Measurement Information Specification
Test Procedure Maturity
Version 2.1

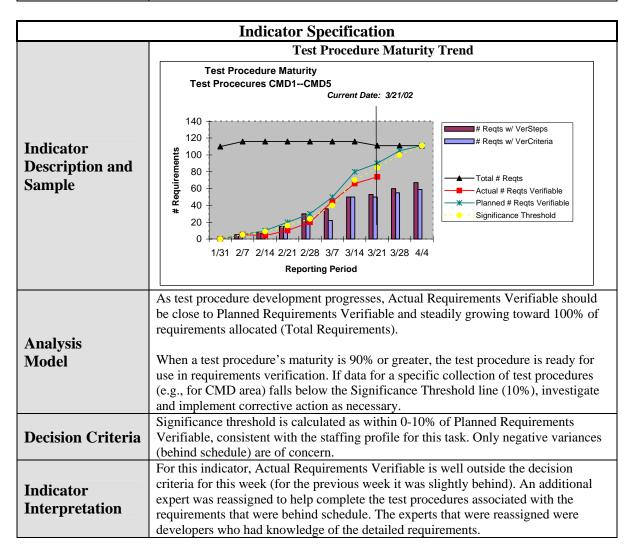
Information Need Description	
Information Need	Evaluate the development of 80 test procedures to obtain a weekly assessment of progress and suitability for use in requirements verification.
Information Category	Schedule and Progress Product Quality

Measurable Concept	
Measurable	Work Unit Progress
Concept	Functional Correctness - Test Procedure Readiness (new measurable concept)

Entities and Attributes	
Relevant Entities	Test procedures
Relevant Entities	• Requirements
Attributes	Number of requirements allocated to test procedure
	Number of requirements allocated to test procedure, for which test procedure
	contains complete and correct verification steps

Base Measure Specification	
Base Measures	 Total number of requirements allocated to test procedure (TotReqts) Planned number of requirements verifiable (PlannedReqtsVerifiable) Number of requirements from number 1 for which all steps (execution, data collection, and data analysis) are complete (ReqtswVerSteps) Number of requirements from number 1 for which verification criteria are consistent with the requirement (ReqtswVerCriteria) Number of requirements from number 1 for which all steps are complete AND all verification criteria are consistent (ActualReqtsVerifiable)
Measurement Methods	 For each test procedure, count the number of requirements allocated. Estimate the effort to prepare/review verification steps and criteria for each requirement, and define a target date for completion. Count the number of requirements that are planned to be completed in each week (PlannedReqtsVerifiable). For each requirement allocated to the test procedure: Read the requirement text. Review the test procedure steps and verification criteria. If the steps are complete, add 1 to ReqtswVerSteps. If the verification criteria are consistent with the requirement text, add 1 to ReqtswVerCriteria. If both conditions in numbers 3 and 4 are true, add 1 to ActualReqtsVerifiable.
Type of Method	 Objective Subjective (with well-defined rules for assigning values)
Scale	Integers from zero to infinity
Type of Scale	Ratio
Unit of Measurement	Requirement

Derived Measure Specification	
Derived	None
Measure	None
Measurement	N/A
Function	



Data Collection Procedure (for each Base Measure) Complete this section for each base measure listed on the previous page.	
Frequency of Data Collection	1-2. At the start of test planning3-5. Weekly, concurrent with test procedure review
Responsible Individual	1-2. Supplier management3-5. Acquirer project engineer, assisted by software experts in the role of test procedure reviewers
Phase or Activity in which	Code and Unit Test (i.e., during test procedure generation)
Tools Used in Data Collection	Supplier test procedures, and requirements and design documents Excel spreadsheet
Verification and Validation	Review with supplier test team
Repository for Collected Data	Acquirer Excel spreadsheet

Data Analysis Procedure (for each Indicator)	
Frequency of	Weekly
Data Reporting	
Responsible	Acquirer project engineer, assisted by software experts in the role of test procedure
Individual	reviewers
Phase or Activity	Code and Unit Test (i.e., during test procedure generation)
in which	
Analyzed	
Source of Data	Acquirer Excel spreadsheet
for Analysis	
Tools Used in	Excel spreadsheet
Analysis	
Review, Report,	Test procedure maturity report supplied to acquirer program management personnel
or User	and supplier development and management personnel.

Additional Information	
Additional	
Analysis	
Guidance	
Implementation	
Considerations	