

SUBJECT:	FERMI RESEARCH ALLIANCE PROCEDURES PROJECT MANAGEMENT	NUMBER:	12.PM-003
RESPONSIBILITY:	Office of Project Support Services	REVISION:	4
APPROVED BY:	Head, Office of Project Support Services	EFFECTIVE:	8/18/13
TITLE	Work Authorization		

1.0 PURPOSE

This procedure establishes the work authorization to ensure that a Control Account (CA) is sufficiently defined, organized, planned, and budgeted before its work scope is authorized and started.

2.0 SCOPE

This procedure describes the steps to prepare a Work Authorization document for control accounts on projects. All project activity is performed consistent with the project Work Breakdown Structure (WBS) and within project specific control accounts.

3.0 RESPONSIBILITIES

3.1 Project Manager (PM) is responsible for

- establishing control accounts at intersections of Organizational Breakdown Structure and Work Breakdown Structure
- identifying CAMs
- developing CA guidance for and reviewing guidance with CAMs
- signing Work Authorization documents

3.2 Control Account Manager (CAM) is responsible for

- developing CA details
- signing Work Authorization document
- managing to parameters contained in the Work Authorization document

3.3 Project Controls is responsible for

- assisting Project Manager in developing CA guidance
- preparing Work Authorization document
- signing Work Authorization document
- opening CA chargeable task codes after Work Authorization document is signed

3.4 Directorate/Budget Office is responsible for

- agreeing to initial project budget with the customer
- issuing work authorization to PM in the form of budget authority on the project

4.0 PROCEDURE

The work authorization process and the project documents provide reasonable assurance that the work that is included in the project baseline, and only that work, is initiated as provided for in the project baseline. A work authorization process flowchart is shown in Appendix E. The work authorization process consists of:

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4.1 Development and Assignment

Through the use of the Responsibility Assignment Matrix, the Project Manager identifies key control points at the intersections of the Work Breakdown Structure (WBS) and Organizational Breakdown Structure (OBS). Control accounts are then established at these key control points. The project manager identifies CAMs who can be assigned to one or more of these control accounts and receives concurrence from line management. A single CAM is assigned to each Control Account. The Project Manager, supported by Project Controls, develops planning guidance for each control account, which may include key scope, schedule and resource parameters. The Project Manager reviews the planning guidance with the CAM.

4.2 Work Authorization

The first step occurs when the customer authorizes FRA/Fermilab to initiate the project. For DOE projects, this would be in the form of a Critical Decision CD-0 approval and an agreement on a specific budget for the project initiation. The Director or Budget Office then issues budget authority to the Project Manager (PM).

Upon direction of the PM, the control account manager (CAM) develops the detailed scope, schedules, and resource/cost estimates for the assigned work packages. Planning packages require less rigorous detail in the schedule. The CAMs forward these plans to Project Controls for validation and inclusion in the Work Authorization document for each control account. (See *Control Accounts, Work Packages, Planning Packages*, EVMS Procedure 12.PM-002). Project Controls prepares the Work Authorization document.

The Work Authorization document for each Control Account includes, as attachments if necessary, the following components (see format in Appendix C and an example of a completed Work Authorization document in Appendix D):

- Control Account title and identifier
- the WBS number and scope of work
- Period of performance
- the signatures of parties responsible for the accomplishment of the work (for example, CAM's, PM, Project Controls, etc.)
- a schedule that details when the work is to be started and completed, including milestones, interim deliverables, and the final product or deliverable
- a time-phased budget by month, by work package, that portrays expenses by labor and materials and services (M&S). This includes a budget in hours for uncosted labor, if applicable.

Completed and signed Work Authorization documents shall be in place before beginning work on any work packages. Work authorization must be in place before starting work after the PMB is established.

4.3 Changes to Work Authorizations

The approved Work Authorization can only be changed with appropriate change control (see *Change Control*, EVMS Procedure 12.PM-007). Work Authorization documents

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(WAD) shall be updated to reflect each change request approval. However, change requests are authorized to proceed concurrently with the update of the WAD.

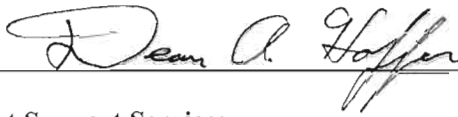
5.0 REFERENCES

DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets Fermi Research Alliance (FRA) Earned Value Management System Description*
 EVMS Procedure 12.PM-001 *Project WBS, OBS and RAM*
 EVMS Procedure 12.PM-002 *Control Accounts, Work Packages & Planning Packages*
 EVMS Procedure 12.PM-007 *Change Control*

6.0 APPENDIX

12.PM-003A: Appendix A: Signature Page and Revision History
12.PM-003B: Appendix B: Acronyms and Glossary
12.PM-003C: Appendix C: Work Authorization document
12.PM-003D: Appendix D: Work Authorization document example
12.PM-003E: Appendix E: Control Account, Planning, and Work Authorization Flowchart

**Appendix A
SIGNATURE PAGE AND REVISION HISTORY**

This procedure approved by:  18-Aug-2013

**Acting Head, Office of Project Support Services
Fermi National Accelerator Laboratory
Dean Hoffer**

DATE

TABLE OF REVISIONS

Author(s)	Description	Revision	Date
	Initial Version	0	10/17/08
E. McCluskey	Removed references to funding. In Appendix B changed definition of Control Account and added definition for Control Account Manager.	1	12/02/08
E. McCluskey	Revised when WADs are updated; clarified Control Account Plan definition; revised who prepares WAD.	2	03/27/09
E McCluskey	Revised to include uncosted labor hours as part of WAD info; revised WAD form to include this, CAM name, and CR history	3	09/17/09
M. Kaducak	Updated reference to DOE O 413.3A to DOE O 413.3B in Section 5.0. Changed OPMO to OPSS. Updated Flowchart in Appendix E	4	08/18/13

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Appendix B ACRONYMS AND GLOSSARY

CA — Control Account
CAM – Control Account Manager
CD — Critical Decision
OBS – Organizational Breakdown Structure
RAM — Responsibility Assignment Matrix
PM — Project Manager
WAD — Work Authorization Document
WBS — Work Breakdown Structure

Control Account (CA) - A key management control point located at the natural intersection point of the WBS and the OBS, where functional responsibility for work is assigned. It represents the point at which budgets (resource plans) and actual costs are accumulated and compared to earned value for management control purposes.

Control Account Manager (CAM) – The member of the project team responsible for the performance defined in a Control Account and for managing the resources authorized to accomplish the tasks.

Control Account Plan (CAP) – Report from cost processor showing the time phased budget for the control account by work package by month.

Critical Decision (CD) – On DOE projects, a formal determination made by the Acquisition Executive and/or designated official at a specific point in a project life cycle that allows the project to proceed. Critical Decisions occur in the course of a project: at determination of Mission Need (CD-0), at the completion of conceptual design (CD-1), at project baselining (CD-2), at the commencement of execution (CD-3), and at turnover (CD-4).

Functional Manager – Line manager whose responsibility includes assigning staff for matrixing to projects

Project Controls – Project support staff for planning, baseline development, management system plan preparation, as well as for monitoring, assessing, controlling, and reporting progress against the project baseline.

Project Financial staff – Project support staff for preparing cost information for monthly reports, monitoring expenditures, tracking spending deviations from baseline plans, preparing the Project Accounting task structure, tracking requisitions, and developing interfaces for financial information from external entities such as other laboratories and universities.

Responsibility Assignment Matrix (RAM) - A structure that relates the project organization structure to the work breakdown structure to help ensure that each element of the project's scope of work is assigned to a responsible individual.

Uncosted Labor – Labor accounted for in work package estimates, but at a \$0 rate in the budget. Such a rate may be used for scientific effort at the customer's direction.

Work Authorization Document (WAD) - A group of documentation consisting of the Work Authorization Form and supporting attachments (as outlined in Procedure 12.PM.003) that represents the agreement between the Project Manager and CAM for the work to be completed.

Work Breakdown Structure (WBS) - A product-oriented grouping of project elements that organizes and defines the total scope of the project. The WBS is a multilevel framework that organizes and graphically displays elements representing work to be accomplished in logical relationships. Each descending level represents an increasingly detailed definition of a project component. Project components may be products or services. It is the structure and code that integrates and relates all project work (technical, schedule, and cost) and is used throughout the life cycle of a project to identify and track specific work scopes.

Appendix C Work Authorization Document
WORK AUTHORIZATION DOCUMENT

_____ Project

Control Account Title: _____

Control Account Number: _____

Control Account Manager: _____

Work Breakdown Structure Element: **WBS X.X.X**

Period of Performance: ____/____/____ to ____/____/____

Current Authorized Budget (in AY\$ with all burdening): \$ _____

Current Authorized Budget for Uncosted Scientist Labor : _____ hours

REVISION HISTORY:

CR#	APPROVAL DATE	CR DOCDB FILE #	PRIOR BUDGET IN \$	NEW BUDGET IN \$	PRIOR UNCOSTED LABOR BUDGET IN HOURS	NEW UNCOSTED LABOR BUDGET IN HOURS	PRIOR PERIOD OF PERFORMANCE

This Work Authorization, including all attachments, represents the agreement between the Project Manager and Control Account Manager (CAM) to perform, or to have performed, efforts defined by the following:

- 1.) A WBS Dictionary sheet that defines the scope of work for this WBS element/Control Account. If additional definition is warranted, or required for a particular WBS element, (e.g., QA reasons, Work Orders for third party services, etc) attach applicable documentation.
- 2.) A detailed Control Account schedule showing all work packages and planning packages.
- 3.) A detailed resource report by WBS and schedule activity.
- 4.) Budgeted cost by month at the Work Package level (Control Account Plan)
- 5.) Budgeted uncosted labor hours by month at the Work Package level (Control Account Plan)

This Work Authorization is for the lifecycle of the project. Funding will be authorized incrementally based on schedule status and funding availability, and communicated by other means to CAMs. Any change to this document will be implemented through the Change Control procedures.

Reviewed by: _____
Project Controls Group Date

Approvals: _____
Control Account Manager Date

_____ Date
Project Manager

THE CHARGEABLE TASK CODE(S) FOR A CONTROL ACCOUNT WILL NOT BE OPENED WITHOUT A SIGNED WORK AUTHORIZATION FORM.

Appendix D Work Authorization Document - Example

REVISED: 15-Jan-2008

WORK AUTHORIZATION DOCUMENT

Cyromodule Production Project

Control Account Title: Cryomodule Production Components

Control Account Number: 1.3.3

Control Account Manager: Joe Smith

Work Breakdown Structure Element: WBS 1.3.3

Period of Performance: 02/15/08 to 06/25/10

Current Authorized Budget (in AYS with all burdening): \$3,250,000

Current Authorized Budget for Uncosted Scientist Labor : 1000 hours

REVISION HISTORY:

CR#	APPROVAL DATE	CR DOCDB FILE #	PRIOR BUDGET IN \$	NEW BUDGET IN \$	PRIOR UNCODED LABOR BUDGET IN HOURS	NEW UNCODED LABOR BUDGET IN HOURS	PRIOR PERIOD OF PERFORMANCE
CR32	01/10/08	518	\$3,100,100	\$3,250,000	500	1000	02/15/08 to 03/30/10

This Work Authorization, including all attachments, represents the agreement between the Project Manager and Control Account Manager (CAM) to perform, or to have performed, efforts defined by the following:

1. A WBS Dictionary sheet that defines the scope of work for this WBS element/Control Account. If additional definition is warranted, or required for a particular WBS element, (e.g., QA reasons, Work Orders for third party services, etc) attach applicable documentation.
2. A detailed Control Account schedule showing all work packages and planning packages.
3. A detailed resource report by WBS and schedule activity.
4. Budgeted cost by month at the Work Package level (Control Account Plan)
5. Budgeted uncosted labor hours by month at the Work Package level (Control Account Plan)

This Work Authorization is for the lifecycle of the project. Funding will be authorized incrementally based on schedule status and funding availability, and communicated by other means to CAMs. Any change to this document will be implemented through the Change Control procedures.

Reviewed by: _____ Date _____
 Project Controls Group

Approvals: _____ Date _____
 Control Account Manager

_____ Date _____
 Project Manager

THE CHARGEABLE TASK CODE FOR A CONTROL ACCOUNT WILL NOT BE OPENED WITHOUT A SIGNED WORK AUTHORIZATION FORM.

APPENDIX E Control Account, Planning, and Work Authorization Flowchart

