The New Management Revolution: Integrating Contractor Performance with Agency Budgets

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The New Management Revolution: Integrating Contractor Performance with Agency Budgets

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Outline

- Review - Earned Value Concept
- Acquisition Reform Legislation
- Office of Management & Budget
  - Circular A-11 Part 3
    - Principles of Budgeting for Capital Asset Acquisitions
    - Capital Programming Guide
- Relationships & Summary
Before we get into all the details let’s talk basics

**The Punchline**

- General consensus:

  *The Federal Government needs to better manage* the planning, budgeting and acquisition of fixed assets, including information technology.
Purpose of Earned Value: Effective Management

Contract: 4 miles of railroad track in 4 weeks for $4 million.
Status: After 3 weeks, only $2 million has been spent.
Question: How are you doing (and how do you know)? *

Spend Plan
» Planned $1M/week
» Planned $3M to date
» Actual cost $2M
» $1M favorable???

Earned Value
» Planned $1M/week
» Planned $3M to date
» Earned $1M (66% behind)
» Actual $2M (100% overrun)
» EAC $8M, 8 weeks late

* Source: GAO Report May 97
Earned Value: Integrated Management

- Fully Funded Programs
- Cost
- EVMS
- Schedule
- Technical
Integrated Management

Program “Dictionary” (defines the program)

Work Breakdown Structure

Aircraft System

Air Vehicle

Propulsion

Airframe

Systems Engrg/Program Mgmnt

Air Vehicle Applications S/W

System Test & Evaluation
Budgeted Cost for Work Scheduled (what you planned to do)

Control Account Budget = 100
BCWS = 38

* 50-50 method used for work in progress
**Earned Value Concept**

*Budgeted Cost for Work Performed (Earned Value-what you did)*

- **Control Account Budget = 100**
- **BCWS = 38**
- **BCWP = 33**
- **“Schedule Variance” = -5**

* 50-50 method used for work in process
**Earned Value Concept**

*Actual Cost of Work Performed (what it cost to do what you did)*

<table>
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<tr>
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<tr>
<td>Budgeted Cost for Work Performed (BCWP)</td>
<td>33</td>
</tr>
<tr>
<td>Budgeted Cost for Work Scheduled (BCWS)</td>
<td>38</td>
</tr>
</tbody>
</table>

**Schedule Variance**: -5

**Cost Variance**: -4

Control Account Budget = 100

Estimated Cost at Completion = ?
The Earned Value Concept
Summary
Earned Value Management: Origins

1960s -
• Complex Programs
• Multiple Customers
• Need for Improved Management

PERT COST
• Resource-loaded networks
• 10 versions by ‘64

Industry Issues:
• “How-to-manage”
• Inefficiency
Earned Value Management: Origins (cont’d)

Industry Best Practices

1967: DoD Instruction 7000.2 Cost/Schedule Control Systems Criteria (C/SCSC)

Criterion-based Management
• Brief statements of attributes
• Not “how-to”
• Not a system
• Minimum acceptable standard

1997: DoD Regulation 5000.2-R Earned Value Management Systems (EVMS) Criteria

Government Requirements
Earned Value Policy:
DoD 5000.2-R, Appendix VI

● 32 Criteria:
  » Organization
  » Planning, Scheduling & Budgeting
  » Accounting Considerations
  » Analysis & Management Reports
  » Revisions & Data Maintenance

● Mirrors Industry Guidelines
DoD Earned Value Policy

- Reaffirmed-
  » ADL Study - 1984
  » TQM Report - 1991
  » DoDI 5000.2 - 1991
  » DoDIG Report - 1993
  » C&L/TASC - 1994
  » DoD 5000.2-R - 1996
  » OMB Circular A-11 Part 3 - 1996
  » GAO Report - 1997
Reform Legislation

- Government Performance and Results Act (GPRA), 1993
- Federal Acquisition Streamlining Act (FASA), (Title V), 1994
- Information Technology Management Reform Act (ITMRA), 1996
  » “Clinger/Cohen”
Purpose of the Acts

- **GPRA**: Provides for establishment and evaluation of performance standards and goals for expenditure of the Federal budget.
- **FASA(V)**: Requires reporting of cost, schedule and performance goals for asset management and evaluation of progress.
- **ITMRA**: Requires reporting of performance in information systems acquisition.
Circular A-11, Part 3: Planning, Budgeting & Acquisition of Fixed Assets

So what is this circular and what impact DOES it have?

Note: “Fixed Asset” has since changed to “Capital Asset”
A-11 Part 3 Objectives

It is designed to

• provide guidance and identify requirements for planning, budgeting and acquisition management of fixed assets

• unify guidance for the collection of agency information that FASA and ITMRA require OMB to report to Congress

• ensure that acquisition plans support the mission statements, performance goals and plans developed per GPRA
Capital Assets: Definition

- Capital assets are
  - Land, Structures, Equipment
  - Intellectual property (including software)
  - Useful life of two years or more
  - Additions, improvements, replacements

- Capital assets may be acquired by
  - Purchase, construction, manufacture
  - Lease-purchase or other capital lease
  - Operating lease
Capital Assets: Examples

- Office buildings
- Hospitals, schools
- Laboratories
- Prisons
- Dams, power plants
- Furniture, elevators
- Printing presses
- Motor vehicles
- Airplanes, ships
- Satellites
- Space exploration equipment
- Info. technology hardware/software
- DoD weapons systems
- etc.....
A-11 also addresses issues regarding full funding, a new idea for some agencies.
Principles of Budgeting for Capital Asset Acquisitions

- **Planning**
  - Supports core mission
  - ROI > alternative uses of public resources
  - Risk is understood

- **Costs & Benefits**
  - Including life-cycle
  - *Cost/Sched/Perf goals measurable using EVMS*

- **Principles of Financing**
  - Fully funded

- **Risk Management**
  - Analyzed & managed
  - Appropriate allocation
    - Government
    - Contractor
  - *Controlled & monitored using EVMS*
  - Formal review process
Performance Measures

Strategic Goals
• Mission
• Long-term Goals

Performance Goals
• Annual goals
• Specific element of a strategic goal

Performance Indicators
• A measure of progress toward a performance goal
  - quantity
  - quality
  - timeliness
  - cost
  - outcome

“Three Pesky Questions:”
1. Is function tied to agency mission?
2. Could another entity do it better?
3. Have processes been reengineered to give best performance at lowest cost?
Performance-based Management: The Key?

- Shift focus to program execution
- Provide for regular and systematic measurement of program performance compared to goals
- Emphasize results (outcomes and outputs)
Baseline Goals

- Cost and Schedule Goals
- Performance Goals

So what gets reported to OMB?
Cost and Schedule Goals

- **Cost**
  - Total project cost
  - Timephased by stage

- **Schedule**
  - Total duration
  - Significant interim milestones

Nothing new to DoD here, but...
Cost and Schedule Variance Reporting

- If cost or schedule is 10% or more above or behind plan, respectively
  - Analyze variances
  - Discuss corrective actions
  - Propose revisions if goals can’t be met
Performance Goals

- These should clearly define the technical or other results expected.
- Wherever possible, they should be quantitative.
- Describe the probability of accomplishment, i.e. what is the degree of risk.
Performance Goal Variance Reporting

If there is *any* deviation from the baseline plan for performance goals:
- Analyze variances
- Discuss corrective actions
- Propose revisions if goals can’t be met

* 10% for DoD
Management Alternatives

- Find the resources
- Adjust program to stay within resources
  - Must meet baseline goals unless OMB approves revisions
  - Proposed revisions must be justified, with an estimated probability of achievement
- Cancel?
A-11 sees a key role for EVMS

- A-11 requires a description of the performance-based management system used by contractors
- Asks whether it is an EVMS system and, if not
- Explain how the system provides measures of accomplishment vs planned schedule and actual cost
Earned Value and A-11, Part 3

- Earned Value from EVMS
- Cost & Schedule Goals
- Performance Goals
- Qualitative
- Quantitative

What about this?
The Next Steps

- OMB Capital Programming Guide
  - Basic reference
  - Replaces OMB A-109
  - Not prescriptive
- OMB training
- Continue Cooperation
  - American Project Management Forum
- Reporting/contract types?
In Conclusion

- A-11 Part 3 officially extends DoD-pioneered performance measurement to all agencies - and applies to DoD
- It effectively mandates Earned Value Management as the basis for performance-based management systems
- Earned Value Home Page: http://www.acq.osd.mil/pm

So, maybe there is something here for me.