised both to review the Financial Systems

Quick Reference Guide and take introductory courses in the use of SAP. The SAP overview screen also has links to related MIT enterprise accounting systems and includes information on training in SAP.

Flexibility through the use of “Expanded Authorities”

One of the most advantageous changes in the last two decades is the adoption by the federal government of the so-called “expanded authorities,” whereby federal agencies, at their option, are authorized to waive cost-related and administrative prior written approval requirements stated in OMB Circulars A-21 and A-110. The expanded authorities give the PI greater flexibility to expend project funds. For example, agency waivers may include authorizing recipients to do any one or more of the following tasks without seeking approval from the sponsor:

- Incur pre-award costs (at the recipient's own risk) up to 90 days prior to award.
- Initiate one time extensions of the expiration date of an award of up to one year.
- Carry forward unobligated balances to subsequent funding periods.

Note that these permissions are included in A-110 and, thus, are not applicable to contracts. Further, agencies may decide not to allow any one of the above permissions if their regulations differ from these permissions. However, these requirements are the default in A-110 for research projects. If you are unsure as to whether the expanded authorities apply to any specifically funded project, you should check in COEUS or with your OSP administrator.

Direct Expenses

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

- The estimated charge is reasonable and necessary for the performance of the project and is incurred within the project's period of performance.

- The expenditure is allowable by the sponsor and, if charged to a federally-funded project, by OMB Circular A-21.
- The expenditure is allocable to the project, i.e., provides benefit to the project.
- The expenses do not exceed the authorized amount of funding on the award amount and adhere to other funding limitations.
- The method of allocation of costs is appropriate and documented.
- The charge is coded with the correct General Ledger identifier and charged to the correct WBS element.
- The charge has been processed through the appropriate Institute system.

Expenses of a technical nature should be charged directly to sponsored projects if the expense can be specifically identified and provides programmatic benefit as described in the project's scope of work. Direct charging of these costs may be accomplished through specific identification of the costs to the sponsored project or through service center charges, as appropriate under the circumstances. Examples of such expenses that may qualify as technical include the following:

- Salaries of principal investigator and related fringe benefits,
- Salaries of technical staff, and related fringe benefits,
- Stipends and tuition for graduate research assistants,
- Laboratory supplies (e.g., chemicals and materials),
- Telephone toll charges directly related to the project,
- Animals and animal care costs,
- Travel costs directly related to the project,
- Service center charges,
- Specialized health and safety supplies, training, and services,
- Subawards,
- Capital and minor equipment.

The above expenses shall be charged using the appropriate general ledger code described and contained in the most current Chart of Accounts.

Note: this list does not include administrative charges but does include technical staff. As described in the Administrative Charging section and in the next section of this chapter, clerical and administrative staff may be directly charged only where the project meets the requirements for a major project defined in A-21, F.6(b) and the expense is properly justified and included in the proposal budget and approved by the sponsor.

Salary Distribution & Certification

The largest category of direct project expense at MIT is salary and benefits. The principal investigator is responsible for reviewing salaries charged to projects. Percentages of salary charged to a project are validated and certified by the principal investigator.

Salary Distribution and Certification. When a principal investigator manages a lab with multiple ongoing projects, the distribution of salaries of the PI, research assistants, researchers and other staff to the various projects must be carefully considered. MIT's process for salary distribution and certification verifies that direct labor charges to federally sponsored agreements are reasonable, and reflect actual work performed. This is commonly referred to as effort reporting. This process shows the distribution of the effort of individuals among the various activities in which they work, as a percentage of total salary (not as a specified number of hours) devoted to benefit the project, either as a direct charge or committed cost sharing. For more information, see the effort reporting link in the Appendix or the OSP home page.

Charges for work performed on sponsored agreements during the academic year will be based on the individual's regular compensation for the continuous period which constitutes the basis of his salary. Charges for work performed on sponsored agreements during all or any portion of such period are allowable at the base salary rate. In no event should charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period.

Further, charges for work performed by faculty members on sponsored agreements during the summer months will be determined for each faculty member at a rate not in excess of the base salary divided by the period to which the base salary relates. The base salary period used in computing charges for work performed during the summer months will be the number of months covered by

the faculty member's official academic year appointment. For example, if a PI works on a sponsored project for one month during the summer, the maximum amount of salary chargeable to the project is one-ninth of the academic year salary (assuming the academic year appointment is nine months).

If a principal investigator spends less effort on the project than proposed, then the PI and the responsible department should:

- Review and adjust salary charges.
- Review any cost sharing commitments.

In addition, for **federal awards**, the PI must notify the sponsor in writing if he or she plans to reduce his or her level of effort by any significant amount from the awarded level. This notification must be routed through OSP prior to submission to the Grant Officer.

All communication with sponsors on other than exclusively technical matters should be coordinated with OSP!

Such reductions may also involve cost sharing. If the PI's salary was being funded in part by the sponsor and in part by MIT, a reduction in effort must be coordinated with the sponsor for appropriate adjustments to cost sharing. If this is not properly coordinated, the sponsor may require MIT to meet its full original cost sharing commitment or reduce the level of project funding. Discuss any planned changes of this sort with the Office of Sponsored Programs (OSP).

A complicating factor in charging faculty effort is the NIH cap on salaries, which limits the salary directly charged to NIH awards to selected Federal Executive Pay Levels and which generally vary from year to year. General principles with regard to the NIH cap include:

- The salary cap applies to the rate of total institutional salary paid to the individual. If a faculty member earning more than the cap charges 50% of his/her salary to a project, the salary charge is 50% of the cap amount—not of the full salary. For example, if the individual's salary is \$200,000 per year and the individual spends 50% of his/her time on the project, and the NIH salary cap is \$150,000 per year, the charge to the grant is 50% of the capped amount (\$75,000) and the effort devoted to the project remains at 50%. The difference between the

NIH cap and the individual's regular salary (\$25,000) must be charged to unrestricted funds.

- An individual's total MIT salary is defined as the pay which an individual receives upon which benefits are calculated.
- Salary dollars above a salary cap level are **unallowable** costs and cannot be used to meet cost sharing commitments, but are tracked and accounted for as part of MIT's Organized Research Base by CAO.
- At the time the award is made, NIH will fund the salary up to the level of the salary cap in effect at that time. If, during the period of that award, the salary cap is increased, it is permissible to use rebudgeting authority to pay the salary at the higher level. NIH, however, will not award any additional funds for this purpose.

The amount of the NIH salary cap varies from year to year. Please consult with the Office of Sponsored Programs for current NIH salary cap amounts.

A summary of NIH salary cap rates can be found on the NIH Office of Extramural Research website (see Appendix for website link).

Other Salaries and Wages

Salaries and wages of technical staff should be charged to research cost objects to reflect the individual's activity on the project. Salaries shall—for research staff—reflect the appropriate salary of the individual(s), net the appropriate vacation accrual charge. For example, for vacation-eligible staff, it is inappropriate to budget the equivalent of 52 weeks of salary in addition to the vacation accrual. Total annual salary and vacation accrual should not exceed 52 weeks. In cases where it is appropriate to budget salary at 52 weeks, appropriate documentation should be provided in the budget justification. Faculty and Graduate research assistants do not accrue vacation, and their salary charges should reflect the appropriate salary distribution for their activities on the project.

The following examples illustrate projects where direct charging of administrative expenses may be appropriate in that they require an extensive amount of administrative or clerical support that is significantly greater than the routine level of such services provided by academic departments. These examples are not exhaustive nor are they intended to imply that direct charging of administrative

expenses would always be appropriate for the situations illustrated in the examples. The A-21 examples of a major project describe those situations that are administratively intensive and are not necessarily reflective of the amount of funding for the project.

The purpose and circumstances of the project and the nature of the administrative functions that relate directly to the project are the criteria that should be used to determine if the project is “major” and that the administrative expenses may be direct charged.

OMB Circular A-21 provides examples of major projects, as follows:

- Large, complex programs such as a general clinical research center, program projects, environmental research centers that entail assembling, managing and coordinating teams of investigators from a number of institutions, or large numbers of child cost objects to manage, and many sub-allocations can make the project major. This is one of the few kinds of projects where it may be appropriate to charge all of the administrative costs directly to the project due to the complexity of the project.
- Projects that involve extensive data accumulation, analysis and entry, surveying, tabulation, cataloging, searching literature, and reporting. When data entry relates to the project and is a significant part of the scope of work, it is a major activity. The data entry activity may seem administrative, but in this case, it is a technical part of the project. The cost associated with this activity can be charged directly to the project, as long as the other criteria are met.
- Projects that involve extensive travel and meeting arrangements for large numbers of participants. In the case of a travel grant where the purpose of the award is to set up a meeting to discuss the technical aspects of a project, all of the administration associated with that project can be charged directly to the project, as long as the other criteria have been met.
- If only a portion of the project involves extensive travel and/or meeting arrangements, then only the administrative expenses associated with making the travel and meeting arrangements constitute a “major activity.” Only the administrative expenses associated with the “major activity” can be charged directly to the project.
- If the principal focus of a project is the preparation of a large report, manual, or website (excluding routine

progress and technical reports), it may be appropriate to charge administrative costs directly to the project.

- Projects that are geographically inaccessible. If a project conducted in the Antarctic requires administrative work, it is reasonable to have an administrator or a copy machine there to perform administrative tasks. In that case, it would be appropriate to charge those costs directly, as long as the other criteria are met.
- Coordination of project-specific database management, individualized graphics or manuscript preparation, multiple project-related investigator coordination, or a large number of human subject or animal protocols to track.

The following is an excerpt from OMB A-21, Exhibit C:

“These examples are not exhaustive nor are they intended to imply that direct charging of administrative or clerical salaries would always be appropriate for the situations illustrated in the examples.”

Many of these administrative activities seem routine and similar to general administrative support costs that are included in the F&A rate. However, because of the nature of the project and the fact that these administrative activities contribute directly to the technical scope of the project, it may be appropriate to direct charge the administrative costs, as long as the other criteria are met (i.e., the costs are explicitly included in the proposal budget, are properly justified, etc.). The purpose and circumstances described here are different than routine administrative and clerical costs, which should be treated as indirect costs.

Questions regarding appropriateness of administrative charges to WBS elements should be addressed to your OSP representative.

Technical Materials

Technical material and supplies include

- Non-capital (“Minor”) equipment (any individual item of equipment costing less than \$3,000);
- Laboratory supplies;
- Other supplies and materials used for the project’s technical scope of work (for example: computer supplies, printing, lab notebooks).

This is a broad category of cost that contains all non-capital items as well as laboratory materials and supplies. The scope of work will determine the expenses in this category of cost. It is important to remember that when non-salary costs, normally considered to be indirect costs (per A-21, F.6(b)), are planned and used for the project's technical scope of work, the project does not need to be "major" for those costs to be charged directly. However, the expenses must be specifically identifiable and directly benefit the project.

MIT's Procurement Department

Goods and services used for research (including technical materials) should be acquired using standard Institute policies and procedures. There are a variety of ways to order and receive materials used in research projects and "Purchasing on the Web: An Introduction" is a valuable resource for persons new to MIT's procurement policies.

Telephone Toll Charges

OMB A-21, F.5.b.(3) provides that telephone toll charges are an allowable direct expense to a sponsored project. However, local telephone costs (monthly charge for operating costs and equipment, installation, etc.) should be treated as F&A.

Travel Costs

In most cases, domestic travel costs are allowable expenses against sponsored project cost objects. For most research assistance awards (grants and cooperative agreements), foreign travel is allowable without specific written authorization from the agency, but typically must be approved by the sponsoring agency (by specific post-award request) when contracts are involved.

It is a requirement to use an U.S. flag carrier for all travel directly charged to federal awards (refer to the policy for exceptions). Also, the airfare must normally be at the lowest available coach class rate. MIT authorizes international travel to be paid at Business Class rates in certain situations, but the difference between coach and business cannot be charged to the sponsored program unless there is explicit approval by the sponsor. It is sometimes difficult—in these times of code-sharing between the United States and foreign airlines—to identify United States flag carriers because the domestic carrier may lease seats to a foreign carrier (and vice versa). The Controller's Office

describes the requirements for use of foreign flag carriers and describes how U.S. flag carriers may be identified on a ticket or ticket receipt; details can be found on the CAO website.

In determining whether any specific travel expense is a legitimate charge to a particular sponsored project, one must consider

- How does the travel benefit the project?
- Are there any travel restrictions in the terms and conditions?

Some sponsors may limit the amounts or types of travel which they will reimburse. Check the terms of the award in COEUS, or the sponsor's guidelines, for particular provisions on travel expenses, pre-authorizations for certain types of travel, or line-item budget restrictions related to travel. All travel must directly benefit the sponsored project. Documentation of the benefit to the project must appear in the remarks section of the expense report.

Service Center Charges

Service centers are units that are established to provide goods and services to other MIT departments, labs and centers and occasionally, external customers. These centers are essentially "small businesses" operated by a DLC, often to facilitate research activities. Charges from Institute-established service centers are allowable costs on WBS elements when they provide a direct benefit to the project. MIT's service centers accumulate the costs of providing goods/services and bill these costs, by means of user fees or equitable distribution methods, to DLCs, and often to sponsored research programs. Service center costs, therefore, may represent direct costs to MIT research programs.

A complete description of MIT's Service Center policy appears on OSP's home page.

Subawards

A subaward is an award made by MIT to another organization (usually, but not always, a university) to help carry out the scientific and technical work under an award made by a sponsor to MIT. When MIT is the recipient of a prime award the organization which MIT brings into the research program is known as the subrecipient and

the award to the subrecipient is a subaward. The technical language for such transactions appears in the federal regulations as follows:

A subrecipient is “the legal entity to which a subaward is made and which is accountable to the recipient for the use of the funds provided. The term may include foreign or international organizations at the discretion of the federal awarding agency.”

When another institution or entity performs a portion of the work scope of a research project for which MIT is the prime awardee, the Institute will incorporate in the proposal to the prime sponsor, the description of the work to be performed by the collaborating subrecipient along with the budget. MIT must also obtain a letter of commitment from the subrecipient’s authorized representative. Once the award is made to MIT, a subaward is issued by MIT to the collaborating institution.

At MIT, subrecipient agreements are executed by the Research Subawards Office in OSP. The OSP home page has information on how personnel in DLCs should prepare a request to have a subaward issued. It also explains the responsibilities assumed by the Institute for monitoring subawards, as required by the federal audit circular, OMB A-133, and the Compliance Supplement. See preparation of proposal budget in the chapter on Sponsored Programs Basics.

Remember that only the first \$25,000 of any subaward is subject to the assessment of Institute F&A. This is important for budgeting and charging purposes. The excess of \$25,000 is a modifier (i.e., excluded) from the Modified Total Direct Cost (MTDC) base and is therefore not subject to F&A for the life of the award/subaward. For subawards that exceed one competitive segment, consult with your OSP representative.

One of the complexities with research collaborators is determining whether the relationship is a subaward (subrecipient agreement) or a procurement (vendor) transaction. Characteristics of a subrecipient(as described in OMB A-133):

- Determines who is eligible to receive what federal financial assistance;
- Has its performance measured against whether the objectives of the federal program are met;
- Has responsibility for programmatic decision making;

- Has responsibility for adherence to applicable federal programs compliance requirements;
- Uses the federal funds to carry out a program of the organization as compared to providing goods or services for a program of the pass-through entity; and
- The subawardee’s principal investigator may be a co-author on publications or may seek patent protection for inventions.

Characteristics of a vendor (as described in OMB A-133):

- Provides the goods and services within normal business operations;
- Provides similar goods or services to many different purchasers;
- Operates in a competitive environment;
- Provides goods or services that are ancillary to the operation of the federal program; and
- Is not subject to the compliance requirements of the federal program.


It is important to recognize that any terms and conditions accepted by MIT flow down to recipients of subawards. Award terms and conditions do not flow down to vendors or consultants.

In addition to ensuring that subawardees abide by the terms and conditions of the MIT subaward, MIT is responsible for ensuring that the federal funds it provides to another organization are spent in accordance with applicable laws and regulations. These subrecipients are monitored by MIT, much as federal sponsors monitor the Institute. Additionally, any subrecipient is responsible to MIT (including sending required reports to us) in the same way MIT is responsible to the prime sponsor.

The Subawards Office within OSP is responsible for issuing subawards, at the direction and with the information provided by the PI or his/her designee. If the subaward needs to be modified, it must be done by the Subawards Office with a formal revision of the original agreement.

Some subawards, particularly those with commercial entities, may be very difficult to negotiate and may take considerable time. This is sometimes the result of the complexity of the subawardee entity, but often may be because the subawardee is a small business and not familiar with federal regulations. In such cases, MIT must be careful in

making subawards since MIT is responsible for reviewing the business practices of the subawardee for consistency with federal costing principles before the award is made.

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

- ▶ OMB Circular A-133
- ▶ OMB Circular A-133 - the Compliance Supplement
- ▶ MIT's Service Center Policy and Procedures
- ▶ Life of an Award Definition
- ▶ Subaward Basics
- ▶ Subaward Agreement and Vendor Definition

Food and Beverages

The one circumstance in which local business meals might be directly charged is described in OMB A-21 under the heading "Meetings and Conferences." This section (J.32) states:

"Costs of meetings and conferences, the primary purpose of which is the dissemination of technical information, are allowable. This includes costs of meals, transportation, rental of facilities, and other items incidental to such meetings or conferences. But see section J.17 'Entertainment Costs'."

Expenses for Food and Beverages must include documentation substantiating the business purpose of the meal. This would typically include the description of the nature of the discussion, and relationship to the sponsored project if applicable, an agenda, a list of attendees, etc.

Auditors routinely question local food costs, and unless they find adequate documentation to show that the costs were associated with a bona fide technical conference or meeting, they may be disallowed. It is important to document how the food charges specifically benefit the project. If the research administrator knows in advance that a conference or meeting on campus with food service is necessary, then the expense should be included as part of the proposal submission so that it may be approved by the sponsor.

Meals while traveling for a sponsored project are allowable; however, on-campus meals eaten at a local business are

rarely allowed on Federally sponsored projects. Food and beverage expenses are allowable only if they are explicitly identified in the approved budget or later approved by the sponsor.

When United States government officials visit campus, the research administrator should avoid directly charging costs for their meals. Typically, government officials are restricted from accepting meals and other benefits from recipients of federal funding. Most of MIT's federal sponsors who visit campus understand this rule, so they usually offer to pay for meals on campus, and it is appropriate to accept their payment.

Compliance with the Allocation and Documentation Standard

This chapter has emphasized the need to charge expenses appropriately to sponsored programs. That is the core principle for sponsored research projects (accounted for in WBS elements). However, OMB Circular A-21 identifies some flexibility which may be used under certain circumstances. Section C4d provides that

"if an individual cost specifically benefits two or more projects or activities in proportions that can be determined without undue effort or cost, the cost should be allocated to the projects based on the proportional benefit. If an individual cost specifically benefits two or more projects or activities in proportions that cannot be determined because of the interrelationship of the work involved, then the cost may be allocated or transferred to benefited projects on a reasonable basis. This requires a methodology, documented at the time the cost is incurred, that allocates costs based on some common characteristic such as head count, square feet, or some other criteria that reflects the benefit received by the projects. The criteria shall be consistently applied regardless of the projects' available funding."

This section of A-21 provides the PI with an opportunity to charge expenses to inter-related research projects using a method that is reasonable but less burdensome than specific identification. In all cases, the methods used to allocate costs should be documented. For example, if laboratory supplies bought in bulk benefit four of a PIs inter-related projects, these costs may be assigned to each project on some reasonable basis, for instance the cost may be assigned proportionately to each project's share of the total expenses for the inter-related project. If project #1

represents 30% of the aggregate expenses of the four projects, it would be reasonable to charge 30% of the laboratory supplies to project #1. Using this method, it wouldn't be necessary for the PI to track the precise amount of lab supplies used by each project.

When allocation expenses cross two or more interrelated projects, consult with your OSP representative for guidance.