Monitoring Progress

How does a project get one year late?
… One day at a time
– Frederick P. Brooks

• MBWA: Management by Walking Around
  – informal method, works fine in small projects but for large projects a formal control mechanism is necessary.
• Project control system should alert management to potential problems before it is too late to correct them.

A project control system should be “an information system that measures project progress and performance against a project plan that supports completion of the project on time, on budget and in the form requested by the customer.
• Control has negative connotations for many people, thus it is frequently resisted.
• Control holds people accountable, allows for traceability and keeps focus.

Control process has four steps:
– Setting a baseline plan.
  • Time-phased cost and resource schedules.
– Measuring progress and performance.
  • We will discuss the Earned Value approach.
– Comparing plan against actual.
  • Status report.
– Taking action.

Details of project plans may not materialize as expected.
• Generally speaking there are three types of changes:
  – Scope changes
  – Implementation of contingency plans
  – Improvement changes
• A well defined change review and control process must be developed in the planning stage.
Change Control Management

• Change control systems report, control and record changes to the project baseline.
• Steps of a change control system
  – identify proposed changes
  – list expected effects of changes on cost and schedule
  – review and approve/disapprove changes
  – negotiate and resolve conflicts of change
  – communicate changes to affected parties
  – assign responsibility for implementing change
  – track all changes to be implemented

Scope Creep

• Large changes in scope of the project is easy to notice. It is the "minor adjustments" that can create a problem.
  – Such minor adjustments are called scope creep.
• Although scope creep is viewed negatively, there are situations where it might have benefits.
  – E.g. new product development, especially early on during the project.

Scope Creep

• Possible negative effects of scope creep
  – changes cash flow.
  – wears down team motivation.
  – team might become less focused.
  – upsets project rhythm
  – increase costs.
• Every approved change must be reflected on the project WBS.
  – A key to success is documentation.

Change Control Management

• The key to managing scope creep is change control.
  – Original baseline must be well-defined and agreed upon with the project customer.
  – Clear procedures must be developed for authorizing and documenting scope changes.
  – Impact of scope change on the baseline (budget and schedule) must be clearly documented.
  – Scope changes must be communicated to all project stakeholders.

Change Control Management

• Benefits of change control systems
  – inconsequential changes are discouraged by the formal process
  – costs of changes are recorded in a log
  – integrity of WBS is maintained
  – allocation and use of budget and management reserve funds are tracked
  – effects of changes are visible to all parties
  – scope changes are quickly reflected in baseline and performance measures