

Big Iron EVM

EVM Implementation at AEDC
Initial Success Met Failure

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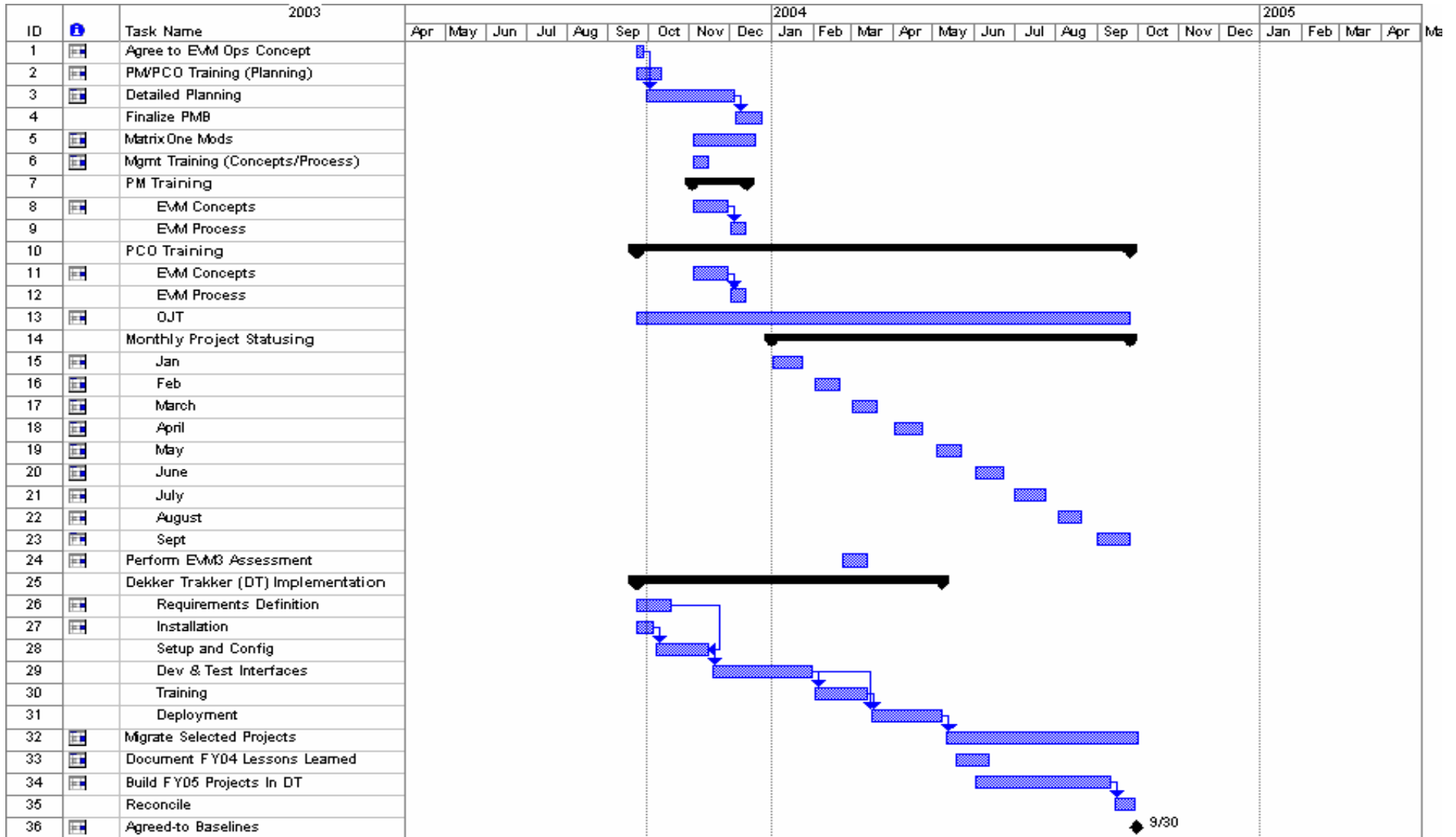
Overview

- Implementation
- Planning
- Reviews
- Baselines
- Process Flows
- Initial Success(es)
- Ultimate Failure

EVM Implementation at AEDC

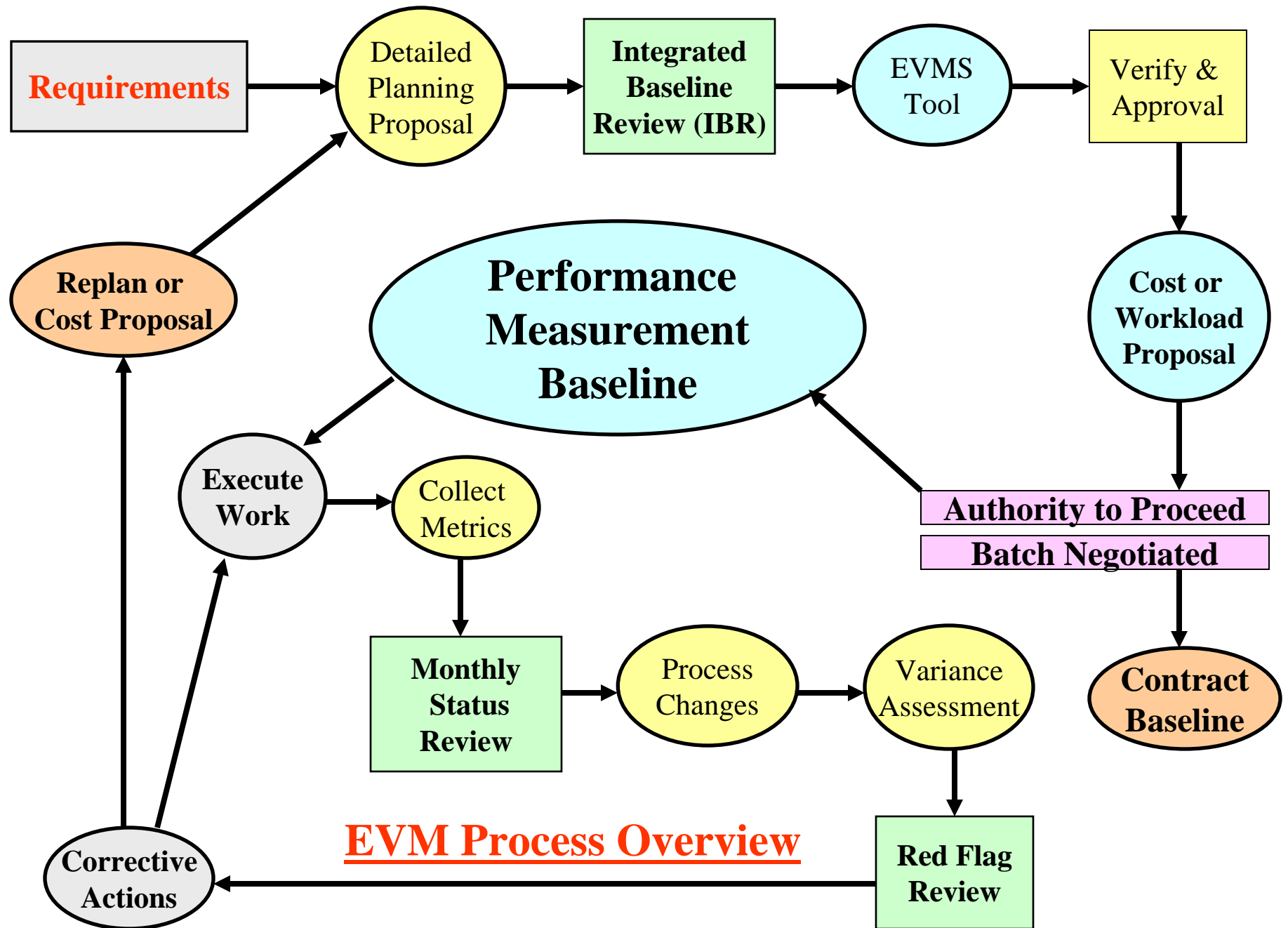
- Proposed in FY04-15 contract bid
- Our challenge....
 - Implement EVM on all jobs “enterprise-wide”
 - Integrate varied tracking/reporting methods for Enterprise Reporting
- Our response...
 - Designed and implemented an EVMS
 - Thru lot of hard work met a major deliverable
 - Made EVM performance a KPI for Award Fee

EVM Implementation Tasks for FY04



EVMS

- Process(es)
 - Project Planning & Documentation
 - Monthly Project Statusing
 - Baseline Configuration Management
- Tool
 - Excel EVMS
 - Matrix One software system
- People
 - Performance Measurement/Project Control organization
 - Project control officer (PCO) role
 - Emphasizing role of project manager

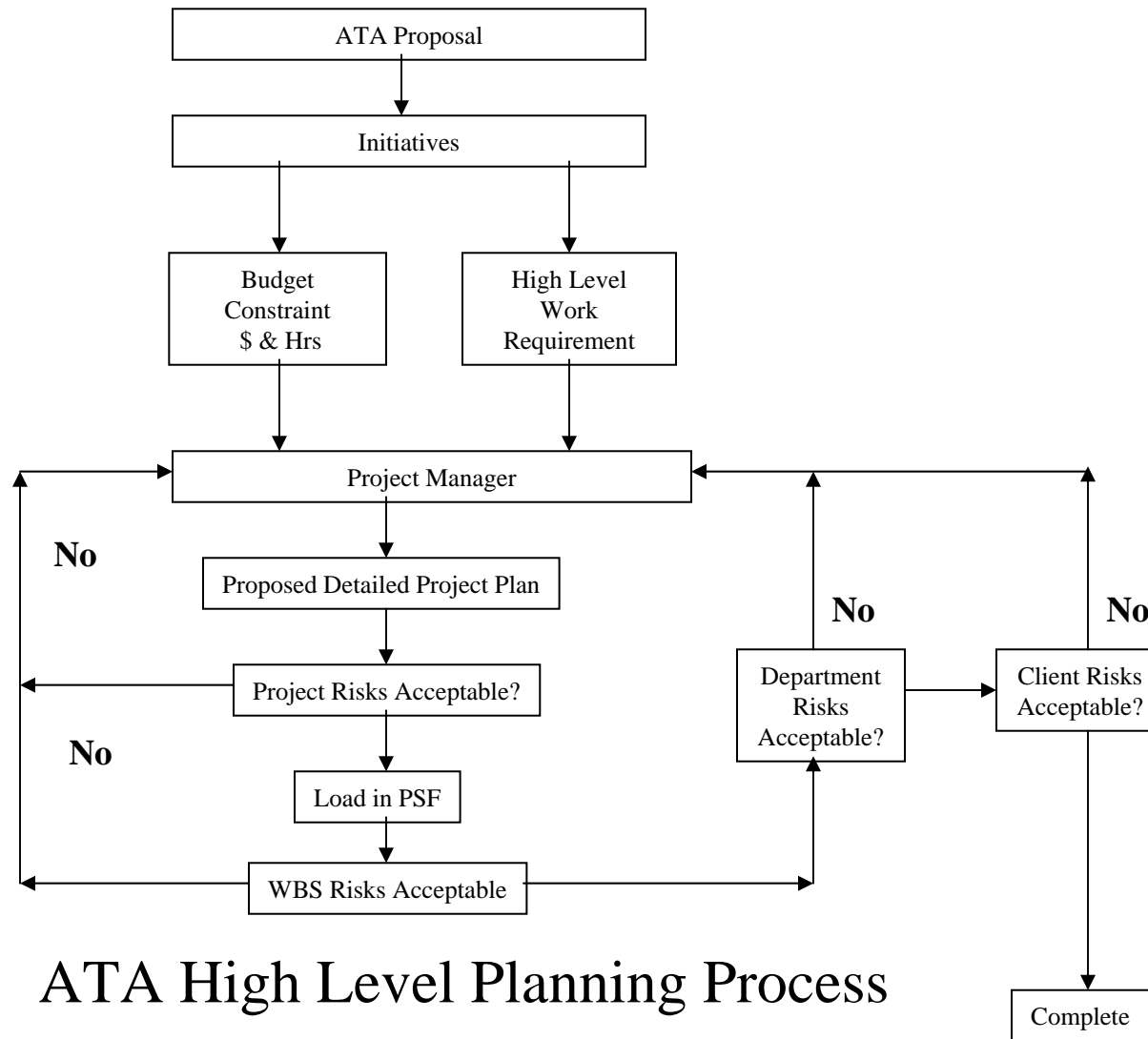


Detailed Planning

- Preplanning
 - Must understand requirements...the work to be done
 - Must communicate initiatives and constraints
- Planning
 - Must tie quantified requirements to budget via BOE
 - Must implement/reflect initiatives
 - Must address EV techniques to be used
 - Plans must be executable with acceptable risks
 - Document
- Reconciliation
 - Process to resolve project-level conflicts where requirements and budget don't match
- Management involvement in all phases



Detailed Planning



ATA High Level Planning Process

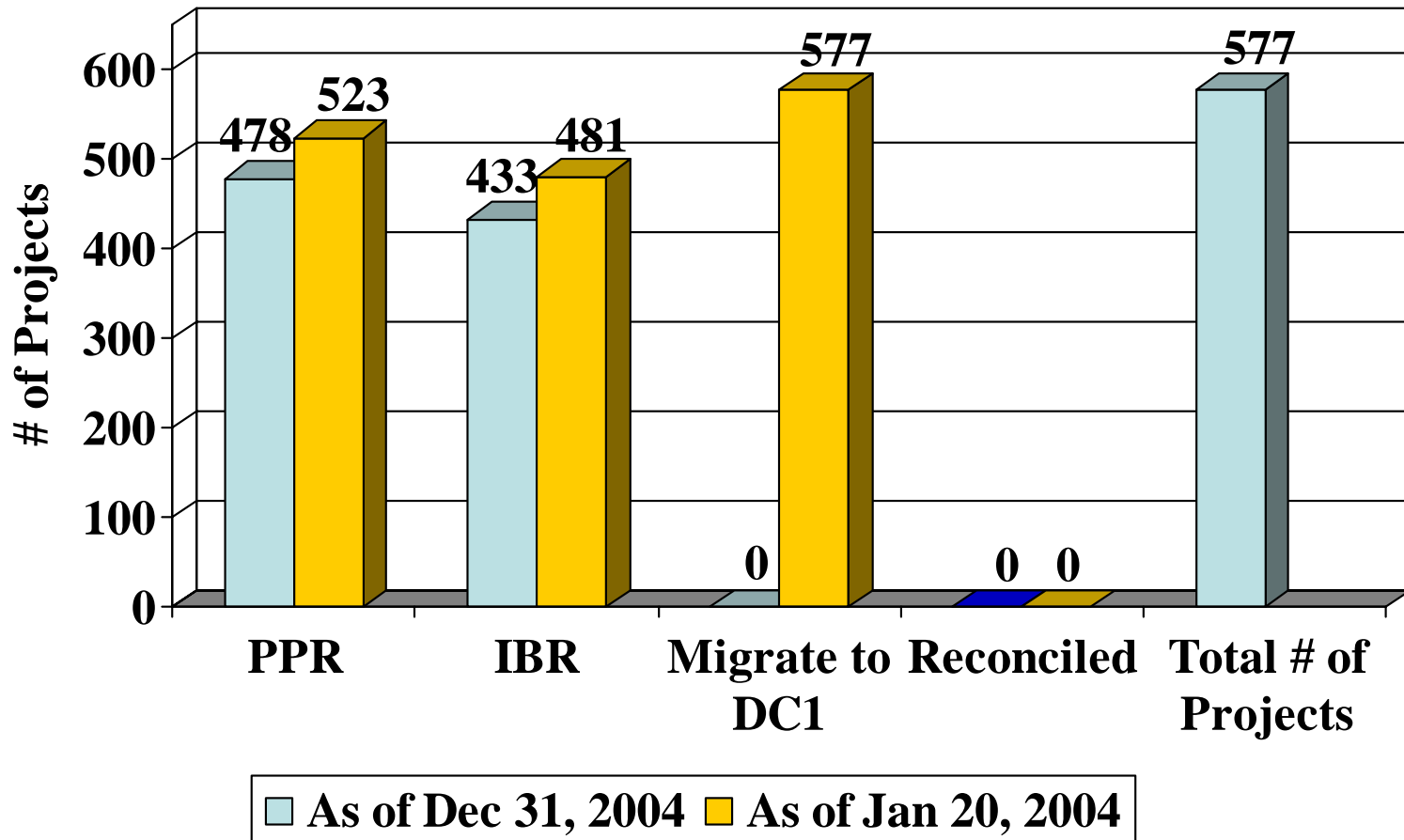
Plan Validation

Integrated Baseline Review (IBR)

- Independent validation of the plan before it becomes the baseline in the accounting system
- Formal (structured) review process
- Formal approval process

“Don’t let garbage into your system”

Detailed Planning Status



Do You Have Enough People? Planned in Right Place?



- When you assess your CPI in terms of hours, how do the authorized resources for remaining work compare with

Planned Resources *

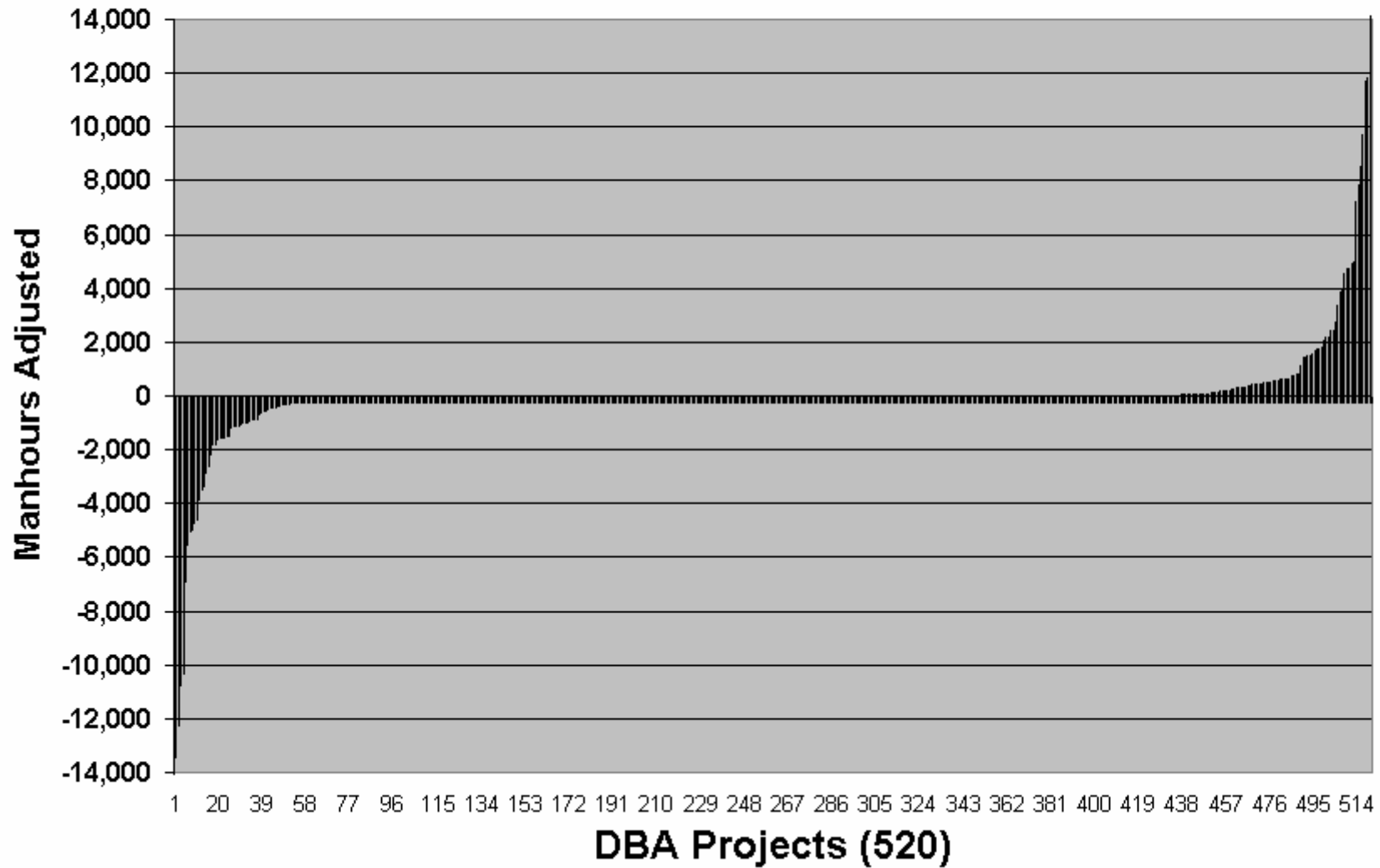
CPI

*Budgeted Resources for remaining work

- Is your estimate to complete (ETC) in your EVMS consistent with this?

Project Adjustments as a Result of Detailed Planning

Delta DC1(PMB) - WL(REV 2)



Monthly **Status** Reviews

- Determine earned value for work performed
- Estimate the quantity of remaining work
- Estimate the effort to complete the remaining work
- Document the current schedule
- Update the staffing and spending forecast
- Identify any work in the baseline that will not be accomplished in the current FY

“Mechanism for validating Manager’s BCWPs and EACs”

Monthly **Red Flag** Reviews

- Understand and document the Cause of the variance(s)
- Determine the Impact of the variance(s)
- Develop and document a Corrective Action plan (if necessary)

“Facilitates Management by Exception”

Baseline Management

- Uses of Different Baselines
- Categories of Changes
- Baselines and PeopleSoft Financials
- Triggers That Initiate Change
- Detailed Flows

Baselines

- **Performance Measurement Baseline (PMB)**
 - Earned Value calculated against PMB
 - Variance Documentation (Schedule, Cost)
 - Basis for Project Management Reviews (PMR)
 - Business rules for managing change follow EIA Standard 748-A and ACS Policy (TBD)
- **Contract Baseline (CB)**
 - Basis for Financial Status Review
 - Business rules for managing change are consistent with standard accounting practices
- **Operating Plan (OPLAN)**
 - Current working plan for completing remaining work
 - Basis for EAC
 - Resides in EVMS Tool

“Requirement to reconcile PMB and CB”

Baseline Change Categories

- PMB Categories
 - Revisions (Administrative Errors)
 - Requirements Change (Scope)
 - Replans (Internal Rescheduling)
 - No Cost Change (WBS or BPAC)
- CB Categories
 - Revisions
 - Requirements Change
 - Funding Only Change (Squaring the Corners)

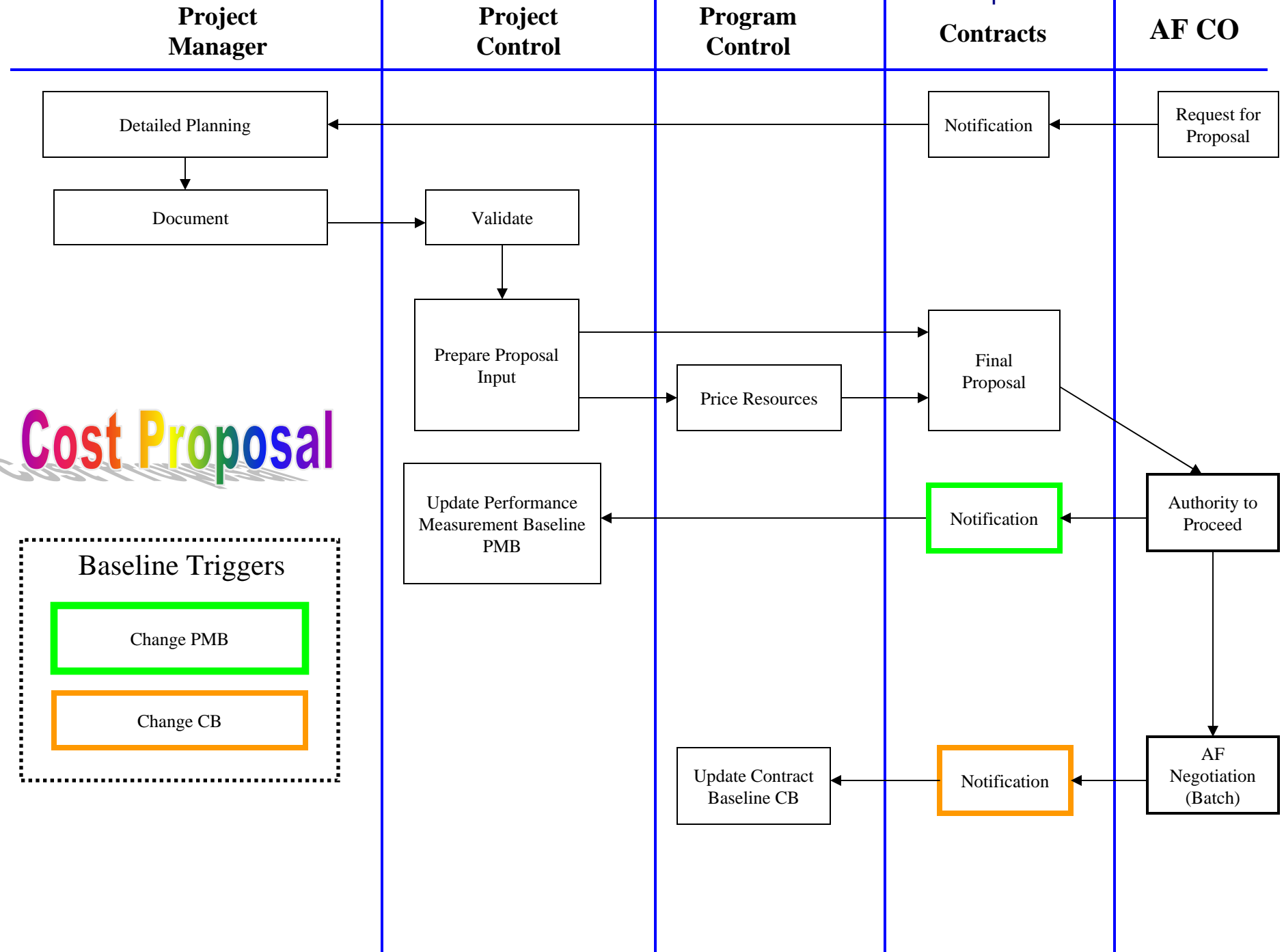
Official PeopleSoft Baselines

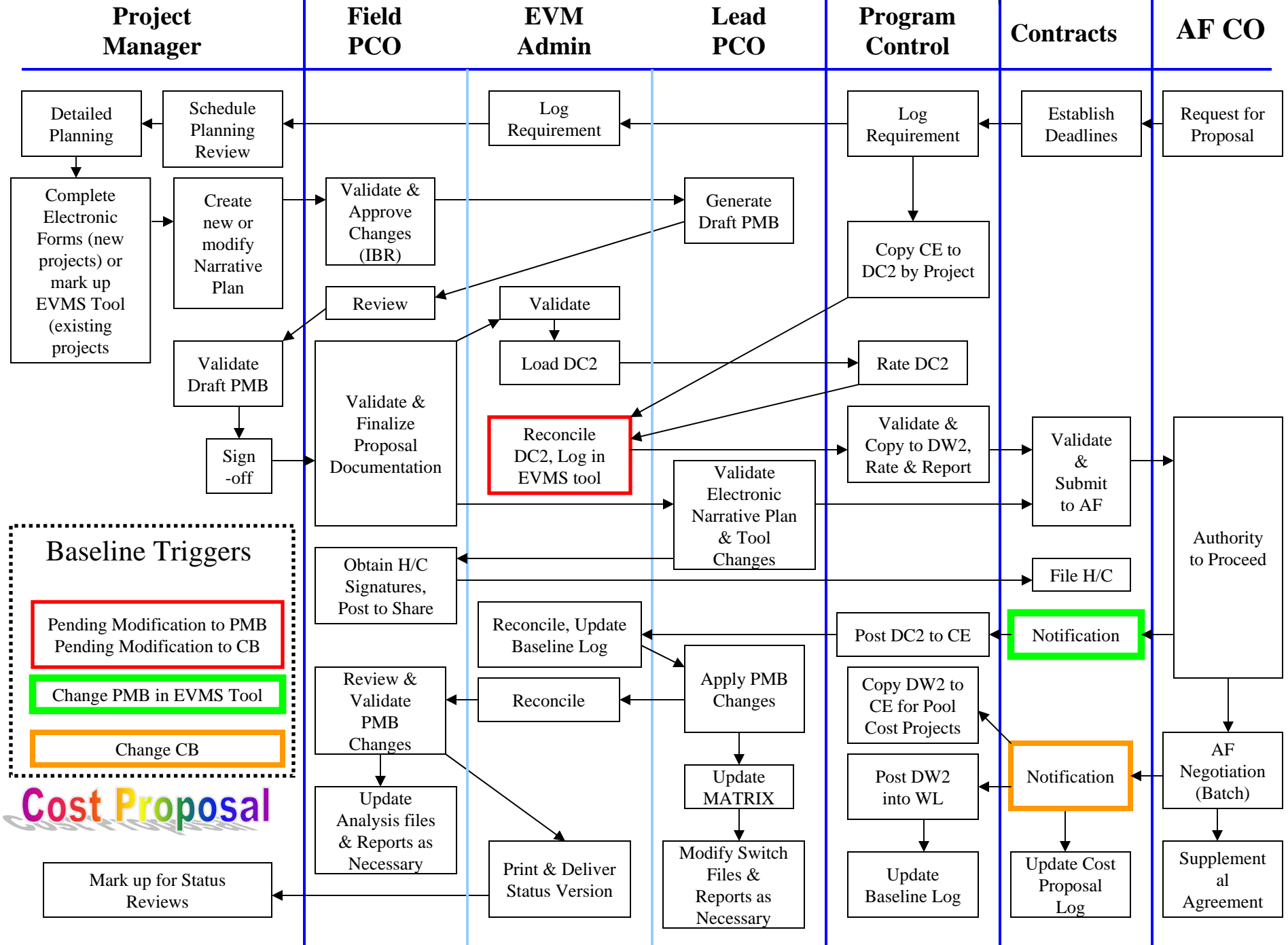
- PMB
 - Draft Cost Estimate (**DC2**)
 - Cost Estimate (**CE**)
- CB
 - Draft Workload Estimate (**DW2**)
 - Workload Estimate (**WL**)

“Can Use PeopleSoft to Track Spending”

Example Process Flows

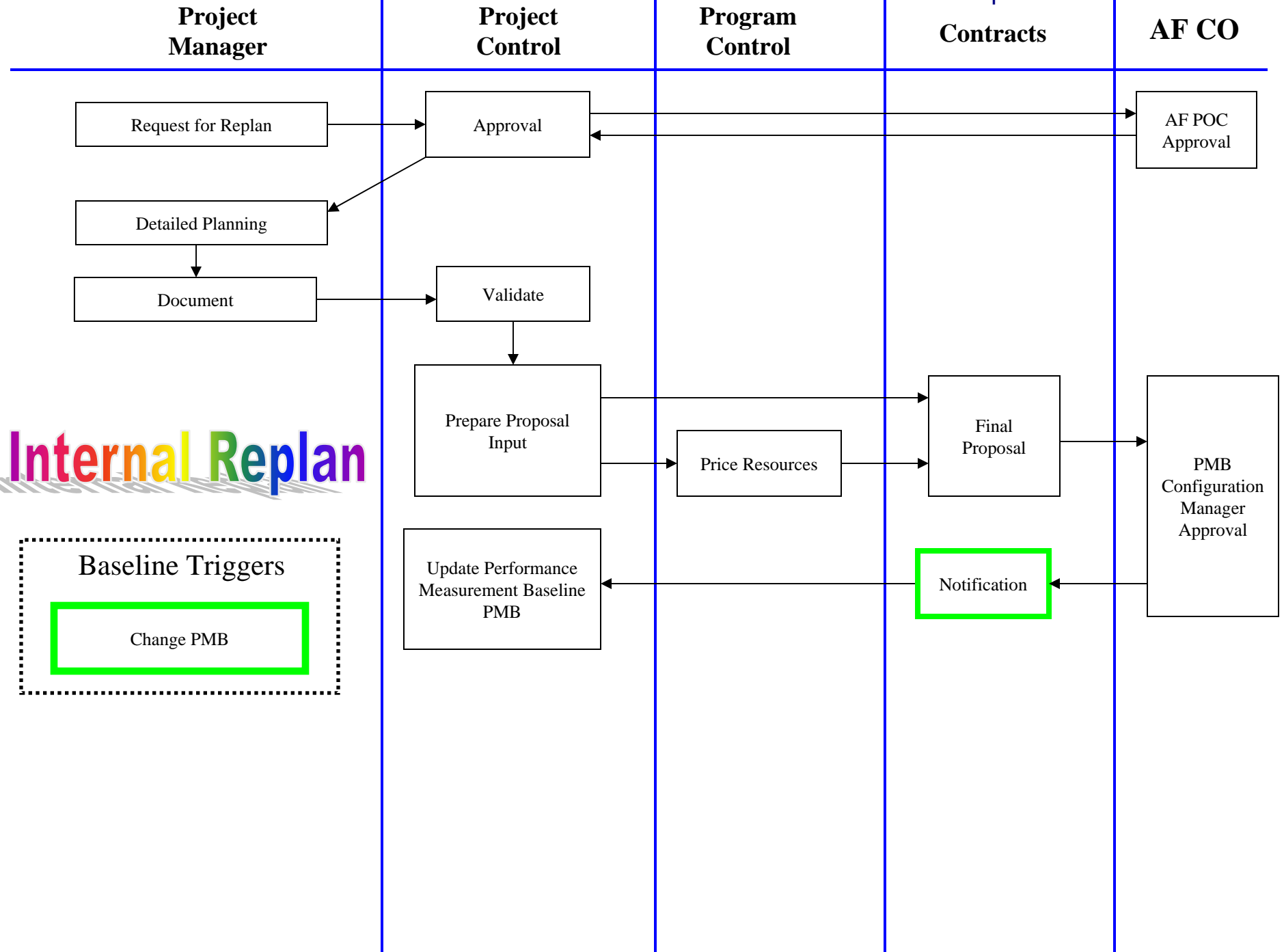
- Cost Proposal
- Internal Replan
- Funding Only Change





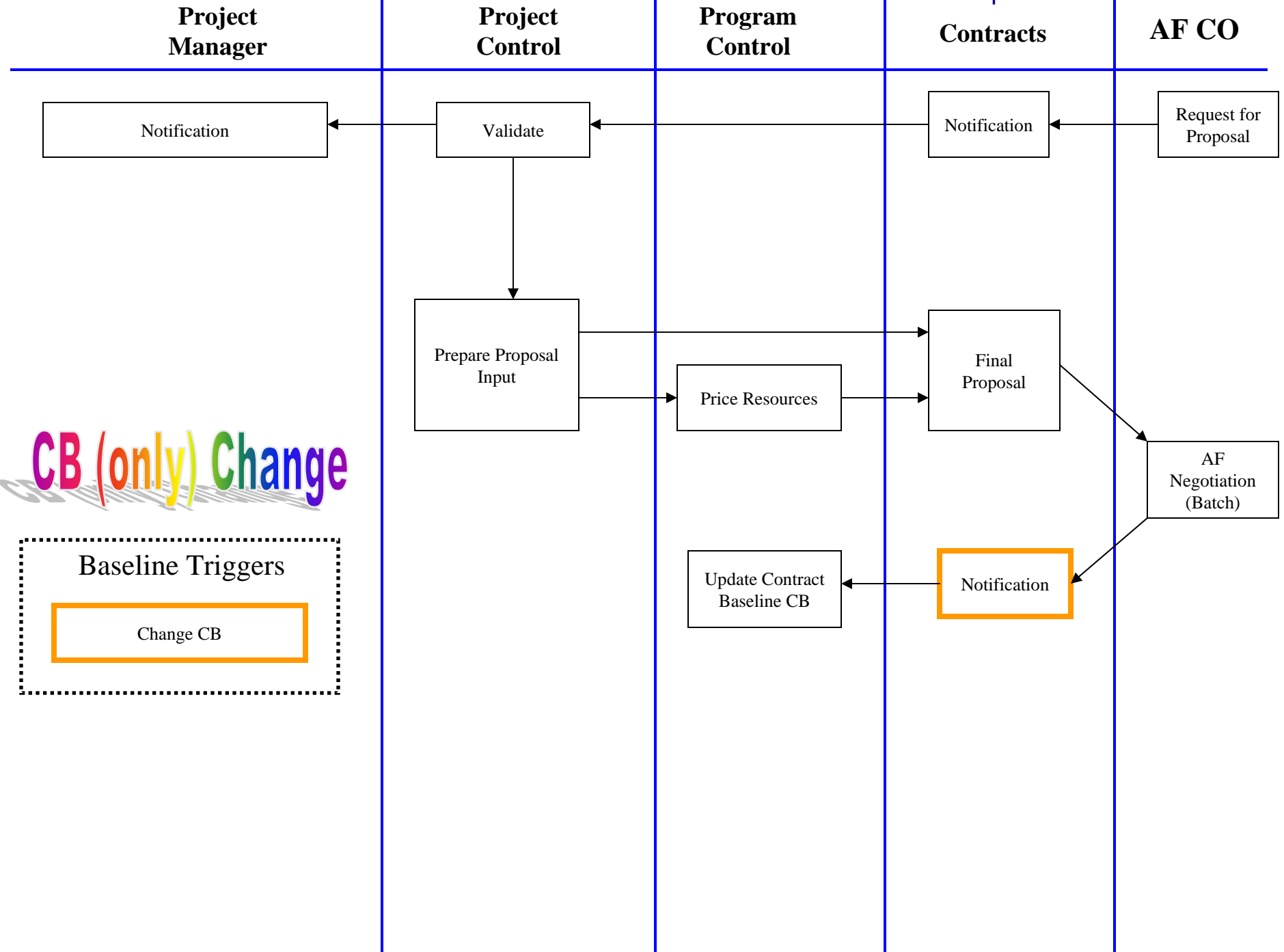
Internal Replan

- Modifies schedule or work requirements without changing resource requirements at the project level



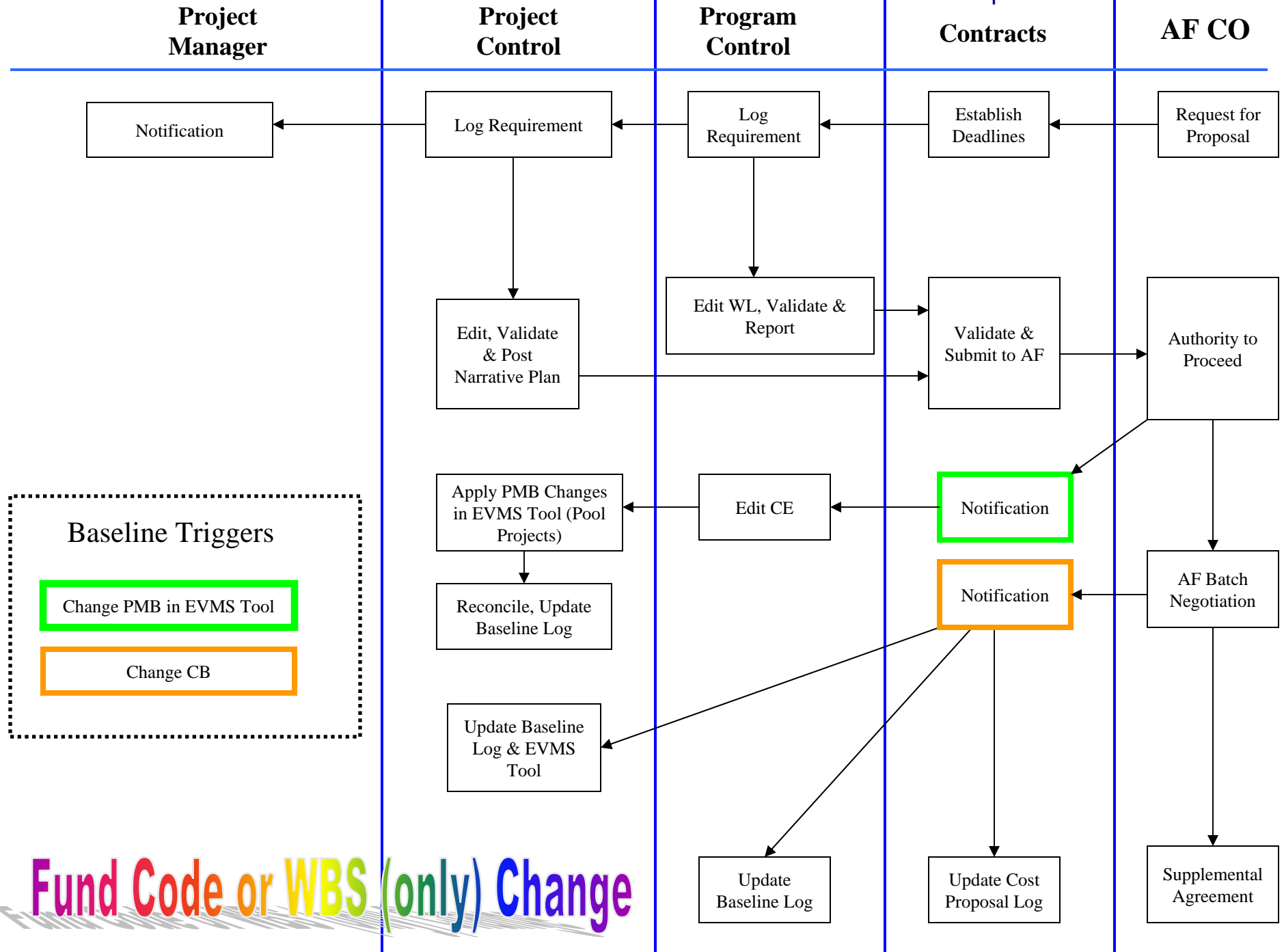
CB (Funding Only) Change

- Modifies budget for completed work
- Typically used for removing excess funds from a project (squaring the corners)



Fund/Program Code Change

- Changes BPAC, WBS, AFPOC, Project Manager, etc. etc
- No change to \$, Hours, or Schedules



Initial Success(es)

- Wing CC very energized (Old Acq hand)
 - Allowed me to write EVM into the RFP
 - Let me brief concept at Industry Days
- Initial steps to implement went well
- Initial EVMS info intuitively accurate
- Accuracy was both good and bad

- Gov't Managers disliked EVM

Ultimate Failure

- New Wing Commander (no Acq experience)
 - EVM “doesn’t scratch my itch”
 - Operational savior of acq site
- Not interested in details of T&E
- Gov’t Managers talked him out of EVM
 - Better to let managers manage the “proven” way
- Deleted EVM requirement in the contract
- CC dis-allowed EVM talk in his presence

Summary

- Application of EVM to “Big Iron” facility
 - Approx 1,000 annual projects
 - Large task
- Deconflicting lots of stuff
 - Engineers and their toys vis-à-vis money
 - Personnel double/triple allocated
 - Everybody wants the experienced folks
 - Schedule
- Actionable information takes...
Management action/involvement