Earned Value Management System
Control Account and Work Package Planning Procedure

Change History Log

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Control Account and Work Package Planning Procedure

1.0 PURPOSE
This document describes the process used to identify control accounts and work packages following all guidelines in the LCLS Project Execution Plan, Project Management Plan, and Earned Value Management System Description.

2.0 SCOPE
This procedure applies for the entire life cycle of the LCLS project. This procedure must be followed when control accounts and related work packages are identified and defined for the LCLS project. This procedure is used at the beginning of the project to establish the control accounts for the project’s scope of work and whenever approved baseline changes require updates to the control accounts.

3.0 REFERENCES
LCLS Project Execution Plan, Section 4, Organization and Responsibilities; Section 5, Resource Requirements
LCLS Project Management Plan, Section 3, Management Organization and Responsibilities; Section 4, Work Plan
LCLS 1.1-015 Earned Value Management System Description, Section 1, Project Organization and Preliminary Planning
LCLS 1.1-019 Change Control Procedure
LCLS 1.1-020 Project Schedule Procedure
LCLS 1.1-021 Cost Estimating Procedure
LCLS 1.1-022 Monthly Status and Reporting Procedure
Work Authorization (template)

4.0 DESCRIPTION
Control accounts provide the means to organize, plan, budget, and execute the work for the LCLS project. They are the natural management control points for the project because they identify who is responsible for specific work elements based on the LCLS WBS and organization breakdown structure.

The control account and work package planning methodology used on the LCLS project is described in Sections 1.3.3, 1.3.4, and 1.3.5 in the LCLS Earned Value Management System Description. Additional guidance can be found in the LCLS Project Execution Plan and Management Plan.
In summary, control account planning is a formal process that identifies the budget assigned to accomplish a specific scope of work. A control account manager (CAM) is responsible for the detailed planning and execution of the scope of work associated with their assigned control account(s). This includes:

- Breaking down the control account scope of work into work packages;
- Defining the work package activity specifics such as duration and relationships to other activities as well as the resource requirements needed to complete the work;
- Identifying the method used to measure completed work (the earned value method);
- Ascertaining or verifying work progress;
- Managing the day-to-day work execution. This can include addressing risk or technical issues, developing work around plans, or other activities required to ensure the work they are responsible for is completed on time and within budget.

The control account and work package planning process is illustrated and described in Section 5. Note that the acronym PMCS is used to identify the LCLS project management control team in the process flow charts.
5.0  PROCEDURE DETAILS

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**Figure 1. Control Account Planning**

**Step 1  Provide High Level Guidelines**

*Responsibility:* Project Office

The Project Office is responsible for identifying and describing all high level control account and work package planning requirements that the LCLS project must follow. This can include, but is not limited to:

- Funding requirements or restrictions;
- Schedule requirements or restrictions;
- Cost estimate requirements or restrictions.

**Step 2  Issue Detailed Guidance and Instructions**

*Responsibility:* Project Control Team

The project control team is responsible for applying the high level guidance provided by the Project Office. They are responsible for developing applicable guidelines and related instructions that others on the project will use to identify and manage the control accounts and work packages. These guidelines and instructions are important to ensure a consistent and disciplined process is used when the work effort associated with a control
account and related work packages are scheduled over time and the time phased budget or estimate costs are developed.

This guidance can include, but is not limited to:

- Coding requirements;
- Allowed earned value methods;
- Detailed schedule requirements or restrictions;
- Detailed cost estimate requirements or restrictions.

**Step 3 Identify Control Points**

*Responsibility: Project Office*

The Project Office identifies the management control points or control accounts for the project. These control points are the intersection points that occur between the lower level work breakdown structure elements and the organization breakdown structure elements. This two dimensional structure is the responsibility assignment matrix for the LCLS project; it identifies who is responsible for what (a specific scope of work as defined in the WBS).

Once the control accounts have been identified, they are assigned to named control account managers.

**Step 4 Prepare Work Authorization Document (WAD)**

*Responsibility: Project Office, System Manager*

Once the control accounts are identified and assigned to the control account managers, a work authorization document (WAD) is prepared. This document allocates a budget dollar value to the control account work scope. This work authorization document is a formal document that tracks the distribution of money to individual control accounts. The work authorization flows from the Project Office to the system managers and then from the system managers to the control account managers. The work authorization documents require a signature from the Project Office as they flow down and authorize the work to the system managers. The system managers also sign the work authorization document as they accept the work. This process is repeated between the system managers and the control account managers as the work authorization is flowed down to them.

These work authorization documents cover the entire scope of work.

**Step 5 Complete Cost Estimate Process**

*Responsibility: Control Account Manager*

Once the control account managers are in place and they have their budget allocations/work authorization, they can begin the process to develop their initial cost estimate. This process is discussed in the Cost Estimating Procedure. In summary, this is a bottom up process based on the foundation of a logically networked schedule that is
resource loaded. The schedule resource detail provides the basis for the time phased cost estimate. It is in this step that the work packages and detailed activities needed to support the work scope for a control account are identified and defined. The overall work authorization document defines the high level planning parameters (budget and time frame) for the control account.

**Step 6  Complete Project Schedule Process**

*Responsibility:* Control Account Manager

The next step is to complete the project schedule process. This process is discussed in the Project Schedule Procedure. In summary, it uses the initial cost estimate details and incorporates key milestone event dates to determine the final schedule and cost estimates for the control accounts. The approved result becomes the performance measurement baseline for the project.

**Step 7  Begin Monthly Status Process**

*Responsibility:* Project Control Team

Once the performance measurement baseline is set, the monthly status process begins. This is discussed in the Monthly Status and Reporting Procedure.