



PROJECT MANAGER **COMPETENCY DEVELOPMENT** FRAMEWORK

Third Edition

Project Management Institute

**PROJECT MANAGER COMPETENCY
DEVELOPMENT FRAMEWORK – THIRD EDITION**

The Library of Congress Cataloging-in-Publication Data has been applied for.

ISBN: 978-1-62825-091-6

Project Management Institute, Inc.
14 Campus Boulevard
Newtown Square, Pennsylvania 19073-3299 USA
Phone: +610-356-4600
Fax: +610-356-4647
Email: customercare@pmi.org
Internet: www.PMI.org

©2017 Project Management Institute, Inc. All rights reserved.

“PMI”, the PMI logo, “PMP”, the PMP logo, “PMBOK”, “PgMP”, “Project Management Journal”, “PM Network”, and the PMI Today logo are registered marks of Project Management Institute, Inc. The Quarter Globe Design is a trademark of the Project Management Institute, Inc. For a comprehensive list of PMI marks, contact the PMI Legal Department.

PMI Publications welcomes corrections and comments on its books. Please feel free to send comments on typographical, formatting, or other errors. Simply make a copy of the relevant page of the book, mark the error, and send it to: Book Editor, PMI Publications, 14 Campus Boulevard, Newtown Square, PA 19073-3299 USA.

To inquire about discounts for resale or educational purposes, please contact the PMI Book Service Center.

PMI Book Service Center
P.O. Box 932683, Atlanta, GA 31193-2683 USA
Phone: 1-866-276-4764 (within the U.S. or Canada) or +1-770-280-4129 (globally)
Fax: +1-770-280-4113
Email: info@bookorders.pmi.org

Printed in the United States of America. No part of this work may be reproduced or transmitted in any form or by any means, electronic, manual, photocopying, recording, or by any information storage and retrieval system, without prior written permission of the publisher.

The paper used in this book complies with the Permanent Paper Standard issued by the National Information Standards Organization (Z39.48—1984).

10 9 8 7 6 5 4 3 2 1

TABLE OF CONTENTS

PREFACE.....	XIII
1 INTRODUCTION.....	1
1.1 Purpose of the <i>PMCD Framework</i>	2
1.2 Target Audience.....	2
1.3 What Is Portfolio/Program/Project Manager Competence?	3
1.3.1 Competencies Addressed by the <i>PMCD Framework</i>	3
1.3.2 Complementing the <i>PMCD Framework</i>	4
1.4 Alignment of the <i>PMCD Framework</i> with PMI Publications and Standards	5
1.5 Design of the <i>PMCD Framework</i>	6
1.6 Structure of the <i>PMCD Framework</i>	7
1.6.1 Portfolio/Program/Project Manager Competence.....	7
1.6.2 Units of Competence	7
1.6.3 Elements	7
1.6.4 Performance Criteria.....	8
1.6.5 Sources of Evidence.....	8
1.6.6 Portfolio/Program/Project Manager Expectations.....	8
1.6.7 Indicative Minimum Competence Level Required	8
1.7 Application of the <i>PMCD Framework</i>	8
1.7.1 Employers	8
1.7.2 Practicing Managers.....	9
1.7.3 Advisor.....	9
1.7.4 Individuals	9
1.8 The PMI Talent Triangle™ and the <i>PMCD Framework</i>	9
2 COMPETENCES OVERVIEW.....	11
2.1 Purpose of Performance and Personal Competences.....	11
2.1.1 Performance Competences.....	11
2.1.2 Personal Competences.....	11

2.2 Structure of Performance and Personal Competences.....	12
2.2.1 Performance Competences.....	12
2.2.2 Personal Competences.....	13
2.3 Structure of Elements of Competence.....	13
2.3.1 Performance Competences.....	13
2.3.2 Personal Competences.....	14
2.3.3. Project Manager Indicative Competence Requirement	15
2.4 Project Versus Program Versus Portfolio Management.....	15
2.4.1 The Relationship Between Project and Program Management.....	15
2.4.2 The Relationship Between Program and Portfolio Management	16
2.5 Typical Development Paths	18
2.5.1 Project Managers	18
2.5.2 Program and Portfolio Managers	18
3 PROJECT MANAGER COMPETENCES	19
3.1 Project Manager Performance Competences.....	19
3.2 Units of Personal Competence	21
4 PROGRAM MANAGER COMPETENCES	23
4.1 Program Manager Performance Competences	25
4.2 Program Manager Personal Competences	26
5 PORTFOLIO MANAGER COMPETENCES	27
5.1 Portfolio Manager Performance Competences.....	29
5.2 Portfolio Manager Personal Competences	30
6 DEVELOP COMPETENCE AS A PORTFOLIO, PROGRAM, OR PROJECT MANAGER.....	31
6.1 Step 1—Review Requirements.....	33
6.1.1 Organizational Requirements and Culture	34
6.1.1.1 Examples.....	34
6.1.2 Role Definition and Requirements.....	34
6.1.2.1 Examples.....	34
6.1.3 Personal Expectations.....	35
6.1.3.1 Examples.....	35

6.1.4 Assessment Criteria	35
6.1.4.1 Knowledge Expectation	36
6.1.4.2 Performance Expectation	36
6.1.4.3 Personal Behavior Expectation	36
6.2 Step 2—Assess Competencies	36
6.2.1 Assessment Detail and Rigor	37
6.2.2 Assessment Process	38
6.2.3 Assessment Tools	39
6.2.3.1 Input-Based Assessment	39
6.2.3.2 Output-Based Assessment	40
6.2.4 Assessment at an Organizational Level	40
6.3 Step 3—Prepare Competency Development Plan	41
6.3.1 Ways of Addressing Development Needs	41
6.3.1.1 Experiential Learning	42
6.3.1.2 Formal Learning	43
6.3.1.3 Nonformal Learning	44
6.3.2 Competence-Based Development	45
6.3.3 Define Development Goals and Competency Development Plan	47
6.4 Step 4—Implement Competency Development Plan	48
6.4.1 Completion of the Planned Activities	48
6.4.2 Monitor the Execution of the Plan	48
6.4.3 Support for the Plan	49
6.4.4 Evaluate the Execution of the Plan	49
6.5 Summary	50
7 USING THE <i>PMCD FRAMEWORK</i> IN AN ORGANIZATION	51
7.1 Overview	51
7.2 Application of the <i>PMCD Framework</i>	52
7.3 Assess Readiness for Deployment	52
7.4 Performance Review	53
7.5 Promotion Process	54
7.6 Recruitment	54
7.7 Implementation	54

7.7.1 Sponsorship.....	54
7.7.2 Country and Political Factors.....	54
7.7.3 Communication and Awareness.....	54
7.7.4 Maturity Assessment	55
7.7.5 Mentoring and Coaching.....	55
7.7.6 Training and Development	55
7.7.7 Reflective Journals	55
7.7.8 Culture	55
7.7.9 Key Performance Indicators	56
7.7.10 Continuous Improvement.....	56
7.8 Piloting the Critical Success Factors.....	56
7.9 Examples of Application.....	56
7.9.1 Mapping Project Management Competences to Organizational Positions	56
7.9.2 Mapping <i>PMCD Framework</i> Codes to Organizational Job Codes.....	57
7.9.3 Mapping Project Management Competences to Organization Training and Development	58
7.9.4 Mapping Individuals to Competences Within the Organization	58
7.9.5 Obtaining Feedback to Assess Competences	59
7.9.6 Collating Competence Ratings Within the Organization.....	59
7.10 Summary.....	60
APPENDIX X1 THIRD EDITION CHANGES	61
X1.1 About This Appendix	61
X1.2 Objectives	61
X1.3 Approach	62
X1.4 Changes	63
APPENDIX X2 CONTRIBUTORS TO THE <i>PROJECT MANAGER COMPETENCY</i> <i>DEVELOPMENT FRAMEWORK</i> – THIRD EDITION	65
X2.1 <i>PMCD Framework</i> Core Committee	65
X2.2 <i>PMCD Framework</i> Subcommittees.....	65
X2.3 Subject Matter Expert Reviewers	66
X2.4 PMI Project Management Standards Program Member Advisory Group.....	67
X2.5 Production Staff	67

APPENDIX X3 PROJECT MANAGER..... 69

X3.1 Units of Project Manager Performance Competence..... 69

X3.1.1 Project Integration 69

X3.1.2 Project Scope Management..... 72

X3.1.3 Project Time Management..... 74

X3.1.4 Project Cost Management 76

X3.1.5 Project Quality Management 77

X3.1.6 Project Human Resource Management..... 79

X3.1.7 Project Communications Management..... 81

X3.1.8 Project Risk Management 82

X3.1.9 Project Procurement Management 84

X3.1.10 Project Stakeholder Management..... 87

X3.2 Units of Project Manager Personal Competence..... 88

X3.2.1 Communicating 88

X3.2.2 Leading 91

X3.2.3 Managing..... 95

X3.2.4 Cognitive Ability 97

X3.2.5 Effectiveness 100

X3.2.6 Professionalism 104

APPENDIX X4 PROGRAM MANAGER..... 109

X4.1 Units of Program Manager Performance Competence 109

X4.1.1 Program Strategic Alignment 109

X4.1.2 Program Benefits Management..... 111

X4.1.3 Program Stakeholder Management 113

X4.1.4 Program Governance 115

X4.1.5 Program Life Cycle Management 116

X4.1.6 Program Scope Management 121

X4.1.7 Program Time Management 122

X4.1.8 Program Financial Management 122

X4.1.9 Program Quality Management..... 124

X4.1.10 Program Resource Management..... 125

X4.1.11 Program Communications Management 126

X4.1.12 Program Risk Management..... 126

X4.1.13 Program Procurement Management..... 127

X4.2 Units of Program Manager Personal Competence	128
X4.2.1 Communicating	128
X4.2.2 Leading	130
X4.2.3 Managing.....	137
X4.2.4 Cognitive Ability	140
X4.2.5 Effectiveness	143
X4.2.6 Professionalism	147
X4.3 Units of Portfolio Manager Performance Competence	150
X4.3.1 Portfolio Strategic Management	150
X4.3.2 Portfolio Governance Management.....	151
X4.3.3 Portfolio Performance Management	153
X4.3.4 Portfolio Communication Management	155
X4.3.5 Portfolio Risk Management	155
X4.3.6 Portfolio Stakeholder Management.....	156
X4.4 Units of Portfolio Manager Personal Competence	159
X4.4.1 Communicating	159
X4.4.2 Leading	164
X4.4.3 Managing.....	166
X4.4.4 Cognitive Ability	169
X4.4.5 Effectiveness	173
X4.4.6 Professionalism	176
REFERENCES	185
GLOSSARY	187

LIST OF TABLES AND FIGURES

Figure 1-1.	<i>PMCD Framework</i> Dimensions of Competence.....	4
Figure 1-2.	Complementing the <i>PMCD Framework</i>	5
Figure 2-1.	Example of a Performance Competence Element	14
Figure 6-1.	Competence Development Process	32
Figure 6-2.	Review Requirements: Inputs, Tools and Techniques, and Outputs	33
Figure 6-3.	Assess Competences: Inputs, Tools and Techniques, and Outputs	37
Figure 6-4.	Prepare Competency Development Plan: Inputs, Tools and Techniques, and Outputs.....	41
Figure 6-5.	Example Section of a Competency Development Plan.....	47
Figure 6-6.	Implement Competency Development Plan: Inputs, Tools and Techniques, and Outputs.....	48
Figure 7-1.	Talent Triangle™	52
Figure 7-2.	Example of Mapping <i>PMCD Framework</i> Codes to Organizational Job Codes.....	57
Figure 7-3.	Example of Mapping Competences to Training and Development Needs	58
Table 1-1.	Points of Alignment of the <i>PMCD Framework</i> with PMI Resources	6
Table 2-1.	Competence Level Scale for Project Managers.....	15
Table 2-2.	Comparative Overview of Project, Program, and Portfolio Management.....	17
Table 3-1.	<i>PMBOK® Guide</i> Knowledge Areas and Processes	20
Table 3-2.	Elements of Project Manager Personal Competence	21
Table 4-1.	Program Manager—Units of Performance Competence	25
Table 4-2.	Program Manager—Units of Personal Competence	26
Table 5-1.	Portfolio Manager—Units of Performance Competence.....	29
Table 5-2.	Portfolio Manager—Units of Personal Competence	30
Table 6-1.	Example Structure for General Development Activities.....	46

Table 7-1. Details to Describe Project, Program, and Portfolio Levels53

Table 7-2. Example of Mapping Competences to Organizational Roles57

Table 7-3. Mapping Individuals to Competences Within the Organization.....59

Table 7-4. Example of Feedback to Assess Competences59

Table 7-5. Example of Employees' Competence Ratings60

Table X3-1. Project Integration—Project Manager Performance Competence70

Table X3-2. Project Scope Management—Project Manager Performance Competence73

Table X3-3. Project Time Management—Project Manager Performance Competence75

Table X3-4. Project Cost Management—Project Manager Performance Competence76

Table X3-5. Project Quality Management—Project Manager Performance Competence78

**Table X3-6. Project Human Resource Management—Project Manager Performance
Competence79**

**Table X3-7. Project Communications Management—Project Manager Performance
Competence81**

Table X3-8. Project Risk Management—Project Manager Performance Competence83

**Table X3-9. Project Procurement Management—Project Manager Performance
Competence85**

**Table X3-10. Project Stakeholder Management—Project Manager Performance
Competence87**

Table X3-11. Communicating—Units of Personal Competence89

Table X3-12. Leading—Units of Personal Competence91

Table X3-13. Managing—Units of Personal Competence.....95

Table X3-14. Cognitive Ability—Units of Personal Competence98

Table X3-15. Effectiveness—Units of Personal Competence 101

Table X3-16. Professionalism—Units of Personal Competence 104

**Table X4-1. Program Strategic Alignment—Program Manager Performance
Competence 110**

Table X4-2. Program Benefits Management—Program Manager Performance Competence111

Table X4-3. Program Stakeholder Management—Program Manager Performance Competence114

Table X4-4. Program Governance—Program Manager Performance Competence115

Table X4-5. Program Life Cycle Management—Program Manager Performance Competence117

Table X4-6. Program Scope Management—Program Manager Performance Competence121

Table X4-7. Program Time Management—Program Manager Performance Competence122

Table X4-8. Program Financial Management—Program Manager Performance Competence123

Table X4-9. Program Quality Management—Program Manager Performance Competence.....124

Table X4-10. Program Resource Management—Program Manager Performance Competence125

Table X4-11. Program Communications Management—Program Manager Performance Competence126

Table X4-12. Program Risk Management—Program Manager Performance Competence127

Table X4-13. Program Procurement Management—Program Manager Performance Competence128

Table X4-14. Communicating—Program Manager Personal Competence.....129

Table X4-15. Leading—Program Manager Personal Competence.....131

Table X4-16. Managing—Program Manager Personal Competence137

Table X4-17. Cognitive Ability—Program Manager Personal Competence141

Table X4-18. Effectiveness—Program Manager Personal Competence.....144

Table X4-19. Professionalism—Program Manager Personal Competence148

Table X4-20. Portfolio Strategic Management—Portfolio Manager Performance Competence150

Table X4-21. Portfolio Governance Management—Portfolio Manager Performance Competence151

Table X4-22. Portfolio Performance Management—Portfolio Manager Performance Competence 153

Table X4-23. Portfolio Communication Management—Portfolio Manager Performance Competence 155

Table X4-24. Portfolio Risk Management—Portfolio Manager Performance Competence..... 156

Table X4-25. Portfolio Stakeholder Management—Portfolio Manager Performance Competence 157

Table X4-26. Communicating—Portfolio Manager Personal Competence 160

Table X4-27. Leading—Portfolio Manager Personal Competence 163

Table X4-28. Managing—Portfolio Manager Personal Competence..... 167

Table X4-29. Cognitive Ability—Portfolio Manager Personal Competence 170

Table X4-30. Effectiveness—Portfolio Manager Personal Competence 174

Table X4-31. Professionalism—Portfolio Manager Personal Competence..... 177

PREFACE TO THE THIRD EDITION

This document builds upon the framework developed in the *Project Manager Competency Development Framework – Second Edition*. Our task with this edition was to extend the previous framework both vertically (to include program and portfolio managers) and horizontally (covering the continued development within the roles of portfolio/program/project managers).

The *PMCD Framework* project team was asked to provide a revised document that:

- Tightly aligns the *Project Manager Competency Development Framework – Third Edition* with the *Project Management Professional (PMP)® Examination Content Outline*;
- Aligns with *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Fifth Edition*;
- Aligns with *The Standard for Program Management – Third Edition*;
- Aligns with *The Standard for Portfolio Management – Third Edition*;
- Builds upon the framework in the second edition, in particular the personal competences;
- Provides examples of evidence required to demonstrate competence; and
- Recognizes and addresses the need for career development along a continuum of expertise and experience.

With the additional dimensions of alignment (program and portfolio management), the depth of detail surrounding the actual competencies has become extensive. To provide a more functional document, we rearranged the content, placing the tabular detail defining the elements of competence into individual appendixes. This allows for a more readable document, while maintaining a substantial level of specificity regarding the competencies themselves.

We would like to recognize the volunteers who participated in this project. They have been tireless in their pursuit of a document that all participants in the project management process are able to utilize to assess their current level of portfolio/program/project management competence.

Michael Yinger
Chairman, *PMCD Framework* Project

Dave Gunner
Vice Chairman, *PMCD Framework* Project

INTRODUCTION

The *Project Manager Competency Development (PMCD) Framework – Third Edition* provides a framework for the definition, assessment, and development of portfolio/program/project manager competency. It defines the key dimensions of competency and identifies those that are most likely to impact performance of managers in the portfolio, program, and project areas. The degree of its impact on management success may vary, depending on factors such as project types and characteristics or organizational context and maturity. The competencies identified by the *PMCD Framework – Third Edition* have a broad application. The potential differences in the importance of particular competencies, given certain organizational contexts or project types or characteristics, still need to be considered during the application of the *PMCD Framework*.

The *PMCD Framework* provides an overall view of the skills and behaviors one would need to develop competence as a portfolio/program/project manager. The framework is comprised of seven sections:

- **Section 1 Introduction**—Introduces and discusses portfolio/program/project manager competency and an overview of the remaining sections of the *PMCD Framework*.
- **Section 2 Competences Overview**—Describes the concepts of personal and performance competences that will be addressed in detail in subsequent sections.
- **Section 3 Project Manager Competences**—Describes the competences applicable to project managers when leading most projects, most of the time.
- **Section 4 Program Manager Competences**—Describes the competences applicable to program managers when managing most programs, most of the time.
- **Section 5 Portfolio Manager Competences**—Describes the competences applicable to portfolio managers when managing most portfolios, most of the time.
- **Section 6 Developing Competence as a Portfolio/Program/Project Manager**—Discusses the process to acquire and/or enhance competence as a portfolio/program/project manager.
- **Section 7 Using the *PMCD Framework* in an Organization**—Provides guidance on how to apply the *PMCD Framework* in an organizational setting.

Note: Competences are also referred to as units of competence. Each unit of competence consists of one or more elements. Details for each element—performance criteria, sources of evidence, expectations of the portfolio/program/project manager, and examples of the evidence that supports the performance criteria—are contained in appendixes.

Section 1 covers the following topics:

- Purpose of the *PMCD Framework* (Section 1.1),
- Target audience (Section 1.2),

- What is portfolio/program/project manager competence? (Section 1.3),
- Alignment of the *PMCD Framework* with Project Management Institute (PMI) publications and standards (Section 1.4),
- Design of the *PMCD Framework* (Section 1.5),
- Structure of the *PMCD Framework* (Section 1.6),
- Application of the *PMCD Framework* (Section 1.7), and
- PMI Talent Triangle™ and the *PMCD Framework* (Section 1.8).

1.1 Purpose of the *PMCD Framework*

The purpose of the *Project Manager Competency Development (PMCD) Framework* – Third Edition is to provide a framework for the definition, assessment, and development of portfolio/program/project manager competence. It defines the key dimensions of competency and identifies those competencies that are most likely to impact performance of managers in the areas of portfolio, program, and project management. The degree of its impact on management success may vary, depending on factors such as project types and characteristics, or organizational context and maturity. The competences identified by the *PMCD Framework* – Third Edition have a broad application. The potential differences in the importance of particular competences, given certain organizational contexts or project types or characteristics, still need to be considered during the application of the *PMCD Framework*. It was developed to provide both individuals and organizations with guidance on how to assess, plan, and manage the professional development of portfolio/program/project managers who have or aspire to have:

- Demonstrated the required knowledge, skills, and experience to manage portfolios, programs, and projects;
- Passed an accredited portfolio/program/project management examination or certification (e.g., the Project Management Professional (PMP)® or equivalent from a recognized institute); and
- Provided evidence of performance and personal competences as identified in Sections 3, 4, or 5 of the *PMCD Framework*.

1.2 Target Audience

The *PMCD Framework* serves as a reference for individuals and organizations to establish and develop portfolio/program/project management competency.

The target audience includes, but is not limited to the following:

- Portfolio/program/project managers,
- Managers of portfolio/program/project managers,
- Members of a portfolio/program/project management office,
- Managers responsible for establishing and developing portfolio/program/project manager competence,
- Portfolio/program/project sponsors,

- Human resource managers,
- Educators teaching portfolio/program/project management and other related subjects,
- Trainers developing portfolio/program/project management educational programs,
- Consultants to the industry of portfolio/program/project management,
- Senior management, and
- Individuals interested in portfolio/program/project management.

1.3 What Is Portfolio/Program/Project Manager Competence?

Competent portfolio/program/project managers consistently apply their management knowledge and personal behaviors to increase the likelihood of delivering portfolios/programs/projects that meet stakeholders' requirements.

With regard to portfolio/program/project managers, competency is the demonstrated ability to perform activities within a portfolio, program, or project environment that lead to expected outcomes based on defined and accepted standards.

Competency for the portfolio/program/project manager consists of three separate dimensions:

- **Knowledge competence.** What the portfolio/program/project manager knows about the application of processes, tools, and techniques for portfolio/program/project activities.
- **Performance competence.** How the portfolio/program/project manager applies portfolio/program/project management knowledge to meet the project requirements.
- **Personal competence.** How portfolio/program/project managers behave when performing activities within the portfolio/program/project environment, their attitudes, and core personality characteristics.

To be recognized as fully competent, a portfolio/program/project manager needs to satisfy each of the three dimensions described above.

1.3.1 Competencies Addressed by the *PMCD Framework*

The three dimensions of competency addressed in the *PMCD Framework*—knowledge, performance, and personal—are demonstrated in different ways:

- **Knowledge competence.** Can be demonstrated by passing an appropriately credentialed assessment, such as the PMP® examination or any equivalent international portfolio/program/project manager accreditation. These knowledge competences are detailed in the examination content outlines, for example, the *Project Management Professional (PMP)® Examination Content Outline [1]*¹ and are not defined in the *PMCD Framework*.
- **Performance competence.** Can be demonstrated by assessing the portfolio/program/project-related actions and outcomes to be considered competent. This is covered in Sections 3 through 5.

¹ The numbers in brackets refer to the list of references at the end of this standard.

- **Personal competence.** Can be demonstrated by assessing the portfolio/program/project manager's behavior. This is covered in Sections 3 through 5.

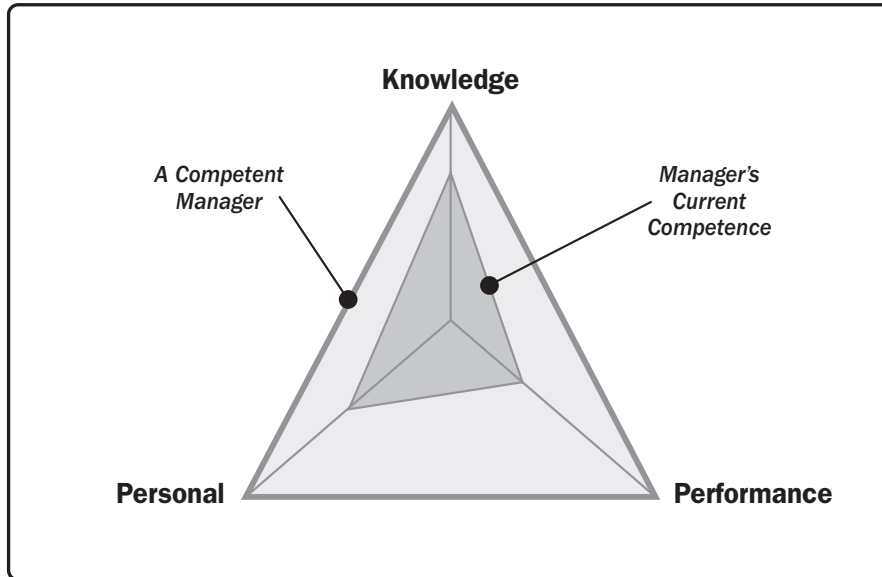


Figure 1-1. PMCD Framework Dimensions of Competence

Figure 1-1 illustrates the three dimensions for assessing portfolio/program/project managers. As a result of the assessment, the portfolio/program/project manager will better understand the skill development necessary to attain recognition as a competent portfolio/program/project manager. The outer boundaries of the Figure 1-1 are a conceptual representation of a fully competent portfolio/program/project manager. The dark shaded area represents an individual manager's current assessment of competence. The difference between the two areas represents the individual manager's competence development needs for the specific role and/or project. While the minimum level of competence may exist at this point in the initiative, efforts to maintain competence should also be undertaken in each dimension. The *PMCD Framework* provides the baseline to assess performance and personal competences.

1.3.2 Complementing the *PMCD Framework*

The *PMCD Framework* is based upon the principles and processes of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* [2], *The Standard for Program Management* [3], and *The Standard for Portfolio Management* [4]. It describes the generic competencies needed in most portfolios/programs/projects, most organizations, and most industries. As depicted in Figure 1-2, the competences described in Sections 3, 4, and 5 of the *PMCD Framework* should be used as a foundation for developing an assessment model.

The *PMCD Framework* does not address industry-specific competency. Individual portfolio/program/project managers or their organizations may choose to supplement the *PMCD Framework's* generic competencies with

additional industry-specific competencies to meet their specific needs, including but not limited to those addressed in the Construction, Government, and Software extensions to the *PMBOK® Guide* as well as PMI practice guides and practice standards. In some industries, there may be technical skills that are particularly relevant to that industry or covered by specific domain, regulatory, or legal requirements. For example, an organization primarily involved in conducting information technology projects may require that its portfolio/program/project managers possess a specified level of information technology competence, as well as competence in portfolio/program/project management. In other industries, there may be regulations that require specific training of the portfolio/program/project manager. For example, an organization primarily involved in construction projects may require more knowledge of safety standards. Portfolio/program/project managers need to manage work within the context of their specific industries and organizations.

The assessment model is then complemented by organizational and industry-specific performance requirements. The actual level of achievement of those competences defines the portfolio/program/project manager's competence. Figure 1-2, complementing the *PMCD Framework*, is a comprehensive representation of the competences that a portfolio/program/project manager is expected to be assessed against.

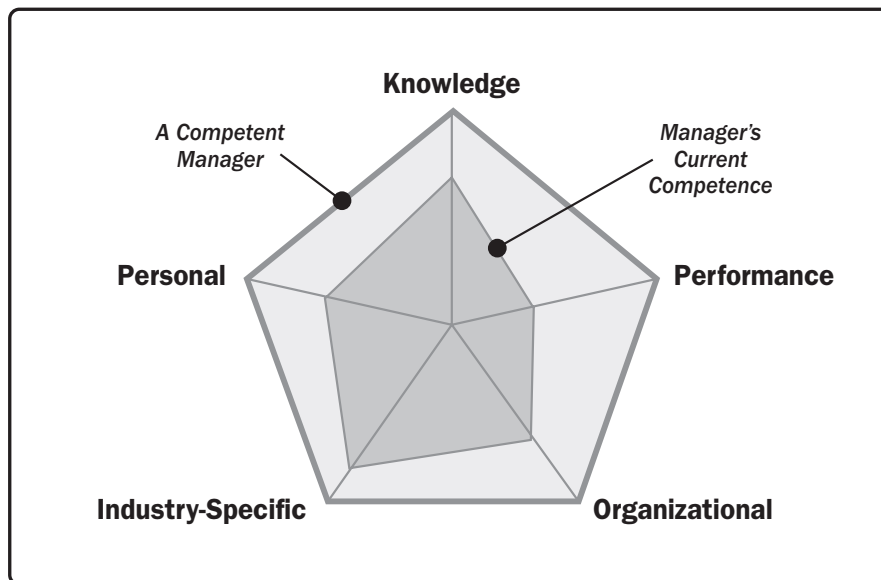


Figure 1-2. Complementing the *PMCD Framework*

1.4 Alignment of the *PMCD Framework* with PMI Publications and Standards

The *PMCD Framework* aligns with the generally accepted practices promoted by PMI as reflected in corresponding standards and documents created or endorsed by PMI, including but not limited to the following:

- *PMBOK® Guide* – Sixth Edition,
- *The Standard for Program Management* – Third Edition,

- *The Standard for Portfolio Management* – Third Edition,
- *Project Management Professional (PMP)® Examination Content Outline*,
- *Program Management Professional (PgMP)® Examination Content Outline* [5],
- *Portfolio Management Professional (PfMP)® Examination Content Outline* [6], and
- Other PMI credentials.

The *PMCD Framework* – Third Edition is also aligned with other PMI publications and standards. Details on the points of alignment are found in Table 1-1.

Table 1-1. Points of Alignment of the *PMCD Framework* with PMI Resources

PMI Publications/Resources ^A	Key Points of Alignment
<i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide)</i>	Structure, vocabulary, and definitions of the current <i>PMBOK® Guide</i>
<i>PMCD Framework</i>	Structure and philosophy of the <i>PMCD Framework</i>
<i>PMI Lexicon of Project Management Terms</i> [7]	Lexicon for portfolio/program/project management terminology
<i>PMI Combined Standards Glossary</i> [8]	Acronyms and terms identified in the PMI published standards
<i>PMP®, PfMP®, PgMP® Examination Content Outline</i>	Required knowledge described therein (The <i>PMCD Framework</i> refers to the <i>PMP® Examination Content Outline</i> for its definition of knowledge competences)
<i>Organizational Project Management Maturity Model (OPM3®)</i> [9]	Portfolio/program/project manager competence modules
<i>PMI Code of Ethics and Professional Conduct</i> [10]	Statement of the Code of Professional Conduct under which a project manager operates
<i>The Standard for Program Management and The Standard for Portfolio Management</i>	Portfolio and program management are components of both standards
<i>Project Management Professional (PMP)® Role Delineation Study</i> [11]	Research indicating the required knowledge, skills, and other data for the project manager

^AAll references to PMI publications and resources refer to the most current version available.

1.5 Design of the *PMCD Framework*

The *PMCD Framework* defines the dimensions of performance and personal competence for portfolio, program, and project managers. As previously identified, knowledge competence is not detailed within the *PMCD Framework* as it is specifically addressed in the various examination content outlines for PMI® credentials. The intent is to ensure that individuals, their organizations, and associated industry professional bodies apply an appropriate process for the assessment, development, and recognition of competency in portfolio/program/project managers.

The *PMCD Framework* has been designed to:

- Cover the range of competences the portfolio/program/project manager needs to demonstrate; and
- Apply generically to all portfolio/program/project managers regardless of the nature, type, size, or complexity of portfolios/programs/projects in which they are engaged.

The generic nature of the *PMCD Framework* is necessary to ensure that:

- Portfolio/program/project management competency in individuals is transferable across industries and organizations; and
- Industries and organizations are able to utilize the *PMCD Framework* as a basis for the development of industry- and organization-specific competency models.

1.6 Structure of the *PMCD Framework*

The *PMCD Framework* breaks the desired competences down into a simple structure. Units of competence represent the highest level and divide the competences into major segments, typically representing a major function or activity. At the next tier are the elements, which describe actions or outcomes that are demonstrable or assessable. Each element is provided with a set of performance criteria, which are the aspects of performance that are regarded as displaying competent performance for an element of competence. Each performance criteria includes a listing of the types of evidence or specific documented proof that the action within the performance criteria has been satisfied. In addition, Sections 3, 4, and 5 of the *PMCD Framework* use the focus for their structure described in Sections 1.6.1 through 1.6.5. Sources of evidence provided for each performance criteria may not be 100% inclusive, therefore typical examples are shown.

1.6.1 Portfolio/Program/Project Manager Competence

Section 3 covers the performance and personal competences of the project manager. Section 4 covers the performance and personal competences of the program manager. Section 5 covers the performance and personal competences of the portfolio manager.

1.6.2 Units of Competence

Each section on competence consists of a number of elements that reflect the activities in which portfolio/program/project managers are expected to be competent.

1.6.3 Elements

Elements are the fundamental building blocks of competence.

1.6.4 Performance Criteria

Each element is described by performance criteria that specify the actions required to demonstrate competent performance.

1.6.5 Sources of Evidence

Performance criteria are achieved by producing specific proof that the action has been completed. These form the basis upon which competence can be assessed.

1.6.6 Portfolio/Program/Project Manager Expectations

These expectations are what is expected of managers as they perform the task(s) envisioned as part of the performance criteria.

1.6.7 Indicative Minimum Competence Level Required

The expected minimum competence level required for a project manager. The *PMCD Framework* does not provide this indicative level for program or portfolio managers, as it is not intended to be prescriptive and is for illustrative purposes only. What is included for project managers is an example, though the same principles can be applied to both program and portfolio management. Further details on how to do this can be found in Section 7.9.2. Each organization that adopts the *PMCD Framework* may choose its own level, based on the types of projects that it has.

1.7 Application of the *PMCD Framework*

The *PMCD Framework* provides important guidance to practitioners, employers, and advisors when setting up a competency framework in the workplace. It is important to become comfortable with the contents of the *PMCD Framework* and what it indicates with regard to portfolio, program, and project manager competency. The *PMCD Framework* provides a summary of the competences that support portfolio/program/project manager performance.

The *PMCD Framework* defines competency by identifying performance criteria relative to specific elements of competence. Understanding the individual manager's current capability is essential to establishing a competency baseline. Measuring individual performance against a competency baseline identifies the manager's strengths and development needs. The dimension of personal competence looks at the individual's behavior relative to overall competence in managing portfolios/programs/projects. The goal is to meet or exceed the baseline competency defined by the *PMCD Framework*.

1.7.1 Employers

For employers, the *PMCD Framework* provides a multidimensional taxonomy of the actions and behaviors typically required by portfolio/program/project managers in order to fulfill their role within the organization.

The *PMCD Framework* can be used to identify the existing competence of these managers, as well as any gaps that should be addressed. Project type, industry, or technology-specific requirements may be needed to complement the *PMCD Framework*. The *PMCD Framework* can be used to determine the competency of individuals who manage projects within the organization.

1.7.2 Practicing Managers

For practicing portfolio/program/project managers, the *PMCD Framework* provides assistance in determining their own level of competence and areas where further development is required.

1.7.3 Advisor

For advisors to an organization, the *PMCD Framework* provides a powerful tool to help scan and analyze the existing actions and outcomes within the organization to discover any gaps that may need to be addressed.

1.7.4 Individuals

For individuals who are considering moving into project, program, and/or portfolio management, the *PMCD Framework* provides a guide to the competences that will be expected of them.

The *PMCD Framework* provides an assessment process that allows portfolio/program/project managers (or managers of portfolio/program/project managers) to identify their strengths and development needs within the competency framework. It assists in the identification of options for improvement and how to develop and implement a competency development plan.

1.8 The PMI Talent Triangle™ and the *PMCD Framework*

The *PMCD Framework* looks at the competency of portfolio, program, and project managers across several different dimensions. PMI considers additional factors that are deemed critical to the successful completion of projects. These factors are embodied in the PMI Talent Triangle™ [12]. This information was derived from PMI research as well as from input from numerous organizations that use project management techniques in their day-to-day operations.

Technical project management, leadership, and strategic and business management make up the talent triangle (covered in additional detail in Section 7). Together with the foundational standards, the *PMCD Framework* covers technical portfolio/program/project management and leadership in projects/programs/portfolios. Business-specific competencies are defined by organizational setup, industry, and specific tasks.

2

COMPETENCES OVERVIEW

The personal and performance competences presented in this section combine with the knowledge competences described in the *PMBOK® Guide – Fifth Edition* as well as relevant sections of *The Standard for Program Management – Third Edition* and *The Standard for Portfolio Management – Third Edition*. As described in Section 1, there are certain overlaps between knowledge, performance, and personal competences. For example, this section may describe the behavior supporting specific actions of performance competence. Taken together, the three dimensions of competency are required by a portfolio/program/project manager to deliver most projects, programs, and portfolios most of the time.

2.1 Purpose of Performance and Personal Competences

2.1.1 Performance Competences

Performance competence is what portfolio/program/project managers are able to do or accomplish by applying their project management knowledge and individual skills. It is generally accepted that there is a causal link between project manager competency and project success. This applies in an analogous way to success in programs and portfolios.

To assess performance competence, endorsed standards or baselines are required for each skill against which:

- Individuals are able to measure and plan their progress toward competency. Organizations are able to design performance measurement instruments, design job or position specifications, employment specifications, and individual development programs.
- Performance competence can be measured by assessing individuals against each unit of competence and element using the performance criteria and types of evidence specified in this section.

The performance competences in this standard provide the framework, structure, and baselines against which an individual may be measured. Assessing the performance competence of project managers and closing any gaps may help individuals and their organizations to maximize project manager competency. The ten units of performance competence described in this section provide one important dimension of the framework for that assessment.

The performance criteria given in this document need to be tailored to the specific organization in accordance with the organizational portfolio/program/project management processes/policies and their applicability.

2.1.2 Personal Competences

Personal competences are those behaviors, attitudes, cultural influences, and core personality characteristics that contribute to a person's ability to manage portfolios, programs, and projects.

Project management is a people-oriented profession. It is important for a portfolio/program/project manager to possess skills that enable effective interaction with others. Personal competences describe such skills.

Improvements in personal competence enhance a portfolio/program/project manager's ability to use knowledge and performance competence effectively on projects. The treatment of personal competences as given in this framework provides a basis for assessing and developing the ability of individuals with regard to the personal competence elements described in this document.

2.2 Structure of Performance and Personal Competences

2.2.1 Performance Competences

The *PMCD Framework* – Third Edition uses the latest edition of the *PMBOK® Guide, The Standard for Program Management* and *The Standard for Portfolio Management*, and the *PMP® Examination Content Outline* to define the structure of the units of performance competence:

- **Project Integration Management.** Performing the activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups.
- **Project Scope Management.** Performing the work required to ensure that the project includes all the work required, and only the work required, to complete a project successfully.
- **Project Time Management.** Performing the work required to manage the timely completion of the project.
- **Project Cost Management.** Performing the work involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget.
- **Project Quality Management.** Managing the work of the performing organization that determines the quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken.
- **Project Human Resource Management.** Performing the work to organize, manage, lead, and develop the project team.
- **Project Communications Management.** Performing the work to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information.
- **Project Risk Management.** Conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.
- **Project Procurement Management.** Performing the work necessary to purchase or acquire products, services, or results needed from outside of the project team.
- **Project Stakeholder Management.** Performing the work required to identify the people, groups, or organizations that could impact or be impacted by the project; to analyze stakeholders' expectations and their impact on the project; and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

2.2.2 Personal Competences

Personal competences are grouped into the following six units:

- **Communicating.** Effectively exchanges timely, accurate, appropriate, and relevant information with stakeholders using suitable methods.
- **Leading.** Guides, inspires, and motivates team members and other project stakeholders to manage and overcome issues to effectively achieve project objectives.
- **Managing.** Effectively administers the project through deployment and use of human, financial, material, intellectual, and intangible resources.
- **Cognitive ability.** Applies an appropriate depth of perception, discernment, and judgment to effectively direct a project in a changing and evolving environment.
- **Effectiveness.** Produces desired results by using appropriate resources, tools, and techniques in all project management activities.
- **Professionalism.** Conforms to ethical behavior governed by responsibility, respect, fairness, and honesty in the practice of project management.

There are elements within each of the personal competences that overlap or are very similar to the other competences. In addition, there are individual capabilities that will be outside of a portfolio/program/project manager's personal competences as defined in this document.

2.3 Structure of Elements of Competence

2.3.1 Performance Competences

Each element is further defined in the terms of performance criteria, expectations, sources of evidence, and examples:

- **Performance criteria.** Specify what the individual needs to do to demonstrate competent performance in each element.
- **Expectation.** The action and level of activity that is required to be demonstrated for each performance criteria.
- **Individual performance criteria and sources of evidence.** Individual performance criteria can be assessed using the sources of evidence. When an individual performs the activities described in the performance criteria, there should be an outcome that provides some type of evidence. This may include deliverables, documents, or feedback from a stakeholder or some other tangible or intangible result. Assessment requires that some form of evidence be reviewed to determine the degree of compliance with the performance criteria.
- **Examples.** Examples of evidence for each criterion are provided. Assessors should note that the *PMCD Framework* provides these examples as general guidance and for the purpose of providing context for an assessment plan. These examples are not standards, nor are they expected outcomes. Project outcomes should reflect cultures, organizations, and industries. As such, assessors can expect to find variance in the outcomes among projects.

In the *PMCD Framework*, the term “documented” means tangible evidence. In this context, “documented” is inclusive of data, any form of media, formal or informal correspondence, objects, and outputs.

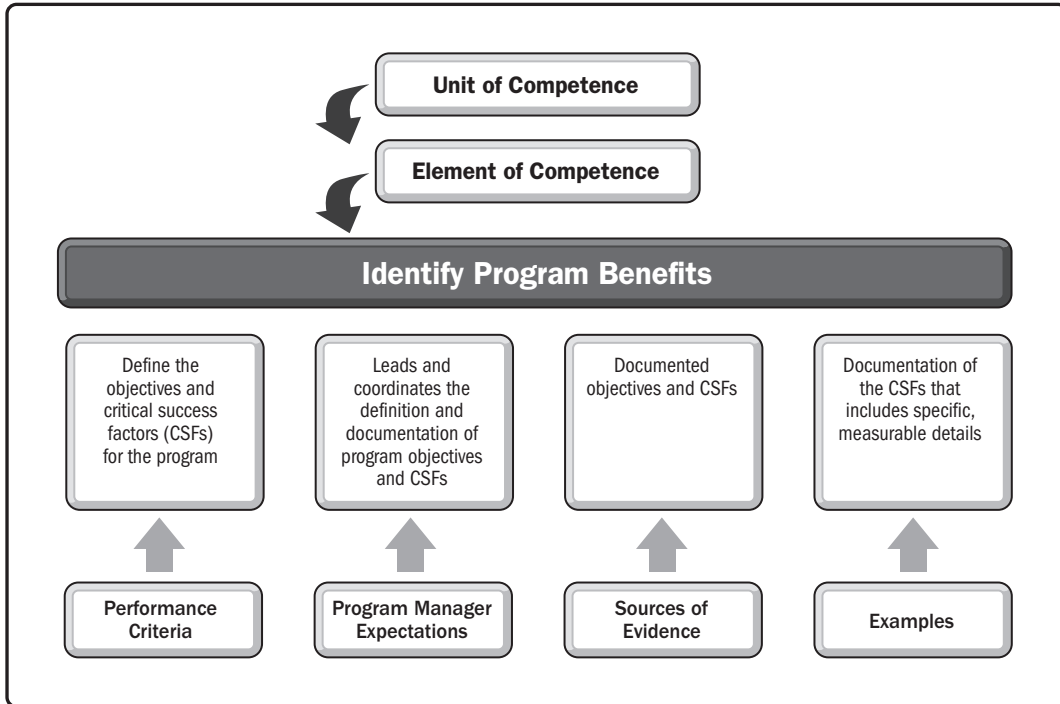


Figure 2-1. Example of a Performance Competence Element

2.3.2 Personal Competences

Each unit is composed of several elements that are considered necessary for an individual to demonstrate personal competence, represented in a similar way as for performance competence (see Figure 2-1).

Performance criteria describe the behaviors that show each competence element. While it is generally difficult to show objective proof of human behavior, the types of evidence provide examples that could reflect the achievement of a certain performance criteria.

Some sources of evidence are project documents, while others are documented observations of a person’s behavior by stakeholders or team members. There are instances where some of the evidence may apply to more than one performance criteria; the duplication of evidence is deliberate, given that the behavior can vary from one unit to another, while the type of evidence used to demonstrate may be the same. The type of evidence should guide the assessor; however, the evidence outlined should not be seen as prescriptive but rather as a typical example.

2.3.3. Project Manager Indicative Competence Requirement

As a guide to assist with understanding the level of competence that may be required for a project manager, the scale shown in Table 2-1 is used. This is an indicative scale and measure and will need to be tailored in accordance with the organization's specific requirements and needs. Also it will very much depend on the responsibility and accountability that the project manager may have and will need to be considered where an organization has different levels of seniority within the project manager job level. In addition, some organizations may put more importance in competency in a particular area, such as the creation of a project charter, for example. More background and detail on how this could be adapted for an organization is provided in Section 7.

Table 2-1. Competence Level Scale for Project Managers

Competence Level	Description of Level
1	Limited experience or knowledge is required in this competence
2	Some knowledge and experience of this competence is required
3	This competence needs to be demonstrated though may only be partially demonstrated and could be performed under supervision
4	Full competency is required, supported by knowledge and experience
5	Full competency, supported by deep knowledge and broad experience; the individual is likely to be regarded as a thought leader

2.4 Project versus Program versus Portfolio Management

This edition of the *PMCD Framework* provides guidance on not only project management competencies, but also those competencies for program and portfolio management. As such the following sections detail the relationship and key differences between the three roles. Refer to Table 2-2. Further details can be found in the *PMBOK® Guide*, *The Standard for Program Management*, and *The Standard for Portfolio Management*.

2.4.1 The Relationship Between Project and Program Management

During the course of a program, projects are initiated and the program manager oversees and provides direction and guidance to the project managers. Program managers coordinate efforts between projects, but typically do not directly manage the individual components. Essential program management responsibilities include planning the program, identifying and planning for benefits realization and sustainment, identification and control of the interdependencies between projects, addressing escalated issues among the projects that comprise the program, and tracking the contribution of each project and the non-project work to the consolidated program benefits.

The integrative nature of program management processes involves coordinating the processes for the projects or program. This coordination applies through all program management activities and involves managing the

processes at a level higher than those associated with individual projects. An example of this type of integration is the management of issues and risks needing resolution at the program level, because they involve multiple projects or otherwise cross project boundaries and therefore cannot be addressed at the individual project level.

The interactions between a program and its components tend to be iterative and cyclical. Information flows predominantly but not exclusively from the program's components, such as a subordinate project, to the program during the program planning phase. During this time, information regarding status changes affecting cross-cutting dependencies could be flowing from the projects to the program and then from the program to the affected projects. Early in a program, the program guides and directs the individual program components to align and achieve desired goals and benefits. The program also influences the approach for managing the individual projects within it. This is accomplished through the program manager's decision-making capability along with program stakeholder engagement and program governance. Later in the program, the individual components report through program governance processes on project status, risks, changes, costs, issues, and other information affecting the program. An example of such an interaction can be found during schedule development, where a detailed review of the overall schedule at the component level is needed to validate information at the program level.

2.4.2 The Relationship Between Program and Portfolio Management

The portfolio manager is responsible for the execution of the portfolio management process. Where program and project managers focus on “doing work right,” portfolio managers focus on “doing the right work.” Portfolio managers receive information on portfolio component performance and progress, and they convey to the portfolio management governing body how the portfolio components as a whole are aligned with the strategic goals, then provide appropriate recommendations or options for action. They also ensure that timetables for portfolio management processes are maintained and followed and that the managers of portfolio components (projects, programs, and operations) receive and provide the information required under the portfolio management processes. They are the primary conduit between managers of portfolio components and portfolio stakeholders. A portfolio has a parent-child relationship with its portfolio components, just as a program has a parent-child relationship with its projects.

Similar to the interactions between program and project management, portfolio management and program management interact as part of their relationship within the organizational strategy and objectives. As the organization manages its portfolio, the programs are influenced by the portfolio needs, such as organizational strategy and objectives, benefits, funding allocations, requirements, timelines, and constraints, which are translated into the program scope, deliverables, budget, and schedule. The direction of influence flows from the portfolio to the program.

Similarly, during the program's benefits delivery, transition, and closing phases the program manager provides key data to the portfolio management function. This data may include program status information, program performance reports, budget and schedule updates, earned value and other types of cost performance reporting, change requests and approved changes, and escalated risks and issues. The type and frequency of these

Table 2-2. Comparative Overview of Project, Program, and Portfolio Management

Organizational Project Management			
	Projects	Programs	Portfolios
Definition	A project is a temporary endeavor undertaken to create a unique product, service, or result.	A program is a group of related projects, subsidiary programs, and program activities managed in a coordinated way to obtain benefits not available from managing them individually.	A portfolio is a collection of projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives.
Scope	Projects have defined objectives. Scope is progressively elaborated throughout the project life cycle.	Programs have a scope that encompasses the scopes of its program components. Programs produce benefits to an organization by ensuring that the outputs and outcomes of program components are delivered in a coordinated and complementary manner.	Portfolios have an organizational scope that changes with the strategic objectives of the organization.
Change	Project managers expect change and implement processes to keep change managed and controlled.	Programs are managed in a manner that accepts and adapts to change as necessary to optimize the delivery of benefits as the program's components deliver outcomes and/or outputs.	Portfolio managers continuously monitor changes in the broader internal and external environments.
Planning	Project managers progressively elaborate high-level information into detailed plans throughout the project life cycle.	Programs are managed using high-level plans that track the interdependencies and progress of program components. Program plans are also used to guide planning at the component level.	Portfolio managers create and maintain necessary processes and communication relative to the aggregate portfolio.
Management	Project managers manage the project team to meet the project objectives.	Programs are managed by program managers who ensure that program benefits are delivered as expected, by coordinating the activities of a program's components.	Portfolio managers may manage or coordinate portfolio management staff, or program and project staff that may have reporting responsibilities into the aggregate portfolio.
Monitoring	Project managers monitor and control the work of producing the products, services, or results that the project was undertaken to produce.	Program managers monitor the progress of program components to ensure the overall goals, schedules, budget, and benefits of the program will be met.	Portfolio managers monitor strategic changes and aggregate resource allocation, performance results, and risk of the portfolio.
Success	Success is measured by product and project quality, timeliness, budget compliance, and degree of customer satisfaction.	A program's success is measured by the program's ability to deliver its intended benefits to an organization, and by the program's efficiency and effectiveness in delivering those benefits.	Success is measured in terms of the aggregate investment performance and benefit realization of the portfolio.

interactions is specified by the portfolio management or governance board, and influenced by the program review and update cycles.

In organizations that leverage portfolios, the program manager is responsible for ensuring that the overall program structure and program management processes align with the portfolio management plan and enable the project teams to successfully complete their work. The program manager ensures that project deliverables are able to be integrated into the program's end product, service, results, and benefits. Program managers also ensure that the projects are organized and executed in a consistent manner and fulfilled within established standards.

2.5 Typical Development Paths

There are project, program, and portfolio managers with various levels of experience; however, this document does not attempt to define these levels. The level of competency that a project, program, or portfolio manager is required to have will depend on a number of factors and is likely to be determined by the organization. Examples on how this can be done are covered in Section 7.

As individuals develop in project, program, or portfolio management, they are likely to acquire skills and experience associated with general management competences and gain a more strategic perspective. The extent of this development is different by person, but also heavily influenced by the organization.

2.5.1 Project Managers

There is typically a development path from novice project managers to experienced project managers. This development is based on growing competences as a result of increased experience and skills resulting from formal or informal development activities (see Section 6).

Subject matter experts or a managers who move into project management are likely to be experts in specific topics, operations, or leadership. They can build on these competences by adding project management specific knowledge and skills. As project management requires many competences that are also needed in line management, a manager usually can quickly develop the competences. Experts without a background in leadership or operations usually have to bridge a bigger competence gap.

2.5.2 Program and Portfolio Managers

As focus and tasks of portfolio, program, and project managers are quite different, there is no “automatic” development from project to program to portfolio management. The development into one of these roles requires additional competences and a shift in focus. Not every project manager will develop into a program or portfolio manager—and not every program or portfolio manager is suited to run a project. As with project managers, the development between different roles is founded on growing competence as a result of experience and increased skills set resulting from formal or informal development activities (see Section 6).

Program management requires a sound knowledge of project management. So project managers can bring in their project experience and extend their competence into the field of program management to develop into program managers. However, good project managers do not always make good program managers, because the different skill set and perspective that is required for a program manager may not come naturally. Likewise a good program manager may not be a good project manager. Like project managers, line managers may develop into program management by acquiring the necessary competence in project and program management.

Portfolio management, on the other hand, is much closer to general management. So it is not simply a “next step” for experienced program managers. Both program managers and line managers need to develop specific competences required for successful portfolio management. Project managers can also develop directly into portfolio managers, even though the competence gap may be bigger.

3

PROJECT MANAGER COMPETENCES

This section of the *PMCD Framework* lists competences and elements for a project manager in a preponderance of settings and circumstances by identifying performance criteria relative to specific elements of competence. Gaining an understanding through assessment of the individual project manager's current capability is essential to creating a baseline of competence. Details on evidence, expectation, and examples for each element in the competence are contained in Appendix X3. Both performance and personal competences are listed. Additional details on performance and personal competences are contained in Section 2.

Measuring the individual performance against a competency baseline will identify the project manager's strengths and development needs. The dimension of personal competence looks at the project manager's behavior relative to overall competence in managing projects. The goal is to meet or exceed the baseline competency defined by the *PMCD Framework*.

For each element, there is a competence level shown, as described in Section 2.3.3. These are not intended to be prescriptive and each organization will have its own levels for a competence based on the types of projects that it manages. The level is intended to assist the project managers and their managers in assessing where they are against where they need to be. More details can be found in Section 7.

3.1 Project Manager Performance Competences

Table 3-1 lists the Knowledge Areas and processes from the *PMBOK® Guide*.

Table 3-1. PMBOK® Guide Knowledge Areas and Processes

Knowledge Area	Process Name
Project Integration Management	<ul style="list-style-type: none"> • Develop Project Charter • Develop Project Management Plan • Direct and Manage Project Work • Monitor and Control Project Work • Perform Integrated Change Control • Close Project or Phase
Project Scope Management	<ul style="list-style-type: none"> • Plan Scope Management • Collect Requirements • Define Scope • Create the Work Breakdown Structure (WBS) • Validate Scope • Control Scope
Project Time Management	<ul style="list-style-type: none"> • Plan Schedule Management • Define Activities • Sequence Activities • Estimate Activity Resources • Estimate Activity Durations • Develop Schedule • Control Schedule
Project Cost Management	<ul style="list-style-type: none"> • Plan Cost Management • Estimate Costs • Determine Budget • Control Costs
Project Quality Management	<ul style="list-style-type: none"> • Plan Quality Management • Perform Quality Assurance • Control Quality
Project Human Resource Management	<ul style="list-style-type: none"> • Plan Human Resource Management • Acquire Project Team • Develop Project Team • Manage Project Team
Project Communications Management	<ul style="list-style-type: none"> • Plan Communications Management • Manage Communications • Control Communications
Project Risk Management	<ul style="list-style-type: none"> • Plan Risk Management • Identify Risks • Perform Qualitative and Quantitative Risk Analysis • Plan Risk Responses • Control Risks
Project Procurement Management	<ul style="list-style-type: none"> • Plan Procurement Management • Conduct Procurements • Control Procurements • Close Procurements
Project Stakeholder Management	<ul style="list-style-type: none"> • Identify Stakeholders • Plan Stakeholder Engagement • Manage Stakeholder Engagement • Control Stakeholder Engagement

3.2 Units of Personal Competence

Table 3-2 defines the respective elements for each unit of personal competence.

Table 3-2. Elements of Project Manager Personal Competence

Personal Competence	Description of Level
Communicating	<ul style="list-style-type: none"> • Actively listens, understands, and responds to stakeholders • Maintains lines of communication • Ensures quality of information • Tailors communication to audience
Leading	<ul style="list-style-type: none"> • Creates a team environment that promotes high performance • Builds and maintains effective relationships • Motivates and mentors project team members • Takes accountability for delivering the project • Uses influencing skills when required
Managing	<ul style="list-style-type: none"> • Builds and maintains the project team • Plans and manages for project success in an organized manner • Resolves conflict involving project team or stakeholders
Cognitive Ability	<ul style="list-style-type: none"> • Takes a holistic view of the project • Effectively resolves issues and solves problems • Uses appropriate project management tools and techniques • Seeks opportunities to improve project outcome
Effectiveness	<ul style="list-style-type: none"> • Resolves project problems • Maintains project stakeholder involvement, motivation, and support • Changes at the required pace to meet project needs • Uses assertiveness when necessary
Professionalism	<ul style="list-style-type: none"> • Demonstrates commitment to the project • Operates with integrity • Handles personal and team adversity in a suitable manner • Manages a diverse workforce • Resolves individual and organizational issues with objectivity

4

PROGRAM MANAGER COMPETENCES

4

This section of the *PMCD Framework* lists the competences for a program manager in a multitude of settings and circumstances by identifying performance criteria relative to specific elements of competence. Gaining an understanding through assessment of the individual program manager's current level of competence is essential to establishing a baseline. Measuring individual performance against a competency baseline allows an assessment of the program manager's strengths and development needs over time. The dimension of personal competence looks at the program manager's behavior relative to overall competence in managing programs. The goal is to meet or exceed the baseline competency defined by the *PMCD Framework*.

Details on evidence, expectation, and examples for each element in the competence are contained in Appendix X3. Both performance and personal competences are listed. Additional details on performance and personal competences are contained in Section 2.

The role of the program manager is separate and distinct from that of the project manager. At all times during the course of a program, the program manager works within the five Program Management Performance Domains: Program Strategy Alignment, Program Benefits Management, Program Stakeholder Engagement, Program Governance, and Program Life Cycle Management; and interacts with each project manager to provide support and guidance on individual projects. The program manager also interacts with the operation team and there also could be relationships with other programs (sometimes referred to as subprograms) within the organization. The program manager also conveys the important relationship of each project to the overall program and organizational performance objectives. The program manager works to ensure that the overall program structure and program management processes enable the program and its component teams to successfully complete their work and to integrate the components' deliverables into the program's end products, services, results, and benefits. Program managers work to ensure that projects are organized and executed in a consistent manner and fulfilled within established standards.

Program managers are required to have a broad view of both program objectives and organizational culture and processes. Program managers should address a number of issues systematically and effectively during the course of the program; for example, optimizing resources among program's components, evaluating total cost of ownership, and overseeing requirements and configuration management across components.

Program managers lead the program management team in establishing program direction, identifying interdependencies, communicating program requirements, tracking progress, making decisions, identifying and mitigating risks, and resolving conflicts and issues. Program managers work with component (project) managers and often with functional managers to gain support, resolve conflicts, and direct individual program team members by providing specific work instructions. Leadership is embedded in the program manager's job and occurs throughout the course of the program.

Program managers employ strategic visioning and planning to align program goals and benefits with the long-term goals of the organization. Once the program goals and benefits have been defined, structured plans are developed to execute the individual components. While project managers lead the work on their components, it is the program manager's responsibility to ensure alignment of the individual plans with the program goals and benefits.

In programs, the program manager needs to integrate and control the interdependencies among the components by working in the five interrelated and interdependent Program Management Performance Domains. Through these Performance Domains, the program manager oversees and analyzes component interdependencies to assist in the determination of the optimal approach for managing the components as a program. The actions related to these interdependencies may include:

- Leading and coordinating common program activities, such as financing and procurement across all program components, work, or phases;
- Resolving resource constraints and/or conflicts that affect multiple components within the program;
- Communicating and reporting to stakeholders in a manner that reflects all activities within the program;
- Responding proactively to risks spanning multiple components of the program;
- Aligning program efforts with organizational/strategic direction that impacts and affects individual components, groups of components, or program goals and objectives;
- Resolving scope, cost, schedule, quality, and risk impacts within a shared governance structure; and
- Tailoring program management activities, processes, and interfaces to effectively address cultural, socioeconomic, political, and environmental differences in programs.

Through structured oversight and governance, program management enables appropriate planning, control, delivery, transition, and benefits sustainment across the components within the program to achieve the program's intended strategic benefits. Program management provides a framework for managing related efforts considering key factors such as strategic benefits, coordinated planning, complex interdependencies, deliverable integration, and optimized pacing.

Program managers should expect change from both inside and outside of the program and should be prepared to manage it. Program managers develop the overall program plan and create high-level plans to guide detailed planning at the component level. Program managers manage the program staff and the project managers and provide vision and overall leadership. Success is measured by the degree to which the program satisfies the needs and benefits for which it was undertaken. Program managers mentor the progress of program components to ensure the overall goals, schedules, budget, and principles of the program are met.

4.1 Program Manager Performance Competences

Table 4-1 defines the respective elements for each unit of performance competence.

Table 4-1. Program Manager—Units of Performance Competence

Units of Performance Competence	Elements of Competence
Strategic Program Alignment	<ul style="list-style-type: none"> • Align program and organization strategy • Develop program roadmap • Assess environment
Program Benefits Management	<ul style="list-style-type: none"> • Identify program benefits • Analyze and plan program benefits • Delivery program benefits • Transition program benefits • Ensure program benefits sustainment
Program Stakeholder Management	<ul style="list-style-type: none"> • Perform program stakeholder identification • Perform program stakeholder planning • Monitor stakeholder engagement
Program Governance	<ul style="list-style-type: none"> • Define governance structure • Manage issue resolution and program change • Authorize program component changes (initiation, transition, closure) • Review program performance • Ensure program conformance to organization standards
Program Life Cycle Management	<ul style="list-style-type: none"> • Define program • Formulate program • Prepare program • Deliver program • Authorize and plan components • Oversee and integrate components • Transition and close components • Close program • Provide program activities overview • Manage program integration • Develop program infrastructure • Manage program delivery • Monitor and control program performance • Sustain benefits and transition program • Close program
Program Communications Management	<ul style="list-style-type: none"> • Plan communications • Deliver information • Report program performance
Program Financial Management	<ul style="list-style-type: none"> • Estimate program costs • Establish program financial framework • Develop program financial management plan • Estimate components costs • Budget program costs • Monitor and control program financials • Close program financially
Program Integration Management	<ul style="list-style-type: none"> • Initiate program • Develop program management plan • Develop program infrastructure • Manage program delivery • Monitor and control program performance • Manage program transition and benefits sustainment • Close program
Program Quality Management	<ul style="list-style-type: none"> • Plan program quality • Assure program quality • Control program quality
Program Resource Management	<ul style="list-style-type: none"> • Plan program resources • Prioritize program resources • Manage resource interdependencies
Program Risk Management	<ul style="list-style-type: none"> • Plan program risk management • Identify program risks • Analyze program risks • Plan program risk responses • Monitor and control program risks
Program Time Management	<ul style="list-style-type: none"> • Plan program schedule • Control program schedule
Program Scope Management	<ul style="list-style-type: none"> • Plan program scope • Control program scope

4.2 Program Manager Personal Competences

Table 4-2 defines the respective competence for each unit of personal competence.

Table 4-2. Program Manager—Units of Personal Competence

Units of Competence	Elements of Competence
Communicating	<ul style="list-style-type: none"> • Actively listens, understands, and responds to stakeholders • Maintains lines of communication • Ensures quality of information • Tailors communication to audience
Leading	<ul style="list-style-type: none"> • Creates a team environment that promotes high performance • Builds and maintains effective relationships • Motivates and mentors program team members • Takes accountability for delivering the program • Uses influencing skills when required
Managing	<ul style="list-style-type: none"> • Builds and maintains the program team • Plans and manages for program success in an organized manner • Resolves conflict involving program team or stakeholders
Cognitive ability	<ul style="list-style-type: none"> • Takes a holistic view of the program • Effectively resolves issues and solves problems • Uses appropriate program management tools and techniques • Seeks opportunities to improve program outcome
Effectiveness	<ul style="list-style-type: none"> • Resolves program problems • Maintains program stakeholder involvement, motivation, and support • Changes at the required pace to meet program needs • Uses assertiveness when necessary
Professionalism	<ul style="list-style-type: none"> • Demonstrates commitment to the program • Operates with integrity • Handles personal and team adversity in a suitable manner • Manages a diverse workforce • Resolves individual and organizational issues with objectivity

5

PORTFOLIO MANAGER COMPETENCES

This section of the *PMCD Framework* lists the competences for a portfolio manager in various settings and circumstances by identifying performance criteria relative to specific elements of competence. Gaining an understanding through assessment of the individual portfolio manager's current capability is essential for creating a competency baseline.

Details on evidence, expectation, and examples for each element of competence are contained in Appendix X3. Both performance and personal competences are listed. Additional details on performance and personal competences are contained in Section 2.

Measuring the portfolio manager's individual performance against a competency baseline helps identify strengths and development needs. The dimension of personal competence looks at the portfolio manager's behavior relative to overall competency in managing portfolios. The goal is to meet or exceed the baseline competency defined by the *PMCD Framework*.

Portfolio managers are responsible for the execution of the portfolio management process. Where program and project managers focus on "doing work right," portfolio managers focus on "doing the right work." Portfolio managers receive information on portfolio component performance and progress, and they convey to the portfolio management governing body how the portfolio components as a whole are aligned with the strategic goal. They then provide appropriate recommendations or options for action. Portfolio managers also ensure that the timetables for portfolio management processes are maintained and followed and that the managers of portfolio components (projects, programs, and operations) receive and provide the information required under the portfolio management processes. Portfolio managers are the primary conduit between managers of portfolio components and portfolio stakeholders.

The portfolio manager may be an individual, a group, or a governing body, and is responsible for establishing, monitoring, and managing all assigned portfolios. Specific responsibilities may include:

- Establishing and maintaining a framework (a conceptual and communicable structure of ideas) and methodology (a body of policies and procedures) for portfolio management within the organization;
- Establishing and maintaining relevant portfolio management processes (strategic management, governance management, communications management, performance management, and risk management);
- Guiding the selection, prioritization, balancing, and termination of portfolio components to ensure alignment with strategic goals and organizational priorities;
- Establishing and maintaining appropriate infrastructure and systems to support portfolio management processes;
- Continuously reviewing, reallocating, reprioritizing, and optimizing the portfolio to ensure ongoing alignment with evolving organizational goals and market opportunities and threats;

- Providing key stakeholders with timely assessment of portfolio component selection, prioritization, and performance, as well as early identification of (and intervention in) portfolio-level issues and risks that are impacting performance;
- Meeting legal and regulatory requirements;
- Achieving the information needs of current and future stakeholders;
- Supporting senior-level decision making by ensuring timely and consistent communication to stakeholders on progress, changes, and impact on portfolio components;
- Influencing active executive sponsorship engagement for the portfolio and each portfolio component as it is initiated; and
- Participating in program and project reviews to reflect senior-level support, leadership, and involvement in key decisions.

The portfolio manager should be aware of how the portfolio is related to the organizational strategy. The portfolio manager assesses and measures the benefits that the portfolio is adding to the organization's objectives. Throughout the portfolio life cycle, the portfolio manager should be able to manage risks, monitor and prioritize portfolio components, resolve issues that need senior-level attention, develop and improve processes, and apply organizational knowledge and management skills. In addition, the portfolio manager should be able to effectively manage the organization's resources and provide timely information for stakeholder communication requirements.

The portfolio manager's expertise should include, but not be limited to the following areas:

- Portfolio strategic management and alignment,
- Portfolio management and techniques,
- Stakeholder engagement,
- Leadership and management skills, and
- Risk management.

5.1 Portfolio Manager Performance Competences

Table 5-1 defines the respective elements for each unit of performance competence.

Table 5-1. Portfolio Manager—Units of Performance Competence

Units of Competence	Elements of Competence
Portfolio Strategic Management	<ul style="list-style-type: none"> • Develop portfolio strategic plan • Develop portfolio charter • Define portfolio roadmap • Manage strategic change
Portfolio Governance Management	<ul style="list-style-type: none"> • Develop portfolio management plan • Define portfolio • Optimize portfolio • Define governance structure • Authorize portfolio • Provide portfolio oversight
Portfolio Performance Management	<ul style="list-style-type: none"> • Develop portfolio performance management plan • Manage supply and demand • Manage portfolio value • Manage issue resolution and portfolio change • Review portfolio performance • Ensure portfolio conformance to organizational standards
Portfolio Communication Management	<ul style="list-style-type: none"> • Develop portfolio communication management plan • Manage portfolio information
Portfolio Risk Management	<ul style="list-style-type: none"> • Develop portfolio risk management plan • Manage portfolio risks
Portfolio Stakeholder Management	<ul style="list-style-type: none"> • Identify stakeholders • Plan stakeholder management • Manage stakeholder engagement • Control stakeholder engagement • Manage issue resolution and portfolio change • Review portfolio performance • Ensure portfolio conformance to organizational standards

5.2 Portfolio Manager Personal Competences

Table 5-2 defines the respective elements for each unit of personal competence.

Table 5-2. Portfolio Manager—Units of Personal Competence

Units of Competence	Elements of Competence
Communicating	<ul style="list-style-type: none"> • Actively listens, understands, and responds to stakeholders • Maintains lines of communication • Ensures quality of information • Tailors communication to audience
Leading	<ul style="list-style-type: none"> • Creates a team environment that promotes high performance • Builds and maintains effective relationships • Motivates and mentors portfolio team members • Takes accountability for delivering the portfolio • Uses influencing skills when required
Managing	<ul style="list-style-type: none"> • Builds and maintains the portfolio team • Plans and manages for portfolio success in an organized manner • Resolves conflict involving portfolio team or stakeholders
Cognitive Ability	<ul style="list-style-type: none"> • Takes a holistic view of the portfolio • Effectively resolves issues and solves problems • Uses appropriate portfolio management tools and techniques • Seeks opportunities to improve portfolio outcome
Effectiveness	<ul style="list-style-type: none"> • Resolves program problems • Maintains portfolio stakeholder involvement, motivation, and support • Changes at the required pace to meet portfolio needs • Uses assertiveness when necessary
Professionalism	<ul style="list-style-type: none"> • Demonstrates commitment to the portfolio • Operates with integrity • Handles personal and team adversity in a suitable manner • Manages a diverse workforce • Resolves individual and organizational issues with objectivity

6

DEVELOP COMPETENCE AS A PORTFOLIO, PROGRAM, OR PROJECT MANAGER

This section describes the process to define competence requirements, analyze personal development needs, and develop the required competences. This process may be used by organizations to systematically develop their portfolio, program, and project managers, or it may be used by professionals to analyze and plan personal development.

Key inputs for the competence development process are the performance and personal competences defined in the previous sections as well as the knowledge competences (processes, tools, and techniques) defined in PMI's foundational standards. All of the competence requirements presented in this framework refer to a typical portfolio, program, or project manager; therefore, these competence requirements should be adapted to reflect organizational requirements, culture, specific role definitions, and individual expectations to define a fitting baseline for competency assessment and development.

This process is intended to be used by organizations and individuals to assess requirements and competency, and to support continuous development of individual skills and organizational capability in portfolio, program, and project management. The process is not intended to be a one-time assessment to identify or certify competent portfolio, program, and project managers.

The competency development process should be performed periodically to assess and improve portfolio, program, and project management competences. Depending on intention, target group, and organizational conditions, the assessment may be conducted for all or for only selected competences, either incrementally or holistically, subject to each individual's need. A suggested competency development process is summarized as follows (see also Figure 6-1):

- **Step 1: Review Requirements (Section 6.1).** In Step 1 of the competency development process, define the assessment criteria by reviewing organization-specific and individual requirements as well as the competence requirements described in this framework (for performance and personal competence) and in PMI's foundational standards (for knowledge competence). Use these consolidated requirements to identify existing gaps, define goals, scope, and criteria of the assessment.
- **Step 2: Assess Competences (Section 6.2).** In Step 2, assess the competency of the portfolio, program, or project managers using the assessment criteria from Step 1. The purpose of the assessment is to identify areas of strengths and weaknesses to determine how further development could improve competence and results.
- **Step 3: Prepare Competency Development Plan (Section 6.3).** In Step 3, define a competency development plan to address the results of the assessment. The plan prescribes or recommends activities to be undertaken. Depending on the agreed activities, either the assessed individuals or other persons in the organization are responsible to put the single development activities into action.

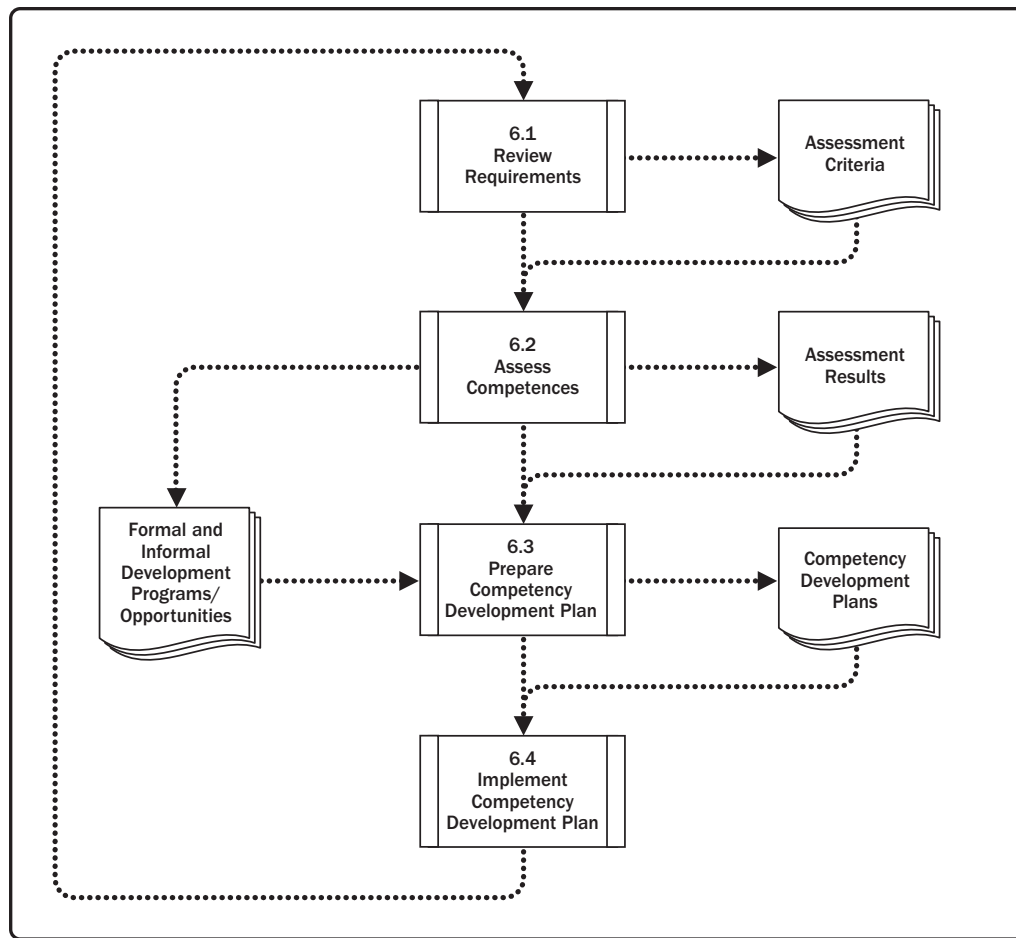


Figure 6-1. Competency Development Process

- **Step 4: Implement Competency Development Plan (Section 6.4).** In Step 4, execute the developmental activities defined in Step 3 and monitor/track them against the competency development plan. This includes an evaluation of the completed activities and achievement of the defined goals.
- **Summary (Section 6.5).** Compare the results with the requirements outlined in Step 1 and repeat the entire process using the same or different key competences to further develop the portfolio, program, or project managers' competency and through this the organization's overall capability in portfolio, program, and project management.

The target audience for this process reflects a wide range of use, from individual self-assessment to organizational-wide assessment. These include:

- Portfolio, program, and project managers;
- Managers of portfolio, program, and project managers;
- Members of a portfolio/program/project management office;

- Managers responsible for establishing and developing portfolio, program, and project management competence;
- Educators/trainers teaching portfolio, program, and project management and other related subjects;
- Developers of portfolio, program, and project management educational programs;
- Consultants to the industry of portfolio, program, and project management;
- Human resource managers;
- Senior/strategic management;
- Organizational capability development managers; and
- Aspiring portfolio, program, and project professionals and executives.

6.1 Step 1—Review Requirements

To ensure meaningful and effective results of the competency assessment, organizational, cultural, and personal requirements should be identified and combined with the requirements of performance, personal, and knowledge competences. This will establish the goals, scope, development plan, and criteria as well as an assessment baseline for each individual or group.

The identified requirements may influence one or all of the following competence dimensions:

- Knowledge expectations,
- Performance expectations, and
- Personal behavior expectations.

The requirements also influence purpose, scope, and implementation of the assessment and all follow-up activities, for example, the development plan and development activities.

Refer to Figure 6-2 for a list of the inputs, tools and techniques, and outputs.

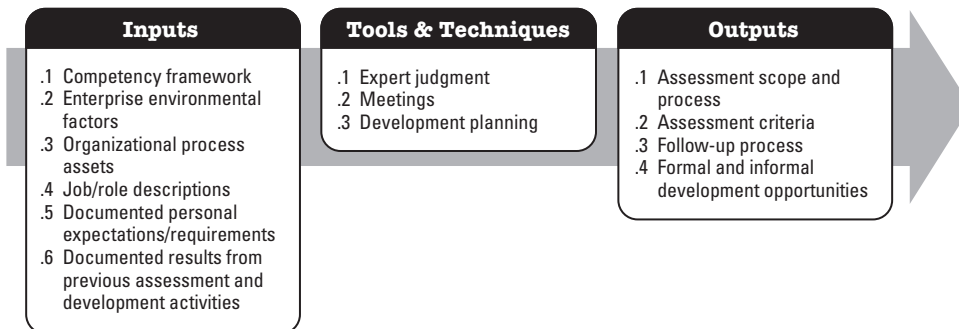


Figure 6-2. Review Requirements: Inputs, Tools and Techniques, and Outputs

6.1.1 Organizational Requirements and Culture

Organizational context and cultural environment are key sources of requirements for the competency of portfolio, program, and project managers.

Factors like organizational structure and functional model, processes, policies and procedures, communication channels, and cultural environment usually impact all three competence dimensions as well as the implementation process.

6.1.1.1 Examples

- Organizational policies or guidelines influence knowledge behavior expectations (e.g., tools);
- Cultural environment influences performance behavior expectations (e.g., stakeholder management and context assessment);
- Required or expected leadership style influences personal behavior expectations (e.g., authoritarian versus empowering style);
- Available development activities influence the definition and implementation of the development plan; and
- The organization influences target groups and the assessment process.

6.1.2 Role Definition and Requirements

Role definitions and job requirements are other key sources for adapting the competency framework to the needs of a specific organization or for specific work tasks.

Depending on the role of portfolio, program, or project managers, the relevance of competences and behavior expectations may be different. Specific roles, for example, may require key competences that are fundamental for repeatable success in the role and for the organization.

6.1.2.1 Examples

- **Senior program manager.** Increased job requirements and additional tasks compared to other program managers, for example, managing multiple related programs to achieve strategy and greater change in the organization.
- **Scheduling specialist.** Increased requirements regarding planning and scheduling, for example, control and monitoring earned value of many different vendors, contractors (including subcontractors) and suppliers, but reduced requirements for other project management competences.
- **Portfolio and program manager combined role.** Combined requirements from portfolio and program management to reflect the tasks of the role, for example, organizational strategy, resources, and assets management.

6.1.3 Personal Expectations

The personal expectations for portfolio, program, or project managers are dependent on their knowledge and experience, the overall situation, context, and the stakeholders' personal expectations.

In addition to the organizational and role specific requirements, personal expectations are another source for adapting the assessment process and criteria to the specific needs of the organization.

6.1.3.1 Examples

- **Project manager for troubled projects.** Increased focus on competences and track record regarding troubled projects.
- **Transition from project to program management.** Increased focus on the program management competences unique to program management; reduced focus on competences “shared” between project and program management.
- **Transition of an experienced executive into project management.** Focus on knowledge and performance competences; reduced focus on personal competences established as part of the executive role.

6.1.4 Assessment Criteria

Based on the identified requirements, assessment criteria for each target group are defined to create a competency assessment baseline. The assessment criteria refer to the three competence dimensions and describe observable behavior or results. Important tools to gather evidence for the behavior and results of a portfolio, program, or project manager are interviews; surveys; deliverables; other portfolio, program, or project management related documents and reviews; key performance indicators and success criteria achievability rates; and any repeatable success measurement.

It is important to define the assessment criteria in a way so that the actual behavior, performance, and results are assessed. Simply checking the existence of formalized documents will not assess performance. The same is true for expected behaviors of portfolio, program, and project managers, who should be assessed for their intentions and effect and not only for superficial actions.

The three assessment dimensions are:

- Knowledge expectation,
- Performance expectation, and
- Personal behavior expectation.

6.1.4.1 Knowledge Expectation

Knowledge competence refers to what a person knows about the portfolio, program, and project management discipline and how portfolios, programs, and projects should be initialized, planned, executed, controlled, handed over, and closed out.

The required knowledge is defined by PMI's foundational standards and the examination content outlines (e.g., PMP®, PgMP®, and PfMP® examination content outlines).

A portfolio, program, or project manager demonstrates knowledge by passing an appropriately credentialed assessment (e.g., PMP®) or organization-specific certifications.

6.1.4.2 Performance Expectation

Performance competence refers to what a person is able to do and achieve by applying portfolio, program, and project management knowledge.

The portfolio, program, or project manager's performance can be demonstrated by assessing related outcomes. These outcomes should be judged on requirements, expectations, and conditions—checking only for the existence of evidence is not sufficient.

Key evidence to measure this competence may be the successful management and delivery of portfolios, programs, or projects. A track record alone, however, is not sufficient evidence for performance competence; it should be supported by specific evidence for the other competences required for a portfolio, program, or project manager.

6.1.4.3 Personal Behavior Expectation

Personal competences are those behaviors, attitudes, and core personality characteristics that contribute to a person's ability to manage portfolios, programs, or projects. Personal competence enables a portfolio, program, or project manager to effectively use knowledge and performance competences.

Evidence of personal competence may be found in observing how the individual behaves while delivering the portfolio, program, and project.

The required personal competences are highly dependent on culture, organization, and other conditions.

6.2 Step 2—Assess Competences

In this step, the detailed assessment methods and detailed assessment process are defined and the portfolio, program, and project managers are assessed against the competence criteria defined in Step 1.

Refer to Figure 6-3 for a list of the inputs, tools and techniques, and outputs.

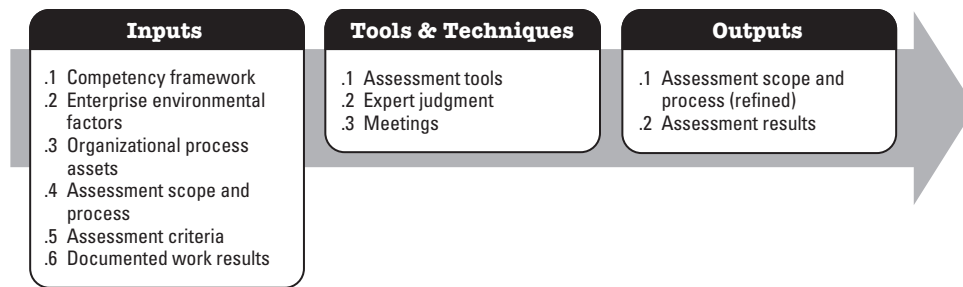


Figure 6-3. Assess Competences: Inputs, Tools and Techniques, and Outputs

6.2.1 Assessment Detail and Rigor

The rigor applied in the competency development process is the level of thoroughness, intensity, breadth, and depth for the assessment of the portfolio, program, and project managers' competence. The level of rigor followed in applying the competency development process may vary depending upon the audience and intended outcomes. The relative levels of rigor are explained in this section. An organization or a portfolio, program, or project manager should use the concept of rigor relative to the importance of developing competence. When an organization requires strong portfolio, program, and project management capabilities, it should use greater rigor in the competency development process to ensure a high caliber of management competence.

Rigor is important because it provides value to the assessment results. Lack of rigor provides meaningless results, and time may be wasted. On the other hand, if in excess, time could be spent producing information that may never be used and the credibility of the process may be lost. This may cause a bias against further assessments. For example, an assessor should not spend 2 days with a project manager assessing 200 performance criteria just to identify a 2-day basic project management class to attend.

Low-rigor competence assessments typically involve casual self-assessments or informal assessments against the competence criteria. The primary use for these is in personal development planning and improvement. An appropriate subset of the *PMCD Framework* may also be useful for team assessment and risk management as a part of project kick-off. The disadvantage of self-assessment is that individuals view their own skills inconsistently and their comparison to the baseline will vary. Some individuals know themselves very well—others do not. Some individuals hold themselves to a higher standard, resulting in a lower rating of competence. This can be compensated for by performing a self-assessment followed by an assessment that is completed by a peer or manager.

An example of low rigor is when portfolio, program, or project managers assess their competence as a personal exercise or prior to an assessment by a third party. The individuals may apply the process with less rigor and the collection of evidence may be done over an extended period. The individuals compare their performance against the performance criteria specified in the previous sections. This self-assessment may lead to a request for assistance to address a development need or an organizational assessment.

Medium rigor is less casual and adds an appropriate selection of the following elements to the assessment process:

- Review of the suggested types of evidence for each performance, personal, and knowledge competence;
- 360-degree feedback, where feedback is provided from all around the subject;
- Interviewing the portfolio, program, or project manager and evaluating the evidence to gain an understanding of the effort and contribution;
- Specific recommendation of action items to work on; and
- Reassessment after implementation of the development plan.

Medium rigor requires the person performing the assessment to have attained the necessary range of competences to make an assessment of performance. The assessor requires competence in the assessment process and an in-depth understanding of portfolio, program, or portfolio management competence. In addition, medium rigor takes more time; as much as two to four times the amount of time as the low-rigor approach described above. Furthermore, the results are more repeatable and useful.

A high-rigor approach to assessment should be documented so that it is repeatable and consistent when conducting other assessments and adds the following, where appropriate:

- Assessment by qualified, independent assessors to allow better observation of the personal competences of the person being assessed. This also allows specific recommendations of the action items to be documented.
- Preparation and assessor review of portfolio/program/project documentation, where the person being assessed describes how he or she demonstrated each of the performance criteria in a recent project.
- Workshops, focus groups, or simulations may be used to distinguish between the ability to convince and the ability to perform.
- Central archiving system to be used for each assessment judgment and for reconciliation of assessor differences in independent scoring. This is essential for legal reasons, as well as for assessor evaluation.

High rigor increases the accuracy of the assessment effort and the consistency of the results for repeatable portfolio, program, and project success rates.

6.2.2 Assessment Process

The portfolio, program, and project managers gather meaningful and tangible evidence to be used in the assessment. The organization may also prescribe the qualitative, quantitative, and interpretive methods to be used and how evidence is collected and assessed.

The central objective is to meet or exceed the competency baseline defined by the *PMCD Framework* (performance and personal competences) and PMI's foundational standards (knowledge competence) and the

organizational/personal requirements. The acceptable level of output or performance will need to be defined prior to the assessment, for example:

- Below expectations or is developing competence,
- Meets expectations or is competent, and
- Exceeds expectations or is highly competent.

Wherever there is a gap, it is necessary to describe the extent of the gap and to define the development required. If at any time during the assessment process there appears to be a gap in competence that is putting the project currently being managed at risk, the assessor may need to immediately initiate actions to address the gap.

The gaps can be viewed as dimension, unit, or element levels, or as detailed as the performance criteria level. Not all gaps have to be examined at the same level of detail. The gaps can be viewed holistically to give a multidimensional picture, or gaps can be viewed individually to address specific development opportunities.

Upon completion of the assessment, a development plan should be created to guide and shape the individual and organization toward the agreed-upon goals and objectives. Organizations may want to strive to address the key competence areas that will provide them with maximum improvement benefits and economies of scale rather than by attempting to focus on all of the possible issues at once.

When there are sufficient performance criteria gaps within an element or unit, the development activity may require a more comprehensive approach to address the gaps. The assessor needs to be aware that when using a holistic approach, strength in one area could obscure one or more gaps in other areas; therefore, the need to recognize when to use a holistic versus detailed approach.

6.2.3 Assessment Tools

Assessment requires standardized tools to provide continuous, reliable, and repeatable success rates of portfolio, program, and project deliverability.

There are many assessment tools that can be applied across different, sectors, industries, and economies. These tools are combined with the defined assessment criteria to create the final assessment toolset (e.g., guidelines, questionnaires, survey instruments, and gap analysis tools).

6.2.3.1 Input-Based Assessment

- **Observation.** The assessee is observed by the assessor while working, to identify the availability and level of execution of the three competence dimensions (knowledge, performance, and personal).
- **Interviews.** The candidate is asked questions through an interview or a series of interviews to assess the level of understanding of the three competence dimensions (knowledge, performance, personal).
- **Results of academic programs or development programs attended.** The results of a program passed by a candidate are considered as part of an assessment to measure the competence level of the candidate.

- **Training and seminars attended.** The outcomes of training or seminars attended by the assessee are considered as part of assessing the knowledge competence element of the candidate.
- **Feedback/feed forward.** This includes a detailed organizational archived past performance appraisal including gap analysis tools and documentation.

6.2.3.2 Output-Based Assessment

- **Performance tasks.** Through a formal performance management and development process, the outputs of the candidate are assessed to measure the level of achievement of the three competence dimensions (knowledge, performance, and personal). This process is conducted through a standardized organizational instrument (e.g., annual performance reviews).
- **Portfolios of evidence to enhance competence.** As part of the performance management and development process, the portfolio of evidence for performance achieved should be submitted.
- **Publications and trainer activity.** The contribution made by the assessee through the publication of peer-reviewed journal articles, conference and symposium presentations, participation in domain or industry-specific trade exhibitions, engaging with peers on various professionally accredited online, social networking forums, tools and blogs, white papers, knowledge exchange tools and platforms, or technical instructions, as well as training others in the field of portfolio, program, or project management, can be used to measure the three competence dimensions (knowledge, performance, and personal).
- **Self- and peer evaluation.** A standardized questionnaire could be developed to measure competences, and this questionnaire should be completed by the candidate or peers to critically assess competence levels; a 360-degree, self-rounded approach should be applied.

6.2.4 Assessment at an Organizational Level

When the assessment process is being applied across an entire organization, the method of evaluation may be quite formal with any of the levels of rigor. The assessor may be the individual's manager, a senior peer, or an external assessor or consultant. In many organizations, a third party is involved to provide a consistent approach across the organization and may be from a human resources or training division. Where a third-party offering of this service is used, it should be properly and effectively inducted by human resources, the training division(s) or capability development department to ensure the vendor clearly understands the organization's processes, people, work practices, and assets. This ensures inclusivity and a structured approach when developing and managing the assessment process across the organization.

The assessor should meet with the portfolio, program, or project manager to discuss the assessment process and to perform the assessment. It is recommended that the portfolio, program, or project managers complete the competence assessment independently. This should be recognized as an important input to the meeting with the assessor.

Notes explaining the assessor's observations and the reasoning that led to the assessment findings should be recorded with appropriate storage and archiving devices (e.g., electronic repository managed centrally) as inputs to the personal development plan and for deploying appropriate development activities.

As discussed in Step 1, an organization usually has to supplement the *PMCD Framework* with additional competences to meet local expectations and the context of portfolio, program, and project professionals. There may be project-type, industry, or technology-specific requirements that an organization may choose to include. Or the organization may want to interpret the *PMCD Framework* to align with its own levels of strategy, maturity, seniority, or positions.

6.3 Step 3—Prepare Competency Development Plan

Once the assessment has been completed, a competency development plan should be created. It is important to use the information that has been gathered in Step 2 to address the development needs of the individual portfolio, program, or project manager and to build on identified gaps strengths.

Refer to Figure 6-4 for a list of the inputs, tools and techniques, and outputs.

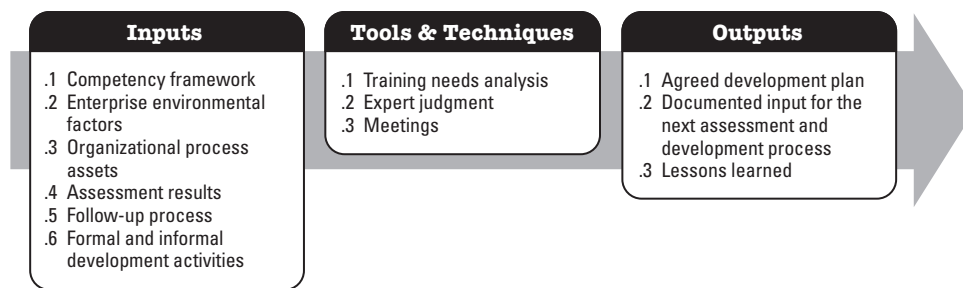


Figure 6-4. Prepare Competency Development Plan: Inputs, Tools and Techniques, and Outputs

The results of the assessment should be addressed in a timely manner, as there may be items identified by the assessment that warrant immediate corrective action. Furthermore, the plan should be prioritized to address areas that are most critical to the individual and the organization. Once the areas have been prioritized, a realistic timeline for the plan needs to be established.

By focusing on the high-priority items, a more effective plan can be implemented. Just as the work breakdown structure is an effective means of decomposing a large project into more manageable deliverables, the competence assessment helps to segregate the elements.

6.3.1 Ways of Addressing Development Needs

There are three main ways to address development needs, through experiential learning, formal learning, or non-formal learning. Each area has multiple approaches that can be used. How portfolio, program, or project managers

address their development depends on a number of aspects, such as their current competence level, available resources, cost, and time. Selecting the best development path requires some analysis. Depending on the desired development goals, usually a combination of formal and informal education delivery techniques and experiential situations is needed to meet the overall objectives. The learning environments described in Sections 6.3.1.1 through 6.3.1.3 may be used to address development needs.

6.3.1.1 Experiential Learning

Experiential learning is the act of learning by doing, through experience, which allows individual portfolio, program, or project managers to address many of their development needs on the job. For example:

- **Mentoring/coaching.** A mentor or coach can be assigned as a “go to” person when the portfolio, program, or project manager needs assistance or would like to discuss issues. The program or portfolio manager may discuss issues or concerns, seeking advice on how to handle or address current or future issues or may also discuss competence, personal behavior, and frame conditions. The mentor or coach may or may not be the individual’s line manager. Mentoring or coaching works best when the portfolio, program, or project manager wants to address development needs.
- **Peer-to-peer coaching.** This is effective when portfolio, program, or project managers have similar capabilities and can provide support to one another. This arrangement can create a particularly positive and supportive environment for two or more portfolio, program, or project managers. Occasionally, it may be necessary for a more experienced or senior manager to also become involved to ensure alignment with best practice. This is considered to be learning from the pool of knowledge in existence within the organization.
- **Role-playing.** Role-playing may be appropriate when specific developments or behaviors need to be addressed. Participants use role-playing to explore the human dynamics of situations. The synergy developed, including the humor and drama from this activity, enhances learning and the understanding of meaning.
- **Simulation/gamification.** This is a variant of role-playing, usually delivered by means of a technology platform, and can create more complex situations and cover longer simulated virtual periods than traditional methods of role-playing. A simulation also creates experience especially with regard to portfolio, program, and project tools; complexity; and balancing of competing goals or activities. The effect of simulations may be enhanced by combining them with traditional methods of training or other formal and informal group interactions. Individuals and the organization have an opportunity to test, learn, and develop from various simulated scenarios and environments. Individuals are also able to contextualize and relate to their own portfolio, program, and project needs and requirements.
- **On-the-job training.** A portfolio, program, or project manager can gain experience on live projects to build confidence, gradually advancing the complexity, breadth, and depth of experience. This may mean assignments to smaller or less complex portfolios, programs, or projects until the individual demonstrates a comprehension of competence—or it may mean rotation of jobs with another employee in the desired job role for a specified period of time to build a wider range of knowledge, capability, and skill set. Another

option may be stretch assignments into a role, which is somewhat beyond or more complex than the portfolio, program, or project manager's current role. This should not amount to allowing to fail, but should nevertheless provide an opportunity to learn and grow into new roles. This arrangement should be structured and supportive.

- **Shadowing.** Shadowing is the learning and observing of an individual's patterns of actions, interdependence, and behaviors in a given organizational context. Shadowing provides comprehensive data sets about the decisions and rationales used by individuals for their actions and decision making. Shadowing could be facilitated over a long period of time and also applied more frequently to gain a quick understanding of the issues and problems and how to resolve them in the most effective way, for example, organizational strategy, change and risk assessment, stage gate reviews, governance, control, and monitoring, etc. This method normally requires an individual to shadow and follow other experienced portfolio, program, and project managers over an agreed-upon period of time while documenting continuously on the observable patterns of activities, actions, and behaviors.

6.3.1.2 Formal Learning

Formal learning is a structured approach to education delivered either through traditional instructor-led classroom, book-based learning, web-based classroom, technology platform, virtual learning environment, peer-reviewed publications, or electronic educational database learning.

- **Group training.** This type of training can be deployed by an educational resource for a number of portfolio, program, or project managers who require the same development. More specific development needs may be addressed using a different method.
- **Individual training.** This type of training may be used when there are one or more portfolio, program, or project managers who require training in a specific area and the resources are not readily available. There are a number of registered education providers (REPs) available. A list of these resources and the particular topics they cover is available on www.pmi.org.
- **Classroom training.** An experienced portfolio, program, or project manager delivers this form of training face-to-face within the organization. This is either a complete project management training course or specific training that has been identified to address a deficiency within the organization. In-house course management tools and manuals may also be created and developed to provide a source of reference and guidance, which is usually part of the organization's central or divisional knowledge repository.
- **Virtual learning environment.** Also known as computer-based training (CBT), computer-assisted instruction, web based training, and web-based learning, a virtual learning environment is an instructional strategy whereby the computer is used to provide the learning objectives, learning resources, recordkeeping or learning logs, progress tracking and reviews, and lessons learned, including formative and summative assessments of learner performance. Most often, it is drill-and-practice, tutorial, virtual role-play, or simulation activities, geared toward the individual learner. These training packages can be purchased off the shelf or created by the organization and used at the project manager's pace and convenience (typically self-paced) or embedded into other training activities (e.g., classroom training).

- **Blended learning.** This training format enhances the learning effect by combining different forms of experiential, formal and nonformal learning into one curriculum to leverage the advantages of the single formats. The implementation of blended learning concepts may also support reducing training costs. Phased online delivery, classroom training, workshops, simulated role-plays, and virtual/web-based learning are some useful and valuable formats for blended learning.
- **PMI®-sponsored programs.** PMI provides a wide range of training, development, and educational programs. A list of these programs and the particular topics that they cover is available on PMI's website at www.pmi.org.
- **Public education.** A number of post-secondary schools and colleges provide project management training. Certificate and degree courses (including post-graduate programs) in portfolio, program, and project management are also available. Some of these colleges and universities are also approved by PMI. GAC accreditation (Global Accreditation Center for Project Management Education Programs) confirms publicly that their project management program meets comprehensive quality standards and can prepare individuals for success in portfolio, program, and project management careers. When a program has earned GAC accreditation, individuals can choose it with confidence, knowing that it offers high-quality project management education. GAC programs and education are based on rigorous standards of quality.

6.3.1.3 Nonformal Learning

Nonformal learning is a method of learning that occurs in a natural way outside traditional formal education programs.

The following are some nonformal learning activities that may be very beneficial to a portfolio, program, and project manager's development:

- Seminars and conferences;
- Web and video conferences;
- Face-to-face meetings;
- Audio and soft-copy books;
- Hard-copy books and peer-reviewed journals and periodicals;
- Podcasts;
- Blogs;
- Online discussion forums;
- Games and simulations;
- Networking through various relevant domain specific community of practice (online or face-to-face);
- Professional, statutory, and regulatory bodies publications; and
- Project management communities.

6.3.2 Competence-Based Development

Adult learners bring years of real-life portfolio, program, and project experience and differing levels of traditional training to their knowledge base. By leveraging portfolio, program, or project managers' existing level of skills and knowledge, and allowing them to learn at their own pace, competence-based learning can provide learners with a greater opportunity to meet their individual learning and development needs and minimize gaps with greater efficiency and increased productivity.

- Regardless of training technique—whether multimedia courseware, instructor-led classroom training, or experiential learning—the learner benefits the most from the right education at the right time. To determine the best training modality for a particular student, there are three things to be considered: knowledge, competence, and skills. Current competence levels (what skills do they have?) in relation to their current organization or portfolio/program/project experience (the knowledge, competence, and skills required to do the job);
- Understanding of the systems, tools, techniques, and methods available for learning, development, and training (e.g., ability to operate and navigate the technology platforms; ability to access the internet for online courses); and
- Personal learning style (e.g., preference for classroom training, online training, or self-paced training).

There is no one best learning technique or modality for a particular level of knowledge and competence; it depends on the student and the area. When selecting development needs, the modality (whether self-directed learning, classroom, or other) should be secondary to the vehicle that best meets the learning objectives.

Table 6-1 provides an example for development activities depending on role and experience. Once the development plan is in place, the portfolio, program, or project managers are able to pursue a mixture of experiences and learning techniques to accomplish their overall goals.

Obtaining a portfolio, program, or project management certification is evidence of knowledge competence and experience; however, the process itself of studying for the certification is a great opportunity to reflect and enhance portfolio, program, or project management competence.

The effect of preparing for the certification is twofold:

- Acquiring new knowledge and building the breadth and depth of existing knowledge about portfolio, program, or project management; and
- Deepening the understanding of portfolio, program, or project management by reflecting on one's own experience and comparing it with the standard frameworks, processes, and tools.

The second aspect may lead to behavioral change or corrective actions regarding day-to-day work based on the new understanding.

While most preparation courses for certifications focus on knowledge and strategies most relevant for the certification exam, exam preparation courses are usually not the best way to train portfolio, program, or project

Table 6-1. Example Structure for General Development Activities

Activity	Role and Experience				
	Less Experienced Project Manager	Project Manager	Experienced Project Manager	Program Manager	Portfolio Manager
Project management skill	Establish a baseline of solid project management skills through education and experience Get a mentor to assist with key skill development areas	Enhance project management skills with deeper engagement and their home sector knowledge through education and experience	Develop high-end project management skills to support complex projects through education and experience	Develop program-specific operational skills, effective benefits management, and economies of scale through education and experience	Develop portfolio specific operational skills, cross-business understanding, and strategic-level business management
Project management knowledge and education	Self-directed learning for fundamentals (e.g., web-based training) Attend trainings and conferences Establish project management network	Classroom or blended learning for applied concepts Develop and/or improve project management methodologies and tools Assist with proposal writing	Use simulation, role-playing, or gaming for abstract lessons Attend leadership training	Attend program management training, leadership training, and other advanced topics	Attend portfolio management training, leadership training, and other advanced topics
Project management experience	On-the-job training Hands-on approach Simulations Read peer-reviewed project management literature Networking Utilize (online) community	Get a short-term role on another project to deepen industry knowledge	Shadow or intern on a complex project Seek information exchange with management/executives	Shadow or intern for program management experience	Shadow or intern for portfolio management experience
Credentials as evidence for knowledge competence	Obtain CAPM® or specialized certification (e.g., scheduling)	Obtain PMP®		Obtain PgMP®	Obtain PfMP®

management basics. The same is true for the training or implementation of new processes, tools, or other portfolio, program, and project management topics.

Before preparing for a certification, a project, program, or portfolio manager should have sound knowledge and experience on the topic and level of the aspired certification. This will maximize the effect of preparing for the exam through integration of new knowledge with reflections of one’s own experiences.

As such, certifications and the preparation for them are an extremely helpful tool for the competence development of portfolio, program, or project managers. However, they do not replace introductory training or change activities and solid experience in the respective fields of portfolio, program, and portfolio management.

6.3.3 Define Development Goals and Competency Development Plan

During the development of a personal competency development plan, the assessor is expected to work with the portfolio, program, or project manager to identify items such as *PMCD Framework* reference, learning activity to address the identified gaps, any key performance indicators (KPIs), success criteria, and/or target date to address the gap and level to be achieved.

The competency development plan follows the competence assessment and lists the activities that are to be undertaken. Figure 6-5 shows an example of a competence development plan, where each line represents a component of learning that indicates how the portfolio, program, or project manager addresses the gap and which level is expected to be achieved. When all items in the plan are combined, they represent the activities that are required to achieve an intended level of competence.

6

Line No.	Label (Known as)	PMCD Framework Reference	Learning Outcome (Behavior) Required	Learning Activity Type	Target Date	Assessor Name	Pre-Development	Level to be Achieved Post-Development
[...]								
21	Action to influence	Personal 2.5.1	Continually reviewing where persuasion is likely to be needed and the method most likely to succeed	Mentoring/coaching	Dec 2016	Arthur Wright	Below expectations June 16, 2015	Exceeds expectations Dec 5, 2016
22	Level of detail required to define the project scope	Performance 2.1.1	Develop the use of WBS to breakdown project scope	Training course on use of WBS	Oct 2015	n/a	Below expectations June 16, 2015	Meets expectations Oct 2015
[...]								

Figure 6-5. Example Section of a Competency Development Plan

The plan should include activities to address developmental areas and ways to leverage personal strengths, and should include actual activities, timing, costs, and metrics based on key performance indicators and success criteria (potential evidences: see Sections 3-5). The development plan should focus on key activities and prioritize activities to produce an effective and timely impact on the competence of the portfolio, program, or portfolio manager.

While ownership of the plan remains with the individual, most learning and development plans will have a sponsor within the organization. The sponsor may be the individual's direct manager or a mentor. Proactively including the manager, sponsor, or mentor in the monitoring of the plan provides an opportunity to ensure that career development is being supported. Individuals should be empowered to take ownership of their own learning and development needs.

6.4 Step 4—Implement Competency Development Plan

Once the competency development plan is agreed upon between the portfolio, program, or project manager and the assessor, the plan can then be executed.

Refer to Figure 6-6 for a list of the inputs, tools and techniques, and outputs.

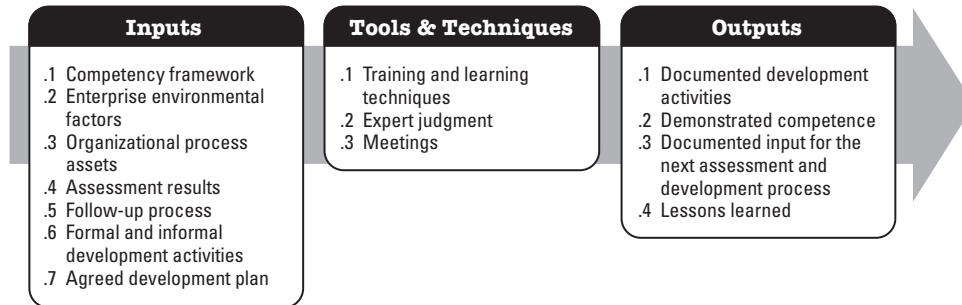


Figure 6-6. Implement Competency Development Plan: Inputs, Tools and Techniques, and Outputs

6.4.1 Completion of the Planned Activities

The portfolio, program, or project managers own their development plans and are accountable for delivering the outcomes. These plans are executed like any other project.

While an organization may be involved in the development and support of a competency development plan, it is the responsibility of the individual to ensure that the plan put in place is complied with, executed, updated, or revised, as appropriate, and that the benefits are realized. The outcomes of the plan allow the individual to improve performance and reap the career benefits.

6.4.2 Monitor the Execution of the Plan

Monitoring of the plan should begin once there is an agreed-upon framework. There may be costs associated with the execution of the plan, and these need to be approved and budgeted.

While the plan is being monitored, it also needs to remain relevant. The situation and context surrounding the portfolio, program, or project manager may change; the current portfolio, program, or project may require a different type of support, knowledge, competence, and skill set or may highlight a new strength. A particular activity may not be providing the necessary outcomes and may need to be realigned to effectively address a particular development area.

The competency development plan should be monitored regularly with the sponsor. For each milestone in the plan, there should be measurable outcomes, which may, for example, include:

- Formative and summative assessment from training and course attended (either formally or informally),
- Feedback from stakeholders,
- Presentations to stakeholders,
- Delivery of project outcomes,
- Mentoring or coaching activities,
- Networking professionally with peers,
- KPIs/success criteria attainment, and
- Meeting critical milestones.

Collection of data against these outcomes will provide solid evidence of progress. When an activity or outcome is completed, this needs to be reported against the plan and communicated to key stakeholders of the plan. The portfolio, program, or project manager should regularly conduct an informal review of the plan, at least once per month. Formal review of the plan should be performed on the completion of major milestones, phases, or projects and should be conducted with the manager, sponsor, or mentor. Many organizations include this review as a major part of their performance management processes.

6.4.3 Support for the Plan

Successful completion of the competency development plan depends on the individual's own passion, commitment to comply, and inspiration including empathy and motivation and the provided support. Within an organization, generally this support comes directly from the individual's immediate manager and senior peers. This support will need to be formally and informally engaged and the relationship nurtured. Engagement requires an understanding of the plan, including why it is (gap analysis), what it is, when it is, where it is, how it will be rolled out, and what is needed to support. The role of the portfolio, program, or portfolio manager is to introduce the plan to the people he or she expects support from, to explain the value and benefits expected, and to ensure that relevant stakeholders are kept up to date.

6.4.4 Evaluate the Execution of the Plan

Progress against the plan is evaluated continually throughout the execution of the plan, both formally and informally. When the planned actions have been completed, the portfolio, program, or project manager should be able to demonstrate that the identified development needs have been addressed. Now is the time for the individuals to self-reflect on their achievement and measure where they are now in relation to their previous gaps, then progressively identify the next competency development plan (for further learning and development).

As with any plan that is executed, there also needs to be a formal review of the success of the plan to determine whether it has really achieved the expected outcomes. Some of the questions that should be asked may include:

- Was the competency development plan suitable, easy to engage, and easy to comply?
- Did the competency development plan deliver the outcomes needed?
- Is there any improvement in terms of day-to-day job performance after completing the competency development plan?
- Are any other gaps observed in the competency level of the individual?
- Were there sufficient support, engagement, and sponsorship for the portfolio, program, and project manager and the plan?
- What worked well and what did not work well?
- Were there activities that would have provided better outcomes?
- Are others now able to use the same plan?

6.5 Summary

The previous sections of *PMCD Framework* define the performance and personal competences that, together with the knowledge competences in PMI's foundational standards, are considered required for a competent portfolio, program, or project manager. This section shows that each organization usually needs to customize the framework and the assessment, potentially using a subset of the competences defined herein, adding other competence dimensions important in their particular context and environment, and combining this with the organization's culture and other personal or organizational criteria, conditions, and constraints.

This section recommends a continuous and iterative process to develop competence as a portfolio, program, or project manager, where requirements are reviewed, competence is assessed, development is planned, the competency development plan is executed, and the process is repeated.

Each iteration of the competency development plan should be treated as an individual's self-development project in itself, expanded to organizational maturity levels. The portfolio, program, or project manager owns the plan, is empowered, and is accountable for delivering the outcomes. The competency development plan is implemented just as any other project would be executed. Successful completion of the competency development plan depends on the passion to comply and the motivation of the portfolio, program, or project manager and the support given by the senior project managers and peers.

The *PMCD Framework* – Third Edition is intended to provide both individuals and organizations with guidance on how to assess, plan, execute, and manage the professional development of portfolio, program, or project managers. The *PMCD Framework* provides a structured approach to the continuing journey of competency development for individuals as well as organizations collectively.

7

USING THE *PMCD FRAMEWORK* IN AN ORGANIZATION

7.1 Overview

This section explores the critical factors that need to be in place to help support a successful implementation and adoption of the *PMCD Framework*, together with some examples. The *PMCD Framework* may be used to ensure that the organization's portfolio, program, and project management capabilities are aligned with the needs of the business. There may be specific considerations and competences that are considered to be more important than others. This prioritization should not be overlooked, along with competences that are specific to the organization. Reference should be made to PMI's Talent Triangle™, whereby PMI's *Pulse of the Profession® In-Depth Report: Talent Management* states that success is reinforced by not only project technical management, but also leadership and strategic and business management skills (see Figure 7-1). Developing competences in these areas is a significant factor in how successful a project manager is. In the *Pulse of the Profession® Report on Navigating Complexity* [13], 75% of organizations state that leadership is the most important aspect or competence to have as the complexity increases. Performance competence covers technical project management and is essentially the application of the core Knowledge Areas of the *PMBOK® Guide*. Whereas the application of personal competences is more associated with the leadership side of the Talent Triangle, business and strategic knowledge and expertise concern the specific skills, experience, and competencies that a portfolio, program, or project manager needs in order to deliver positive business outcomes for the organization.

Section 6 details the process from capturing competency requirements through performing the assessment, to creating and implementing a development plan. However, this is only successful when the organization has both the desire and the appropriate environment in place to support this. The organization needs to ensure that its portfolio, program, and project management capability is optimized for the types of programs and projects that it undertakes. This may result in additional competences that are specific to the organization. These can be considered supplementary to the personal competences, as described earlier.

Some of the key benefits to the organization of implementing a competency framework include, but are not limited to:

- Motivated portfolio, program, and project management community;
- Individuals who have an understanding of their development needs;
- A community of portfolio, program, and project managers who are better placed to provide maximum value to the organization and serve the needs of the business;
- An organization that is better placed to not only attract the best talent, but also to retain the talent; and
- Individuals who are able to be assigned and aligned with the most appropriate opportunities, commensurate with their competences and development needs.

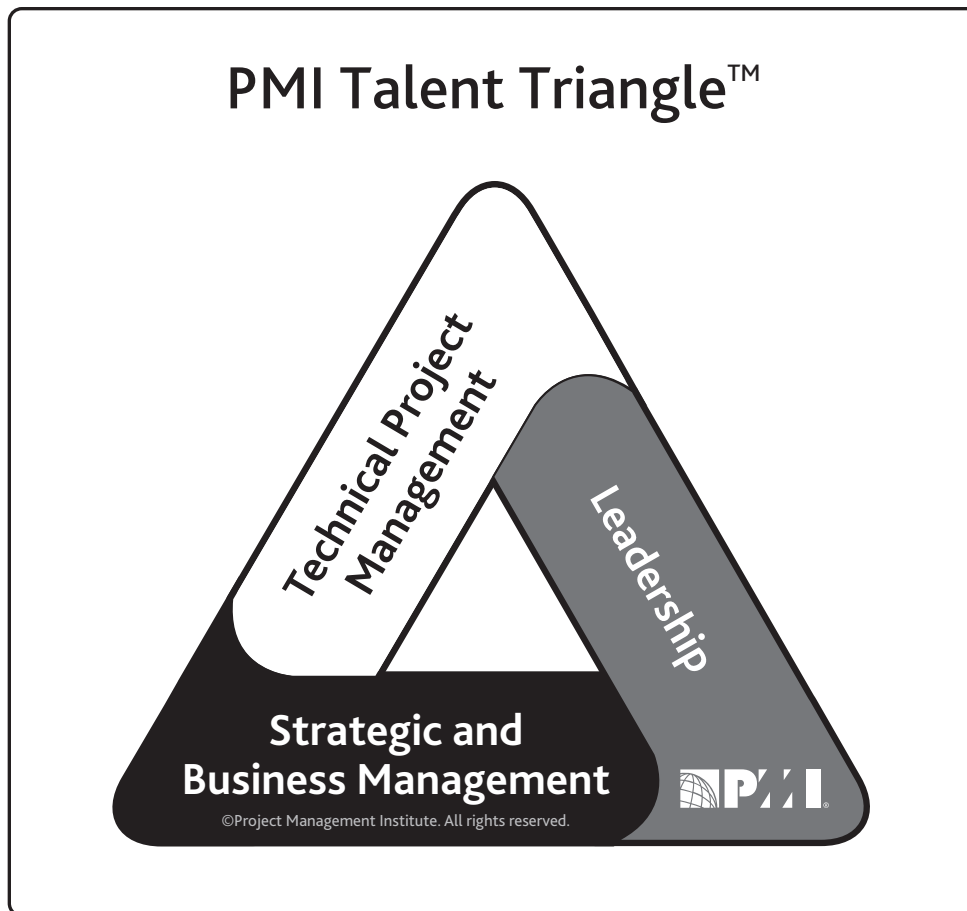


Figure 7-1. PMI's Talent Triangle™

Ultimately, it also helps to ensure that core portfolio, program, and project management knowledge is put into practice in the most effective way.

7.2 Application of the PMCD Framework

The framework is designed to be used by organizations of any size where portfolio, program, and project management disciplines are essential to the success of the business or operation. However, the organization needs to first understand and appreciate that there are a number of factors that need to be taken into consideration.

7.3 Assess Readiness for Deployment

The organization has to appreciate and understand the importance of project management (which includes program and portfolio) competence. There needs to be an appropriate portfolio, program, and project job code and job family in place, with suitable role descriptions and demarcations between various levels. This should be aligned to and in accordance with existing human resources procedures covering promotion and performance reviews.

Once there is a job family or equivalent in place for portfolio, program, and project management, an exercise should be undertaken to align the job family in accordance with the needs of the business as follows:

- Entry-level project manager,
- Project manager,
- Experienced project manager,
- Program manager, and
- Portfolio manager.

These roles could be again subdivided further, for example, with both entry-level and experienced program and portfolio manager levels. Each level within the job family should include details of the elements in Table 7-1.

Table 7-1. Details to Describe Project, Program, and Portfolio Levels

Element	Description
Responsibilities	Specific and key tasks to be undertaken by the role
Experience	Is to be measured by achievements in terms of previous projects, programs, or portfolios, managed. The benefits and value achieved and complexity managed should be described
Knowledge	This may include an understanding of processes, methodologies, and procedures and can be specific to the organization as well as to generic project management disciplines
Skills	These should be demonstrated by documented and witnessed evidence of the delivery of positive results and outcomes
Education	This should include formal qualifications and educational certificates, as well as the appropriate PMI certifications and any others that may be industry- or domain-specific
Competence	These are classified as personal or performance and are described in Sections 3, 4, and 5 of this <i>PMCD Framework</i>

7.4 Performance Review

Most organizations have a process for assessing and providing feedback on the performance of an individual. This may or may not be linked to a promotion and/or compensation review process. In either case, the human resources organization involved in these processes needs to be in support of the competence framework. Assurance is required that the organization’s review process is aligned to and not in conflict with the framework. Those individuals from other areas of the business who are not in portfolio, program, or project job roles or job codes will also be required to be aware of and understand the importance of the competency framework. This is especially important when seeking feedback on performance in relation to the organization’s review cycle and process. The feedback sought and captured should be such that it can help inform evidence of active competences (as per Section 6).

7.5 Promotion Process

Most organizations have one or more promotion processes. The promotion process will need to be synchronized with the requirements stipulated for the job role and job level. As a result, any existing process will need to be considered and amended in line with the respective, responsibilities, experience, knowledge, skills, and education as mentioned in Section 6.1.2. Evidence of these competences being demonstrated should be sought prior to the authorization of a promotion.

7.6 Recruitment

As far as it is possible, competency assessment should be included as part of the recruitment process. However, this will depend on the interview process that the organization has adopted. It is worth noting that evidence cannot be directly verified, other than through references. However, competences can be partly assessed through role-play activities for certain situational scenarios. This can be done through witnessed behaviors and decisions, and is a useful technique to supplement and inform the recruitment and selection process.

7.7 Implementation

Following the decision by an organization to adopt the portfolio, program, and project management competency framework, there are a number of factors that need to be considered first. These may be specific to the organization in question; however, Sections 7.7.1 through 7.7.10 describe ten of the most critical success factors.

7.7.1 Sponsorship

It is essential within the organization that senior support, sponsorship, and commitment is obtained and that the benefits of adopting such a framework are detailed as they relate to the organization's strategy. Pending the amount of organizational change required, it may be necessary to prepare a supporting business case.

7.7.2 Country and Political Factors

As is often the case with global organizations, some employees are likely to reside in countries that are subject to work councils, unions, and other local and or regional legislation. In such cases, the appropriate consultation will need to take place and where necessary consideration of local arrangements should be made.

7.7.3 Communication and Awareness

In organizations where a competency framework does not exist or where a significant change is required, a promotional and awareness campaign to market and promote internal awareness is going to be essential. Senior management needs to understand the value and importance of the framework and should buy into the concept.

7.7.4 Maturity Assessment

It is recommended to conduct an assessment and subsequent gap analysis of the maturity of the current human resources and organizational processes. PMI's *OPM3*[®] and *Implementing Organizational Project Management: A Practice Guide* should also be referred to at this time. Where there are significant gaps, these should be addressed or taken into account prior to the adoption of the competency framework. This may apply in the case of smaller organizations or organizations with less maturity where not all aspects of the competency framework can be adopted or where it would be inappropriate to do so.

7.7.5 Mentoring and Coaching

There are many different forms of mentoring and coaching; however, the organization should encourage and support all types of mentoring and coaching. Individuals need to be able to select or be assigned a suitable mentor and allowed the time to undertake such activities.

7.7.6 Training and Development

Most organizations have a strategy and approach for training and development. This should be revisited and aligned with the *PMCD Framework*. Any development plan needs to accommodate competency development and growth in addition to knowledge. Many of the competences for project, program, and portfolio management are also essential for other job families or professions. As such, an organization will need to integrate the entire competency development framework with the other training and development in place for other disciplines. In addition, tools such as role-based training curriculums can prove valuable in helping to guide individuals to the most appropriate training for their current needs and to support their career aspirations.

7.7.7 Reflective Journals

While input from others is essential for identifying gaps and development needs, individuals do need to take ownership of their own careers and personal growth. One way of doing this is for individuals to record and track their own development progress. This can be accomplished in many ways; however, one of the key ways in which this can be done is by using a reflective journal where individuals annotate the development or remedial action that they choose or agree to undertake and where they note the impact and value of what it is that they are now doing differently.

7.7.8 Culture

For large global corporations, the importance of cultural considerations should not be underestimated. The approach to competency development and individual growth can vary significantly from one country and culture to another. When considering deploying a competency framework, all cultural sensitivities should be understood and the appropriate allowances made.

7.7.9 Key Performance Indicators

Organizations should consider defining a number of KPIs to ensure that the organization and the individual teams have the essential competences to manage and deliver its portfolio of programs and projects.

7.7.10 Continuous Improvement

Investing in the project management community through talent development is something that organizations with the best record on project delivery typically do. The recommendation is that organizations should create or develop a strategy that is underpinned by a mindset focusing on continuous improvement.

7.8 Piloting the Critical Success Factors

Once formal commitment to the critical success factors in Sections 7.7.1 through 7.7.10 has been agreed to by various parts of the organization, the chances of a successful implementation increase. For large organizations, it is probably worth considering piloting the approach in a suborganization or country, to identify and address any organization-specific issues.

It is recommended that the organization determines which competences are essential for its business in terms of portfolio, program, and project management. Once this has been accomplished, the organization should revisit this process on an annual basis to ensure that any changes in business needs are reflected in the core competences that are required. Competence development should be viewed as an ongoing activity and not as an activity that is visited only annually or at the time the organization undergoes its performance assessment. Competence development can be accomplished through the use of reflective journals as mentioned previously, but also by using techniques such as role-play and shadowing. In addition, the evidence through the practical application of competence should continually be evaluated and assessed by seeking constructive feedback.

7.9 Examples of Application

This section looks at how the competency framework can be applied. These are, however, just examples, and are not meant to be prescriptive. Organizations should prioritize the competences that are of particular importance to them and map them accordingly.

7.9.1 Mapping Project Management Competences to Organizational Positions

Table 7-2 shows how the roles are mapped to an organization's job codes and the job levels within those codes. However, some organizations have different job code structures; therefore, project management codes may be specific to the domain or types of project that are being managed.

Table 7-2. Example of Mapping Competences to Organizational Roles

PMCD Framework Reference	Organization Job Code	Organization Description	Organization Job Level
Project manager	1005	Entry-level project manager	1-2
Project manager	1006	Project manager	3-4
Project manager	1007	Senior project manager	5-6
Program manager	2001	Delivery manager	6-7
Portfolio manager	3001	Services executive	6-8

7.9.2 Mapping PMCD Framework Codes to Organizational Job Codes

Figure 7-2 shows a job title of entry-level project manager, in the IT software development business sector. An example of some of the personal competences that may be required are listed together with the proficiency level and its importance to the role.

The required proficiency in a particular competence is based on the examples as shown in Section 2.3.3. An organization needs to give each competence serious consideration as to its importance from a business perspective and the types of projects that it either commissions or manages on behalf of clients. Not all competences necessarily have equal weighting or importance. This also depends on the job levels within the respective project management job family, which in many cases is aligned to the complexity of the projects.

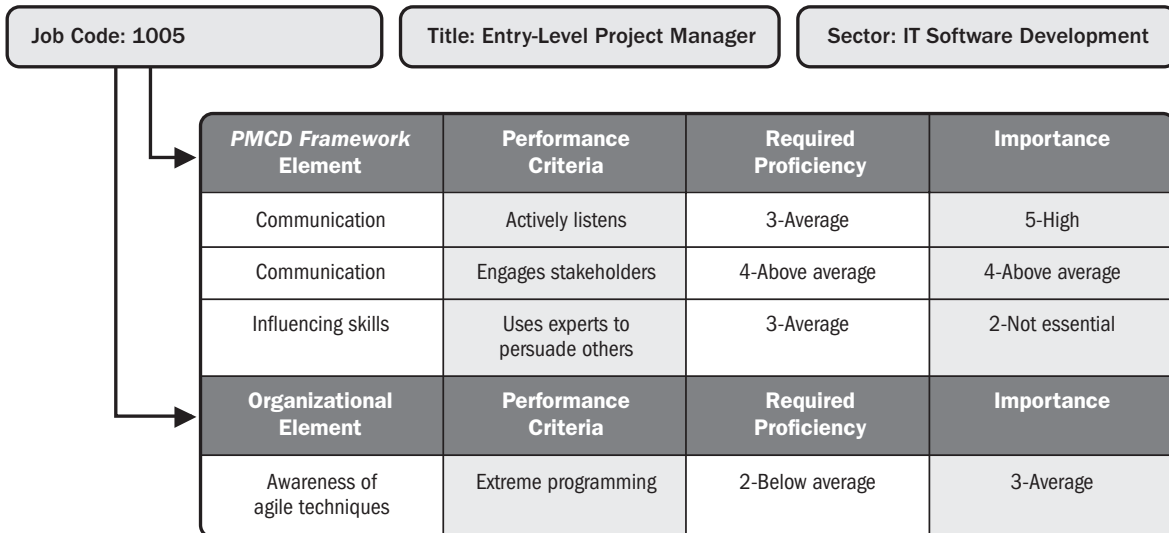


Figure 7-2. Example of Mapping PMCD Framework Codes to Organizational Job Codes

There may also be some additional nonstandard competences that are required for the role. In the example in Figure 7-2, a certain level of understanding of extreme programming techniques would be desirable, but not essential for a junior project manager. This is valuable for identifying and ensuring that project managers have the correct level of competence for their role and is helpful for use as a recruitment aid. However, these are only examples of how the mapping can be done, and it is expected that the mapping would be further expanded to also include the elements detailed in Section 7.9.1.

7.9.3 Mapping Project Management Competences to Organization Training and Development

An organization needs to ensure that it has a mechanism in place to address competence gaps and development needs, once these have been identified. Details of possible competence gaps and development needs are included in Section 6. It is worth noting that many organizations do not consider learning through formal training to be the first or best approach for addressing competence deficiencies. In many cases, mentoring, coaching, role-play, shadowing, and on-the-job training are the recommended training and development activities to pursue. However, where training is deemed necessary or is deemed to be the solution, it needs to be appropriate and matched to the competence.

Figure 7-3 illustrates how a course can be mapped to the competences for a project manager, as identified in Section 3. In this example, the training course for this has two relevant *PMCD Framework* competences that can be mapped. This type of mapping is essential when individuals are addressing their own development needs.

Training Code:	PM007
Description:	Project Leadership and Management Training
Audience:	Project manager
Delivery Type:	Instructor-led

Type of Competence	Competence	Element	Proficiency
Personal	Leading	Relationship building	3
Personal	Leading	Influencing skills	3

Figure 7-3. Example of Mapping Competences to Training and Development Needs

7.9.4 Mapping Individuals to Competences within the Organization

It is common practice within organizations for individuals to assess themselves against competence criteria. This is a useful means for portfolio, program, and project managers to evaluate where they believe they need to develop compared with what is required for their role.

Using a variation of Table 7-1 the self-assessment rating can be added as an additional column (see Table 7-3). This assessment needs to be accepted as only the view of the individual; however, it should be recognized that an individual does not always know what they do not know or how others perceive them.

Table 7-3. Mapping Individuals to Competences Within the Organization

<i>PMCD Framework Element</i>	<i>Performance Criteria</i>	<i>Required Proficiency</i>	<i>Importance</i>	<i>Self-Assessed Rating</i>
Communication	Actively listens	3-Average	5-High	3
Communication	Engages stakeholders	4-Above average	4-Above average	5
Influencing skills	Uses experts to persuade others	3-Average	2-Not essential	2

7

7.9.5 Obtaining Feedback to Assess Competences

In addition to the self-assessment, it is recommended that additional feedback and input be obtained. This can be from organizations’ existing performance review process or from a separate activity and should ideally include feedback from managers, peers, and those they work alongside. In any specific area, a comparison is made of individuals’ self-assessments of competence with the perceptions of their managers and others.

The evaluations can include multiple *PMCD Framework* competences or, in some cases, all of them. In the example shown in Table 7-4, there is a manager’s evaluation and two peer evaluations. The average rating is a calculation based on the three evaluations, along with the individual’s own perception. In this example, the individual matches the proficiency required for the role.

Table 7-4. Example of Feedback to Assess Competences

<i>Performance Criteria</i>	<i>Required Proficiency</i>	<i>Importance</i>	<i>Self-Assessed Rating</i>	<i>Manager Evaluation</i>	<i>Peer 1 Evaluation</i>	<i>Peer 2 Evaluation</i>	<i>Average</i>
Actively listens	3-Average	5-High	3	4	3	3	3
Engages stakeholders	4-Above average	4-Above average	5	3	4	4	4
Uses experts to persuade others	3-Average	2-Not essential	2	2	3	4	3

7.9.6 Collating Competence Ratings within the Organization

The competence ratings provide the organization with the necessary data to help ensure that individuals are assigned to the most appropriate opportunities for them and the organization (see Table 7-5). This could help to address a particular development need that the individual has or it could identify a particular skill or competence that the individual possesses for use in a specific project or role.

Table 7-5. Example of Employees' Competence Ratings

Employee ID	Name	Competence Average Match or Exceeded
00001	Adams, John	12
00183	Williams, Jane	8
00232	Lebowski, Ron	7

7.10 Summary

The guidance in this section is not intended to be prescriptive but is intended to provide an outline of some of the stages and activities that need considered when implementing the *PMCD Framework* within and across an organization. The value and benefits the framework will increase when the readiness assessment and critical success factors are given due consideration. PMI's *Pulse of the Profession® In-Depth Report: Talent Management* states that organizations that align their talent management approach with their organizational strategy are more likely to be successful at implementing career paths, developing people, effective recruiting, and assigning individuals to the most appropriate roles.

Appendix X1 Third Edition Changes

X1.1 About this Appendix

Substantial changes have been made to the *PMCD Framework* – Third Edition, to the point that the document is not readily comparable to previous versions. The intent of this appendix is to lay out the changes to the document along with the objectives of update such that both the history and applicability of this document are clear.

The fundamental change between the second and third editions of the *PMCD Framework* is the expansion horizontally across more roles within the project management profession, to include program and portfolio managers. In parallel to this expansion, the update committee added substantial depth and breadth to the competencies articulated in the second edition.

The structure of the document itself has been modified to facilitate a better understanding of the concepts of competency assessment and development, while consolidating the actual competencies into more usable, stand-alone tables contained in the appendixes of the document.

X1.2 Objectives

Specifically, the update committee's objectives included the following:

- **Expand the *PMCD Framework* to include portfolio and program managers.** To meet this objective, the committee drew heavily on the portfolio and program standards, patterning the competences to match the structure of those standards. Throughout the process of adding these new sections, the committee followed the Second Edition of *PMCD Framework* with the intent of creating a competency framework for portfolio and program managers that was analogous to the existing framework for project managers. The committee believed this would serve two primary purposes: (1) the framework would be more usable because the format was the same, allowing the reader to assess and develop competency in a similar manner, whether for a portfolio, program, or project manager; and (2) the overall framework, covering all three roles, would be more streamlined because the committee replicated competences, where appropriate, allowing for comparability and reuse across multiple roles.
- **Maintain alignment between all PMI standards.** As with the Second Edition, the committee worked closely with the existing standards to ensure consistency between the *PMCD Framework* and the relevant standards. This effort included reviewing the current editions of the standard as well as working with other committees where a revision was underway (i.e., *PMBOK® Guide* – Sixth Edition).

- **Provide a usable tool set for practitioners.** The *PMCD Framework* is intended to be a tool set for the profession to assess and develop the competency of project management practitioners. The committee rearranged the *PMCD Framework* from the Second Edition so that practitioners could assess and then enhance competences in the various manager roles covered by the *PMCD Framework*.

X1.3 Approach

The Second Edition of the *PMCD Framework* was a significant departure from the First Edition. The document was restructured along the lines of the *Project Management Professional (PMP)® Examination Content Outline*, based on project charter direction from PMI. The team also took the opportunity to expand the document to cover three levels of project managers. A first draft of the document consisted of a framework to assess and develop project coordinators, project managers, and senior project managers. While this expanded the scope of the charter, there was belief within the team that the document would have a greater value to the profession.

PMI redirected the team to focus solely on the project manager, leaving the other levels of competency development to future projects. The charter for the *PMCD Framework* was strengthened and a core team was reconstructed to drive adherence to the charter. While the final draft of the *PMCD Framework – Second Edition* met the charter of the project to address a project manager that has developed the knowledge and experience to pass the PMP®, the team felt strongly that there was a need to expand the framework to include the level below the PMP® certified project manager and the level above and to add a competency framework for portfolio and program managers. The committee believed this additional coverage would be beneficial to organizations as a development path for project staff.

To address the issues raised by the Second Edition project committee (specifically, addressing multiple roles), the Third Edition committee was formed to update and expand the *PMCD Framework*. The Core Team of eight members enlisted approximately 20 additional volunteers to serve as subteam members. Each Core Team member was assigned one or two sections using a revised document outline. The sections were set up to extend and expand the concept of a development framework covering portfolio and program managers, along with project managers, while providing competency definitions at a much greater level of detail than the previous two editions.

A subject matter expert and MAG review highlighted areas of additional expansion of the document leading to a substantial incremental effort to finalize a polished version of the *PMCD Framework*.

In the end, the Third Edition addresses broad swathes of the project management community with a framework for the development of competences for portfolio, program, and project managers.

X1.4 Changes

While the core of the Second Edition was maintained, several chapters were added to accommodate the expanded scope (portfolio and program managers) and to delineate the expanded competency structure.

- **Section 1.** Virtually unchanged, with additions to accommodate the new scope.
- **Section 2.** The Third Edition deepened the definition of competency. As a result, the structure of the competences themselves was expanded. These changes are contained in this section. This section also introduces the relationship between portfolio, program, and project management. While some of the competencies are the same or analogous, they may be applied differently based on the differing requirements of the portfolio, program, and project manager roles.
- **Section 3.** This section is dedicated to describing the project manager role in the context of the *PMCD Framework*. The competences are located in Appendixes X3 and X4.
- **Section 4.** A wholly new section, dedicated to describing the program manager role. The structure of this section and the competences themselves mirror Section 3 and the project manager role.
- **Section 5.** A wholly new section, dedicated to describing the portfolio manager role, a mirror to Sections 3 and 4.
- **Section 6.** This section covers the gap noted in the Second Edition and provides a development framework for the career of the project manager. With the addition of the portfolio and program manager roles, this section was added to the Third Edition to aid the practitioner in competence development.
- **Section 7.** In an effort to expand the usability and applicability of the *PMCD Framework* in the organization, this section was added to provide guidance on how to apply the framework, including tying into an organization's existing training and monitoring network.

Appendix X2

Contributors to the *Project Manager Competency Development Framework – Third Edition*

This appendix lists, alphabetically within groupings, those individuals who have contributed to the development and production of the *Project Manager Competency Development Framework – Third Edition*. The Project Management Institute is grateful to all of these individuals for their support and acknowledges their contributions to the project management profession.

X2.1 PMCD Framework Core Committee

Michael Yinger, Chair
 Dave Gunner, Vice Chair, MSc, PMP, PfMP
 Emad E. Aziz, PfMP, PgMP, PMP
 Connie F. Figley, PMP, LEED AP
 Ivo Gerber, PMP, PMI-SP, PgMP
 Tobias Kindler, PMP
 Gary J. Sikma, PMP, CSM
 Langeswaran Supramaniam, PMP
 M. Elaine Lazar, MA, MA, AStd, Project Specialist

X2.2 PMCD Framework Subcommittees

Content was developed in subcommittees, each under the leadership of a Core Committee member. The following were substantial contributors to the framework.

Shantanu Bhamare, MBA, PMP, LIMC
 Algin Erozan, PMP, CISA, ITIL, SCRUM MASTER
 Joseph Griffin, PMP
 Darryl Kielec, PEng, PMP, PMI-PBA
 Olivier Lazar, MSc, MBA, PMP, PgMP, PfMP
 Alden P. K. Lee, BE, MBA, PMP
 Joshua Lerner, PMP, CSM, GWCPM
 Lorian Lipton, PMP, SCPM, GWPM
 Jim Marion, PhD, PMP
 Enock Fanyana Mchiza, MBA
 M. Aslam Mirza, MBA, CEngr, LMG, PMP

Mary Miller-Furesh
 Daud Nasir, PMP, LSSBB
 Lambert Ofoegbu, PMP, PMI-RMP, OPM3 Certified Professional
 Tracey Richardson, PhD, PMP, PMI-RMP
 Bryan R. Shelby, PMP, PgMP, PfMP

X2.3 Subject Matter Expert Reviewers

The *PMCD Framework – Third Edition* was implemented through a consensus process, which included two separate subject matter expert (SME) reviews. Without this significant contribution from the PMI community, the updated framework would not reflect the views of the public-at-large, and for their time, the benefit of their knowledge, and the care with which they took their task, the core committee is truly grateful.

These reviewers were:

Shyamprakash K. Agrawal, PMP, PgMP	Mehdi. A. Gharabaghi Akram Hassan, OPM3, PMP	D. John Peter, PMP
Ali Bayati, PhD, PMP	Daniel Hendling, PMP	John H. Platt II, PE, PMP
Praveen Kumar Bojja, MBA, PMP	Rick Holmes	Barbara Porter, MBA, PMP
Chris Cartwright	Keiichiro Kaneko, JP, PMP, PE	David W. Power, PfMP, PMI-RMP
Bruce Chadbourne, PgMP	Sun Kim, PMP, MBA	Jose Mari H. Rubi-Cruz, PMP, PBA
Wanda L. Curlee, DM, PMP, PgMP, PfMP, PMI-RMP	Igor Kokcharov, PMP, PhD	Guy Schleffer, PgMP, PfMP
Victor Noguera Durán, MBA, PMP	Lizzie P. Lee, PMP, PMI-SP	Koji Shiota, PgMP, PMP
Mehdi Ebrahimi	Ginger Levin, PhD, PMP, PgMP, OPM3	Shekhar Singh, PMP
Ingrid Janssen Emami, PMP	Etsuko Mizui, PMP	Nader Soliman, MBA, PMP
Algin Erozan, PMP, CISA	Astrid Mueller-Wenzke	Anna Starynska
Iain Fraser, Dip PPC, PMP, PMI Fellow, Fellow PMINZ	Lily Murariu, MEng, MPM, DBA (candidate)	Michael J. Stratton, PhD, PMP
	Johan Olivier, PMP, PrEng	Neil Turner, PhD
	Kypros Stylianou Pissas, PMP, CSM	Toshiyuki Watanabe, PE, JP, PMP
		Anton Zandhuis

X2.4 PMI Project Management Standards Program Member Advisory Group

The PMI Standards Program's Member Advisory Group (SMAG) works under the leadership of the standards manager. We extend our sincerest thanks to them for their compelling and helpful guidance throughout the development process.

During the course of the committee's work, the following distinguished members of the PMI community served with distinction on the SMAG:

Monique Aubry
Maria Cristina Barbero, MBA, PMP, PMI-ACP, CSM
Margareth Carneiro, MBA, MSc, PMP
Cyndi Snyder Dionisio, PMP
Larry M. Goldsmith, PMP
Brian Grafsgaard, CSM, PMP, PgMP, PfMP
Hagit Landman, MBA, PMP, PMI-SP
Yvan Petit, PhD, MEng, MBA, PMP, PfMP
Paul E. Shaltry, PMP
Chris Stevens, PhD
Dave Violette, MPM, PMP
John Zlockie, MBA, PMP, Standards Manager

X2.5 Production Staff

Special mention is due to the following employees of PMI:

Donn Greenberg, Manager, Publications
Roberta Storer, Product Editor
Barbara Walsh, Publications Planner

Appendix X3

Project Manager

X3.1 Units of Project Manager Performance Competence

X3.1.1 Project Integration

Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups.

The elements for this unit are:

- Develop Project Charter,
- Develop Project Management Plan,
- Direct and Manage Project Work,
- Monitor and Control Project Work,
- Perform Integrated Change Control, and
- Close Project or Phase.

Table X3-1. Project Integration—Project Manager Performance Competence

Element: Develop Project Charter		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Complete relevant sections of the project charter	Leads and manages development of relevant sections of project charter	Completed or in progress project charter	Project charter or portions thereof contain substantive content. Charter includes all or some of the sections listed below in accordance with organizational expectations and complexity of the project: <ul style="list-style-type: none"> • Purpose or justification • Measurable objections or success criteria • Requirements • Assumptions and constraints • Project description and boundaries • Risks • Milestone schedule • Budget • Stakeholder list • Approval requirements • Assigned project manager, responsibility, and authority level • Designation of sponsor and authority level
Obtain approval to proceed	<ul style="list-style-type: none"> • Works with senior management or project sponsor to obtain approval to proceed • Develops relationships to facilitate the approval processes • Resolves any authority conflicts, using project charter as basis, related to assignment of resources to the project 	Signed project charter	Project charter or portions thereof contain substantive content. Charter includes sections as noted above and signed by project manager, senior management, and/or sponsor in accordance with organizational expectations and complexity of the project
Element: Develop Project Management Plan		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop subsidiary plans	Leads and manages the development of subsidiary plans	Completed subsidiary plans	Completed subsidiary plans that contain substantive content. Plans developed include all or some listed below in accordance with organizational expectations and complexity of the project: <ul style="list-style-type: none"> • Communications management • Cost management/cost baseline • Human resources • Procurement management • Quality management • Requirements management • Risk management • Schedule management/schedule baseline • Scope management/scope baseline • Stakeholder management
Integrate subsidiary plans into comprehensive project management plan	Leads and manages the integration of the subsidiary plans into project management plan	Fully cross-referenced and integrated project management plan	<ul style="list-style-type: none"> • Project management plan of substantive content through the subsidiary plans in accordance with organizational expectations and complexity of the project • Demonstrated leadership throughout development process
Maintain project management plan	Leads and manages maintenance of project management plan and its subsidiary plans throughout the project including changes made to project scope, cost, schedule, and quality requirements	Documented reviews and revised versions, as required, of the project management plan and its subsidiary plans	<ul style="list-style-type: none"> • Project management plan is progressively elaborated through periodic reviews and updates • Periodic reviews/plan updates are documented and retained in accordance with organizational standards

APPENDIX X3 - PROJECT MANAGER

Element: Direct and Manage Project Work		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Lead performance of project work	<ul style="list-style-type: none"> Ensures project activities performed will accomplish project objectives Demonstrates ownership of work process with specific ownership of project management related tasks 	Project documents and deliverables	<ul style="list-style-type: none"> Tangible components that demonstrate completion of project objectives Complete and meaningful work performance data throughout project that demonstrate project objectives were met
Implement approved changes	Incorporates approved changes into project's scope, plans, and environment	<ul style="list-style-type: none"> Processed change requests Evidence of incorporation for approved requests 	<p>Approved changes are incorporated in a timely manner and in accordance with organizational expectations. Ownership of tasks to implement changes is defined. Documentation of changes includes:</p> <ul style="list-style-type: none"> Signed change requests Updated project documentation
Element: Monitor and Control Project Work		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Track and review progress of project meeting its objectives	Uses tools such as earned value (EV) to monitor performance and applies corrective or preventive actions, as required, to drive the project to successful completion	<ul style="list-style-type: none"> Periodic data reports on project performance Documentation of decisions on preventive and corrective actions taken to control project performance 	<ul style="list-style-type: none"> Project notebooks that contain current and historical project data allowing for ongoing robust reviews of project's performance Documented forward planning and corrective actions with routine progress reviews
Report on progress of meeting project objectives	<ul style="list-style-type: none"> Defines or revises status reporting standards to appropriately reflect project complexity and stakeholder involvement Provides periodic thorough and robust reporting of project progress 	<ul style="list-style-type: none"> Project status reports Stakeholder communications Project performance data 	<ul style="list-style-type: none"> Periodic performance updates delivered as report, presentation, or other means appropriate to the project that thoroughly address status of work; evaluation of the project scope, schedule, and cost; health; accomplishments; and issues/corrective actions Documents are preserved according to organizational standards
Element: Perform Integrated Change Control		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Review change requests	Leads and manages review and evaluation of all project change requests	Change requests and documentation of review process (change control board [CCB]) including configuration management process	<ul style="list-style-type: none"> Changes are raised and reviewed in a timely manner Review process is conducted in accordance with organizational standards
Approve/reject change requests	<ul style="list-style-type: none"> Leads discussions to review and disposition change requests Documents, by signature, the approval or rejection of all change requests Changes are processed and implemented, if approved, in a timely manner Follows change control process in accordance with organizational standards 	<ul style="list-style-type: none"> Signed change requests Documented implementation of approved changes 	<ul style="list-style-type: none"> Dispositioned change requests include sufficient level of detail of change and approval or rejection to allow for future understanding of basis Change request documentation is completed and maintained as part of project records
Manage the impact of approved changes	Assesses the impact of approved change requests on project plans, documents, and deliverables, and makes corresponding modifications	<ul style="list-style-type: none"> Documented implementation of approved changes Evidence of specific actions taken as a result of approved changes 	<ul style="list-style-type: none"> New/changed deliverables are reflected in project documents and communicated to project team and stakeholders Corrective/preventive actions are taken as necessary

Table X3-1. (continued)

Element: Perform Integrated Change Control		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Communicate status of change requests and impact of approved changes	Informs team and stakeholders in a timely manner of approved changes, rejected changes, and resulting impacts	<ul style="list-style-type: none"> • CCB documentation • Monthly reports • Team/stakeholder communications 	<ul style="list-style-type: none"> • CCB minutes include a complete accounting of change requests, their status, final disposition, and impacts to the project • Communications/monthly reports address change requests and resulting impacts to the project
Element: Close Project or Phase		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Review deliverables against project scope, schedule, and budget baseline performance criteria	Leads and plans reconciliation of project deliverables to project baselines	Documented comparison of deliverables to key project elements	Documented match of deliverables against scope, schedule, and budget with explanations of any gaps or other differences
Document project closure	Communicates phase or project completion to stakeholders, adjusting message based on specific information needs of shareholders	Stakeholder communications	<ul style="list-style-type: none"> • Communications are appropriately written based on recipient stakeholder(s) • Communications address success (or failure) of the project, ongoing considerations if any, and any other closure-related factors • Communications are maintained as required by organizational standards
Transition to next phase (including post-project support)	Leads and enables transition planning	Transition plans	Documented plan to transition to next phase and evidence that the plan has been successfully implemented
Document lessons learned	Leads and facilitates lessons learned session and publishes resulting lessons	Lessons learned documentation and/or meeting notes	<ul style="list-style-type: none"> • A complete listing of lessons learned, including best practices and recommended improvements is documented for use on future projects • Documentation is clearly identified and maintained in database or other organizational tool to ensure it can be easily located and accessed by future projects
Archive project records	Ensures archival tasks related to phase and/or project closure are completed and performed in a timely manner	Project documents retrievable from organization's archival system	<ul style="list-style-type: none"> • Project documents are clearly identified and stored in organization's archival system • Accounting of complete set of archived project documents

X3.1.2 Project Scope Management

Project Scope Management covers performance of the work required to ensure that the project includes all the work required, and only the work required, to complete a project successfully. Clear characteristics of the project scoping is essential so as stakeholders know what is included and excluded in the project.

The elements for this unit are:

- Plan Scope Management,
- Collect Requirements,

- Define Scope,
- Create Work Breakdown Structure (WBS),
- Validate Scope, and
- Control Scope.

Table X3-2. Project Scope Management—Project Manager Performance Competence

Element: Plan Scope Management		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for scope management	Leads and manages the development of scope management plan Identifies and validates scope requirements – what is included and what is excluded. Categorizes needs versus wants	Approved scope management plan	<ul style="list-style-type: none"> • Plan addresses how project scope is defined, developed, monitored, controlled, and verified • In accordance with organizational expectations and complexity of the project the plan includes processes for: <ul style="list-style-type: none"> ◦ Preparing detailed scope statement ◦ Enabling creation of WBS ◦ Establishing how the WBS will be maintained and approved ◦ How formal acceptance of deliverables will occur ◦ How requests for changes to the scope statement will be processed
Element: Collect Requirements		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define the project requirements	Solicits requirements from stakeholders and validates them through requirements management processes	Requirements documentation such as requirements traceability matrix	<ul style="list-style-type: none"> • Requirements documentation meets organizational expectations for level of detail and formality • Requirements documented are unambiguous (measurable and testable)
Element: Define Scope		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop a detailed description of the project and result/product	Leads and manages scope definition process and ensures approval by project sponsor and key stakeholders	Project scope statement	Statement includes a complete description of project scope including what scope is not included
Element: Create Work Breakdown Structure (WBS)		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Decompose project deliverables and work down to its lowest level of planned work	Leads and manages development of the work breakdown structure	Work breakdown structure	<ul style="list-style-type: none"> • WBS clearly presents total scope at the work package level • WBS provides the project team and sponsors a structured vision of what has to be delivered
Element: Validate Scope		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Obtain formal acceptance of completed project deliverables	Leads preparation of documentation packages for presentation to the customer or sponsor for completed project deliverables and obtains formal acceptance	<ul style="list-style-type: none"> • Documentation packages of completed deliverables requesting formal acceptance • Letter or other documentation formally accepting completed deliverables 	<ul style="list-style-type: none"> • Documentation packages include sufficient detail to support formal acceptance • Formal acceptance by the customer or sponsor includes affirmation of their satisfaction with the completed deliverable(s)

Table X3-2. (continued)

Element: Control Scope		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitor project status and product scope	Monitors project against baseline scope (scope statement, WBS, and WBS Dictionary)	<ul style="list-style-type: none"> • Work performance data • Documented evaluation of data that demonstrates project progress is being monitored 	<ul style="list-style-type: none"> • Project status reports clearly present project status, emerging/ongoing issues, actions taken, and results
Manage changes to scope baseline	<ul style="list-style-type: none"> • Leads discussions to review and disposition scope change requests • Documents, by signature, approval, or rejection of all change requests • Processes and implements changes, if approved, in a timely manner • Follows change control process in accordance with organizational standards 	<ul style="list-style-type: none"> • Signed change requests • Documented implementation of approved changes • Updated scope statements and other project documents, as needed 	<ul style="list-style-type: none"> • Dispositioned change requests include sufficient level of detail of change and approval or rejection to allow for future understanding of basis • Change request documentation is completed and maintained as part of project records

X3.1.3 Project Time Management

Project Time Management covers the processes involved in planning, estimating, developing, managing, and controlling the schedule to complete the project in a timely manner.

The elements for this unit are:

- Plan Schedule Management
- Define Activities
- Sequence Activities
- Estimate Activity Resources
- Estimate Activity Durations
- Develop Schedule
- Control Schedule

Table X3-3. Project Time Management—Project Manager Performance Competence

Element: Plan Schedule Management		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for schedule management	Leads and manages the development of schedule management plan Develops guidance and direction on how the project schedule will be managed throughout the project	Approved schedule management plan	<ul style="list-style-type: none"> Plan addresses policies, procedures, and documentation for planning, developing, managing, executing, and controlling the project schedule In accordance with organizational expectations and complexity of the project the plan establishes the following: <ul style="list-style-type: none"> Scheduling methodology and scheduling tool to be used Acceptable level of accuracy for activity duration estimates Units of measurement for each resource Organizational procedures links Process for maintaining the project schedule Variance thresholds for monitoring schedule performance
Element: Define Activities		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Identify and document the specific actions to be performed to produce the project deliverables	Leads activity definition process	<ul style="list-style-type: none"> Activity list Activity attributes Milestone list 	Level of activity detail provides a sound basis for estimating, scheduling, executing, monitoring and controlling
Element: Sequence Activities		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Identify and document the relationships and dependencies among project activities	Leads activity sequencing process	Project schedule network diagrams	Sequence of work represents, while recognizing constraints, the greatest efficiency for the project
Element: Estimate Activity Resources		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Estimate the type and quantity of resources required to perform each activity	Leads activity resource estimation process	<ul style="list-style-type: none"> Activity resource requirements Resource breakdown structure 	<ul style="list-style-type: none"> Resource requirements estimated for material, human resources, equipment and supplies, as applicable Resource requirements include sufficient detail to allow accurate cost and duration estimates
Element: Estimate Activity Durations		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Estimate the duration of each activity with estimated resources	Leads activity duration estimation process	Activity duration estimates	Activity scopes of work, required resource types, estimated resource quantities, and resource calendars are used to inform duration estimates
Element: Develop Schedule		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create the project schedule model	Leads activity development process	<ul style="list-style-type: none"> Schedule baseline Schedule data Project schedule and calendars 	<ul style="list-style-type: none"> Project schedule represents full scope of work and represents an achievable execution of work Project schedule is created and accepted by key stakeholders

Table X3-3. (continued)

Element: Control Schedule		Indicative competence level required: 4	
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitor status of project activities to update project progress	<ul style="list-style-type: none"> Monitors project progress against baseline schedule Addresses delays and performance issues 	Work performance information; schedule forecasts	Project schedule and other relevant artifacts are updated as appropriate on a timely basis as defined by the project plan
Manage changes to the schedule baseline	<ul style="list-style-type: none"> Leads discussions to review and disposition scope change requests Documents, by signature, approval or rejection of all change requests Processes and implements changes, if approved, in a timely manner Follows change control process in accordance with organizational 	<ul style="list-style-type: none"> Signed change requests Documented implementation of approved changes Updated schedule, as needed 	<ul style="list-style-type: none"> Dispositioned change requests include sufficient level of detail of change and approval or rejection to allow for future understanding of basis Change request documentation is completed and maintained as part of project records

X3.1.4 Project Cost Management

Project Cost Management covers the processes required to manage a project within the approved budget.

The elements for this unit are:

- Plan Cost Management
- Estimate Costs
- Determine Budget
- Control Costs

Table X3-4. Project Cost Management—Project Manager Performance Competence

Element: Plan Cost Management		Indicative competence level required: 3	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for cost management	<ul style="list-style-type: none"> Leads and manages the development of cost management plan Develops guidance and direction on how the project costs will be managed throughout the project 	Approved cost management plan	<ul style="list-style-type: none"> Plan addresses policies, procedures, and documentation for planning, managing, expending, and controlling project costs In accordance with organizational expectations and complexity of the project the plan establishes the following: <ul style="list-style-type: none"> ◦ Resource units of measurement ◦ Level of precision ◦ Level of accuracy ◦ Organizational procedures links ◦ Variance thresholds for monitoring ◦ Earned value management rules

Element: Estimate Costs		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Estimate the cost of completing project activities	<ul style="list-style-type: none"> Leads and monitors the cost estimation process Ensures costing alternatives, cost trade-offs, and risks are considered as part of the development of cost estimates 	<ul style="list-style-type: none"> Activity cost estimates Basis of estimates 	<ul style="list-style-type: none"> Estimates results in cost to complete full scope of work Basis of estimates provides sufficient detail for future evaluations and determination of change request validity Estimating process results in achieving optimal costs for the project
Element: Determine Budget		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop authorized project cost baseline	Leads and monitors the budget definition and approval process	<ul style="list-style-type: none"> Approved cost baseline Project funding requirements 	Cost baseline is time-phased and represents cost for complete scope of the project
Element: Control Costs		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitor status of project activities to update project costs	Variations are identified early allowing corrective actions to be taken in a timely manner resulting in minimization of risk	<ul style="list-style-type: none"> Work performance information Cost forecast 	<ul style="list-style-type: none"> Work performance information includes cost/schedule variance, cost/schedule performance index, to-complete performance index and variance at complete values Calculated EAC or a bottom-up EAC is documented
Manage changes to cost baseline	<ul style="list-style-type: none"> Leads discussions to review and disposition change requests affecting project costs Documents, by signature, approval or rejection of all change requests Processes and implements changes, if approved, in a timely manner Follows change control process in accordance with organizational 	<ul style="list-style-type: none"> Signed change requests Documented implementation of approved changes Updated cost baseline, as needed 	<ul style="list-style-type: none"> Dispositioned change requests include sufficient level of detail of change and approval or rejection to allow for future understanding of basis Change request documentation is completed and maintained as part of project records

X3.1.5 Project Quality Management

Project Quality Management covers management of the performing organization’s work that determines the quality policies, objectives, and responsibilities to satisfy a project’s requirements. Quality planning, quality control, and quality assurance processes should be understood and implemented.

The elements for this unit are:

- Plan Quality Management
- Perform Quality Assurance
- Control Quality

Table X3-5. Project Quality Management—Project Manager Performance Competence

Element: Plan Quality Management		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for quality management	<ul style="list-style-type: none"> Leads and manages the development of quality management plan Leads identification of applicable quality standards and/or requirements 	<ul style="list-style-type: none"> Approved quality management plan Process improvement plan 	<ul style="list-style-type: none"> Quality management plan provides guidance and direction on how project quality will be managed and validated Process improvement plan includes steps for analyzing project management processes
Document how project will demonstrate quality compliance	Leads development of quality metrics and quality checklists	<ul style="list-style-type: none"> Quality metrics Quality checklists 	<ul style="list-style-type: none"> Quality metrics describe project/product attribute and how attribute will be measured by control quality process Project uses organization's standardized or tailored checklists as appropriate for project scope and complexity
Element: Perform Quality Assurance		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Audit quality requirements and results from quality control measurements	<ul style="list-style-type: none"> Ensures audits of quality process are executed in accordance with quality management plan Implements changes to project documents based on audit reports 	<ul style="list-style-type: none"> Final audit reports Project management plans and other project document updates 	<ul style="list-style-type: none"> Audits are performed as planned Audit reports provide a clear description of what was reviewed, results of the review, and actions to be taken to resolve issues Corrective action plans clearly articulate action, owner, expected outcome, and relevant time and cost metrics Project management plans and other project documents are updated in a timely manner
Element: Control Quality		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Identify causes of poor quality and take action to eliminate	<ul style="list-style-type: none"> Monitors execution of quality activities to assess performance Leads assessment of quality activity performance Identifies necessary changes Initiates lessons learned sessions 	<ul style="list-style-type: none"> Quality control measurements Work performance information Assessment reports Documented lessons learned 	<ul style="list-style-type: none"> Quality control measurements are documented in accordance with quality management plan Work performance information addresses compliance to requirements and includes causes for rejections, rework, process adjustments Lessons learned document includes both best practices and recommended improvements and is readily retrievable for use on future projects
Validate project deliverables and work meet requirements	Ensures project deliverables and work meet key stakeholders' requirements necessary for final acceptance	Accepted project deliverables and work	Formal acceptance documents project deliverable(s) and/or work completed

X3.1.6 Project Human Resource Management

Project Human Resource Management covers performance of the work to organize, manage, and lead the project team.

The elements for this unit are:

- Plan Human Resource Management
- Acquire Project Team
- Develop Project Team
- Manage Project Team

Table X3-6. Project Human Resource Management—Project Manager Performance Competence

Element: Plan Human Resource Management		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create guidelines outlining overall approach to managing human resources	Leads and manages the development of cost management plan	Approved human resource management plan	Plan provides guidance on how human resources will be defined, staffed, managed, and eventually released In accordance with organizational expectations and complexity of the project the plan establishes the following: <ul style="list-style-type: none"> • Roles and responsibilities • Project organization charts • Staffing management plan
Element: Acquire Project Team		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Confirm human resource availability and staff project team	<ul style="list-style-type: none"> • Leads development of project organization chart • Ensures project is adequately staffed • Adheres to organizational policies such as equal opportunity, lack of bias, and fairness 	<ul style="list-style-type: none"> • Approved project organization chart • Resource allocation sheet 	<ul style="list-style-type: none"> • Project staffing is based on roles required to complete project scope and not constrained by organizational resource limitations • Resource allocations are leveled • Resources are not over-allocated • Relationship between resources and their line/functional managers versus the project is clearly defined for matrix organizations
Issue new hire requisitions	Oversees and facilitates preparation of requisitions and obtains approval	Approved requisitions	New hire requisitions are descriptive of the role, reporting lines, and time allocations
Procure contractor services	<ul style="list-style-type: none"> • Leads and facilitates procurement process for contracted services • Ensures contracts are signed and executed in a timely fashion 	Executed contracts	Service contracts include a clear statement of work including, but not limited to, scope, heuristics, schedule of work, deliverables, place of work, and other terms and conditions
Secure assignment of internal resources to the project	<ul style="list-style-type: none"> • Approves/oversees internal requisition • Successfully negotiates project assignments for internal resources line/functional managers 	Internal resources assigned to the project	<ul style="list-style-type: none"> • Agreements with line/functional managers for assignment of resources is documented • Agreements define scope to be performed by resources, resource types, number of resources needed, and period of performance • Agreements allow for resources to be returned to the function, to the extent possible, in accordance to project staffing needs

Table X3-6. (continued)

Element: Develop Project Team		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Mentor team	<ul style="list-style-type: none"> Leads development of mentoring program Provides mentoring to team members and engages senior project team members to do the same Evaluates effectiveness of program and makes changes as needed to improve 	<ul style="list-style-type: none"> Approved mentoring program Mentor/mentee assignment matrix 	<p>Mentoring program provides the structure for productive mentor/mentee interactions and includes:</p> <ul style="list-style-type: none"> Training for both mentors and mentees Tools to support the program (e.g., forms to evaluate progress, role-play examples or other methods for use in sessions)
Sponsor team-building activities	<ul style="list-style-type: none"> Leads planning and holding team-building activities Utilizes a variety of activities based on team makeup, stage of the project, and other factors 	<ul style="list-style-type: none"> Team-building activities plan Documented feedback Team performance assessments 	<ul style="list-style-type: none"> Team-building activities plan includes a variety of activities ranging from a single agenda item to an off-site facilitated experience Feedback identifies team-building activities are considered effective and beneficial by the team Negative feedback is addressed in a timely manner and adjustments to the plan are made as necessary Team performance assessments are based on predefined criteria that address project objectives (being met), project schedule (on time), project cost (within budget), and other pertinent criteria
Element: Manage Project Team		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Track team member performance and provide feedback	<ul style="list-style-type: none"> Conducts performance appraisals on an annual basis Provides feedback (positive and negative) in a constructive manner that encourages continued development 	Manager and individual signed performance appraisals	<p>Performance appraisals include:</p> <ul style="list-style-type: none"> Activities completed during appraisal period Planned activities for upcoming period Accomplishments Areas for development Career goals and activities to achieve Manager assessment and feedback
Manage team changes	<ul style="list-style-type: none"> Monitors and controls allocation of resources Reassigns team members to provide new and challenging assignments Obtains new/additional staff as needed to support project deliverables 	<ul style="list-style-type: none"> Team organization charts Turnover packages Staffing agreements 	<ul style="list-style-type: none"> Team organization charts are maintained and provided to the team Reassignments provide adequate time for individuals involved to prepare and review turnover packages with incoming individual Staffing agreements are pre-established, maintained/updated as needed, and include: <ul style="list-style-type: none"> Number or full-time equivalents of resources needed Period of performance Scope to be performed Allocated budget and applicable charge codes
Resolve conflicts	<ul style="list-style-type: none"> Takes action to minimize conflict Recognizes when conflict has occurred Identifies source of conflict Resolves conflicts 	<ul style="list-style-type: none"> Posted team ground rules Team communications Differing professional opinion process 	<ul style="list-style-type: none"> Team ground rules are clear and concise; senior project leadership ownership of rules is demonstrated by their signatures on the posted rules Team communications, as appropriate, are widely distributed to minimize multiple messages being received Differing professional opinion process defines steps for inputs from two or more individuals to be heard by an established group for resolution

X3.1.7 Project Communications Management

Project Communications Management covers performance of the work to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information.

The elements for this unit are:

- Plan Communications Management
- Manage Communications
- Control Communications

Table X3-7. Project Communications Management—Project Manager Performance Competence

Element: Plan Communications Management		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for communications management	<ul style="list-style-type: none"> • Leads and manages the development of communications management plan • Develops approach and plan for project communications 	Approved communications management plan	Plan describes how communications will be planned, structured, monitored, and controlled. Plan addresses items including: <ul style="list-style-type: none"> • Who needs what information • Who is authorized to access information • When is the information needed • Where will the information be stored • How will the information be stored (format) • How the information will be retrieved • Other considerations (e.g., time zone, language, cross-cultural)
Create communications policies	<ul style="list-style-type: none"> • Leads and facilitates development of communications policies • Oversees execution 	Approved communications policies	Communications policies contain sufficient detail for use by the project team
Element: Manage Communications		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create, collect, and distribute project information	<ul style="list-style-type: none"> • Manages creation, collection, and distribution of project information to project team and stakeholders • Approves, including authorship as appropriate, formal communications to project team, senior management, or stakeholders • Ensures communication needs are met 	Project communications (e.g., performance reports, deliverables status, schedule progress, issues resolution status, project presentations, meeting minutes, project announcements)	<ul style="list-style-type: none"> • Project communications utilize appropriate methods and models (e.g., incorporation of feedback loops, written versus oral, writing style) based on the message and recipient • Project communications provide information in a timely and relevant manner • Project communications demonstrate compliance to the communications management plan
Store project information	<ul style="list-style-type: none"> • Manages storage of project information • Ensures project information is readily retrievable 	Stored project communications and documents	Project communications and documents are: <ul style="list-style-type: none"> • Captured, stored, and distributed utilizing established information management system and in accordance with the communication management plan • Readily retrievable
Disposition project information	Ensures project information is properly dispositioned at the end of a project phase or at project	Retrievable project communications and documents	<ul style="list-style-type: none"> • Project documents are clearly identified and stored in organization's archival system • Complete accounting of archived project documents

Table X3-7. (continued)

Element: Control Communications		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors communications to identify gaps and breakdowns	Manages communications throughout project life cycle	<ul style="list-style-type: none"> • Feedback from project team, senior management, or stakeholders • Revisions to communications management plan 	<ul style="list-style-type: none"> • Issue log captures negative feedback and includes responses and corrective actions as well as closure of items • Plan revisions address and correct causes and opportunities for future communications gaps and breakdowns
Provide timely and accurate responses to communications gaps and breakdowns	<ul style="list-style-type: none"> • Restores communications whenever incidents of miscommunication occur • Restores and/or disseminates the intended message 	Documented responses addressing communication gaps and breakdowns	<ul style="list-style-type: none"> • Responses are addressed timely and professionally • Responses fully address miscommunications and clearly communicate intended message
Conduct ad hoc meetings	Initiates and leads ad hoc meetings, as appropriate, to address gaps and breakdowns	Documented meeting minutes	<ul style="list-style-type: none"> • Content of ad hoc meetings is clearly communicated with attendees • Meeting actions are captured and tracked to completion

X3.1.8 Project Risk Management

Project Risk Management includes the processes of conducting risk management planning, identification, analysis, and response planning and controlling risk on a project.

The elements for this unit are:

- Plan Risk Management
- Identify Risks
- Perform Qualitative Risk Analysis
- Perform Quantitative Risk Analysis
- Plan Risk Responses
- Implement Risk Responses
- Monitor Risks

Table X3-8. Project Risk Management—Project Manager Performance Competence

Element: Plan Risk Management		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for risk management	<ul style="list-style-type: none"> Leads and manages development of risk management plan Develops guidance and direction on how the project risks will be managed throughout the project 	Approved risk management plan	In accordance with organizational expectations and complexity of the project the plan addresses the following: <ul style="list-style-type: none"> Risk management methodology Defines roles and responsibilities Protocols for application of contingency and management reserves Timing (when and how often) for performance of risk management processes
Element: Identify Risks		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Determine which risks may affect the project and document their characteristics	Oversees the risk identification and definition process	Risk register	<ul style="list-style-type: none"> Risk register includes list of identified risks and potential responses Risks are described in as much detail as is reasonable Root causes of risk are recorded
Element: Perform Qualitative and Quantitative Risk Analysis		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Prioritize risks for further analysis or action by assessing their probabilities of occurrence and impact	Oversees the risk analysis process	Updated risk register and assumptions log	Updates to risk register could include: <ul style="list-style-type: none"> Assessments of probability and impacts Risk ranking/scores Risk urgency Risk categorization Watch list Assumptions log is updated with new information identified through qualitative risk analysis process
Numerically analyze the effect of identified risks on overall project objectives	Oversees the risk analysis process	Updated risk register	Updates to risk register could include: <ul style="list-style-type: none"> Probabilistic analysis of the project Probability of achieving cost and time objectives Prioritized list of quantified risks Trends identified from quantitative risk analysis results
Element: Plan Risk Responses		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop options and actions to enhance opportunities and reduce threats to project objectives	Oversees the development of the risk responses	<ul style="list-style-type: none"> Risk register updated with risk responses Updated management plans 	<ul style="list-style-type: none"> Level of detail included in the risk register corresponds to the priority ranking and planned response to each risk Project management plan and subsidiary plans, as appropriate, are updated to reflect changes based on this process

Table X3-8. (continued)

Element: Control Risks		Indicative competence level required: 4	
Performance Criteria	Expectation	Sources of Evidence	Examples
Implement risk response plans	<ul style="list-style-type: none"> • Initiates risk response plans when necessary • Monitors project for secondary risks from the risk response 	<ul style="list-style-type: none"> • Change requests • Updated risk register • Updated management plans 	<p>Change requests that implement contingency plans or workarounds address recommended corrective or preventive actions as appropriate</p> <p>Risk register updates may include:</p> <ul style="list-style-type: none"> • Outcomes of risk reassessments, risk audits, and periodic risk reviews • Actual outcomes of the project's risks and risk responses • Management plans updated, as required, to reflect approved changes
Monitor status of project risks	<ul style="list-style-type: none"> • Tracks identified risks • Monitors residual risks • Identifies new risks • Conducts ongoing risk assessments 	<ul style="list-style-type: none"> • Results of risk assessments performed • Risk status reports 	<p>Risk assessments, utilizing project status reports, are performed periodically throughout the project</p> <p>Assessments determine:</p> <ul style="list-style-type: none"> • Presence of trends in project status reports • Continued validity of project assumptions • Existing risks that can be changed or retired • Whether risk management policies and procedures are being followed • Whether contingency reserves should be modified • New risks that should be documented
Evaluate risk process effectiveness	Ensures risk audits are performed periodically, in accordance with risk management plan, to examine and document effectiveness of risk responses	<ul style="list-style-type: none"> • Risk audit schedule • Risk audit reports 	<ul style="list-style-type: none"> • Risk audit reports demonstrate that the schedule for performance has been followed • Risk audit reports address the effectiveness of the risk reporting, evaluation, and response process • Changes to the risk documents are made to address results of the audit

X3.1.9 Project Procurement Management

Project Procurement Management covers performance of the work necessary to purchase or acquire products, services, or results needed from outside the project team.

The elements for this unit are:

- Plan Procurement Management
- Conduct Procurements
- Control Procurements
- Close Procurements

Table X3-9. Project Procurement Management—Project Manager Performance Competence

Element: Plan Procurement Management		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for procurement management	<ul style="list-style-type: none"> Leads and manages the development of procurement management plan Develops guidance and direction on how the project team will acquire goods and services 	<ul style="list-style-type: none"> Approved procurement management plan 	<p>In accordance with organizational expectations and complexity of the project the plan includes:</p> <ul style="list-style-type: none"> Type of contracts planned Constraints and assumptions Approach for long-lead items Approach for handling make-or-buy decisions Procurement metrics for evaluating sellers and managing contracts Other items as identified in the <i>PMBOK® Guide</i>
Document procurement decisions	<ul style="list-style-type: none"> Leads and manages procurement discussions Approves procurement decisions Identifies opportunities for economies of scale, value for monies, time, and cost-efficient procurement approaches 	<ul style="list-style-type: none"> Make-or-buy analysis results Source evaluation/selection criteria including weighting factors 	<p>Source selection criteria are reflective of complexity of product, service, or results. Those with more complexity include other criteria in addition to purchase price such as:</p> <ul style="list-style-type: none"> Seller's understanding of SOW Life cycle costs Seller's management/technical approach Seller's financial/production capacity Past performance Other items as identified in the <i>PMBOK® Guide</i>
Develop procurement statements of work (SOW) and documents to solicit proposals from prospective sellers	<ul style="list-style-type: none"> Leads development of SOWs and procurement documents such as requests for information (RFIs), invitations for bid (IFBs), requests for proposal (RFPs), and requests for quotation (RFQs) Ensures SOWs and procurement documents are structured such that sellers can provide complete and accurate responses and to facilitate easy evaluation of responses 	<ul style="list-style-type: none"> Procurement statements of work Procurement documents (e.g., RFIs, IFBs, RFPs, RFQs) 	<ul style="list-style-type: none"> SOWs are written to be clear, complete, and concise. They include items such as specifications, quantity desired, quality levels, performance data, period of performance, work location, and collateral services required Procurement documents are written with the appropriate level of detail consistent with the procurement value and associated risks Procurement documents demonstrate compliance with the procurement management plan and other organizational procurement processes
Element: Conduct Procurements		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Obtain seller(s) responses	<ul style="list-style-type: none"> Sends RFIs/RFPs to seller(s) and receives responses Leads bidder conferences and other meetings with potential providers Leads development of uniform responses to seller(s) questions 	<ul style="list-style-type: none"> Seller responses to RFIs and RFPs Documented results of bidder conferences and other meetings with potential seller(s) (e.g., product demonstrations) Documented responses to seller(s) questions 	<ul style="list-style-type: none"> Seller responses, supported by bidder conferences and/or responses to questions, demonstrate the seller(s) have a clear and common understanding of the procurement requirements Documentation demonstrates that all sellers received the same information, responses to questions, etc.
Select seller(s)	<ul style="list-style-type: none"> Leads objective evaluation of seller responses Documents result of evaluation Leads selection of "short list" of sellers Leads determination of selected seller from this short list 	<ul style="list-style-type: none"> Documented results of objective evaluation of seller responses "Short list" of sellers Selected seller along with evaluation results, justification, and rationale 	<p>Documentation demonstrates that evaluations were performed in accordance procurement management plan and were fair to all sellers</p>

Table X3-9. (continued)

Element: Conduct Procurement			
<i>Indicative competence level required: 3</i>			
Performance Criteria	Expectation	Sources of Evidence	Examples
Award contract(s)	Supports and monitors seller contract negotiations Approves award of contracts	Executed procurement agreements with selected sellers Seller resource calendars	Procurement agreements meet specific needs of the project while adhering to organizational procurement policies Procurement agreements include the following: <ul style="list-style-type: none"> • Statement of work • Schedule baseline • Period of performance • Pricing • Payment terms • Inspection and acceptance criteria • Other items as identified in the <i>PMBOK® Guide</i>
Element: Control Procurements			
<i>Indicative competence level required: 3</i>			
Performance Criteria	Expectation	Sources of Evidence	Examples
Manage procurement relationships	<ul style="list-style-type: none"> • Manages interfaces with seller(s) • Ensures both project and seller(s) meet contractual obligations 	Documented communications (letters, memos, emails) addressing seller interactions, status, and performance reports	Communications with seller(s) demonstrate that interfaces are conducted within the boundaries of the contract
Monitor contract performance	<ul style="list-style-type: none"> • Evaluates seller performance according to contract and scope of work (SOW) or service level agreement (SLA) • Performs periodic reviews of seller's performance • Tracks seller's deliverables against SOW • Executes change requests in a timely manner 	<ul style="list-style-type: none"> • Seller performance review reports • Signed change requests 	<ul style="list-style-type: none"> • Review reports include corrective actions when necessary and plan for implementing • Subsequent reviews address if corrective actions were implemented and effective; follow-on corrective actions identified if required • Change requests that involve constructive changes are uniquely identified and documented • Details for managing early terminations (for cause, convenience, or default) are captured as necessary
Make changes and corrections to contracts	<ul style="list-style-type: none"> • Manages contract modification process • Executes contract modifications in the best interest of the project • Manages negotiations for changes with seller(s) 	Executed contract amendments and supporting procurement documentation	<ul style="list-style-type: none"> • Contract amendments demonstrate compliance to the project's established process including documentation, tracking systems, dispute resolution procedures, and necessary approval levels • Contract amendment documentation includes details of need and justification for changes
Element: Close Procurements			
<i>Indicative competence level required: 3</i>			
Performance Criteria	Expectation	Sources of Evidence	Examples
Close procurements	<ul style="list-style-type: none"> • Confirms contract deliverables have been successfully met and scope of work is complete • Approves closure of contracts 	<ul style="list-style-type: none"> • Procurement audits • Documented acceptance of seller-provided deliverables • Notice of contract closure 	<ul style="list-style-type: none"> • Acceptance of seller-provided deliverables and closure is formally documented in accordance with the contract terms and conditions • Notifications of early terminations are formally documented, based on details previously captured, and in accordance with the contract terms and conditions
Archive procurement information	<ul style="list-style-type: none"> • Leads lessons learned reviews • Ensures archival tasks are completed 	<ul style="list-style-type: none"> • Indexed set of contract documentation • Documented results of lessons learned reviews 	<ul style="list-style-type: none"> • Contract documentation is complete, well organized, and readily retrievable for future use • Lessons learned document includes both best practices and recommended improvements and is readily retrievable for use on future projects

X3.1.10 Project Stakeholder Management

Project Stakeholder Management covers performance of the work required to identify the people, groups, and/or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decision and execution.

The elements for this unit are:

- Identify Stakeholders
- Plan Stakeholder Management
- Manage Stakeholder Engagement
- Control Stakeholder Engagement

Table X3-10. Project Stakeholder Management—Project Manager Performance Competence

Element: Identify Stakeholders		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create comprehensive list of stakeholders identified	<ul style="list-style-type: none"> • Leads identification of appropriate focus for each stakeholder or group of stakeholders • Ensures register is consulted and updated on a regular basis to address changes in stakeholders through the life cycle of the project 	Stakeholder register	<ul style="list-style-type: none"> • Stakeholder register includes identification information, assessment information, and stakeholder classification • Stakeholder directory includes pertinent information, including name, organizational position, location, project role, and contact information • Assessment addresses major requirements, main expectations, potential influences, and identification of project phase where stakeholder has most interest • One or more classification models are used for stakeholder analysis (e.g., power/interest grid, power/influence grid, influence/impact grid, salience mode)
Document procurement decisions	Oversees collection of stakeholder information		
Create stakeholder organizational chart	Leads development of stakeholder organization chart		
Perform stakeholder analysis	Leads assessment and classification of stakeholders		
Element: Plan Stakeholder Management		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Create and define plan for stakeholder management	Leads and manages development of clear, actionable plan to interact with project stakeholders to support project interests	Approved stakeholder management plan	<ul style="list-style-type: none"> • Plan identifies management strategies to effectively engage stakeholders through project life cycle • Management strategies consider stakeholder needs, interests, and potential impact on project success • In accordance with organizational expectations and complexity of the project plan provides: <ul style="list-style-type: none"> ◦ Engagement levels ◦ Scope and impact of changes ◦ Stakeholder interrelationships and overlaps ◦ Communication requirements ◦ Plan for distribution of information ◦ Plan for performing plan reviews and updates

Table X3-10. (continued)

Element: Plan Stakeholder Management		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Evaluates and documents engagement level of stakeholders	Leads development of engagement matrix	Completed stakeholder engagement assessment matrix	<ul style="list-style-type: none"> Assessment compares current to planned engagement level of all stakeholders Actions and communications are identified to address gaps between current and desired engagement levels
Element: Manage Stakeholder Engagement		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Communicate and work with stakeholders throughout project life cycle	<ul style="list-style-type: none"> Engagement results in increased support and minimization of resistance from stakeholders Number of identified issues and change requests resulting are minimized as a result of proactive and ongoing stakeholder engagement Stakeholder feedback and lessons learned reflect generally positive inputs to the project and are readily available for use on other projects Communication, interpersonal, and management skills are appropriately applied to all engagements with stakeholders 	<ul style="list-style-type: none"> Issue log Change requests Feedback from stakeholders Documented lessons learned 	<ul style="list-style-type: none"> Issue log tracks issues from cradle to grave and documents timely resolution Change requests fully identify change, basis, and identify project corrective or preventive actions as appropriate Feedback from stakeholders is documented and distributed appropriately for use in improving project performance and stakeholder engagement Lessons learned database or other means includes root cause analysis of issues and rationale for selected corrective actions
Element: Control Stakeholder Engagement		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop and execute responses and countermeasures to maintain appropriate level of stakeholder engagement throughout project life cycle	<ul style="list-style-type: none"> Control strategies result in maintaining or increasing the efficiency and effectiveness of stakeholder engagement activities Issues are addressed proactively Stakeholder feedback and lessons learned reflect generally positive inputs to the project and are readily available for use on other projects 	<ul style="list-style-type: none"> Documented work performance information Document updates (management plans, stakeholder register, issue log) Feedback from stakeholders Documented lessons learned 	<ul style="list-style-type: none"> Performance information includes deliverables status, change request implementation status, and forecasted estimates to complete Document updates capture changes in stakeholder engagement approach or strategy Feedback from stakeholders is documented and distributed appropriately for use in improving project performance and stakeholder engagement Lessons learned database or other means includes root cause analysis of issues and rationale for selected corrective actions

X3.2 Units of Project Manager Personal Competence

X3.2.1 Communicating

Communicating involves the effective exchanges of accurate, appropriate and relevant information with stakeholders using suitable methods.

The elements for this unit are:

- Actively listens, understands, and responds to stakeholders
- Maintains lines of communication
- Ensures quality of information
- Tailors communication to audience

Table X3-11. Communicating—Units of Personal Competence

Element: Actively Listens, Understands, and Responds to Stakeholders		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Actively listens	<ul style="list-style-type: none"> Team members and stakeholders are satisfied that concerns are addressed Communication is adapted to audience Interpretation and assessment of stakeholder needs that are not well defined or understood are translated back to ensure understanding 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Feedback on empathy and understanding toward others' point of view
Understands explicit and implicit content of communications	<ul style="list-style-type: none"> Develops and adapts communication strategies Includes formal updates/changes to stakeholder analysis and project communications plan as relevant Matches level and formality of communication to stakeholder 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	Confirmation that messages were received and understood
Responds to and acts upon expectations, concerns, and issues	Undertakes analysis, evaluation of options (as appropriate), and takes/recommends appropriate actions	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Responses to issues important to others (e.g., issue log) Change requests
Element: Maintains Lines of Communication		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Engages stakeholders proactively	<ul style="list-style-type: none"> Establishes regular forums for interaction with stakeholders, including various formal and informal media that facilitate proactive communications Addresses issues and documents in minutes and action item log 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Confirmation that stakeholder needs have been met proactively
Disseminates information effectively	<ul style="list-style-type: none"> Establishes regular forums for interaction with stakeholders, including formal and informal media Uses appropriate communications method for information disseminated 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Effective communications through conversation, survey, notes, presentations, or observation
	<ul style="list-style-type: none"> Communication distribution matches with stakeholder register Response time and method matches with communication plan 		<ul style="list-style-type: none"> Relevant and timely communication shared with appropriate stakeholders
Maintains formal and informal communications	<ul style="list-style-type: none"> Establishes regular forums for interaction with team and stakeholders, including various formal and informal media Documents minutes from both scheduled and ad hoc sessions Appropriately matches level of formality to session and audience 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Minutes from planned and unplanned meetings, brainstorming sessions, etc. Correspondence Notes and follow-ups from discussions Feedback on availability to stakeholders
Element: Ensures Quality of Information		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses appropriate information sources	Engages with team leads and members in developing reports, analyzing issues, evaluating progress, and options analysis	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Timely action based on information Identified risks Change requests Feedback on project reports

Table X3-11. (continued)

Element: Ensures Quality of Information		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides accurate and factual information	Engages with PMO and other stakeholders for health checks, audits, and review of reporting metrics <i>Additional expectation for experienced project manager: shares relevant information with program manager or senior management for use on other projects/overall program</i>	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Documents show that factual information is provided • Documented feedback on accuracy of the information
Seeks validation of information	<ul style="list-style-type: none"> • Engages with PMO and other stakeholders for health checks, audits, and review of reporting metrics • Ensures key decisions are documented with supporting information and analysis as appropriate 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Documentation of input from subject matter experts (e.g., interest groups, professional bodies) • Meeting minutes
Element: Tailors Communication to Audience		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides relevant information	<ul style="list-style-type: none"> • Regularly conducts follow-up with audiences • Able to effectively summarize key points and issues in a clear and concise manner <i>Additional expectation for experienced project manager: project manager is able to present to different levels of audience with ease</i>	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	<ul style="list-style-type: none"> • Documented feedback from recipient confirming information relevance • Demonstrated strong presentation skills
Uses suitable communication methods for the audience	<ul style="list-style-type: none"> • Conducts and regularly reviews/updates stakeholder analysis • Routinely solicits feedback on communications • Responds to issues and concerns. <i>Additional expectation for experienced project manager: feedback rarely identifies significant issues with communication methods</i>	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Preferred communication methods identified in stakeholders' analysis • Notes from meetings demonstrating suitability of method selection • Feedback from stakeholders regarding suitability of method selection
Aligns communications with environment or setting	<ul style="list-style-type: none"> • Utilizes templates and guidelines for formal and informal communications with internal and external stakeholders • Routinely solicits feedback from team and stakeholders <i>Additional expectation for experienced project manager: provides feedback on templates and guidelines including examples and methods based on experiences and lessons learned for use by team and other projects</i>	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Sensitivity to others' specific communication needs and context • Appropriate use of formal, informal verbal, nonverbal, and para-lingual components • Minutes from team meetings or presentations • Examples of various choices of location, time, participants, and privacy settings

X3.2.2 Leading

Leading involves guiding, inspiring, and motivating team members and other project stakeholders to manage and overcome issues in order to effectively achieve project objectives.

The elements for this unit are:

- Creates a team environment that promotes high performance
- Builds and maintains effective relationships
- Motivates and mentors project team members
- Takes accountability for delivering the project
- Uses influencing skills when required

Table X3-12. Leading—Units of Personal Competence

Element: Creates a Team Environment That Promotes High Performance		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Expresses positive expectations of team	<ul style="list-style-type: none"> • Regularly seeks opportunities to highlight individual team members' achievements and abilities to the individual and senior management • Actively supports decisions made by the team to senior management and stakeholders • Sets expectations for individual team members, the team, and self • Openly shares expectations for team and self 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	<ul style="list-style-type: none"> • Documented feedback from team on recognizing abilities of team members • Documented feedback from team on supporting decision making • Documented feedback from team on setting positive expectations
Promotes team learning and advocates professional and personal development	<ul style="list-style-type: none"> • Sets expectations for preparation and use of development plans • Routinely reviews plans with individuals • Provides thoughtful assessments including achievements and opportunities for development • Includes discussions of individuals' career objectives and development activities to achieve • Documents discussions and maintains completed plans for future reference and reviews • Routinely reviews team members' skills • Discusses results with individual • Documents skills achieved and ongoing skill development in development plan • Routinely solicits feedback on project manager's ability to educate, influence, and persuade team members in the areas of learning and professional/personal development • Reviews feedback and identifies areas for development • Shares with team for use in future feedback sessions • Identifies opportunities for professional development to senior management • Recommends candidates • Develops appropriate funding request 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Individual development plans • Documentation of new skills gained by the team members • Funding for development

Table X3-12. (continued)

Element: Creates a Team Environment That Promotes High Performance		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
	<p><i>Additional expectation for experienced project manager:</i></p> <ul style="list-style-type: none"> • Develops multiyear professional development program • Processes requests to secure funding 		
Encourages teamwork consistently	<ul style="list-style-type: none"> • Leads by example and sets expectations that every team member's input is important and to be respected • Fosters teamwork through team-building activities • Engages team through participation in planning and execution of activities • Routinely solicits feedback from team • Responds to issues and concerns • Flows clear and consistent goals to team leads • Shares feedback from stakeholders and senior management about team's work and accomplishments 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	<ul style="list-style-type: none"> • Examples of creative actions taken to encourage teamwork and respect for different opinions and personalities • Documented feedback on acknowledgement of unique skills and abilities • Identified responsibilities of team leaders in giving clear, consistent goals
Demands and models high performance	<ul style="list-style-type: none"> • Identifies standards (plans, procedures, etc.) for use by the team that establish performance and quality expectations <p><i>Additional expectation for experienced project manager: recommends revisions to existing standards based on past experiences and lessons learned</i></p> <ul style="list-style-type: none"> • Routinely solicits feedback from team • Feedback indicates the project manager exhibits commitment to the project and team, is a positive role model, and meets or exceeds standards • Sets expectations for team and individual team members • Recognizes team members' strengths and areas for development • Assigns areas of responsibility appropriately including stretch assignments • Monitors progress and discusses commitments regularly to maintain focus on accountability 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Documented standards for individual performance and quality • Documented results of project manager performing to standards • Documented feedback that the project manager is acting as a role model • Holds project team members accountable for their commitments
Element: Builds and Maintains Effective Relationships		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Confines relationships to work-related matters appropriate to the project and local culture	<ul style="list-style-type: none"> • Demonstrates leadership for the project team. Behaves professionally and in accordance with expected norms in all stakeholder interactions • Separates fact from emotion • Earns respect of stakeholders • Establishes and follows meeting rules and guidelines • Sets expectation for project team to do the same 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Maintaining formal working relationship with stakeholders • Guidelines for formal and informal discussion

APPENDIX X3 - PROJECT MANAGER

Element: Builds and Maintains Effective Relationships		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Builds trust and confidence with stakeholders	<ul style="list-style-type: none"> Establishes a professional rapport with stakeholders built on trust and mutual respect Demonstrates integrity and earned trust, enabling stakeholder confidence to be maintained during difficult situations 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Acting with integrity Keeping commitments Providing consistent messages Supporting team members when confronted with unjustified criticism Maintaining composure Demonstrating fair treatment of all stakeholders
Creates an environment that encourages openness, respect and consideration of stakeholders	<ul style="list-style-type: none"> Establishes a professional rapport with stakeholders built on trust and mutual respect Uses communication to drive project management practices Regularly communicates and demonstrates availability to stakeholders Routinely solicits feedback from team on team environments Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Feedback from stakeholders on openness of issues analysis and resolution Project manager maintains open door policy and is approachable at all times Examples of sensitivity and genuine interest in feelings and values of others Documented evidence of fair and fact-based decisions
Element: Motivates and Mentors Project Team Members		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and communicates to the team the project vision, mission statement, and strategic value	<ul style="list-style-type: none"> Establishes clear communications and tactics to ensure that all team members have understanding of project vision, mission, and strategic value to the organization Educates team members on impact of project on business, alignment of objectives, and team's role in achieving the project's vision and mission Routinely solicits feedback from team Responds to concerns/issues 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Presentations with clear focus on vision, mission, and strategic value Rallying support behind the strategy and sharing the strategy with team members Documented feedback from team regarding awareness of program's strategic value
Rewards performance according to organization guidelines	<ul style="list-style-type: none"> Establishes and facilitates implementation of rewards and recognition program Ensures functional managers/senior managers are aware of high performance of individuals Understands the value of individuals' and team's contributions Communicates individuals' and team's achievements to management 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Rewards and recognition records Plans for success of team members Celebrating individual accomplishments on a frequent basis Assures credit is given to the individual
Establishes mentoring relationships for team members' development	<ul style="list-style-type: none"> Establishes a mentoring program for the project Acts as mentor to individual team members Uses lessons learned to guide team to optimal solutions Project manager is recognized as someone who provides valuable and meaningful mentorship experiences Routinely solicits feedback from team on mentoring activities Responds to issues and concerns Reviews individual performance with functional manager in order to aid development plans 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Examples of mentoring relationships Examples of being sought out as a mentor for others Documented feedback on mentoring activities Examples of progress on individual development plan

Table X3-12. (continued)

Element: Takes Accountability for Delivering the Project		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Demonstrates ownership of, accountability for, and commitment to the project	<ul style="list-style-type: none"> Engages team and stakeholders to participate in regular project reviews Regularly reviews project risks with team, including identification of emerging risks Secures resources needed to mitigate Appropriately fosters and supports development of relationships between team members and senior management/client while demonstrating ownership of team issues and outcomes 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Active involvement with all stakeholders and project team members Quickly addressing possible project hindrances, delays, or risks Reports or meeting notes where the project manager takes responsibility for mishaps Taking ownership for adverse outcomes
Aligns personal activities and priorities toward increasing likelihood of achieving project goals	<ul style="list-style-type: none"> Assesses and understands actions required to achieve project goals Sets and adapts priorities to best serve the project Uses issues priority list to direct the team's focus 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Documented priority planning Lists of prioritized action items Active event management
Supports and promotes team's actions and decisions	<ul style="list-style-type: none"> Routinely solicits feedback from team on actions to support and promote the team. Responds to issues and concerns Engages project team regularly in meetings that provide a forum for reviewing team's activities Obtains sufficient knowledge and understanding of actions taken by team Documents team's actions and decisions as part of regular team meetings Personally supports actions taken to senior management 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Documented feedback from team members that project manager acts assertively on their behalf Keeps abreast of project team activities and maintains accountability for delivery of work Takes a stand in front of higher authorities to support team's actions Takes meeting notes that reflect project manager's support for team's actions and decisions
Element: Uses Influencing Skills When Required		<i>Indicative competence level required: 2</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Applies appropriate influencing techniques to stakeholders and team members	<ul style="list-style-type: none"> Demonstrated use of multiple approaches and styles for influencing stakeholders and team members Understands the role of influence in guiding project team and stakeholders to optimal outcome <p><i>Additional expectation for experienced project manager:</i> Demonstrated ability to influence management and senior stakeholders</p> <ul style="list-style-type: none"> Project documentation includes approaches to be applied to stakeholders to gain support throughout project execution Ability to confront issues and reach a solution in a tactful and respectful manner Ability to separate emotion from logic and promote value of a solution Uses knowledge, lessons learned, and team's errors in a positive manner to educate the team 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Examples of different styles on different occasions Document describing alternative approaches used to influence Examples of strong facilitation and negotiation skills Examples of the ability to educate the team
Uses experts or third parties to persuade others	<ul style="list-style-type: none"> Builds networks of influence to support the project outcome Accepts own limitations and employs input from SMEs as needed Demonstrated ability to promote value of project to team and stakeholders 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Using positional power of others to influence Using a third party's knowledge power to influence Networking and gathering support for the project while not manipulating for personal gain

X3.2.3 Managing

Managing involves the effective administration of the project through appropriate deployment and use of human, financial, material, intellectual, and intangible resources.

The elements for this unit are:

- Builds and maintains the project team
- Plans and manages for project success in an organized manner
- Resolves conflict involving project team or stakeholders

Table X3-13. Managing—Units of Personal Competence

Element: Builds and Maintains the Project Team		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures expectations and responsibilities are clear to team members and they understand their importance to the project	<ul style="list-style-type: none"> • Routinely solicits feedback from team on roles and responsibilities • Clarifies ambiguities • Documents project goals and responsibilities and widely communicates • Conducts regular team meetings, briefs, reviews, and one-on-one sessions • Develops individual scope and task plans • Communicates overall project scope and individuals' plans to the team • Establishes RAM at initiation of project and maintains throughout • Conducts regular team meetings and briefs that engage each member in discussions on activities • Conducts one-on-one sessions as needed 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	<ul style="list-style-type: none"> • Documented feedback from project team on clarity of roles and responsibilities • Team correspondence • Documented project directives, tasks, and assignments • Published resource assignment matrix • Active participation of each member in team activities
Maintains a positive attitude and effective relationships among team members	<ul style="list-style-type: none"> • Resolves or facilitates resolution of conflicts • Supports team leads and members in meeting their goals and objectives • Routinely solicits feedback from team on team attitude and effectiveness • Responds to issues and concerns • Understands importance of team rapport • Creates and seeks opportunities that will facilitate collaboration within the team • Actively seeks and finds opportunities to reward the team 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	<ul style="list-style-type: none"> • Examples of effective conflict resolution • Respect for others by appealing to reason • Genuinely values input and expertise of others on the team • Willingness to learn from others • Examples of team events to facilitate bonding and rapport within the team • Celebration of teamwork and achievements

Table X3-13. (continued)

Element: Builds and Maintains the Project Team		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Identifies, evaluates, and selects internal and external talent	<ul style="list-style-type: none"> Understands and documents current and future human resource needs of the project Builds a network of talent to meet current and future human resource needs <p><i>Additional expectation for experienced project manager:</i></p> <ul style="list-style-type: none"> Works with program manager to build network of talent from outside the project and organization Uses standard methods to determine project human resources needs Demonstrates ability to determine project needs and matches with human resource pool 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Project resource requirements documentation Inventories of suitable team members identified from internal talent pool Predefined selection criteria applied to resources acquisition
Promotes healthy work-life balance	<ul style="list-style-type: none"> Develops and promotes a culture and environment for a healthy work-life balance for team members while sustaining individuals' performance Routinely solicits feedback from team Responds to issues and concerns Routinely surveys team to understand activities that are consuming too much time, alternative approaches, and suggestions to improve efficiency Provides feedback to team on input received 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Documented plan of action to achieve balance Meeting notes documenting balance issues Examples of actions taken to improve job efficiency and productivity
Element: Plans and Manages for Project Success in an Organized Manner		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Works with others to clearly identify project scope, roles, expectations, and tasks specifications	<ul style="list-style-type: none"> Solicits feedback from team and stakeholders on the planning process Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Feedback on level of involvement of others in the planning process
Applies organization or industry standards and generally accepted practices to the project	<ul style="list-style-type: none"> Establishes governance and quality standards appropriate to project Utilizes PMO and/or corporate standards Solicits feedback from team, stakeholders, and SMEs on practices employed Responds to issues and concerns Tailors corporate or PMO standards to meet or exceed stakeholder expectations Develops project plan which draws upon PMI, industry, and corporate standards <p><i>Additional expectation for experienced project manager:</i> Uses past experiences and lessons learned as input to project plan</p>	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Examples and feedback from project team, stakeholders, and subject matter experts on following industry generally accepted practices Proposed measures and improvements intended to achieve or exceed industry generally accepted practices Project plan that incorporates industry standards
Tailors generally accepted practices for successful completion of the project	<ul style="list-style-type: none"> Tailors corporate or PMO standards to meet or exceed stakeholder expectations Uses SMEs where relevant to the project <p><i>Additional expectation for experienced project manager:</i> Recommends tailoring of procedures based on lessons learned and best practices</p>	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Documented change of generally accepted practices Approved changes to project management procedures to accommodate generally accepted practices

Element: Plans and Manages for Project Success in an Organized Manner <i>Indicative competence level required: 3</i>			
Performance Criteria	Expectation	Sources of Evidence	Examples
Organizes project information, emphasizing appropriate levels of detail	<ul style="list-style-type: none"> Methodologies align with PMI and/or PMO/corporate policy Captures or delegates capture of key project information Develops and utilizes database or document to capture 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	Examples of standard methodologies used in projects: <ul style="list-style-type: none"> Meeting minutes Project status reports or updates Repository for project artifacts Examples of knowledge management
Insists on compliance with processes, procedures, and policies	<ul style="list-style-type: none"> Conducts audits and reviews of process, procedure, and policy compliance Establishes, updates, and utilizes key performance indicators Regularly reviews metrics with team Shares relevant information with program manager for use on other projects and overall program Reviews results of project audits and reviews with team and discusses deficiencies and opportunities for improvement 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Monitored compliance of processes, procedures, and policies Examples of enforcing policies and procedures Documented use of performance metrics to manage project
Element: Resolves Conflict Involving Project Team or Stakeholders <i>Indicative competence level required: 3</i>			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures that the team and stakeholders are fully aware of team rules	Establishes project policies, processes, and procedures in accordance with the PMO or organizational standards at project initiation	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	Documented team rules
Recognizes conflict	<ul style="list-style-type: none"> Resolves or facilitates the removal of conflict where it arises within the project Recognizes areas for potential conflict and seeks to minimize Routinely solicits feedback from team on conflict resolution Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Examples of conflict occurring within the project Team survey results Issue log
Resolves conflicts	Routinely solicits feedback from team on conflict resolution Responds to issues and concerns	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Examples of conflict resolution techniques used Feedback from team and stakeholders on satisfactory resolution of conflict

X3.2.4 Cognitive Ability

Cognitive ability involves the application of an appropriate depth of perception, discernment, and judgment to effectively direct a project in a changing and evolving environment.

The elements for this unit are:

- Takes a holistic view of project
- Effectively resolves issues and solves problems
- Uses appropriate project management tools and techniques
- Seeks opportunities to improve project outcome

Table X3-14. Cognitive Ability—Units of Personal Competence

Element: Takes a Holistic View of Project		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands project stakeholder needs, interests, and influence for project success	<ul style="list-style-type: none"> Analyzes project stakeholders to develop appropriate communication strategies to engage them as needed to ensure project success Develops communication plan that includes meetings and reports based on stakeholder analysis and input Seeks input from stakeholders to ensure their needs and objectives are appropriately captured 	Project documents	<ul style="list-style-type: none"> Stakeholder analysis Communication plan aligned with stakeholders' needs Stakeholders' needs and objectives documented in project charter and plan
Understands how project actions impact other areas of the project, other projects, and organizational environment	<ul style="list-style-type: none"> Considers project objectives and goals when analyzing specific issues and options in determining appropriate action to take <p><i>Additional expectation for experienced project manager:</i></p> <ul style="list-style-type: none"> Shares relevant information with program manager for use on other projects and overall program Able to understand and evaluate relations and impact of project on the organization Evaluates relations and impact of project-to-project and project-to-program, advises program manager appropriately 	<ul style="list-style-type: none"> Documented observations from communications Project documents 	<ul style="list-style-type: none"> Relates external events to project execution Documented impacts of project on organizational environment
Understands both the formal and informal structure of organizations	<ul style="list-style-type: none"> Builds networks of influence across the stakeholders Routinely solicits feedback from stakeholders Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager uses formal and informal organizational knowledge
Understands organizational politics	<ul style="list-style-type: none"> Builds networks of influence across the stakeholders Routinely solicits feedback from stakeholders Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager able to operate within organizational politics
Uses emotional intelligence to understand and explain others' past actions and current attitudes, and anticipate future behavior	<ul style="list-style-type: none"> Routinely solicits team on ability to understand and effectively interact with them; uses past experience and emotional intelligence to anticipate/diffuse situational behavior and provides guidance to individuals on team Identifies personality and traits of key individuals in order to match persuasion and motivation techniques 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Project manager able to capture verbal and nonverbal cues of the team Project manager displays appropriate behaviors Project manager appropriately selects and applies persuasion and motivation techniques to each individual
Element: Effectively Resolves Issues and Solves Problems		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Simplifies complexities for a complete and accurate analysis	<ul style="list-style-type: none"> Demonstrated ability to understand, depict, and explain project interdependencies Ability to evaluate and develop visual aids for addressing complex problems and to define clear steps for problem resolution 	<ul style="list-style-type: none"> Project documents Documented observations from communications Project documents 	<ul style="list-style-type: none"> Visual representations of project issues and interdependencies (lists, diagrams, relationship maps etc.) Analysis documents indicating use of techniques to break apart complex problems to find solutions

APPENDIX X3 - PROJECT MANAGER

Element: Effectively Resolves Issues and Solves Problems		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Applies complex concepts or tools when needed	Involves SMEs, project team, and specific techniques where required and appropriately maintains issue log for capturing problems, analyzes, and path to resolution	<ul style="list-style-type: none"> Project documents 	<ul style="list-style-type: none"> Issue log that provides methods proposed for analysis of complex issues Documented root cause analysis, portfolio analysis, expert judgment, etc. Documented analysis supporting issues resolution
Applies lessons learned to resolve current project issues	Documents reviews and provides routine updates to lessons learned	<ul style="list-style-type: none"> Project documents 	Documentation of application of lessons learned to current project issues
Aggregates multiple related issues to understand the complete picture	<ul style="list-style-type: none"> Considers project objectives and overall outcomes in analyzing specific project issues and identified options in determining appropriate action to take Demonstrates project knowledge to identify related trends that link to specific issues 	<ul style="list-style-type: none"> Project documents 	Summary reports or project scorecards outlining the relationships and linkages between issues
Observes discrepancies, trends, and interrelationships in project data	<ul style="list-style-type: none"> Recognizes and questions inconsistent project data; uses judgment to request validation of data when necessary Analyzes project metrics and takes action where required 	<ul style="list-style-type: none"> Documented observations from communications Project documents 	<ul style="list-style-type: none"> Requests for information validation or confirmation Documented trend analysis
Element: Uses Appropriate Project Management Tools and Techniques		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands project management tools and techniques	Knows and understands corporate and industry standards, tools, and techniques	<ul style="list-style-type: none"> Project documents 	List of available tools and/or techniques
Selects appropriate tools and/or techniques	Defines set of tools and techniques in accordance with established process that will best support successful project performance	<ul style="list-style-type: none"> Project documents 	<ul style="list-style-type: none"> List of selected tools and/or techniques Documented selection process and results
Applies selected tools and/or techniques to project management	Achievement of successful project outcomes is attributed to use of selected tools and techniques	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Outcomes achieved through use of tools and/or techniques
Element: Seeks Opportunities to Improve Project Outcome		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides a framework to address opportunities and concerns	<ul style="list-style-type: none"> Establishes a framework to identify and address issues and improvement opportunities and empowers team to employ Utilizes input from team members to populate risk, opportunity, and issues tracking <p><i>Additional expectation for experienced project manager:</i></p> <ul style="list-style-type: none"> Shares relevant information with program manager for use on other projects and overall program 	<ul style="list-style-type: none"> Documented observations from communications Project documents 	<ul style="list-style-type: none"> Lists of issues and associated opportunities or concerns distributed to all team members along with a clearly communicated update process Maintains issue log current and communicates changes/additions in it to all the stakeholders Meeting notes where issues were addressed documenting approaches and solutions identified Comparison between actions proposed and results obtained
Looks for opportunities to improve project value or execution	<ul style="list-style-type: none"> Establishes a framework to identify and address issues and improvement opportunities and empowers team to employ Utilizes input from team members to 	<ul style="list-style-type: none"> Documented observations from communications Project documents 	<ul style="list-style-type: none"> Risk register showing opportunities Notes from group activities (e.g., brainstorming sessions, meetings) where new opportunities were identified

Table X3-14. (continued)

Element: Seeks Opportunities to Improve Project Outcome		Indicative competence level required: 3	
Performance Criteria	Expectation	Sources of Evidence	Examples
	populate risk, opportunity, and issues tracking <i>Additional expectation for experienced project manager:</i> • Demonstrated history of capitalizing on opportunities that result in project improvements		• Documented suggestions in a project or actions taken in a project related to the results obtained
Seizes relevant opportunities as they emerge	Maintains documentation of actions taken to identify and recommend improvements to the project sponsor	• Survey results from stakeholders and team members • Documented observations from communications • Project documents	• Meeting notes where opportunities were analyzed • Entries in change control process • Examples of opportunities related to the moment they are presented during the evolution of the project
Consolidates opportunities and passes them to the organization	• Maintains documentation of opportunities that may add value to the program • Demonstrated ability to analyze opportunities and evidence of prioritizing and selecting those opportunities with the highest potential for identification to the organization	• Survey results from stakeholders and team members • Documented observations from communications • Project documents	• Emails, meeting notes, and other communication artifacts regarding project opportunities • Documented proposals to clients or internal stakeholders indicating added value for pursuing identified opportunities • Number of opportunities identified and pursued

X3.2.5 Effectiveness

Effectiveness involves the production of desired results by using appropriate resources, tools, and techniques in all project management activities.

The elements for this unit are:

- Resolves project problems
- Maintains project stakeholder involvement, motivation, and support
- Changes at the required pace to meet project needs
- Uses assertiveness when necessary

Table X3-15. Effectiveness—Units of Personal Competence

Element: Resolves Project Problems		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Employs appropriate problem solving techniques	<ul style="list-style-type: none"> Establishes issue log that documents resolution and includes criteria to evaluate effectiveness of solutions Feedback from stakeholders indicates agreement with techniques and tools used 	<ul style="list-style-type: none"> Project documents 	<ul style="list-style-type: none"> Issue log with resolution documentation
		<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Agreement with problem solving techniques Project manager used proper knowledge management tools
Validates that proposed solutions resolve the problem and are within the project boundaries	Reviews the recommendations and analysis from team leads and members; accepts or amends recommendations with appropriate justification	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager used proper knowledge management tools
	Establishes issue log that documents resolution, demonstrates resolution is within project scope, and includes criteria to evaluate solution	<ul style="list-style-type: none"> Project documents 	Issue log with resolution documentation
	Project problems are adequately and appropriately resolved; feedback rarely requires project manager to resolve concerns/issues that problems were not solved	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Stakeholders' agreement that problems were resolved
Chooses solutions that maximize project benefit and minimize negative impacts	Project problems are adequately and appropriately resolved; feedback rarely requires project manager to resolve concerns/issues that problems were not solved	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Stakeholders' agreement that problems were resolved
	<p>Evaluates project post implementation of solution for effectiveness</p> <p><i>Additional expectation for experienced project manager:</i></p> <p>Shares relevant results and lessons learned with program manager for use on other projects and overall program</p>	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Documented impact of solution on project Documented external and/or environmental impact of solution
Element: Maintains Project Stakeholder Involvement, Motivation, and Support		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses stakeholder communications to maintain stakeholder motivation	Establishes regular forums for interaction with stakeholders, including various formal and informal media; responds to issues and concerns	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Communication plan Updates to stakeholder analysis Stakeholders feel motivated
Constantly seeks opportunities to communicate project status and directions to meet the needs and expectations of stakeholders	<ul style="list-style-type: none"> Establishes regular forums for interaction with stakeholders, including various formal and informal media Responds to issues and concerns Feedback indicates communications are acceptable and needs are being met 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Examples where the project manager took an opportunity to communicate status Stakeholders' feedback that their needs were met
Includes experts in meetings and discussions to influence and obtain stakeholder support	<ul style="list-style-type: none"> Builds networks of influence across the stakeholders Includes SMEs to enhance credibility Documents inclusion of SMEs in project records to achieve issues consensus and support 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Consensus and support achieved on issues Minutes from meetings where subject matter experts were invited for consultations with stakeholders

Table X3-15. (continued)

Element: Maintains Project Stakeholder Involvement, Motivation, and Support		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses objectivity for consensus building	<ul style="list-style-type: none"> Establishes a professional rapport with team and stakeholders built on trust and mutual respect Demonstrates decisions are made based on facts and logic Possesses record of understanding behaviors of individuals and team and utilizes to obtain optimal solution 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Documented use of best practices for making team decisions Examples of influencing biased team members toward objective position
Element: Changes at the Required Pace to Meet Project Needs		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Adapts to changes in the project environment to minimize adverse impacts	<ul style="list-style-type: none"> Adapts to changes Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Project manager displays a "can-do" attitude despite changes
	Establishes regular forum to assess risks; reviews mitigation activities and documents in the risk register for their impact on minimization of adverse impacts	<ul style="list-style-type: none"> Project documents 	Documented risk mitigation activities
Demonstrates flexibility toward changes that benefit the project	<ul style="list-style-type: none"> Embraces continual review, analysis, and change to support project outcomes Solicits input from team members to populate risks, opportunities, and issues Prioritizes and selects opportunities that can impact the project <p><i>Additional expectation for experienced project manager:</i></p> <ul style="list-style-type: none"> Advises program manager regarding risks and opportunities that may impact other projects 	<ul style="list-style-type: none"> Project documents 	<ul style="list-style-type: none"> Risk registry updates identifying new opportunities Documented opportunities analysis Change requests
Takes positive actions to capitalize on opportunities or to resolve present problems	<ul style="list-style-type: none"> Embraces continual review, analysis, and change to support project outcomes Engages stakeholders in opportunity analysis 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager demonstrates an action-oriented and proactive approach
	Resolution of outstanding problems captured in project documentation for future reference and lessons learned	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager resolves outstanding problems
	<i>Additional expectation for experienced project manager:</i>	<ul style="list-style-type: none"> Uses past experiences and lessons learned to aide resolution of problems 	
Enables a change-friendly environment by fostering continuous learning	Actively promotes use of the project library resources to aide in addressing and adapting to changes	<ul style="list-style-type: none"> Project documents 	Project library with relevant documentation of technologies, techniques, or methods used during the project execution
	<ul style="list-style-type: none"> Actively promotes team and personal development as part of the project culture Works with functional managers to recommend personal development opportunities for individuals 	<ul style="list-style-type: none"> Project documents 	Documented training recommendations for team members
	Ensures individual development plans and develops project timeline to allow for adequate time for development and investigations	<ul style="list-style-type: none"> Project documents 	Project schedule includes time for team members to study new solutions, situations, or technologies

APPENDIX X3 - PROJECT MANAGER

Element: Changes at the Required Pace to Meet Project Needs		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
	Actively promotes use of the project library resources to aide in addressing and adapting to changes	<ul style="list-style-type: none"> Project documents 	Project library with relevant documentation of new technologies, techniques, or methods used during the project execution
Acts as a change agent	<ul style="list-style-type: none"> Change program established and appropriately used Project manager responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	Feedback from stakeholders indicates changes appropriately initiated or facilitated by project manager
	Feedback from stakeholders rarely requires response by project manager for issues and concerns	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager demonstrates positive self-esteem and self-confidence
Element: Uses Assertiveness When Necessary		<i>Indicative competence level required: 2</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Takes initiative when required, assuming calculated risks to expedite project delivery	<ul style="list-style-type: none"> Project manager takes initiative to drive project forward Responds to issues and concerns 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Feedback from stakeholders that the project manager took initiative when required
	Maintains documentation of issues and resolutions that demonstrates timeliness	<ul style="list-style-type: none"> Project documents 	<ul style="list-style-type: none"> Issue log with documented resolutions Issues escalation reports showing timely decision path
Prevents inconclusive discussions, makes decisions, and takes appropriate actions	<p>Able to tactfully decline or redirect inconclusive suggestions for benefit of team and willingness to make concise decisions in interest of moving project forward</p> <p><i>Additional expectation for experienced project manager:</i> Uses past experiences and lessons learned to aide decision making abilities</p>	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Feedback from team on actions taken Project manager able to decline a proposal without causing an argument and while maintaining cooperation Project manager able to resolve a crisis by assessing the situation and offering decisive action
Shows persistence and consistency in actions	Project manager able to respond to issues and does not leave issues unresolved	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Documented feedback from stakeholders stating that the project manager showed persistence and consistency
	Establishes regular forums to drive timely decisions on issues in order to meet stakeholders needs	<ul style="list-style-type: none"> Project documents 	Meeting minutes, action item notes, or status reports showing decisions made
	Ability to motivate at all stages of the project independent of climate	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager maintains motivation when faced with challenges
Makes timely decisions based on facts while managing ambiguity	<ul style="list-style-type: none"> Decisions are made and communicated in a timely fashion, based on information and appropriate analysis Risks and issues are not left unmanaged or ignored Issue log demonstrates timeliness <p><i>Additional expectation for experienced project manager:</i> past experiences and lessons learned are used to aide decision making</p>	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Decision memoranda or decision analysis documents demonstrating factual analysis of issues and prompt decision making Issue log showing time from recording to resolution Issues escalation reports showing timely decision path

X3.2.6 Professionalism

Conforms to an ethical behavior governed by responsibility, respect, fairness, and honesty in the practice of project management.

The elements for this unit are:

- Demonstrates commitment to the project,
- Operates with integrity,
- Handles personal and team adversity in a suitable manner,
- Manages a diverse workforce, and
- Resolves individual and organizational issues with objectivity.

Table X3-16. Professionalism—Units of Personal Competence

Element: Demonstrates Commitment to the Project		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands and actively supports the project's and organization's mission and goals	Defines project goals that are based on corporate mission and goals <i>Additional expectation for experienced project manager:</i> Identifies project improvements to project sponsor and program manager for consideration	<ul style="list-style-type: none"> • Project documents 	<ul style="list-style-type: none"> • Alignment of project goals and objective with organization's missions and strategy • Project activities that support organizational goals
	Demonstrated ability to steer team in direction of organization even in the face of differing personal preference	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	Examples where support was given when project goals differ from personal preferences
Cooperates with all stakeholders to achieve project objectives	<ul style="list-style-type: none"> • Establishes a professional rapport with stakeholders built on trust and mutual respect • Demonstrated ability to set common goals that help align team and stakeholders 	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	Specific cooperative efforts to achieve project objectives
	Demonstrated ability to develop team with adequate support and direction through relevant stages of life cycle to a high-performing team	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	Team-building techniques were used to foster cooperation
Makes sacrifices where necessary to move project forward	Demonstrated ability to separate personal gain from overall program gain <i>Additional expectation for experienced project manager:</i> Recommends to program manager where benefits to another project or the overall program may be achieved	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications • Project documents 	Options taken for effective project execution while giving personal benefits a lower priority
	Demonstrated ability to put aside setbacks while continuing to drive to a positive overall outcome	<ul style="list-style-type: none"> • Survey results from stakeholders and team members • Documented observations from communications 	Positive attitude while dealing with project challenges

APPENDIX X3 - PROJECT MANAGER

Element: Operates with integrity		<i>Indicative competence level required: 4</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Adheres to all legal requirements	<ul style="list-style-type: none"> Engages lawyers and SMEs when legal boundaries are not well understood Ensures team understands ability and right to escalate legal issues through communications channels 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	All legal requirements were met
	Identifies and documents legal requirements at initiation of project; obtains stakeholder buy-in and approval	Project documents	Log of legal requirements applied to a project with written stakeholder approval
Works within a recognized set of ethical standards	<ul style="list-style-type: none"> Project conducted within ethical standards as defined by project documents Employs independent SMEs to address issues and concerns Ensures team understands their ability and right to escalate ethical issues through communications channels 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<p>Project manager ensured project followed ethical standards</p> <p>Project manager neither offered nor accepted inappropriate payments or other items from any stakeholders</p>
Seeks to avoid and discloses any possible conflict of interests to all stakeholders	<ul style="list-style-type: none"> Completely and truthfully reports potential conflict of interests Ensures team understands ability and right to escalate issues and concerns through communications channels 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Truthful reporting of potential conflict of interests
	Ensures organizational conflict of interest (OCI) statement and OCI plan are incorporated in project policies	Project documents	Organizational conflict of interest (OCI) statement and OCI plan
Maintains and respects confidentiality of sensitive information	Able to handle confidential matters; responds to issues and concerns	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager maintains confidentiality
	<p>Utilizes data templates that contain proper confidentiality, export, or security classification based on end use</p> <p><i>Additional expectation for experienced project manager:</i> Provides feedback on templates based on experiences and lessons learned for use by team and other projects</p>	Project documents	Project documentation that includes the confidentiality or security level classification notice (e.g., nondisclosure agreement [NDA])
Respects the intellectual property of others	<ul style="list-style-type: none"> Ensures agreements for reuse of protected intellectual property are incorporated in project policies, processes, and procedures Engages lawyers/SMEs to define intellectual property at project initiation 	Project documents	<p>Agreements for reuse of protected intellectual property</p> <p>Searches for potentially applicable patents, trademarks, or copyrights</p>
	Engages lawyers/SMEs to ensure copyrights are respected and intellectual property is used in accordance with project requirements	Project documents	Copyright notices with source indication whenever protected intellectual property was used

Table X3-16. (continued)

Element: Handles Personal and Team Adversity in a Suitable Manner		Indicative competence level required: 3	
Performance Criteria	Expectation	Sources of Evidence	Examples
Maintains self-control in all situations and responds calmly	Ability to handle difficult situations; responds to issues and concerns	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Times where the project manager felt strong emotions (such as anger or extreme frustration) but controlled them Uses stress management techniques to control response, prevent burnout, and deal with ongoing stress both personally and with other project personnel Project manager displays self-control
Admits shortcomings and explicitly accepts responsibility for failures	<ul style="list-style-type: none"> Self-identifies and addresses issues Demonstrates self-awareness and personal ownership of issues or failures 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	<ul style="list-style-type: none"> Project manager actively listens to constructive feedback and acts on it Project manager accepts responsibility for failure
Learns from mistakes to improve future performance	Establishes and implements regular forum to review and update lessons learned	Project documents	Documented lessons learned
	Openly communicates about areas for development and actions being taken	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager learns from mistakes
	<ul style="list-style-type: none"> Self-reflects on appropriateness and effectiveness of actions Transparent in addressing concerns and areas for development 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Examples where the individual analyzed his or her own performance to understand causes of mistakes and failures
Develops elements of trust and respect within the project environment	Establishes a professional rapport with stakeholders built on trust and mutual respect that is evident on a daily basis	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager displays an awareness of, respect for, and willingness to accommodate cultural differences
	<ul style="list-style-type: none"> Recognizes and rewards team Promotes positive team member achievements with management and clients 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Team celebrates achievements
Ensures team's adherence to cultural issues, legal requirements, and ethical values	<ul style="list-style-type: none"> Sets expectations of project team's adherence to organization's ethics standards Establishes and promotes a culture of respect and ethics in line with the organizational culture <p><i>Additional expectation for experienced project manager: Provides real-life examples to team to enhance understanding based on past experiences and lessons learned</i></p>	Project documents	Document describing ethical standards and stakeholders' value systems
	<ul style="list-style-type: none"> Adheres to <i>Code of Conduct</i> and high standards in daily interactions with team and stakeholders Holds team accountable for the same high standards 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager consistently exhibits good moral judgment and behavior
	Engages program management resources and SMEs at project initiation to ensure project plan is aligned to applicable standards and legislation	Project documents	Documented analysis of applicable legislation, standards, and local customs relevant to the project

APPENDIX X3 - PROJECT MANAGER

Element: Resolves Individual and Organizational Issues with Objectivity		<i>Indicative competence level required: 3</i>	
Performance Criteria	Expectation	Sources of Evidence	Examples
Respects personal, ethnic, and cultural differences	<ul style="list-style-type: none"> Establishes and promotes organization's culture of respect and ethics Understands personal, ethnic, and cultural diversity of team and stakeholders so that scheduled forums and communications accommodate them 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager respects personal, ethnic, and cultural differences
	<ul style="list-style-type: none"> Project manager demonstrates understanding of individual personalities and communication styles Utilizes appropriate methods to solicit input from each team member 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager values the contribution of each team member
Creates an environment of confidence and respect for individual differences	<ul style="list-style-type: none"> Establishes and promotes organization's culture of respect and ethics Positively promotes personal, ethnic, and cultural differences of stakeholders so that team members are aware and accept them as the norm 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Team has confidence that the project manager respected individual differences
	Understands individual personalities and strengths and creates a tailored environment that enables/motivates members to perform at their best	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager creates the conditions to motivate and enable others to contribute their best
Respects the organizational framework for management of the project	<ul style="list-style-type: none"> Establishes and enforces standards and processes consistent with the PMO Establishes and promotes a culture of respect and ethics in line with the organizational culture Recognizes and respects the authority of other project managers 	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	<ul style="list-style-type: none"> Project manager respects the management framework established by the organization Project manager follows rules of collaboration and reporting within the programs or portfolio of projects
Balances individual interests with organizational interests	Able to balance individual versus organizational interests; responds to issues and concerns	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications 	Project manager sees clear distinctions between individual and organizational interests
	Project manager holds PMP® certification and demonstrates professionalism consistent with designation at all times	<ul style="list-style-type: none"> Survey results from stakeholders and team members Documented observations from communications Project documents 	Project manager adheres to PMI's <i>Code of Conduct</i>
Assigns team members in an unbiased way to appropriate tasks	<ul style="list-style-type: none"> Works with functional managers along with own observations to assess and identify project team members' strengths and weaknesses Assigns areas of responsibility including stretch assignments 	Project documents	<ul style="list-style-type: none"> Skills assessment documentation indicating each team member's strength and weaknesses Responsibility assignment matrix aligned with team members' skills assessment Examples of personnel assignments that allow individuals to grow by doing more than status quo

Appendix X4 Program Manager

X4.1 Units of Program Manager Performance Competence

X4.1.1 Program Strategic Alignment

Program Strategic Alignment focuses on ensuring the linkage of enterprise and program plans; on defining, maintaining, and validating the program value proposition; and on aligning program management with enterprise operations management.

The elements for this unit are:

- Align program and organization strategy,
- Develop program roadmap, and
- Assess environment.

Table X4-1. Program Strategic Alignment—Program Manager Performance Competence

Element: Align Program and Organization Strategy			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands and applies organization strategic vision	Ability to understand the organization's strategic vision and align the program and its outcome to serve the strategy of the organization	Presentations, meetings, program charter, program business case, program vision, program mission, program goals and objectives	Presentations, meeting minutes, documented feedback from stakeholders Sources of evidence indicate how program outcomes serve organization strategic vision and objectives
Aligns program with strategic vision	Program is clearly aligned with the strategic vision of the organization	Presentations, meetings, program charter, program business case	Presentations, meeting minutes, documented feedback from stakeholders, sources of evidence indicate how program outcomes serve organization strategic vision and objectives
Understands program environment	Program takes into account the environmental factors and there is clear understanding of issues, constraints, risks, and/or other considerations among stakeholders	Environmental analysis, program charter, program business case, program plan, program roadmap	Presentations, meeting minutes, documented feedback from stakeholders, sources of evidence clearly reflect any constraints, opportunities, risks and/or other considerations related to the program immediate and extended environments
Element: Develop Program Roadmap			
Performance Criteria	Expectation	Sources of Evidence	Examples
Documents program roadmap, plan, and business case	Program documentation is complete and signed off	Program roadmap, plan, and business case	Roadmap, program plan, business case are all comprehensive, inclusive of all components, indicative of alignment to strategy and delivery of strategic benefits, and signed off by stakeholders
Communicates program roadmap and all relevant components	Program roadmap is comprehensive and clearly understood by program stakeholders including component leaders	Meetings, conference calls, presentations to stakeholders, program roadmap	Presentations, meeting minutes, documented feedback from stakeholders, and program roadmap are readable, clear, comprehensive, and concise
Element: Assess Environment			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands environmental influences inside and outside the organization	Clear communication on the environmental factors impact the program to all stakeholders	Presentations, conference calls, meetings with stakeholders, program charter, program business case, program plan, program roadmap	Presentations, meeting minutes, documented feedback from stakeholders, and sources of evidence clearly reflect any constraints, opportunities, risks and/or other considerations related to the program immediate and extended environments
Undertakes environmental analysis	Effective and complete analysis of the environment, both internal and external, including impact to program plan and roadmap	Environmental analysis, comparative advantage analysis, feasibility studies, SWOT analysis, assumptions analysis, program charter, program business case, program plan, and program roadmap	Documented analysis, relevant presentations, meeting minutes, feedback from stakeholders, sources of evidence clearly reflect any constraints, opportunities, risks, and/or other considerations related to the program immediate and extended environments

X4.1.2 Program Benefits Management

Program Benefits Management focuses program stakeholders on the outcomes to be provided by the various activities conducted during the program’s duration.

The elements for this unit are:

- Identify Program Benefits,
- Analyze and Plan Program Benefits,
- Deliver Program Benefits,
- Transition Program Benefits, and
- Ensure Program Benefits Sustainment.

Table X4-2. Program Benefits Management—Program Manager Performance Competence

Element: Identify Program Benefits			
Performance Criteria	Expectation	Sources of Evidence	Examples
Defines the objectives and critical success factors for the program	Leads and coordinates the definition and documentation of program objectives and critical success factors	Documented objectives and CSFs, program business case, benefits register, benefits realization plan	Documentation of program benefits and critical success factors includes specific, measurable details; business benefits are identified and quantified; and meaningful metrics and key performance indicators are developed to measure the actual delivery of benefits; process is established to measure benefits against benefits realization plan; communication processes are in place to record program progress and report to stakeholders
Identifies, qualifies, and quantifies the program business benefits	Leads and coordinates the definition and documentation of program business benefits	Benefits register	Properly formatted benefits register that includes: <ul style="list-style-type: none"> • Owner • Current measurements • Goal measurements • Date • Benefit owner
Develops appropriate metrics to measure benefits delivery	Leads and coordinates the definition and documentation of metrics to measure the delivery of program business benefits	Metrics documentation, benefits register	Metrics documentation, which includes metrics that are: <ul style="list-style-type: none"> • Specific • Measurable • Achievable • Relevant • Time bound
Establishes processes for measuring progress against the benefits plan	Leads and coordinates the definition and documentation of the process to measure the delivery of program business benefits against plan	Metrics documentation, benefits register	Process is established to measure benefits against benefits realization plan; communication processes are in place to record program progress and report to stakeholders
Develops appropriate status reporting on program progress	Leads and coordinates the definition and documentation of the process to report on the established metrics to measure the delivery of program business benefits against plan	Status reports	Creates a properly formatted status report that effectively communicates the current status and changes of benefits realization and progress to stakeholders

Table X4-2. (continued)

Element: Analyze and Plan Program Benefits			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes benefits realization plan	Leads and coordinates the definition of the sequence and timing of the delivery of business benefits as identified, defined, analyzed, and captured in the benefits register	Benefits realization plan	Benefits realization plan clearly indicates benefits, defines each benefit and associated assumptions, determines how each benefit will be achieved, and links component project output to planned program outcome; defines the metrics and procedures to measure benefits, defines roles and responsibilities required to manage the benefits; defines how the resulting capabilities will be transitioned to the individuals, groups, or organizations responsible for sustaining the benefits; and provides a process for determining the extent to which each program benefit is achieved prior to formal program closure
Defines and prioritizes program components	Leads and coordinates the definition and sequencing of program components and their interdependencies	Program roadmap	Creates and maintains a program roadmap indicative of program components, interdependencies, and outcome delivery, and indicative of integration to realize benefits
Defines key performance indicators to monitor delivery of program benefits	Leads and coordinates the definition of the metrics to use to monitor the delivery of program benefits	Program roadmap	Program roadmap defines the KPIs and associated quantitative measures required to effectively monitor the delivery of program benefits
Establishes program performance baseline	Leads and coordinates the definition of the program performance baseline for delivery of program benefits	Benefits realization plan and program road map	Benefits realization plan and program road map include performance baseline information related to cost, time, and benefits realization thresholds, allowing program manager and stakeholders to determine whether they are delivered in a timely manner and within the control thresholds
Element: Deliver Program Benefits			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures that the program remains aligned with the organization's strategic objectives as circumstances change	Reviews the program baseline when organizational objectives and priorities change; proposes, obtains approval for, and makes appropriate adjustments	Updates to program roadmap and baseline	Creates and maintains a comprehensive program master plan that is in alignment with organizational strategy and periodically validates program value proposition and ensures alignment with strategy
Initiates, performs, transitions, and closes program components	Oversees the life cycle of program components, ensures components are prioritized in the best interest of benefits delivery	Component charters, component status and progress reports, component closure reports	Component charters are approved, component performance reports are accurate and timely, document decisions of component termination (as applicable), documented component closure reports
Manages component interdependencies	Understands and monitors cross-component dependencies to ensure the timely and efficient delivery of program benefits	Program master plan	Network/dependency diagrams or other representations of the cross-component dependencies are clearly depicted on program master plan, status and progress reports are utilized to capture information and facilitate decisions related to dependencies, documented proof of decision making are accomplished in a timely, effective manner

Element: Deliver Program Benefits			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors benefits delivery through the evaluation of program risks and KPIs	Collects, analyzes, and reports metrics on the delivery of program benefits by the various components, manages risks at the program level	Program benefits realization plan, progress reports, status reports, and program risk register	Program risk and key performance indicator evaluation information is clearly documented, aggregated from component performance reports and outputs
Maintains the benefits register as benefits are delivered	Updates the benefits register as benefits are delivered or as the delivery baseline changes	Updated benefits register	Documented updates to the benefits realization plan and benefits register are made in a timely fashion
Reports to program stakeholders according to the program communication plan	Informs program stakeholders on the status of the delivery of program benefits	Stakeholder status reports	Communication artifacts incorporate the current status, progress, and forecasts, and are curated and disseminated in accordance with the program communication management plan
Element: Transition Program Benefits			
Performance Criteria	Expectation	Sources of Evidence	Examples
Verifies that program benefits realization criteria are met upon closure of the program or its components	At time of component closure, follows the transition plan and ensures that the planned benefits have been delivered and are transitioned into operations	Component closure and transition documentation, benefits register	Documented verification that anticipated benefits have been delivered as per benefits register, stakeholder signoff is obtained
Develops transition plans to facilitate ongoing benefits realization after component or program closure	Ensures that plans are in place to properly hand off component deliverables to the responsible operational group	Transition plans and associated communications, component closure documentation	Signoff on benefits transition by life cycle managers and/or operators as applicable, evaluation of program benefits delivered against benefit realization criteria
Element: Ensure Program Benefits Sustainment			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures that program benefits will continue to be delivered post-transition	Ensures that the operational group responsible for the continuation of program benefits will be able to sustain their delivery, prepares the sustainment plan to ensure meaningful transition	Benefits sustainment plans and associated communications	Benefits sustainment plans are comprehensive and signed off by operational owners

X4.1.3 Program Stakeholder Management

Program Stakeholder Management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution. The management of stakeholders should cover impact and analyzing stakeholder expectations.

The elements for this unit are:

- Program Stakeholder Identification,
- Program Stakeholder Planning, and
- Stakeholder Engagement.

Table X4-3. Program Stakeholder Management—Program Manager Performance Competence

Element: Stakeholder Identification			
Performance Criteria	Expectation	Sources of Evidence	Examples
Identifies program stakeholders	Effectively identifies and categorizes all program stakeholders	Stakeholder register, stakeholder map	Stakeholder register is comprehensive, includes sponsor, governance board, program and project managers, program and project team members, funding organization and performing organization, program management office, customers, potential customers, suppliers, governmental regulatory agencies, competitors, affected individuals or organizations, and other groups as applicable
Gathers stakeholder information: culture, politics, environment, budget, constraints, and history	Demonstrates information-gathering skills by capturing relevant data from stakeholders	Stakeholder register, stakeholder map	Interest and power of each stakeholder (or stakeholder group) are accounted for; documented information about each stakeholder (or stakeholder group) including: organizational culture and acceptance of change, attitudes about the program and its sponsors, expectation of program benefits delivery, degree of support or opposition to the program benefits, and ability to influence the outcome of the program
Element: Stakeholder Engagement Planning			
Performance Criteria	Expectation	Sources of Evidence	Examples
Creates guidelines outlining the overall approach to managing stakeholders	Creates guidelines outlining the overall approach to managing program stakeholders	Program stakeholder register, stakeholder engagement plan	<p>Stakeholder engagement plan contains a detailed strategy for effective stakeholder engagement for the duration of the program; plan includes stakeholder engagement guidelines and provides insight about how the stakeholders of various components are engaged; defines the metrics used to measure the performance of stakeholder engagement activities. This should not only include measures of participation in meetings and other communications channels, but should also strive to measure the effectiveness of the engagement in meeting its intended goal</p> <p>The guidelines for project-level stakeholder engagement should be provided to the component projects and nonproject work under the program. The stakeholder engagement plan includes critical information used in the development of the program's communications plan and its ongoing alignment as the known stakeholders change</p>
Element: Stakeholder Engagement			
Performance Criteria	Expectation	Sources of Evidence	Examples
Executes stakeholder management plan	Executes stakeholder management plan	Stakeholder engagement plan, stakeholder communications, and stakeholder register	Stakeholder register and engagement plan are referenced and evaluated often, and updated as needed
Ensures stakeholders are adequately and appropriately engaged	Stakeholder engagement yields positive contribution to the realization of the program's objectives and benefits, stakeholder participation	Stakeholder communications, decisions, and influences over program benefits realization	Documented evidence of communication, negotiation, and conflict resolution activities on part of the program manager and program team as appropriate

X4.1.4 Program Governance

Program governance covers the systems and methods by which a program and its strategy are defined, authorized, monitored, and supported by its sponsoring organization.

The elements for this unit are:

- Define governance structure,
- Manage issue resolution and program change,
- Authorize program component changes (initiation, transition, closure),
- Review program performance, and
- Ensure program conformance to organizational standards.

Table X4-4. Program Governance—Program Manager Performance Competence

Element: Define Governance Structure			
Performance Criteria	Expectation	Sources of Evidence	Examples
Clearly defines the roles and responsibilities of and the process for interaction between the governance board and program manager	The governance board is the group that determines the authority the program manager will have on the program. Work with the governance board to define a structure that will best serve the needs of the program and will provide the necessary flexibility to the program manager, yet provide the requisite assurance to the organization that (a) resources are expended effectively and efficiently and (b) risks are maintained within agreed thresholds	Program governance plan	Roles and responsibilities document clearly delineates roles of governance board and those of each member, levels of program manager authority, escalation points, and escalation processes
Element: Manage Issue Resolution and Program Change			
Performance Criteria	Expectation	Sources of Evidence	Examples
Reviews program-level cross-component issues and serious component-level issues requiring senior management attention; makes appropriate changes in program plans	Escalates appropriate issues to the governance board for resolution, when necessary, requesting that the board convene when an issue requires urgent attention as per the program governance plan	Issue logs, change requests and their disposition, documented issue resolution process	Evidence of program change requests and issue logs demonstrating escalation to governance board as appropriate, as well as correspondence with governance board to resolve issues; correspondence with component leaders to identify and assess issues; reports to governance board included in and executed as per the governance plan
Element: Authorize Program Component Changes (Initiation, Transition, Closure)			
Performance Criteria	Expectation	Sources of Evidence	Examples
Reviews requests to initiate, transition, and close components	Presents requests to the governance board, provide appropriate supporting information, business cases, and justification of why or why not to initiate, transition, and/or close components and act upon their recommendations	Component business case, component transition plan, progress and status reports	Comprehensive business case, including measures of benefits realization and contribution, progress and status reports with deliverable status and assessment of readiness for transition, component closure reports

Table X4-4. (continued)

Element: Review Program Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Receives, reviews, and reacts to reports on program performance, program phase gate reviews, and decision point reviews	Prepares and presents performance reports to the governance board and executes their instructions	Program performance reports and meeting minutes, emails, or other reactions by the governance board to these reports; change requests due to these performance reports and their disposition	Program status reports, benefits realization reports and input from customers and component leaders
Element: Ensure Program Conformance to Organizational Standards			
Performance Criteria	Expectation	Sources of Evidence	Examples
Assesses both the performance and viability of the program in the context of current organizational standards and objectives	Prepares and presents performance reports to the governance board and executes their instructions; holds planned and ad hoc program governance meetings	Program performance reports and meeting minutes, emails, or other reactions by the governance board to these reports; change requests due to these performance reports and their disposition	Program status reports, benefits realization reports, and input from customers and organizational stakeholders including but not limited to internal audit, quality control, and other departments; program governance meeting minutes

X4.1.5 Program Life Cycle Management

Program life cycle management covers the full span of the components that make up a program, from defining to closing. This is input and output from virtually all other program management domains.

The elements for this unit are:

- Define program,
- Formulate program,
- Prepare program,
- Deliver program,
- Authorize and plan components,
- Oversee and integrate components,
- Transition and close components,
- Transition program,
- Close program,
- Provide program activities overview,
- Manage program integration,
- Develop program infrastructure,
- Manage program delivery,
- Monitor and control program performance,
- Sustain benefits and transition program, and
- Close program.

Table X4-5. Program Life Cycle Management—Program Manager Performance Competence

Element: Define Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Creates the business case and demonstrates extent to which it satisfies the objectives of the strategic plan and expected program outcomes	Business case is comprehensive and clearly identifies program goals, objectives, scope, and anticipated benefits	Program business case and charter	Program business case and charter are formulated and approved
Element: Formulate Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Creates estimates of scope, resources, and cost; develops initial risk assessment; develops charter; develops roadmap; supports program sponsor and sponsoring organization to secure program financing	Demonstrates the ability to secure funding, works with project sponsors, possesses requisite skills for completing all deliverables of this phase	Estimates of scope, resources, and cost; initial risk assessment; charter developed; roadmap developed	Approved estimates of scope, resources, and cost, initial risk assessment, charter developed, roadmap developed, feedback from relevant stakeholders obtained
Initiates studies, estimates of scope, resources, and cost	Demonstrates the ability to capture information and consolidate in scope statements and plans	Program scope document, program estimates	Approved program estimates of scope, resources, and cost, initial risk assessment, charter developed, roadmap developed
Develops an initial risk assessment	Demonstrates the ability to identify, quantify, and mitigate program risks and effectively document all of the above	Risk register	Risk register, approved mitigation plans
Develops program charter and roadmap	Creates a charter and roadmap that effectively describe the program	Program charter and roadmap	Approved program charter and roadmap
Element: Prepare Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes governance structure	Sets up a governance structure to effectively manage the program	Presentations, meetings conference calls	Project schedules, presentations, feedback from stakeholders
Defines program organization and deploys initial team	Effectively architects the organization needed to support the program and communicate this structure to stakeholders	Team structure, program structure	Team organizational chart (org chart), program organizational structure, feedback from stakeholders
Develops program management plan with all component plans: benefits management plan, stakeholder engagement plan, governance plan, change management plan, communication management plan, financial management plan, information management plan, procurement management plan, quality management plan, resource management plan, risk management plan, schedule management plan, and scope management plan	Demonstrates the ability to identify, quantify, and mitigate program risks and effectively document all of the above	Risk register	Risk register, approved mitigation plans
Element: Deliver Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Authorizes and plans components	Works with stakeholders to effectively identify and plan components, authorizes components	Component management plans, component charters	Evidence of input from stakeholders into component plans and charters, approvals obtained from governance board and sponsors
Provides oversight of program and components	Effectively manages the flow of the program to achieve overall and component objectives	Status reports, completed deliverables	Status reports, documentation on deliverables, signoff from stakeholders

Table X4-5. (continued)

Element: Define Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Manages component and program elements to successful completion of program, manages component transition and closure	Demonstrates the ability to manage all components of the program and component delivery over the component life cycle	Program scope, risk register, component plans, resources schedules, etc.	Approved scope, up-to-date risk register (including mitigation plans), resource schedules, etc.; component closure reports, signoff obtained from operations teams accepting transition of component deliverables
Element: Authorize and Plan Components			
Performance Criteria	Expectation	Sources of Evidence	Examples
Creates necessary documentation for planning components of the program	Ensures deliverables that will satisfy the program's goals and benefits are identified in component plans	Component plans, resource plans, risk registers, roadmaps	Approved component planning documents; manage components in a consistent and coordinated way in order to achieve results that could not be obtained by managing the components as stand-alone efforts
Re-plans component integration or changes in program direction through adaptive change	Demonstrates the ability to modify plans to reflect changes in the environment, stakeholder expectations, etc.	Program/component plans, updated as necessary	Up-to-date program/component plans, with changes approved by relevant stakeholders
Element: Oversee and Integrate Components			
Performance Criteria	Expectation	Sources of Evidence	Examples
Responds to events that require significant replanning or new component initiation requests	Captures events in a timely manner, solicits feedback from component leaders and other stakeholders, assesses impact for all components	Component management plans, change requests	Variance analysis, replanning, approved change requests, new baselines to component management plans and program management plan as applicable
Ensures component plans include activities required for component integration	Develops component plans that include activities for component integration and are included in all subsidiary plans	Component management plans	Transition activities are clearly identified and planned, resources are allocated and committed, plans are approved by stakeholders
Formalizes scope of work to be accomplished by the component and identifies the deliverables that will satisfy the program's goals and benefits	Scope of work is clearly and comprehensively defined and approved; all components are clearly aligned to program goals and benefits	Component management plans, component charter	Component charter and plan approved
Integrates appropriate information from each component plan into the program management plan	Integrates program management plan and component management plan	Program management plan and program roadmap, benefits realization plan	Milestones, deliverables, and other major events of component are aligned with program phase gates
Initiates components to conduct the integration efforts of multiple components	Component outcomes are integrated and combined to enable benefits realization	Program management plan and program roadmap, benefits realization plan	Component outcome integration is accounted for in program management plan and roadmap
Element: Transition and Close Components			
Performance Criteria	Expectation	Sources of Evidence	Examples
Integrates components with others to realize associated benefits	Provides leadership to integrate components with one another and transition to other areas of the organization	Program management plan and transition plan, program roadmap, benefits realization plan	Approved transition plans, feedback from stakeholders
Solicits status and other information from component managers and ensures dissemination to other components to facilitate integration of efforts with the overall program activities	Manages the flow of information related to component integration as part of the overall program plan	Meetings, conference calls, presentations	Presentations, feedback from stakeholders
Addresses the need for product support during transition	Manages support requirements within the structure of the program and the overall environment	Program management plan and transition plan, program roadmap, benefits realization plan	Presentations, support logs, signoffs by operations accepting transitioned components

Element: Transition and Close Components			
Performance Criteria	Expectation	Sources of Evidence	Examples
Reviews components to verify that the benefits were delivered and transitions any remaining projects and sustaining activities	Demonstrates the ability to deliver the expected financial results of the program and the components, ensures benefits delivery or justification of premature closure	ROI calculations, benefits statements, financial plans, benefits realization plan	Reports that demonstrate compliance (or corrective action that warrants compliance) to financial documents, benefits statements, calculated ROI, benefits realization plan
Reviews final status of all components with program sponsor and program governance board before authorizing formal program closure	Clearly articulates the process, impact, and expectations of closure activities for both program and components; ensures benefits delivery or justification of premature closure	Program and component closure plans, meetings, presentations	Presentations, transition plans, feedback from sponsors, program closure reports
Element: Transition Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Consults with governance board to determine whether (1) the program has met all of the desired benefits and all transition work was performed within the component transition or (2) there is another program or sustaining activity that will oversee the ongoing benefits for which this program was chartered	Manages the process of transitioning the program, ensures benefits delivery or justification of premature closure	Transition plans, closure documents, presentations, meetings	Approved transition/closure plans, meeting minutes, presentations, stakeholder feedback
Transitions the resources, responsibilities, knowledge, and lessons learned to another sustaining entity	Manages the process of transitioning resources and program knowledge as appropriate	Transition plans, closure documents, presentations, meetings	Approved transition/closure plans, meeting minutes, presentations, stakeholder feedback
Coordinates transitioning activities and receives approval to formally closeout the program	Manages the process of transitioning activities including soliciting and receiving requisite approvals	Transition plans, closure documents, presentations, meetings	Approved transition/closure plans, meeting minutes, presentations, stakeholder feedback
Element: Close Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Plans and manages closure activities of the program	Demonstrates the ability to detail the necessary steps for closure of the program, achieve signoff from stakeholders	Transition plans, closure documents, presentations, meetings	Approved transition/closure plans, meeting minutes, presentations, stakeholder feedback
Monitors closure activities to ensure expected results	Demonstrates the ability to oversee program closure activities	Status reports, presentations, meetings	Status reports, presentations, feedback from stakeholders
Documents closure activities, including final signoff on complete closure of the program	Obtains final approval on closure of the program from stakeholders	Signoff documents, program closure report	Final signoff document, feedback from stakeholders
Element: Provide Program Activities Overview			
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides oversight of program activities	Oversees both the individual components as well as the overall program plan	Status reports, program plans, roadmap	Status reports, approved program plan, roadmaps, feedback from stakeholders
Element: Manage Program Integration			
Performance Criteria	Expectation	Sources of Evidence	Examples
Identifies, defines, combines, unifies, and coordinates multiple components into the program	Ability to see and communicate the big picture as well as manage the component details	Individual component plans, integration plan, program roadmap	Approved program and component plans, feedback from stakeholders
Element: Develop Program Infrastructure			
Performance Criteria	Expectation	Sources of Evidence	Examples
Investigates, assesses, and plans the support structure that will assist the program in achieving its goals	Demonstrates the ability to conduct effective research leading to achievement of program goals	Program plans, roadmaps, organizational breakdown structure, PMO setup and staffing plans, presentations	Approved program and component plans, feedback from stakeholders

Table X4-5. (continued)

Element: Develop Program Infrastructure			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes both the management and technical resources of the program and its components	Creates and populates the resource plan, with the approval of stakeholders	Resource plans, infrastructure requirements documents, presentations	Approved resource plans, feedback from stakeholders, adequate infrastructure is in place including software tools; documents, data, and knowledge repositories, configuration management tools, change management system, risk database and analysis tools, financial management systems, earned value management activities and tools, requirements management activities and tools, and other tools and activities as required
Element: Manage Program Delivery			
Performance Criteria	Expectation	Sources of Evidence	Examples
Manages new component or project initiation process	Effectively manages the process, achieves approval of requests after the creation of charters and assessment of contribution to benefits	Initiation requests, presentations, conference calls, discussions, component charters	Component charters approved by stakeholders with clear demonstration of contribution to program benefits
Evaluates component initiation requests against the organization's approved selection criteria	Demonstrates the ability to evaluate requests for new components and/or projects, ensuring these are in alignment with organization goals and expectations	Initiation request log, presentations, conference calls, discussions, component charters	Signoff on component charters
Redefines priorities of existing components to ensure optimal resource allocation and management and interdependence	Demonstrates the ability to change priorities while still achieving goals and expectations of the program	Comprehensive program and component plans inclusive of all subsidiary plans	Revised program and/or component plans, appropriately approved; feedback from stakeholders
Delays or accelerates components as defined	Manage the timeline of the program and components to achieve goals and expectations	Program/component schedule, program roadmap, presentations	Updated program/component timelines, program roadmap, approval and feedback from stakeholders
Approves or rejects program level change requests	Evaluates the impact of a change request and makes effective decisions to accept or reject as appropriate	Updated change log, change request documents	Update change request log, updated program management plan, program roadmap, feedback from stakeholders
Collaborates with the customer or sponsor to present a request to close or transition the component	Collaborates and communicates with all stakeholders about closing/transitioning a program component	Presentations, discussions, conference calls	Presentations, transition plans, feedback from stakeholders
Updates program roadmap to reflect both go/no-go decisions and approved change requests that affect the high-level milestones, scope, or timing of major stages scheduled throughout the program	Manages the timeline and integrates the impact of go/no-go decisions on the overall roadmap	Updated program roadmap, presentations	Updated program roadmap with appropriate approvals, feedback from stakeholders
Element: Monitor and Control Program Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Collects, measures, analyzes, and disseminates performance information to track progress against the program objectives and assess overall program trends	Manages overall performance of the program to plans and objectives as approved by stakeholders	Performance management plans, meetings, program objectives, stage-gate reviews	Performance plans, status reports, feedback from stakeholders, stage-gate decisions documented
Element: Sustain Benefits and Transition program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Tracks, monitors, and reports on program benefits	Keeps track of and reports on benefits, sustainment plans, and transition activities	Status reports, presentations	Status reports, transition plans, sustainment plans, feedback from stakeholders

Element: Sustain Benefits and Transition program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Plans for sustainability of program benefits	Plans and manages benefits transition to a sustainable state	Sustainability plan, presentations	Approved transition plans, benefits expectations, sustainability plans, feedback from stakeholders
Element: Close Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Plans program closure	Creates plans and achieves approval from stakeholders	Closure plans, presentations	Approved closure plans, stakeholder feedback
Oversees and monitors program closure	Keeps track of closure activities and ensures they are in line with commitments	Status reports, closure plans, presentations	Status reports, presentations, feedback from stakeholders
Achieves signoff on program closure	Achieves signoff on program closure activities and final closure of the program	Program signoff	Signed program closure statement, feedback from stakeholders

X4.1.6 Program Scope Management

Program Scope Management includes all of the activities involved in planning and managing the program’s scope.

The elements for this unit are:

- Plan program scope, and
- Control program scope.

Table X4-6. Program Scope Management—Program Manager Performance Competence

Element: Plan Program Scope			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes program scope management plan	Leads the development of program scope management plan and projects within the program interfaces	Program scope statement, program scope management plan, program WBS	A well-defined scoped management plan that is part of an overall integrated program plan, aligned with program charter and business case
Element: Control Program Scope			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors program status and product scope and manages changes to scope baseline (scope statement)	Ensures that program stays on scope and oversees program change management (changes to program scope)	Change requests with documentation supporting the decisions, updates to scope statement and WBS	Well-articulated program scope change requests

X4.1.7 Program Time Management

Program Time Management activities determine the order and timing of the components needed to produce the program benefits, estimate the amount of time required to accomplish each one, identify significant milestones during the performance of the program, and document the outcome.

The elements for this unit are:

- Plan program schedule, and
- Control program schedule.

Table X4-7. Program Time Management—Program Manager Performance Competence

Element: Plan Program Schedule			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and documents the policies and procedures relating to the program schedule	Leads and facilitates development of program master schedule management plan	Program schedule management plan, program schedule standards, program schedule, and associated updates to project documents, updates to the roadmap	An updated program schedule and associated updates to project documents, updates to the roadmap
Element: Control Program Schedule			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors the status of program activities to update program progress and manages changes to the schedule baseline that are needed to achieve project deliverables	Monitors the program to keep on schedule, oversees process to change program schedule, updates to the program master schedule	Updates to the program schedule, program roadmap, and other program documents related to schedule changes	A revised and current program schedule and program roadmap

X4.1.8 Program Financial Management

Program Financial Management includes the activities involved in identifying the program's financial sources and resources, integrating the budgets of the program components, developing the overall budget for the program, and controlling costs throughout the duration of both the components and the program.

The elements for this unit are:

- Estimate program costs,
- Establish program financial framework,
- Develop program financial management plan,
- Estimate component cost,
- Budget program cost,
- Monitor and control program financials, and
- Close program financially.

Table X4-8. Program Financial Management—Program Manager Performance Competence

Element: Estimate Program Cost			
Performance Criteria	Expectation	Sources of Evidence	Examples
Estimates the cost of completing program activities	Coordinates and leads cost estimation process	Program cost estimates	Program cost estimates that include detailed total cost of ownership estimates
Element: Establish Program Financial Framework			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and documents structures, policies, and procedures relating to program costs	Leads development and establishment of financial framework for program	Program financial framework	Prepared, detailed program plan that includes financial management policies and procedures
Element: Develop Program Financial Management Plan			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and documents KPIs and success criteria for program financial management plan	Develops assessment, reporting, and updates of program financial management plan	Program financial management plan	Prepared, detailed program plan that includes financial management policies and procedures
Element: Estimate Component Cost			
Performance Criteria	Expectation	Sources of Evidence	Examples
Estimates the cost of program components	Identifies economies of scale opportunities, resource sharing within the program, detailed budgets for each component are formulated and approved	Cost estimates for all program components, detailed component budgets	Program cost estimates that include detailed total cost of ownership estimates, detailed, approved, component budgets
Element: Budget Program Cost			
Performance Criteria	Expectation	Sources of Evidence	Examples
Develops an authorized program cost baseline	Leads budget creation and definition process in the program	Integrated budget across the program, including component costs as well as program-level costs	Program cost estimates that include detailed total cost of ownership estimates and a cost register, detailed and approved component budgets
Element: Monitor and Control Program Financials			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors the status of program activities to update program cost estimates and manages changes to the financial baseline	Oversees process to change program budget and financial baseline	Contract payments, component budgets closed, updates to program documents, change requests, and corrective actions	Program cost estimates that include detailed total cost of ownership estimates and an accurate cost register included with periodic status reports
Element: Close Program Financially			
Performance Criteria	Expectation	Sources of Evidence	Examples
Updates program financial status and monitors financial compliance requirements	Assesses and reports the actual financial performance against the baseline and oversees process to close the financials of the program	Component financial closing statements and budgets; updates to program documents	Program cost estimates that include detailed total cost of ownership estimates and an accurate cost register included with periodic status reports

X4.1.9 Program Quality Management

Program Quality Management includes the activities of the performing organization that determine quality policies, objectives, and responsibilities so that the program will be successful and implements the quality management system through policy and procedures with continuous improvement activities conducted throughout, as appropriate.

The elements for this unit are:

- Plan program quality,
- Assure program quality, and
- Control program quality.

Table X4-9. Program Quality Management—Program Manager Performance Competence

Element: Plan Program Quality			
Performance Criteria	Expectation	Sources of Evidence	Examples
Identifies quality standards and requirements and documents quality compliance	Defines or identifies overall program quality standards and metrics; coordinates possibly differing quality standards across program components	Program quality standards, policies, estimates of cost, metric definitions, service level agreements (SLAs), quality checklists, quality assurance and control specifications	Proper execution of the program quality standards and policies reflected in the quality of the program output
Element: Assure Program Quality			
Performance Criteria	Expectation	Sources of Evidence	Examples
Audits quality requirements and quality control results	Evaluates overall program quality on a regular basis throughout the program's duration, focusing on cross-component quality relationships and impact; analyzes component quality control results to ensure delivery of overall program quality and takes appropriate action, when needed, through the program change control process	Quality assurance findings, standards reports, and change requests	Effective program status reports, issue logs, change logs, and risk logs that reflect adherence to the program quality plan
Element: Control Program Quality			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors execution and assesses performance of quality activities and recommends changes to quality activities	Monitors component deliverables throughout the life of the program to verify that they fulfill quality requirements leading to benefit realization; reviews the effectiveness of quality plans across all components; leads assessment of program or component change requests related to quality activities; documents resulting changes, if any, to program or component documents that result from such assessments; ensures corresponding changes to organizational process assets, when appropriate	Quality control completed checklists, test reports, or measurement results, quality change requests	Effective program status reports, issue logs, change logs, and risk logs that reflect adherence to the program quality plan

X4.1.10 Program Resource Management

Program Resource Management ensures all required resources (people, equipment, material, etc.) are made available to the project managers, as necessary, to enable their projects to deliver benefits for the program.

The elements for this unit are:

- Plan program resources,
- Prioritize program resources, and
- Manage resource interdependencies.

Table X4-10. Program Resource Management—Program Manager Performance Competence

Element: Plan Program Resources			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes guidelines outlining the overall approach to managing human resources	Develops and manages the prioritized resource allocation plan across program components for both human and other resources (see Section 8.6 in <i>The Standard for Program Management – Third Edition</i>); the resource plan will become part of the program management plan	Program resource priorities, updated program resource plan	A well-formatted and documented program resource plan with current and accurate updates, evidence of agreement by appropriate stakeholders to allocate resources depicted in the plan
Element: Prioritize Program Resources			
Performance Criteria	Expectation	Sources of Evidence	Examples
Executes human resource plan	Develops and manages the prioritized resource allocation plan across program components for both human and other resources	Program resource requirements, program resource plan, updated resource plan	A well-formatted and documented program resource plan with current and accurate updates, resources are available as per the plan, program and component activities are not hindered by lack of resources
Element: Manage Resource Interdependencies			
Performance Criteria	Expectation	Sources of Evidence	Examples
Creates and maintains responsibility assignment matrices, manages dependencies between program components	Hires and manages program team as part of program manager's responsibilities, balances resource allocation between components	Updated program resource plan, updated component resource plans	A comprehensive RACI (responsible, accountable, consulted, and informed) chart that reflects all of the major stakeholders against the key program deliverables; program and components are not delayed due to lack of resources

X4.1.11 Program Communications Management

Program Communications Management includes the activities for facilitating timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of program information, which provides the links between people and information that are necessary for successful communications and decision making.

The elements for this unit are:

- Plan communications,
- Distribute information, and
- Report program performance.

Table X4-11. Program Communications Management—Program Manager Performance Competence

Element: Plan Communications			
Performance Criteria	Expectation	Sources of Evidence	Examples
Creates guidelines outlining the overall approach to managing communications	Develops and documents the program communications plan; communications plan includes both internal and external stakeholder communications	Program communications plan	A well-formatted program communications plan addressing key stakeholders' needs, containing all components of a communication management plan
Element: Distribute Information			
Performance Criteria	Expectation	Sources of Evidence	Examples
Executes communications management plan	Timely and concise distribution of program information	Program communication artifacts	Clearly articulated artifacts, compiled and disseminated in a timely fashion
Element: Report Program Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Responds to and engages countermeasures to gaps between program progress and communication management plan	Appraisal and evaluation of the information provided and whether the content is appropriately formatted for meaningful consumption by the intended recipient	Program performance reports	Program reports that reflect action items addressing the discovered gaps and satisfy stakeholder requirements

X4.1.12 Program Risk Management

Program Risk Management involves tracking program-level risk identified in the program risk register and identifying new risks that emerge during the execution of the program.

The elements for this unit are:

- Plan program risk management,
- Identify program risks,
- Analyze program risks,
- Plan program risk responses, and
- Monitor and control program risks.

Table X4-12. Program Risk Management—Program Manager Performance Competence

Element: Plan Program Risk Management			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and documents the policies and procedures relating to program risks and organizational risk profile	Establishes and documents the policies and procedures relating to program risks	Program risk management plan	Comprehensive risk management plan that is part of a comprehensive integrated program plan, includes risk tolerances, appetite, and thresholds; component risk management plans align to this plan
Element: Identify Program Risks			
Performance Criteria	Expectation	Sources of Evidence	Examples
Determines which risks may affect the program and documents the characteristics of the identified risks	Determination to include an evaluation of project risks and the potential for relevance at the program level or other projects; evaluation of risks across projects, either that ought to be managed at a program level or that should be used to inform other project risk registers	Program risk register	Current and updated program risk register that includes named risk, probability, impact, and means of addressing the risk and risk owner
Element: Analyze Program Risks			
Performance Criteria	Expectation	Sources of Evidence	Examples
Prioritizes risks for further analysis or action by assessing their probabilities of occurrence and impact	Analyzes and manages component and cross-component risks to the delivery of program benefits	Program risk register, risk reports	Current and updated program risk register that includes named risk, probability, impact, and means of addressing the risk and risk owner
Element: Plan Program Risk Responses			
Performance Criteria	Expectation	Sources of Evidence	Examples
Develops options and actions to enhance potential opportunities and reduce threats, both relative to project objectives	Develops options and actions to enhance potential opportunities and reduce threats, both relative to delivery of program benefits	Risk response plans, risk register updates, contingency budgets and rationale, and change requests	Current and updated program risk register that includes named risk, probability, impact, and means of addressing the risk and risk owner
Element: Monitor and Control Program Risks			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitors the status of program risks, implements risk response plans, and evaluates risk process effectiveness	Monitors the status of program risks, implements program risk response plans, and evaluates program risk process effectiveness	Evidence of risk response activities, supporting documentation of ongoing risk monitoring both before and after response implementation	Current and updated program risk register that includes named risk, probability, impact, and means of addressing the risk and risk owner

X4.1.13 Program Procurement Management

Program Procurement Management addresses the activities necessary to acquire products and services.

The elements for this unit are:

- Plan program procurements,
- Execute program procurements,
- Administer program procurements, and
- Close program procurements.

Table X4-13. Program Procurement Management—Program Manager Performance Competence

Element: Plan Program Procurements			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and documents procurement decisions	Documents cross-component procurement decisions and rationale for greater effectiveness, including identifying opportunities for economies of scale	Program procurement standards, program procurement plan, updates to program budget and financial plan	Comprehensive updated program procurement plan, budget, and financial plan
Element: Execute Program Procurements			
Performance Criteria	Expectation	Sources of Evidence	Examples
Obtains and collates provider responses	Directs component managers through the process of conducting procurements, making sure the overall program needs are foremost in framing the RFPs/RFIs and in communicating with the candidate providers	RFP/RFI responses; memos or emails documenting the results of bidder conferences and other meetings with potential providers, e.g., product demonstrations provider proposals, proposal evaluation criteria, awarded contracts	An RFP response evaluation form that helps evaluators to compare responders in a consistent and fair manner that will get the best value for the supporting organization
Element: Administer Program Procurements			
Performance Criteria	Expectation	Sources of Evidence	Examples
Manages procurement relationships and monitors contract performance	Directs component managers through provider interactions, when evaluating provider performance according to previously established SOW and/or SLA, and during negotiations to change SOW or SLA when needed; monitors contract performance across the program when provider contributes to or affects multiple components	Performance reports, progress reports, KPI assessments	Well formatted and thorough status reports covering both the overall program and the individual components and relevant evidence
Element: Close Program Procurements			
Performance Criteria	Expectation	Sources of Evidence	Examples
Documents contract resolution and archives procurement information	Ensures that component managers successfully document contract resolution as it affects the component, particularly when provider affects multiple components, some of which may still be actively working with the provider; ensures that component managers successfully archive procurement information, including results of lessons learned session(s)	Contract closeout reports, updates to program documents (e.g., lessons learned), closed contracts	A project acceptance document including benefits register, operational documentation, and lessons learned signed by the appropriate sponsors

X4.2 Units of Program Manager Personal Competence

X4.2.1 Communicating

Communicating involves the effective exchanges of accurate, appropriate and relevant information with stakeholders using suitable methods.

The elements for this unit are:

- Actively listens, understands, and responds to stakeholders,
- Maintains lines of communication,
- Ensures quality of information, and
- Tailors communication to audience.

Table X4-14. Communicating—Program Manager Personal Competence

Element: Actively Listens, Understands, and Responds to Stakeholders			
Performance Criteria	Expectation	Sources of Evidence	Examples
Actively listens	Team members and clients are satisfied that concerns are addressed; communication is adapted to different stakeholders; interpretation and assessment of stakeholder needs that are not well defined or understood are translated back to ensure understanding	Survey results from stakeholders and team members; documented observations from communication; documented feedback on empathy and understanding toward others' point of view	Surveys are captured and maintained according to organizational standards; appropriate notes about behavior are shared with program manager as part of the performance review process
Understands explicit and implicit content of communications	Develops and adapts communication strategies using implicit stakeholder communications (such as present program climate) and ongoing stakeholder needs; includes formal updates/changes to stakeholder analysis and communications plan as relevant; matches level and formality of communication to stakeholder	Documented observations from communication	Documented confirmation that messages were received and understood
Responds to and acts upon expectations, concerns, and issues	Undertakes analysis, evaluation of options as appropriate, and takes/recommends appropriate actions	Documented responses to issues important to others (i.e., issue log)	Change requests; survey results from stakeholders
Element: Maintains Lines of Communication			
Performance Criteria	Expectation	Sources of Evidence	Examples
Engages stakeholders proactively	Establishes regular forums for interaction with stakeholders, including various formal and informal media that facilitate proactive communications; minutes and action item log show that issues are being addressed	Documented confirmation that stakeholders' needs have been met proactively	Notes from meetings, documents listing stakeholder needs along with how they have been addressed
Disseminates information effectively	Establishes regular forums for interaction with stakeholders, including formal and informal media; communication method is appropriate for information disseminated	Documentation that the communication was effective through conversation, survey, notes, presentations, or observation	Meeting notes, emails documenting the information and how it was received
	Communication distribution matches with stakeholder register; response time and method matches with communication plan	Documentation of relevant and timely communication shared with appropriate stakeholders	Meeting notes, emails, or other documents that detail the relevant communication and response(s)
Maintains formal and informal communication	Establishes regular forums for interaction with team and stakeholders, including various formal and informal media; documents minutes from both scheduled and ad hoc sessions; level of formality is appropriately matched to session and audience	Scheduled meetings, teleconferences, town halls, formal briefings, etc., used to disseminate information to stakeholders	Minutes from planned and unplanned meetings, brainstorming sessions, etc.; correspondence; notes and follow-ups from discussions; documented feedback on availability to stakeholders
Element: Ensures Quality of Information			
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses appropriate information sources	Engages with project managers, team leads, subject matter experts, and team members, as relevant, when developing reports, analyzing issues, evaluating progress, and options analysis; program management information systems are used, maintained, and current	Databases, industry information stores, online and off-line research, publications relevant to the program and/or industry	<ul style="list-style-type: none"> • Documentation of sources and analysis • Documented feedback on the sources
Provides accurate and factual information	Program manager engages with PMO for health checks, audits, and review of reporting metrics; program process reports tie to activities for the given reporting period	Reporting tools, observations, and measurement performed by the team and/or external parties	Documents showing that factual information is provided; documented feedback on the accuracy of the information

Table X4-14. (continued)

Element: Ensures quality of information			
Performance Criteria	Expectation	Sources of Evidence	Examples
Seeks validation of information	Program manager engages with PMO for health checks, audits, and reviews of reporting metrics; ensures key decisions are documented with supporting information and analysis as appropriate; established formal review period for reports; engages SMEs as appropriate	Meetings, teleconferences, informal and formal conversations with team members	Documentation of input from subject matter experts (e.g., interest groups, professional bodies), meeting minutes
Element: Tailors Communication to Audience			
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides relevant information	Develops and adapts communications according to ongoing stakeholder needs and audience (i.e., external client, senior management, and team); complexity and type of communication matches stakeholder	Meetings, teleconferences, and informal and formal conversations with team members	Documented feedback from recipient confirming information relevance
	Able to present and summarize key points, issues, instructions in a clear, concise manner	Demonstrated strong presentation skills	
Uses suitable communication method for the audience	Develops and adapts communications according to ongoing stakeholder needs and audience (i.e., external client, senior management, and team); incorporates formal updates/changes to stakeholder analysis and communications plan as relevant	Preferred communication methods identified in stakeholders' analysis	Notes from meetings demonstrating suitability of method selection
	Routinely solicits feedback from stakeholders on communications; responds to questions/concerns	Feedback from stakeholders regarding suitability of method selection	Documented feedback, with appropriate responses, maintained according to organizational standards
Aligns communications with environment or setting	Routinely solicits feedback from stakeholders on communications; responds to questions/concerns	Communication (meetings, presentations, memos, etc.) with stakeholders, taking into account: <ul style="list-style-type: none"> • Sensitivity to others' specific communication needs and context, • Appropriate use of formal, informal verbal, nonverbal, and para-lingual components, • Minutes from team meetings or presentations, and • Examples of various choices of location, time, participants, and privacy settings 	Documented feedback from key stakeholders, maintained as appropriate according to organization standards

X4.2.2 Leading

Leading involves guiding, inspiring, and motivating team members and other program stakeholders to manage and overcome issues in order to effectively achieve program objectives.

The elements for this unit are:

- Creates a team environment that promotes high performance
- Builds and maintains effective relationships
- Motivates and mentors program team members
- Takes accountability for delivering the program
- Uses influencing skills when required

Table X4-15. Leading—Program Manager Personal Competence

Element: Creates a Team Environment That Promotes High Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Expresses positive expectations of team	Identifies and communicates program and project goals in a manner that is aligned with and promotes the group's culture of performance; expectations and oversight match level of ability; encourages and facilitate discussions to support decision making; rewards for performance are promoted	Documented feedback from team on: <ul style="list-style-type: none"> • Recognizing abilities of team members • Supporting decision making • Setting positive expectations 	<ul style="list-style-type: none"> • Program goals are clearly articulated and defined, are quantified where possible, time bound, and means of measurement and/or indicators of success are listed and agreed upon • Clear mapping of program goals to strategy • Evidence of communication/correspondence with team members on goals • Project goals are clearly articulated and defined, are quantified where possible, time bound, and means of measurement and/or indicators of success are listed and agreed upon • Clear mapping of project goals to overall program goals to strategy • Evidence of communication/correspondence with project managers on goals of their specific projects • Communication of goals and activities leading to the achievement thereof is clear, uses language and terminology that is commonplace in the organization, engaging of team members and resources, evidence of participatory methods and involvement of team members • Individual's personal development plans (if provided through HR) includes clear incentives for the achievement and surpassing of program • When program team is ad hoc, bonuses/compensation is tied to performance and excess of program performance goals
Promotes team learning and advocates professional and personal development	Team and personal development is promoted and recognized as part of the culture; project managers are empowered (using KPIs) against team and individual performance; reviews individuals' performance with functional manager in order to aid development plans	Individual development plans	<ul style="list-style-type: none"> • Professional development plans are in place, include the skills and qualities necessary for successful program delivery and benefits realization, according to the individual and their respective role • Team is engaged in collective team-building activities and productive recreation • Individuals' personal development plans (if provided through HR) include clear incentives for the achievement and surpassing of program • When program team is ad hoc, bonuses/compensation is tied to performance and excess of program performance goals
	Assesses individuals' levels of ability at initiation of program and monitors throughout; documents improvements made at program completion	Documentation of new skills gained by the team members	<ul style="list-style-type: none"> • Individual assessments conducted at program initiation, continuous assessment conducted throughout the program life cycle • Assessments include 360-degree feedback, and means and recommendations for improvement; team members are assessed on the extent to which they implement improvement plans and their effectiveness

Table X4-15. (continued)

Element: Creates a Team Environment That Promotes High Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
	Solicits feedback from team; responds to identified questions and concerns	Documented feedback from program team	Assessments include 360-degree feedback, and means and recommendations for improvement, team members are assessed on the extent to which they implement improvement plans and their effectiveness
	Recognizes and recommends professional development activities; establishes budgets with functional managers	Funding for development	Approved budgets for team development, attributing funds and investments in activities that build and nurture program-specific skills and qualities
Encourages teamwork consistently	Program, project, and team goals are identified and communicated in a manner that is aligned with and promotes the group's culture of performance; able to engage and encourage multidisciplinary teams; shares feedback from stakeholders and senior management about team's work and accomplishments	Examples of creative actions taken to encourage teamwork, respect for different opinions and personalities	<ul style="list-style-type: none"> Team-building activities are conducted Team-building activities are assessed for effectiveness Participatory activities are conducted, allowing for the solicitation and inclusion of all team members' views, ideas, and opinions; fairness is demonstrated in vetting such ideas and concepts Communication and/or correspondence disseminating feedback and recommendation from stakeholders an senior management on team performance, as well as positive feedback
	Understands strengths and weakness of individual team members	Documented feedback on acknowledgement of unique skills and abilities	Personal development plans for each team member reflect areas of strength and areas that require further development, evidence of correspondence with team members and their respective acceptance of such development plans
	Flows clear and consistent goals to team leaders and project managers	Identified responsibilities of team leaders in giving clear, consistent goals	Responsibility assignment matrices are in place with clearly defined and articulated goals for each team member; goals are quantified and time bound where possible, with clear means of measurement and indicators of success; team members should commit to such goals in writing
Demands and models high performance	Demonstrates and models positive leadership behavior for the team; sets clear expectations; actively rewards performance; discusses lower levels of performance with individuals in a manner that avoids punishment but encourages development and improvement	Documented standards for individual performance and quality	Constructive feedback is clearly articulated and disseminated as and when needed; team members receive praise in public and feedback on areas of development in private
	Sets expectations for self and routinely evaluates performance; discusses performance with senior leadership and team	<ul style="list-style-type: none"> Documented results of program manager performing to standards Documented feedback that the program manager is acting as a role model 	Documented results of discussions with senior leadership around performance
	Uses program reviews and meetings to demonstrate and enforce accountability	Examples of holding program members accountable for their commitments	Program review meetings include discussion of specific goals and activities leading to their fulfillment, team members receive feedback on their performance of specific program activities and achievement of program goals; proceedings are documented as part of the minutes of meeting/review

Element: Builds and Maintains Effective Relationships			
Performance Criteria	Expectation	Sources of Evidence	Examples
Confines relationships to work-related matters appropriate to the program and local culture	Demonstrates leadership for the program teams in line with the program culture; behaves professionally and in accordance with expected norms in all stakeholder interactions; separates fact from emotion; earns respect of stakeholders	Documented feedback from team and stakeholders on program manager maintaining formal working relationship with stakeholders	Correspondence and communication exclude emotional impulses, unprofessional language, terminology, or personalized statements and messages; correspondence and communications do not include accusations, blame, and personal confrontations
	Establishes and follows meeting rules and guidelines	Documented guidelines for formal and informal discussion	Meetings have clear agendas; agendas are mapped to meeting minutes; decisions and actions are documented in meeting minutes, with clear assignment of who does what, when
Builds trust and confidence with stakeholders	Establishes a professional rapport with stakeholders built on trust and mutual respect; demonstrated integrity and earned trust enabling stakeholder confidence to be maintained during difficult situations	Examples of: <ul style="list-style-type: none"> • Acting with integrity • Keeping commitments • Providing consistent messages • Supporting team members when confronted with unjustified criticism • Maintaining composure • Demonstrating fair treatment of all stakeholders 	Correspondence and communication is indicative of mutual respect, trust, and appreciation; demonstrated fulfillment of commitments and promises; communication and correspondence are consistent, not contradictory or competing; evidence of upholding team members' rights and providing necessary support when and as needed; does not ask or require team members to succumb to wrongful accusations and/or unjustified criticism; does not act with impulse or emotion; does not demonstrate favoritism or the accommodation of one stakeholder or stakeholder group's requirements over those of others
Creates an environment that encourages openness, respect, and consideration of stakeholders	Establishes a professional rapport with stakeholders built on trust and mutual respect	Feedback from stakeholders on openness of issues analysis and resolution	Discussions are held openly, team members are not afraid to voice their opinions and thoughts, program manager is accessible and does not object to or hinder the access of team members to stakeholders
	Uses communication to drive program management practices; regularly communicates and demonstrates availability to stakeholders	Program manager maintains open-door policy and is approachable at all times	Discussions are held openly, team members are not afraid to voice their opinions and thoughts, program manager is accessible and does not object to or hinder the access of team members to stakeholders
	Routinely solicits feedback from team on team environments; responds to identified issues and concerns	Displays sensitivity and genuine interest in feelings and values of others; documented evidence of fair and fact-based decisions	Records of meetings (minutes, logs, or other types of documentation) include team feedback and recommendations for improvement on environments, issues, and concerns, with clear documentation of actions or decisions resultant from such feedback

Table X4-15. (continued)

Element: Motivates and Mentors Program Team Members			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and communicates to the team the program vision, mission statement, and strategic value	Establishes clear communications and tactics to ensure that all team members have awareness of the overall program and where individual projects and team fit within the overall context; ensures that functional managers/PMO align personal objectives with project vision, mission, and strategic value	Examples of presentations with clear focus on vision, mission, and strategic value	<ul style="list-style-type: none"> • Presentations include practical, understandable information on vision, mission, and strategic value; information is succinct, comprehensive, and motivational • Team members have clear understanding of how their activities contribute to the overall success of the program • Team members provide voluntary feedback on means to better align their activities with the anticipated strategic value of the program, both during preset program review activities and ad hoc
	Educates team members on impact of program on business, alignment of objectives, and team's role in achieving the program's vision and mission	Examples of rallying support behind the strategy and sharing the strategy with team members	Team members are acutely aware of the strategy, why their work is important, and how it contributes to the achievement of the strategy
	Routinely solicits feedback from team; responds to concerns/issues	Documented feedback from team regarding awareness of program's strategic value	Meeting minutes, logs, or other recordkeeping documentation include clearly articulated issues, actions, and decisions as raised by and solicited from team members
Rewards performance according to organization guidelines	Establishes and facilitates implementation of rewards and recognition program; ensures functional managers and/or senior managers are aware of high performance of individuals	<ul style="list-style-type: none"> • Documented rewards and recognition records • Examples of plans for success of team members 	Newsletter circulars announcing team member outstanding performance, other means of recognition for outstanding performance; communication of team performance and outcome are disseminated to senior managers
	Understands the value of individuals' and team's contributions; communicates to management individuals' achievements	Examples of celebrating individual accomplishments on a frequent basis; assures credit is given to the individual	Newsletter circulars announcing team member outstanding performance or other means of recognition for outstanding performance; communication of team performance and outcome are disseminated to senior managers
Establishes mentoring relationships for team members' development	Establishes a mentoring program for the program; acts as mentor to individual project managers and others as appropriate; uses lessons learned to guide team to optimal solutions	Examples of mentoring relationships	Provides clear mentorship and guidance to team members; does not exclude them as aloof, non-present, or uninvolved; evidence of program manager guidance and support to team members to resolve issues, conflicts, and problems
	Program manager is recognized as someone who provides valuable and meaningful mentorship experiences	Examples of being sought out as a mentor for others	Provides mentorship to team members, supports their quest for creative solutions and means to confront and overcome challenges when possible
	Routinely solicits feedback from team on mentoring activities; responds to identified issues and concerns	Documented feedback on mentoring activities	Documentation of meeting proceedings (issues and actions logs, etc.) includes sufficient evidence of response to issues and concerns escalated to program manager
	Reviews individual performance with functional manager in order to aid development plans	Examples of progress on individual development plan	Individuals personal development plans (when provided through HR) include clear incentives for the achievement and surpassing of program goals, or, if program team is ad hoc, bonuses/compensation is tied to performance and excess of program performance goals

APPENDIX X4 - PROGRAM MANAGER

Element: Takes Accountability for Delivering the Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Demonstrates ownership of, accountability for, and commitment to the program	Program manager is intimately aware of the status and health of the program and constituent projects; analyzes options and corrective actions to optimize program outcomes; conducts program reviews with all stakeholders	Examples of active involvement with all stakeholders and program team members	Program manager has clear perception of the status of all component projects and the program at large, is aware of issues, challenges, and risks, and takes action to resolve them; holds, leads, and uses periodic program reviews and phase gates to ensure program is aligned with strategy, component projects will create anticipated benefits, and program performance is according to plan; clearly communicates program status to all stakeholders in a timely fashion
	Performs regular risks reviews with stakeholders; engages and informs proper resources to address issues	Examples of quickly addressing possible program hindrances, delays, or risks	Program library is up to date, risk identification, mitigation, and management documentation is updated, relevant, and coherent
	Appropriately fosters and supports development of relationships between team members and senior management/client while demonstrating ownership of team issues and outcomes	<ul style="list-style-type: none"> • Reports or meeting notes where the program manager takes responsibility for mishaps • Examples of taking ownership for adverse outcomes 	Program manager has clear perception of the status of all component projects and the program at large, is aware of issues, challenges, and risks, and takes action to resolve them; holds, leads, and uses periodic program reviews and phase gates to ensure program is aligned with strategy, component projects will create anticipated benefits, and program performance is according to plan; clearly communicates program status to all stakeholders in a timely fashion
Aligns personal activities and priorities toward increasing likelihood of achieving program goals	Manages time commitments appropriately with specific focus on point in time investments to constituent projects, project teams, stakeholders in accordance with anticipated return to program outcomes; assesses and understands the impact of each issue in order to prioritize; sets and adapts individual priorities to best satisfy objectives of overall program; uses issue priority as a tool to direct team in best direction to achieve goals	<ul style="list-style-type: none"> • Documented priority planning • Lists of prioritized action items • Examples of active event management 	Program roadmap is up to date, relevant, and reflective of reliable estimates and valid assumptions, time performance on the program level is reflected, and impact is incorporated in to-complete planning; component project plans are aligned to and congruent with the program roadmap; program library includes information on project prioritization techniques, criteria, and methods relevant to the program, agreed upon and utilized by all stakeholders; project plans and activities reflect analysis was conducted on maximum possible return and results, aligned with prioritization and benefits delivery
Element: Takes Accountability for Delivering the Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Supports and promotes team's actions and decisions	Routinely solicits feedback from team on actions to support and promote the team; responds to questions/concerns	Documented feedback from program team members that program manager acts assertively on their behalf	Minutes of meeting reflect results of dialogue with project team members indicate supportive actions by program manager and timeliness and effectiveness of response to questions/concerns.
	Provides a forum for team to discuss and resolve issues; defends team decisions in discussions with key stakeholders	Meeting notes reflecting program manager's support for team's actions and decisions	Minutes of meeting reflect results of dialogue with project team members indicate supportive actions by program manager and timeliness and effectiveness of response to questions/concerns; participatory meetings are held engaging team members; correspondence/communication indicative that program manager cascades team discussions, decisions, and issues to stakeholders when relevant

Table X4-15. (continued)

Element: Takes Accountability for Delivering the Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
	Engages program team regularly in meetings and one-on-one interactions	Keeps abreast of program team activities and maintains accountability for delivery of work	Minutes of meeting reflect results of dialogue with project team members indicate supportive actions by program manager and timeliness and effectiveness of response to questions/concerns; participatory meetings are held engaging team members
	Adequately understands and owns team actions in order to independently defend position with senior management and stakeholders	Takes a stand in front of higher authorities to support team's actions as if they were his or her own	Minutes of meeting reflect results of dialogue with project team members indicate supportive actions by program manager and timeliness and effectiveness of response to questions/concerns; participatory meetings are held engaging team members; correspondence/communication indicative that program manager cascades team discussions, decisions, and issues to stakeholders when relevant
Element: Uses Influencing Skills When Required			
Performance Criteria	Expectation	Sources of Evidence	Examples
Applies appropriate influencing technique to each stakeholder	Demonstrated use of multiple approaches and styles for influencing stakeholders; understands the role of influence in guiding program team, client, or management to optimal outcome	Examples of different styles on different occasions	Clear and comprehensive stakeholder identification activities, documented stakeholder identification matrices, stakeholder engagement and influence plans are documented and implemented
	Program documentation includes approaches to be applied to stakeholders to gain support throughout program execution	Document describing alternative approaches used to influence	Clear and comprehensive stakeholder identification activities, documented stakeholder identification matrices, stakeholder engagement and influence plans are documented and implemented
	Ability to confront issues and reach a solution in a tactful and respectful manner; ability to separate emotion from logic and promote value of a solution	Examples of strong facilitation and negotiation skills	Issues are logged and tracked periodically; logs and correspondence related to issues indicate program manager confronts issues and problems, negotiates fairly with stakeholders and upholds the strategic interest of the performing and client organizations at all times
	Uses knowledge, lessons learned, and even team's errors in a positive manner to educate the team	Examples of the ability to educate the team	Lessons learned are periodically captured and applied to program and project plans and activities, especially at phase gates
Uses experts or third parties to persuade others	Builds networks of influence to support the program outcome	Examples of using positional power of others to influence	Uses Delphi technique, brainstorming sessions, and other expert advice when needed; provides information to and solicits feedback from expert networks
	Accepts own limitations and employs input from SMEs as needed	Examples of using a third party's knowledge power to influence	Solicits information from people closest to the work, as well as those with deeper knowledge on the subject matter, the market, environment, or other element of the program
	Demonstrated ability to promote value of program to senior management	Examples of networking and gathering support for the program while not manipulating for personal gain	Presentations conducted to senior management, stakeholder groups, and clients demonstrating alignment of program to strategic objectives, benefits realization, and integration

X4.2.3 Managing

Managing involves the effective administration of the program through appropriate deployment and use of human, financial, material, intellectual, and intangible resources.

The elements for this unit are:

- Builds and maintains the program team,
- Plans and manages for program success in an organized manner, and
- Resolves conflict involving program team or stakeholders.

Table X4-16. Managing—Program Manager Personal Competence

Element: Builds and Maintains the Program Team			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures expectations and responsibilities are clear to team members, and they understand their importance to the program	Routinely solicits feedback from team on roles and responsibilities; clarifies ambiguities; documents program and project goals and responsibilities and widely communicates; conducts regular team meetings, briefs, reviews, and one-on-one sessions	<ul style="list-style-type: none"> • Documented feedback from program team on clarity of roles and responsibilities • Team correspondence 	Responsibility assignment matrices are clearly documented, team member acceptance of roles and responsibilities are documented through correspondence; proof of action taken to rectify team objections to roles and responsibilities, whether by modification of roles and responsibilities or by soliciting their buy-in
	Develops and flows down team and individual scope and tasks from overall program scope	Documented project and program directives, tasks, and assignments	Scope statements for component projects are clearly articulated, linking component project to overall program scope; correspondence proves oversight and supervision of project manager creation of component project charters, WBS, tasks, resource allocation, and resource assignment
	Establishes resource assignment matrix (RAM) at initiation of program and maintains throughout	Published RAM	Documented, updated, and accepted RAM
	Conducts regular team meetings and briefs that engage each member in discussions on their activities; conducts one-on-one sessions as needed	Examples of active participation of each member to team activities	Meeting records (minutes or other documentation) include discussion of team member roles and responsibilities, feedback actively gathered from team members, actions taken to solicit buy-in or amend roles and responsibilities as applicable and in the best interest of the program
Maintains a positive attitude and effective relationships among team members	Resolves or facilitates resolution of conflicts within program team members and between projects as required; supports project managers and teams in meeting their goals/objectives	Examples of effective conflict resolution	Correspondence, meeting records and other documentation include reference to action taken to resolve conflict, issue log at program level, indicating issues and their resolution
	Routinely solicits feedback from team on team attitude and effectiveness; responds to identified issues and concerns	Documented feedback from team members demonstrating: <ul style="list-style-type: none"> • Respect for others by appealing to reason • Genuinely valuing input and expertise of others on the team • Willingness to learn from others 	Periodic performance reviews solicit 360-degree feedback from all team members feedback is analyzed to identify areas of strength and areas of improvement actions identified in writing and executed to bridge areas of development

Table X4-16. (continued)

Element: Builds and Maintains the Program Team			
Performance Criteria	Expectation	Sources of Evidence	Examples
	Understands importance of team rapport; creates and seeks opportunities that will facilitate collaboration within the team	Examples of team events to facilitate bonding and rapport within the team	Team-building events, constructive team recreation events, policies, and procedures encourage collaboration
	Actively seeks and finds opportunities to reward the team	Celebration of teamwork and achievements	Photographs of team events, posting of team achievements and individual achievements in newsletters, articles, or other media
Identifies, evaluates, and selects internal and external talent	Understands and documents current and future human resource needs of the program	Program resource requirements documentation	Resource loading, balancing, and allocation sheets are documented, accurate, periodically updated, and consider heuristics and realistic resource availability, allocation conflicts are resolved, tasks exist without resources loaded
	Builds a network of talent both from within and outside the program and organization to meet current and future human resource needs	Inventories of suitable team members identified from internal talent pool	Resource availability is documented and constantly updated, resource availability is negotiated with line managers, reflected in resource databases, and availability per resource is documented in a realistic manner
	Uses standard methods to determine program human resources needs; demonstrates ability to determine program needs and matches with human resource pool	Predefined selection criteria applied to resources acquisition	Resource requirements are identified and documented based on the skill sets and qualities required; resource availability reflects resources available to the organization, both internal and external; resource mapping reflects available resources (and lack thereof) to program requirements, gaps in resource availability
Promotes healthy work-life balance	Develops and promotes a culture and environment for a healthy work-life balance for team members while sustaining individuals' performance; routinely solicits feedback from team; responds to identified issues and concerns	<ul style="list-style-type: none"> • Documented feedback from program team members • Meeting notes documenting balance issues • Documented plan of action to achieve balance 	<ul style="list-style-type: none"> • Documented feedback from program team members • Meeting notes documenting balance issues • Documented plan of action to achieve balance
	Routinely surveys team to understand activities that are consuming too much time, alternate approaches, and suggestions to improve efficiency; provides feedback to team on input received	Examples of actions taken to improve job efficiency and productivity	Documented team survey results, documentation of what-if scenarios and examination of alternative approaches to daily tasks
Element: Plans and Manages for Program Success in an Organized Manner			
Performance Criteria	Expectation	Sources of Evidence	Examples
Works with others to clearly identify program scope, roles, expectations, and tasks specifications	Solicits feedback from team and stakeholders on the planning process' responds to identified issues and concerns	Documented feedback on level of involvement of others in the planning process	Clear documentation of program scope, proof of input from stakeholders including team members, users, customers, and other parties as applicable, clear specification of objectives; comprehensive work breakdown structures that are cascaded to the task level as applicable

APPENDIX X4 - PROGRAM MANAGER

Element: Plans and Manages for Program Success in an Organized Manner			
Performance Criteria	Expectation	Sources of Evidence	Examples
Applies organization or industry standards and generally accepted practices to the program	Establishes program governance and quality standards appropriate to program and in accordance with the program sponsor; utilizes PMO, industry, and/or corporate standards; solicits feedback from team, stakeholders, and SMEs on practices employed; responds to identified issues and concerns	Examples and feedback from program team, stakeholders and subject matter experts on following industry generally accepted practices	Evidence of research of applicable regulatory, organization, and industry standards, documented steps and procedures to achieve and meet such standards; standards are available and shared among team members; project and program quality assurance and quality control activities take standards into account and deliverables are measured against such standards; program and project activities include compliance to standards; feedback is captured and documented; action is taken and documented in the case of nonconformance
	Tailors corporate or PMO standards to meet or exceed stakeholder expectations	Proposed measures and improvements intended to achieve or exceed industry generally accepted practices	
	Develops program plan that draws upon PMI, industry, and corporate standards	Program plan that incorporates industry standards	Activities to assure and verify compliance to standards are included within program and project scope, and are assigned to resources, and monitored as part of program/project monitoring and control
Tailors generally accepted practices for successful completion of the program	Tailors corporate or PMO standards to meet or exceed stakeholder expectations; uses SMEs in the program, when relevant	Documented change of generally accepted practices	Activities to assure and verify compliance to standards are included within program and project scope, and are assigned to resources, and monitored as part of program/project monitoring and control
	Recommends tailoring of procedures based on program lessons learned and best practices	Approved changes to program management procedures to accommodate generally accepted practices	Documented feedback to stakeholders responsible for program and those responsible for setting organizational standards and policies based on program lessons learned
Organizes program information, emphasizing appropriate levels of detail	Methodologies align with PMI and/or PMO/corporate policy	Examples of standard methodologies used in program	Clearly articulated methodologies that reflect and uphold life cycles and management processes in PMI standards, management artifacts in standards are applied as relevant
	Captures or delegates capture of key program information; develops and utilizes database or document to capture	<ul style="list-style-type: none"> • Meeting minutes • Program/project status reports or updates • Repository for program/project artifacts • Examples of knowledge management 	Program information system includes artifacts that reflect program information, reality, action plans, corrective action and other information to a degree that supports and facilitates management and control
Insists on compliance with processes, procedures, and policies	Conducts audits and reviews of process, procedure, and policy compliance; establishes, updates, and utilizes key performance indicators; regularly reviews metrics with team	<ul style="list-style-type: none"> • Monitored compliance of processes, procedures, and policies • Examples of enforcing policies and procedures • Documented use of performance metrics to manage program and/or projects 	Documented compliance review plans, outcome of audits, corrective action, and assurance that corrective action has been conducted and completed effectively
	Reviews results of program audits and reviews with team and discusses deficiencies and opportunities for improvement	Examples of enforcing policies and procedures	Program information system includes artifacts that reflect program information, reality, action plans, corrective action, and other information to a degree that supports and facilitates management and control

Table X4-16. (continued)

Element: Resolves Conflict Involving Program Team or Stakeholders			
Performance Criteria	Expectation	Sources of Evidence	Examples
Documented compliance review plans, outcome of audits, corrective action, and assurance that corrective action has been conducted and completed effectively	Compliance/audit policies, processes, and procedures are established in accordance with the PMO or organizational standards at program initiation	Documented audit reports, compliance logs	Compliance plans are created and maintained, audits are conducted and documented
Ensures that the team and stakeholders are fully aware of team rules	Program policies, processes, and procedures are established in accordance with the PMO or organizational standards at program initiation	Documented team rules	Team rules are documented, circulated, and discussed; feedback on team rules is captured and analyzed; improvements/modifications to rules are made and documented as applicable in the best interest of the program; team rules reflect and are not in conflict with organization rules, policies, and procedures
Recognizes conflict	Resolves or facilitates the removal of conflict where it arises within the program; recognizes areas for potential conflict and seeks to minimize	Examples of conflict occurring within the program	Steps to identify and resolve conflict are proactively taken
	Routinely solicits feedback from team on conflict resolution; responds to identified issues and concerns	Team survey results	Evidence of surveys, survey results, analysis of results, decision taken based on survey results, and actions circulated accordingly
Resolves conflicts	Routinely solicits feedback from team on conflict resolution; responds to identified issues and concerns	<ul style="list-style-type: none"> Examples of conflict resolution techniques used Feedback from team and stakeholders on satisfactory resolution of conflict 	Issue log identifies issues and the resolution of such issues in a timely and effective fashion

X4.2.4 Cognitive Ability

Cognitive ability involves the application of an appropriate depth of perception, discernment, and judgment to effectively direct a program in a changing and evolving environment.

The elements for this unit are:

- Takes a holistic view of program,
- Effectively resolves issues and solves problems,
- Uses appropriate program management tools and techniques, and
- Seeks opportunities to improve program outcome.

Table X4-17. Cognitive Ability—Program Manager Personal Competence

Element: Takes a Holistic View of Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands program stakeholder needs, interests, and influence for success	Analyzes program stakeholders to develop appropriate strategies for communication and other change needs; develops a power influence grid	Stakeholder analysis	Documented stakeholder analysis, power/influence maps, heat maps, and engagement plans
	Develops communications, including meetings and reports based on stakeholder analysis and input; basis for communication plan properly documented in plans	Communication plan aligned with stakeholders' needs	Program communication plan captures all stakeholders and stakeholder groups
	Seeks input from stakeholders to ensure their needs and objectives are appropriately captured	Stakeholders' needs and objectives documented in program charter and plan	Documented evidence of dialogue with stakeholders and stakeholder groups
Understands how individual projects impact the program, and ultimately, the organizational environment	Considers program objectives and outcomes overall in analyzing specific project issues and identified options in determining appropriate action to take	Relates external events to program execution	Project deliverables and activities leading to the creation of those deliverables are clearly mapped to the program benefits realization plan, periodically monitored, and adjusted
	Able to understand and evaluate relations and impact of project-to-project and project-to-program	Documented impacts of individual projects on program and organizational environment	Interproject dependencies, issues, and risks are captured, monitored, and controlled at the program level
Understands both the formal and informal structure of organizations	Builds networks of influence across the stakeholders; routinely solicits feedback from stakeholders; addresses/responds to questions and concerns	Documented feedback from stakeholders on use of formal and informal organizational knowledge	Communication plan accommodates all stakeholder requirements; plan is executed and demonstrates feedback is solicited from stakeholders
Understands organizational politics	Builds networks of influence across the stakeholders; routinely solicits feedback from stakeholders; addresses/responds to questions/concerns	Documented feedback from stakeholders on ability to operate within organizational politics	Communication plan accommodates all stakeholder requirements; plan is executed and demonstrates feedback is solicited from stakeholders
Uses emotional intelligence to understand and explain others' past actions and current attitudes, and anticipate future behavior	Routinely solicits team on ability to understand and effectively interact with them; uses past experience and emotional intelligence to anticipate/diffuse situational behavior and provides guidance to individuals on team	<ul style="list-style-type: none"> • Documented feedback on capturing verbal and nonverbal cues of the team • Documented feedback from the team that the behaviors displayed are appropriate 	Communication plan accommodates all stakeholder requirements; plan is executed and demonstrates feedback is solicited from stakeholders
	Identifies personality and traits of key individuals in order to match persuasion and motivation techniques	Documented feedback that different persuasion and motivation techniques were applied appropriate to each individual	Communication plan accommodates all stakeholder requirements; plan is executed and demonstrates feedback is solicited from stakeholders
Element: Effectively Resolves Issues and Solves Problems			
Performance Criteria	Expectation	Sources of Evidence	Examples
Simplifies complexities for a complete and accurate analysis	Demonstrated ability to understand, depict, and explain program issues and project interdependencies	Visual representations of program issues and interdependencies (lists, diagrams, relationship maps, etc.)	Documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution
	Ability to evaluate and develop visual aids for addressing complex problems and to define clear steps for problem resolution	Analysis documents indicating use of techniques to break apart complex problems to find solutions	Documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution
Applies complex concepts or tools when needed	Involves SMEs, program team, and specific techniques where required and appropriate; maintains issue log for capturing problems, analyzes problem, and determines path to resolution	<ul style="list-style-type: none"> • Issue log that provides methods proposed for analysis of complex issues • Documented root cause analysis, program analysis, expert judgment, etc. • Documented analysis supporting issues resolution 	Documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution; issue log indicates the capture, analysis, assignment, and resolution of issues; all artifacts prove the engagement of SMEs
Applies lessons learned to resolve current program issues	Documents reviews and provides routine updates to lessons learned	Documentation of application of lessons learned to current program issues	Lessons learned log maintained and regularly updated, issue logs and meeting minutes indicate utilization of lessons learned logs

Table X4-17. (continued)

Element: Effectively Resolves Issues and Solves Problems			
Performance Criteria	Expectation	Sources of Evidence	Examples
Aggregates multiple related issues to understand the complete picture	Considers program objectives and overall outcomes in analyzing specific project/program issues and identified options in determining appropriate action to take; demonstrates program knowledge to identify related trends that link to specific issues	Summary reports or project/program scorecards outlining the relationships and linkages between issues	Issue logs capture issues, resolutions, and activities to resolve; documented analysis, including the use of visual analysis techniques to identify the root cause of issues and their resolution; issue log indicates the capture, analysis, assignment, and resolution of issues; all artifacts prove the engagement of SMEs
Observes discrepancies, trends, and interrelationships in project/program data	Regularly receives and reviews program data; ability to recognize and question inconsistent data; uses judgment to request validation of data when necessary; analyzes program metrics and takes action where required	<ul style="list-style-type: none"> • Requests for information validation or confirmation • Documented trend analysis 	Program monitoring includes review of progress data for component projects and operations work; aggregates data to assess impact on overall program performance; takes corrective action as necessary; program management information system includes records and artifacts of all the above
Element: Uses Appropriate Program Management Tools and Techniques			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands project, program, and portfolio management tools and techniques	Develops program management standards and processes consistent with the PMO; involves SMEs, team, and stakeholders during development where required and appropriate; reviews and updates as necessary	List of available tools and/or techniques	Certified in good standing by PMI; applies tools and techniques from PMI standards to the program and component projects when relevant
Selects appropriate tools and/or techniques	Defines set of tools and techniques to be used as part of program governance and process for selection	<ul style="list-style-type: none"> • List of selected tools and/or techniques • Documented selection process and results 	Applies tools and techniques from PMI standards to the program and component projects when relevant
Applies selected tools and/or techniques to program management	Regularly reviews and updates program documentation to capture program outcomes achieved	Outcomes achieved through use of tools and/or techniques	Applies tools and techniques from PMI standards to the program and component projects when relevant; artifacts, tools, and techniques are aligned with those applied at the program level
Element: Seeks Opportunities to Improve Program Outcome			
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides a framework to address opportunities and concerns	Establishes a framework to identify and address issues and improvement opportunities and empowers team to employ; utilizes input from team members to populate risk, opportunity, and issues tracking	<ul style="list-style-type: none"> • Lists of issues and associated opportunities or concerns distributed to all team members along with a clearly communicated update process • Maintains current issue log and communicates changes/additions in it to all stakeholders • Meeting notes where issues were addressed, documenting approaches and solutions identified • Comparison between actions proposed and results obtained 	Program Risk Management is applied in the context of positive risk (opportunity) and is not limited to adversity; opportunities are identified and captured in a log, likelihood and impact analyzed, and action plans identified in case of materialization of the opportunity; benefit/cost analysis, what-if scenarios, and other analyses are conducted for each opportunity; stakeholder/sponsor/client approval is obtained on case-by-case basis; action plans are executed upon materialization of the opportunity
Looks for opportunities to improve program value or execution	Establishes a framework to identify and address issues and improvement opportunities and empowers team to employ; utilizes input from team members to populate risk, opportunity, and issues tracking	<ul style="list-style-type: none"> • Risk register showing opportunities • Notes from group activities (e.g., brainstorming sessions, meetings) where new opportunities were identified • Documented suggestions in program or actions taken in a program related to the results obtained 	Program Risk Management is applied in the context of positive risk (opportunity) and is not limited to adversity; opportunities are identified and captured in a log, likelihood and impact analyzed, and action plans are identified in case of materialization of the opportunity; benefit/cost analysis, what-if scenarios, and other analyses are conducted for each opportunity; stakeholder/sponsor/client approval is obtained on case-by-case basis; action plans are executed upon materialization of the opportunity

Element: Effectively Resolves Issues and Solves Problems			
Performance Criteria	Expectation	Sources of Evidence	Examples
Seizes relevant opportunities as they emerge	Maintains documentation of actions taken to identify and recommend program improvements to the program sponsor	<ul style="list-style-type: none"> • Meeting notes where opportunities were analyzed • Entries in change control process • Examples of opportunities related to the moment they are presented throughout program life 	Program Risk Management is applied in the context of positive risk (opportunity) and is not limited to adversity; opportunities are identified and captured in a log, likelihood and impact analyzed, and action plans identified in case of materialization of the opportunity; benefit/cost analysis, what-if scenarios, and other analyses are conducted for each opportunity; stakeholder/sponsor/client approval is obtained on case-by-case basis; action plans are executed upon materialization of the opportunity
Consolidates opportunities and passes them to the organization	Maintains documentation of opportunities that may add value to the program; demonstrated ability to analyze opportunities and evidence of prioritizing and selecting those opportunities with the highest potential for identification to the organization	<ul style="list-style-type: none"> • Emails, meeting notes, and other communication artifacts regarding program opportunities • Documented proposals to clients or internal stakeholders indicating added value for pursuing identified opportunities • Number of opportunities identified and pursued 	Program Risk Management is applied in the context of positive risk (opportunity) and is not limited to adversity; opportunities are identified and captured in a log, likelihood and impact analyzed, and action plans identified in case of materialization of the opportunity; benefit/cost analysis, what-if scenarios, and other analyses are conducted for each opportunity; stakeholder/sponsor/client approval is obtained on case-by-case basis; action plans are executed upon materialization of the opportunity

X4.2.5 Effectiveness

Effectiveness involves the production of desired results by using appropriate resources, tools, and techniques in all program management activities.

The elements for this unit are:

- Resolves program problems,
- Maintains program stakeholder involvement, motivation, and support,
- Changes at the required pace to meet program needs, and
- Uses assertiveness when necessary.

Table X4-18. Effectiveness—Program Manager Personal Competence

Element: Resolves Program Problems			
Performance Criteria	Expectation	Sources of Evidence	Examples
Employs appropriate problem solving techniques	Issue log that documents resolution, demonstrates resolution is within program scope, and has criteria to evaluation solution	Issue log with resolution documentation	Issue logs capture issues, resolutions, and activities to resolve; documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution; issue log indicates the capture, analysis, assignment, and resolution of issues
	Routinely solicits feedback from stakeholders; feedback indicates agreement from stakeholders with techniques and tools used	<ul style="list-style-type: none"> • Documented feedback from stakeholders of problem-solving techniques • Documented use of proper knowledge management tools 	Documented feedback on possible alternative solutions to resolving issues; correspondence indicates acceptance, agreement, or consensus with proposed solutions from impacted stakeholders only.
Validates that proposed solutions resolve the problem and are within the program boundaries	Reviews the recommendations and analysis from the project managers, and accepts or amends recommendations with appropriate justification	Documented use of proper knowledge management tools	Documented correspondence (or records in issue logs) that indicate feedback disseminated on recommendations, whether with acceptance, justified decline, or amendments
	Issue log that documents resolution, demonstrates resolution is within program/project scope, and has criteria to evaluate solution	Issue log with resolution documentation	Issue logs include activities outlining steps taken to reach resolution, as well as final resolution of issues and demonstrated achievement of desired outcome
	Routinely solicits feedback from stakeholders on resolution of problems; feedback rarely requires program manager to resolve concerns/issues that problems were not solved	Documented feedback from stakeholders that problems were resolved	Engaging relevant stakeholders only; correspondence demonstrates the solicitation of feedback from stakeholders
Chooses solutions that maximize program benefit and minimize negative impacts	Routinely solicits feedback from stakeholders on resolution of problems; feedback rarely requires program manager to resolve concerns/issues that problems were not solved	Documented feedback from stakeholder stating the problems were resolved	Documented analysis of alternative solutions; analyses include cost/benefit, what-if scenarios, decision trees, and other means of alternatives assessment; alternative selected has been proven to be least costly, and of the highest yield of benefits; all calculations are based on realistic assumptions
	Evaluates program post-implementation of solution and determines impact internally on program and externally on other projects	<ul style="list-style-type: none"> • Documented impact of solution on program • Documented external and/or environmental impact of solution 	Documented analysis of alternative solutions; analyses include cost/benefit, what-if scenarios, decision trees, and other means of alternatives assessment; alternative selected has been proven to be least costly and of the highest yield of benefits; all calculations are based on realistic assumptions
Element: Maintains Program Stakeholder Involvement, Motivation, and Support			
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses stakeholder communication to maintain stakeholder motivation	Establishes regular forums for interaction with stakeholders, including various formal and informal media; routinely solicits feedback from stakeholders; responds to question and concerns	<ul style="list-style-type: none"> • Communication plan • Updates to stakeholder analysis • Documented feedback from stakeholders stating that they felt motivated 	Communication plan captures the requirements of all stakeholders and stakeholder groups; includes the clear setting of stakeholder expectations and provision of necessary reassurances and other requirements in a timely fashion; includes progress information as well as benefits realization tracking and solicitation of buy-in, building interest and motivation based on the end state

APPENDIX X4 - PROGRAM MANAGER

Element: Maintains Program Stakeholder Involvement, Motivation, and Support			
Performance Criteria	Expectation	Sources of Evidence	Examples
Constantly seeks opportunities to communicate program status and directions to meet the needs and expectations of stakeholders	Establishes regular forums for interaction with stakeholders, including various formal and informal media; routinely solicits feedback from stakeholders; responds to question and concerns; feedback indicates communications are acceptable and needs are being met	<ul style="list-style-type: none"> • Examples where the individual took an opportunity to communicate status • Documented feedback from stakeholders on how their needs were met 	Harnesses formal channels such as organization's newsletter, media, and other means as well as informal channels including but not limited to social media and other communication tools as available to enhance communicate with stakeholders
Includes experts in meetings and discussions to influence and obtain stakeholder support	Builds networks of influence across the stakeholders; includes SMEs where credibility is enhanced; documents in program record inclusion of SMEs to achieve issues consensus and support	<ul style="list-style-type: none"> • Examples of how consensus and support were achieved on different issues • Minutes from meetings where subject matter experts were invited for consultations with stakeholders 	Meeting minutes and other forms of recordkeeping include evidence of the engagement of stakeholders and subject matter experts
Uses objectivity for consensus building	Establishes a professional rapport with team and stakeholders built on trust and mutual respect; has record of making decisions based on facts and logic	Documented use of best practices for making team decisions	Workshop notes, meeting minutes, and other records of collaborative activities clearly demonstrate consensus building
	Establishes a professional rapport with team built on trust and mutual respect; has record of understanding of individual and team behavior to obtain optimal solution	Examples of influencing biased team members toward objective position	Correspondence with biased team members shows objectivity, demonstrates how program manager explained and demonstrated value to the organization and the individual biased team member of the programs outcome
Element: Changes at the Required Pace to Meet Program Needs			
Performance Criteria	Expectation	Sources of Evidence	Examples
Adapts to changes in the program environment to minimize adverse impacts	Routinely solicits feedback from stakeholders on adaptation to changes; responds to identified issues and concerns	Documented feedback from stakeholders stating that the program manager displayed a "can-do" attitude despite changes	Proactively identifies changes, responds positively to change requests, conducts due diligence and change impact analysis (or ensures it is rigorously conducted), approves changes that enhance program outcome and value, change log is populated and periodically updated
	Regularly assesses risks; reviews and documents mitigation activities in the risk register for their impact on minimization of adverse impacts	Documented risk mitigation activities	Risk register is compiled and constantly updated, severity analysis is conducted based on realistic assumptions, mitigation actions are clearly defined and incorporated in program and component plans, risk owners are assigned and triggers identified
Demonstrates flexibility toward changes that benefit the program	Embraces continual review, analysis, and change to support program outcomes; solicits input from team members to populate risk, opportunity, and issues; prioritizes and selects opportunities that can impact the program	<ul style="list-style-type: none"> • Risk registry updates identifying new opportunities • Documented opportunities analysis • Change requests 	Risk register is compiled and constantly updated; severity analysis is conducted based on realistic assumptions; mitigation actions are clearly defined and incorporated in program and component plans; risk owners are assigned and triggers identified; risks are prioritized
Takes positive actions to capitalize on opportunities or to resolve present problems	Embraces continual review, analysis, and change to support program outcomes; engages stakeholders in opportunity analysis	Documented feedback from stakeholders that the program manager demonstrated an action-oriented and proactive approach	Periodic review of program performance, could be phase gates or other form; incorporate review and feedback by multiple relevant stakeholders; issues, changes, and deficiencies are identified and acted upon
	Resolution of outstanding problems captured in program documentation for future reference and lessons learned	Examples where the program manager resolved outstanding problems	Issue logs captures issues, resolutions, and activities to resolve; documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution; issue log indicates the capture, analysis, assignment, and resolution of issues
	Actively promotes use of the program library resources to aid in addressing and adapting to changes	Program library with relevant documentation of technologies, techniques, or methods used during the program execution	Program library is comprehensive, coherent, and up to date; all artifacts and information therein are relevant and reliable

Table X4-18. (continued)

Element: Changes at the Required Pace to Meet Program Needs			
Performance Criteria	Expectation	Sources of Evidence	Examples
Enables a change-friendly environment by fostering continuous learning	Actively promotes team and personal development and recognizes development as part of the program culture; project managers are empowered (and performance is measured) against team and individual performance; works with functional managers or PMO to recommend personal development	Documented training recommendations for team members	Professional development plans are in place and are executed for team members; performance for all team members and project managers is measured, KPIs are set, and performance is analyzed against all such KPIs
	Individual team resource plans and projects allow for adequate time for development and investigations	Program schedule includes time for team members to study new solutions, situations, or technologies	Research, development, and investigations are clearly identified as tasks, incorporated into program and component project plans, and adequate time is allocated for such activities
	Actively promotes use of the program library resources to aide in addressing and adapting to changes	Program library with relevant documentation of new technologies, techniques, or methods used during the program execution	Program library is comprehensive, coherent, and up to date, and all artifacts and information therein are relevant and reliable; records, communication, correspondence and other artifacts indicate program manager's active enticement of team members to reference program library
Acts as a change agent	Routinely solicits feedback from stakeholders on change program; responds to identified issues and concerns	Documented feedback from stakeholders regarding changes initiated or facilitated by program manager	Proactively identifies changes, responds positively to change requests, conducts due diligence and change impact analysis (or ensures it is rigorously conducted), approves changes that enhance program outcome and value, change log is populated and periodically updated
	Routinely solicits feedback from stakeholders; feedback rarely requires response by program manager to issues and concerns	Documented feedback from stakeholders stating that the program manager demonstrated positive self-esteem and self-confidence	
Element: Uses Assertiveness When Necessary			
Performance Criteria	Expectation	Sources of Evidence	Examples
Takes initiative when required, assuming calculated risks to expedite program delivery	Routinely solicits stakeholders for feedback on program manager's initiative taking to drive program forward; responds to questions/concerns	Feedback from stakeholders confirms that the program manager took initiative when required	Program records indicate proactive decision making; confrontation of problems, issues, and challenges; and constant monitoring of risks and issues
	Maintains documentation of issues and resolutions that demonstrates timeliness	<ul style="list-style-type: none"> • Issue log with documented resolutions • Issue escalation reports showing timely decision path 	Issue log captures issues, resolutions, and activities to resolve; documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution; issue log indicates the capture, analysis, assignment, and resolution of issues
Prevents inconclusive discussion, makes a decision, and takes appropriate action	Routinely solicits team for feedback on ability to tactfully decline or redirect inconclusive suggestions for benefit of team and willingness to make concise decisions in interest of moving program forward; responds to questions/concerns	<ul style="list-style-type: none"> • Feedback from team on actions taken • Examples where the program manager declined a proposal without causing an argument and maintained cooperation • Examples where the program manager resolved a crisis by assessing the situation and offering decisive action 	Documented actions and proof of their execution on all issues and challenges that arise; all issues and actions have clear due and review dates, desired outcome is identified, and results are measured against desired outcome

Element: Changes at the Required Pace to Meet Program Needs			
Performance Criteria	Expectation	Sources of Evidence	Examples
Shows persistence and consistency in actions	Routinely solicits stakeholders' feedback on program manager's actions on issues so they are not left unresolved	Documented feedback from stakeholders stating that the program manager showed persistence and consistency	Correspondence and/or communication with stakeholders indicating the proactive solicitation of feedback and active consideration of negative feedback and attempts of taking corrective action
	Establishes regular forums to drive timely decisions on issues in order to meet stakeholders' needs	Meeting minutes, action item notes, or status reports showing decisions made	Follow-through can be established by analyzing consecutive meeting minutes, records, and communication indicative of persistence and rigor
	Ability to motivate at all program stages independent of climate	Examples of maintaining motivation when faced with challenges	Motivational activities are conducted; motivational presentations, speeches, and communications, highlighting benefits to the organization and to the individual team members
Makes timely decisions based on facts while managing ambiguity	Decisions are made and communicated in a timely fashion, based on information and appropriate analysis; risks and issues are not left unmanaged or ignored; issue log that demonstrates timeliness	<ul style="list-style-type: none"> Decision memoranda or decision analysis documents demonstrating factual analysis of issues and prompt decision making Issue log showing time from recording to resolution Issue escalation reports showing timely decision path 	Issue log captures issues, resolutions, and activities to resolve; documented analysis including the use of visual analysis techniques to identify the root cause of issues and their resolution; issue log indicates the capture, analysis, assignment, and resolution of issues

X4.2.6 Professionalism

Conforms to an ethical behavior governed by responsibility, respect, fairness, and honesty in the practice of program management.

The elements for this unit are:

- Demonstrates commitment to the program,
- Operates with integrity,
- Handles personal and team adversity in a suitable manner,
- Manages a diverse workforce, and
- Resolves individual and organizational issues with objectivity.

Table X4-19. Professionalism—Program Manager Personal Competence

Element: Demonstrates Commitment to the Program			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands and actively supports the program's and organization's mission and goals	Uses business analysis skills to define program and project goals that are based on corporate mission and goals; identifies program improvements to the program sponsor	<ul style="list-style-type: none"> Documented alignment of program goals and objective with organization's missions and strategy Examples of defined program activities that support organizational goals 	Program business case indicates how its goals, outcomes, benefits, and results will serve program mission and goals; includes means and criteria for measurement; program benefits monitoring and realization plans clearly demonstrate linkage and extent of contribution to program mission, goals, and value
	Demonstrated ability to steer team in direction of organization even in the face of differing personal preference	Examples where support was given when program goals differed from personal preferences	Program documentation includes proof of corrective action taken, when necessary, to maintain program alignment with program and program goals, benefits, and value
Cooperates with all stakeholders to achieve program objectives	Establishes a professional rapport with stakeholders built on trust and mutual respect; demonstrated ability to set common goals that help align team, client, and management	Examples of specific cooperative efforts to achieve program objectives	Clearly articulated and executed stakeholder management plan demonstrates the engagement of most stakeholders and stakeholder groups, clear communication, and setting of expectations and targets; all communication is truthful and accurately resembles reality
	Demonstrated ability to develop team with adequate support and direction through relevant stages of life cycle to a high-performing team	Examples where team-building techniques were used to foster cooperation	Team-building activities and events, constructive recreation activities, team mentoring, and feedback sessions conducted collectively and on individual basis
Makes sacrifices where necessary to move program forward	Demonstrated ability to separate personal gain from overall program gain; makes well-considered and evaluated sacrifices on one project for greater good of program	Examples of prior options taken for effective program execution while giving personal benefits a lower priority	Benefit/cost analysis, risk analysis, and what-if scenarios are conducted to analyze alternatives; decisions are made based on results of analysis and not mere opinion
	Demonstrated ability to put aside setbacks while continuing to drive to a positive overall outcome	Examples where the program manager demonstrated positive attitude while dealing with program challenges	Communication and correspondence at times of adversity demonstrate positive attitude, team motivation, and attempts to resolve, surmount, and confront challenges
Element: Plans and Manages for Program Success in an Organized Manner			
Performance Criteria	Expectation	Sources of Evidence	Examples
Works with others to clearly identify program scope, roles, expectations, and task specifications	Develops and maintains a process to create project proposals with clearly identified scope, roles, and expectations through key stakeholders' involvement	Solicited and unsolicited feedback	Documented feedback on level of involvement of others in the planning process
Applies organization or industry standards and generally accepted practices to the program	Develops and maintains policies and procedures for program/project review, prioritization, and approval following organizational standards and industry best practices	Communicates on the standards to be observed as part of program practices	Examples and feedback from program team, stakeholders, and subject matter experts on following industry generally accepted practices
	Adopts and adapts industry best practices into organizational processes and procedures; participates in PMI events (e.g., seminars, congresses) and utilizes PMI's online forums (e.g., ProjectManagement.com)		Proposed measures and improvements intended to achieve or exceed industry generally accepted practices
	Develops a formal program management strategy and maintains it through continuous improvement efforts		Program plan that incorporates industry standards

APPENDIX X4 - PROGRAM MANAGER

Element: Plans and Manages for Program Success in an Organized Manner			
Performance Criteria	Expectation	Sources of Evidence	Examples
Tailors generally accepted practices for success of the program	Creates and maintains a well-defined methodology, including formal review process for continuous improvement	Communicates on the practices to be observed as part of determining program success	Documented change of generally accepted practices
	Develops a formal review process to identify areas of improvement to enable programs/projects to succeed		Approved changes to program/project management procedures to accommodate generally accepted practices
Organizes information, emphasizing appropriate levels of detail	Ensures program and project methodologies in place allow tailoring for various types of initiatives	Leads discussions/presentations on information	Examples of standard methodologies used in programs/projects
	Provides the process and templates for formally documenting and archiving of minutes of meeting		Meeting minutes
	Establishes process and templates for periodic status reporting by programs and projects and compiling these into program reports		Program/project status reports or updates
	Maintains a clearly identified, controlled, and secured repository for all programs and projects		Repository for program/project artifacts
	Provides and maintains a lessons learned database and identifies lessons learned surveys as part of the methodology		Examples of knowledge management
Insists on compliance with processes, procedures, and policies	Gate reviews and audits process are established at the program level and customized for type of initiative; ensures reviews are performed on a regular basis	Monitored compliance of processes, procedures, and policies	Logs updated and maintained according to organization's standards
	Identifies areas of improvements through gate and audit reviews and communicates these learnings to all appropriate stakeholders for implementation	Supports and demonstrates ongoing compliance	Examples of enforcing policies and procedures
	Creates and maintains appropriate KPIs that align programs and projects to organization's strategic plans and goals	Communicates about appropriate metrics	Documented use of performance metrics to manage projects
Element: Resolves Conflict Involving Program Team or Stakeholders			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures that the team and stakeholders are fully aware of team rules	Develops and maintains organizational policies, standards, and guidelines for conflict resolution and escalation process; performs periodic review of guidelines to ensure these represent the best practices	Team communications about team rules	Documented team rules
Recognizes and resolves conflict	Conducts feedback at program level to identify major sources of conflict among programs and projects	Solicited and unsolicited feedback	Team survey results
	Facilitates conflict resolution among team members and stakeholders of various programs and projects using multiple techniques	Active conflict resolution within the team	Examples of conflict resolution techniques used
	Collects post-resolution feedback to confirm that conflicts were resolved in the best possible way	Solicited and unsolicited feedback	Feedback from team and stakeholders on satisfactory resolution of conflict

X4.3 Units of Portfolio Manager Performance Competence

X4.3.1 Portfolio Strategic Management

Portfolio Strategic Management includes the processes to develop the portfolio strategic plan, the portfolio charter, and the portfolio roadmap, and to assess and manage the alignment of these three deliverables to the organizational strategy and objectives. In addition, Portfolio Strategic Management involves managing, monitoring, and responding to ongoing changes in organizational strategy and in portfolio components to determine appropriate actions. Actions may include a modification to strategy and goals or changes to the portfolio itself.

The elements for this unit are:

- Develop portfolio strategic plan,
- Develop portfolio charter,
- Define portfolio roadmap, and
- Manage strategic change.

Table X4-20. Portfolio Strategic Management—Portfolio Manager Performance Competence

Element: Develop Portfolio Strategic Plan			
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop a portfolio plan based on the inventory of work and aligned with the organizational strategy and objectives	Understands organizational strategy and objectives and aligns the inventory of work to them	Portfolio strategic plan and organizational strategy and objectives	A well-formatted, comprehensive portfolio plan that is aligned with the organizational strategy and objectives
Element: Develop Portfolio Charter			
Performance Criteria	Expectation	Sources of Evidence	Examples
Define the portfolio components and overall structure, based on organizational strategy and priorities and grouping portfolio components to facilitate effective management	Leads development of relevant sections of portfolio charter	Portfolio charter	A clearly articulated and signed portfolio charter
Element: Define Portfolio Roadmap			
Performance Criteria	Expectation	Sources of Evidence	Examples
Analyze portfolio components to determine dependencies and priorities, and document the resulting plan	Understands the overall business well enough to define, document, and obtain consensus on component dependencies, executing the schedule for this strategic plan and recognizing dependencies among components to best reduce conflicts and eliminate gaps	Portfolio roadmap	A roadmap that is aggregated with the aligned project and program schedules and milestones
Element: Manage Strategic Change			
Performance Criteria	Expectation	Sources of Evidence	Examples
Assess the impact of changes in organizational strategy and adjust the portfolio resources and/or component mix accordingly	Reviews and evaluates change requests; leads discussion related to, and disposition of, change requests; assesses the impact of approved change requests on portfolio plans, documents, and deliverables, and makes corresponding modifications to the reports	Change requests, portfolio plans, minutes of portfolio oversight meetings	Change registers that reflect current change requests and evidence in the minutes that acknowledge comprehension and adjustment to changes

X4.3.2 Portfolio Governance Management

Portfolio Governance Management includes portfolio oversight and how to plan for, define, optimize, and authorize the portfolio in support of overall governance body decision-making activities. Portfolio Governance Management ensures that investment analysis is done to identify opportunities and threats; to assess changes, dependencies, and impact; to select, prioritize, and schedule activities to fund; and to achieve performance targets.

The elements for this unit are:

- Develop portfolio management plan,
- Define portfolio,
- Optimize portfolio,
- Define governance structure,
- Authorize portfolio, and
- Provide portfolio oversight.

Table X4-21. Portfolio Governance Management—Portfolio Manager Performance Competence

Element: Develop Portfolio Management Plan			
Performance Criteria	Expectation	Sources of Evidence	Examples
Define structure of the portfolio management plan; oversee and contribute to the definition of these subsections of the plan	Leads development of subsections of portfolio management plan	The various subsections that constitute the portfolio management plan	A comprehensive outline that includes all relevant subsections articulated and documented
Integrate subsections into a single comprehensive and consistent document	Leads integration of the subsections into the overall portfolio management plan	The fully cross-referenced and integrated portfolio management plan	A single, integrated document consisting of all subsections
Element: Define Portfolio			
Performance Criteria	Expectation	Sources of Evidence	Examples
Identify, categorize, score, and rank portfolio components to create a comprehensive and up-to-date component list	Understands the overall business well enough to work with portfolio governance to define, document, and obtain consensus on component prioritization	Component list including projects, programs and operational work	A prioritized list of component categories and a list of prioritized portfolio components within each category; updates to the portfolio roadmap and portfolio management plan corresponding to this new prioritization
Element: Optimize Portfolio			
Performance Criteria	Expectation	Sources of Evidence	Examples
Create the component mix with the greatest potential to support the organizational strategy, maximizing portfolio return within the organization's risk profile and as constrained by organizational capabilities and capacities	Understands the overall business well enough to work with portfolio governance to develop, propose, negotiate, and achieve consensus on the optimal mix of portfolio components	Portfolio roadmap, portfolio management plan, and process assets and artifacts	A rebalanced structure of portfolio components resulting in updates to the portfolio roadmap, portfolio management plan, and other portfolio process assets and artifacts

Table X4-21. (continued)

Element: Define Governance Structure			
Performance Criteria	Expectation	Sources of Evidence	Examples
Clearly define the roles and responsibilities of, and the process for interaction between, the governance board and portfolio manager	Portfolio governance plan	Ensure that the portfolio defines a governance model that will facilitate alignment of portfolio deliverables with the organizational strategy	Portfolio manager should be seen as the governance champion within the organization, constructive alignment of the portfolio (including constituents programs and projects) within the organization's strategy, goals, aims, and objectives; portfolio manager should be championing the strategic project management tools, techniques, and processes to facilitate the portfolio success
Review requests to initiate, transition, and close components	Component change requests and their disposition	Activate selected portfolio components by allocating resources to develop component proposals or to execute portfolio components	Clear authority of portfolio changes and communicating the likelihood impact (cost, benefit and risk) of these changes to stakeholders, synchronization, and constructive alignment, realignment (to integrate approved changes) of the portfolio components within the organization's strategy
Element: Authorize Portfolio			
Performance Criteria	Expectation	Sources of Evidence	Examples
Authorize selected portfolio component proposal development or execution; allocate resources to authorized portfolio components	Understands the overall business well enough to work with portfolio governance to discuss and evaluate which components will be allowed to proceed and when to proceed	Program and project charters and portfolio documents	Documented and signed component initiation authorizations including charters, change registers, and related meeting minutes
Communicate these changes and decisions related to portfolio authorizations to portfolio stakeholders	Able to communicate complex ideas and analyzes into a form readily understood by all levels of the organization	Related stakeholder communications	Emails, memos, and meeting minutes reflecting communication to stakeholders concerning changes
Element: Provide Portfolio Oversight			
Performance Criteria	Expectation	Sources of Evidence	Examples
Monitor the execution of the portfolio to ensure alignment with organizational strategy and objectives	Evaluates component execution in the context of organizational strategy and objectives	Meeting minutes, emails, and other memos	Emails, memos, and meeting minutes reflecting communication to stakeholders concerning changes
Make governance decisions related to portfolio performance, portfolio proposals and changes, and availability of resources	Makes recommendations accordingly for component changes or closure/cancellation; communicates these recommendations and resulting actions to interested stakeholders	Portfolio component status reports, proposals, and change requests, including documentation of resulting decisions related to these components	Portfolio component status reports, proposals, and change requests, including documentation of resulting decisions related to these components
Ensure staffing and resources are managed at the program and project levels	Effectively supports the staffing of programs and projects in the portfolio	Meeting minutes, emails, and other memos	Support project managers to get required resources based on project charter and plans

X4.3.3 Portfolio Performance Management

Portfolio Performance Management is the systematic planning, measurement, and monitoring of the portfolio’s organizational value through achievement against strategic goals. In addition, Portfolio Performance Management manages the sourcing of key resources such as finance, assets, and human resources to ensure optimal returns.

The elements for this unit are:

- Develop portfolio performance management plan,
- Manage supply and demand,
- Manage portfolio value,
- Manage issue resolution and portfolio change,
- Review portfolio performance,
- Ensure portfolio conformance to organizational standards, and
- Manage portfolio information.

Table X4-22. Portfolio Performance Management—Portfolio Manager Performance Competence

Element: Develop Portfolio Performance Management Plan			
Performance Criteria	Expectation	Sources of Evidence	Examples
Define and document methodology for measuring and analyzing component progress against component goals	Understands the complexities of measuring and reporting on component status	Portfolio management plan with updates	Updates to the portfolio performance management section of the portfolio management plan
Define and document approach to managing resource utilization	Understands the complexities of measuring and reporting on resource needs and optimal utilization	Portfolio management plan with updates	Updates to the portfolio performance management section of the portfolio management plan
Define and document mechanism for calculating and reporting organizational value and benefits	Understands the complexities of measuring and reporting on organizational value and benefits	Portfolio management plan with updates	Updates to the portfolio performance management section of the portfolio management plan
Define and document how stakeholders will be evaluated for their informational needs, and as a result, how they will be reported	Understands the needs of the various categories of stakeholders and can develop an appropriate level of reporting for each category	Portfolio management plan with updates	Updates to the portfolio performance management section of the portfolio management plan
Element: Manage Supply and Demand			
Performance Criteria	Expectation	Sources of Evidence	Examples
Balance the resource capacity of the organization (i.e., supply) against the resources assigned or requested by the executing components and the components submitting proposals to kick-off (i.e., demand)	Understands the complexities of measuring and reporting on organizational value and the benefits of components versus the resources needed to complete the deliverables and obtain the business benefits	Portfolio resource management plan	Updates to resource allocations and other portfolio documents affected by resource allocations

Table X4-22. (continued)

Element: Manage Portfolio Value			
Performance Criteria	Expectation	Sources of Evidence	Examples
Develop and reach consensus on the definition of portfolio value	Understands the complexities of the business well enough to facilitate and contribute to the analysis of defining portfolio value within the organization	Portfolio budgets, key performance management registers, and other documents referencing value	Definition of portfolio value; definition of the method of evaluating portfolio value in order to deliver the maximum value aligned with organizational strategic objectives and within the organization's risk tolerance
Manage the portfolio to deliver the maximum value aligned with organizational strategic objectives and within the organization's risk tolerance	Informs stakeholders of the approved change and resulting impact	Portfolio budgets, key performance management registers, and other documents referencing value	Updates to portfolio documents and portfolio or portfolio component change requests associated with this analysis of maximized portfolio value
Element: Manage issue Resolution and Portfolio Change			
Performance Criteria	Expectation	Sources of Evidence	Examples
Review program-level cross-component issues and serious component-level issues requiring senior management attention; make appropriate changes in portfolio plans	Ensure that the portfolio defines a change management process that enables the portfolio manager to respond to significant changes in the organization's environment	Change requests and their disposition	Portfolio manager should be engaged and involved in the change management process; changes at the project and program level should be fed back to the portfolio to ensure sustainable changes are in place; change process has to be visible with clear owners for operational consistency; cost benefit of the portfolio is maintained or enhanced, risk-free or low-risk portfolio capability, and availability of resources; SMART resources management from portfolio level
Element: Review Portfolio Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Receive, review, and react to reports on portfolio performance	Monitor the portfolio to ensure alignment with organizational strategy and authorize changes in response to portfolio performance, change requests, and/or resource availability	Portfolio performance reports and meeting minutes, emails, or other reactions by the governance board to these reports; change requests due to these performance reports and their disposition	Portfolio manager to consistently review the portfolio performance and produce visible portfolio level reports on the organization's information and knowledge repository; portfolio manager is also responsible to source, allocate, and reallocate resources within the portfolio's components as appropriate for approved changes; effective economies of scale management
Element: Ensure Portfolio Conformance to Organizational Standards			
Performance Criteria	Expectation	Sources of Evidence	Examples
Assess both the performance and viability of the portfolio in the context of current organizational standards and objectives	Provide portfolio oversight, monitor the portfolio to ensure alignment with organizational strategy, and authorize changes in response to portfolio performance, change requests, and/or resource availability	Portfolio performance reports and meeting minutes, emails, or other reactions by the governance board to these reports; change requests due to these performance reports and their disposition	Portfolio manager is responsible for the overall oversight and gaps in the portfolio and should identify tangible and visible measure to be in compliance with the organization's standards and objectives; portfolio manager should be visibly seen (standing out constantly) as the champion of organization's governance, policies, and procedures

Table X4-23. Portfolio Communication Management—Portfolio Manager Performance Competence

Element: Develop Portfolio Communication Management Plan			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establish guidelines outlining the overall approach to managing communications within the portfolio	Develops and documents the portfolio communication management plan	Portfolio management plan section pertaining to communications or a stand-alone program communications plan	A well-articulated communications plan that provides clear and concise guidelines for communicating with stakeholders; this plan will specify medium, frequency, and level of detail to specific stakeholders
Element: Manage Portfolio Information			
Performance Criteria	Expectation	Sources of Evidence	Examples
Manage portfolio information including the collection, analysis, storage, and delivery of portfolio information to stakeholders according to their requirements in a timely manner	Disseminate portfolio progress and information	Portfolio performance reports; portfolio information management system	Evidence of organized repository of all program-related communication artifacts that include status reports and other communications with key stakeholders
Ensure alignment of the project and program communications	Ensure consistent and targeted communication	Portfolio management plan section dealing with communications	Evidence of organized repository of all program-related communication artifacts that include status reports and other communications with key stakeholders

X4.3.4 Portfolio Communication Management

Portfolio Communication Management includes developing the portfolio communication management plan and managing portfolio information.

The elements for this unit are:

- Develop portfolio communication management plan, and
- Manage portfolio information.

X4.3.5 Portfolio Risk Management

Portfolio risk management covers management of uncertain events or conditions that, if they occur, have a positive or negative effect on one or more project objectives.

The elements for this unit are:

- Develop portfolio risk management plan, and
- Manage portfolio risks.

Table X4-24. Portfolio Risk Management—Portfolio Manager Performance Competence

Element: Develop Portfolio Risk Management Plan			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establish and document the policies and procedures relating to project and program risks, including risk process and governance	Establish and document the policies and procedures relating to portfolio risks	Portfolio management plan section dealing with portfolio risks, including portfolio risk register	Develop and create policies and procedures that sustainably and visibly measure the cost, risk, and benefit; portfolio risk profiling organization to wide strategy, expectations, and requirements
Element: Manage Portfolio Risks			
Performance Criteria	Expectation	Sources of Evidence	Examples
Evaluate portfolio risk effectiveness	Monitor the status of portfolio risks, implement portfolio risk response plans, and evaluate portfolio risk process effectiveness	<ul style="list-style-type: none"> • Risk register • Portfolio documents 	Change requests due to risk responses with documentation supporting the decisions; associated updates to portfolio document

X4.3.6 Portfolio Stakeholder Management

Portfolio Stakeholder Management analyses and addresses impact and communication of the portfolio regarding its stakeholders who may affect, be affected by, or perceive themselves to be affected by a decision, activity, or outcome of the portfolio.

The elements for this unit are:

- Identify stakeholders,
- Plan stakeholder management,
- Manage stakeholder engagement,
- Control stakeholder engagement,
- Manage issue resolution and portfolio change,
- Review portfolio performance, and
- Ensure portfolio conformance to organizational standards.

Table X4-25. Portfolio Stakeholder Management—Portfolio Manager Performance Competence

Element: Identify Stakeholders			
Performance Criteria	Expectation	Sources of Evidence	Examples
Comprehensive list of stakeholders identified	Comprehensive list of portfolio stakeholders identified	Stakeholder register	Portfolio manager should ensure critical stakeholders are engaged from onset and participating in the mission critical approval processes and stage-gate reviews
Stakeholder contact information gathered	Portfolio stakeholder contact information gathered	Stakeholder directory	Portfolio manager should be able to connect to and communicate with relevant stakeholders should there be a need to recalibrate or reprioritize changes in the portfolio with up-to-date contact information; any potential gaps, deviations, or changes should be communicated on regular basis to ensure a well-informed portfolio team that is in compliance and governance within the organization-wide policies and procedures
Stakeholder organizational charts created	Portfolio stakeholder organizational charts created	Stakeholder organization chart	Portfolio team that has clear roles and responsibilities, focal points, and liaison teams; effectively establishing a well informed and well-communicated portfolio team
Stakeholder high-level analysis	Portfolio stakeholder high-level analysis	Interest versus influence maps	Portfolio manager needs to clearly understand the rules of engagement when managing stakeholders, e.g., what will work and what will not work within the organization; prioritization and calibration of the programs and projects within the portfolio
Element: Plan Stakeholder Management			
Performance Criteria	Expectation	Sources of Evidence	Examples
Guidelines created outlining the overall approach to managing stakeholders	Guidelines created outlining the overall approach to managing portfolio stakeholders	Stakeholder management plan	Portfolio team should engage with program and project team when there are critical bottlenecks; strategic stakeholders require close attention and management to ensure a collective response and action plan for sustainable stakeholder management practices; this will ensure sustainable stakeholders, commitment and priorities in the programs and projects
Stakeholder needs assessment	Perform or ensure the performance of a portfolio stakeholder needs assessment	Stakeholder categorization; stakeholder needs assessment	Portfolio manager needs to assess and appraise critical and strategic stakeholders needs and wants and ensure the portfolio (including the constituent programs and projects) performance is consistent and meeting the organization's strategy, key performance indicators, and success criteria
Stakeholder responsibilities determined	Portfolio stakeholder responsibilities determined	Responsibility assignment matrix	Cross-component roles and responsibilities within the portfolio's program and projects are proactively identified to ensure portfolio team's efficiency and any gaps; duplication in roles and responsibilities are eliminated; achieving economies of scale and a lean and sustainable portfolio team in terms of resourcing and operational consistency
Plan for meetings and reviews	Plan for meetings and reviews with portfolio stakeholders	Stakeholder calendar	Review meetings with clear agendas, action plans, follow-ups, reporting of any gaps and deviations within the portfolio are communicated; visible and meaningful reviews; reviews are comprehensive

Table X4-25. (continued)

Element: Manage Stakeholder Engagement			
Performance Criteria	Expectation	Sources of Evidence	Examples
Stakeholder management plan executed	Stakeholder management plan executed	Stakeholder plan progress reports	Portfolio manager needs to understand the rules of engagement of each stakeholder; what will work and what will not work within the organization's boundaries, policies, procedures, governance, and compliance requirements; ensuring ongoing commitment and priorities of stakeholders for maintaining portfolio level progress, operations, and resourcing; portfolio is achieving the stated tangible and intangible benefits and value
Meetings conducted	Meetings conducted with portfolio stakeholders	Meeting minutes	Meetings with clear agendas, action plans, follow-ups, reporting of any gaps and deviations within the portfolio are communicated; visible and meaningful reviews; reviews should be comprehensive to manage stakeholders' expectations
Action items determined and assigned	Action items determined and assigned	Action item list	Action plans and follow-ups with clear owners and reporting lines; issues, problems, and challenges in the portfolio are identified swiftly and managed effectively
Stakeholder change requests	Portfolio stakeholder change requests	Change management process and log	Portfolio manager is responsible for the change management process integrity; establishing effective changes for continuous improvement in portfolio performance; portfolio-level change log is sustainable operationally and from resources perspective to ensure the portfolio is retaining its benefit and value
Element: Control Stakeholder Engagement			
Performance Criteria	Expectation	Sources of Evidence	Examples
Responses and countermeasures developed in response to gaps between progress and stakeholder management plan	Responses and countermeasures developed in response to gaps between progress and portfolio stakeholder management plan	Progress reports	Portfolio manager is responsible to ensure overall stakeholder expectations, requirements, needs, and wants are effectively and efficiently managed; responses and countermeasures are communicated to the stakeholders to ensure high-quality, cost- and time-efficient portfolio; continuous engagement and involvement from portfolio manager is critical to the portfolio development and oversight on the portfolio health check
Review meetings	Review meetings	Meeting minutes	Meeting minutes
Proactive announcements of issues (i.e., problems, schedule slippages)	Proactive announcements of issues to portfolio stakeholders (i.e., problems, schedule slippages)	Announcement documentation	Portfolio health check (performance) is rigorously monitored; ensures due diligence, governance, and compliance to policies and procedures when there are potential issues, problems, and challenges

Element: Manage Issue Resolution and Portfolio Change			
Performance Criteria	Expectation	Sources of Evidence	Examples
Review program-level cross-component issues and serious component-level issues requiring senior management attention; make appropriate changes in portfolio plans	Ensure that the portfolio defines a change management process that enables the portfolio manager to respond to significant changes in the organization's environment	Change requests and their disposition	Portfolio manager should be engaged and involved in the change management process; changes at the project and program level should be fed back to the portfolio to ensure sustainable changes are in place; change process has to be visible with clear owners for operational consistency; cost benefit of the portfolio is maintained or enhanced, risk-free or low-risk portfolio capability, and availability of resources; uses SMART resources management from portfolio level
Element: Review Portfolio Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Receive, review, and react to reports on portfolio performance	Monitor the portfolio to ensure alignment with organizational strategy and authorize changes in response to portfolio performance, change requests, and/or resource availability	Portfolio performance reports and meeting minutes, emails, or other reactions by the governance board to these reports; change requests due to these performance reports and their disposition	Portfolio manager to consistently review the portfolio performance and produce visible portfolio-level reports on the organization's information and knowledge repository; portfolio manager is also responsible to source, allocate, and reallocate resources within the portfolio's components as appropriate for approved changes; effective economies of scale management
Element: Ensure Portfolio Conformance to Organizational Standards			
Performance Criteria	Expectation	Sources of Evidence	Examples
Assess both the performance and viability of the portfolio in the context of current organizational standards and objectives	Provide portfolio oversight; monitor the portfolio to ensure alignment with organizational strategy; authorize changes in response to portfolio performance, change requests, and/or resource availability	Portfolio performance reports and meeting minutes, emails, or other reactions by the governance board to these reports; change requests due to these performance reports and their disposition	Portfolio manager is responsible for the overall oversight and gaps in the portfolio and identify tangible and visible measure to be in compliance with the organization's standards and objectives; portfolio manager should be visibly seen (standing out constantly) as the champion of organization's governance, policies, and procedures

X4.4 Units of Portfolio Manager Personal Competence

X4.4.1 Communicating

The elements of competence for communicating are:

- Actively listens, understands, and responds to stakeholders,
- Maintains lines of communication,
- Ensures quality of information, and
- Tailors communication to audience.

Table X4-26. Communicating—Portfolio Manager Personal Competence

Element: Actively Listens, Understands, and Responds to Stakeholders			
Performance Criteria	Expectation	Sources of Evidence	Examples
Actively listens	Portfolio manager is an active listener, shows empathy toward others, and communicates appropriately to the situation	Survey results from stakeholders and team members; documented observations from communication; documented feedback on empathy and understanding toward others, point of view	Portfolio manager should be able to balance priorities of stakeholders to remain in compliance with organization level strategy, goals, aims, and objectives; remains enthusiastic, passionate, and compassionate of their needs and wants to ensure sustainable portfolio performance and its components deliverables, e.g., prioritizing resources over constituent programs and project components
Understands explicit and implicit content of communications	Understands confidential, restricted, and open communications and engages accordingly	Documented observations from communication	Portfolio manager should be able to demonstrate trustworthiness and at all times understand, apply, and remain in compliance with the organization's data protection act (including portfolio information)
	Follows up with stakeholders after communicating to ensure message understood	Documented confirmation that messages were received and understood	Meaningful engagement with stakeholders of portfolio documentation and information with appropriate communication modes and channels
Responds to and acts upon expectations, concerns, and issues	Maintains a portfolio-level log to ensure each issue and concern is properly followed up with stakeholders; all guidance and recommendations are fully documented	Documented responses to issues important to others (i.e., issue log)	Portfolio log is effectively managed; accomplished visible configuration management process for any changes, issues, reviews (initial and detailed), further reviews, and updates
	Establishes a change management process for projects and programs and ensures that the process is followed	Change requests	Ability to use and apply constructively a portfolio change management process and configuration management process and remain in compliance; all portfolio changes are effectively communicated and revised through visible configuration management process
	Performs stakeholder and customer satisfaction survey outside of projects and programs to identify strengths and weaknesses as well as issues and concerns	Survey results from stakeholders	Facilitating and moderating the feedback and feed forward of the portfolio performance, gaps, issues, and challenges including alternative way forward to stakeholders
Element: Maintains Lines of Communication			
Performance Criteria	Expectation	Sources of Evidence	Examples
Engages stakeholders proactively	Champions effective stakeholder engagement	Documents confirmation that stakeholder's needs have been met proactively	Champion of the stakeholders' rule of engagement and involvement including managing expectations tangibly and meaningfully
Disseminates information effectively	Establishes process and templates identifying various types of communications and how to best conduct those; uses multiple ways of communications in the defined process	Documentation that the communication was effective through conversation, surveys, notes, presentations, or observations	Expertise of range of informal and formal communication instruments, processes, tools, and techniques; multiple use of communication methods to engage, persuade, convince, and influence stakeholders
	Establishes communication management plan as an essential part of project and program planning and reviews performance in gate reviews and audits	Documentation of relevant and timely communication shared with appropriate stakeholders	Owner of the portfolio-level communication plan and portfolio stage gate reviewer; able to make appropriate changes, reviews, and updates with the communication approaches, processes, and methods as change occurs in the portfolio progress and performance

APPENDIX X4 - PROGRAM MANAGER

Element: Maintains Lines of Communication			
Performance Criteria	Expectation	Sources of Evidence	Examples
Maintains formal and informal communication	Documents all formal communications including meetings, workshops, sessions, and briefings	Minutes from planned and unplanned meetings, brainstorming sessions, etc.	Proactively manages all relevant portfolio data and information for ease of cross-referencing when sequencing, prioritizing, and balancing the portfolio components
	Distributes documented minutes of meetings to the appropriate audiences	Correspondence	Managing portfolio stakeholders' expectations and requirements for portfolio documentation and information
	Follows up with all meeting participants for review and confirmation of meeting minutes and notes	Notes and follow-ups from discussions	Moderating and facilitating meeting feedback and feed forward for appropriate onward and clear action plans and owners
	Develops and leads delivery of communication approaches	Documented feedback on availability to stakeholders	Capability to use and apply various communication methods, tools, and techniques in formal and informal environments
Element: Ensures Quality of Information			
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses appropriate information sources	Accesses multiple sources to collect needed information to make informed decisions from internal and external experts and organizations	Documentation of sources and analysis	Capability to source authoritative, convincing, influential, and credible data sets and information to analyze and develop the organization's portfolio, supported with evidence-based appraisal for decision making
	Critically analyzes, interprets, and reports data and information to inform decision making and provide advice	Documented feedback on the sources	Mentor and coach the portfolio component team members for high-value portfolio and its components
Provides accurate and factual information	Rarely needs to correct any communication that has occurred confirming that accurate information was acquired	Documents showing that factual information is provided	Evidence of credibility and trustworthiness of the portfolio manager, right and accurate portfolio information and data sets are provided throughout the portfolio life cycle
	Stakeholders confirm that they receive accurate information from the portfolio manager; decisions are made based on information provided; validity of information is rarely disputed	Documented feedback on the accuracy of the information	Portfolio manager to work on the right, correct, and accurate data sets and information; gap analysis is robust, fewer changes, fewer reviews (reappraisal) and fewer referrals, e.g., to the oversight committee
Seeks validation of information	Validates information collected from multiple sources to confirm its accuracy; such sources may include individuals, reports, and other documents available internally and externally	Documentation of input from subject matter experts (e.g., interest groups, professional bodies)	Capability to source authoritative, convincing, influential, and credible datasets and information to analyze and develop the organization's portfolio supported with evidence-based appraisal for decision making; changes and reviews are further validated with effective configuration management process
	Follows up with all meeting participants for review and confirmation of meeting minutes and notes	Meeting minutes	Moderates and facilitates meeting feedback and feed forward for appropriate onward and clear action plans and owners

Table X4-26. (continued)

Element: Tailors Communication to Audience			
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides relevant information	Implements effective communication methods and advises others on their use	Documented feedback from recipient confirming information relevance	Able to mentor and coach portfolio team members on range of communication methods, tools, techniques, and instruments to communicate portfolio data sets and information; moderates and facilitates portfolio dashboards and internal organization's knowledge repositories
	Able to present on a wide variety of topics and to different levels of audience with ease; uses various presentation skills effectively to capture audience attention and deliver the message	Demonstrated strong presentation skills	Displays presentation etiquette, maneuvers and navigates critical and strategic portfolio data sets and information, communicating confidently and ensuring portfolio team is on the same page; removes all possible perceptions of uncertainty in the organization's portfolio, providing credible, trustworthy, and justifiable data sets and information when showcasing the portfolio components and investments
Uses suitable communication method for the audience	Establishes and maintains stakeholder analysis-related process, models, and templates for use by projects and programs	Preferred communication methods identified in stakeholders' analysis	Understands clearly the rules of stakeholders' engagement, priorities, interest, and power of the portfolio and its components; able to use, populate, and apply constructively portfolio management tools, templates, techniques, and instruments
	Rarely requires stakeholder analysis to be redone because of ineffectiveness of original analysis	Notes from meetings demonstrating suitability of method selection	Successful facilitation and moderation of the stakeholders' expectations, needs, and wants; fewer changes, fewer reconfigurations, and fewer reviews of the stakeholder analysis as their expectations, needs, and wants have been effectively and correctly captured and there is no need of continuous appraisal; communication of all aspects of the portfolio has been successful as stakeholders are on the same page and each understands the expected level of commitments and work required to meet the portfolio and its component requirements
	Identifies, engages, and responds to stakeholder needs; solicits feedback	Feedback from stakeholders regarding suitability of method selection	Regular moderation, facilitation forums (both formal and informal), and engaging with stakeholders for feedback and subsequent feed forward for continuous improvement; able to take on constructive criticism for portfolio enhancement; motivates and mentors portfolio team members
Aligns communication with environment or setting	Develops and maintains templates and guidelines for formal and informal communication with internal and external stakeholders; such templates may include presentations, meeting minutes, project status reports, standard emails, etc.	Documented feedback on sensitivity to others' specific communication needs and context-appropriate use of formal, informal verbal, nonverbal, and para-lingual components, minutes from team meetings or presentations, examples of various choices of location, time, participants, and privacy settings	Understanding and expertise in range of formal and informal communication methods, tools, techniques, and instruments; able to use and apply any organization-wide portfolio templates to ensure sustainable and meaningful communication practices; coaching and mentoring the portfolio team on the use of various portfolio communication tools to ensure information is pitched to the right level and audience within the organization; portfolio manager should have access to the organization's communication assets to ensure successful portfolio management

X4.4.2 Leading

The elements of competence for leading are:

- Creates a team environment that promotes high performance,
- Builds and maintains effective relationships,
- Motivates and mentors portfolio team members,
- Takes accountability for delivering the portfolio, and
- Uses influencing skills when required.

Table X4-27. Leading—Portfolio Manager Personal Competence

Element: Creates a Team Environment That Promotes High Performance			
Performance Criteria	Expectation	Sources of Evidence	Examples
Expresses positive expectations of team	Sets expectations; influences and persuades others' professional development	Verbal and written expectation setting for the team	Documented feedback from team on: <ul style="list-style-type: none"> • Recognizing abilities of team members • Supporting decision making • Setting positive expectations
Promotes team learning and advocates professional and personal development	Establishes individual development plans with direct resources and reviews regularly with individuals	Individual development plans	Development plans maintained and updated according to organizational standards
	Sets up annual learning and development budget for portfolio resources; identifies learning and development needs based on portfolio priorities	Funding for development	Documented support for securing and disbursing funding for individual development
	Solicits feedback from team; responds to identified questions and concerns	Solicited and unsolicited feedback	Documented feedback from portfolio team
	Maintains a skills inventory of portfolio resources and regularly updates when new skills acquired	Documentation of new skills gained by the team members	Skills inventory updated and maintained according to organizational standards
Encourages teamwork consistently	Promotes teamwork culture over individual contributions and encourages members to seek help and guidance when needed; shares feedback from stakeholders and senior management about team's work and accomplishments	Examples of creative actions taken to encourage teamwork; respect for different opinions and personalities	Action plans, with clear task assignments, documented and maintained according to organizational standards
	Recognizes team members' strengths and development areas; assigns area of responsibility including stretch assignments	Solicited and unsolicited feedback	Documented feedback on acknowledgment of unique skills and abilities
	Engages team leads in development and communication of portfolio goal	Identified responsibilities of team leaders in giving clear, consistent goals	Responsibility matrix updated and maintained according to organizational standards
Demands and models high performance	Establishes and maintains criteria that recognizes high performance matched with recognition and reward	Clear standards for performance and quality	Documented standards for individual performance and quality, maintained according to organizational standards
	Sets expectations for self-performance to standards; seeks feedback from team and stakeholders; maintains transparency in addressing concerns and areas for development	Solicited and unsolicited feedback, expectation setting sessions with the team	Documented results of portfolio manager performing to standards; documented feedback that the portfolio manager is acting as a role model
	Documents team commitments, regularly reviews in team meetings, and follows up to completion	Examples of holding team members accountable for their commitments	Commitments log or document updated and maintained according to organizational standards

Table X4-27. (continued)

Element: Builds and Maintains Effective Relationships			
Performance Criteria	Expectation	Sources of Evidence	Examples
Confines relationships to work-related matters appropriate to the portfolio and local culture	Promotes a culture of open business communication appropriate to the organizational culture; helps establish formal communication channels between senior leaders and project and program managers	Solicited and unsolicited feedback from stakeholders	Documented feedback from team and stakeholders that portfolio manager maintains formal working relationship with stakeholders
	Maintains and updates guidelines for conducting meetings with internal and external stakeholders at various levels of the organization	Guidelines on team interactions	Documented guidelines for formal and informal discussion, maintained according to organizational standards
Creates an environment that encourages openness, respect, and consideration of stakeholders	Uses communications to drive portfolio management practices; solicits stakeholder feedback; seeks issue resolution	Solicited and unsolicited feedback from stakeholders	Documented feedback from stakeholders on openness of issues analysis and resolution
	Uses communications to drive portfolio management practices; regularly communicates and demonstrates availability for stakeholders	Portfolio manager maintains open-door policy and is approachable at all times	Documented feedback from stakeholders on policy
	Seeks stakeholder feedback; self-reflects on appropriateness and effectiveness of actions; maintains transparency in addressing concerns and areas for development	Examples of sensitivity and genuine interest in feelings and values of others	Documented feedback from stakeholders on expressions of interest in feelings and values
	Program manager's decisions are made based on facts and demonstrate fairness	Clear decision-making process and policy	Documented evidence of fair and fact-based decisions
Element: Motivates and Mentors Portfolio Team Members			
Performance Criteria	Expectation	Sources of Evidence	Examples
Establishes and communicates to the team the portfolio vision, mission statement, and strategic value	Periodically addresses portfolio team on directional, motivational, and educational topics in order to disseminate understanding of organizational vision, mission, and strategic plans and links these to portfolio priorities	Portfolio vision and mission statement, strategic value statement about the portfolio	Examples of presentations with clear focus on vision, mission, and strategic value; examples of rallying support behind the strategy and sharing the strategy with team members
	Routinely solicits feedback from team; responds to concerns/issues	Solicited and unsolicited feedback from stakeholders	Documented feedback from team regarding awareness of portfolio's strategic value
Rewards performance according to organization guidelines	Establishes and maintains performance review, recognition, and reward program; establishes link between performance and reward	Rewards and recognition program	Documented rewards and recognition records updated with actual results and maintained according to organizational standards
	Establishes performance expectations and guidelines with program and project managers	Clear performance guidelines, communicated to the team	Examples of plans for success of team members
	Incorporates various recognition methods for varying levels of accomplishments	Assures credit is given to the individual	Examples of celebrating individual accomplishments on a frequent basis
Establishes mentoring relationships for team members' development	Promotes a culture of mentoring and coaching and encourages senior team members to coach juniors; adds contribution to knowledge sharing and coaching as a criterion in performance evaluation	Mentorship program guidelines, communicated to team	Examples of mentoring relationships
	Portfolio manager is recognized as someone who provides valuable and meaningful mentorship experiences	Examples of being sought out as a mentor for others	Documentation on mentor/mentee relationships

APPENDIX X4 - PROGRAM MANAGER

Element: Motivates and Mentors Portfolio Team Members			
Performance Criteria	Expectation	Sources of Evidence	Examples
	Seeks feedback from mentees; self-reflects on appropriateness and effectiveness of actions; utilizes feedback to improve for future mentoring activities	Documented feedback on mentoring activities	Documented feedback on mentoring activities
	Reviews individual performance with portfolio team members; uses development plan reviews as opportunity to also highlight successes and progress of individual's development	Examples of progress on individual development plan	Documented individual development plans, updated and maintained according to organizational standards
Element: Takes Accountability for Delivering the Portfolio			
Performance Criteria	Expectation	Sources of Evidence	Examples
Demonstrates ownership of, accountability for, and commitment to the portfolio	Performs regular reviews of projects and programs under the portfolio; communicates with sponsors and senior management stakeholders to get input	Examples of active involvement with all stakeholders and portfolio team members	Activity log demonstrating involvement with the team and other stakeholders
	Identifies major risks and issues faced by the portfolio and advises relevant project and program managers on possible resolutions	Examples of quickly addressing possible portfolio hindrances, delays, or risks	Risk log showing timeliness of response and clear ownership of tasks, updated and maintained according to organizational standards
	Provides regular updates to senior management on the overall performance, risks, and issues of the portfolio	Demonstrated ownership of portfolio issues	Reports or meeting notes where the portfolio manager takes responsibility for mishaps
	Demonstrates active ownership and responsibility for portfolio's fiscal health; monitors all investments into projects and programs	Examples of taking ownership for adverse outcomes	Examples of taking ownership for adverse outcomes
Aligns personal activities and priorities toward increasing likelihood of achieving portfolio goals	Establishes and manages prioritization process and criteria for projects and programs	Communication on prioritization on portfolio goals	Documented priority planning
	Maintains portfolio-level action items and task list to ensure proper control	Use of action lists in meetings and conversations with team members	Lists of prioritized action items, updated and maintained according to organizational standards
	Conducts the project prioritization and selection meetings; participates in key projects and programs meetings	Team meetings	Examples of active event management, event log, updated and maintained according to organizational standards
Supports and promotes team's actions and decisions	Conducts regular meetings with portfolio team and project and/or program managers to provide feedback from reviews and audits	Solicited and unsolicited feedback	Documented feedback from portfolio team members that portfolio manager acts assertively on their behalf
	Provides support to program and project managers on executed decisions; serves as ambassador, influencing senior management and stakeholders on appropriateness of decisions, as needed	Active support of all team members	Meeting notes reflecting portfolio manager's support for team's actions and decisions
	Conducts regular meetings with project and/or program managers to monitor ongoing activities and maintain awareness of overall program and project statuses	Keeps abreast of portfolio team activities and maintains accountability for delivery of work	Meeting logs and meeting minutes, maintained according organizational standards
	Provides rationale to senior management for decisions made by portfolio, program, and project teams in different circumstances	Takes a stand in front of higher authorities to support team's actions	Issue log, including resolution of items where interaction with senior management is documented

Table X4-27. (continued)

Element: Uses Influencing Skills When Required			
Performance Criteria	Expectation	Sources of Evidence	Examples
Applies appropriate influencing technique to each stakeholder	Understands various ways of influencing and applies those effectively to influence senior management, sponsors, program manager, and project managers to deliver project portfolio with maximum success	Observation by stakeholders	Examples of different styles on different occasions; document describing alternative approaches used to influence
	Facilitates senior management stakeholders to come to a decision that brings the best outcome for portfolio	Examples of strong facilitation and negotiation skills	Documented feedback from stakeholders
	Enhances portfolio resources' skills through training, coaching, and knowledge sharing; addresses the major weaknesses observed in the resources	Examples of the ability to educate the team	Training material, training plan, training calendar
Uses experts or third parties to persuade others	Accesses internal and external resources at top to middle levels and advises	Examples of using projects/programs to access expert resources to bring about positive outcomes positional power of others to influence	Documented feedback from stakeholders
	Relies on expert knowledge in establishing and enhancing methodology and providing support to projects and programs	Examples of using a third party's knowledge power to influence	Documented feedback from stakeholders
	Acquires information and facts using various methods in order to convince senior management to gain positive support for the portfolio	Examples of networking and gathering support for the portfolio while not manipulating for personal gain	Documented feedback from stakeholders

X4.4.3 Managing

The elements of personal competence for managing are:

- Builds and maintains the portfolio team,
- Plans and manages for portfolio success in an organized manner, and
- Resolves conflict involving portfolio team or stakeholders.

Table X4-28. Managing—Portfolio Manager Personal Competence

Element: Builds and Maintains the Portfolio Team			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures expectations and responsibilities are clear to team members and they understand their importance to the portfolio	Routinely solicits feedback from team on roles and responsibilities; clarifies ambiguities; documents portfolio goals and responsibilities and widely communicates; conducts regular team meetings, briefs, reviews, and one-on-one sessions	Observations by stakeholders	Documented feedback from portfolio team on clarity of roles and responsibilities
	Provides and maintains guides and templates for effective and efficient communication while taking into account the culture of the organization	Team guides and templates, appropriate training material, a training plan	Presentation, training material, documented feedback from team
	Establishes and maintains responsibility assignment matrix, work breakdown structure, and schedule templates to help clearly assign responsibility to team members by programs and projects	Communication on assignments, project planning documents	Documented portfolio directives, tasks, and assignments; published resource assignment matrix
	Ensures that optimum resource loading is achieved by programs and projects by monitoring through gate reviews and audits	Team activities against project and portfolio plans	Examples of active participation of each member to team activities
Maintains a positive attitude and effective relationships among team members	Observes conflict resolution within programs and projects; assists program and project managers, as necessary, with the goal of achieving the best possible outcome for the portfolio	Work to manage conflict, assist team members to do the same	Documented examples of effective conflict resolution, correlation between resolution and optimal outcome for the portfolio
	Observes coordination among projects and programs; manages organizational politics surrounding the portfolio	Solicited and unsolicited feedback from team members	Documented feedback from team members demonstrating respect for others by appealing to reason; genuinely valuing input and expertise of others on the team; willingness to learn from others
	Understands importance of team rapport; creates and seeks opportunities that facilitate collaboration within the team	Plans and leads team events designed to create rapport and collaboration	Examples of team events to facilitate bonding and rapport within the team
	Develops and maintains recognition and reward process and templates for use by programs and projects	Celebration of teamwork and achievements	Documented rewards and recognition for team members
Identifies, evaluates, and selects internal and external talent	Maintains resource allocation, acquisition process, and templates for use by programs and projects	Project and program resource requirements documentation	Job descriptions, interview notes
	Develops and maintains a database of internal resources and their capabilities	Inventories of suitable team members identified from internal talent pool	Documented pipeline of candidates for open positions
	Matches internal resources against projects and programs; verifies external resource requirements of programs and projects	Predefined selection criteria applied to acquisition of resources	Job descriptions, selection criteria for positions
Promotes healthy work-life balance	Develops and promotes a culture and environment for a healthy work-life balance for team members while sustaining individuals' performance; routinely solicits feedback from team; responds to identified issues and concerns	Solicited and unsolicited feedback	Documented feedback from portfolio team members
	Reviews resource usage of projects and programs under portfolio	Communication on the need for balance and how to achieve it	Meeting notes documenting balance issues
	Develops project proposal writing guide that provides process for estimating realistic resource requirements	Communication on the need for balance and how to achieve it	Documented plan of action to achieve balance
	Confirms the project proposal time and cost requirements are realistic considering resource productivity levels	Communication to the team on resourcing	Examples of actions taken to improve job efficiency and productivity

Table X4-28. (continued)

Element: Plans and Manages for Portfolio Success in an Organized Manner			
Performance Criteria	Expectation	Sources of Evidence	Examples
Works with others to clearly identify portfolio scope, roles, expectations, and tasks specifications	Develops and maintains a process to create project proposals with clearly identified scope, roles, and expectations through key stakeholders' involvement	Solicited and unsolicited feedback	Documented feedback on level of involvement of others in the planning process
Applies organization or industry standards and generally accepted practices to the portfolio	Develops and maintains policies and procedures for program/project review, prioritization, and approval following organizational standards and industry best practices	Communicates on the standards to be observed as part of portfolio practices	Examples and feedback from portfolio team, stakeholders, and subject matter experts on following industry generally accepted practices
	Adopts and adapts industry best practices into organizational processes and procedures; participates in PMI events (e.g., seminars, congresses) and utilizes PMI's online forums (e.g., ProjectManagement.com)	Proposed measures and improvements intended to achieve or exceed industry generally accepted practices	Proposed measures and improvements intended to achieve or exceed industry generally accepted practices
	Develops a formal portfolio management strategy and maintains it through continuous improvement efforts	Portfolio plan that incorporates industry standards	Portfolio plan that incorporates industry standards
Tailors generally accepted practices for success of the portfolio	Creates and maintains a well-defined methodology including formal review process for continuous improvement	Communicates on the practices to be observed as part of determining portfolio success	Documented change of generally accepted practices
	Develops a formal review process to identify areas of improvement to enable programs/projects to succeed	Approved changes to program/project management procedures to accommodate generally accepted practices	Approved changes to program/project management procedures to accommodate generally accepted practices
Organizes information, emphasizing appropriate levels of detail	Ensures program and project methodologies in place allow tailoring for various types of initiatives	Leads discussions/presentations on information	Examples of standard methodologies used in programs/projects
	Provides the process and templates for formally documenting and archiving of minutes of meeting	Meeting minutes	Meeting minutes
	Establishes process and templates for periodic status reporting by programs and projects and compiling these into portfolio reports	Program/project status reports or updates	Program/project status reports or updates
	Maintains a clearly identified, controlled, and secured repository for all programs and projects	Repository for program/project artifacts	Repository for program/project artifacts
	Provides and maintains a lessons learned database and identifies lessons learned surveys as part of the methodology	Examples of knowledge management	Examples of knowledge management
Insists on compliance with processes, procedures, and policies	Gate reviews and audits process are established at the portfolio level and customized for type of initiative; ensures reviews are performed on a regular basis	Monitored compliance of processes, procedures, and policies	Logs, updated and maintained according to organizational standards
	Identifies areas of improvements through gate and audit reviews and communicates these learnings to all appropriate stakeholders for implementation	Supports and demonstrates ongoing compliance	Examples of enforcing policies and procedures
	Creates and maintains appropriate KPIs that align programs and projects to organization's strategic plans and goals	Communicates about appropriate metrics	Documented use of performance metrics to manage projects

Element: Resolves Conflict Involving Portfolio Team or Stakeholders			
Performance Criteria	Expectation	Sources of Evidence	Examples
Ensures that the team and stakeholders are fully aware of team rules	Develops and maintains organizational policies, standards, and guidelines for conflict resolution and escalation process; performs periodic review of guidelines to ensure these represent the best practices	Team communications about team rules	Documented team rules
Recognizes and resolves conflict	Conducts feedback at portfolio level to identify major sources of conflict among programs and projects	Solicited and unsolicited feedback	Team survey results
	Facilitates conflict resolution among team members and stakeholders of various programs and projects using multiple techniques	Active conflict resolution within the team	Examples of conflict resolution techniques used
	Collects post-resolution feedback to confirm that conflicts were resolved in the best possible way	Solicited and unsolicited feedback	Feedback from team and stakeholder on satisfactory resolution of conflict

X4.4.4 Cognitive Ability

The elements of personal competence for cognitive ability are:

- Takes a holistic view of the portfolio,
- Effectively resolves issues and solves problems,
- Uses appropriate portfolio management tools and techniques, and
- Seeks opportunities to improve portfolio outcome.

Table X4-29. Cognitive Ability—Portfolio Manager Personal Competence

Element: Takes a Holistic View of the Portfolio			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands portfolio stakeholder needs, interests, and influence for success	Analyzes portfolio stakeholders to understand and balance their interest, influence, and risk tolerance in relation to the portfolio investment	Stakeholder analysis	Portfolio manager needs to continuously appraise the risk appetite of critical and strategic stakeholders; able to drive the portfolio team constructively and make meaningful, tangible, and visible decisions for an effective and sustainable portfolio
	Acts as the primary conduit between managers of portfolio components and portfolio stakeholders	Communication plan aligned with stakeholders' needs	Portfolio manager should be able to drive and steer the portfolio team's strength and capitalize effectively, communicating regularly and be seen as critical organization-level strategic change agent, implementing organization's critical strategic changes through portfolio components
	Seeks input from stakeholders to ensure their needs and objectives are appropriately captured	Stakeholders' needs and objectives documented in portfolio strategic plan and portfolio charter	Clear owner and advocate of the portfolio charter and constantly engaging and involving the portfolio team and component's stakeholders
Understands how individual projects and programs impact the portfolio plan and ultimately the organizational environment	Has ability to determine strategic alignment with new or changing organizational strategy and objectives	Related external events included in portfolio plan	Portfolio manager should develop the capability to undertake frequent reality check between the internal and external environment, continuously appraising and reappraising the organization's strategic goals and objectives, fitness for purpose, and competitive advantage enhancement through portfolio components
	Balances the portfolio needs against other organizational priorities and explanations	Documentation of impacts on the organizational environment	Portfolio manager needs to continuously assure and reassure the needs and priorities are pitched at the right level and constantly to the internal and external environment for competitive advantage and operations sustainability through portfolio components (programs and projects)
Understands both the formal and informal structure of organizations	Builds networks of influence across the stakeholders identifying the appropriate mix of communication media for the stakeholder and contributor interest and influence	Documented feedback from stakeholders on use of formal and informal organizational knowledge	Portfolio manager should develop the networking capability to be able to influence, persuade, and convince stakeholders appropriately for high-quality portfolio deliverables, cost- and time-efficient portfolio.
Understands organizational politics	Understands organizational structure and has ability to effectively navigate corporate structure to support portfolio; uses organizational process assets and enterprise environmental factors as guiding inputs to the portfolio structure and communications matrix	Documented feedback from stakeholders on ability to operate within organizational politics	Portfolio manager should be able to navigate, mix, and match organizational political harmony with all the relevant portfolio stakeholders' expectations and requirements; clear characteristics of the portfolio structure should be established to ensure portfolio components progress and performance continuity, including scarce resources management
Uses emotional intelligence to understand and explain others' past actions and current attitudes, and to anticipate future behavior	Uses past experience and emotional intelligence to anticipate/diffuse situational behaviors and potential conflicts within and between stakeholder and portfolio delivery communities	Documented feedback on capturing verbal and nonverbal cues of the team; documented feedback from the team that the behaviors displayed are appropriate	Portfolio manager should be developing knowledge, skills, and competences to be a critical and strategic emotional manager; portfolio manager needs to know and apply appropriately emotional intelligence with potentially difficult and challenging portfolio stakeholders and deliverables
	Identifies personality and traits of key individuals in order to match persuasion and motivation techniques	Documented feedback that different persuasion and motivation techniques were applied appropriate to each individual	Portfolio manager needs to understand the rules of stakeholder engagement, strength, boundaries, constraints, priorities, and what will and will not work within the portfolio environment

APPENDIX X4 - PROGRAM MANAGER

Element: Effectively Resolves Issues and Solves Problems			
Performance Criteria	Expectation	Sources of Evidence	Examples
Simplifies complexities for a complete and accurate analysis	Simplifies complexities for a complete and accurate analysis	Visual representations of portfolio issues and interdependencies (lists, diagrams, relationship maps, etc.)	Portfolio manager should have the ability to shape the portfolio successfully within the organization's requirements and capability to rationalize and justify quantitatively and qualitatively the portfolio selection, cost-risk-benefit balancing, resourcing dependencies, portfolio level critical path, and portfolio components prioritization
	Ability to identify problem impacts and resolution priority within the portfolio	Analysis documents indicating use of techniques to break apart complex problems to find solutions	Decompose portfolio issues, problems, and challenge including detailed impact analysis and allocate clear owners for quick turnaround resolution
Applies complex concepts or tools when needed	Expertise in the identification of the appropriate tool or process for each problem type encountered	Issue log that provides methods proposed for analysis of complex issue and documented analysis supporting issues resolution	Expertise in usage and application of portfolio tools, techniques, and instruments to appraise and reappraise complex portfolio issues and problems, e.g., scarce resources availability and management, shuffling resources between the portfolio components including similar suppliers in multiple components in the portfolio and organization wide
	Engages subject matter experts (SME) as required to aid in analysis	Documented root cause analysis, portfolio analysis, expert judgment etc.	Capability to produce, populate, and deliver visible portfolio-level dashboards; central information and knowledge repository owner for portfolio reviews, updates, and changes; portfolio-level stage gate reviewer, and internal peer reviewer of portfolio-level deliverables and documentations that will feed in the program- and project-level team performance appraisal
Applies lessons learned to resolve current portfolio issues	Applies lessons learned to value management framework updating the portfolio management plan	Documentation of application of lessons learned to current portfolio issues	Portfolio lessons learned owner and initiator benchmarking previous and current practice; ensuring constructive engagement of the portfolio team to populate and produce the lessons learned; identifying effective portfolio level lessons learned sessions and production; facilitating with senior management team for a productive lessons learned development and progression; ensuring current portfolio issues and problems could be drawn upon from this lessons learned for continuous improvement and a meaningful way forward for an efficient and effective portfolio
Aggregates multiple related issues to understand the complete picture	Considers portfolio objectives and outcomes overall in analyzing specific issues and identified options in determining appropriate action to take	Summary reports or project/program scorecards outlining the relationships and linkages between issues	Portfolio health check with meaningful and measurable score cards (established organization-wide key performance indicators and success criteria); balanced scorecards that will integrate portfolio, program, and project performance based on the agreed criteria
Observes discrepancies, trends, and interrelationships in project/program data	Leverages quantitative and qualitative analysis to identify and act upon trends identified	Requests for information validation or confirmation	Portfolio oversights and gaps analysis; verification and validation of the quantitative and qualitative assessment of the portfolio with supporting evidences
	Able to use trend information in developing risk mitigation responses	Documented trend analysis	Portfolio documentation that provides appropriate structure and mechanisms to pull out information and communicate swiftly any potential risk and trigger relevant mitigation strategies and responses; clear owner of the portfolio level risk to ensure no impact to the organization's competitive advantage

Table X4-29. (continued)

Element: Uses Appropriate Portfolio Management Tools and Techniques			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands portfolio, program, and project management tools and techniques	Knowledge of corporate and industry standard techniques such as capability and capacity management, scenario analysis, and cost-benefit analysis	List of available tools and/or techniques	Portfolio-level dashboards, capital budgeting instruments, techniques and tools, portfolio modeling, simulation and optimization, portfolio cost-benefit risk assessment, gap analysis, critical resources planning, scheduling and management, internal portfolio information and knowledge repository management
Selects appropriate tools and/or techniques	Defines set of tools and techniques to be used as part of portfolio governance and process for selection; ability to select most appropriate methods for type and scale of portfolio	List of selected tools and/or techniques and documented selection process and results	Capability to manage multiple portfolios, programs, and projects with strategic portfolio management tools and techniques
Applies selected tools and/or techniques to portfolio management	Regularly reviews and updates portfolio documentation to capture portfolio outcomes achieved	Outcomes achieved through use of tools and/or techniques	Portfolio documentation oversights and gap analysis, constant reviews to ensure cost-benefit-risk assessment of the portfolio remains visible, viable and feasible
Element: Seeks Opportunities to Improve Portfolio Outcome			
Performance Criteria	Expectation	Sources of Evidence	Examples
Provides a framework to address opportunities and concerns	Leads opportunity/risk assessments within portfolio risk management	Lists of issues and associated opportunities or concerns distributed to all team members along with a clearly communicated update process	Clear owner of the portfolio risk; facilitate, engage, and involve all portfolio stakeholders in communicating tangible and intangible opportunities and threats from risk; calculated portfolio level risk
	Provides a framework to address opportunities and concerns	Maintains current issue log and communicates changes/additions to all stakeholders	Establishes clear support mechanisms to ensure portfolio-level risk and the impact to the broader organization structures and competitive advantage are effectively communicated, visibility of portfolio risk management
	Establishes a framework to identify and address issues and improvement opportunities and empowers team to employ	Meeting notes where issues were addressed documenting approaches and solutions identified	Portfolio continuous improvement through effective and continuous engagement of the portfolio team, clear ownership, team working, and ability to delegate portfolio packages
	Tracks accuracy or compliance of resulting solution	Comparison between actions proposed and results obtained	Monitor rigorously the portfolio's compliance to organization's policies, procedures, and governance
Looks for opportunities to improve portfolio value or execution	Establishes a framework to identify and address issues and improvement opportunities and empowers team to employ	Risk register showing opportunities	Delegates portfolio packages to appropriate portfolio team; assigns ownership of the risk, seizes opportunities, and capitalizes on threats
	Identifies, assesses, and analyzes opportunities as an integral part of strategic alignment and risk analysis	Notes from group activities (e.g., brainstorming sessions, meetings) where new opportunities were identified	Constantly monitors the benefit and value achievability of the portfolio and alignment with the overall organization's strategy, goals, aims, and objectives
	Continually maintains portfolio value in the portfolio management plan	Documented suggestions in portfolio or actions taken in a portfolio related to the results obtained	Enhances the portfolio benefit and value through alternative approaches and methods, ensuring competitive advantage and organization's sustainability

Element: Seeks Opportunities to Improve Portfolio Outcome			
Performance Criteria	Expectation	Sources of Evidence	Examples
Seizes relevant opportunities as they emerge	Uses accepted elicitation techniques such as value scoring models to capture and qualify opportunities throughout the portfolio life	Meeting notes where opportunities were analyzed, entries in change control process, examples of opportunities related to the moment they are presented throughout portfolio life	Portfolio life cycle management, including oversights, gaps, and stage gate reviews with tangible and measurable portfolio health check balanced scorecards (cost-benefit-risk), portfolio life cycle maturity
Consolidates opportunities and passes them to the organization	Builds opportunity reporting into portfolio risk management and governance reporting processes	Emails, meeting notes, and other communication artifacts regarding portfolio opportunities	Portfolio value-based optimization throughout the portfolio life cycle
	Uses outputs from value and risk management to promote opportunities; leverages with stakeholders to adjust portfolio scope	Documented proposals to clients or internal stakeholders indicating added value for pursuing identified opportunities	Portfolio scoping, alignment (portfolio freeze), realignment, resources calibration and recalibration to identify potential opportunities to leverage throughout the portfolio life cycle for competitive advantage
	Demonstrated ability to analyze opportunities and evidence of prioritizing and selecting those opportunities with the highest potential for identification to the organization	Number of opportunities identified and pursued	Usage and application of prioritization tools and techniques; capability to rationalize and justify portfolio components selection, evidencing selection criteria, maturity level of the selection criteria (constantly reviewing the selection criteria based on internal and external environment changes) and scoring methods in relation to cost-benefit risk and dependencies, including interdependencies to the organization's strategy, goals, aims and objectives; identifying the right portfolio at the right time for the organization to ensure portfolio distinctiveness, uniqueness, and competitive advantage

X4.4.5 Effectiveness

The elements of competence for effectiveness are:

- Resolves portfolio problems;
- Maintains portfolio stakeholder involvement, motivation, and support;
- Changes at the required pace to meet portfolio needs; and
- Uses assertiveness when necessary.

Table X4-30. Effectiveness—Portfolio Manager Personal Competence

Element: Resolves Portfolio Problems			
Performance Criteria	Expectation	Sources of Evidence	Examples
Employs appropriate problem-solving techniques	Employs appropriate problem-solving techniques	Documented needs analysis (e.g., design inputs list)	Documented evidence of analysis and use of portfolio management decision support tools
	Issue log that documents resolution, demonstrates resolution is within portfolio scope, and has criteria to evaluate solution	Issue log with resolution documentation	Issue log maintained and stored according to organizational guidelines
	Routinely solicits feedback from stakeholders; feedback indicates portfolio manager has expertise in the identification of the appropriate tool or process for each problem type encountered	Documented feedback from stakeholders of problem-solving techniques	Feedback forms, including any relevant actions to address the feedback
	Ensures that SMEs have strong basis for expert judgment (not just opinion)	Documented use of proper knowledge management tools	Clear cross-reference on the tools used vs. the credentials of the SME
Validates that proposed solutions resolve the problem and are within the portfolio boundaries	Uses independent methods to verify solution and ensures solution is within scope	Documented use of proper knowledge management tools	Clear alignment of solution and scope, documented per organizational standards
	Issue log that documents resolution, demonstrates resolution is within portfolio scope, and has criteria to evaluate solution	Issue log with resolution documentation	Issue log stored and maintained according to organizational standards
	Routinely solicits feedback from stakeholders on resolution of problems; feedback validates success of portfolio risk mitigation is built into governance and value management processes	Documented feedback from stakeholders that problems were resolved	Feedback maintained with appropriate actions aligned to specific items in the feedback
Chooses solutions that maximize portfolio benefit and minimize negative impacts	Routinely solicits feedback from stakeholders on resolution of problems; feedback indicates portfolio manager has sufficient knowledge to evaluate compliance of solution and determine impact on other portfolio components through weighted ranking and scoring techniques	Documented feedback from stakeholders stating the problems were resolved	Stakeholder signoff, stored per organizational standards
	Evaluates portfolio post-implementation of solution and determines impact internally on portfolio and externally on programs/projects	Documented impact of solution on portfolio and documented external and/or environmental impact of solution	Solution document that addresses the issues to be resolved along with necessary annotation of any external impacts of the solution
Element: Maintains Portfolio Stakeholder Involvement, Motivation, and Support			
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses stakeholder communication to maintain stakeholder motivation	Establishes regular forums for interaction with stakeholders, including various formal and informal media; routinely solicits feedback from stakeholders; responds to questions and concerns	Communication plan; updates to stakeholder analysis; documented feedback from stakeholders stating that they felt motivated	Communications plan updated with feedback from stakeholders, maintained according to organizational standards
Constantly seeks opportunities to communicate portfolio status and directions to meet the needs and expectations of stakeholders	Establishes regular forums for interaction with stakeholders, including various formal and informal media; routinely solicits feedback from stakeholders; responds to questions and concerns; feedback indicates communications are acceptable and needs are being met	Examples where the portfolio manager took an opportunity to communicate status; documented feedback from stakeholders on how their needs were met	Communication schedules, documents used as part of the communication; feedback received from stakeholders
Includes experts in meetings and discussions to influence and obtain stakeholder support	Builds networks of influence across the stakeholders; includes SMEs where credibility is enhanced; documents in portfolio records inclusion of SMEs to achieve consensus and support on issues	Examples of how consensus and support were achieved on different issues	Minutes from meetings where subject matter experts were invited for consultations with stakeholders

APPENDIX X4 - PROGRAM MANAGER

Element: Maintains Portfolio Stakeholder Involvement, Motivation, and Support			
Performance Criteria	Expectation	Sources of Evidence	Examples
Uses objectivity for consensus building	Establishes a professional rapport with stakeholders built on trust and mutual respect; record of decisions based on facts and logic	Documented use of best practices for making team decisions	Clear alignment of the team and stakeholders, documented via survey and/or direct feedback
	Establishes a professional rapport with team built on trust and mutual respect; record of increasing alignment of stakeholders with portfolio direction	Examples of influencing biased team members toward objective position	Documented examples of issues raised and resolution achieved
Element: Changes at the Required Pace to Meet Portfolio Needs			
Performance Criteria	Expectation	Sources of Evidence	Examples
Adapts to changes in the portfolio environment to minimize adverse impacts	Routinely solicits feedback from stakeholders on adaptation to changes; feedback indicates portfolio manager adapts well to changes in the portfolio environment, minimizes adverse portfolio impacts, and maximizes the benefit from any opportunities	Documented feedback from stakeholders stating that the portfolio manager displayed a "can-do" attitude despite changes	Actual feedback along with resolution of issues raised by the feedback
	Portfolio value is managed as a strategic objective; risks are regularly assessed; mitigation activities are reviewed and documented in the risk register for their impact on minimization of adverse impacts	Documented risk mitigation activities	Risk management log, maintained according to organizational standards
Demonstrates flexibility toward changes that benefit the program	Embraces continual review, analysis, and change to support portfolio outcomes through active promotion of portfolio value management; uses techniques to prioritize and select the most valuable opportunities	Risk registry updates identifying new opportunities; documented opportunities analysis; change requests	Risk registry, change request log, and minutes from relevant meetings, maintained according to organizational standards
Takes positive actions to capitalize on opportunities or to resolve present problems	Embraces continual review, analysis, and change to support portfolio outcomes through active promotion of portfolio value management	Documented feedback from stakeholders that the portfolio manager demonstrated an action-oriented and proactive approach	Action log, annotated with identified solutions, and stakeholder feedback
	Portfolio sponsors and other stakeholder groups provide continued support of portfolio based on return on investment and other portfolio performance reports	Examples where the portfolio manager resolved outstanding problems	Action log, annotated with identified solutions, and stakeholder feedback
	Portfolio process assets and portfolio component inventory are used and maintained throughout delivery of portfolio	Demonstrated use of the appropriate tools and techniques to resolve portfolio issues	Portfolio library with relevant documentation of technologies, techniques, or methods used during the portfolio execution
Enables a change-friendly environment by fostering continuous learning	Team and personal development are actively promoted and recognized as part of the portfolio culture; assesses team members and recommends personal development opportunities	Identifies and/or creates training recommendations for team members	Documented training recommendations for team members
	Individual team resource plans allow for adequate time for development and investigations	Portfolio schedule includes time for team members to study new solutions, situations, or technologies	Clearly documented schedule, maintained according to company standards
	Portfolio process assets, including lessons learned from previous portfolio, program, project, and other component deliveries used and maintained throughout delivery of portfolio	Establishes training program, including creation of relevant collateral	Portfolio library with relevant documentation of new technologies, techniques, or methods used during the portfolio execution
Acts as a change agent	Routinely solicits feedback from stakeholders on change program; responds to identified issues and concerns	Feedback from stakeholders	Documented feedback from stakeholders regarding changes initiated or facilitated by portfolio manager
	Routinely solicits feedback from stakeholders; feedback rarely requires response by portfolio manager to issues and concerns	Demonstrates positive self-esteem and self-confidence	Documented feedback from stakeholders stating that the portfolio manager demonstrated positive self-esteem and self-confidence

Table X4-30. (continued)

Element: Uses Assertiveness When Necessary			
Performance Criteria	Expectation	Sources of Evidence	Examples
Takes initiative when required, assuming calculated risks to expedite program delivery	Routinely solicits stakeholders for feedback on portfolio manager's initiative taking to drive portfolio forward; responds to questions/concerns	Feedback, solicited and otherwise	Documented feedback from stakeholders annotated with the actions taken by the portfolio manager
	Engages actively with peers and organization leadership to compete for organizational resources in the best interests of the portfolio and its stakeholders	Seeks and documents relevant issues	Issue log with documented resolutions, maintained according to company standards
	Drives timely value management to enable the portfolio to operate at the portfolio efficient frontier	Issues escalation reports showing timely decision path	Escalation reports, maintained according to company standards
Prevents inconclusive discussion, makes a decision, and takes appropriate action	Able to tactfully decline or redirect inconclusive suggestions for the benefit of the portfolio; willing to own and make concise decisions in the interest of moving the portfolio forward; routinely solicits team for feedback; responses provide examples where the portfolio manager resolved an issue by assessing the situation and offering decisive actions	Feedback from team members and other stakeholders	Feedback from team on actions taken; examples where the portfolio manager declined a proposal without causing an argument and maintained cooperation; examples where the portfolio manager resolved a crisis by assessing the situation and offering decisive action
Shows persistence and consistency in actions	Routinely solicits stakeholders' feedback on portfolio manager's actions on issues so they are not left unresolved	Feedback, both solicited and unsolicited	Documented feedback from stakeholders stating that the portfolio manager showed persistence and consistency
	Establishes regular forums to drive timely decisions on issues in order to meet stakeholders' needs	Tracks meetings and action items	Meeting minutes, action item notes, or status reports showing decisions made
	Ability to motivate at all portfolio stages independent of climate	Examples of maintaining motivation when faced with challenges	Documented action plans, with clear task assignments
Makes timely decisions based on facts while managing ambiguity	Decisions are made and communicated in a timely fashion, based on information and appropriate analysis; risks and issues are not left unmanaged or ignored; issue log demonstrates timeliness	Tracks decisions and supporting facts	Decision memoranda or decision analysis documents demonstrate factual analysis of issues and prompt decision making; issue log shows time from recording to resolution; issues escalation reports show timely decision path

X4.4.6 Professionalism

The elements of personal competence for professionalism are:

- Demonstrates commitment to the portfolio,
- Operates with integrity,
- Handles personal and team adversity in a suitable manner,
- Manages a diverse workforce, and
- Resolves individual and organizational issues with objectivity.

Table X4-31. Professionalism—Portfolio Manager Personal Competence

Element: Demonstrates Commitment to the Portfolio			
Performance Criteria	Expectation	Sources of Evidence	Examples
Understands and actively supports the portfolio's and organization's mission and goals	Understands and actively aligns the portfolio and organizational mission and goals	Team communication about mission and goals for the portfolio and the organization	Documented alignment of portfolio goals and objective with the organization's missions and strategy
	Demonstrated ability to steer team in direction of organization even in the face of differing personal preference	Team communication about mission and goals for the portfolio and the organization	Examples where support was given when goals of portfolio differed from personal preferences
	Continual benefits-realization analysis to ensure portfolio components continue to achieve organizational goals	Team communication about mission and goals for the portfolio and the organization	Examples of defined portfolio activities that support organizational goals
Cooperates with all stakeholders to achieve portfolio objectives	Establishes a professional rapport with stakeholders built on trust and mutual respect	Implementation of decision-making criteria, demonstrated decision-making intent and methodology	Examples of specific cooperative efforts to achieve portfolio objectives
	Demonstrated ability to develop team with adequate support and direction through relevant stages of life cycle to a high-performing team	Implementation of decision-making criteria, demonstrated decision-making intent and methodology	Examples where team-building techniques were used to foster cooperation
Makes sacrifices when necessary to move the portfolio forward	Ability to rapidly and accurately assess the cross-portfolio impacts of decisions to prioritize one portfolio component over another, make a decision, and move on to execute	Implementation of decision-making criteria, demonstrated decision-making intent and methodology	Examples of prior options taken for effective portfolio execution while giving personal benefits a lower priority
	Ability to ignore minor setbacks and drive to a positive overall outcome	Implementation of decision-making criteria, demonstrated decision-making intent and methodology	Examples where the portfolio manager demonstrated a positive attitude while dealing with portfolio challenges
	Ability to identify areas of concern within the portfolio and, when deemed necessary, act quickly to terminate nonviable components	Implementation of decision-making criteria, demonstrated decision-making intent and methodology	Termination of nonviable portfolio component(s)
Element: Operates with Integrity			
Performance Criteria	Expectation	Sources of Evidence	Examples
Adheres to all legal requirements	Engages specific stakeholders to provide legal oversight to portfolio activities	Surveys and minutes from meetings	Feedback from stakeholders that all legal requirements were met
	Legal and regulatory obligations are documented as enterprise environmental factors referenced in all appropriate activities and communicated to all team members	Legal requirements from business requirements documents	Documented log of legal requirements applied to the program with written stakeholder approval
Works within a recognized set of ethical standards	Trained in corporate and/or industry code of conduct; regularly solicits team and stakeholders on use of ethical standards; employs independent SMEs to address issues and concerns; ensures team understands their ability and right to escalate ethical issues through communications channels; adheres to <i>PMI Code of Ethics and Professional Conduct</i> throughout the portfolio	Communicates a standard set of ethics; demonstrates ethical behavior when dealing with the team and other stakeholders	Documented feedback from stakeholders stating that portfolio manager employed ethical standards; documented feedback from stakeholders indicating the portfolio manager neither offered nor accepted inappropriate payments or other items from any stakeholders
Seeks to avoid and discloses any possible conflict of interests to all stakeholders	Seeks to avoid and discloses any possible conflict of interests to all stakeholders	Clear communication on possible conflicts of interest and how to resolve	Example of truthful reporting of potential conflict of interests
	Ensures organizational conflict of interest (OCI) statement and OCI plan are incorporated in program policies	Creates and shares a conflict of interest plan with the team	Organizational conflict of interest (OCI) statement and OCI plan
Maintains and respects confidentiality of sensitive information	Understands guidelines for confidentiality associated with team human resources; sets guidelines for portfolio information based on corporate and/or stakeholder policy/requirements	Communicates guidelines to the team; models appropriate behavior with respect to the guidelines	Documented feedback from stakeholders states that the individual maintains confidentiality
	Ensures portfolio product templates contain proper confidentiality, export, or security classification based on end use	Creates/shares appropriate documentaton to maintain confidentiality	Examples of portfolio documentation that include the confidentiality or security level classification notice (e.g., NDA)

Table X4-31. (continued)

Element: Operates with Integrity			
Performance Criteria	Expectation	Sources of Evidence	Examples
Respects the intellectual property of others	Captures documented agreements for reuse of protected intellectual property and shares within PMIS and other organizational repositories referenced by the portfolio; engages lawyers and SMEs to define intellectual property	Communicates with the team with respect to intellectual property; conducts appropriate research related to the portfolio	<ul style="list-style-type: none"> Documented agreements for reuse of protected intellectual property Documented searches for potentially applicable patents, trademarks, or copyrights
	Engages lawyers and SMEs to ensure copyrights are respected and intellectual property is used in accordance with portfolio requirements	Appropriate use of SMEs	Examples of copyright notice with source indication whenever protected intellectual property was used
Element: Handles Personal and Team Adversity in a Suitable Manner			
Performance Criteria	Expectation	Sources of Evidence	Examples
Maintains self-control in all situations and responds calmly	Ability to separate emotion from logic and demonstrates sound judgment in challenging circumstances	Models appropriate emotional behavior as part of the team	<ul style="list-style-type: none"> Examples where the portfolio manager felt strong emotions (such as anger or extreme frustration) but controlled them Uses stress-management techniques to control response, prevent burnout, and deal with ongoing stress both personally and with other portfolio personnel
	Routinely solicits feedback from team and stakeholders on portfolio manager's handling of difficult situations; responds to identified issues and concerns	Solicited and unsolicited feedback	Documented feedback from stakeholders indicating that the individual displayed self-control
Admits shortcomings and explicitly accepts responsibility for failures	Self-aware and takes personal ownership of issues or failures; buffers team from issues or failures	Solicited and unsolicited feedback	<ul style="list-style-type: none"> Documented feedback from stakeholders where the individual actively listened to constructive feedback and acted on it Examples where the individual accepted responsibility for failure
Learns from mistakes to improve future performance	Actively contributes to lessons learned activity to improve portfolio management plan collateral; establishes and implements regular forum to review and update lessons learned	Captures lessons based on personal experience and that of other team members	Documented lessons learned
	Seeks feedback from team and stakeholders on performance and openly communicates about areas for development and actions being taken	Solicited and unsolicited feedback	Documented feedback from stakeholders stating that the individual learned from mistakes
	Self-reflects on appropriateness and effectiveness of actions; transparent in addressing concerns and areas for development	Analysis of actions during and after action is taken	Examples where the individual analyzed his or her own performance to understand causes of mistakes and failures
Element: Manages a Diverse Workforce			
Performance Criteria	Expectation	Sources of Evidence	Examples
Develops elements of trust and respect within the project environment	Establishes a professional rapport with stakeholders built on trust and mutual respect that is evident on a daily basis	Solicited and unsolicited feedback	Documented feedback from team that the portfolio manager displayed an awareness of, respect for, and willingness to accommodate cultural differences
	Recognizes and rewards team; promotes positive team member achievements and behavior with management and clients	Communicates on rewards programs; conducts open recognition of team members	Examples where the team celebrated achievements
Ensures team's adherence to cultural issues, legal requirements, and ethical values	Trained in corporate and/or industry code of conduct; adherence to <i>PMI Code of Ethics and Professional Conduct</i> throughout the portfolio	Communicates with the team on relevant cultural, legal, and ethical values	Document describing ethical standards and stakeholders' value systems

APPENDIX X4 - PROGRAM MANAGER

Element: Operates with Integrity			
Performance Criteria	Expectation	Sources of Evidence	Examples
	Adheres to code of conduct and high standards in daily interactions with team and stakeholders; holds team accountable for the same	Solicited and unsolicited feedback	Examples of consistently good moral judgment and behavior
	Engages SMEs to align portfolio plan with applicable standards and legislation	Effective use of SMEs in the portfolio process	Documented analysis of applicable legislation, standards, and local customs relevant to the portfolio
Respects personal, ethnic, and cultural differences	Routinely solicits feedback from team on portfolio manager's respect of personal, ethnic, and cultural differences; feedback confirms portfolio manager consistently uses good moral judgment and displays sensitivity to all team members	Solicited and unsolicited feedback	Documented feedback from the team shows the portfolio manager respected personal, ethnic, and cultural differences
	Understands individual personality and communication style in order to solicit input from team members using methods that align with their style	Solicited and unsolicited feedback	Examples where the portfolio manager valued the contribution of each team member
Creates an environment of confidence and respect for individual differences	Positively promotes personal, ethnic, and cultural differences of stakeholders so that team members are aware and accept as the norm	Communicates on expected team norms related to culture and ethics	Documented feedback from team showing that they had confidence that the portfolio manager respected individual differences
	Understands individual personalities and strengths and creates a tailored environment that enables and/or motivates members to perform at their best	Evaluates individual performance of team members	Examples where the portfolio manager created the conditions that motivated and enabled others to contribute their best
Element: Resolves Individual and Organizational Issues with Objectivity			
Performance Criteria	Expectation	Sources of Evidence	Examples
Respects the organizational framework for management of the portfolio	Clearly establishes roles and responsibilities, reporting, and escalation routes for reporting within the portfolio; routinely solicits feedback from team and stakeholders; responds to identified issues and concerns	Communicates on roles, responsibilities, and organizational rules for the team/ portfolio	Documented feedback from stakeholders that the portfolio manager respected the management framework established by the organization; documented feedback from stakeholders that the portfolio manager follows rules of collaboration and reporting within the portfolio, programs, and projects
Balances individual interest with organizational interest	Routinely solicits stakeholder feedback on portfolio manager's balancing of individual versus organizational interests; responds to identified issues and concerns	Solicited and unsolicited feedback	Documented feedback from stakeholders that the individual saw clear distinctions between individual and organizational interests
	Portfolio manager holds portfolio manager certification and demonstrates professionalism consistent with designation at all times	Communicates a standard set of ethics; demonstrates ethical behavior when dealing with the team and other stakeholders	Documented feedback from stakeholders that the individual adhered to PMI's <i>Code of Ethics and Professional Conduct</i>
Assigns team members in an unbiased way to appropriate tasks	Supports and directs the assignment of personnel based on the allocation of skills to best support the organizational objectives, using supply and demand techniques	Manages team assignments based on skills and capacity	Skills assessment documentation indicating each team member's strengths and weaknesses
	Ability to work with functional managers to identify required portfolio skills	Captures appropriate skills to be used in executing portfolio tasks	Responsibility assignment matrix aligned with team members' skills assessment
	Assesses and identifies portfolio team members' strengths and weaknesses; assigns areas of responsibility including stretch assignments	Manages the team based on individual capabilities	Examples of personnel assignment that allows them to grow by doing more than the status quo

REFERENCES

- [1] Project Management Institute. (2015). *Project Management Professional (PMP)® Examination Content Outline*. Newtown Square, PA: Author.
- [2] Project Management Institute. (2013). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. Newtown Square, PA: Author.
- [3] Project Management Institute. (2013). *The Standard for Program Management*. Newtown Square, PA: Author.
- [4] Project Management Institute. (2013). *The Standard for Portfolio Management*. Newtown Square, PA: Author.
- [5] Project Management Institute (2011). *Program Management Professional (PgMP)® Examination Content Outline*. Newtown Square, PA: Author.
- [6] Project Management Institute (2013). *Portfolio Management Professional (PfMP)® Examination Content Outline*. Newtown Square, PA: Author.
- [7] Project Management Institute. (2016). *PMI Lexicon of Project Management Terms*. Newtown Square, PA: Author.
- [8] Project Management Institute. (2012). *PMI Combined Standards Glossary*. Newtown Square, PA: Author.
- [9] Project Management Institute. (2013). *Organizational Project Management Maturity Model (OPM3®)*. Newtown Square, PA: Author.
- [10] Project Management Institute. (2006). *PMI Code of Ethics and Professional Conduct*. Available from www.pmi.org/CodeofEthics
- [11] Project Management Institute. (2012). *Project Management Professional (PMP)® Role Delineation Study*. Newtown Square, PA: Author.
- [12] Project Management Institute. (2013). *PMI's Pulse of the Profession® In-Depth Report: The Competitive Advantage of Effective Talent Management*. Available from <http://www.pmi.org>
- [13] Project Management Institute. (2013). *Pulse of the Profession® In-Depth Report: Navigating Complexity*. Available from http://www.pmi.org/~/_media/PDF/Business-Solutions/Navigating_Complexity.ashx

GLOSSARY

360-degree Feedback. The type of feedback in which project team members, project sponsors, and other stakeholders are surveyed anonymously in regard to the project manager's performance. This can be used to assess baseline competence in order to complete a competence gap analysis and create a development or training plan.

Ability. The quality of being able to do something; the physical, mental, financial, or legal power to perform; a natural or acquired skill or talent.

Accept. The act of formally receiving or acknowledging something and regarding it as being true, sound, suitable, or complete.

Acceptance. See *accept*.

Activity. A distinct, scheduled portion of work performed during the course of a project.

Assumption. A factor in the planning process considered to be true, real, or certain, without proof or demonstration.

Attitudes. Relatively lasting feelings, beliefs, and behavior tendencies directed toward specific persons, groups, ideas, issues, or objects. They are often described in terms of three components: (a) an affective component, or the feelings, sentiments, moods, and emotions about some person, idea, event, or object; (b) a cognitive component or the beliefs, opinions, knowledge, or information held by the individual; and (c) a behavioral component or the intention and predisposition to act.

Baseline. The approved version of a work product that can be changed only using formal change control procedures and is used as the basis for comparison.

Behavior. The manner in which an individual acts or conducts oneself under specified circumstances.

Capability. A specific organization project management maturity (OPM3®) competency that should exist in order for an organization to execute project management processes and deliver project management services and products. Capabilities are incremental steps leading up to one or more Best Practices.

Change Control. A process whereby modifications to documents, deliverables, or baselines associated with the project are identified, documented, approved, or rejected. See also *change control board*.

Change Control Board (CCB). A formally chartered group responsible for reviewing, evaluating, approving, delaying, or rejecting changes to the project, and for recording and communicating such decisions.

Change Request. A formal proposal to modify any document, deliverable, or baseline.

Communication. A process through which information is exchanged among persons using a common system of symbols, signs, or behaviors.

Communications Management Plan. A component of the project, program, or portfolio management plan that describes how, when, and by whom information will be administered and disseminated.

Competence. A cluster of related knowledge, attitudes, skills, and other personal characteristics that affects a major part of one's job (i.e., one or more key roles or responsibilities), correlates with performance on the job, can be measured against well-accepted standards, and can be improved by means of training and development. See also *knowledge competence*, *personal competence*, and *performance competence*.

Competence Baseline. An initial assessment of the individual compared to the personal knowledge, performance, and personal competencies as described in the *PMCD Framework*.

Competence Dimensions. A multidimensional framework that breaks competency into dimensions of knowledge, performance, and personal competencies.

Competence Gap. The difference between the desired level of competence within a given dimension and the level of competence assessed for an individual. It is the gaps in one's competence that an individual aims to improve through individual development.

Competency. See *competence*.

Competency Development Plan. A plan that prescribes activities to be undertaken by the project manager that are necessary to achieve the learning required after an assessment is performed to determine the competence gap.

Cost Management Plan. A component of a project or program management plan that describes how costs will be planned, structured, and controlled.

Document. A medium and the information recorded thereon, which generally has permanence and can be read by a person or a machine. Examples include project management plans, specifications, procedures, studies, and manuals.

Effective Performance. An intended or expected accomplishment.

Elements of Competence. The basic building blocks of a unit of competence. They describe, in output terms, actions or outcomes, which are demonstrable and assessable.

Emotional Intelligence. Describes an ability, capacity, or skill to perceive, assess, and manage the emotions of oneself, of others, and of groups.

Feedback. A reaction or response to a particular process or activity.

Integrated Change Control. The process of reviewing all change requests, approving changes, and controlling changes to deliverables and organizational process assets.

Knowledge. Knowing something with the familiarity gained through experience, education, observation, or investigation; it is understanding a process, practice, or technique, or how to use a tool.

Knowledge Competence. The knowledge and understanding that a project manager brings to a project. This can include qualifications and experience, both direct and related. These are the knowledge components of competence.

Lessons Learned. The knowledge gained during a project that shows how project events were addressed or should be addressed in the future for the purpose of improving future performance.

Organizational Process Assets. Plans, processes, policies, procedures, and knowledge bases specific to and used by the performing organization.

Outcome. The tangible or intangible result of applying a capability.

Performance Competence. What the project manager is able to do or accomplish by applying project management knowledge. This competency dimension looks at the demonstrable performance of the individual in carrying out project management tasks, and focuses on the project outcomes grouped in five units: Initiating, Planning, Executing, Monitoring and Controlling, and Closing a Project.

Performance Criteria. An integrated list of aspects of performance that would be regarded as displaying competent performance during a project in an element of competence.

Personal Competence. The core personality characteristics underlying a person's capability to do a project. These are the behavior, motives, traits, attitudes, and self-concepts that enable a person to successfully manage a project, grouped into six units: communicating, leading, managing, cognitive ability, effectiveness, and professionalism.

Personality. A unique organization of a relatively stable set of characteristics, tendencies, and temperaments that define an individual and determine that person's interaction with the environment.

Procurement Management Plan. A component of the project or program management plan that describes how a team will acquire goods and services from outside of the performing organization.

Project Charter. A document issued by the project initiator or sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.

Project Management. The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

Project Performance. A measure of the extent to which the project is carried out as planned in terms of objectives, time and financial constraints, and organizational policies and procedures.

Project Schedule. An output of a schedule model that presents linked activities with planned dates, durations, milestones, and resources.

Project Success. A collective assessment by project stakeholders (e.g., client/customer, sponsor) of the degree to which the project has achieved each of its objectives.

Quality Management Plan. A component of the project or program management plan that describes how an organization's quality policies will be implemented.

Responsibility Assignment Matrix. A grid that shows the project resources assigned to each work package.

Risk Management Plan. A component of the project, program, or portfolio management plan that describes how risk management activities will be structured and performed.

Risk Mitigation. A risk response strategy whereby the project team acts to decrease the probability of occurrence or impact of a threat.

Risk Register. A repository in which outputs of risk management processes are recorded.

Risk Response Planning. The process of developing options and actions to enhance opportunities and to reduce threats to project objectives.

Seller. A provider or supplier of products, services, or results to an organization.

Skill. Ability to use knowledge, a developed aptitude, and/or a capability to effectively and readily execute or perform an activity.

Staffing Management Plan. A component of the human resource plan that describes when and how team members will be acquired and how long they will be needed.

Stakeholder. An individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio.

Style. A set of skills, attributes, or characteristics of a person; the concept refers to a frequent pattern of what is said, done, expressed, or performed by a person demonstrating one's values. It encompasses the modes or patterns of behavior that people exhibit in approaching their work and interacting with others.

Subject Matter Expert (SME). A person, usually an accomplished performer, who knows the knowledge, performance, and personal competence required for a given unit of competence.

Types of Evidence. Specific documented proof that performance criteria are achieved or expected action has been completed; these form the basis upon which competence can be assessed.

Unit of Competence. A major segment of overall competency, typically representing a major function.

Work Breakdown Structure (WBS). A hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables.

Work Breakdown Structure Dictionary. A document that provides detailed deliverable, activity, and scheduling information about each component in the work breakdown structure.