

A Guide for Obtaining Data to Support Project-Level Earned Value Management (EVM) Analysis and Reporting

(Reporting for Contracts with No EVM Requirements)

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1. Introduction

NASA policy requires the implementation of EVM on projects that meet established parameters and thresholds. In some cases, EVM is applicable to a project but not to a contract. Some examples of this include steady state or Level of Effort (LOE) support contracts, contracts that do not meet the established thresholds for EVM application, Firm Fixed Price (FFP) contracts, and others. This guide will discuss the different data elements required to support project-level EVM analysis and reporting and provide options for obtaining that information on non-EVM contracts.

It is important to note, that for these recommendations to work, it is necessary to plan for the implementation of EVM early in both the total project planning and the procurement process. It may be more challenging if contracts are owned by another organization, so it is critical to share this strategy with project managers and procurement organizations. Also, when developing requirements to support EVM, be sure to review the other Data Requirements Descriptions (DRDs) on the contract for commonality. It is possible that the data requested in other DRDs will provide data needed to support EVM planning and analysis as is or with minimal changes required.

2. Data Elements to Support Project-Level EVM Analysis & Reporting

EVM represents the integration of cost, schedule, and technical data to provide an assessment of project performance and health. Actual cost data, cost plans (including changes to those plans), forecasts, work status, and variance explanations are the pieces of information required to conduct EVM planning and analysis. The Work Breakdown Structure (WBS) serves as a common framework for cost, schedule, and technical planning. For this reason, the WBS DRD plays a key role in the integration of cost, schedule, and technical data so all reporting instructions must ensure reporting in accordance with the WBS. For example, the WBS used in cost reporting must align with the WBS for schedule reporting.

There are several options for obtaining the data that will be based largely on factors such as the size of the contract, the type of work, and the NASA Project Manager's needs for insight. Several sample contract DRDs are provided that describe the basic elements needed to support EVM planning, analysis, and reporting. The content and format can be tailored to support each project's unique needs.

3. Actual Cost Data

Monthly actual cost data by WBS are needed to support EVM planning and analysis and serve as the source for Actual Cost of Work Performed (ACWP) or Actual Cost (AC). There are various methods, both formal and informal, that can be used to obtain cost data.

If a NASA Form (NF) 533 is required on a contract, it will serve as the source for actual cost data. See NASA Procedural Requirements (NPR) 9501.1 NASA Contractor Financial Management Reporting System for instructions on preparing an NF 533 DRD. It is important to ensure that the language in the NF 533 DRD or the Performance Work Statement (PWS) allow for flexibility in the reporting structure. Some examples include:

- “Provisions shall be made to allow costs to be collected by government provided cost allocation as well as by special projects or activities.”
- “Further breakdown may be required for funding codes and customers which will be reflected in the work order report and in scheduled monthly reviews.”

If a NF 533 will not be required on the contract, or cannot support detailed cost collection, other methodologies must be employed to ensure availability of monthly actual costs. One method is to use a separate DRD for contractor reporting of actual cost. This can be in any electronic format required for integration with the project management tool but must be done on a monthly basis. A project utilizing a specific software tool to load actual cost data will want to specify a reporting format in a DRD format will allow for automatic upload of data into the tool. A sample DRD entitled *Actual Cost Data in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* is shown in [Appendix 1](#). Projects can use this DRD to collect data and tailor based on their specific reporting needs. For example, a column can be added to the format to require reporting of both Work Year Equivalent (WYE) and hours.

For Firm Fixed Price Contracts that will not receive an NF 533, the best approach for obtaining actual cost data is when payments are made based on established milestones. This ensures that actual cost align with the work accomplished. If billing does not coincide with work accomplished, actual costs can be estimated based on an assessment of work accomplished through schedule status, weekly meetings, or other interactions with the contractor.

Another option for obtaining contractor cost data is to request access to the contractor’s financial data. If this methodology is employed, the contract performance work statement must specify this requirement, if this will be the route for obtaining actual cost information. For example, “The contractor shall provide an automated, network accessible, ad hoc query capability to permit specific Government users, as identified by the Contracting Officer (CO), access to determine the cost, schedule, and status of work at the level of detail reported in individual work orders, specific customers, unique projects, WBS, and NF 533 reports.”

4. Cost Plans and Forecasts

Cost plans are needed to support the project-level Performance Measurement Baseline (PMB) and serve as the basis for Budget Cost for Work Performed (BCWP) or Earned Value (EV). Forecasts are needed to support the development of the project-level Estimate at Completion (EAC). This data can be formally requested as a monthly deliverable from the contractor or can be developed by the project manager (PM) and Project Office.

In cases where a contract is small or just providing WYEs in support of a larger NASA task, the PM may want to develop cost plans and forecasts internally, with support from the contractor. It is important that any rate updates be submitted to NASA to ensure cost plans and forecasts are developed utilizing the latest information when updating the cost plan or the EAC. [Appendix 2](#) sample DRD entitled *Direct and Indirect Rates* can be used to request rate information from a contractor. The NASA PM must specify the basis for the rate, for example hourly or annualized

rates. Note that the rate information DRD is not necessary if the contractor is providing the cost plan as a deliverable or if the contract or the CO can provide the rate information.

In cases where the contracts are larger, or perhaps when the contractor generates this data internally, the NASA PM may want to formally request the data from the contractor in a DRD. Two similar DRDs have been developed, one for capturing cost plan data and the other for capturing forecast data. [Appendix 3](#) sample DRD entitled *Time-Phased Cost Plans in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* provides a format that can be tailored to collect cost plans in PM specified units, e.g. WYEs, hours, and/or dollars. Note that when changes are requested, it is important that estimates be time-phased monthly by customer-specified WBS. [Appendix 4](#) sample DRD, entitled *Time-Phased Cost Forecast in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* can be tailored to a project's needs for forecasting. It is standard that comprehensive forecasts be conducted on an annual basis, and this format can be used to support that process.

5. Status of Work Accomplished

Several methods can be employed to status work accomplished that serves as the basis for the BCWP or EV. The most preferred way to obtain status of work accomplished is from an Integrated Master Schedule (IMS) that is current and delivered on a monthly basis. See NASA's IPMR DRD Guide, Appendix B or Appendix C located at [NASA EVM Reporting Guidance & Tools](#) for a sample IMS DRD. It is important that the WBS used for the IMS is the same that is used for cost actual, plan, forecast, and variance explanation reporting.

If the contract will not include a requirement for an IMS deliverable, other options can be employed to obtain status. First, the status can be obtained through regularly scheduled meetings with the contractor. If this route is selected, be sure to include language in the contract's performance work statement requiring the contractor to provide a status of work accomplished for each WBS specified for reporting. These status reviews must occur at least monthly and provide an assessment of work accomplished on tasks using objective measures and exit criteria. The status will be in the form of percentage complete, and the NASA team will verify accuracy of the status and make adjustments as required.

Another option is to request from the contractor a status of work accomplished for each WBS specified for reporting. The status must be based on objective measures and exit criteria. The status takes a percent complete format that is then dollarized by multiplying that percent complete by the WBS element total budget. A sample DRD entitled *Measurement of Work Accomplishment Status in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* is shown in [Appendix 5](#).

Another method for obtaining status is by asking the contractor to use a cost weighted milestone methodology to provide a dollarized status of the work accomplished each month. This requires that each sub-task be broken down into monthly cost weighted milestones that represent a portion of the total sub-task budget. It is important that the sum of all cost weighted milestones must equal 100% of the planned subtask budget. On a monthly basis, a report will be generated which captures the "dollarized" planned accomplishments compared to the actual accomplishments. Ideally, these milestones will align with those established for payment, such that actuals will align with work achievement. If not, actual cost will have to be estimated. A sample DRD entitled *Cost Weighted Milestone Methodology in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* is included for reference in [Appendix 6](#). Note

that using this DRD also provides the Budgeted Cost for Work Scheduled (BCWS) or Planned Value (PV); therefore, a separate Cost Plan DRD is not required in this case.

6. Variance Explanations

Explanations of cost, schedule, and variance at completions (VAC) are also required for EVM planning and analysis. This data can be formally requested from the contractor on a monthly basis, or it may be discussed at Monthly Status Reviews (MSR).

If the contract will not require formal submittal of variance explanations, the contractor can present variance data at the MSR. A sample DRD entitled *Monthly Status Reviews (MSRs) in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* is attached in [Appendix 7](#). This DRD can stand alone or be combined with a DRD for Monthly Status Reviews where other information is required to be presented by the contractor. In most cases, contracts will require a MSR and a separate DRD will not be required.

The variance explanation data can be a formal report prepared and submitted by the contractor on a monthly basis and if required, a sample DRD entitled *Variance Explanations in Support of Project-Level Earned Value Management (EVM) Planning and Analysis* is provided in [Appendix 8](#). The project must specify a variance threshold for reporting of variances, noting that these thresholds can differ by reportable WBS. The project must also determine whether monthly and cumulative explanations will be required. Note that different thresholds can be used for the types of variance (cost/schedule/at complete), current versus cumulative, and even by WBS element. Note that formal variance analysis reporting may be too time-consuming and expensive for smaller contracts.

7. Summary

The table below summarizes some of the options for obtaining the information needed to support earned value planning and analysis.

Element:	Actual Cost	Cost Plans	Forecast	Work Status	Variance Explanation
Source For:	ACWP (AC)	BCWS (PV) BAC	EAC ETC	BCWP (EV)	Analysis
Options:	NF 533 DRD (Figure 1) Contractor System Access Estimates	Developed by NASA PM DRD (Figure 3)	Developed by NASA PM DRD (Figure 4)	IMS Status Meetings or DRD (Figures 5 & 6)	Status Meetings DRD (Figure 7) and/or Formal Reporting DRD (Figure 8)

The options selected for obtaining the necessary data elements will depend on several factors including contract type, value, and the NASA PM's needs. For example, firm fixed price contracts usually provide a payment plan that can be used for planning, actual and earned data. The COR or CO should be able to provide variance data on these contracts. Small cost contracts are a little more complicated and require additional DRD data from the contractor. A cost plan, an IMS, 533 actual cost reporting and monthly status meetings for the variance data may be required. Support contracts are usually managed by a Project Control Account Manager (P-CAM), so the planning and status is often maintained in the project IMS.

Appendix 1. Sample Data Requirements Description (DRD)

TITLE: Actual Cost Data in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) collecting and assessing actual costs, (2) supporting project analysis, (3) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 30 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 12 working days after close of accounting month

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using Earned Value Management.

INTERRELATIONSHIP: The actual cost received in this format must reconcile with the NASA Form 533 and come from the contractor's internal accounting system. The reporting structure for the actual costs aligns with the Work Breakdown Structure (WBS) elements specified for reporting.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: NASA Form 533 M and Q, Work Breakdown Structure

CONTENTS: Include the beginning and end dates of the accounting month for which the actual costs and hours were consumed. Include the name of the contract and the associated work order, task order, job order, or other unique project identifier. Provide cost information, hours and or WYEs consumed by the specified WBS.

Beginning of Period:

End of Period:

Contract Name:

Work/Task/Job Order #:

WBS #	WBS Description	Hours/WYEs	Actual Cost
123456.01	Project Management		
123456.02	Systems Engineering		
123456.03	Safety & Mission Assurance		
123456.04	Science/Technology		
123456.05	Payloads		
123456.06	Spacecraft		
123456.07	Mission Operations		
123456.08	Launch Vehicle/Services		
123456.09	Ground Systems		
123456.10	Systems Integration & Testing		
123456.11	Education & Public Outreach		
TOTAL			

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify the units needed, such as hours, WYEs, dollars, etc.]

MAINTENANCE: None required

Appendix 2. Sample Data Requirements Description (DRD)

TITLE: Direct and Indirect Rates

DESCRIPTION/USE: To provide information for: (1) developing and maintaining a project Performance Measurement Baseline (PMB) and Estimate at Completion (EAC) forecast, (2) supporting project analysis, and (3) providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 30 days after Authorization to Proceed

SUBMISSION FREQUENCY: Quarterly

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The rates must reconcile back to other deliverables supporting NASA's Program, Planning, Budget, and Execution (PPBE) process and other DRDs in support of project-level EVM planning and analysis.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure (WBS) DRD, NASA Form 533M and Q, and other Budget and Operating Plan DRDs

CONTENTS: For each of the elements below, provide the rates escalated by year for the life of the contract:

Direct Rates (prime and subcontractors):

Indirect Rates:

Fringes - all pools:

G&A Rate:

Overhead Rate:

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify the basis for the rate, for example hourly or annualized rates.]

MAINTENANCE: None required

Appendix 3. Sample Data Requirements Description (DRD)

TITLE: Time-Phased Cost Plans in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) developing and maintaining a project Performance Measurement Baseline (PMB), (2) supporting project analysis, (3) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 90 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 12 working days after close of accounting month

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The reporting structure for the cost plans align with the Work Breakdown Structure. The cost plans must reconcile back to other deliverables supporting NASA's Program, Planning, Budget, and Execution (PPBE) process.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure DRD, NASA Form (NF) 533 M and Q, and other Budget and Operating Plan DRDs

CONTENTS: Define the beginning and end dates of the period for the current month. Include the name of the contract and the associated work order, task order, job order, or other unique project identifier. Plans must be time-phased by month and by customer-specified WBS and include all authorized work scope. Specify the month and year in each column. Provide a description of any authorized changes to the cost plans from the previous month that exceed +/- [NASA Project Manager specified threshold(s)] of the total cost plan for each WBS element specified for reporting. Authorized changes include allocation of management reserve, changes to time-phasing due to internal replanning or formal reprogramming, contract changes, rephrasing of budgets, etc. Note that pure cost growth (inefficiencies, poor planning, etc.) for in-scope work is reflected as a change to the forecast, not as a cost plan change. Include the reason for the change, impacts to current activities, impacts to overall cost and schedule, and any corrective actions required.

Beginning of Period:

End of Period:

Contract Name:

Work/Task/Job Order #:

WBS #	WBS Description	Current Month	Current Month + 1	Current Month + 2	Current Month + 3	Current Month + 4	Current Month + n	Total
123456.01	Project Management							
123456.02	Systems Engineering							
123456.03	Safety & Mission Assurance							
123456.04	Science/Technology							
123456.05	Payloads							
123456.06	Spacecraft							
123456.07	Mission Operations							
123456.08	Launch Vehicle/Services							
123456.09	Ground Systems							
123456.10	Systems Integration & Testing							
123456.11	Education & Public Outreach							
TOTAL								

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify units, e.g. hours, WYEs, or dollars]

MAINTENANCE: None required

Appendix 4. Sample Data Requirements Description (DRD)

TITLE: Time-Phased Cost Forecast in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) developing and maintaining a project Performance Measurement Baseline (PMB), (2) supporting project analysis, (3) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 90 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 12 working days after close of accounting month. Comprehensive forecast annually to coincide with NASA's Program, Planning, Budget, and Execution (PPBE) process.

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The reporting structure for the cost plans align with the Work Breakdown Structure (WBS). The cost plans must reconcile back to other deliverables supporting NASA's PPBE process.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure DRD, NASA Form 533M and Q, and other Budget and Operating Plan DRDs

CONTENTS: Define the beginning and end dates of the period for the current month. Include the name of the contract and the associated work order, task order, job order, or other unique project identifier. Forecasts must be time-phased by month and by customer-specified WBS and include all authorized work scope. Specify the month in each column and expand the format as necessary to capture all authorized work scope. Provide a description of any changes to the estimate from the previous month that exceed +/- [NASA Project Manager specified threshold(s)] of the total cost forecast for each WBS element specified for reporting. Include the reason for the change, impacts to current activities, and impacts to overall cost and schedule.

Beginning of Period:

End of Period:

Contract Name:

Work/Task/Job Order #:

WBS #	WBS Description	Current Month	Current Month + 1	Current Month + 2	Current Month + 3	Current Month + 4	Current Month + n	Total
123456.01	Project Management							
123456.02	Systems Engineering							
123456.03	Safety & Mission Assurance							
123456.04	Science/Technology							
123456.05	Payloads							
123456.06	Spacecraft							
123456.07	Mission Operations							
123456.08	Launch Vehicle/Services							
123456.09	Ground Systems							
123456.10	Systems Integration & Testing							
123456.11	Education & Public Outreach							
TOTAL								

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify units, e.g. hours, WYEs, or dollars]

MAINTENANCE: None required

Appendix 5. Sample Data Requirements Description (DRD)

TITLE: Measurement of Work Accomplishment Status in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) supporting project analysis and (2) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 90 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 12 working days after close of accounting month

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The reporting structure for the cost plans align with the Work Breakdown Structure (WBS). The cost plans must reconcile back to other deliverables supporting NASA's Program, Planning, Budget, and Execution (PPBE) process.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure DRD and Monthly Status Review DRDs

CONTENTS: Include the contract name and work/task/job order number (or other unique project identifier) associated with the report. The contractor will provide a current month and cumulative since inception dollarized status of work accomplished by each WBS item specified for reporting. Cumulative status of tasks is represented by a percent complete assessment based on objective measures and exit criteria. A description of the methods and exit criteria used in determining the percent complete assessment. The status is then dollarized by multiplying the percent complete status by the total budget for each WBS specified for reporting in the WBS DRD. To calculate a dollarized current month status, subtract last month's cumulative from current month's.

Beginning of Period:

End of Period:

Contract Name:

Work/Task/Job Order #:

WBS #	WBS Description	Total Budget (\$K)	Current Month		Cumulative Since Inception	
			% Complete	Dollarized Status (\$K)	% Complete	Dollarized Status (\$K)
123456.01	Project Management	200	20	40	50	100
123456.02	Systems Engineering					
123456.03	Safety & Mission Assurance					
123456.04	Science/Technology					
123456.05	Payloads					
123456.06	Spacecraft					
123456.07	Mission Operations					
123456.08	Launch Vehicle/Services					
123456.09	Ground Systems					
123456.10	Systems Integration & Testing					
123456.11	Education & Public Outreach					

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify the units needed, such as hours, WYEs, dollars, etc.]

MAINTENANCE: None required.

Appendix 6. Sample Data Requirements Description (DRD)

TITLE: Cost Weighted Milestone Methodology in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) supporting project analysis, (2) assessing progress and (3) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 90 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 12 working days after close of accounting month

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The reporting structure for the cost plans align with the Work Breakdown Structure. The cost plans must reconcile back to other deliverables supporting NASA's Program, Planning, Budget, and Execution (PPBE) process.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure DRD

CONTENTS: The contractor will use a cost weighted milestone methodology to provide a dollarized status of the work accomplished each month. This requires that each sub-task be broken down into monthly cost weighted milestones that represent a portion of the total sub-task budget. It is important that the sum of all cost weighted milestones must equal 100% of the planned subtask budget. On a monthly basis, a report will be generated which captures the "dollarized" planned accomplishments compared to the actual accomplishments.

On a monthly basis, determine, document and update the status of each of the scheduled milestone accomplishments for the month and make a definitive determination as to whether or not the effort is completed. Each milestone or task will use a 0/100 performance measurement methodology where performance is not earned until the milestone or task is completely finished. This will aid in achieving objectivity where progress and cost is concerned. An example of the process is outlined below.

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify units, e.g. hours, WYEs, or dollars]

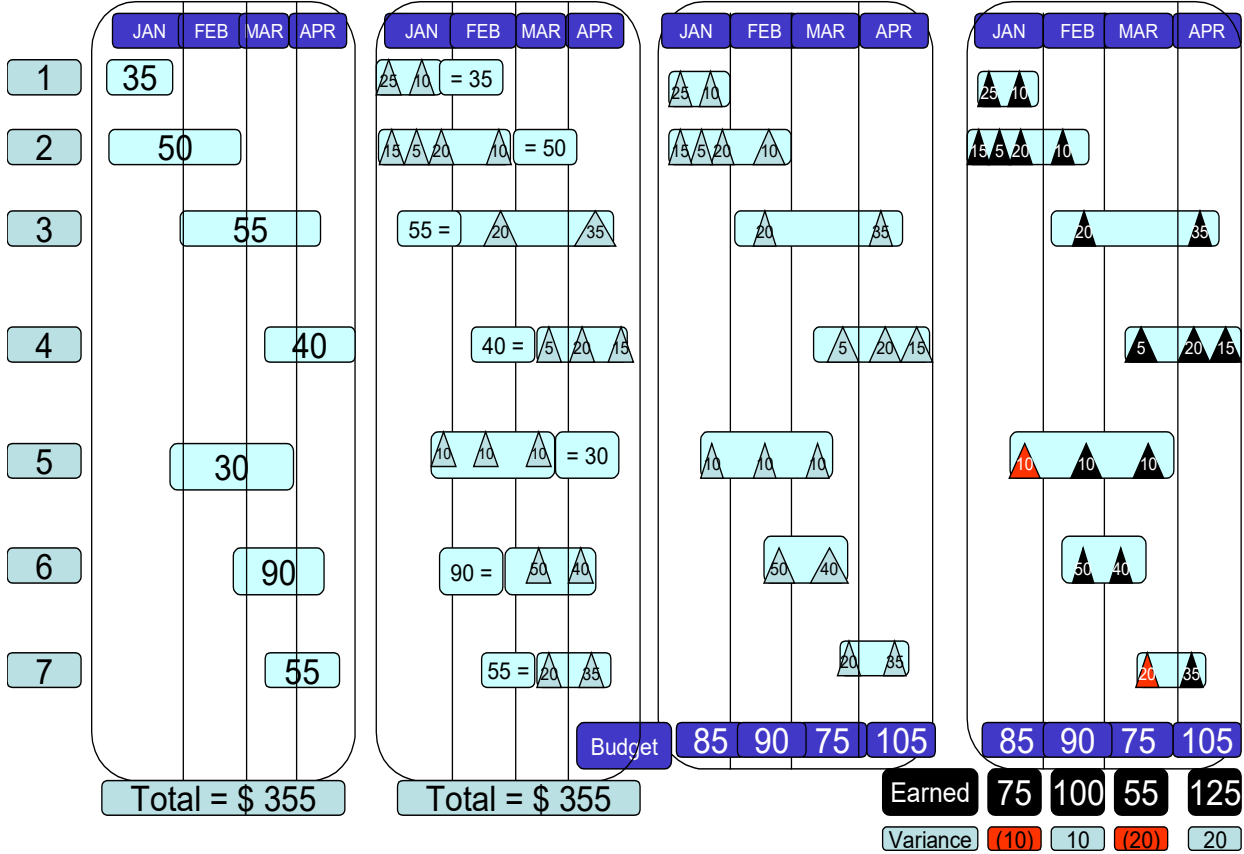
MAINTENANCE: None required

Step 1
Develop and "Dollarize"
the Schedule based on
the Sub-tasks

Step 2
Define and Cost
Weight Milestones
in Sub-Tasks

Step 3
Develop Monthly
Budgets that Align
with Schedule

Step 4
Report on Cost,
Schedule and
Performance
Using 0/100 Technique



Appendix 7. Sample Data Requirements Description (DRD)

TITLE: Monthly Status Reviews (MSRs) in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) supporting project analysis and (2) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 90 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 15 working days after close of accounting month

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The reporting structure aligns with the Work Breakdown Structure (WBS). The cost plans must reconcile back to other deliverables supporting NASA's Program, Planning, Budget, and Execution (PPBE) process.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure DRD, NASA Form 533M and Q, other Budget and Operating Plan DRDs, other Monthly Status Reviews DRDs

CONTENTS: The contractor will conduct a MSR with NASA to include the following information:

Comparison of the dollarized work accomplished to the cost plan for each WBS specified for reporting in the WBS DRD (both cumulatively since inception and current month). This represents the schedule variance.

Comparison of the dollarized work accomplished to the actual cost incurred to accomplish that work (both cumulatively since inception and current month). This represents the cost variance.

Comparison of the Budget at Completion (BAC) to the latest forecasted Estimate at Completion (EAC). This represents the Variance at Completion (VAC).

Explanation of variances that exceed +/- [NASA Project Manager specified threshold(s)] must be explained and include the reason for the variance, the impact to the immediate task and overall cost and schedule at completion (if none, explain why), and any corrective actions that will be undertaken to recover.

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify units, e.g. hours, WYEs, or dollars]

MAINTENANCE: None required

Appendix 8. Sample Data Requirements Description (DRD)

TITLE: Variance Explanations in Support of Project-Level Earned Value Management (EVM) Planning and Analysis

DESCRIPTION/USE: To provide information for: (1) supporting project analysis and (2) and providing valid, timely project status information to higher management.

PRIMARY RESPONSIBILITY: Center EVM Focal Point

DISTRIBUTION: Per Contracting Officer's letter

INITIAL SUBMISSION: 90 days after Authorization to Proceed

SUBMISSION FREQUENCY: Monthly; 15 working days after close of accounting month

REMARKS: This DRD will be used when the contractor is performing work in support of a NASA project that is using EVM.

INTERRELATIONSHIP: The reporting structure aligns with the Work Breakdown Structure (WBS). The cost plans must reconcile back to other deliverables supporting NASA's Program, Planning, Budget, and Execution (PPBE) process.

DATA PREPARATION INFORMATION:

SCOPE: This report will be used as the basis for integration of project cost, schedule, and technical data to support project-level EVM planning and analysis.

APPLICABLE DOCUMENTS: Work Breakdown Structure DRD, NASA Form 533M and Q, other Budget and Operating Plan DRDs, Monthly Status Reviews DRDs

CONTENTS: The contractor will provide variance explanations on a monthly basis for all variances that exceed +/- [NASA Project Manager specified threshold(s)] on a [NASA Project Manager specified current and/or cumulative basis]. For each WBS specified for reporting, provide the following information:

WBS number and Description:

Type and Magnitude of Variance. For type, select from the following:

Schedule Variance: Comparison of the dollarized work accomplished to the cost plan for each WBS specified for reporting in the WBS DRD (both cumulatively since inception and current month).

Cost Variance: Comparison of the dollarized work accomplished to the actual cost incurred to accomplish that work (both cumulatively since inception and current month).

Variance at Completion (VAC): Comparison of the Budget at Completion (BAC) to the latest forecasted Estimate at Completion (EAC).

Effect on the immediate task

Effect on the overall contract

Corrective actions taken or planned

FORMAT: Electronic versions shall be compatible with Microsoft Excel. Contractor formats that provide all required data are acceptable.

UNITS: [NASA Project Manager must specify units, e.g. hours, WYEs, or dollars]

MAINTENANCE: None require