Appendix J Change Record Page

Date	Version	Change Description
1/24/12	5.0	Used Lisa's markup baseline. Accepted changes. Retained unaddressed comments. Performed cleanup and reformatting. Added team inputs.
1/31/12	5.1	Completed rework on mc phases 1 and 2. Added Geoff's J.3 Report Results. Baseline version for SCAMPI M Team peer review.
3/21/12	5.2	Mike's updates based on review issues of 5.1
4/3/12	5.3	Integrated updates from Dan, Lisa, Mike from 5.1 review
4/5/12	5.4	Used Lisa's 5.4 as new master
4/12/12	5.5	Added Kathy's 4/12 Intro update, Dan's 4/9 Phase 3 update, Lisa's 4/10 Phase 2 update, Mike's 4/18 update.
4/23/12	5.6	Updated after 4/23 telecon
4/27/12	6.0	Baseline release for NDIA CMMI WG review
5/9/12	6.1	Updated based on peer review technical comments
5/21/12	6.2	Updated based on Geoff's changes & editorial comments
5/22/12	6.3	Accepted changes from 6.2. Minor cleanup.
5/23/12	6.4	Updated based on team 6.3 review
5/24/12	6.5	Added Baseline appraisal VS. Previous appraisal concept (SCAMPI A or M)
5/25/12	7.0	Baseline release for community review
7/13/12	7.1	Updated based on feedback from Alex/Rusty
7/13/12	7.2	Post review team cleanup.
10/24/12	7.3	Post small review updates

Appendix J SCAMPI Maintenance (SCAMPI M) Appraisals

Introduction

This appendix describes the modifications to the Class A SCAMPI MDD necessary to plan and conduct a SCAMPI Maintenance (SCAMPI M) appraisal.

The intent of the SCAMPI M is to provide a method to extend the validity period of SCAMPI A ratings with a significantly reduced cost while maintaining the integrity of the SCAMPI A results. Key principles include:

- 1. Ensuring the organization is continuing to operate at the maturity or capability levels indicated in the baseline appraisal.
- Applying concepts for surveillance audits from other successful standards and reference models (e.g., ISO 9001/AS9100, TL9000).
- 3) Ensuring the organizational unit has not undergone significant changes that would invalidate the results of the previous SCAMPI, by examining the continued applicability of the sampling factors defined for the prior SCAMPI.
- 4) Reviewing high yield artifacts to perform an investigation of all the specific and generic goals in the reference model scope.
- 5) Determining a model sample scope for the SCAMPI M appraisal consisting of selected specific goals and generic practices, using a combination of investigative and random sampling.
- 6) Examining the model sample scope, using the rigor of the Class A SCAMPI MDD required practices for determining goal satisfaction.

The SCAMPI M method can be used to extend previously attained SCAMPI A ratings for up to 2 years from the completion of the SCAMPI M appraisal. The number of SCAMPI M appraisals is not restricted, but the maximum validity period from the date of the previous SCAMPI A is 5 years. The SCAMPI M extension(s) are reflected in the SAS, and indicate the SCAMPI M method was used.

During SCAMPI M planning, the appraisal team leader verifies that the organization meets the criteria for conducting a SCAMPI M appraisal. The appraisal team leader uses the sampling factors from the baseline appraisal to validate that the organizational unit has not had significant changes that would prevent the sampling factors from being used as a starting point for the SCAMPI M appraisal (see J.1.1.1 Determine Appraisal Objectives). Note that while the SCAMPI M appraisal organizational unit cannot be increased (i.e., beyond the SCAMPI A range of sampling factors and sampling factor values), the sponsor may elect to exclude from scope any portions of the organizational unit previously included for the SCAMPI A. These exclusions must be explicitly documented, and the rating extension will not apply to the excluded portions of the organizational unit.

As part of the SCAMPI M planning, the appraisal team leader begins a high-level investigation of the organization's process improvement activities associated with the reference model scope. The primary purpose of this investigation is to gain confidence that the implementation of the organization's processes has not changed significantly and verify that a SCAMPI M appraisal would be appropriate. The appraisal team leader reviews the current state of process improvement in the organization with the sponsor, representatives of process improvement efforts within the organizational unit (e.g., Process Group), and process and product quality assurance representatives (e.g., Quality Assurance). If the identified areas of concern span a significant portion of the appraisal reference model scope, a SCAMPI M based on model sampling may not be adequate and a full SCAMPI A may be warranted. If a SCAMPI M is deemed appropriate, any areas of concern identified by the appraisal team leader could become part of the "investigative sample" in the model sample scope that will be used in Stage 2 of the SCAMPI M Appraisal.

Note that while the SCAMPI M appraisal reference model scope cannot be increased from the model scope used in the baseline appraisal, the sponsor may chose to exclude process areas and limit the appraisal to a reduced reference model scope. These exclusions must be explicitly documented, and the rating validity

period extension will not apply to the excluded reference model scope (for example, if the reference model scope for the baseline appraisal was CMMI Maturity Level 5, the sponsor could chose to limit the scope of the extension to CMMI Maturity Level 3).

Upon completion of a SCAMPI M appraisal, the baseline for evaluating organizational unit change (e.g., sampling factors and sampling factor values) and model scope (e.g., process areas, capability or maturity levels) becomes the most recent appraisal conducted against the organizational unit. If a SCAMPI M changes the organizational unit and/or model scope, a new baseline is established for conducting future SCAMPI M appraisals within the maximum 5 year validity period since the previous SCAMPI A, and future SCAMPI M appraisals must not exceed this baseline. Throughout this appendix, the most recent appraisal conducted against the organizational unit is referred to as the "baseline appraisal".

The SCAMPI M method has two stages performed during the Conduct Appraisal phase, summarized below. The SCAMPI M Conduct Appraisal phase begins with the start of Stage 1 (Activity J.2.1 Prepare Participants) and continues through the end of Stage 2 (J.2.6 Generate Appraisal Results). The SCAMPI M Conduct Appraisal phase must be completed within in 45 calendar days from the start of the conduct appraisal phase.

Stage 1- Determine the model sample scope.

In this part of the Conduct Appraisal phase, the appraisal team determines which process areas included in the baseline appraisal are still being appropriately implemented and if there are any areas of concern. High yield artifacts are collected (see J.1.4 Obtain and Inventory Initial Objective Evidence and Appendix E – Managed Discovery), examined, and evidence recorded for the sampled basic units and support functions for all specific and generic goals within the reference model scope. Optionally, interviews may be conducted based on the appraisal team's need to understand the data collected. Based on the review of artifacts and any affirmations, the appraisal team identifies reference model specific goals and generic practices with potential weaknesses that warrant further investigation. These areas of concern become part of the "investigative sample" in the model sample scope that will be used in Stage 2 of the SCAMPI M appraisal. Again, if the identified areas of concern span a significant portion of the appraisal reference model scope, the appraisal team leader could recommend against conducting a SCAMPI M appraisal. The investigative sample is supplemented with random sampling to determine the model sample scope.

The primary output for Stage 1 is the model sample scope that will be used in Stage 2. The model sample scope is comprised of selected specific goals and generic practices (i.e., investigative and random sample). In Stage 2, all specific practices related to a specific goal are investigated in order to obtain full coverage needed for assigning specific goal ratings.

<u>Stage 2 – Characterize the specific practices and generic practices in the model sample scope and rate the specific goals to determine if the baseline appraisal ratings can be extended.</u>

Data related to the model sample scope is collected in accordance with J.1.1.4 Determine Appraisal Scope. Practices are characterized and specific goals rated in accordance with J.2.4.2 Characterize Implementation of Model Practices and Generate Preliminary Findings, and J.2.6.1 Derive Findings and Rate Goals. If all sampled specific goals are rated Satisfied and there are no weaknesses identified with the generic practices that would impact generic goal satisfaction, the baseline appraisal ratings can be extended.

If the SCAMPI M results in a negative outcome (i.e., one or more goals rated Unsatisfied or Not Rated), the organization has the option of addressing the weaknesses in an action plan that will, if all requirements are met, extend the validity period extension of the baseline appraisal ratings (See J.3.1.3 Plan for Next Steps). While the appraisal team can provide a recommendation for next steps regarding the feasibility of addressing the weaknesses in the required four month timeframe, the sponsor is ultimately responsible for making the decision to proceed with an action plan.

If the sponsor elects to pursue this option, the action plan must be completed and implemented, and the appraisal team must re-examine the goal(s) that were not satisfied during a reappraisal to confirm the goal(s) are now satisfied, within 4 months of the SCAMPI M final findings. If these requirements are met, the maturity or capability level ratings validity period will be extended. If the sponsor does not elect this option, the SCAMPI A ratings will immediately be revoked.

If the maximum 5 year period since the last SCAMPI A is exceeded during a SCAMPI M or the action plan reappraisal to address negative SCAMPI M results, the SCAMPI A rating is immediately revoked, and can only be reinstated by a successful SCAMPI A appraisal.

Except where otherwise noted below, all SCAMPI A appraisal Activities described in the body of this MDD apply to SCAMPI M appraisals.

J.1 Plan and Prepare for a SCAMPI Maintenance Appraisal

Phase Description

Planning and preparing for a SCAMPI M Appraisal is much like planning and preparing for a SCAMPI A appraisal. The initial planning and preparing for a SCAMPI M appraisal is performed prior to Stage 1. The appraisal plan is then updated prior to Stage 2 to include the model sample scope and plans for data collection.

J.1.1 Analyze Requirements

J.1.1.1 Determine Appraisal Objectives

Activity Description

The Activity Description described in 1.1.1 Determine Appraisal Objectives applies to SCAMPI M. Additionally:

The appraisal objectives of a SCAMPI M appraisal generally include one or more of the following factors:

- Extend previously achieved SCAMPI A appraisal ratings beyond 3 years
- Ensure organizational processes are being maintained.

The amount of change in the organizational unit since the baseline appraisal determines the eligibility of the organizational unit to undergo a SCAMPI M appraisal. This is evaluated by:

- A review of the current organizational unit sampling factors compared to the sampling factors in place when the baseline appraisal was performed.
- Discussions with the sponsor, representatives of process improvement efforts within the organizational unit (e.g. Process Group), and process and product quality assurance representatives (e.g. Quality Assurance). Artifacts are collected to substantiate the discussions.

Required Practices

The Required Practices described in 1.1.1 Determine Appraisal Objectives apply to SCAMPI M. Additionally:

The appraisal team leader shall:

- Determine eligibility of the organizational unit for a SCAMPI M.
- Document rationale for eligibility in the appraisal plan

Parameters and Limits

The Parameters and Limits described in 1.1.1 Determine Appraisal Objectives apply to SCAMPI M. Additionally:

The appraisal team leader works with the sponsor or sponsor's designee to identify the sampling factors of the organizational unit at the time of the SCAMPI M. The SCAMPI M sampling factors are compared to the baseline appraisal sampling factors. The organizational unit may be eligible for a SCAMPI M if no new sampling factors or sampling factor values have been added since the baseline appraisal (i.e., the SCAMPI M sampling factors are the same or a subset of the baseline appraisal sampling factor values).

No sampling factors or sampling factor values beyond those included in the baseline appraisal can be added in a SCAMPI M appraisal. If a baseline appraisal sampling factor or sampling factor value is removed for a SCAMPI M, a new organizational unit baseline is created for future SCAMPI Ms. The removed sampling factor or sampling factor value cannot be re-inserted into future SCAMPI M appraisals until it has been included in a new SCAMPI A.

During SCAMPI M appraisal planning, the sponsor may decide to exclude portions of the organizational unit included in the baseline appraisal. If the exclusion occurs because of changes to sampling factor or sampling factor values, the eligibility rules described in the previous paragraph apply. If the exclusions occur because of reasons other than sampling factor or sampling factor value changes (e.g., appraisal risk reduction), these exclusions must be explicitly documented, and if the SCAMPI M is successful, the rating extension will not apply to the excluded portions of the organizational unit. The portion excluded from the SCAMPI M cannot be re-inserted into the organizational unit in a subsequent SCAMPI M until it has been included in a new SCAMPI A.

When evaluating the organizational unit's eligibility for a SCAMPI M, the appraisal team leader must hold discussions with at least the following:

- The sponsor;
- Representative(s) of process improvement activities within the organizational unit, if any;
- Process and product quality assurance representative(s).

The purpose of the discussions is to gain an understanding of changes to process definition or process implementation in the organizational unit since the baseline appraisal. Artifacts substantiating the interview topics must be collected.

Implementation Guidance

The Implementation Guidance described in 1.1.1 Determine Appraisal Objectives applies to SCAMPI M. Additionally:

When conducting discussions with the sponsor, representatives of process improvement efforts within the organizational unit, and process and product quality assurance representatives, topics can include:

- A summary of current business objectives, progress against achieving those objectives, and process initiatives that support achievement of those objectives;
- Descriptions of process changes in the organizational unit since the baseline appraisal, the current state of process deployment, and a summary of actions taken to address weaknesses identified in the baseline appraisal.
- Descriptions of frequently observed noncompliance found during objective evaluations.

Separate discussions sessions are recommended for the three groups (i.e., sponsor, process improvement and quality assurance representative(s)) based on individual roles and managerial reporting chains.

Reviewing the final appraisal plan, final findings, and appraisal disclosure statement from the baseline appraisal can help the appraisal team leader understand the context of the baseline appraisal, including the sampling factors and values used to determine the baseline appraisal scope.

Reviewing organizational events such as mergers, acquisitions, and management changes can provide additional insight into the amount of change in the organizational unit sampling factors since the baseline appraisal, and can help determine eligibility for a SCAMPI M.

As stated in the Parameter and Limits above, a baseline appraisal sampling factor or sampling factor value may be removed for a SCAMPI M. An example of this situation is if an organization is not performing Operations & Maintenance work any more due to the conclusion of all the projects in this area. In this case, the number of relevant sampling factor values would be reduced in the current SCAMPI M as well as any future SCAMPI M.

If processes have changed in the organizational unit since the baseline appraisal without impacting the sampling factors or sampling factor values, the appraisal team leader should consider whether the extent of the changes to the processes is significant enough that the process baseline from the SCAMPI A has been compromised, in which case conducting a SCAMPI M might not be appropriate.

J.1.1.2 Determine Data Collection Strategy

Activity Description

The Activity Description described in 1.1.2 Determine Data Collection Strategy applies to SCAMPI M. Additionally:

The data collection strategy may differ for each stage of the SCAMPI M appraisal.

Required Practices

The Required Practices described in 1.1.2 Determine Data Collection Strategy applies to SCAMPI M. Additionally:

The appraisal team leader or designee shall document the data collection strategy for each stage of the SCAMPI M appraisal.

Parameters and Limits

The Parameters and Limits described in 1.1.2 Determine Data Collection Strategy applies to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 1.1.2 Determine Data Collection Strategy applies to SCAMPI M. Additionally:

The SCAMPI M method incorporates features of a managed discovery data collection approach for Stage 1. High yield artifacts are evaluated, from which the model sample scope for Stage 2 is determined. (See Appendix E – Managed Discovery for examples of high yield artifacts.) Other considerations (See 1.1.2 Determine Data Collection Strategy) may impact the data collection approach for Stage 2. Because the model sample scope is not known until Stage 1 is complete, a verification data collection approach may not be suitable for Stage 2, unless an organizational unit maintains a data structure providing access to evidence for all basic units and support functions across all process areas. See Appendix J Introduction and Section J.2 for more information on Stage 1 and Stage 2 objectives and activities.

J.1.1.3 Determine Appraisal Constraints

Activity Description

The Activity Description described in 1.1.3 Determine Appraisal Constraints applies to SCAMPI M. Additionally:

SCAMPI M appraisals are designed to be performed on a shorter schedule, for less cost, and with less impact on the appraised organization than a typical SCAMPI A appraisal. As such, resource constraint management is a particularly important consideration when planning a SCAMPI M appraisal. Resource constraints should be examined for each stage of the SCAMPI M. The data collection strategy may have a significant impact on the SCAMPI M appraisal schedule.

Required Practices

The Required Practices described in 1.1.3 Determine Appraisal Constraints apply to SCAMPI M. Additionally:

The appraisal team leader shall reassess appraisal constraints at the conclusion of Stage 1 of the SCAMPI M, when the model sample scope has been determined.

Parameters and Limits

The Parameters and Limits described in 1.1.3 Determine Appraisal Constraints apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 1.1.3 Determine Appraisal Constraints applies to SCAMPI M. Additionally:

The extent of the model sample scope (identified at the conclusion of Stage 1) will have a strong influence on SCAMPI M cost and schedule. The readiness review conducted prior to Stage 2 is an appropriate time to review cost and schedule constraints with the sponsor. See J.1.5.1 Perform Readiness Review.

J.1.1.4 Determine Appraisal Scope

Activity Description

The Activity Description described in 1.1.4 Determine Appraisal Scope applies to SCAMPI M. Additionally:

The relationship between the terms "model scope" and "model sample scope" is a key SCAMPI M concept.

The model scope in an appraisal is the set of reference model process areas that are investigated within the organizational unit, and, for CMMI models, the representation chosen and the associated maximum capability or maturity level targeted. In a SCAMPI M appraisal, the model scope can be the same set, or a subset, of the process areas and levels in the model scope of the baseline appraisal (i.e., process areas and maturity/capability levels may be less than or equal to those used in the baseline SCAMPI A, but not greater).

In a SCAMPI M appraisal, the model sample scope is the subset of the model scope that will be characterized and rated in Stage 2 of the appraisal to determine whether the organizational unit's baseline appraisal ratings results may be extended. The model sample scope is determined at the end of Stage 1, and consists of an investigative sample and random sample of model scope process area specific goals and generic practices:

- The investigative sample is a set of specific goals and generic practices within the model scope that have been identified by the appraisal team based on objective evidence reviewed during SCAMPI M Stage 1.
- The random sample is a set of specific goals and any generic practices within the model scope that are randomly selected to supplement the investigative sample.

In a SCAMPI M appraisal, organizational scope and model scope are determined as part of the Plan and Prepare for Appraisal Phase. In Stage 1 of the Conduct Appraisal Phase, the SCAMPI M model sample scope is determined, and the process area coverage by the basic units and support functions within the organizational scope is planned.

The sampling factors and sampling factor values used to determine the organizational scope of the SCAMPI M appraisal are the same, or a subset of, those used in the baseline appraisal. See J.1.1.1 Determine Appraisal Objectives.

Required Practices

The Required Practices described in 1.1.4 Determine Appraisal Scope apply to SCAMPI M (with the exception of the planned coverage of process areas as noted below). Additionally:

At the conclusion of Stage 1 in a SCAMPI M appraisal, the appraisal team leader, in conjunction with the appraisal team, shall determine and document:

- the model sample scope for Stage 2;
- the planned coverage of each process area in the model sample scope for Stage 2 of the appraisal for each basic unit and support function within the organizational scope of the appraisal.

Parameters and Limits

The Parameters and Limits described in 1.1.4 Determine Appraisal Scope apply to SCAMPI M. Additionally:

The model scope for a SCAMPI M appraisal cannot exceed the model scope appraised in the baseline appraisal. When determining the SCAMPI M model scope:

- Process areas are limited to the set of process areas included in the model scope of the baseline appraisal. Process areas rated as not applicable in the baseline appraisal cannot become applicable in the SCAMPI M. Increasing maturity levels in a SCAMPI M is not permitted;
- Capability levels beyond those appraised in the baseline appraisal cannot be added to a SCAMPI M appraisal;
- An organizational unit may decrease the baseline appraisal model scope (e.g., process areas, maturity levels, or capability levels) in a SCAMPI M. Doing so creates a new model scope, from which process areas or levels cannot be added in a subsequent SCAMPI M. If model scope is decreased in a SCAMPI M, the model sample scope data coverage rules described below apply to the reduced model scope.

When determining the model sample scope, a minimum of 33% of the specific goals and 33% of the generic practices in the model scope must be included in model sample scope

- All specific practices in any selected specific goal must be examined;
- When determining the 33% of specific goals and generic practices in the model scope, standard rounding rules apply;
 - If using the staged representation, the generic practices in the model sample scope must be sampled for all process areas containing sampled specific goals;
 - If using the continuous representation, a minimum of 33% of generic practices through the targeted capability level must be sampled for each process area containing sampled specific goals. If the targeted capability level is 1, GP 1.1 must be sampled.

In addition, the following data coverage rules apply:

- The investigative sample is determined by reviewing objective evidence (artifacts) in Stage 1 for all specific and generic goals in the model scope.
- The model sample scope must include at least two specific goals within the model scope that are selected by random sampling (regardless of whether the investigative sample alone comprises 33% of the specific goals with the model scope).
- The model sample scope must include at least one specific goal from each Process Area Category within the model scope;
- If using the staged representation, the model sample scope must include at least one specific goal from each maturity level within the model scope.
- Random sampling of generic practices is not required unless the investigative sample of generic practices is below 33%.

The organizational unit may request that the appraisal team include some specific goals and generic practices in Stage 2 of the SCAMPI M based on business objectives of the organization. These organizational unit requests are not considered part of the investigative sample, and are not included in the 33% specific goal and generic practice requirements for the model sample scope.

To determine the data coverage expectations for Stage 2:

- Map the basic units and support functions to process areas in accordance with 1.1.4 Determine Appraisal Scope. This mapping identifies process area instantiations for each basic unit and support function in the organizational scope of the appraisal. The mapping establishes how the organizational scope of the appraisal is linked to the model scope of the appraisal.
- Apply the model sample scope to the mapping. If a process area contains any sampled specific goals, each sampled basic unit or support function providing evidence for that process area for the appraisal must provide evidence for the sampled specific goals of the process area and the sampled generic practices in the model sample scope. The new mapping establishes how the organizational scope of the appraisal is linked to the model sample scope of the appraisal.

• Establish representative coverage of the organizational unit by applying all SCAMPI A coverage rules for Process Areas, Basic Units, and Support Functions. (See 1.1.4 Determine Appraisal Scope.). Coverage Rule 1 for Process Areas is modified for SCAMPI M as follows: Objective evidence provided for goals included in the model sample scope must address all practices that are part of those goals. Each basic unit or support function in the organizational scope must address all practices in the goals for which they supply data.

Implementation Guidance

In a SCAMPI M appraisal, organizational scope is determined in the same manner as a SCAMPI A appraisal. This may result in the same or a different set of basic units and support functions that were in the organizational scope of the baseline appraisal. Basic units that were performing work at the time of the baseline appraisal may no longer be active by the time of the SCAMPI M. Other new basic units may have started performing work.

Situations may occur in which an organizational unit elects to decrease the SCAMPI M model scope from that which was defined for the baseline appraisal. Examples include:

- The Supplier Agreement Management process area (in the CMMI-DEV and CMMI-SVC models) that was applicable for the baseline appraisal could become not applicable for the SCAMPI M if the organizational unit no longer has suppliers.
- For business reasons, an organizational unit may decide to extend a lower maturity level or capability levels than were achieved in the baseline appraisal (e.g., an organization that achieved or extended a maturity level 4 in a baseline appraisal may decide to only extend the maturity level 3 portion of the reference model in a SCAMPI M).

If an organizational unit is considering decreasing the model scope during a SCAMPI M appraisal, care should be taken to ensure that the model sample scope data coverage rules have been adequately applied to support the reduced model scope.

The appraisal team examines objective evidence from Stage 1 to identify the specific goals and generic practices that will comprise the investigative sample portion of the model sample scope. Selection of generic practices may result from systemic issues observed across process areas. Selection of specific goals may result from issues related to a specific practice or group of specific practices associated with a specific goal.

Final findings from the baseline appraisal can also provide guidance for identifying the investigative sample.

When determining the investigative sample, it is not required that appraisal team members maintain checklists of all practices in the reference model scope to perform this task. However, in order to achieve appraisal team consensus on the investigative sample, individual team members (or mini-teams) provide rationale to the full team supporting specific goal and generic practice selections related to evidence reviewed.

When sampling generic practices:

- If using the staged representation, the 33% generic practice rule is applied based on the number of generic practices relevant to the targeted maturity level. For example, maturity level 2 has 10 relevant generic practices. Taking 33% of 10 indicates a minimum of 3 generic practices are included in the model sample scope. For maturity levels greater than 3, taking 33% of the relevant 12 generic practices indicates a minimum of 4 generic practices are included in the model sample scope. Generic practices are sampled for all process areas containing sampled specific goals. For example, in an SCAMPI M appraisal targeting a maturity level 3 extension, if GP 2.2, GP 2.5, GP 2.7, and GP 3.2 are the generic practices to be sampled, they are sampled for each process area containing sampled specific goals.
- If using the continuous representation, individual process areas may have different targeted capability levels. Generic practices associated with GG3 would not apply to a process area with a target capability level 1 or 2. To ensure adequate data coverage for each process area in the model sample

scope, a minimum of 33% of generic practices through the targeted capability level is be sampled for each process area containing sampled specific goals. If the targeted capability level is 1, GP 1.1 is sampled (and related to the specific practices in the model sample scope).

• Using either staged or continuous representations, an appraisal team may include an entire generic goal (all generic practices) for an individual process area in the model sample scope.

The model sample scope may exceed the overall minimum requirement of 33% of specific goals and generic practices. The organizational unit may request greater sampling coverage for business improvement purposes (e.g., targeted process areas or generic practices to assess institutionalization), or for appraisal risk reduction (e.g., 33% sampling coverage of goals at each maturity level as a contingency needed in order to ensure sufficient coverage necessary for rating lower maturity levels in the event the targeted maturity level ratings are not achieved).

The appraisal team may also determine the model sample scope must be expanded beyond 33% of specific goals and generic practices due to potential weaknesses identified during Stage 1 artifact review. This may raise questions about the organizational unit's readiness to be appraised, and impact the resources (e.g., cost and schedule) required to conduct the appraisal. In such cases, the appraisal team leader considers this factor when conducting the readiness review prior to Stage 2.

If processes in the organizational unit have changed significantly since the baseline appraisal (without impacting sampling factors or sampling factor values), the appraisal team should closely examine the artifacts associated with changed process as they relate to specific and generic goals in the model scope for potential weaknesses during Stage 1.

Evaluation of artifacts and affirmations in Stage 2 could indicate weaknesses outside of the model sample scope. In this instance, the model sample scope is increased to include review of the specific goals or generic practices relative to the weakness.

A random number generator is a useful tool for selecting the random sample of specific goals and generic practices. Number the specific goals not contained in the investigative sample, and use the random number generator to identify the specific goals that will supplement the investigative sample to meet at least the minimum specific goal model sample scope requirements. Do the same for the generic practices.

J.1.1.5 Determine Appraisal Outputs

Activity Description

The Activity Description described in 1.1.5 Determine Appraisal Outputs applies to SCAMPI M. Additionally:

Although the outputs of a SCAMPI M appraisal resemble those of a SCAMPI A, some differences exist:

- The primary output of SCAMPI M Stage 1 is a defined model sample scope for Stage 2.
- The outputs of SCAMPI M Stage 2 include:
 - Goal ratings based on the model sample scope
 - The extended validity period for ratings determined from the baseline appraisal

Required Practices

The Required Practices described in 1.1.5 Determine Appraisal Outputs apply to SCAMPI M. Additionally:

The appraisal team leader shall:

- Review required SCAMPI M outputs for each stage with the appraisal sponsor.
- Review and select optional SCAMPI M outputs with the appraisal sponsor.

Parameters and Limits

The Parameters and Limits described in 1.1.5 Determine Appraisal Outputs apply to SCAMPI M. Additionally:

Required SCAMPI M outputs include:

- Appraisal record (see J.3.2.2 Generate Appraisal Record)
- CMMI Steward data (see J.3.2.3 Provide Appraisal Feedback to the CMMI Steward)

Required SCAMPI M outputs for each Stage are:

- Stage 1 defined model sample scope.
- Stage 2 the appraisal record and CMMI Steward data, which include:
 - Final findings, including statements of strengths and weaknesses documented for goals containing practices in the model sample scope
 - Goal ratings for the organizational unit based on the model sample scope. The choice may be made to not disclose the ratings to anyone other than the appraisal sponsor. Goal ratings for individual disciplines or for individual basic units, unless the basic unit is the organizational unit, are not allowed.
 - Validity period for the ratings determined from the baseline appraisal
 - The appraisal disclosure statement, signed by the appraisal team leader and sponsor

Implementation Guidance

The Implementation Guidance described in 1.1.5 Determine Appraisal Outputs applies to SCAMPI M. Additionally:

In the event of a SCAMPI M negative outcome (one or more goals rated Unsatisfied or Not Rated), the organizational unit has the option to create an action plan that addresses model sample scope goals rated Unsatisfied or Not Rated. (See J.3.1.3 Plan for Next Steps.)

J.1.1.6 Obtain Commitment to Initial Appraisal Plan

Activity Description

The Activity Description described in 1.1.6 Obtain Commitment to Initial Appraisal Plan applies to SCAMPI M. Additionally:

The appraisal sponsor agrees to the initial appraisal plan for each stage of the SCAMPI M appraisal. At the conclusion of Stage 1, the plan is refined based on the identified model sample scope.

Required Practices

The Required Practices described in 1.1.6 Obtain Commitment to Initial Appraisal Plan apply to SCAMPI M. Additionally:

In addition to sponsor approval of the initial plan, the appraisal team leader or designee shall obtain sponsor approval of the appraisal plan prior to Stage 2.

Parameters and Limits

The Parameters and Limits described in 1.1.6 Obtain Commitment to Initial Appraisal Plan apply to SCAMPI M. Additionally:

The initial SCAMPI M appraisal plan includes:

- Rationale for determining whether a SCAMPI M appraisal is appropriate
- The baseline appraisal scope
- The data collection strategy for each stage
- A description of the planned appraisal outputs for each stage
- The SCAMPI M appraisal constraints, including

 The planned appraisal duration. The maximum amount of time to perform the SCAMPI M Conduct Appraisal phase is 45 days. The Conduct SCAMPI M Appraisal phase begins with the start of Stage 1 (Activity J.2.1 Prepare Participants) and continues through the end of Stage 2 (J.2.6 Generate Appraisal Results).

Implementation Guidance

The Implementation Guidance described in 1.1.6 Obtain Commitment to Initial Appraisal Plan applies to SCAMPI M.

J.1.2 Develop Appraisal Plan

J.1.2.1 Tailor Method

Activity Description

The Activity Description described in 1.2.1 Tailor Method applies to SCAMPI M.

Required Practices

The Required Practices described in 1.2.1 Tailor Method apply to SCAMPI M. Additionally:

The appraisal team leader tailors the method using the SCAMPI M tailoring checklist.

Parameters and Limits

The Parameters and Limits described in 1.2.1 Tailor Method apply to SCAMPI M. Additionally:

The parameters and limits sections of the MDD body and this appendix define the allowable variation in the SCAMPI M method.

Implementation Guidance

The Implementation Guidance described in 1.2.1 Tailor Method applies to SCAMPI M. Additionally:

Typical tailoring choices that significantly impact SCAMPI M appraisal planning include:

- The data collection strategy for supporting the SCAMPI M Stages
- Scheduling considerations based on the data collection strategy for Stage 2
- Unique team member assignments and mini-team pairings based on a small SCAMPI M team
- Possible action plan in the event of a negative SCAMPI M outcome

J.1.2.2 Identify Needed Resources

Activity Description

The Activity Description described in 1.2.2 Identify Needed Resources applies to SCAMPI M. Additionally:

Required Practices

The Required Practices described in 1.2.2 Identify Needed Resources apply to SCAMPI M. Additionally:

The appraisal team leader identifies resources needed for each stage of the SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 1.2.2 Identify Needed Resources applies to SCAMPI M. Additionally:

Participants required for each stage of the SCAMPI M must be considered.

Implementation Guidance

The Implementation Guidance described in 1.2.2 Identify Needed Resources applies to SCAMPI M. Additionally:

While the SCAMPI M requirement for minimum number of appraisal team members is less than that of a SCAMPI A, the team member qualification requirements are greater than those required in SCAMPI A appraisals. (See J.1.3.2 Select Team Members.) SCAMPI M appraisals are designed for experienced team members who are able to reach accurate conclusions with less evidence.

Basic unit and support function participants may not be known until the conclusion of Stage 1, when the model sample scope and associated data coverage needs are determined.

In the event of a SCAMPI M negative outcome, action plan activities may require additional resources, including re-assembling the SCAMPI M appraisal team or setting up a virtual appraisal environment as part of action plan closure.

J.1.2.3 Develop Data Collection Plan

Activity Description

The Activity Description described in 1.2.3 Develop Data Collection Plan applies to SCAMPI M. Additionally:

The data collection plan is based on the strategy determined in J.1.1.2 Determine Data Collection Strategy, and evolves for each stage of the SCAMPI M.

The plan for Stage 1 involves collection of high yield artifacts for all specific and generic goals in the model scope.

The plan for Stage 2 is not fully realized until the completion of Stage 1, when the model sample scope is determined and the data coverage rules are applied to the basic units and support functions in the organizational scope. Initial planning for Stage 2 involves organizational preparation to support Stage 2 data collection needs. The level of detail in the initial plan for Stage 2 will differ for organizations using a managed discovery data collection strategy versus organizations using a verification data collection strategy.

Required Practices

The Required Practices described in 1.2.3 Develop Data Collection Plan apply to SCAMPI M. Additionally:

The appraisal team leader or designee shall document the data collection plan for each stage of the SCAMPI M appraisal.

Parameters and Limits

The Parameters and Limits described in 1.2.3 Develop Data Collection Plan apply to SCAMPI M. Additionally:

For Stage 1, the data collection plan must include artifacts for all specific and generic goals in the model scope performed by all the basic units and support functions in the organizational scope.

Affirmation collection in Stage 1 is optional.

For Stage 2, the plan must specify how, when, and by whom the objective evidence will be verified for every instantiation of every practice in the model sample scope in accordance with the coverage rules described in J.1.1.4 Determine Appraisal Scope.

Implementation Guidance

The Implementation Guidance described in 1.2.3 Develop Data Collection Plan applies to SCAMPI M. Additionally:

The appraisal team leader works with the appraisal coordinator and/or organizational unit representatives to identify the initial set of artifacts to be collected for Stage 1. Additional artifacts may be requested by the appraisal team during Stage 1.

The appraisal team leader allocates evidence review assignments to team members. The assignments may vary as the SCAMPI M appraisal progresses through each stage.

For Stage 1, a managed discovery data collection approach is recommended. The high yield artifacts support efficient appraisal team evaluation of specific goals and generic goals at less cost than a verification data collection approach. Examples of high yield artifacts for use in the Stage 1 evidence review can be found in Appendix E, Managed Discovery table of "Example High-Yield Work Products. The organization is not required to collect objective evidence for every practice in the model scope nor are they required to map the Stage 1 artifacts to practices in the model scope.

The plan for Stage 1 evidence review is primarily work product-oriented. However, a limited number of affirmations may be needed if the appraisal team requires clarification on how the collected artifacts relate to implementation of model components (goals).

The conclusion of Stage 1 results in a defined model sample scope for Stage 2. If artifacts needed for Stage 2 have not already been collected in Stage 1, the data collection plan is updated to address collection of the needed artifacts.

J.1.2.4 Determine Cost and Schedule

Activity Description

The Activity Description described in 1.2.4 Determine Cost and Schedule applies to SCAMPI M.

Required Practices

The Required Practices described in 1.2.4 Determine Cost and Schedule apply to SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 1.2.4 Determine Cost and Schedule apply to SCAMPI M. Additionally:

The appraisal team leader estimates cost and schedule during initial SCAMPI M planning, and re-estimates when the model sample scope has been determined at the conclusion of Stage 1.

Implementation Guidance

The Implementation Guidance described in 1.2.4 Determine Cost and Schedule applies to SCAMPI M. Additionally:

The SCAMPI M appraisal method was designed to be significantly less expensive to perform than conducting a SCAMPI A appraisal of identical scope. The savings are achieved in conducting the SCAMPI M through the use of:

- Sampling techniques to determine which portions of the model scope are to be examined in detail,
- Abstracting some appraisal activities from the practice level to the goal level to achieve efficiencies,
- Effectively using high yield artifacts to obtain a broad understanding of the organization's process model coverage,
- Prioritizing appraisal team activities by focusing the detailed investigation in areas of potential weakness, and
- A corrective action plan concept for addressing identified weaknesses within the scope of the appraisal. This action plan concept enables organizations to accept some ratings risk (i.e., since an unfavorable rating is potentially recoverable with the action plan) and can minimize the costly iterations of perfecting objective evidence and performing a series of intermediate appraisals prior to conducting the SCAMPI M.

Estimating Stage 1 costs can be based on the extent of the set of high yield artifacts identified in the Data Collection Plan. The data coverage rules for model sample scope described in J.1.1.4 Determine Appraisal Scope can serve as a framework for estimating Stage 2 costs.

J.1.2.5 Plan and Manage Logistics

Activity Description

The Activity Description described in 1.2.5 Plan and Manage Logistics applies to SCAMPI M.

Required Practices

The Required Practices described in 1.2.5 Plan and Manage Logistics apply to SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 1.2.5 Plan and Manage Logistics apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 1.2.5 Plan and Manage Logistics applies to SCAMPI M.

J.1.2.6 Document and Manage Risks

Activity Description

The Activity Description described in 1.2.6 Document and Manage Risks applies to SCAMPI M.

Required Practices

The Required Practices described in 1.2.6 Document and Manage Risks apply to SCAMPI M. Additionally:

The appraisal team leader or designee shall re-evaluate risks at the conclusions of Stage 1 when the SCAMPI M model sample scope has been determined.

Parameters and Limits

The Parameters and Limits described in 1.2.6 Document and Manage Risks apply to SCAMPI M. Additionally:

When evaluating risks to a SCAMPI M appraisal, cost must also be considered as a potential risk area.

Implementation Guidance

The Implementation Guidance described in 1.2.6 Document and Manage Risks applies to SCAMPI M. Additionally:

The SCAMPI M model sample scope is not determined until the conclusion of Stage 1. Not knowing the extent of the model sample scope during initial planning can be a source of cost and schedule risks.

J.1.2.7 Obtain Commitment to Appraisal Plan

Activity Description

The Activity Description described in 1.2.7 Obtain Commitment to Appraisal Plan applies to SCAMPI M.

Required Practices

The Required Practices described in 1.2.7 Obtain Commitment to Appraisal Plan apply to SCAMPI M. Additionally:

The appraisal team leader or designee shall review the appraisal plan with the sponsor and ensure the sponsor's approval prior to each stage of the SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 1.2.7 Obtain Commitment to Appraisal Plan apply to SCAMPI M. Additionally:

The required contents of the SCAMPI M appraisal plan include:

- Rationale for determining whether a SCAMPI M appraisal is appropriate (see J.1.1.6 Obtain commitment to the Initial Appraisal Plan)
- Model sample scope with investigative and randomly sampled specific goals and generic practices identified (see J.1.1.4 Determine Appraisal Scope)

Implementation Guidance

The Implementation Guidance described in 1.2.7 Obtain Commitment to Appraisal Plan applies to SCAMPI M. Additionally:

Review of the appraisal plan prior to Stage 1 helps ensure that the sponsor understands and agrees with the initial SCAMPI M planning and risks. The organizational scope and the model scope have been agreed upon. The sponsor understands how the SCAMPI M will be conducted, the resources and logistics required, and the consequences of a negative appraisal outcome.

Review of the plan prior to Stage 2 provides the sponsor an opportunity to address risks to the appraisal constraints prior to proceeding. At this point, the model sample scope has been agreed to, and its impact on the appraisal constraints (e.g., cost, schedule, staff availability to support interviews) is better understood.

J.1.3 Select and Prepare Team

J.1.3.1 Identify Appraisal Team Leader

Activity Description

The Activity Description described in 1.3.1 Identify Appraisal Team Leader applies to SCAMPI M. Additionally:

The appraisal team leader must be a certified SCAMPI M Lead Appraiser.

Required Practices

The Required Practices described in 1.3.1 Identify Appraisal Team Leader apply to SCAMPI M. Additionally:

The sponsor or designee shall select a certified SCAMPI M Lead Appraiser to serve as the appraisal team leader.

Parameters and Limits

The Parameters and Limits described in 1.3.1 Identify Appraisal Team Leader apply to SCAMPI M. Additionally:

The appraisal team leader must be a certified SCAMPI M Lead Appraiser in good standing. If the SCAMPI M model scope includes high maturity process areas, the appraisal team leader must also be a certified high-maturity Lead Appraiser in good standing.

Implementation Guidance

The Implementation Guidance described in 1.3.1 Identify Appraisal Team Leader applies to SCAMPI M. Additionally:

SCAMPI M lead appraisers, by definition, will be certified Lead Appraisers who have completed SCAMPI M certification training.

SCAMPI M appraisal team leader responsibilities include:

- Ensuring that all appraisal team members have the appropriate experience, knowledge, and skills in the appraisal reference model, applicable domains, and in the SCAMPI M appraisal method
- Ensuring that the appraisal is conducted in accordance with the documented SCAMPI M method

Because of the cost and schedule constraints on a SCAMPI M, the appraisal team leader should consider being part of a mini-team and/or being assigned to an evidence review role.

J.1.3.2 Select Team Members

Activity Description

The Activity Description described in 1.3.2 Select Team Members applies to SCAMPI M. Additionally:

Because SCAMPI M appraisal team members require an ability to reach accurate appraisal conclusions in a shorter timeframe and with less evidence than a SCAMPI A, the qualifications to be an appraisal team member on a SCAMPI M are greater than those needed for a SCAMPI A.

Required Practices

The Required Practices described in 1.3.2 Select Team Members apply to SCAMPI M.

Parameters and Limits

The minimum acceptable team size for a SCAMPI M appraisal is two people (including the appraisal team leader).

Each appraisal team member must have previously completed a CMMI Steward-licensed offering of the designated introductory course relating to each and every reference model (e.g., CMMI Constellation, or People CMM) that is included in the scope of the appraisal.

Each SCAMPI M appraisal team member must have prior experience as an appraisal team member on at least two SCAMPI A appraisals.

The SCAMPI M team overall must have field experience relating to the content of the reference model (e.g., development of products and services for CMMI-DEV, delivery of services for CMMI-SVC, acquisition for CMMI-ACQ, human resources for P-CMM), For each reference model (e.g., constellation) in the scope of the appraisal, the team must have the following:

• Individual SCAMPI M team members, each of whom have at least six years of experience performing the type of work addressed in each appraisal reference model included in the appraisal

The appraisal team leader is required to evaluate and validate the experience of each team member by either a review of the member's resumé or through an interview to determine their level of expertise.

The selected appraisal team members and their organizational affiliation and qualifications (individually and in aggregate) must be documented in the appraisal plan. The team leader must identify the range of roles, functions, or activities performed in the work done within the organizational unit (e.g., lifecycle stages for CMMI-DEV).

The SCAMPI M appraisal team must include at least two members external to the organizational unit being appraised (one of whom must be the SCAMPI M Appraisal Team Lead).

The appraisal team, as a whole, must have members with experience performing practices from all of the process areas included in the appraisal scope. Each individual SCAMPI M team member must have experience performing practices from the process areas the individual is reviewing.

The appraisal team shall not be composed entirely of staff who wrote the processes being appraised. If one or more process authors are included on the team, the risk management section of the appraisal plan must address how potential conflicts of interest will be managed.

The sponsor of the appraisal shall not be an appraisal team member. A senior manager who has supervisory authority over the entire organizational unit shall not be an appraisal team member.

Additional requirements specific to high maturity appraisals:

- Each SCAMPI M appraisal team member reviewing high maturity process areas must have been an appraisal team member on at least one SCAMPI A high maturity appraisal.
- At least one SCAMPI M appraisal team member reviewing high maturity process areas must:
 - Have been on a previous SCAMPI A high maturity appraisal as part of a high maturity miniteam, or
 - Be a certified high maturity Lead Appraiser who has been on a previous SCAMPI A high maturity appraisal as an appraisal team leader or team member.
- The team as a whole must have collective experience implementing high maturity activities, such as establishing, evaluating, using, or analyzing process performance baselines and process performance models.

The appraisal team leader is the final authority on acceptance of appraisal team members and is responsible for ensuring their qualifications and suitability for the appraisal purpose.

Implementation Guidance

The Implementation Guidance described in 1.3.2 Select Team Members applies to SCAMPI M. Additionally:

Because the SCAMPI M is designed as a low cost alternative to a SCAMPI A appraisal, using fewer number of team members relative to the SCAMPI A is also appropriate. When determining SCAMPI M team size, a balance between the scope of the appraisal and appraisal cost and schedule constraints should be considered. Using fewer but more experienced team members can mitigate cost and schedule risks without compromising team effectiveness.

Additional appraisal team member selection considerations include:

• Encouraging involvement of team members who participated on previous organizational unit SCAMPI A or SCAMPI M appraisals. Using consistent team members across appraisals contributes to an understanding of the organizational unit that can increase appraisal efficiency.

J.1.3.3 Document and Manage Conflicts of Interest

Activity Description

The Activity Description described in 1.3.3 Document and Manage Conflicts of Interest applies to SCAMPI M.

Required Practices

The Required Practices described in 1.3.3 Document and Manage Conflicts of Interest apply to SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 1.3.3 Document and Manage Conflicts of Interest apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 1.3.3 Document and Manage Conflicts of Interest applies to SCAMPI M.

J.1.3.4 Prepare Team

Activity Description

The Activity Description described in 1.3.4 Prepare Team applies to SCAMPI M.

Required Practices

The Required Practices described in 1.3.4 Prepare Team apply to SCAMPI M. Additionally:

The appraisal team leader shall provide SCAMPI M Method training to appraisal team members or ensure that they have already received it.

All SCAMPI M appraisal team members must receive SCAMPI M training from a certified SCAMPI M lead appraiser.

Parameters and Limits

The Parameters and Limits described in 1.3.4 Prepare Team apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 1.3.4 Prepare Team apply to SCAMPI M.

J.1.4 Obtain and Inventory Initial Objective Evidence

J1.4.1 Obtain Initial Objective Evidence

Activity Description

The Activity Description described in 1.4.1 Obtain Initial Objective Evidence applies to SCAMPI M. Additionally:

Unlike a SCAMPI A, the data needed for a SCAMPI M appraisal differs based on the two stages of the SCAMPI M. Prior to the start of each stage, the appraisal team leader will review the data needs with the sponsor or designee.

The organization provides objective evidence for each stage based on the strategy and descriptions in the data collection plan. See J.1.2.3 Develop Data Collection Plan.

Required Practices

The Required Practices described in 1.4.1 Obtain Initial Objective Evidence apply to SCAMPI M. Additionally:

The appraisal team leader or designee shall obtain the objective evidence needed to conduct Stages 1 and 2 of a SCAMPI M appraisal in accordance with the data collection plan.

Parameters and Limits

The Parameters and Limits described in 1.4.1 Obtain Initial Objective Evidence apply to SCAMPI M. Additionally:

For Stage 1, the organization collects artifacts from all basic units and support functions in the organizational scope for all specific and generic goals in the model scope, as described in the data collection plan (See J.1.2.3 Develop Data Collection Plan.

For Stage 2, the organization must provide artifacts reflecting implementation of the practices contained in the model sample scope. Typically these artifacts are mapped to the practices in the model sample scope, unless a discovery approach to Stage 2 has been planned. The appraisal team leader or designee must update the data collection plan (See J.1.2.3 Develop Data Collection Plan). Artifacts are obtained from the basic units and support functions in the organizational scope based on the application of the data coverage rules to the model sample scope (See J.1.1.4 Determine Appraisal Scope).

Implementation Guidance

The Implementation Guidance described in 1.4.1 Obtain Initial Objective Evidence applies to SCAMPI M. Additionally:

For Stage 1, a managed discovery data collection approach is recommended. The high yield artifacts support efficient appraisal team evaluation of specific goals and generic goals at less cost than a verification data collection approach. The organization is not required to collect objective evidence for every practice in the model scope nor are they required to map the Stage 1 artifacts to practices in the model scope.

The organization collects Stage 2 artifacts at the practice level of the model sample scope from the basic units and support functions instantiating the implementation of those practices.

Because the model sample scope of the SCAMPI M appraisal is not known until the conclusion of Stage 1, the organizational unit may need additional schedule time to collect the artifacts for Stage 2. Some objective evidence used in Stage 1 may be reused in Stage 2. In some instances, enough Stage 1 evidence may be reused that the appraisal team may shift directly from Stage 1 to Stage 2. In cases where the organizational unit may need additional time to collect Stage 2 evidence, the appraisal team leader and sponsor may agree to delay the

start of Stage 2. The appraisal team leader works with the organizational unit's sponsor or designee(s) to update the data collection plan for Stage 2, and make any appraisal schedule modifications necessary to support the updated plan. Note that the 45 day clock for the Conduct Appraisal phase continues to run during any delays between Stage 1 and Stage 2, and the appraisal team leader and sponsor should plan accordingly.

J.1.4.2 Inventory Objective Evidence

Activity Description

The Activity Description described in 1.4.2 Inventory Objective Evidence applies to SCAMPI M.

Required Practices:

The appraisal team leader and/or designees shall

- examine the initial set of objective evidence provided by the organizational unit for Stages 1 and 2 of a SCAMPI M appraisal
- determine the extent to which additional objective evidence is needed to continue relative to each stage

Parameters and Limits

The Parameters and Limits described in 1.4.2 Inventory Objective Evidence apply to SCAMPI M. Additionally:

For Stage 1, the data collected by the organization must include artifacts of each specific and generic goal in the model scope, and any additional artifacts requested by the appraisal team during Stage 1. Ultimately, the information provided by the organization for Stage 1 must be detailed enough for the appraisal team to determine the model scope for Stage 2.

Information provided by the organization for Stage 2 must be detailed enough to understand the extent to which each type of objective evidence (i.e., artifacts and/or affirmations) is available for each process instantiation for each model practice within the model sample scope of the appraisal in accordance with the data coverage rules described in J.1.1.4 Determine Appraisal Scope.

Implementation Guidance

The Implementation Guidance described in 1.4.2 Inventory Objective Evidence applies to SCAMPI M.

J.1.5 Prepare for Appraisal Conduct

J1.5.1 Perform Readiness Review

Activity Description

The Activity Description described in 1.5.1 Perform Readiness Review applies to SCAMPI M. Additionally:

Readiness for a SCAMPI M appraisal is assessed in the context of each stage of the SCAMPI M. Readiness is reviewed prior to the conduct of each stage, and is determined by the appraisal team leader. The readiness review for Stage 1 is conducted prior to the Conduct Appraisal Phase.

Required Practices

The Required Practices described in 1.5.1 Perform Readiness Review apply to SCAMPI M. Additionally:

Prior to the start of each stage, the appraisal team leader shall determine whether the objective evidence collected for that stage is adequate to proceed with the appraisal as planned (See J.1.4.2 Inventory Objective Evidence).

Parameters and Limits

The Parameters and Limits described in 1.5.1 Perform Readiness Review apply to SCAMPI M. Additionally:

The maximum amount of time to perform the SCAMPI M Conduct Appraisal phase is 45 days. The Conduct SCAMPI M Appraisal phase begins with the start of Stage 1 (Activity J.2.1 Prepare Participants) and continues through the end of Stage 2 (J.2.6 Generate Appraisal Results).

The conduct of a Stage 1 readiness review may trigger the start of the 45 day constraint for the Conduct Appraisal phase. If team members perform document review during the readiness review for the purpose of identifying the model sample scope, or if any practice characterizations are determined, then the readiness review for Stage 1 starts the 45 day clock. If the plan calls for such document review or characterization, then the entire team must participate in the readiness review where those activities are carried out.

Implementation Guidance

The Implementation Guidance described in 1.5.1 Perform Readiness Review applies to SCAMPI M. Additionally:

For a SCAMPI M, the recommended minimum readiness criteria include the following

- There are no significant coverage gaps in the evidence collected for each stage compared to the data collection plan for that stage.
- Artifacts identified in the objective evidence databases are accessible.
- The state of readiness and completeness is consistent with the duration of the planned Conduct Appraisal phase.

J.1.5.2 Re-Plan Data Collection

Activity Description

The Activity Description described in 1.5.2 Re-Plan Data Collection applies to SCAMPI M. Additionally:

Re-planning data collection is stage-dependent in a SCAMPI M appraisal.

Re-planning data collection for Stage 1 could occur if the appraisal team needs supporting interviews to provide clarification on the high yield artifacts.

Re-planning data collection for Stage 2 could occur if evidence reviewed in Stage 2 indicates the model sample scope should be expanded. Evaluation of objective evidence in Stage 2 could indicate weaknesses outside of

the model sample scope. In this instance, the model sample scope may be increased to include review of the specific goals or generic practices relative to the weakness.

Required Practices

The Required Practices described in 1.5.2 Re-Plan Data Collection apply to SCAMPI M. Additionally:

The appraisal team leader reviews the current inventory of objective evidence collected for each stage of the SCAMPI M appraisal compared to the appraisal plan, and re-plans data collection accordingly.

Parameters and Limits

None.

Implementation Guidance

The Implementation Guidance described in 1.5.2 Re-Plan Data Collection applies to SCAMPI M. Additionally:

At any point in the SCAMPI M Conduct Appraisal phase, the appraisal team may request additional evidence (for example, if the assumptions concerning the Stage 1 high yield artifacts content are incorrect, or if the model sample scope expands during Stage 2). This may involve data collection re-planning.

J.2 Conduct a SCAMPI Maintenance Appraisal

Phase Description

The SCAMPI M Conduct Appraisal consists of two stages.

Stage 1 represents a high-level investigation that is focused on high yield artifacts for each specific and generic goal in the model scope, from which a model sample scope is determined. Stage 2 is more closely aligned with the SCAMPI A Conduct Appraisal phase in terms of the depth of the investigation. Stage 2 involves evaluating objective evidence based on the model sample scope. The result of Stage 2 is an extension or revocation of ratings determined in the baseline SCAMPI A or subsequent SCAMPI M appraisal.

The SCAMPI M Conduct Appraisal phase begins with the start of Stage 1 (Activity J.2.1 Prepare Participants) and continues through the end of Stage 2 (J.2.6 Generate Appraisal Results). The SCAMPI M Conduct Appraisal phase must be completed in 45 calendar days.

J.2.1 Prepare Participants

J.2.1.1 Conduct Participant Briefing

Activity Description

The Activity Description described in 2.1.1 Conduct Participant Briefing applies to SCAMPI M. Additionally:

The participants involved in each stage of the SCAMPI M appraisal may be different. Since the model sample scope is determined during Stage 1, participants for Stage 2 affirmations (e.g., interviews, demonstrations) may not be known until the end of Stage 1. Therefore, more than one participant briefing may be needed to ensure all participants understand their role in the appraisal.

Required Practices

The Required Practices described in 2.1.1 Conduct Participant Briefing applies to SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 2.1.1 Conduct Participant Briefing applies to SCAMPI M. Additionally:

Prior to each stage, each person must understand their role in the appraisal.

Implementation Guidance

The Implementation Guidance described in 2.1.1 Conduct Participant Briefing applies to SCAMPI M. Additionally:

Members of the organization participating in each stage of the SCAMPI M appraisal are informed of their role, and the expectations of the sponsor and appraisal team. While this communication is typically accomplished through a briefing in which the appraisal team leader provides an overview of the appraisal process, purpose, and objectives there is no requirement to conduct a formal briefing with the appraisal participants as this could be accomplished with a less formal orientation session.

During appraisal planning discussions with the sponsor, representatives of process improvement efforts in the organizational unit, and product and process quality assurance representatives, the appraisal team leader

reviews expectations with the discussion participants as part of determining the organizational unit's eligibility to conduct a SCAMPI M (See J.1.1.1 Determine Appraisal Objectives).

Each stage of the SCAMPI M Conduct Appraisal phase involves different groups of participants:

- Stage 1 organizational unit staff from basic units and support functions providing artifacts, and participants in interviews that may occur
- Stage 2 organizational unit staff needed to provide objective evidence (artifacts and affirmations) related to the model sample scope of the SCAMPI M. The participants in Stage 2 will be identified as part of planning for Stage 2

Briefing the Stage 1 participants may occur during the initial SCAMPI M Plan and Prepare for Appraisal phase. Doing so can provide guidance for the collection of high yield artifacts needed for Stage 1. The Stage 2 participants briefing most closely resembles a SCAMPI A participants briefing.

J.2.2 Examine Objective Evidence

J.2.2.1 Examine Objective Evidence from Artifacts

Activity Description

The Activity Description described in 2.2.1 Examine Objective Evidence from Artifacts applies to SCAMPI M. Additionally:

Examining objective evidence from artifacts for a SCAMPI M appraisal involves examining artifacts during each Stage (See J.1.4 Obtain and Inventory Initial Objective Evidence). In Stage 1, high yield artifacts are examined to evaluate process implementation of specific and generic goals in the model scope, leading to a determination of the model sample scope. Examining artifacts in Stage 2 of a SCAMPI M appraisal closely resembles similar activity performed in a SCAMPI A appraisal, as documented in 2.2.1 Examine Objective Evidence from Artifacts.

Required Practices

For Stage 1 the Required Practices described in 2.2.1 Examine Objective Evidence from Artifacts apply to SCAMPI M at the goal level.

For Stage 2, the Required Practices described in 2.2.1 Examine Objective Evidence from Artifacts apply to SCAMPI M.

Parameters and Limits

For Stage 1, the Parameters and Limits described in 2.2.1 Examine Objective Evidence from Artifacts apply to SCAMPI M at the goal level.

For Stage 2, the Parameters and Limits described in 2.2.1 Examine Objective Evidence from Artifacts apply to SCAMPI M.

Implementation Guidance

For Stage 1, the Implementation Guidance described in 2.2.1 Examine Objective Evidence from Artifacts applies to SCAMPI M at the goal level. Additionally:

High yield artifacts are examined for the basic units and support functions in the organizational scope of the appraisal to determine the investigative model sample scope for Stage 2.

For Stage 2, the Implementation Guidance described in 2.2.1 Examine Objective Evidence from Artifacts applies to SCAMPI M. Additionally:

Stage 2 closely resembles similar activity performed in a SCAMPI A appraisal. Some of the Stage 2 artifacts could have already been collected during Stage 1. In Stage 2, those artifacts may be reused, but are applied at the specific practice and generic practice level of the model sample scope.

Evaluation of artifacts in Stage 2 could indicate weaknesses outside of the model sample scope. In this instance, the model sample scope is increased to include review of the specific goals or generic practices relative to the weakness.

J.2.2.2 Examine Objective Evidence from Affirmations

Activity Description

The Activity Description described in 2.2.2 Examine Objective Evidence from Affirmations applies to SCAMPI M. Additionally:

Examining objective evidence from affirmations for a SCAMPI M appraisal may involve affirmations during each Stage (reference J.1.4 Obtain and Inventory Initial Objective Evidence). Stage 1 affirmations are optionally conducted based on the appraisal team's need to understand the data contained in the high yield artifacts. Affirmations in Stage 2 of a SCAMPI M appraisal are required and closely resemble similar activity performed in a SCAMPI A appraisal, as documented in 2.2.2 Examine Objective Evidence from Affirmations.

Required Practices

If affirmation activities are conducted for Stage 1: the Required Practices described in 2.2.2 Examine Objective Evidence from Affirmations apply to SCAMPI M at the goal level.

For Stage 2: the Required Practices described in 2.2.2 Examine Objective Evidence from Affirmations apply to SCAMPI M.

Parameters and Limits

If affirmation activities are conducted for Stage 1, the Parameter and Limits described in 2.2.2 Examine Objective Evidence from Affirmations apply to SCAMPI M at the goal level.

For Stage 2, the Parameter and Limits described in 2.2.2 Examine Objective Evidence from Affirmations applies to SCAMPI M.

Implementation Guidance

For Stage 1, if affirmation activities are conducted, the Implementation Guidance described in 2.2.2 Examine Objective Evidence from Affirmations applies to SCAMPI M at the goal level. Additionally:

During Stage 1, affirmations may be collected based on the appraisal team's need to better understand the data contained in the high yield artifacts. The primary focus of Stage 1 is to determine the investigative model sample scope for Stage 2.

For Stage 2, The Implementation Guidance described in 2.2.2 Examine Objective Evidence from Affirmations applies to SCAMPI M. Additionally:

Stage 2 closely resembles similar activity performed in a SCAMPI A appraisal. Some of the Stage 2 affirmations could have already been gathered during Stage 1. In Stage 2, those affirmations may be reused if they are applicable at the specific and generic practice level of the model sample scope. Broad, high level affirmations from Stage 1 may not provide enough information to fully confirm implementation of model practices.

Affirmations in Stage 2 could indicate weaknesses outside of the model sample scope. In this instance, the model sample scope is increased to include review of the specific goals or generic practices relative to the weakness.

J.2.3 Document Objective Evidence

J.2.3.1 Tag/Review/Tag Notes Activity Description

The Activity Description described in 2.3.1 Record Tag/Review/Tag Notes applies to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Activity Description described in 2.3.1 Tag/Review/Tag Notes applies to SCAMPI M for the model sample scope.

Required Practices

The Required Practices described in 2.3.1 Record Tag/Review/Tag Notes apply to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Required Practices described in 2.3.1 Tag/Review/Tag Notes apply to SCAMPI M for the model sample scope.

Parameters and Limits

The Parameters and Limits described in 2.3.1 Tag/Review/Tag Notes apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 2.3.1 Tag/Review/Tag Notes applies to SCAMPI M.

J.2.3.2 Record Presence/Absence of Objective Evidence

Activity Description

The Activity Description described in 2.3.2 Record Presence/Absence of Objective Evidence applies to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Activity Description described in 2.3.2 Record Presence/Absence of Objective Evidence applies to SCAMPI M for the model sample scope.

Required Practices

The Required Practices described in 2.3.2 Record Presence/Absence of Objective Evidence apply to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Required Practices described in 2.3.2 Record Presence/Absence of Objective Evidence apply to SCAMPI M for the model sample scope.

Parameters and Limits

The Parameters and Limits described in 2.3.2 Record Presence/Absence of Objective Evidence apply to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Parameters and Limits described in 2.3.2 Record Presence/Absence of Objective Evidence apply to SCAMPI M for the model sample scope.

Implementation Guidance

The Implementation Guidance described in 2.3.2 Record Presence/Absence of Objective Evidence applies to SCAMPI M at the goal level for Stage 1. Additionally:

A single high yield artifact can reflect the implementation of practices associated with one or more goals. High yield artifacts collected to support specific goals may reflect implementation of practices associated with related generic goals or practices (e.g., artifacts supporting configuration management goals may reflect implementation of Generic Practice 2.6 Control Work Products). While objective evidence is mapped to specific and generic goals during Stage 1, it may be beneficial to map objective evidence at the practice level when known.

For Stage 2, the Implementation Guidance described in 2.3.2 Record Presence/Absence of Objective Evidence applies to SCAMPI M for the model sample scope.

J.2.3.3 Document Practice Implementation

Activity Description

The Activity Description described in 2.3.3 Document Practice Implementation applies to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Activity Description described in 2.3.3 Document Practice Implementation applies to SCAMPI M for the model sample scope.

Required Practices

The Required Practices described in 2.3.3 Document Practice Implementation apply to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Required Practices described in 2.3.3 Document Practice Implementation apply to SCAMPI M for the model sample scope.

Parameters and Limits

For Stage 1, the Parameters and Limits described in 2.3.3 Document Practice Implementation apply to SCAMPI M for each goal where the appraisal team thinks there is risk of the goal not being satisfied.

For Stage 2, the Parameters and Limits described in 2.3.3 Document Practice Implementation apply to SCAMPI M for the model sample scope.

Implementation Guidance

For Stage 1, the Implementation Guidance described in 2.3.3 Document Practice Implementation applies to SCAMPI M for each goal where the appraisal team thinks there is risk of the goal not being satisfied. Additionally:

For Stage 1, the database used to record the inventory of objective evidence may incorporate the functionality to record goal-level gaps. Additionally, when examining objective evidence to determine which goals to include in the Stage 2 sample model scope, process gaps not considered serious enough to include the goal in the investigative sample may be recorded, as appropriate.

For Stage 2, the Implementation Guidance described in 2.3.3 Document Practice Implementation applies to SCAMPI M for the model sample scope.

J.2.3.4 Review and Update the Data Collection Plan

Activity Description

The Activity Description described in 2.3.4 Review and Update the Data Collection Plan applies to SCAMPI M. Additionally:

The data collection plan is reviewed and updated prior to each stage. The data collection needs for Stage 2 will not be understood until the determination of the model sample scope in Stage 1.

Required Practices

The Required Practices described in 2.3.4 Review and Update the Data Collection Plan apply to SCAMPI M at the goal level for Stage 1. Additionally:

Review and update the data collection plan prior to Stage 2 to reflect data needs for the model sample scope.

For Stage 2, the Required Practices described in 2.3.4 Review and Update the Data Collection Plan apply to SCAMPI M for the model sample scope.

Parameters and Limits

The Parameters and Limits described in 2.3.4 Review and Update the Data Collection Plan apply for SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 2.3.4 Review and Update the Data Collection Plan applies to SCAMPI M at the goal level for Stage 1.

For Stage 2, the Implementation Guidance described in 2.3.4 Review and Update the Data Collection Plan applies to SCAMPI M for the model sample scope. Additionally:

The focus of data collection differs for each stage of the SCAMPI M appraisal. For Stage 1 the focus is on 1) a high-level understanding of the processes associated with the model scope and 2) understanding potential gaps in implementation of specific and generic goals for the model scope which influences identification of the model sample scope. Stage 2 focuses on understanding gaps in practice implementation for the model sample scope. The data collection status summarizes the differences between the objective evidence on hand and the evidence needed to support the creation of appraisal outputs (e.g., findings and ratings). The plan for future data collection should be revisited prior to the beginning of each stage and updated as necessary.

J.2.4 Verify Objective Evidence

J.2.4.1 Verify Objective Evidence

Activity Description

The Activity Description described in 2.4.1 Verify Objective Evidence applies to SCAMPI M at the goal level for Stage 1. For Stage 1, the organization provides a set of high yield artifacts.

For Stage 2, the Activity Description described in 2.4.1 Verify Objective Evidence applies to SCAMPI M for the model sample scope.

Required Practices

The Required Practices described in 2.4.1 Verify Objective Evidence apply to SCAMPI M at the goal level for Stage 1 for artifacts and any affirmations for the model sample scope.

For Stage 2, the Required Practices described in 2.4.1 Verify Objective Evidence apply to SCAMPI M for the model sample scope.

Parameters and Limits

The Parameters and Limits described in 2.4.1 Verify Objective Evidence applies to SCAMPI M. Additionally:

For Stage 2:

Data Sufficiency: Verify that all data (i.e., artifacts and/or affirmations) are provided for all sampled basic units and support functions for the model sample scope of the appraisal, in accordance with the coverage rules specified in Section J.1.1.4, Determine Appraisal Scope, and documented in the data collection plan.

Coverage of the Basic Unit or Support Function: For basic units or support functions that encompass multiple disciplines or facets of work, ensure that the objective evidence covers all aspects of the work (e.g., in a systems and software project, looking only at evidence relating to software engineering is inadequate).

Implementation Guidance

The Implementation Guidance described in 2.4.1 Verify Objective Evidence applies to SCAMPI M. Additionally:

Affirmations are optional for Stage 1. The team determines if affirmations are needed to understand the high yield artifacts collected for the model scope.

Because the model sample scope is not known until Stage 1 is complete, a verification data collection approach may not be suitable for Stage 2 unless an organizational unit has a data structure in place providing access to evidence for all basic units and support functions, all process areas.

J.2.4.2 Characterize Implementation of Model Practices and Generate Preliminary Findings Activity Description

Characterization of model practices is not applicable to Stage 1.

Generation of preliminary findings is optional for Stage 1. Validation of gaps for each specific and generic goal where the appraisal team thinks there is risk of the goal not being satisfactorily implemented may be beneficial in determining the model sample scope prior to the start of Stage 2.

The Activity Description described in 2.4.2 Characterize Implementation of Model Practices and Generate Preliminary Findings applies to Stage 2 of SCAMPI M for the model sample scope.

Required Practices

The Required Practices described in 2.4.2 Characterize Implementation of Model Practices and Generate Preliminary Findings apply to Stage 2 of SCAMPI M for the model sample scope.

Parameters and Limits

The Parameters and Limits described in 2.4.2 Characterize Implementation of Model Practices and Generate Preliminary Findings apply to Stage 2 of SCAMPI M for the model sample scope.

Implementation Guidance

The Implementation Guidance described in 2.4.2 Characterize Implementation of Model Practices and Generate Preliminary Findings applies to Stage 2 of SCAMPI M for the model sample scope.

J.2.5 Validate Preliminary Findings

J.2.5.1 Validate Preliminary Findings.

Activity Description

The Activity Description described in 2.5.1 Validate Preliminary Findings applies to SCAMPI M. Additionally:

Obtaining feedback from participants at the end of Stage 1 is optional to ensure the team's understanding of the objective evidence evaluated and used to determine model sample scope.

Validation of preliminary findings for Stage 2 closely aligns with SCAMPI A validation of preliminary findings.

Required Practices

This activity is optional for Stage 1.

The Required Practices described in 2.5.1 Validate Preliminary Findings apply to Stage 2 of SCAMPI M for the model sample scope.

Parameters and Limits

The Parameters and Limits described in 2.5.1 Validate Preliminary Findings apply to Stage 2 of SCAMPI M for the model sample scope.

Implementation Guidance

The Implementation Guidance described in 2.5.1 Validate Preliminary Findings applies to Stage 2 of SCAMPI M for the model sample scope. Additionally:

For Stage 1 the team leader may want to meet with the sponsor or designee as well as members of a process group or other individuals involved in process improvement to ensure the team has adequately understood the objective evidence used to determine the model sample scope. The focus of validation at Stage 1 would be on potential weaknesses that determined the model sample scope. The validation activity does not have to be a formal briefing but could be a discussion with a limited number of participants.

J.2.6 Generate Appraisal Results

J.2.6.1 Derive Findings and Rate Goals

Activity Description

This activity is not performed for Stage 1.

The Activity Description described in 2.6.1 Derive Findings and Rate Goals applies to Stage 2 of a SCAMPI M for the model sample scope. Additionally:

Generating the appraisal results for Stage 2 of the SCAMPI M is much like generating the results for a SCAMPI A appraisal for the model sample scope. The preliminary findings focus on exemplary practice implementations as well as gaps in the implementation of practices.

For specific goals, only the specific goals in the Stage 2 model sample scope are rated. Generic goal rating for process areas in the model sample scope is based on the level of sampling and the impact of the aggregated weakness, as described in the parameters and limits.

If any goals are rated Unsatisfied or Not Rated, an action plan may be optionally developed to address the weaknesses or insufficient evidence coverage which impacted goal satisfaction. Refer to J.3.1.3 Plan for Next Steps for information on the action plan and follow-on activities.

Required Practices

This activity is not performed for Stage 1.

For Stage 2, the Required Practices described in 2.6.1 Derive Findings and Rate Goals apply to SCAMPI M for the model sample scope.

Parameters and Limits

For Stage 2 the Parameters and Limits described in 2.6.1 Derive Findings and Rate Goals apply to SCAMPI M for all specific goals included in the model sample scope. Additionally:

When rating generic goals:

- If all associated practices for a generic goal are included in the model sample scope, the goal rating process is performed as described in 2.6.1 Derive Findings and Rate Goals.
- If the model sample scope contains just a subset of the generic goal's associated practices, and weaknesses identified in the sampled generic practices are serious enough to have a significant negative impact on goal achievement, the generic goal is rated Unsatisfied. Ratings of Satisfied or Not Rated do not apply to generic goals for which all associated practices are not contained in the model sample scope.

Implementation Guidance

For Stage 2 the Implementation Guidance described in 2.6.1 Derive Findings and Rate Goals applies to SCAMPI M for all goals included in the model sample scope.

J.2.6.2 Determine Process Area Ratings

Activity Description

The Activity Description described in 2.6.2 Determine Process Area Ratings applies to SCAMPI M. Additionally:

SCAMPI M appraisals determine whether the validity period of process area ratings from the baseline appraisal can be extended for an additional 2 years from the completion of the SCAMPI M appraisal. The rating process differs for:

- Process areas in the model sample scope
- Process areas that are in the model scope but not the model sample scope

Required Practices

The Required Practices described in 2.6.2 Determine Process Area Ratings apply to SCAMPI M. Additionally:

The appraisal team must determine if the validity period of process area ratings can be extended.

If using a continuous representation,

- For process areas in the model sample scope,
 - The validity period of the baseline appraisal capability levels can be extended if no rated goals in the process area were rated Unsatisfied or Not Rated.
 - If any goals in the model sample scope for a process area are rated Unsatisfied or Not Rated, the validity period of a lower capability level than that achieved in the baseline appraisal can be extended for that process area in accordance with the parameters and limits described below.
- For process areas in the model scope but not the model sample scope, baseline appraisal capability levels can be extended.

If using a staged representation,

- For process areas in the model sample scope, baseline appraisal process area ratings can be extended if no rated goals in the model sample scope were rated Unsatisfied or Not Rated.
- For process areas in the model scope but not the model sample scope, baseline appraisal process area ratings can be extended.

Parameters and Limits

If using the continuous representation, capability level ratings for process areas in the model sample scope are extended based on the highest level at which:

- all rated specific goals in the model sample scope are rated Satisfied, and
- no generic goals are rated Unsatisfied or Not Rated.

The following table defines the basis for extending the validity period of capability level ratings:

Capability Level	Process Areas in Model Sample Scope
Rating Extended	
0	Default rating
1	Generic goal for capability level 1 is not rated Unsatisfied or Not Rated
	(all rated specific goals in the model sample scope are Satisfied)
2	No generic goals for capability levels 1 or 2 are rated Unsatisfied or Not Rated
	(all rated specific goals in the model sample scope are Satisfied)
3	No generic goals for capability levels 1, 2, or 3 are rated Unsatisfied or Not Rated
	(all rated specific goals in the model sample scope are rated Satisfied)

In a SCAMPI M appraisal, process area capability levels can be extended at or below the levels achieved in the baseline appraisal. For each process area in the model sample scope, a minimum 33% of generic practices for

a capability level must be sampled for that process area to extend the capability level. To extend a capability level 1, GP 1.1 must be sampled (and related to the specific practices in the model sample scope).

If an organizational unit extends a process area capability level below that achieved in the baseline appraisal, a new baseline is created. Process area capability levels cannot be raised above the baseline appraisal using a SCAMPI M.

If using the continuous representation, for each process area containing sampled specific goals, a minimum of 33% of generic practices must be sampled based on the target capability level of the process area

If the appraisal team determines that the validity period for targeted ratings for process areas cannot be extended, baseline ratings are revoked or the organization can develop an action plan to address the goals which were not satisfied, see J.3.1.3 Plan for Next Steps.

The SCAMPI M method can be used to extend previously attained SCAMPI A ratings for up to 2 years from the completion of the SCAMPI M appraisal. The number of SCAMPI M's is not restricted, but there is a maximum 5 year ratings validity period before another SCAMPI A is required. The SCAMPI M extension(s) are reflected in the SAS, and indicate the SCAMPI M method was used.

Process area ratings cannot be omitted in a SCAMPI M appraisal. The appraisal team must determine if the validity period of process area ratings can be extended.

Implementation Guidance

None

J.2.6.3 Determine Process Area Profile

Activity Description

The Activity Description described in 2.6.3 Determine Process Area Profile applies to SCAMPI M.

Required Practices

If the sponsor selected a process area profile as an output, the appraisal team shall generate a process area profile depicting the rating extension results agreed to by the appraisal team for each process area within the model scope of the appraisal.

Parameters and Limits

The Parameters and Limits described in 2.6.3 Determine Process Area Profile apply to SCAMPI M. Additionally:

If using a staged representation, the vertical axis rating indicates whether the targeted rating has been "Extended" or "Not Extended".

If using a continuous representation, the vertical axis indicates the capability level extensions agreed to by the appraisal team.

Implementation Guidance

The Implementation Guidance described in 2.6.3 Determine Process Area Profile applies to SCAMPI M.

J.2.6.4 Determine Maturity Level

Activity Description

In a SCAMPI M appraisal, the extensions of maturity level ratings are based on process area rating extensions as described in J.2.6.2 Determine Process Area Ratings. The maturity level rating extended is the highest level

at which the rating for all process areas in the model scope are extended, and for which the model sample scope data coverage rules are met.

If the targeted maturity level rating is not extended, a lower maturity level rating may be extended if the process area ratings and sampling data coverage criteria applicable to that level are met. Otherwise an action plan may be defined to address the identified weaknesses which impacted the rating extension decision, or to broaden the model sample scope to collect additional data and ensure the coverage criteria are met. Refer to J.3.1.3 Plan for Next Steps for information on the action plan and follow-on activities.

Required Practices

If a maturity level rating extension was selected as an output by the sponsor, the appraisal team shall determine the maturity level rating that can be extended based on the ratings extensions assigned to process areas and the extent of data coverage in the model sample scope for all process areas up to and including that maturity level.

Parameters and Limits

When using the staged representation, the maturity level rating extended is the highest maturity level at which ratings were extended for all process areas in the model scope staged at that maturity level and all lower maturity levels. In other words, for a maturity level 3 rating to be extended, process area ratings must have been extended for all process areas in the model scope staged at maturity levels 2 and 3.

The maturity level rating extended cannot exceed the maturity level achieved in the baseline appraisal.

A maturity level cannot be extended unless the model sample scope data coverage requirements have been satisfied for that maturity level. (Refer to J.1.1.4 Determine Appraisal Scope)

- A minimum of 33% of specific goals and 33% of generic practices in model scope through the extended maturity level must be included in the model sample scope. The selected generic practices in the model sample scope must be sampled for all process areas containing sampled specific goals.
- The model sample scope must include at least two specific goals within the model scope through the extended maturity level that are selected by random sampling (regardless of whether the investigative sample alone comprises 33% of the specific goals with the model scope).
- The model sample scope must include at least one specific goal from each Process Area Category within the model scope through the extended maturity level.
- The model sample scope must include at least one specific goal from each maturity level within the model scope through the extended maturity level.
- Basic units and support functions must meet the data coverage requirements for the model sample scope

If the targeted maturity level is unable to be extended, and the model sample scope data coverage requirements for lower maturity levels have not been satisfied, the appraisal team leader and sponsor must decide whether to:

- Collect additional data at the lower maturity levels, possibly extending the Conduct Appraisal phase within the 45 day constraint.
- Generate an action plan to address identified weaknesses at the targeted maturity level or address data coverage gaps at lower maturity levels. See J.3.1.3 Perform Next Steps.
- Revoke the baseline rating achieved in the baseline appraisal, without extending a maturity level rating lower than the targeted rating.

The SCAMPI M method can be used to extend previously attained SCAMPI A ratings for up to 2 years from the completion of the SCAMPI M appraisal. The number of SCAMPI M's is not restricted, but there is a maximum 5 year ratings validity period before another SCAMPI A is required. The SCAMPI M extension(s) are reflected in the SAS, and indicate the SCAMPI M method was used.

Implementation Guidance

This section cannot be omitted for a SCAMPI M appraisal seeking to extend a prior maturity level rating.

Organizational units concerned about not achieving targeted maturity level rating extensions can help to ensure the extension of a lower maturity level rating by planning for and meeting the data coverage requirements for all maturity levels below the targeted rating. However, applying the data coverage requirements to all maturity levels in scope may increase cost and resource needs for the SCAMPI M appraisal.

J.2.6.5 Document Appraisal Results

Activity Description

The Activity Description described in 2.6.4 Document Appraisal Results applies to SCAMPI M. Additionally:

In a SCAMPI M appraisal, the appraisal results include ratings for goals included in the Stage 2 model sample scope, and the decision on whether the baseline appraisal rating can be extended. This activity is not applicable to Stage 1.

Required Practices

For Stage 2:

- document the final findings
- document the validity period of maturity level or capability level ratings
- document the appraisal disclosure statement

Parameters and Limits

For Stage 2, the Parameters and Limits for 2.6.5 Document Appraisal Results apply for SCAMPI M.

Implementation Guidance

For Stage 2, the Implementation Guidance for 2.6.5 Document Appraisal Results applies for SCAMPI M.

Phase J.3 Report Results of a SCAMPI Maintenance Appraisal

Phase Description

Process inputs, outputs, and activities for reporting results of a SCAMPI M are very similar to other appraisal methods in the SCAMPI family, particularly the SCAMPI A method which delivers benchmark ratings. The high level outcome of the SCAMPI M is a decision on whether to extend the validity period of a previous maturity level rating or capability level rating(s) achieved in a prior SCAMPI A baseline. Additionally, SCAMPI M findings include validated strengths, weaknesses, practice characterization values, and goal ratings for the model sample scope as determined by the appraisal team. SCAMPI M activities align with the process definitions specified in sections 3.1 through 3.2 provided in the body of the MDD, with differences primarily in reporting the unique provisions of the SCAMPI M such as: 1) the use of an action plan if the result of the SCAMPI M is that the ratings cannot be extended, and 2) how the Appraisal Disclosure Statement (ADS) is used when an action plan is required to successfully complete the SCAMPI M.

J.3.1 Deliver Appraisal Results

J.3.1.1 Deliver Final Findings

Activity Description

The Activity Description described in 3.1.1 Deliver Final Findings applies to SCAMPI M. Additionally:

The SCAMPI M final findings contain:

- a summary of the documented strengths and weaknesses for process area goals and generic practices within the model sample scope, and
- the validity period for assigned ratings

An additional final findings presentation associated with the action plan reappraisal may be delivered if the SCAMPI M initially resulted in a negative outcome (i.e., one or more goals were rated Unsatisfied or Not Rated) and an action plan was developed and implemented. See J.3.1.3. Plan for Next Steps.

Required Practices

The Required Practices described in 3.1.1 Deliver Final Findings apply to SCAMPI M. Additionally:

If an action plan was implemented resulting from an initial negative outcome of the SCAMPI M, a final findings presentation shall be developed and presented associated with the action plan reappraisal activity. See J.3.1.3. Plan for Next Steps.

The appraisal disclosure statement (ADS) for SCAMPI M shall:

- adhere to the template provided by the CMMI Steward which includes all elements required by a SCAMPI M
- specify the model scope and model sample scope
- specify the investigative and random samples for the model sample scope
- specify whether an action plan is being implemented to address weaknesses resulting from a SCAMPI M if it was determined that the baseline appraisal ratings could not be extended

Parameters and Limits

The Parameters and Limits described in 3.1.1 Deliver Final Findings apply to SCAMPI M. Additionally:

The SCAMPI M final findings include:

- a description of the model sample scope indicating the specific goals and generic practices that were investigated and characterized for each process area
- strengths and weaknesses for process areas that are part of the model sample scope
- a statement indicating whether baseline appraisal ratings were extended, and, if so, the levels for which they were extended
- the validity period for ratings

Implementation Guidance

The Implementation Guidance described in 3.1.1 Deliver Final Findings applies to SCAMPI M. Additionally:

The final findings may optionally contain appraisal team observations for any of the process areas included in the SCAMPI M model scope.

A unique template for a SCAMPI M final findings presentation is provided to SCAMPI Lead Appraisers as a work aid by the CMMI Steward.

Special emphasis should be given in the results briefing to the model sample scope, how it was determined, and the model elements investigated, including which practices were characterized as input to rating decisions.

J.3.1.2 Conduct Executive Session(s)

Activity Description

The Activity Description described in 3.1.2 Conduct Executive Session(s) applies to SCAMPI M.

Required Practices

The Required Practices described in 3.1.2 Conduct Executive Sessions(s) apply to SCAMPI M.

Parameters and Limits

The Parameters and Limits described in 3.1.2 Conduct Executive Sessions(s) apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 3.1.2 Conduct Executive Sessions(s) applies to SCAMPI M. Additionally:

The executive session is highly recommended if the SCAMPI M resulted in a negative outcome, in such cases it is recommended the executive session take place prior to the final findings presentation. The appraisal sponsor may want to strategize with the appraisal team regarding the key items to be included in an action plan to address the weaknesses identified during the SCAMPI M. The appraisal team leader and appraisal sponsor should consider potential action plans and action plan reappraisal activities (See J.3.1.3 Plan for Next Steps).

J.3.1.3 Plan for Next Steps

Activity Description

The Activity Description described in 3.1.3 Plan for Next Steps applies to SCAMPI M. Additionally:

The "action plan" takes on particular emphasis for SCAMPI M, as it may include near-term actions to address weaknesses (gaps) that initially prevented the organizational unit from being able to extend its target ratings. If an action plan is developed and implemented, an action plan reappraisal is conducted to determine if the organization has successfully addressed its weaknesses and as a result, is able to extend its baseline ratings.

Required Practices

The Required Practices described in 3.1.3 Plan for Next Steps applies to SCAMPI M. Additionally:

If the SCAMPI M resulted in a negative outcome (i.e., the target rating could not be extended due to one or more goals rated Unsatisfied or Not Rated), the appraisal team leader shall provide a recommendation on whether an action plan could be developed and implemented, and an action plan reappraisal performed within 4 months.

The appraisal sponsor shall determine whether the organization chooses to develop and implement an action plan and perform an action plan reappraisal.

Parameters and Limits

The Parameters and Limits described in 3.1.3 Plan for Next Steps apply to SCAMPI M. Additionally:

If the SCAMPI M resulted in a negative outcome and it is decided to continue with the SCAMPI M process for the purpose of extending the target ratings, then:

- An "action plan" must be developed and implemented to address goal impacting weaknesses
- An action plan reappraisal must be successfully completed as follows (note: generally follows the SCAMPI methods of appraisal planning, conducting, and reporting results):
- The organizational scope of the action plan reappraisal consists of the basic units and support functions having weaknesses in the SCAMPI M appraisal that led to goals being rated Unsatisfied or Not Rated and any associated basic units or support functions the appraisal team leader determines are necessary to ensure the weaknesses have been addressed. In the case where a basic unit is no longer performing, another basic unit is required to be evaluated. In the situation that a basic unit is no longer performing and there is no other basic unit in the organizational unit to be evaluated, then the organizational unit must be redefined to exclude the portion of the organization where that basic unit resided or the model scope redefined to exclude the process area(s) that included the weakness(es). [J.1.1.1 and J.1.1.4]
 - The scope of the action plan reappraisal activity must completely reevaluate and characterize all practices associated with any goal rated Unsatisfied or Not Rated.
 - The appraisal team may request evidence from other practices in the model scope related to any goal rated Unsatisfied or Not Rated.
 - An appraisal plan is developed for the action plan reappraisal activities. [J.1.2,]
 - A detailed data collection plan must be developed for the action plan reappraisal activities. [J.1.2.3 and J.1.5.2].
 - The appraisal team reviews artifacts and conducts affirmation activities. [J.2.2.1 and J.2.2.2]
 - Artifacts and affirmations must be collected and reviewed from each basic unit or support function having weaknesses in the SCAMPI M that led to goals being rated Unsatisfied or Not Rated. Artifacts used as objective evidence must have been created or revised prior to the start of conduct action plan reappraisal activity.
 - The appraisal team evaluates the data and records the data. [J.2.3.2].
 - The appraisal team evaluates the extent of institutionalization of the implementation of the practices.
 - The appraisal team characterizes the practices from instantiation and organizational unit perspectives. [J.2.4.2].
 - The appraisal team develops and presents the preliminary findings. [J.2.5.1].
 - The appraisal team rates the goals that are pertinent to the reappraisal action plan. [J.2.6.1, J.2.6.2, J.2.6.3 and J.2.6.4].
 - The appraisal team develops and presents the action plan reappraisal final findings presentation. [J.3.1.1]

- Only one action plan reappraisal to address the weaknesses identified in the SCAMPI M can be performed.
- All corrective actions and appraisal team action plan reappraisal activities must be completed within four (4) calendar months of the date when the baseline SCAMPI M final findings were presented.
- If the action plan reappraisal is successfully completed, then the target ratings can be extended.
- If the action plan reappraisal still results in a negative outcome, or if the action plan reappraisal is not completed within the 4 month timeframe, or if the baseline rating expires prior to the successful result of the action plan reappraisal, the baseline rating is revoked.
- The appraisal team leader for the reappraisal must be the same as the appraisal team leader that led the SCAMPI M. Any special situations must be coordinated with the CMMI Steward.

Implementation Guidance

The Implementation Guidance described in 3.1.3 Plan for Next Steps applies to SCAMPI M. Additionally:

If the SCAMPI M resulted in a negative outcome and the sponsor decides to proceed with implementing an action plan to address the identified weaknesses, the associated action plan reappraisal should be performed by the same appraisal team members that performed the baseline SCAMPI M to the greatest extent possible. If original appraisal team members are not available, then it is recommended that the alternate appraisal team members identified in the appraisal plan be considered for filling open appraisal team requirements. Other appraisal team members can be selected for the reappraisal activities at the discretion of the appraisal team leader.

If the SCAMPI M appraisal resulted in an extension for the targeted baseline appraisal rating, the appraisal sponsor may determine the "next steps" activities and products are not necessary for a successful outcome. In this case, the final findings alone may be sufficient.

The SCAMPI M appraisal method allows implementing an action plan addressing weaknesses that prevented extending the targeted rating. Action plans are intended to be appropriate only if the identified weaknesses can reasonably be addressed within the 4 month timeframe and with confidence that the practices are adequately implemented and institutionalized across the organizational unit. Some weaknesses may be severe enough that corrective actions may not be feasible in a 4 month timeframe. If this is the case, the appraisal team leader advises the appraisal sponsor if action plans are unlikely to adequately close gaps and result in favorable ratings.

When reevaluating and characterizing practices associated with a goal in an action plan reappraisal, the extent of data coverage required is determined by the appraisal team leader based on the degree of change performed in the organizational unit to address the Unsatisfied or Not Rated goal. Corrective actions that caused changes to the organizational unit's set of standard processes have a greater impact than corrective action changes to a single basic unit's process execution. In cases where corrective action involved changes to organizational processes, data coverage may include artifacts and/or affirmations for all basic units or support functions that provided evidence for the goal in the SCAMPI M. Where corrective action was limited to a single basic unit, limiting data coverage to artifacts and affirmations for that basic unit may be appropriate.

If a basic unit having weaknesses in A SCAMPI M leading to goal ratings of Unsatisfied or Not Rated is no longer performing, and unable to provide evidence in an action plan reappraisal, another basic unit may be selected to be part of the organizational scope for the action plan reappraisal. An alternative basic unit from the same subgroup should be selected if one exists and is performing processes that led to the SCAMPI M weaknesses. If no other basic units in the same subgroup are currently performing processes that led to the weaknesses, an alternative basic unit from a different subgroup could be selected as long as the alternative subgroup basic unit follows the same processes that led to the original basic unit's weaknesses.

For example if Basic Unit 1 in the SCAMPI M organizational scope had weaknesses that led to a specific goal failure in the Verification process area, and Basic Unit 1 has already completed the verification lifecycle, it would be unable to provide evidence for the action plan reappraisal demonstrating that the weaknesses had been addressed. If no other basic units in the Basic Unit 1 subgroup have reached the verification lifecycle stage, Basic Unit 2 from a different subgroup could be selected as long as the two subgroups follow a common verification process (i.e., verification was not a process that made the two subgroups distinct from each other).

When evaluating institutionalization of implemented practices or performing characterization of practices, the appraisal team may request evidence from other practices in the model scope related to any goal rated Unsatisfied or Not Rated. (For example, additional generic practice evidence may be needed to determine the extent of institutionalization, or additional practices in other related process areas that may have associated model dependencies on the practices or goals where weaknesses were identified.)

J.3.2 Package and Archive Appraisal Assets

J.3.2.1 Collect Lessons Learned

Activity Description

The Activity Description described in 3.2.1 Collect Lessons Learned applies to SCAMPI M.

Required Practices

The Required Practices described in 3.2.1 Collect Lessons Learned apply to SCAMPI M.

Parameters and Limits

The Parameter and Limits described in 3.2.1 Collect Lessons Learned apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 3.2.1 Collect Lessons Learned applies to SCAMPI M. Additionally:

Since a SCAMPI M appraisal may include an action plan reappraisal of weaknesses following the original appraisal, with several months between these activities, it is recommended that lessons learned be collected immediately following each of these separate activities.

J.3.2.2 Generate Appraisal Record

Activity Description

The Activity Description described in 3.2.2 Generate Appraisal Record applies to SCAMPI M.

Required Practices

The Required Practices described in 3.2.2 Generate Appraisal Record apply to SCAMPI M. Additionally:

The SCAMPI M appraisal record shall be sent within 30 days of date when the final findings are presented to the organization. If there was a negative outcome of the SCAMPI M and the organization decides to develop and implement an action plan, the Appraisal Disclosure statement (ADS) shall specify that an action plan is being implemented and an action plan reappraisal is expected.

If an action plan reappraisal activity is conducted, a revised appraisal record shall be prepared and submitted for the action plan reappraisal. The revised appraisal record shall be sent to the steward within 30 days of the date the action plan reappraisal final findings presentation is given.

Parameters and Limits

The Parameters and Limits described in 3.2.2 Generate Appraisal Record apply to SCAMPI M. Additionally:

The SCAMPI M appraisal record contains a description of the model sample scope, summary of strengths and weaknesses for the process areas in the model sample scope, and the validity period for the assigned ratings.

If an action plan is implemented and an action plan reappraisal conducted to verify closure of weaknesses, the appraisal records shall include:

- Final findings briefings, characterizations of practice implementation, and appraisal disclosure statements from both the baseline SCAMPI M appraisal and the subsequent action plan reappraisal.
- The action plan developed to address weaknesses from the baseline appraisal.
- The objective evidence used to substantiate goal-rating judgments determined in the action plan reappraisal.
- The appraisal sponsor shall maintain the appraisal record until the SCAMPI M rating expires.

Implementation Guidance

The Implementation Guidance described in 3.2.2 Generate Appraisal Record applies to SCAMPI M. Additionally:

The ADS associated with the action plan reappraisal need not specify that the SCAMPI M implemented an action plan and successfully conducted the action plan reappraisal; the final results alone are sufficient.

An appraisal record (including ADS) is used to document the appraisal activities and results of the SCAMPI M appraisal even if the intent is to implement an action plan as described in J.3.1.3 Plan for Next Steps. An initial appraisal record and a revised appraisal record (only if the action plan reappraisal is performed) are necessary for the following reasons:

- To provide visibility into the weaknesses determined and the closure of corrective actions that may result in extended ratings that were not achieved in the original appraisal.
- To provide insight by the Appraisal Quality Program on the corrective actions and to help ensure the integrity of the SCAMPI M appraisal method. The corrective actions planned by the organizational unit may not be successful or achievable within the required timeframe and may be abandoned, in which case the records of the original appraisal become the final appraisal record, and the baseline appraisal rating is permanently revoked.

J.3.2.3 Provide Appraisal Feedback to the CMMI Steward

Activity Description

The Activity Description described in 3.2.3 Provide Appraisal Feedback to the CMMI Steward applies to SCAMPI M.

Required Practices

The Required Practices described in 3.2.3 Provide Appraisal Feedback to the CMMI Steward apply to SCAMPI M. Additionally:

If an action plan reappraisal is conducted as a result of an action plan, a revised appraisal data package shall be provided to the CMMI Steward for the action plan reappraisal. Each appraisal data package shall include the distinct contents specified in 3.2.3 as applicable to the scope of the appraisal activity conducted. The action plan reappraisal shall also include the action plan as part of the appraisal data package submitted to the CMMI Steward.

Parameters and Limits

The Parameters and Limits described in 3.2.3 Provide Appraisal Feedback to CMMI Steward apply to SCAMPI M. Additionally:

The appraisal data package(s) provided to the CMMI Steward shall be submitted within thirty (30) days of the final findings being delivered. If the SCAMPI M resulted in a negative outcome and the organization has decided to implement an action plan, the fact that the organization has chosen to implement an action plan is identified in the ADS.

If an action plan has been implemented and a successful action plan reappraisal has been accomplished, then a revised ADS is prepared and submitted within 30 days of the action plan reappraisal final findings presentation.

Implementation Guidance

The Implementation Guidance described in 3.2.3 Provide Appraisal Feedback to CMMI Steward applies to SCAMPI M.

Additionally:

If an action plan has been implemented and a successful action plan reappraisal has been accomplished, the revised ADS need not show that an action plan was part of the SCAMPI M.

An appraisal data package is submitted to the CMMI Steward for a SCAMPI M appraisal, even if the outcomes are negative and an action plan reappraisal is planned to verify the successful closure of action plans. The initial appraisal data package indicates to the CMMI Steward that the appraisal is not yet complete and a package for the action plan reappraisal is expected to follow.

Submission of the appraisal data package(s) to the CMMI Steward does not imply these results will be made publicly available. As with all SCAMPI products, any publication of appraisal results must be approved by the appraisal sponsor.

J.3.2.4 Archive and/or Dispose of Key Artifacts

Activity Description

The Activity Description described in 3.2.4 Archive and/or Dispose of Key Artifacts applies to SCAMPI M. Additionally:

If a SCAMPI M action plan reappraisal is to be conducted, the SCAMPI M artifacts are retained until the completion of the action plan reappraisal.

Required Practices

The Required Practices described in 3.2.4 Archive and/or Dispose of Key Artifacts apply to SCAMPI M. Additionally:

If a SCAMPI M action plan reappraisal is to be conducted, the appraisal team leader shall ensure the SCAMPI M artifacts are retained until the completion of the action plan reappraisal.

Parameters and Limits

The Parameters and Limits described in 3.2.4 Archive and/or Dispose of Key Artifacts apply to SCAMPI M.

Implementation Guidance

The Implementation Guidance described in 3.2.4 Archive and/or Dispose of Key Artifacts applies to SCAMPI M.

Glossary

SCAMPI Maintenance Appraisal – an appraisal conducted to determine if previously achieved SCAMPI A ratings can be extended beyond the SCAMPI A three year expiration date.

baseline appraisal – the appraisal whose organizational unit, model scope, and ratings are used as a basis for conducting a SCAMPI M appraisal. A baseline appraisal is either a SCAMPI A appraisal, or the most recent SCAMPI M appraisal conducted within the 5 year possible extension period of the SCAMPI A ratings.

model scope – the set of reference model process areas that are investigated within the organizational unit in an appraisal, and, for CMMI models, the representation chosen as well as the associated maximum capability or maturity level targeted.

model sample scope – a subset of the model scope that will be investigated in Stage 2 of a SCAMPI M appraisal to determine whether the organizational unit's SCAMPI A rating may be extended. The model sample scope consists of an investigative sample and random sample of model scope process area specific goals and generic practices.

The investigative sample is a set of specific goals and generic practices within the model scope that have been identified by the appraisal team based on objective evidence reviewed during SCAMPI M Stage 1.

The random sample is a set of specific goals and any generic practices within the model scope that are randomly selected to supplement the investigative sample.

high yield artifact - a work product which can be used as an objective evidence artifact for multiple practices in the appraisal reference model. Examples of high yield artifacts include plans, schedules, financial reports, and review packages.

action plan - a bounded set of activities performed to address weaknesses that led to unsatisfied goals in a SCAMPI M appraisal. The action plan includes an appraisal plan, organizational unit corrective action activities, a reappraisal of SCAMPI M unsatisfied goals, and reporting of results to the CMMI Steward.