GUIDELINES FOR ACCOUNTING RELATED TO COSTS OF COMPUTER SOFTWARE DEVELOPMENT

Accounting for Costs of Computer Software Developed Or Obtained for Internal Use

A. Background:

Required by Accounting Rules (SOP 98-1) beginning in fiscal 2000, new accounting regulations require that certain costs associated with computer software obtained or developed for internal use be expensed while others be capitalized. Internal use software is any software acquired, internally developed, or modified to meet the Institutes internal needs, with no intention of marketing the software externally. MIT will be required to track the cost of software development projects to meet the following objectives:

- For compliance with accounting rules, software development projects that are expected to incur total capital costs over the life of the project that meet or exceed the capitalization threshold of $250,000
- For MIT management purposes, software development projects that are expected to incur total costs over the life of the project that meet or exceed $250,000

B. Identification of a Software Project

The Vice President for Information Systems and Technology (IS&T) will be responsible for communicating to the Controllers Accounting Office (CAO) new projects whose total cost is expected to meet or exceed $250,000. All departments that are planning to embark on a software development project should ensure that the office of the VP of IS&T is notified about the details of the project to determine if the capitalized software rules will apply. Once a determination is made, the VP of IS&T will communicate the initiation of a qualified software project to CAO and the participating department(s) via e-mail. This e-mail will include such specific project information as the scope, sponsor(s) and project manager.

Once the project has been identified, CAO and the Budget Office (OBFP) will work together to orient the sponsors, project manager, and department administrators on the software capitalization rules and guidelines included in this document for implementation, tracking and monitoring, and reporting.

The project manager is responsible for identifying the contributing departments and sub-departments (teams), the funding sources and developing the project structure (with assistance from OBFP/CAO). Once all the information is obtained (see section C3) the project WBS structure can be established in SAP.
C. Establishment of Cost Objects

MIT will utilize the SAP Project work breakdown structure (WBS) to record costs related to software development. A WBS hierarchy will be established for each software development project for the duration of the project. The project hierarchy will be used to distinguish “capital” WBS elements from “expense” WBS elements.

Software Development Project Hierarchy - Example

Settle monthly to an asset in progress, class ASC (Software Development)

Settle monthly to departmental cost center
1. **WBS Elements for Capitalized Costs**

WBS Elements to be used for capitalized costs will be assigned a number in the same range as Internal Orders that are used for capitalization purposes (beginning with 11 or 12). Capital WBS Elements have the following characteristics:

- Used to accumulate costs that meet the capitalization criteria.
- Linked to an asset in process (ASC), which will be the settlement receiver.
- Will settle monthly, which is consistent with the asset process for buildings and other settlements related to the monthly close. i.e. facilities internal orders.
- When the project is complete, the ASC will be settled (one time) to a fixed asset.

*Note:* This process is identical to the process of capitalization of construction projects and space changes into buildings, which is currently in use at MIT as of April 2000.

2. **WBS Elements for Costs to be Expensed**

WBS expense structure to be used for costs which will be expensed, (not subject to capitalization). The expense structure may have 1 or many children WBS Elements. The number issued will be in the same range as current numbers for Cost Centers. (i.e.1374000). Expense WBS Element(s) will have the following characteristics:

- Will be used to accumulate costs that should be expensed. (do not meet criteria for capitalization)
- Will be assigned a Cost Center as the settlement receiver
- Expense WBS Element will settle monthly as usual

3. **Required Information for Establishment of Project Structure**

In order for CAO to properly set up a project hierarchy, the following information is needed:

- Exact title of the project
- The departments who will participate in the project (additional departments can be added as needed)
- What cost center will be charged for the expense portion of the project it may be necessary to establish a new cost center, or a department may want to have the costs go to more than one. In the later case this will mean that more than one set of WBS elements are required for the department.
- Master data elements for each WBS element: supervisor, addressee, profit center, fund center, begin date and title.
Once all of this information is communicated to CAO, WBS numbers will be assigned and set up in SAP. Supervisors and addressees will be notified when the WBS elements are established.

D. Tracking and Reporting Costs

a) Responsibility for Reporting and Tracking Project Costs.
   The appropriate administrative person from each participating department will be responsible for recording costs on the correct WBS element. This individual will verify expenses monthly and make necessary corrections. The project manager will be responsible for ensuring that all participating departments are properly recording and classifying costs on a timely basis.

b) Criteria for Identifying Capital vs. Expense Costs

   **Costs to Capitalize**
   
   - Software acquisition costs
   - Costs directly related to software development, including:
     - Material costs
     - Developer salary & benefit costs
     - Outside Consultant costs (including time and related expenses)
     - Project Team testing
     - Data conversion software
     - Manager salary & benefit costs for project oversight if directly related to software development.

   **Costs not to be Capitalized:**
   
   - Discovery Costs -- those costs incurred before the project scope is broadly defined and before MIT management approval
   - Costs to develop and offer end user training of new or upgraded software
   - Costs to implement, after development is complete
   - Data conversion costs (other than costs to develop or obtain software that allows for access or conversion of old data)
   - All other testing – not done by the project team
   - Documentation costs
   - Staff training, including developers
   - Travel costs for any Institute employees
   - Costs incurred after implementation has begun (defined as the point at which the software is in use, in a production environment, by the users for whom the software was designed). For example, maintenance agreements may not be capitalized.
c) Guideline for Tracking and Reporting Costs

- The tracking of salaries will be based on percentage of time dedicated to the project. (i.e. if an individual works 80 hours at MIT for the week, and he/she allocates 50% to a capital project, the 50% will be based on the 80 hours worked, not on a regular 40 hour work week).
- The threshold for tracking salary costs is 10 % of FTE (do not track time if under 10% over a three month period).
- Equipment costs related to capital projects must also be tracked. Materials costs relating to capital projects, including equipment must also be tracked. If an equipment item (whether minor or major) is purchased, and will be used 50% or more on the project for development, the allocable portion of its cost should be charged to the capital WBS element for the project. This is true only in instances where the equipment costs are below $3,000, the level at which all costs are capitalized by the Institute.

d) Method/Tools for tracking costs

Each participating department is responsible for developing a method for tracking costs and providing the tools necessary to do so.

e) Frequency of reporting

All costs should be reported to the department administrator on a monthly basis.

E. Monitoring and Reporting Project Costs

Detailed reporting and monitoring on a project level will happen in two ways. First, at the department level, the administrator will be responsible for ensuring that their costs are reported properly on the appropriate WBS elements. Second, the Project manager will be responsible for monitoring and reporting costs for the entire project. On a periodic basis this would involve reporting to the sponsors of the project the current budget vs. actual status.

On a quarterly basis a report will be provided by CAO to BFSG on all current software projects in process. This should include an analysis of expenses to date against budget and some projection information on estimated completion date and cost.

On an annual basis CAO will review with all of the project managers the status of every project. A determination will be made on whether the project will still meet the criteria for capitalization. If it is determined that it will things will remain, if it is determined that it won’t reach the $250,000 threshold, then the capital portion will have to be expensed. Future costs would continue to be charged to the expense WBS elements in the project structure, but the tracking of capital vs. expense costs can be discontinued.
F. Budget & Funding

The "Capital" portion of the project structure described above will be a part of the fixed asset portion of its balance sheet, and not part of any department's operating expenses. However, these costs were generally budgeted, as part of the operating budget of the department, during the fiscal year. Although capital assets are depreciated over time, the costs incurred this year for this project do represent a cash outlay for the Institute now, and must be funded.

To provide for the funding of these costs, and to match budgeted resources with actual expenditures, a department contributing resources to a capital project should transfer (actual, not budget) the corresponding amount funding to the Institute's "Educational Plant" Fund Cost Object, 2732220. It is recommended that this be done on a quarterly basis.

For example, if staff, consultants, and materials costs of $100,000 were part of the normal budget in the first quarter of fiscal 2001, but were incurred and capitalized during the quarter, at the beginning of the next quarter the department should make this "funding entry":

- Debit Cost Center 1XXXXXX GL account 422325 (educational plant) $100,000
- Credit Educational Plant IO #2732220 GL account 422325 $100,000.

Explanation: to transfer funding for capital expenses incurred in Q1 2001 for HR Payroll Project

(If capital costs incurred are expected to exceed budgeted funds available, the department should be in touch with its budget officer as soon as possible.)

Since actuals, not budgets, are moved, the department's budget is not affected.

The department will be incurring the cost on the "transfer out" GL account, not on salaries or M&S, where the funds may have originally been budgeted. If the department chooses to re-budget between these categories, they may do so.

G. Completion of a Project

Once a project has been completed, the project manager should notify CAO and all participating departments, after ensuring that all project-related costs have been recorded. CAO will then transfer all capital costs into a completed asset number that will be created in the asset system. At this point a depreciation time frame will be established and the asset will begin depreciating the following month. Since very often there are charges that come in after the completion of a project that are not known, the project WBS elements will remain open for a period of two months. The settlement receiver for the capital WBS elements will be changed to the new completed asset number as the in process account will be terminated. Once it is determined that no additional charges will occur, all WBS elements in the project structure will be closed.