Measurement Information Specification
Peer Reviews
Organization 20
Version 1.0

Information Need Description	
Information Need	• Are we resolving peer review comments in a timely manner and as planned? • How much time is spent on peer reviews?
Information Category	Product Quality

Measurable Concept	
Measurable Concept	Work Unit Progress, Product Quality

Entities and Attributes	
Relevant Entities	Quality
Attributes	Peer Reviews

Base Measure Specification	
Base Measures	1. Number of peer reviewed work products 2. Total time spent on reviews 3. Technical completeness rating 4. Technical accuracy rating 5. Syntax quality rating
Measurement Methods	1. Count number of peer review forms that were completed in the month. 2. Track time spent on individual peer reviews. 3. Record the rating in the technical completeness category. 4. Record the rating in the technical accuracy category. 5. Record the rating in the syntax quality category.
Type of Method	Objective
Scale	Integers from zero to infinity
Type of Scale	Ratio
Unit of Measurement	Peer Reviews

Derived Measure Specification	
Derived Measure	1. Technical completeness average rating 2. Technical accuracy average rating 3. Syntax quality average rating
Measurement Function	1. Sum the technical completeness ratings for each peer review conducted in the same month, and divide by the total number of peer reviews completed in that month. 2. Sum the technical accuracy ratings for each peer review conducted in the same month, and divide by the total number of peer reviews completed in that month. 3. Sum the syntax quality ratings for each peer review conducted in the same month, and divide by the total number of peer reviews completed in that month.

Indicator Specification

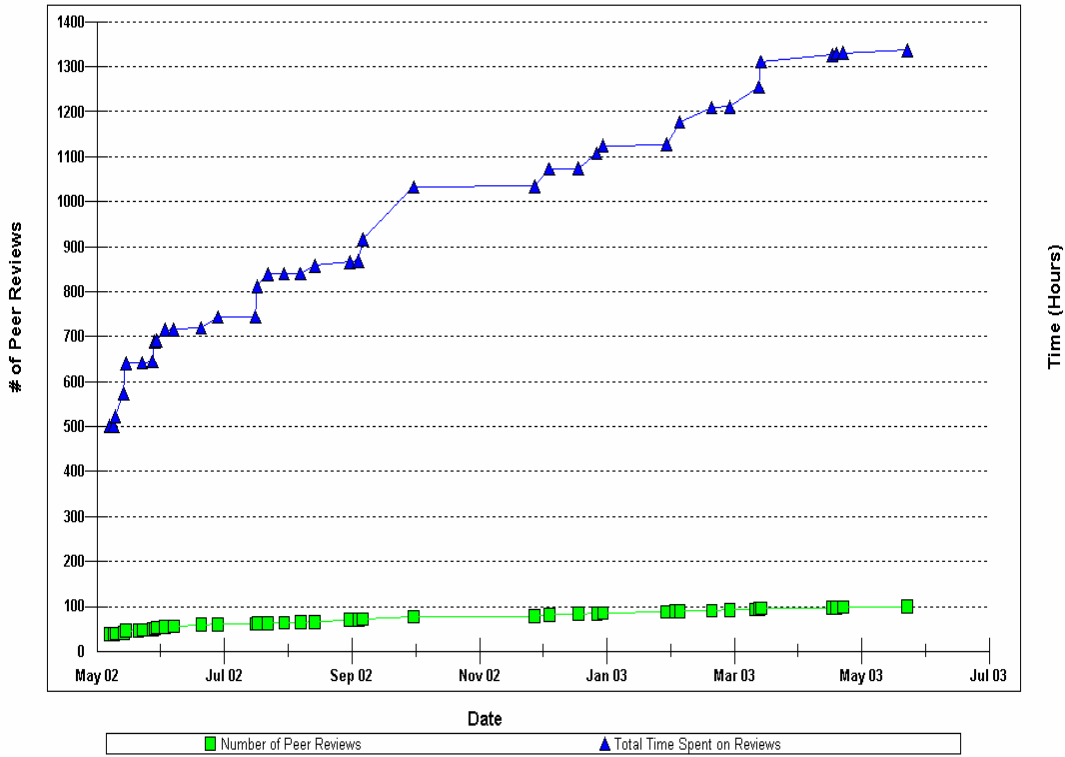| Indicator Description and Sample	1. Number Peer Reviews 3. Peer Review Ratings See end of file for full-size versions.	2. Average Time spent on Reviews
Analysis Model	1. The chart shows the number of peer reviews and the cumulative time spent on the reviews. 2. The bar chart shows the number of peer review findings and the average time spent on reviews each month. 3. The bar chart shows the average rating for the three rating categories each month.	
Decision Criteria	If there are any work products where peer review comments have not been addressed, they must be addressed immediately.	
Indicator Interpretation	1. The number of peer reviews conducted remains constant, but the time spent on the reviews continues to increase linearly. 2. The amount of time spent on reviews each month seems to have no correlation to the number of reviews submitted. 3. The average ratings for technical completeness, technical accuracy, and syntax quality for the peer reviews are fairly equal each month.	

Data Collection Procedure (For Each Base Measure)

Frequency of Data Collection	1. Per peer review 2. Per peer reviewed work product
Responsible Individual	Peer Reviewer
Phase or Activity in which Collected	All
Tools Used in Data Collection	Peer review template (Peer Review Form – DMM1 – 1 Apr 02.xls)
Verification and Validation	Ensure all fields are completed.
Repository for Collected Data	• Peer review template • PAL • PSM Insight

Data Analysis Procedure (For Each Indicator)

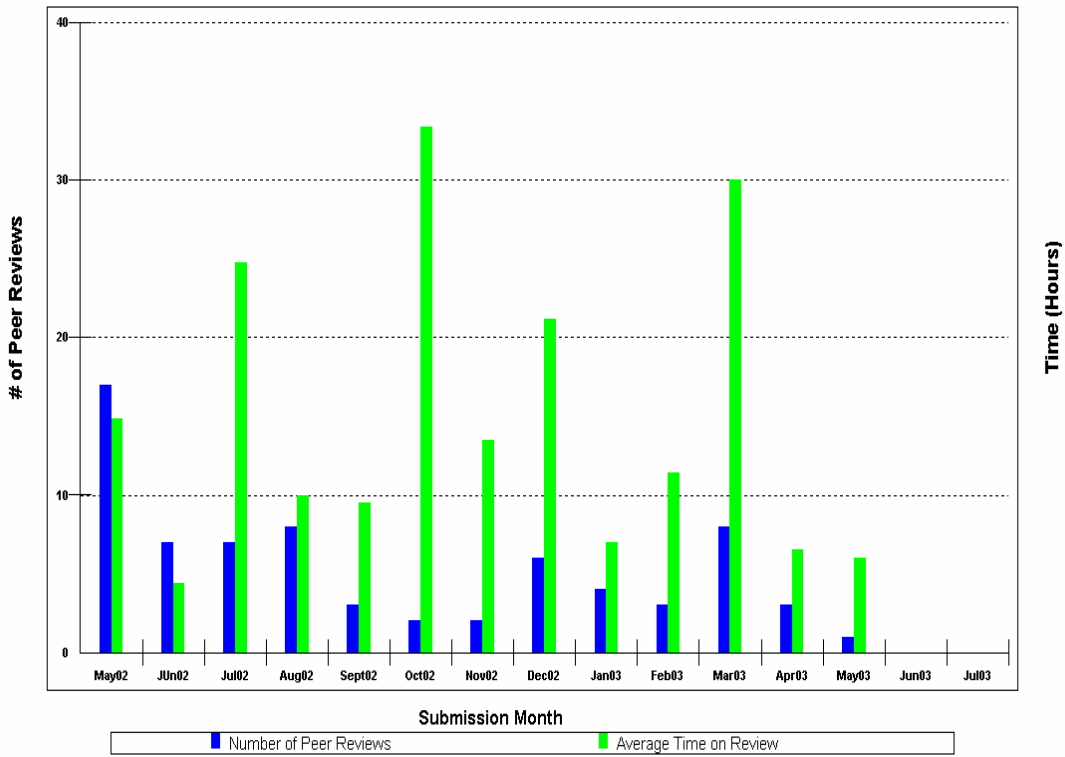| Frequency of Data Reporting	Monthly
Responsible Individual	Org. Measurement Analyst (org. level only)

Phase or Activity in which Analyzed	All
Source of Data for Analysis	Project data is collected from peer review template that each project completes and puts in the PAL.
Tools Used in Analysis	PSM Insight
Review, Report, or User	BAMs Senior Management

Additional Information	
Additional Analysis Guidance	The number of discovered defects is usually relative to the amount of discovery activity, such as number of inspections and amount of testing.
Implementation Considerations	

Peer Review Summary - Org Level

Average Time Spent on Peer Reviews

Peer Review Rating Averages - Org Level

Chart showing Average Rating by Month (May02 through Jul03) with three series: Technical Completeness Average (blue), Technical Accuracy Average (green), Syntax Quality Average (cyan). Vertical axis labeled "Average Rating" (0 to 5), horizontal axis labeled "Month". Right side labeled "TACOM-ARDEC".

Technical Completeness Average   Technical Accuracy Average   Syntax Quality Average