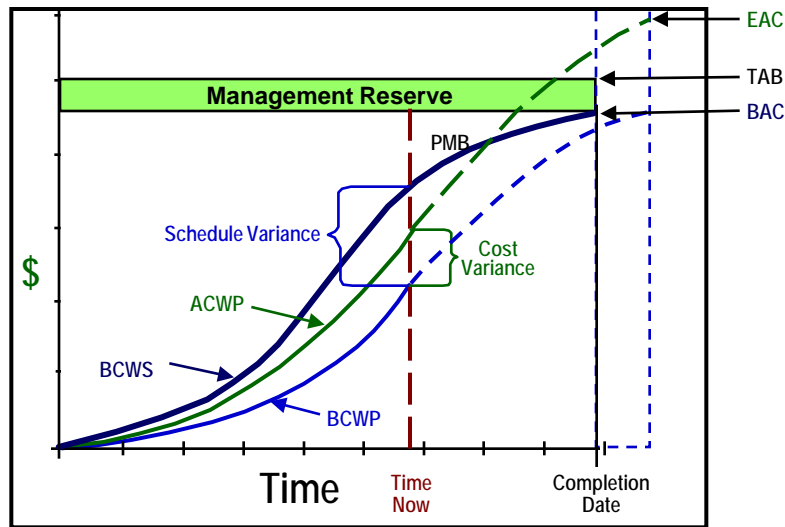




EARNED VALUE MANAGEMENT

'GOLD CARD'



VARIANCES Favorable is Positive, Unfavorable is Negative

Cost Variance $CV = BCWP - ACWP$ $CV \% = (CV / BCWP) * 100$
 Schedule Variance $SV = BCWP - BCWS$ $SV \% = (SV / BCWS) * 100$
 Variance at Completion $VAC = BAC - EAC$

OVERALL STATUS

% Schedule = $(BCWS_{CUM} / BAC) * 100$
 % Complete = $(BCWP_{CUM} / BAC) * 100$
 % Spent = $(ACWP_{CUM} / BAC) * 100$

DoD TRIPWIRE METRICS

tw Cost Efficiency $CPI = BCWP / ACWP$ Favorable is > 1.0, Unfavorable is < 1.0
tw Schedule Efficiency $SPI = BCWP / BCWS$ Favorable is > 1.0, Unfavorable is < 1.0

tw BASILINE EXECUTION INDEX (BEI) = A Schedule Metric

$BEI = \text{Tasks with Actual Finish Date} / (\# \text{ of Baseline Tasks Scheduled to Finish Prior to Status Date} + \text{Tasks Missing Baseline Start or Finish Date})$

tw CRITICAL PATH LENGTH INDEX (CPLI) = A Schedule Metric

$CPLI = (\text{CP Length}_{(\text{Time Now To Contract End})} + \text{Total Float}_{(\text{To Contract End Baseline Finish})}) / \text{CP Length}$

Hit / Miss = Month's Tasks Completed ON or AHEAD / Month's Tasks Scheduled to Complete

ESTIMATE AT COMPLETION (EAC) = Actuals to Date + [(Remaining Work)/(Performance Factor)]

$EAC_{CPI} = ACWP_{CUM} + [(BAC - BCWP_{CUM}) / CPI_{CUM}]$
 $= BAC / CPI_{CUM}$
 $EAC_{Composite} = ACWP_{CUM} + [(BAC - BCWP_{CUM}) / (CPI_{CUM} * SPI_{CUM})]$

\$ TO COMPLETE PERFORMANCE INDEX (TCPI)

$TCPI_{EAC} = \text{Work Remaining} / \text{Cost Remaining} = (BAC - BCWP_{CUM}) / (EAC - ACWP_{CUM})$

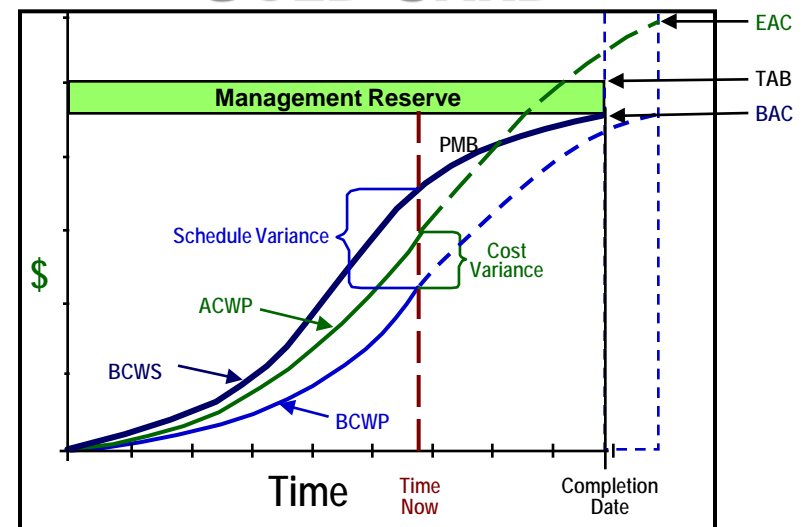
To Determine a Contract Level TCPI or EAC; You May Replace BAC with TAB

\$ To Determine the TCPI_{BAC or LRE} Replace EAC with BAC or LRE



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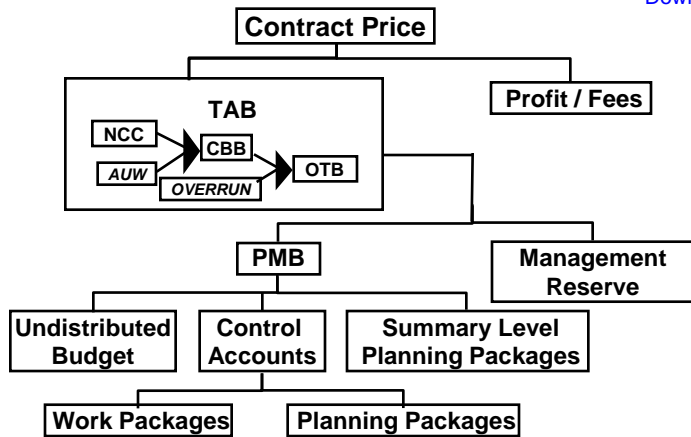
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To Determine a Contract Level TCPI or EAC; You May Replace BAC with TAB

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**ACRONYMS**

ACWP Actual Cost of Work Performed	Cost of work accomplished	= ACTUAL COST
AUW Authorized Unpriced Work	Work contractually approved, but not yet negotiated / definitized	
BAC Budget At Completion	Total budget for total contract thru any given level	
BCWP Budgeted Cost of Work Performed	Value of work accomplished	= EARNED VALUE
BCWS Budgeted Cost of Work Scheduled	Value of work planned to be accomplished	= PLANNED VALUE
CA Control Account	Lowest CWBS element assigned to a single focal point to plan & control scope / schedule / budget	
CBB Contract Budget Base	Sum of NCC & AUW	
EAC Estimate At Completion	Estimate of total Cost for total contract thru any given level may be generated by Ktr, PMO, DCMA, etc. = $EAC_{Ktr} / PMO / DCMA$	
LRE Latest Revised Estimate	Ktr's EAC or EAC_{Ktr}	
MR Management Reserve	Budget withheld by Ktr PM for unknowns / risk management	
NCC Negotiated Contract Cost	Contract Price Minus profit or fee(s)	
OTB Over Target Baseline	Sum of CBB & recognized overrun	
PAC Price At Completion	NCC Plus Profit or Fee(s)	
PMB Performance Measurement Baseline	Contract time-phased budget plan	
PP Planning Package	Far-term CA activities not yet defined into WPs	
SLPP Summary Level Planning Package	Far-term activities not yet defined into CAs	
TAB Total Allocated Budget	Sum of all budgets for work on contract = NCC, CBB, or OTB	
TCPI To Complete Performance Index	Efficiency needed from 'time now' to achieve a BAC, EAC, or LRE	
UB Undistributed Budget	Broadly defined activities not yet distributed to CAs	
WP Work Package	Near-term, detail-planned activities within a CA	

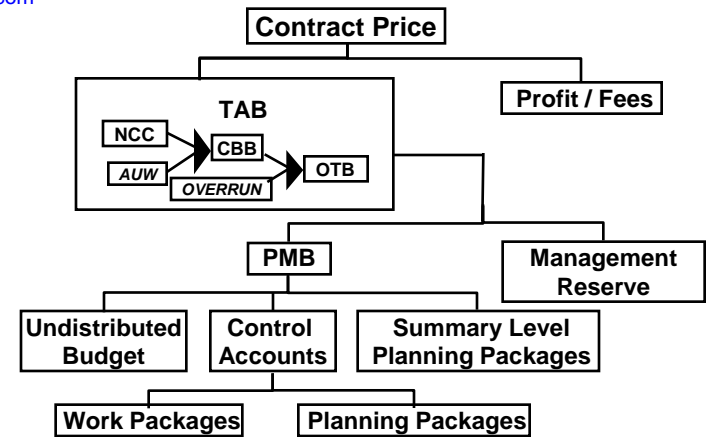
EVM POLICY: DoDI 5000.02, Encl 4, Table 5. EVMS in accordance with ANSI/EIA-748 is required for cost or incentive contracts, subcontracts, intra-government work agreements, & other agreements valued \geq \$20M (Then-Yr \$). EVMS contracts \geq \$50M (TY \$) require that the EVM system be formally validated by the cognizant contracting officer. Additional Guidance in Defense Acquisition Guidebook & Earned Value Management Implementation Guide (EVMIG). EVMS is discouraged on Firm-Fixed Price & Time & Material Contracts; & LOE activities regardless of cost.

EVM CONTRACTING REQUIREMENTS:

FAR EVM Clauses NOT For DoD	- 52.234-2 for Solicitation = Pre-Award IBR or - 52.234-3 = Post Award IBR - 52.234-4 for Solicitation & Contract
For DoD \geq \$20M DFARS CLAUSES	- 252.234-7001 "NOTICE OF EVMS" FOR SOLICITATIONS - 252.234-7002 "EVMS" FOR SOLICITATIONS & CONTRACTS
CONTRACT PERFORMANCE REPORT	- DI-MGMT-81466A* 5 FORMATS = WBS, ORGANIZATION, BASELINE, STAFFING, EXPLANATION
INTEGRATED MASTER SCHEDULE	- DI-MGMT-81650* MANDATORY FOR DoD EVMS CONTRACTS
INTEGRATED BASELINE REVIEW	- MANDATORY FOR ALL EVMS CONTRACTS

* See the EVMIG for CPR & IMS tailoring guidance

EVM Home Page = <https://acc.dau.mil/evm>
eMail Address: EVM.dau@dau.mil
Revised September 2010

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