

KLM Technology Group Project Engineering Standard	PROJECT CONTROL PROCEDURE (PROJECT STANDARDS AND SPECIFICATIONS)	Page 1 of 18
		Rev: 01
		Feb 2012

TABLE OF CONTENTS

PURPOSE	2
SCOPE	2
DEFINITION	2
ORGANIZATION AND RESPONSIBILITIES	2
Organization and Function	2
Integration of Control Functions	5
PROCEDURE	7
Introduction	7
Planning and Scheduling	7
Progress Planning	9
Progress Reporting	13
Progress Meeting	14
RECORDS	16
REFERENCES	16
ATTACHMENTS	17
Attachment 1 CONTRACTORS Organization Chart	17
Attachment 2 Manpower Histogram	18

KLM Technology Group Project Engineering Standard	PROJECT CONTROL PROCEDURE (PROJECT STANDARDS AND SPECIFICATIONS)	Page 2 of 18
		Rev: 01
		Feb 2012

PURPOSE

The purpose of this procedure is to establish a method for planning and control for the execution of the PROJECT. This procedure describes the approach to the planning and controls that are to be performed in the PROJECT. In case of any conflict and inconsistency between this procedure and Contract, the Contract will prevail.

SCOPE

This procedure defines the Planning, Scheduling, Progress Control and Reporting requirements for each phase of the PROJECT implementation including:

1. Detail Design and Engineering
2. Procurement
3. Construction
4. Commissioning and Start-up

DEFINITION

1. Construction is divided into two (2) distinct sections; Construction/Pre-commissioning and Commissioning/Start-up.
2. EDMS means Engineering Documents Management System which is a document control software with database used by CONTRACTOR.

ORGANIZATION AND RESPONSIBILITIES

Organization and Function

The responsibility for the overall project control will rest with the Project Management Team in CONTRACTOR Office until engineering has almost been completed (over 90% progress) and all major equipment have been delivered to the Site, after which

KLM Technology Group Project Engineering Standard	PROJECT CONTROL PROCEDURE (PROJECT STANDARDS AND SPECIFICATIONS)	Page 3 of 18
		Rev: 01
		Feb 2012

the overall project control function will pass to the Field Control Team at the Site as at that time the majority of the project activities will be carried out at the Site.

A. Organization

The Project Control Team is shown in Attachment 1 (CONTRACTOR's Organization Chart). The Project Control Team will be responsible for determining the project control strategy and overall project control.

After engineering has substantially been completed and all major equipments have been delivered to the Site, the Field Control Team at the Site will be responsible for overall project control.

The Project Control Team will be organized under the Project Control Manager for:

1. Schedule Control
2. Cost Control
3. Change Control
4. Document Control

The Field Control team at the Site will be organized under the Field Control Manager for:

1. Field Schedule Control
2. Cost Control
3. Change Control
4. Document Control
5. Material Control

B. Responsibilities

1. The Project Control Manager will be responsible for all project control matters, such as planning, controlling and reporting for the Project and will report to the Project Manager. The Field Control Manager will be responsible for all project control matters at the Site and will report to the Construction Manager.

KLM Technology Group Project Engineering Standard	PROJECT CONTROL PROCEDURE (PROJECT STANDARDS AND SPECIFICATIONS)	Page 4 of 18
		Rev: 01
		Feb 2012

The prime duties of the Project Control Manager and Field Control Manager will, as appropriate, be

- Establishing schedule strategy
- Issuing and maintaining schedule control procedures
- Identifying project activities and integrating engineering, procurement and construction activities into one comprehensive project execution plan.
- Developing and issuing various types of project schedules
- Identifying the critical paths
- Resource Planning and optimal resource mobilization
- Actual status monitoring and date collection
- Analyzing schedule trends. Physical progress and resource performance
- Identifying schedule problematic areas
- Planning and initiating corrective actions
- Updating and monitoring the schedules, incorporating any changes occurring during project execution
- Preparing and issuing schedule and progress reports
- Cost estimation and budgeting
- Change order handling
- Project cost control (monitoring, analyzing, forecasting, reporting, etc.)
- Planning and coordinating with reference sections for IT infrastructures
- Preparing and issuing the IT plan

2. Schedule Engineer who will;

- Analyze project requirements and prepare a project schedule that integrates constraints and strategies for engineering, procurement and construction.

KLM Technology Group Project Engineering Standard	PROJECT CONTROL PROCEDURE (PROJECT STANDARDS AND SPECIFICATIONS)	Page 5 of 18
		Rev: 01
		Feb 2012

- Prepare logic diagrams. in accordance with the Work Breakdown Structure, which form the basis for detailed level schedule reporting and analysis.
- Issue detailed activity schedules and expedite the return of schedule updating data.
- Monitor progress against baseline schedules, analyze deviations and recommend remedial action.
- Prepare agenda items for schedule review meetings.
- Prepare and maintain progress curve for engineering, procurement and construction.

3. Cost Engineer who will:

- Maintain and update the project budget and cash flow.
- Lead check estimate.
- Analyze cost trends and variance.
- Prepare changes in the work estimates In the formats agreed with OWNER
- Coordinate the work of the related disciplines and project groups tor cost matters.
- Prepare end maintain Change Order Logs and Change Order Status Report.

4. Project Administration Manager who will;

- Gather and record of Project documents and main EDMS for CONTRACTOR's and vendors documents.
- Report document status.
- Create document exception report for expediting of document Issue end revisions.

5. The Field Control Manager who will;

- Issue detailed activity schedules and expedite the return of schedule updating data.