Measurement Information Specification
Milestone Dates
Version 3.0

Information Need Description	
Information Need	
Questions Addressed	Is the current schedule realistic? How many activities are concurrently scheduled? How often has the schedule changed? What is the projected completion date for the project? What activities, events, or products are on time, ahead of schedule, or behind schedule?
Information Category	Schedule and Progress
Description	Milestone Dates measures the start and end dates for activities, events, and products. The measure provides an easy-to-understand view of scheduled activities and events. Comparison of plan and actual milestone dates provides insight into significant and repetitive schedule changes at the activity level.

Measurable Concept	
Measurable Concept	Milestone Performance

Entities and Attributes	
Relevant Entities	
Attributes	

Base Measure Specification	
Base Measures	• Start date of activity or event • End date of activity or event
Measurement Methods	
Type of Method	
Scale	
Type of Scale	
Unit of Measurement	
Categorization	• Activity or event name • Version of the plan • Increment • Organization

Typical Aggregation Structure	- Component - Activity
Typically Collected for Each	- CI or equivalent - Key activity
Count Actuals Based on	- Customer sign-off - Action items closed - Documents baselined - Milestone review held - Successful completion of tasks

Derived Measure Specification	
Derived Measure	
Measurement Function	

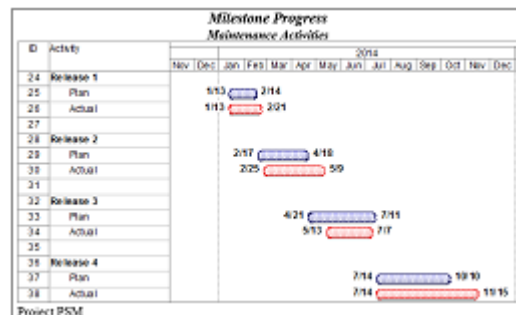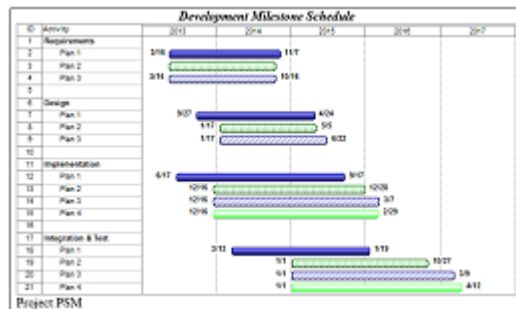|	Indicator Specification
Analysis guidance and examples	During project planning and replanning, schedules derived from planned start and end dates should be analyzed. The analysis should determine whether any important activities or events are missing, whether each activity's planned start/end dates and duration are reasonable (based on other project assumptions such as staffing level or life cycle selected), and whether the overlap between activities is feasible. During a replan, schedule slippage over time should be analyzed. Figure 5-12a is a Gantt chart used to compare multiple planning baselines for a single project. Each major project activity is included, with each successive plan represented by a different bar type. In Figure 5-12a, Implementation ends slightly earlier in Plan 4 than in Plan 3, but Integration and Test finishes more than one month later in Plan 4 than in Plan 3. Given the extent of slippage that has already occurred on the project, the feasibility of meeting this new milestone must be evaluated.
Analysis Model	
Decision Criteria	
Indicator Interpretation	

Data Collection Procedure (for each Base Measure)	
Complete this section for each base measure listed on the previous page.	
Frequency of Data Collection	
Responsible Individual	
Phase or Activity in which Collected	
Tools Used in Data Collection	
Verification and Validation	
Repository for Collected Data	

Data Analysis Procedure (for each Indicator)	
Frequency of Data Reporting	
Responsible Individual	
Phase or Activity in which Analyzed	
Source of Data for Analysis	
Tools Used in Analysis	
Review, Report, or User	

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Additional Information	
Additional Analysis Guidance	**Additional Analysis** Further analysis of scope changes, staffing levels, work unit progress, and defect rates can uncover the reasons for schedule slips. The impact of schedule slips must be evaluated in light of project priorities and constraints. **Lessons Learned** Slips in critical path activities and events are of greatest concern because of the ripple effect on the project schedule. Schedules should contain a sufficient level of detail to monitor progress; multiple levels of detail may be needed to report progress to different audiences. If multiple increments or releases are planned, separate activities and events should be defined for each increment or release.
Implementation Considerations	
Project Application	• Applicable to all sizes and types of projects. • Included in most government and industry measurement practices.
Process integration	• Required data is generally obtained from project scheduling systems and/or documentation. Data should be focused on major activities and events, particularly key items affecting the critical path performance or risk items. • Detailed milestones provide a better indication of progress and allow earlier identification of problems. • If dependency data is collected, slips in related activities can be projected and assessed. • If activities or events are re-planned to occur at a different time, the original dates should be retained (with a unique plan identifier) to observe planned schedule changes. • Some operations and maintenance projects are considered level-of-effort tasks and may not have detailed milestones. Such projects may only track increment release date and change request closure dates.
Usually Applied During	• Project Planning (Estimates) • Requirements Analysis (Estimates and Actuals) • Design (Estimates and Actuals) • Implementation (Estimates and Actuals) • Integration and Test (Estimates and Actuals) • Operations and Maintenance (Estimates and Actuals)
Alternatives Include	

Figure 5-12b.

Development Milestone Schedule

ID	Activity	2013	2014	2015	2016	2017
1	**Requirements**					
2	Plan 1	5/16 ▬▬▬ 11/7				
3	Plan 2	▬▬▬				
4	Plan 3	5/16 ▬▬▬ 10/16				
5						
6	**Design**					
7	Plan 1	9/27 ▬▬▬ 4/24				
8	Plan 2	1/17 ▬▬▬ 5/5				
9	Plan 3	1/17 ▬▬▬ 6/22				
10						
11	**Implementation**					
12	Plan 1	6/17 ▬▬▬ 9/17				
13	Plan 2	12/16 ▬▬▬ 12/28				
14	Plan 3	12/16 ▬▬▬ 3/7				
15	Plan 4	12/16 ▬▬▬ 2/29				
16						
17	**Integration & Test**					
18	Plan 1	3/13 ▬▬▬ 1/19				
19	Plan 2	1/1 ▬▬▬ 10/27				
20	Plan 3	1/1 ▬▬▬ 3/9				
21	Plan 4	1/1 ▬▬▬ 4/12				

Project PSM

Milestone Progress
Maintenance Activities

ID	Activity	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
										2014					
24	**Release 1**														
25	Plan		1/13 ▬▬ 2/14												
26	Actual		1/13 ▬▬ 2/21												
27															
28	**Release 2**														
29	Plan				2/17 ▬▬ 4/18										
30	Actual				2/25 ▬▬ 5/9										
31															
32	**Release 3**														
33	Plan						4/21 ▬▬ 7/11								
34	Actual						5/13 ▬▬ 7/7								
35															
36	**Release 4**														
37	Plan									7/14 ▬▬ 10/10					
38	Actual									7/14 ▬▬ 11/15					

Project PSM

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