| Varia  | Inces 🗸 Posi  | itive (+) 🛛 Negative (–)  |    |
|--|---|---|----|
| Cost<br>Varianc                                |   | BCWP – ACWP<br>(CV / BCWP) * 100  |    |
| Schedu   | ıle SV =  | BCWP – BCWS   |    |
| Varianc<br>Varianc                             |   | (SV / BCWS) * 100<br>BAC – EAC  |    |
| Comple   |   | (VAC / BAC) * 100   |    |
| Perfo  | ormance (   | > 1.0 🛛 😵 < 1.0   |    |
| Cost Pe  | erformance C  | CPI = BCWP / ACWP   |    |
| Schedu   | le Performance S  | SPI = BCWP / BCWS   |    |
| Over   | all Status  |   | \$ |
| % Sche   | edule = <b>(BCWS<sub>cu</sub></b>   | / BAC) * 100  | •  |
|  | plete = (BCWP <sub>cu</sub>   |   |    |
| % Sper   | nt = ( <b>ACWP</b> <sub>cu</sub>  | <sub>м</sub> / <b>BAC)</b> * 100  |    |
| Base   | line Execut   | ion Index (BEI)   |    |
| & Hit  | Task %  | · · ·   |    |
|  |   |   |    |
| DEL  | Total Tasks Co  | mpleted   |    |
| BEI =  | (Total Tasks wit  | th Baseline Finish On   |    |
| BEI =  | (Total Tasks wit  | ·   |    |
| Hit =  | (Total Tasks wit<br>or Prior to Curr<br>100 * (Tasks Cor  | th Baseline Finish On<br>ent Report Period)   |    |
|  | (Total Tasks with<br>or Prior to Curr<br>100 * (Tasks Col<br>PRIOR to F<br>Tasks Bas  | th Baseline Finish On<br>ent Report Period)<br>mpleted ON or<br>Baseline Finish /<br>elined to Finish   |    |
| Hit =<br>Task %                                | (Total Tasks wit<br>or Prior to Curr<br>100 * (Tasks Col<br>PRIOR to B<br>Tasks Bas<br>within Cur   | th Baseline Finish On<br>ent Report Period)<br>mpleted ON or<br>Baseline Finish /<br>elined to Finish<br>rent Report Period)  |    |
| Hit =<br>Task %                                | (Total Tasks wit<br>or Prior to Curr<br>100 * (Tasks Con<br>PRIOR to F<br>Tasks Bas<br>within Cur   | th Baseline Finish On<br>ent Report Period)<br>mpleted ON or<br>Baseline Finish /<br>elined to Finish<br>rent Report Period)  |    |
| Hit =<br>Task %<br>Estim<br>Actuals            | (Total Tasks wit<br>or Prior to Curr<br>100 * (Tasks Con<br>PRIOR to F<br>Tasks Bas<br>within Cur   | th Baseline Finish On<br>ent Report Period)<br>mpleted ON or<br>Baseline Finish /<br>elined to Finish<br>rent Report Period)<br><b>pletion =</b><br>maining Work) /                                       |    |
| Hit =<br>Task %<br>Estin<br>Actuals<br>(Perfor | (Total Tasks with<br>or Prior to Curre<br>100 * (Tasks Con<br>PRIOR to F<br>Tasks Bas<br>within Cur<br>nate @ Com<br>s to date + [ (Re<br>mance Factor) | th Baseline Finish On<br>ent Report Period)<br>mpleted ON or<br>Baseline Finish /<br>elined to Finish<br>rent Report Period)<br><b>opletion =</b><br>maining Work) /<br>[<br>(BAC – BCWP <sub>CUM</sub> ) |    |
| Hit =<br>Task %<br>Estim<br>Actuals            | (Total Tasks with<br>or Prior to Curre<br>100 * (Tasks Con<br>PRIOR to F<br>Tasks Bas<br>within Cur<br>nate @ Com<br>s to date + [ (Re<br>mance Factor) | th Baseline Finish On<br>ent Report Period)<br>mpleted ON or<br>Baseline Finish /<br>elined to Finish<br>rent Report Period)<br><b>pletion =</b><br>maining Work) /                                       |    |

$$EAC_{Composite} = ACWP_{CUM} + \frac{(BAC - BCWP_{CUM})}{(CPI_{CUM} * SPI_{CUM})}$$

### To Complete Performance Index (TCPI) § #

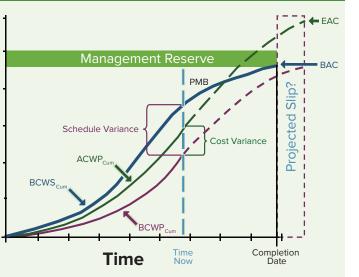
 $TCPI_{Target} = Work \& Cost = \frac{(BAC - BCWP_{CUM})}{(Target - ACWP_{CUM})}$ 

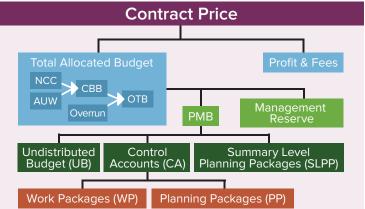
§ To Determine the TCPI for BAC, LRE, or EAC Substitute TARGET with BAC, LRE, or EAC

# To Determine the Contract Level TCPI for EAC, You May Replace BAC with TAB

# **Beginners Guide to Earned Value Management**

## **Total Allocated Budget**





#### Acronyms

| ACWP | Actual Cost of Work Performed<br>Cost actually incurred in accomplishing work performed = ACTUAL COST  |
|------|--|
| AUW  | Authorized Unpriced Work<br>Work contractually approved, but not yet negotiated / definitized  |
| BAC  | Budget At Completion<br>Total budget for total contract thru any given level   |
| BCWP | Budgeted Cost for Work Performed<br>Value of completed work in terms of the work's assigned budget = EARNED VALUE                                |
| BCWS | Budgeted Cost for Work Scheduled<br>Time-phased Budget Plan for work currently scheduled = PLANNED VALUE   |
| CA   | Control Account<br>Lowest CWBS element assigned to a single focal point to plan &<br>control scope / schedule / budget                           |
| СВВ  | Contract Budget Base<br>Sum of NCC & AUW   |
| EAC  | Estimate At Completion<br>Estimate of total Cost for total contract thru any given level generated by Ktr, PMO,<br>DCMA, etc. = EAC KRT/PMO/DCMA |
| LRE  | Latest Revised Estimate<br>Ktr's EAC or EAC <sub>xx</sub>  |
| MR   | Management Reserve<br>Budget withheld by Ktr PM for unknowns / risk management   |
| NCC  | Negotiated Contract Cost<br>Contract Price Minus profit or fee(s)  |
| отв  | Over Target Baseline<br>Sum of CBB + additional budget approved for remaining work   |
| PAC  | Price At Completion<br>EAC Plus Adjusted Profit or Fee(s)  |
| РМВ  | Performance Measurement Baselines<br>Contract time-phased budget plan  |
| PP   | Planning Package<br>Far-term CA activities not yet defined into WPs  |
| SLPP | Summary Level Planning Package<br>Far-term contract activities not yet defined into CAs  |
| ТАВ  | Total Allocated Budget<br>Sum of all budgets for work on contract = NCC, CBB, or OTB   |
| TCPI | To Complete Performance Index<br>Efficiency needed from 'time now' to achieve a Cost Target = BAC, LRE, or EAC                                   |
| UB   | Undistributed Budget<br>Broadly defined activities not yet distributed to CAs or SLPPs   |
| WP   | Work Package<br>Near-term, detail-planned activities within a CA   |

## EVM Policy: DoDI 5000.02, Enclosure 1. Table 8.

EVMS in accordance with EIA-748 is required for cost or incentive contracts, subcontracts, intra-government work agreements, & other agreements valued  $\geq$  \$20M (TY \$). Contracts  $\geq$  \$100M# (TY \$) require that the EVMS be formally validated by the cognizant contracting officer. \*Class Deviation-Earned Value Management System Threshold (9/1/15) EVM is discouraged on Firm-Fixed Price, Time & Material Contracts, & LOE activities regardless of cost. Refer to the IPMR Implementation Guide for IPMR Tailoring Guidance.

## **DoD's EVM Contracting Requirements**

 
 DFARS Clauses
 252.234-7001 252.234-7002 252.242-7005

 Contract Performance Report
 DI-MGMT-81466A

 Integrated Master Schedule
 DI-MGMT-81650

 Integrated Program Mngt Report
 DI-MGMT-81861\*

 Integrated Baseline Review
 Mandatory for all EVMS contracts

 WBS For Defense Materiel Items
 MIL-STD-881-C
 "NOTICE OF EVMS" FOR SOLICITATIONS "EVMS" FOR SOLICITATIONS & CONTRACTS "CONTRACTOR BUSINESS SYSTEMS" FOR SOLICITATIONS & CONTRACTS 5 FORMATS = WBS, ORGANIZATION, BASELINE, STAFFING, EXPLANATIONS & PROB ANALYSES MANDATORY FOR DOD EVMS CONTRACTS 7 FORMATS = WBS, OBS / IPT, BASELINE, STAFFING, EXPLANATIONS & PROB ANALYSES, IMS, HISTORY / FORECAST COST

> \*Combines & Supersedes DI-MGMT-81466A & 81650; Effective July 1, 2012 Incorporates guidance or standards from the Defense Acquisition University