

Measurement Information Specification

Test Procedure Status

Project Level Only

Organization 3

Version 1.0

Information Need Description	
Information Need	<ul style="list-style-type: none">• How is testing proceeding?• Have all test procedures been run as planned?
Information Category	Schedule and Progress

Measurable Concept	
Measurable Concept	Work Unit Progress

Entities and Attributes	
Relevant Entities	Testing
Attributes	Procedures

Base Measure Specification	
Base Measures	<ol style="list-style-type: none">1. Planned number of test procedures2. Planned number of test procedures tested (attempted)3. Actual number of test procedures successfully tested
Measurement Methods	<ol style="list-style-type: none">1. Prior to test, estimated based on engineering judgment. Updated as the number of test procedures are recorded in the approved test procedures document.2. Sum of the number of test procedures conducted IAW approved test procedures, documented in test logs.3. Sum of the number of test procedures successfully conducted IAW approved test procedures, validated against the defined criteria, and documented in the test logs.
Type of Method	<ol style="list-style-type: none">1. Subjective (eng. judgment), Objective (based on test procedures)2. Objective3. Objective
Scale	Integers from zero to infinity
Type of Scale	Ratio
Unit of Measurement	Test Procedures

Derived Measure Specification	
Derived Measure	Test Variance
Measurement Function	$(\text{planned number of test procedures tested} - \text{actual number of test procedures successfully tested}) / \text{planned number of procedures tested}$

Indicator Specification	
Indicator Description and Sample	<p style="text-align: center;">Test Progress</p> <p>See end of file for full-size version.</p>
Analysis Model	<p>The Test Status measure may be used to evaluate test progress. It helps assess product quality based on the proportion of attempted test cases that have been successfully executed and the amount of testing that has been performed.</p> <p>Graph plots the planned number of test procedures over time, along with the actual number of test procedures conducted, and the number of test procedures that passed.</p>
Decision Criteria	Greater than 20% variance, adverse trend
Indicator Interpretation	<ul style="list-style-type: none"> • The top line (blue) represents the planned number of test procedures. The middle line (pink) represents the actual number of test procedures that were conducted. The bottom line (green) represents the number of actual test procedures that passed. • Progress proceeded quickly up until 3 Apr 03 when a failure occurred. PCRs were written, and testing was halted while the source of the problem was investigated. Testing resumed when solutions were determined. • The number of test procedures was reduced when it was determined that the requirement was unclear. The requirement was investigated, and the test procedures were changed accordingly upon clarification. • An approximate two-week delay was encountered while awaiting resolution of the PCRs and subsequent rewrite of the test procedures. • Regression tests were conducted to verify PCR fixes.

Data Collection Procedure (For Each Base Measure)	
Frequency of Data Collection	<ol style="list-style-type: none"> 1. Per revision to the Test Procedures 2. Monthly 3. Monthly
Responsible Individual	Software Test Team Lead
Phase or Activity in which Collected	Integration and Test Phase
Tools Used in Data Collection	<ol style="list-style-type: none"> 1. Test Procedures 2. Test Logs 3. Test Logs
Verification and Validation	Check against test logs
Repository for Collected Data	<ul style="list-style-type: none"> • Test Spreadsheet • PAL • PSM Insight

Data Analysis Procedure (For Each Indicator)	
Frequency of Data Reporting	Monthly
Responsible Individual	Project Measurement Analyst
Phase or Activity in which Analyzed	Integration and Test Phase
Source of Data for Analysis	PSM Insight
Tools Used in Analysis	PSM Insight
Review, Report, or User	Project Leads and BAMS

Additional Information	
Additional Analysis Guidance	<ul style="list-style-type: none"> • There should be a mapping between defined test cases and requirements to analyze which functions are passing test. • Allocated requirements should be testable and mapped to test sequences.
Implementation Considerations	

Level A Procedures
As of 25 May 01

