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Portfolio Management Competency Standards: Department of Defense Versus Project Management Institute

June 2025

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Prepared for the Naval Postgraduate School, Monterey, CA 93943.

ACQUISITION RESEARCH PROGRAM
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ABSTRACT

Department of Defense (DoD) acquisition programs and professionals have been under scrutiny for years. Direction has been provided, over time, to adopt civilian program management practices within DoD. The Project Management Institute, Inc. (PMI) sets and manages civilian program management standards and certification. This study assesses DoD alignment and/or progress in adopting PMI standards. This study is primarily focused on portfolio management competency standards; however, the research requires that some foundational information, prior study results, and discussion of deltas between DoD concepts or documentation and practical application be addressed. This study is a follow-on or update to a 2021 Naval Postgraduate School thesis on the same topic (*Gap Analysis of Department of Defense Program Management Competency Standards in Preparation for the Shift to Portfolio Management in Defense Acquisitions*). In both this study and previous studies, gap analysis methodology (both qualitative and quantitative approaches) was applied. The research from 2021 found a 41% alignment with industry standards. This study found an increased alignment, closer to 60%. This study reinforces recommendations from the 2021 study and makes an overall recommendation that would result in complete alignment between DoD standards and PMI, the industry standard for portfolio management.

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Without everyone's efforts and support, this project would likely still be a brainchild looking for a way out.

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LIST OF ACRONYMS AND ABBREVIATIONS

AIRC	Acquisition Innovation Research Center
AM	acquisition management
ANSI	American National Standards Institute
ASD(A)	Assistant Secretary of Defense for Acquisition
ASQ	American Society for Quality
AWF	acquisition work force
BM	business management
BTI	barrier to implementation
CFO	chief financial officer
CPM	capability portfolio management
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
EW	exam weighting
FY	fiscal year
GAO	Government Accountability Office
ISO	International Standards Organization
L	leadership
MBA	Master of Business Administration
MSPM	Master of Science in Program Management
NDAA	National Defense Authorization Act
NPS	Naval Postgraduate School
OMB	Office of Management and Budget
PfMP	Portfolio Management Professional
PM	project manager or project management
PMBOK	Project Management Book of Knowledge
PMI	Project Management Institute
PMIAA	Program Management Improvement Accountability Act

PMP	Project Management Professional
SECDEF	Secretary of Defense
TM	technical management
TW	task weighting
UOC	unit of competency
USA	United States of America
USC	United States Code

I. INTRODUCTION

Portfolio management, within the Department of Defense (DoD), was established as a requirement by the National Defense Authorization Act (NDAA) of 2021. Section 809 and Section 836 address portfolio management guidance: "(b) Portfolio Management – The Secretary of Defense shall establish capabilities for robust, effective, and data-driven portfolio management described in subsection (a)(1)(C)" (National Defense Authorization Act for Fiscal Year 2021, [NDAA], 2021).

The intent was to improve DoD management processes for major defense acquisition programs with a goal of increasing efficiency while reducing overall costs. To succeed in meeting the requirements of the NDAA, the Secretary of Defense (SECDEF) would require trained professionals equipped with tools and capabilities necessary to meet those requirements.

This purpose of this study is to assess how well DoD portfolio management competency standards align with the Project Management Institute's (PMI) competency standards and make training improvement recommendations.

A previous study from the Naval Postgraduate School (NPS), "Gap Analysis of Department of Defense Program Management Competency Standards in Preparation for the Shift to Portfolio Management in Defense Acquisitions," from December 2021 found that on the whole, DoD was roughly 41% aligned with industry standards. The authors of that study used gap analysis as their approach for determining alignment (Stewart et al., 2021). This study follows a similar research analysis methodology.

A. BACKGROUND

Despite direction from the FY2021 NDAA for full implementation to be completed by 2023 (NDAA, 2021), DoD is routinely criticized in Government Accountability Office (GAO) reports and various independent studies, both in business and in academia, for failing to do so. Case in point, the Defense Acquisition University (DAU) acknowledges portfolio management yet does not offer a portfolio management certification, nor does it offer anything specifically tailored to portfolio management in its course offerings

(Defense Acquisition University [DUA], n.d.b). In contrast, the Project Management Institute (PMI) introduced a portfolio management certification in 2014, the Portfolio Management Professional (PfMP) certification (PMO Advisory, n.d.).

GAO reports over the years between 2015 and 2025 have been critical of DoD's project, program and portfolio management. Some excerpts from several GAO reports follow:

> The Department of Defense (DoD) is not effectively using portfolio management to optimize its weapon system investments … (Sullivan, 2015, Highlights page)

> DoD does not have a policy to guide portfolio management across the department that fully reflects key best practices. The policy is also not current and DoD is not implementing it, but it has not rescinded DoD Directive 7045.20, Capability Portfolio Management … (Sullivan, 2015, p. 15)

> Yet, when compared to leading practices, we found that several practices used by military services for training, mentoring, retaining, and selecting people for program manager positions could be improved. (Sullivan, 2018, p. 26)

> In nearly all cases, the military services could improve their practices by learning from ideas and initiatives being used … by commercial companies and ensuring that civilian and military personnel have similar opportunities to develop. (Sullivan, 2018, p. 26)

> The Office of Management and Budget (OMB) has begun to implement all requirements of the Program Management Improvement Accountability Act of 2016 (PMIAA), but further efforts are needed to fully implement the law. (Jones, 2019, Highlights page)

Table 1 is an extract from GAO report 20-44, titled *Improving Program Management; Key Actions Taken, but Further Efforts Needed to Strengthen Standards, Expand Reviews, and Address High-Risk Areas,* and summarizes the GAO view of PMIAA actions and status across selected agencies.

Table 1. Summary Table of PMIAA Requirements and Actions. Source: Jones (2019).

Table 1: Our Assessment of Selected PMIAA Requirements and Actions

Agency/ Council	PMIAA Requirements	GAO Assessment
Office of Management and Budget (OMB)	Issue 5-year strategic plan	Issued; met relevant strategic planning criteria
	Adopt government-wide standards for program management	Standards lack detail; governance structure needed
	Conduct portfolio reviews of agency programs	Conducted portfolio reviews with ten of the 24 CFO Act agencies
	Conduct portfolio reviews of our high-risk areas	Conducted portfolio reviews for five out of 35 high-risk areas
Office of Personnel Management	Identify skills and competencies	Completed
	Establish or update job series	Completed
	Establish career path	To be completed by the end of 2019
Program Management Policy Council	Meet twice per fiscal year	Requirement met for 2019
	Review programs in our high-risk areas and give recommendations to OMB	Not done
CFO Act Agencies	Designate Program Management Improvement Officer	Completed

Legend: Chief Financial Officer (CFO); Program Management Improvement Accountability Act (PMIAA)
Source: GAO analysis of agency information. | GAO-20-44

Negative findings continued to pop up in GAO reports after FY2021 NDAA passage in December 2020:

> DoD partially concurred with our 2015 recommendation related to improving portfolio management, … However, DoD has yet to fully address the recommendation. (Oakley, 2021b, p. 66)

> Leadership: Work still remains at both the Office of the Secretary of Defense and military department levels to complete the development and implementation of acquisition policies. (Oakley, 2021a, p. 13)

> GAO has long reported on needed improvements to DoD's portfolio management practices. (Mak, 2022, Highlights page)

The Defense Acquisition Workforce Improvement Act (DAWIA) of 1990 requires DoD to track and report on the acquisition workforce. DoD has been doing so since 1992 (Gates et al., 2024, p. 1). In 2022, a study by RAND Corporation noted the consolidation of 14 career fields in FY2021 into seven career fields moving forward. Portfolio management is not listed among the career fields in either case (Gates et al., 2024, p. 2).

An Acquisition Innovation Research Center (AIRC) study from the University of Maryland in September 2023 on Portfolio Performance Analysis and Visualization went

as far as stating, “DoD is not following industry standards for portfolio management” (Driessnack & Johnson, 2023, p. 10, Figure 3).

B. PURPOSE

The purpose of this study is to assess the alignment of DoD portfolio management standards with PMI portfolio management standards, with the intent of making recommendations, where necessary, for potential ways to improve the alignment.

1. Research Questions

a. Primary Research Question

How do DoD portfolio management competency standards align with PMI portfolio management competency standards?

b. Secondary Research Question

What has changed since the previous NPS study on this topic was completed in December 2021?

2. Benefits of This Study

This study benefits the defense acquisition community in numerous ways. First, the study assesses whether DoD is actually complying with the FY2021 NDAA. Second, the study provides clarity on portfolio management competency standards. Third, this study provides a quantitative assessment via a gap study on the alignment of DoD and PMI competency standards. Next, the study provides a data point in an ongoing list of studies that look at DoD versus industry standards in acquisition management. Next, the study highlights where DoD can focus efforts to improve its alignment to industry standards as required by federal law. Last, it serves as a launching point for future studies on how to improve DoD portfolio management.

C. SCOPE

This thesis is focused on the analysis of competency standards for portfolio management within the DoD and the United States of America. Mention of the

international community and global standards is purely for framing the standards followed within the USA. Any recommendations this study produces are intended to keep the discussion going and work on continuous process improvement within the DoD acquisition work force (AWF).

D. METHODOLOGY

To conduct this study, two years were spent reading through a variety of literature. During that time, similar studies were reviewed to determine their relevance or impact on this study. GAO documentation and NDAAs from across the years were read. The International Standards Organization (ISO) and American National Standards Institute (ANSI) were reviewed for clarity on defining competency and standards. Numerous DAU and PMI documents on project management, program management, and portfolio management were read. The NPS study from December 2021 informed the path taken on this study. Upon completion of the literature review, a conclusion similar to Stewart et al.'s, regarding the selection of standards for comparison with the DoD standards, was made.

In order to compare DoD standards to industry standards, the *Memorandum for Secretaries of the Military Departments Directors of the Defense Agencies*, from December 2024, signed out by Gary A. Ashworth, as acting Assistant Secretary of Defense for Acquisition (ASD[A]), with the subject line of "Program Management Functional Career Field Competencies" was determined to be as close to a set of DoD portfolio management competency standards as could be found (Office of the Assistant Secretary of Defense [OASD], 2024). In looking to gain an understanding of industry standards, ISO and ANSI websites and documentation were reviewed to provide clarity on understanding industry standard and their definitions. Their definitions of project, program and portfolio are very closely aligned, with ANSI's definitions provided by PMI. PMI is ANSI accredited and the natural choice for comparing industry standards with DoD (Project Management Institute [PMI], n.d.).

From there, data was collected or extracted from the ASD(A) memorandum, PMI's Portfolio Management Examination Content Outline, and various DAU website references

and placed in a spreadsheet to facilitate a basic comparison. The basic comparison is a macroscopic look at DoD versus PMI within portfolio management. Using the PMI certification examination content "domains" as the control, DoD Units of Competency from the ASD(A) memorandum were compared to PMI's standard to look for gaps in alignment.

Upon completion of the comparison between DoD and PMI, recommendations were developed and then reviewed through the same lens used in the previous study with respect to barriers to implementation (BTI). In order to retain some degree of continuity between the studies, the same scoring system was used:

> Those with No BTI are defined as practices that already occur within the DoD and received an implementation score of 0. Those with Low BTI signify changes that the DoD could implement immediately with little to no change in personnel structure or additional policy concerns and received an implementation score of 1. Those with Medium BTI require significant policy or personnel structure changes and received an implementation score of 2. Those with High BTI require significant personnel and policy changes and received an implementation score of 3. (Stewart et al., 2021, pp. 4–5)

E. ORGANIZATION OF STUDY

Chapter II presents a review of literature covering a wide range of project, program, and portfolio related information. The implementation of the ASD(A) memorandum by DAU is discussed. Various studies from the GAO, RAND, and other academics are discussed and summarized. At the end of the review, PMI standards and certification processes are discussed.

Chapter III discusses the methodologies used to complete this study. Detailed steps used to go from macro-level analysis to a micro-level analysis for determining alignment between DoD and PMI are presented.

Chapter IV presents the gap analysis, its results, potential changes to DoD implementation of the FY2021 NDAA direction along with an assessment of BTI for any recommendations derived from this study. This represents a qualitative (subjective) and quantitative (objective) approach.

Chapter V presents conclusions drawn from the study, clear responses to the research questions driving this study, and some recommendations for future study. It also addresses limitations and utility of the study.

F. INTRODUCTION SUMMARY

Having a clear understanding of industry portfolio management competency standards is required for determining the alignment between DoD portfolio management and those standards. If DoD is to correctly and fully implement the direction from the FY2021 NDAA, the DoD must achieve full alignment with industry standards.

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II. LITERATURE REVIEW

Understanding the definitions and basis for competency standards is critical to analyzing DoD's alignment with industry standards, in this case PMI's standards. If DoD were perfectly aligned, this study would not be necessary. As previously mentioned, the GAO has been critical of DoD and most federal agencies and organizations on their implementation of project, program, and now portfolio management. DoD Weapon System Acquisition has been on the GAO High-Risk List since 1990 (Oakley, 2025) and continues to struggle.

A. ISO AND ANSI

The ISO is a global organization that defines and publishes standards across all industries (International Standards Organization [ISO] , n.d.a). ANSI is the USA's member body in the ISO. ANSI provides oversight and accredits standards within USA across all American industries to include the U.S. government (American National Standards Institute [ANSI], n.d.a.). Both are independent organizations.

ISO 9000 defines competence as the "ability to apply knowledge and skills to achieve intended results" (ISO, n.d.c, section 3.10.4).

ISO views a standard to be "a document established by consensus and approved by a recognized body that provides rules, guidelines, or characteristics for activities or their results, aiming for the optimum degree of order in a given context" (American Society for Quality, n.d.).

Similarly, ANSI defines a standard as "a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose" (ANSI, n.d.b.).

ANSI and ISO have definitions for project, program (programme), and portfolio as well. Per ISO 21502:2020 (used by both ISO and ANSI):

- A project is a "temporary endeavor to achieve one or more defined objectives" (ISO, n.d.b., para. 3.20).

- A programme is a "group of programme components (3.19) managed in a coordinated way to realize benefits (3.2)" (ISO, n.d.b, paras. 3.2, 3.18 and 3.19).
- Programme components are "project (3.20), programme (3.18) or other related work" (ISO, n.d.b, paras. 3.18, 3.19 and 3.20).
- Benefits are a "created advantage, value or other positive effect" (ISO, n.d.b. para 3.2).
- A portfolio is a "collection of portfolio components (3.16) grouped together to facilitate their management to meet strategic objectives" (ISO, n.d.b, paras. 3.15 and 3.16).
- A portfolio component is a "project (3.20), programme (3.18), portfolio (3.15) or other related work" (ISO, n.d.b, paras. 3.15, 3.16, 3.18 and 3.20).

It is important to note that both organizations are aligned in their definitions and are the recognized experts on the topic of standards and standardization.

B. PMI

The Project Management Institute (PMI), established in 1969, is the leading provider of standards and certifications within project management (DAU, n.d.a, About). They are recognized experts and have a strong relationship with ANSI. PMI is essentially the project management standards developer for ANSI.

PMI's definitions for project, program, and portfolio are aligned with ISO and ANSI:

> Project is a temporary endeavor to create a unique product, service, or result (PMI, 2017).
>
> Program is a group of related projects, subsidiary programs and program activities managed in a coordinated manner to obtain benefits not available from managing them individually (PMI, 2017).
>
> Portfolio is a collection of projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives (PMI, 2017).

Table 2 shows the PMI summary comparing projects to programs to portfolios.

Table 2. Comparative Overview of Portfolio, Program, and Project Management. Source: PMI (2017).

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 that are managed in a coordinated manner 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.

PMI started their Portfolio Management Professional (PfMP) certification process in 2014 (PMO Advisory, n.d.). Through defined domains and tasks within those domains, PMI has provided the standard for portfolio management recognized by ANSI and ISO. The current standard is *The Standard for Portfolio Management, Fourth Edition*, ANSI/ PMI 08–003-2017 (PMI, 2017). Projects and Programs are covered by a similar standard, *The Standard for Program Management, Fifth Edition,* ANSI/PMI 08–002-2024 (PMI, 2024). Those standards have an accompanying guidebook, *A Guide to the Project Management Body of Knowledge AND The Standard for Project Management, PMBOK Guide, Seventh Edition*, published in 2021 (PMI, 2021).

PMI codifies six performance domains through which portfolio management links to organizational strategy and business execution. They are shown in Figure 1 and illustrate how those domains are linked to the Portfolio Life Cycle. A portfolio manager should have competencies within technical project management, leadership, and strategic and business management (PMI, 2017).

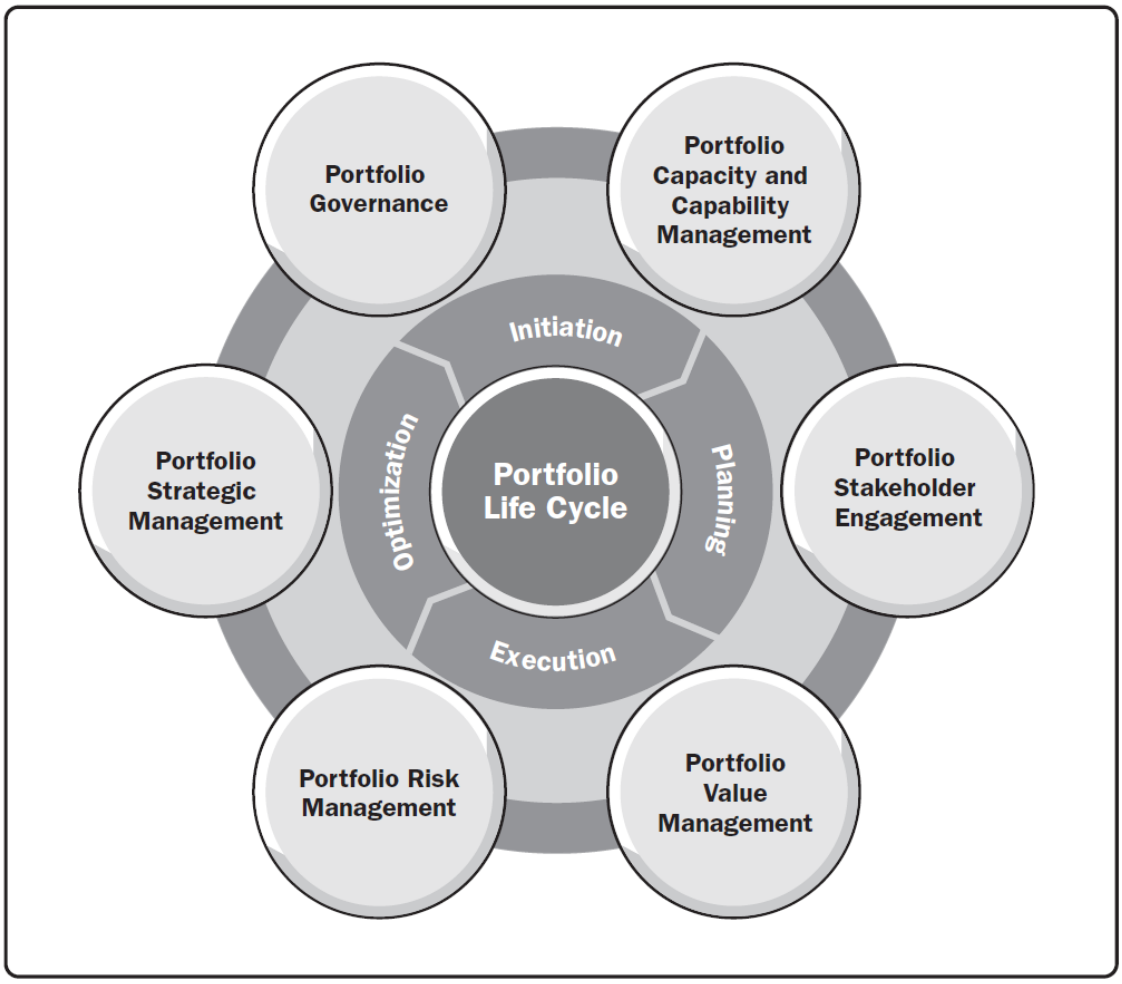

Figure 1. Portfolio Management Performance Domains. Source: PMI (2017).

The standard also states that a portfolio manager should "be able to form and lead expert teams, and have expertise in all of the following areas" (PMI, 2017, p. 15) and then lists and briefly describes each of the following, further emphasizing the importance of the performance domains:

- Portfolio strategic management and alignment
- Portfolio management methods and techniques
- Stakeholder engagement
- Leadership and management skills
- Risk management
- Organizational change management
- Systems thinking (PMI, 2017, p. 15)

While the standard discusses competency in terms of six performance domains, *The Portfolio Management Professional (PfMP) Examination Content Outline*, provides a table showing percentage of items on the exam aligned to five domains that are slightly different than the standard (PMI, 2013). This is likely due to timing of publication[1] and some changes that might not have caught up with the examination guide. Table 3 shows the domains and weighting of exam questions by percentage.

Table 3. PfMP Domains and Breakdown of Exam Questions. Source: PMI (2013).

Domain	Percentage of Items on Exam
Strategic Alignment	25%
Governance	20%
Portfolio Performance	25%
Portfolio Risk Management	15%
Communications Management	15%

The examination outline goes on to present each of the domains broken into tasks within the domains. There are 35 tasks, in total, across the five domains (PMI, 2013). These will be addressed in Chapter III of this study, as they are the basis for comparison to DoD competency standards.

C. DOD AND DAU

In November 1990, the Defense Acquisition Workforce Improvement Act (DAWIA) was signed into law. Enacted by Public Law 101-510; over time it has been modified by amendments to USC Title 10, Chapter 87 (DAU, n.d.c). As a product of DAWIA, the Defense Acquisition University (DAU) was founded. DAU is responsible to

[1] The standard was updated in 2017, and the exam guide was published in 2013.

the Undersecretary of Defense for Acquisition and Sustainment, per DoDI 5000.66, Change 3, *Defense Acquisition Workforce Education, Training, Experience, and Career Development Program*, and the Assistant Secretary of Defense for Acquisition (ASD(A)) provides oversight of DAU (Department of Defense [DoD], 2022).

Within DoD there is an understanding that there is a hierarchy with portfolio at the top, programs in the middle, and projects at the bottom; however, the three terms are often used interchangeably.

DoDD 7045.20, September 25, 2023, *Capability Portfolio Management*, pursuant Section 113 of USC Title 10, establishes the policy for using capability portfolio management (CPM) across all DoD. CPM is defined as "a disciplined management approach to align, prioritize, and optimize investments, requirements, risks, resources, research, and developments around a set of capabilities to achieve a set of mission objectives" (DoD, 2023, p. 19).

In December 2024, Gary A. Ashworth, acting ASD(A) signed a memorandum with the subject line reading, Program Management Functional Career Field Competencies. The memorandum had the competencies as an attachment and are described as being a "living document and will be continually updated as appropriate" (OASD, 2024). These competencies replaced those published in April 2023. A similar memorandum was used for the basis of comparison in a NPS thesis from 2021 (Stewart et al., 2021).

The ASD(A) memorandum details four functional competency units with a listing of competencies within each unit. It is significant to note that this memorandum references DoDI 5000.66 and appears to ignore the existence of DoDD 7045.20. It is equally significant to point out that the memorandum does not address portfolio management, nor does it establish competencies for portfolio management.

Table 4 is from the ASD(A) memorandum that summarizes the competencies.

Table 4. Functional Competencies. Source: OASD (2024).

Management Competency Units and Competencies December 1, 2024

Acquisition Management	Business Management	Technical Management
Capability Integration Planning	**Contract Management**	**Engineering Management**
Requirements Management	Market Research	Technical Planning
Acquisition Program Strategic Planning	Pre-Solicitation Planning and Execution	Requirements Decomposition
Business Case Development	Source Selection & Negotiations	Decision Analysis
Acquisition Law and Policy	Contract Administration	Configuration Management
Acquisition Policy and Best Practices	Contracting Approaches	Digital Engineering
Contractual Laws, Regulations, and Obligations	**Financial Management**	**Digital Literacy**
Financial Mgmt Laws, Directives, and Policies	Financial Planning	Machine Learning
Stakeholder Management	Programming	Artificial Intelligence
Political Savvy	Budget Formulation	Software Acquisition
External Situational Awareness	Budget Execution	**Test and Evaluation Mgmt**
Program Execution	Cost estimates	Test Planning: Preparation, Integration, Analysis Reporting
Risk/Opportunity Management	**Business Acumen**	**Product Support Mgmt**
Teaming	Internal/External Politics	Product Support Planning
Program Oversight	Financial Terms, Motivations, Incentives	Product Support Management
Resource Management	Public/Private Industry Differences	Supply Chain Mgmt and Supply Chain Risk Mgmt
Technology Management	Challenges/Constraints & Competitive Environment	Diminishing Manufacturing Sources & Materiel Shortages
Program Planning	Business Capture	
Pathway Selection		
Tailoring Acquisition Approach		
Executive Leadership		
Foundational Competencies	**Leading Change**	**Results Driven**
Interpersonal Skills	Creativity & Innovation	Accountability
Integrity / Honesty	Vision	Decisiveness
Communicate Effectively	Flexibility & Resilience	Customer Service
Continual Learning	**Leading People**	Problem Solving
Public Service Motivation	Conflict Management	**Building Coalitions**
Technical Credibility	Developing Others	Influencing / Negotiating
Digital Literacy	Team Building	Partnering

There are additional tables that go into greater detail on defining the competencies and providing sub-competencies. These additional tables will be discussed in Chapter III as they will be the basis for comparison to PMI standards.

Of significant note, DoD and DAU acknowledge the existence of portfolio management and portfolio managers; however, they do not have actual career fields for portfolio managers nor do they have certifications for portfolio managers.

In February 2022, DAU restructured its course offerings and certifications in response to changes to DAWIA. The initiative known as "Back-to-Basics" restructured the three-tier certifications they offered and the fourteen career fields they provided training for by consolidating them into eight functional areas[2] (Gates et al., 2024). Program Management has Practitioner and Advanced tiers, but neither addresses portfolio management, as seen in Figure 2 (DAU, n.d.b).

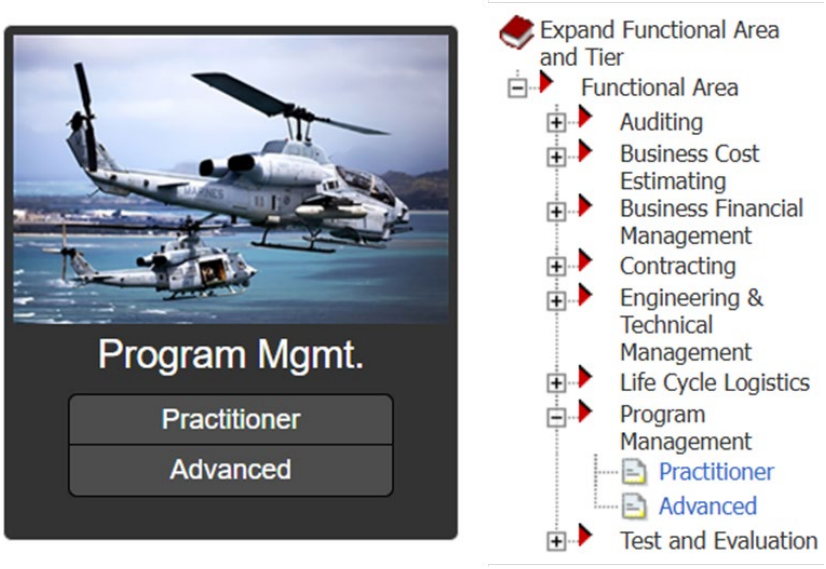

Figure 2. DAU Certification and Development Guides. Adapted from DAU (n.d.b).

[2] Business – Financial Management and Cost Estimating shown in DoDD 5000.66 as a singular functional area is broken into two within DAU iCatalog (DAU, n.d.b), see figure 2.

DoDD 5000.66, Change 3 provides the following definitions for competency and functional area. Competency is "a measurable pattern of knowledge, skills, abilities, behaviors, and other characteristics that an individual needs to perform work roles or occupational functions successfully. Competencies are used to develop acquisition training and education standards" (DoD, 2022). A functional area is "one or more related occupations that are characterized by a common set of core acquisition and functional competencies. A functional area is a self-sustaining designation with defined or recognized career progression and certification requirements based on experience and training" (DoD, 2022).

D. GAO

The U.S. Government Accountability Office (GAO), an independent, non-partisan agency working for Congress conducts a variety of studies and assessments focusing on saving the government money or helping the government work more efficiently. GAO maintains a "high-risk series" or list that identifies government **"**programs and operations with serious vulnerabilities to waste, fraud, abuse, or mismanagement, or in need of transformation" (United States Government Accountability Office, n.d., header section). GAO conducts analysis within five areas: leadership commitment, agency capacity, an action plan, monitoring efforts, and demonstrated progress (Oakley, 2025, p. 35).

According to the February 2025 report, DoD Weapon Systems Acquisition has been on the list since its inception in 1990 (Oakley, 2025, p. 39). For 2025, it is one of three list areas that declined since 2023 and was tagged with a note that "legislation is likely to be necessary to effectively address this high-risk area" (Oakley, 2025, p. 5).

The number of studies, analysis, and recommendations the GAO has conducted or provided on DODs acquisition programs is staggering. This is not surprising as the DoD is one of the largest parts of the federal budget. The consistency with which the GAO reports findings related to management of the various projects, programs, and now portfolios is equally unsurprising. The small sampling of reports reviewed for this study were done with the intent of discerning any degree of improvement, but the fact that the High-Risk List for

2025 shows DoD in decline in this area was a bit of a surprise, but not altogether shocking (Oakley, 2025, p 5).

E. NPS THESES

In 2020 and later in 2021 two theses were prepared by students of the Naval Postgraduate School. Jonathan Karnes studied and reported findings on *Aligning DoD Program Management Competencies with Project Management Institute Standards* (Dec 2020). Triggered by the FY2020 National Defense Authorization Act (NDAA, 2019), Karnes' study (an MBA Professional Project) determined the extent of alignment between DoD's 2016 competency standards and PMIs various standards of the time. It looked at five research questions designed to qualify and quantify the alignment between DoD and PMI standards (Karnes, 2020).

Conor Stewart, Adam Deitrich, and Jordan Reid studied the alignment of DoD and PMI standards in their MBA Professional Project, *Gap Analysis of Department of Defense Program Management Competency Standards in Preparation for the Shift to Portfolio Management in Defense Acquisitions* (Dec 2021). Their study addressed the alignment question through a gap analysis with the intent of answering their three research questions.

These two studies got the proverbial ball rolling with respect to looking at DoD standards alignment with industry standards. Karnes' study was perhaps the cleanest and easiest review due to comparing "apples" to "apples." Even with the one-for-one comparison, Karnes' found that DoD was only 25% aligned with PMI's PfMP standards. His study was not focused on portfolio management but still provided a good starting point for delving into portfolio management. His findings did, however, show that DoD was 61% aligned between DoD Program Management Competency Standards and All PMI Standards (a composite look) (Karnes, 2020).

Stewart et al.'s (2021) study was a little harder due to comparing "apples" to "not-quite-apples." In fact, it would be safe to say that they were comparing "apples" to "oranges" looking for alignment that might not have been there. This study was very focused on portfolio management, but the DoD was not. Their study looked at direction within the FY2021 NDAA as an indicator that DoD was about to shift into portfolio

management and looked to offer some thoughts on alignment between DoD standards and PMI standards with an eye toward recommendations that might facilitate DoD's shift. They took the methodology Karnes' used and focused on DoD standards versus PMI's PfMP standards. Their gap analysis found that DoD was 41% aligned with PMI's PfMP standards (Stewart et al., 2021).

In both cases, the studies compared program management competencies with portfolio management competencies. In both cases, some degree of alignment was found and recommendations for DoD and DAU to make changes were suggested. Stewart et al. (2021), proposed that "the DoD and the DAU should modify their structure to recognize 'portfolio manager' as either an official career field or career path" (Stewart et al., 2021, p. 65).

F. OTHER STUDIES

A literature review using key words like "portfolio management," "DoD portfolio management," and "DoD acquisition management," failed to result in much research related to how successful the DoD is in implementing FY21 NDAA direction to implement portfolio management. Two studies were most relevant to this research.

Published in 2024, RAND Corporation produced a research report, *Implementation of the New Defense Acquisition Workforce Improvement Act Framework, End of Fiscal Year 2022 Update*, that looked at the implementation of the new DAWIA Framework, what DAU named "Back-to-Basics" (Gates et al., 2024). This study did an excellent job of framing the acquisition work force, and changes in the alignment of the functional areas or career paths within that work force. A key takeaway was that the word "portfolio" did not appear once in that report.

An organization similar to the Naval Postgraduate School's Acquisition Research Program, the DoD's Acquisition Innovation Research Center (AIRC) is "DoD's Avenue for applying business, policy, law, and technical practices and expertise to improve acquisition efficiency and effectiveness" (Acquisition Innovation Research Center, n.d.). A September 2023 University of Maryland study, *Portfolio Performance Analysis and Visualization*, looked to "expand the use of portfolio-level data, analysis, and visualization

of the date across Program Executive Offices (PEOs)" (Driessnack & Johnson, 2023). While this study was not focused on standards, one of the results of their study was a finding noted by the team, "the DoD does not implement industry standard portfolio management," and on an inset in that report, they state, "DoD is not following industry standards for portfolio management" (Driessnack & Johnson, 2023).

G. SUMMARY

This chapter provided a variety of source information that defined standards, competency, project, program, and portfolio. It also provided some historical perspective and brief reviews of various studies on the same or similar topics. Like the two NPS studies that preceded this one, such information is foundational to the comparison of DoD portfolio management competency standards to PMI portfolio management competency standards. The next chapter will walk through the methodology for comparison based on information introduced in the literature review.

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III. METHODOLOGY

As this study is intended to be a follow-on to the previous studies on this topic from NPS, the methodology for determining alignment between DoD and PMI competency standards will be nearly identical. This chapter reviews the data sources, the analysis of those sources, and concludes with limitations. The intent of keeping the methodology as close to the preceding studies as possible was to allow for continuity in the studies and to allow for future work to draw lines between the studies and interpret trends that will produce methodology that looks very similar to Stewart et al.'s (2021) research results.

A. DATA SOURCES

As discussed in the literature review, the two data sources chosen for this study are the DoD Program Management Functional Career Field Competencies and the PMI Portfolio Management Professional Examination Content Outline. All data that was extracted from their source documents and placed into a spreadsheet can be found in the supplemental of this study.

1. PMI Portfolio Management Professional Examination Content Outline[3]

PMI's guidebook, *Portfolio Management Professional (PfMP) Examination Content Outline* (PMI, 2013), quantifies the areas of study a person seeking this certification should focus on when viewing the *Standard for Portfolio Management* (PMI, 2017). Taken together, along with various other preparation recommendations from PMI, these two documents prepare candidates to take the PfMP exam to earn the PfMP credential.

[3] See supplemental.

a. Proportions

The content outline provides a breakdown of the percentage of questions on the exam by domain. This is presented in Table 3 within the literature review. These percentages will act as weighting of alignment criteria within the analysis.

b. Domains and Tasks

Each of the domains are listed in tabular form to include a brief definition of the domain in question. Those domains and their related tasks are captured in Tables 5 through 9. As these represent the industry standard, they will be the control that the DoD standards are compared for alignment. There are five domains and 35 associated tasks.

Table 5. Strategic Alignment. Source: PMI (2013).

Domain 1: Strategic Alignment

The Strategic Alignment domain includes the continuous activities necessary for aligning portfolio components (programs, projects, and operations) with organizational strategic objectives, goals, and priorities. Portfolio strategic alignment also involves recommending portfolio scenarios and related components to create an initial high level portfolio roadmap.

Tasks	Strategic Alignment (25%)
Task 1	**Evaluate organizational strategic goals and objectives using document reviews, interviewing, and other information gathering techniques in order to understand the strategic priorities.**
Task 2	**Identify prioritization criteria (e.g., legislative, dependencies, ROI, stakeholder expectations, strategic fit) using information gathering and analysis techniques in order to create a basis for decision making.**
Task 3	**Rank strategic priorities working with key stakeholders and using qualitative and quantitative analyses in order to provide a guiding framework to operationalize the organizational strategic goals and objectives.**
Task 4	**Identify existing and potential portfolio components by reviewing documentation such as business plans/proposals in order to create portfolio scenarios.**
Task 5	**Create portfolio scenarios (what-if analysis) by reviewing components against prioritization criteria and using analysis techniques (e.g., options analysis, risk analysis, SWOT analysis, financial analysis) in order to evaluate and select viable options.**
Task 6	**Recommend portfolio scenario(s) and related components, based on prioritization analysis/criteria, in order to provide governance with a rationale for decision making.**
Task 7	**Determine the impact to portfolio and portfolio components due to changes in strategic goals and objectives, in order to sustain strategic alignment.**
Task 8	**Create high level portfolio roadmap working with key stakeholders using prioritization, interdependency analysis, and organizational constraints in order to confirm and communicate the portfolio components sequencing, dependencies, and strategic alignment.**

Table 6. Governance. Source: PMI (2013).

Domain 2: Governance

The Governance domain includes activities related to establishing the governance model, developing the portfolio management plan, and approving the portfolio. Tasks in the Governance domain ensure that portfolio components are authorized and processes and procedures are developed and continuously improved.

Tasks	Governance (20%)
Task 1	**Define and establish a governance model including the structure (including but not limited to steering committees, governance boards), policies, and decision-making roles, responsibilities, rights and authorities in order to support effective decision-making and achieve strategic goals.**
Task 2	**Determine portfolio management standards, protocols, rules, and best practices, using organizational assets (such as information systems, subject-matter experts) and industry standards in order to establish consistent portfolio management practices.**
Task 3	**Define and/or modify portfolio processes and procedures including but not limited to benefits realization planning, information management, performance, communication, risk management, stakeholder engagement, resource management, and change management in order to manage the portfolio efficiently and effectively.**
Task 4	**Create the portfolio management plan including, but not limited to, roles and responsibilities, governance model, escalation procedures, risk tolerances, and governance thresholds, change control and management, key performance indicators, prioritization model, and communication procedures using standards, models, and other organizational assets in order to ensure effective and efficient portfolio management.**
Task 5	**Make recommendations and obtain approval regarding portfolio decisions (e.g, components, plans, budget, roadmap) through communication with key decision makers as defined by the governance model, in order to authorize the execution of the portfolio.**

Table 7. Portfolio Performance. Source: PMI (2013).

Domain 3: Portfolio Performance

The Portfolio Performance domain includes the activities required for managing the portfolio using the portfolio processes as defined by the governance model; continuously monitoring and evaluating the performance of the consolidated portfolio components in order to balance the portfolio; and reporting on progress towards the achievement of strategic objectives.

Tasks	Portfolio Performance (25%)
Task 1	**Initiate the portfolio using the portfolio roadmap and supporting artifacts in order to authorize the portfolio structure and activate the components.**
Task 2	**Collect and consolidate key performance metric data, as defined by portfolio governance and using various techniques, in order to measure the health of the portfolio.**
Task 3	**Monitor the portfolio performance on an ongoing basis, using reports, conversations, dashboards, and auditing techniques in order to ensure portfolio effectiveness and efficiency and maintain strategic alignment.**
Task 4	**Manage and escalate issues by communicating recommended actions to appropriate decision makers for timely approval and implementation of proposed solution(s).**
Task 5	**Manage portfolio changes using change management techniques, in order to improve portfolio performance and maintain strategic alignment.**
Task 6	**Balance portfolio and prioritize portfolio components, using established criteria and methods in order to optimize resource utilization and achieve strategic portfolio objectives.**
Task 7	**Analyze and optimize the consolidated allocation/reallocation of capacity (e.g., people, tools, materials, technology, facilities, financial) using supply/demand management and scenario analysis techniques to ensure portfolio efficiency and effectiveness.**
Task 8	**Update and refine existing portfolio road maps, using change analysis in order to facilitate re-allocation of organizational resources to the portfolio.**
Task 9	**Measure the aggregated portfolio performance results against the defined business or strategic goals and objectives in order to demonstrate progress toward the achievement of business or strategic goals.**
Task 10	**Maintain records by capturing portfolio artifacts, such as approvals, prioritizations, and other decisions, in order to ensure compliance with organizational policies, regulatory requirements, and portfolio management standards.**

Table 8. Portfolio Risk Management. Source: PMI (2013).

Domain 4: Portfolio Risk Management

Portfolio Risk Management includes activities related to the balancing and management of portfolio risk consistent with the risk appetite of the organization and facilitates decision making.

Tasks	Portfolio Risk Management (15%)
Task 1	**Determine acceptable level of risk for the portfolio, based on organizational and stakeholder risk tolerances, in order to provide input to governance.**
Task 2	**Develop the portfolio risk management plan, using governance risk guidelines, processes, and procedures and other organizational assets in order to capitalize on opportunities, and respond to risks.**
Task 3	**Perform dependency analysis to identify and monitor risks related to the interdependencies and intradependencies within or across portfolios in order to support decision-making.**
Task 4	**Develop, monitor, and maintain portfolio-level risk register, including risks to strategic goals and objectives, to business value, and escalated from portfolio components, using risk management processes in order to support decision making.**
Task 5	**Promote common understanding and stakeholder ownership of portfolio risks, through communications with stakeholders, in order to facilitate risk response.**
Task 6	**Provide recommendation and obtain approval for a portfolio management reserve, based on aggregate portfolio risk exposure, in order to optimize portfolio strategic goals and objectives.**

Table 9. Communications Management. Source: PMI (2013).

Domain 5: Communications Management

The Communications Management domain includes activities related to continuously communicating with stakeholders; understanding their needs and expectations; addressing issues as they occur; managing conflicting interests; and fostering appropriate stakeholder engagement in portfolio decisions and activities.

Tasks	Communications Management (15%)
Task 1	**Analyze internal and external stakeholders using techniques such as meetings, interviews, surveys/questionnaires, in order to identify stakeholder expectations, interests, and influence on the success of the portfolio.**
Task 2	**Create the aggregate communication strategy and plan, including methods, recipients, vehicles, timelines and frequencies in order to enable effective communication to stakeholders.**
Task 3	**Engage stakeholders, through oral and written communication, to ensure awareness, manage expectations, foster support, and build relationships and collaboration for the success of the portfolio roadmap.**
Task 4	**Maintain the communication strategy and plan by evaluating current communications capabilities, identifying gaps, and documenting communications plan to meet stakeholder requirements.**
Task 5	**Prepare and/or facilitate stakeholder understanding of portfolio management-related processes, procedures, and protocols using organizational assets (e.g., information systems, training delivery methods) in order to promote common understanding and application of the portfolio management process.**
Task 6	**Verify accuracy, consistency, and completeness of portfolio communication, utilizing governance guidelines, to maintain credibility and satisfaction with all stakeholders.**

2. Office of the Assistant Secretary of Defense for Acquisition Memorandum[4]

As DoD does not list portfolio management as a career path or functional area, the ASD(A) memorandum from December 16, 2024, detailing Program Management Functional Career Field Competencies, is the only similar data to PMI's domains and tasks. Table 4 in the literature review shows the summary of functional Areas, competency units and competencies as of December 1, 2024. Table 10 shows an excerpt from that same

[4] See supplemental.

memorandum that details each Unit of Competency (UOC), competency descriptions, and any sub-competencies that might exist. The table presented in the memorandum is 14 pages long and indicates that it was completed in October 2024. The memorandum provides four functional areas and seventeen units of competency that hold 62 different competencies (OASD, 2024).

Table 10. Memorandum Excerpt Showing a Sampling of the DoD Program Management Career Field Function Competencies. Adapted from OASD (2024).

DoD Program Management Career Field Functional Competencies			
As of:	Completed October 2024		
Unit of Competency	**Topic**	**Competency Description**	**Sub-Competencies**
Acquisition Management (AM)1	**Capability Integration Planning** Ability to develop both a short and long range, innovative acquisition plan/ strategy that provides a frame work for creating functional activities essential to the development of a technology or system/product and manufacturing and fielding.	Supervise the requirements management effort to derive feasible program and portfolio requirements from the user capability needs statement and CONOPs per Joint Capabilities Integration and Development System (JCIDS) outputs or functional problem statements (for business systems) to establish the Acquisition Program Baseline (APB).	1. Implement a process, in coordination with user(s), to create and manage program requirements baseline (including interfaces) across the program life cycle. 2. Understand that there is a time-sensitive process for implementing requirements and subsequent acquisition strategy changes resulting from emerging intelligence information or other sources. 3. Guide the requirements process together with the user to meet "customer needs" and support decisions in the context of system of systems architecture. 4. Identify and incorporate best practices in trade-off analysis and system engineering to make requirements related program decisions.
		Supervise the acquisition program strategic planning process to develop and document the organization's mission, vision of success, and fundamental values as they relate to achieving successful acquisition outcomes	1.Supervise and approve the development of an acquisition program baseline. 2. Frame an Acquisition Strategy that addresses the JCIDS requirements given the PPBE resourcing constraints and relevant risks & opportunities and associated trade-offs. 3. Crosswalk and validate supporting technical, financial, and contract planning documents against the Acquisition Strategy goals and objectives.

B. ANALYSIS

The first step of the analysis of the data presented was completed in the selection of the data sources. It was a basic comparison to determine whether there were similar data

pools to compare. While verbiage used in the two organizations is similar, there is no real one-for-one matching. This requires taking some liberties with the data before proceeding.

First, this study assumed that PMI's "domains" and DoD's functional areas were equivalent in nature. Second, this study assumed that PMI's "tasks" within their domains and DoD's competencies and sub-competencies were equivalent in nature. If either of these two assumptions were found to be invalid, the comparison would have to be considered invalid. As no reason to invalidate these assumptions could be found, the analysis continued.

1. Qualitative Analysis

Assessing the alignment of DoD competencies to PMI tasks required a keyword search or comparison and then some subjective interpretation of the intent behind DoD verbiage. The following steps provide the approach taken:

1. The two data sources were extracted from their source files and input into an excel spreadsheet.
2. After the data from the two sources was validated as correct and intact, keywords were selected from the PMI tasks and then searched within the DoD competencies. Similar to the work completed by Stewart et al. (2021), not all PMI tasks had a DoD equivalent and not all DoD competencies had a match. Those competencies from the DoD that were not matched do not appear in the final analysis.
3. After matching as many of the DoD competencies with PMI tasks as possible, based on key words, a scrub was made to see if there were any competencies that matched by intent as evidenced by their descriptions. This is where the subjective part of the analysis comes into play.
4. Similar to Stewart et al. (2021), three level alignment levels were assigned to those matching and each level had a corresponding numeric value (which comes into play in the next section, Quantitative Analysis). The three levels used by Stewart et al. (2021) were used herein:

- *No Discernible Alignment* indicated that no current DoD PM competency standard fit the description of a PMI-stated task.
- *Partial Alignment* indicated that one or more keywords or the general purpose of the DoD PM competency or sub-competencies related to the PMI-stated task.
- *Full Alignment* indicated that an existing DoD PM competency standard matched the PMI-stated task to the degree that included several exact word matches or clearly aligned descriptions, purposes, or applications. (p. 38)

5. After matching all possible DoD competencies to PMI tasks, the matches or lack thereof were reviewed to see if there were any candidates for change. One of the objectives of this study is to produce some recommendations for change. Again, similar to Stewart et al. (2021), a careful look at barriers to implementation (BTI) was taken. This was done to facilitate making recommendations once the analysis is complete. There were four levels used by Stewart et al. (2021):

   - *No BTI* are practices that already occur within the DoD
   - *Low BTI* are changes that the DoD could implement immediately with little to no change in personnel structure or additional policy concerns.
   - *Medium BTI are changes that would require either significant changes in policy or personnel structure.*
   - *High BTI are changes that would require both significant personnel and policy changes.* (pp. 38–39)

To facilitate the quantitative analysis described in the next section, each BTI was given a suitable numeric value.

2. Quantitative Analysis

To facilitate a quantitative analysis, two scoring or grading scales were used. As described in the qualitative analysis section, each category was given a corresponding numeric value.

The two scales are listed in Table 11.

Table 11. Grading Scales

Alignment		BTI	
No Discernible Alignment	0	No BTI	0
Partial Alignment	0.5	Low BTI	1
Full Alignment	1	Medium BTI	2
		High BTI	3

Because PMI has weighted their domains using the percentages found in Table 3, those weights and the additional weighting created by virtue of each PMI domain having differing numbers of tasks were applied. Those weightings were only applied to the alignment score, not to the BTI score.

Alignment scoring provides a quantitative view of DoD's competency standards, and BTI scoring provides a quantitative view of the level of difficulty necessary to implement change or process improvement.

C. LIMITATIONS

The following are research limitations.

1. DoD is Not a Business

Despite the federal government making changes to the way it governs, making efforts to align to accepted business practices or industry standards, there is no denying that the DoD is different from any other organization with which PMI interacts. As such, it is important to note that the DoD seems to be delaying meeting the requirements levied upon it in FY20 and FY21 NDAAs. This slow speed to implementation forced this study to compare program management competencies to portfolio management standards.

2. Subjective Versus Objective Analysis

Because DoD has not implemented portfolio management in the same way that PMI standards would indicate to be correct, a fully objective analysis could not be completed. This is evidenced by the comparison of program management competencies to portfolio management standards. A fair degree of subjective interpretation or interpolation was

necessary to determine alignment of competencies and standards. In most cases, those competencies that relied on the subjective views of the researcher for a match were given a partial alignment score.

3. Experience

As a retired Navy Commander of twenty-eight years and a government civilian, working as a project manager for five years has provided sufficient experience and capability to interpret DoD verbiage and intent. Completion of the Master of Science in Program Management (MSPM) academic coursework, provided insights into project, program, and portfolio management.

D. SUMMARY

This chapter covered the research approach, data sources, analysis methods, and some limitations. Chapter IV will present the analysis, and Chapter V will conclude this study.

IV. ANALYSIS

This chapter presents the analysis of the data from PMI and DoD standards. It first shows results of the comparison of DoD competencies to PMI domains and standards. From there it covers a macro-level comparison of the results of this study with those of Stewart et al. (2021). Like Stewart et al.'s (2021) study, this chapter concludes with a discussion of the barriers to implementation.

A. ALIGNMENT

Technically speaking, there is no alignment between DoD portfolio competencies and PMI PfMP standards. There are no DoD portfolio specific competencies, at least not explicitly in the ASD(A) memorandum, nor in DAU's literature. There are, however, some alignments between DoD's program management competencies and PMI's portfolio standards, and those will be addressed herein.

1. Overall

As discussed in the previous chapter, the data from PMI and the ASD(A) memorandum were input into an excel spreadsheet and formatted for use. The data in question can be found in the supplemental. To determine if there were any changes from the previous study, Stewart et al.'s (2021) data was also pulled into the spreadsheet. Their data is backfilled in blue and annotated with either 2021 or some other indicator attributing the data to their study. Their data was rounded to the nearest whole number; this study's data used the raw data rounded to the nearest hundredth to present as accurate a picture as possible.

Table 12 shows the overall alignment data with columns for Alignment (raw), EW Alignment (weighted with PMI's exam percentages; exam weighted), and TW Alignment (weighted with percentages based on PMI's task quantities within each domain; number of tasks divided by total number of tasks to arrive at task weighted).

Table 12. Alignment Summary[5]

PMI Domain	Exam (EW)	Task (TW)	2025 Alignment	2025 EW Alignment	2025 TW Alignment	2021 Alignment	2021 EW Alignment	2021 TW Alignment
Strategic Alignment	25%	23%	43.75%	10.94%	10.00%	18.75%	4.69%	4.29%
Governance	20%	14%	40.00%	8.00%	5.71%	0.00%	0.00%	0.00%
Portfolo Performance	25%	29%	65.00%	16.25%	18.57%	35.00%	8.75%	10.00%
Portfolio Risk Management	15%	17%	50.00%	7.50%	8.57%	50.00%	7.50%	8.57%
Communication Management	15%	17%	100.00%	15.00%	17.14%	100.00%	15.00%	17.14%
OVERALL/AVERAGE			59.75%	57.69%	60.00%	40.75%	35.94%	40.00%

There have been some improvements in alignment over the past four years; but some of that may be attributed to the subjective nature of some of the data and the experience levels of the researchers. Similar to Stewart et al.'s (2021) study, the most heavily weighted domains in the PMI standard received the lowest (for the most part) alignment scores, with Portfolio Performance bucking that trend. The remaining two domains remained unchanged. Figure 3 depicts the domain-by-domain comparison of the two studies' raw alignment scores.

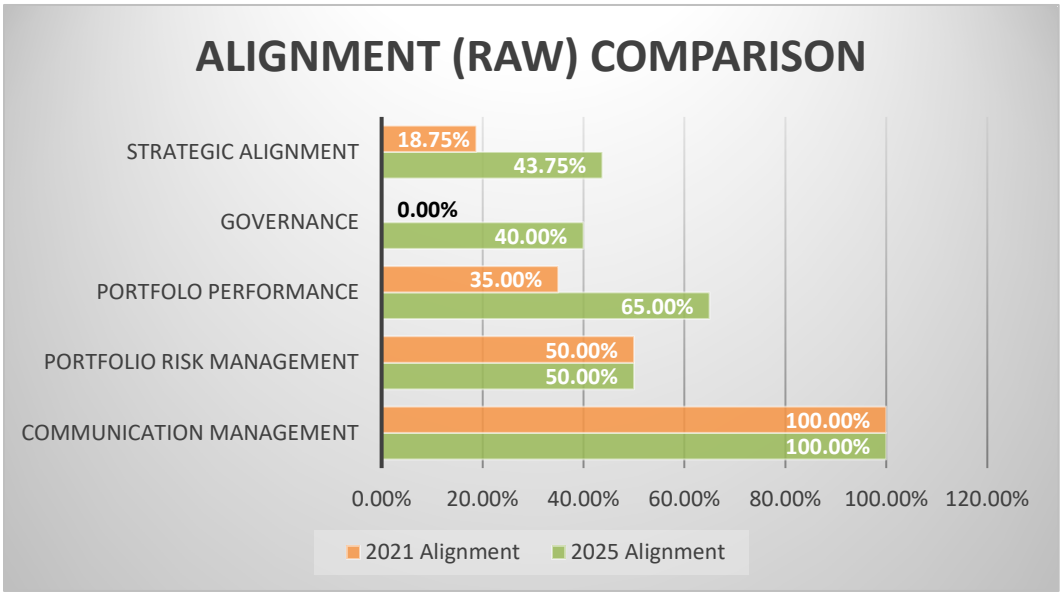

Figure 3. Alignment Comparison

[5] Contains information adapted from Stewart et al. (2021).

Overall, the average alignment between the two standards, with weighting considered, ranges from 57.69 to 60.00%. The previous study showed the alignment to be in the range of 35.94–40.75%. That is close to a 20% increase study-over-study. It is important to note that the weighted alignment results shape the picture by showing if the alignment is placed in the correct or more heavily weighted PMI standards. In the previous study, the least emphasized domains by weighting carried over half of the alignment. The data shows that this has changed to the more heavily emphasized domains carrying over half of the alignment.

2. By Domain

Each domain will be presented in a summary table containing qualitative and quantitative results and be accompanied by discussion of the qualitative and quantitative analysis.

a. Strategic Alignment

Per PMI, "the Strategic Alignment domain includes the continuous activities necessary for aligning portfolio components (programs, projects, and operations) with organizational strategic objectives, goals, and priorities. Portfolio Strategic Alignment also involves recommending portfolio scenarios and related components to create an initial high level portfolio roadmap" (PMI, 2013). No singular functional area within the ASD(A) memorandum directly mapped to this domain. Instead, there were units of competency from within all four functional areas (acquisition management, business management, technical management, and leadership) that showed some degree of alignment. This is one of the strongest weighted domains out of the five with 25% exam weighting and 23% task weighting (PMI, 2013). Overall, this domain saw an improvement in alignment of almost 235%. Table 13 shows the summary of data for this domain.

Table 13. Strategic Alignment Domain Data[6]

				2025				2021			
Tasks	**Strategic Alignment (25%)**	**DOD UOC**	**DOD Competency**	**Alignment**	**BTI**	**EW Alignment**	**TW Alignment**	**Alignment**	**BTI**	**EW Alignment**	**TW Alignment**
Task 1	Evaluate organizational strategic goals and objectives using document reviews, interviewing, and other information gathering techniques in order to understand the strategic priorities.	AM1, L2	Acquisition Program Strategic Planning (AM1); Vision (L2)	0.5	1	0.13	0.11	0.5	1	0.13	0.11
Task 2	Identify prioritization criteria (e.g., legislative, dependencies, ROI, stakeholder expectations, strategic fit) using information gathering and analysis techniques in order to create a basis for decision making.	AM2, AM4, TM1	Acquisition Policy and Best Practices (AM2); Political Savvy and External Situational Awareness (AM4); Decision Analysis (TM1)	0.5	1	0.13	0.11	0	2	0.00	0.00
Task 3	Rank strategic priorities working with key stakeholders and using qualitative and quantitative analyses in order to provide a guiding framework to operationalize the organizational strategic goals and objectives.			0	1	0.00	0.00	0	2	0.00	0.00
Task 4	Identify existing and potential portfolio components by reviewing documentation such as business plans/proposals in order to create portfolio scenarios.			0	1	0.00	0.00	0.5	2	0.13	0.11
Task 5	Create portfolio scenarios (what-if analysis) by reviewing components against prioritization criteria and using analysis techniques (e.g., options analysis, risk analysis, SWOT analysis, financial analysis) in order to evaluate and select viable options.	AM3, L4	Risk/Opportunity Management (AM3); Program Oversight (AM3); Decisiveness (L4)	0.5	1	0.13	0.11	0	1	0.00	0.00
Task 6	Recommend portfolio scenario(s) and related components, based on prioritization analysis/criteria, in order to provide governance with a rationale for decision making.	L4	Decisiveness (L4)	0.5	1	0.13	0.11	0	1	0.00	0.00
Task 7	Determine the impact to portfolio and portfolio components due to changes in strategic goals and objectives, in order to sustain strategic alignment.	AM1,BM2	Acquisition Program Strategic Planning (AM1); Financial Planning (BM2)	1	0	0.25	0.23	0	2	0.00	0.00
Task 8	Create high level portfolio roadmap working with key stakeholders using prioritization, interdependency analysis, and organizational constraints in order to confirm and communicate the portfolio components sequencing, dependencies, and strategic alignment.	AM3, AM4, L1, L2	Resource Management (AM3); Political Savvy and External Situational Awareness (AM4); Communicate Effectively (L1); Vision (L2); Flexibility (L2)	0.5	2	0.13	0.11	0.5	2	0.13	0.11
			Average Score	43.75%	1.00	10.94%	10.00%	18.75%	1.63	4.69%	4.29%

[6] Contains information adapted from: PMI (2013), OASD (2024) and Stewart et al. (2021).

(1) Qualitative Analysis

During the keyword search and through application of some personal experience, it was found that there were a handful of competencies in the ASD(A) memorandum that aligned with various PMI tasks within Strategic Alignment. In almost all cases, there was room for interpretation of the verbiage and no direct, "word-for-word" correlation between the competencies and the tasks. In the previous study, 5 of 8 tasks had no DoD alignment. In this study, it was found that only 2 of 8 had no DoD alignment. This presents a marked improvement, giving the qualitative a 75% alignment.

(2) Quantitative Analysis

In looking at those tasks that had some DoD alignment, the scoring applied to each task validated the marked improvement shown in the qualitative analysis, but not to the degree that qualitative analysis alone would indicate. In this study, most of the alignment was only *Partial Alignment* and the final score of 43.75%, while increased over the previous study's 18.75% alignment, is nowhere near the 75% alignment the qualitative analysis indicates.

b. Governance

PMI defines the governance domain as follows:

> The Governance domain includes activities related to establishing the governance model, developing the portfolio management plan, and approving the portfolio. Tasks in the Governance domain ensure that portfolio components are authorized and processes and procedures are developed and continuously improved. (PMI, 2013, p. 5)

As with the previous domain, there were no singular DoD functional areas that directly correlated or aligned to the Governance domain. There were elements of acquisition management and leadership functional areas that partially aligned with PMI's tasks. All but one of the tasks saw some sort of improvement over the previous study. Table 14 shows the summary of data for this domain.

Table 14. Governance Domain Data[7]

				2025				2021			
Tasks	**Governance (20%)**	**DOD UOC**	**DOD Competency**	**Alignment**	**BTI**	**EW Alignment**	**TW Alignment**	**Alignment**	**BTI**	**EW Alignment**	**TW Alignment**
Task 1	Define and establish a governance model including the structure (including but not limited to steering committees, governance boards), policies, and decision-making roles, responsibilities, rights and authorities in order to support effective decision-making and achieve strategic goals.			0	3	0.00	0.00	0	3	0.00	0.00
Task 2	Determine portfolio management standards, protocols, rules, and best practices, using organizational assets (such as information systems, subject matter experts) and industry standards in order to establish consistent portfolio management practices.	AM3, AM5	Program Oversight (AM3); Tailoring Acquisition Approach (AM5)	0.5	2	0.10	0.07	0	3	0.00	0.00
Task 3	Define and/or modify portfolio processes and procedures including but not limited to benefits realization planning, information management, performance, communication, risk management, stakeholder engagement, resource management, and change portfolio efficiently and effectively.management in order to manage the	AM5	Tailoring Acquisition Approach (AM5)	0.5	2	0.10	0.07	0	3	0.00	0.00
Task 4	Create the portfolio management plan including, but not limited to, roles and responsibilities, governance model, escalation procedures, risk tolerances, and governance thresholds, change control and management, key performance indicators, prioritization model, and communication procedures using standards, models, and other organizational assets in order to ensure effective and efficient portfolio management.	AM3	Program Oversight (AM3)	0.5	2	0.10	0.07	0	3	0.00	0.00
Task 5	Make recommendations and obtain approval regarding portfolio decisions (e.g, components, plans, budget, roadmap) through communication with key decision makers as defined by the governance model, in order to authorize the execution of the portfolio.	AM4, L1	Politial Savvy and External Situational Awareness (AM4); Pathway Selection and Tailoring Acquisition Approach (AM5); Communicate Effectively (L1)	0.5	2	0.10	0.07	0	3	0.00	0.00
			Average Score	40.00%	2.20	8.00%	5.71%	0.00%	3.00	0.00%	0.00%

[7] Contains information adapted from: PMI (2013), OASD (2024) and Stewart et al. (2021).

(1) Qualitative

In the previous study, there were zero competencies aligned with PMI tasks. In this study, there are four with *Partial Alignment*. While the alignment between functional areas and tasks was weighted towards acquisition management, there were some business management UOCs that almost made the cut. This domain saw the largest improvement in alignment out of the five domains.

(2) Quantitative

Unsurprisingly, none of the tasks achieved full alignment with PMI's tasks, but the fact that 4 out of 5 tasks achieved some degree of alignment is an improvement. For the third ranked domain, by exam weighting and task weighting, to go from zero alignment to any alignment would have been well received, but achieving the highest level of improvement out of the tasks is notable.

c. Portfolio Performance

The most heavily weighted domain, by exam weighting (tied with Strategic Alignment, 25%) and task weighting (a clear winner, 29%), Portfolio Performance should have seen the largest correlation between PMI tasks and DoD UOCs. PMI defines this domain as follows:

> The Portfolio Performance domain includes the activities required for managing the portfolio using the portfolio processes as defined by the governance model; continuously monitoring and evaluating the performance of the consolidated portfolio components in order to balance the portfolio; and reporting on progress towards the achievement of strategic objectives. (PMI, 2013, p. 6)

There were UOCs from three of four DoD functional areas in alignment with this domain, once again showing that no singular DoD functional area maps to a PMI domain. Table 15 shows the summary of data for this domain.

Table 15. Portfolio Performance Domain Data[8]

				2025				2021			
Tasks	**Portfolio Performance (25%)**	**DOD UOC**	**DOD Competency**	**Alignment**	**BTI**	**EW Alignment**	**TW Alignment**	**Alignment**	**BTI**	**EW Alignment**	**TW Alignment**
Task 1	Initiate the portfolio using the portfolio roadmap and supporting artifacts in order to authorize the portfolio structure and activate the components.	AM1, AM5	Acquisition Program Strategic Planning (AM1); Pathway Selection and Tailoring Acquisition Approach (AM5)	0.5	2	0.13	0.14	0	2	0.00	0.00
Task 2	Collect and consolidate key performance metric data, as defined by portfolio governance and using various techniques, in order to measure the health of the portfolio.	AM3	Program Oversight (AM3)	0.5	1	0.13	0.14	0.5	1	0.13	0.14
Task 3	Monitor the portfolio performance on an ongoing basis, using reports, conversations, dashboards, and auditing techniques in order to ensure portfolio effectiveness and efficiency and maintain strategic alignment.	AM3	Program Oversight (AM3)	1	0	0.25	0.29	1	0	0.25	0.29
Task 4	Manage and escalate issues by communicating recommended actions to appropriate decision makers for timely approval and implementation of proposed solution(s).	L1	Communicate Effectively (L1)	1	0	0.25	0.29	1	1	0.25	0.29
Task 5	Manage portfolio changes using change management techniques, in order to improve portfolio performance and maintain strategic alignment.	AM1, AM5, L2, L4	Requirements Management (AM1); Acquisition Program Strategic Planning (AM1); Tailoring Acquisition Approach (AM5); Flexibity (L2); Problem Solving (L4)	1	0	0.25	0.29	1	1	0.25	0.29
Task 6	Balance portfolio and prioritize portfolio components, using established criteria and methods in order to optimize resource utilization and achieve strategic portfolio objectives.	AM1, AM3, L2	Acquistion Program Strategic Planning (AM1); Program Oversight (AM3); Flexibility (L2)	0.5	2	0.13	0.14	0	2	0.00	0.00
Task 7	Analyze and optimize the consolidated allocation/reallocation of capacity (e.g., people, tools, materials, technology, facilities, financial) using supply/demand management and scenario analysis techniques to ensure portfolio efficiency and effectiveness.	AM3	Requirements Decomposition (AM3); Program Oversight (AM3)	1	0	0.25	0.29	0	1	0.00	0.00
Task 8	Update and refine existing portfolio road maps, using change analysis in order to facilitate re-allocation of organizational resources to the portfolio.	AM3, L2	Requirements Decomposition (AM3); Program Oversight (AM3); Flexibility (L3)	0.5	2	0.13	0.14	0	2	0.00	0.00
Task 9	Measure the aggregated portfolio performance results against the defined business or strategic goals and objectives in order to demonstrate progress toward the achievement of business or strategic goals.	BM2	Financial Planning (BM2); Programming (BM2)	0.5	2	0.13	0.14	0	1	0.00	0.00
Task 10	Maintain records by capturing portfolio artifacts, such as approvals, prioritizations, and other decisions, in order to ensure compliance with organizational policies, regulatory requirements, and portfolio management standards.			0	2	0.00	0.00	0	2	0.00	0.00
			Average Score	65.00%	1.10	16.25%	18.57%	35.00%	1.30	8.75%	10.00%

[8] Contains information adapted from: PMI (2013), OASD (2024) and Stewart et al. (2021).

(1) Qualitative

In the previous study, Stewart et al. (2021), found that only 4 out of 10 tasks had some alignment from DoD UOCs. This research found 9 out of 10 tasks showed some degree of alignment. That is more than double the alignment from the previous study. As the most heavily weighted domain, by a small margin provided by task weighting, this domain should have seen the highest degree of improvement. Qualitatively speaking it did.

(2) Quantitative

Compared to the previous study, this domain saw half of its tasks gain some degree of alignment. The remaining five saw no change. Alignment went from 35% in the previous study to 65% in this one by raw alignment, resulting in an 185.7% improvement.

d. Portfolio Risk Management

PMI defines the Portfolio Risk Management domain as follows:

> Portfolio Risk Management includes activities related to the balancing and management of portfolio risk consistent with the risk appetite of the organization and facilitates decision making. (PMI, 2013, p. 7)

This domain is one of two that are at the bottom of the weighting; and despite the obvious language relating to risk management, once again there is no functional area in the DoD competencies that correlates to this domain. There are elements of the acquisition management functional area that correlate, specifically, the "Risk/Opportunity Management" competency under UOC Acquisition Management (AM) 3. Table 16 shows the summary of data for this domain.

Table 16. Portfolio Risk Management Domain Data[9]

Tasks	Portfolio Risk Management (15%)	DOD UOC	DOD Competency	2025 Alignment	2025 BTI	2025 EW Alignment	2025 TW Alignment	2021 Alignment	2021 BTI	2021 EW Alignment	2021 TW Alignment
Task 1	Determine acceptable level of risk for the portfolio, based on organizational and stakeholder risk tolerances, in order to provide input to governance.	AM3	Risk/Opportunity Management (AM3)	1	0	0.15	0.17	1	1	0.15	0.17
Task 2	Develop the portfolio risk management plan, using governance risk guidelines, processes, and procedures and other organizational assets in order to capitalize on opportunities, and respond to risks.	AM3	Risk/Opportunity Management (AM3)	1	0	0.15	0.17	1	1	0.15	0.17
Task 3	Perform dependency analysis to identify and monitor risks related to the interdependencies and intradependencies within or across portfolios in order to support decision-making.			0	1	0.00	0.00	0	2	0.00	0.00
Task 4	Develop, monitor, and maintain portfolio-level risk register, including risks to strategic goals and objectives, to business value, and escalated from portfolio components, using risk management processes in order to support decision making.	AM3	Risk/Opportunity Management (AM3)	1	0	0.15	0.17	1	1	0.15	0.17
Task 5	Promote common understanding and stakeholder ownership of portfolio risks, through communications with stakeholders, in order to facilitate risk response.			0	1	0.00	0.00	0	1	0.00	0.00
Task 6	Provide recommendation and obtain approval for a portfolio management reserve, based on aggregate portfolio risk exposure, in order to optimize portfolio strategic goals and objectives.			0	1	0.00	0.00	0	2	0.00	0.00
			Average Score	50.00%	0.50	7.50%	8.57%	50.00%	1.33	7.50%	8.57%

[9] Contains information adapted from: PMI (2013), OASD (2024) and Stewart et al. (2021).

(1) Qualitative

With the culture of risk management within DoD, one might opine that this domain should have alignment. However, only half of the tasks had any degree of alignment with the DoD's functional areas. The other three might have some subjective correlation based on personal experience but this study has tried to keep things objective. There was no change between this study and the previous study.

(2) Quantitative

Scoring between the two studies appears to be identical and this domain remained unchanged with a score of 50% for alignment.

e. Communications Management

Communications is very important in every industry, and it appears that the DoD is fully aligned with PMI's standards. PMI defines this domain as follows:

> The Communications Management domain includes activities related to continuously communicating with stakeholders; understanding their needs and expectations; addressing issues as they occur; managing conflicting interests; and fostering appropriate stakeholder engagement in portfolio decisions and activities. (PMI, 2013, p. 8)

Once again, there is no direct correlation between the DoD functional areas and this PMI domain. UOCs from the DoD functional areas of acquisition management and leadership are found to align with each of the tasks in this domain. Table 17 shows the summary of data for this domain.

Table 17. Communications Management Domain Data[10]

Tasks	Communications Management (15%)	DOD UOC	DOD Competency	2025 Alignment	2025 BTI	2025 EW Alignment	2025 TW Alignment	2021 Alignment	2021 BTI	2021 EW Alignment	2021 TW Alignment
Task 1	Analyze internal and external stakeholders using techniques such as meetings, interviews, surveys/questionnaires, in order to identify stakeholder expectations, interests, and influence on the success of the portfolio.	AM3, AM4; L1	Program Oversight (AM3); Teaming (AM3); Political Savvy and External Situational Awareness (AM4); Communicate Effectively (L1)	1	0	0.15	0.17	1	0	0.15	0.17
Task 2	Create the aggregate communication strategy and plan, including methods, recipients, vehicles, timelines and frequencies in order to enable effective communication to stakeholders.	L1	Communicate Effectively (L1)	1	0	0.15	0.17	1	0	0.15	0.17
Task 3	Engage stakeholders, through oral and written communication, to ensure awareness, manage expectations, foster support, and build relationships and collaboration for the success of the portfolio roadmap.	AM3, AM4, L1	Program Oversight (AM3); Teaming (AM3); Political Savvy and External Situational Awareness (AM4); Communicate Effectively (L1)	1	0	0.15	0.17	1	0	0.15	0.17
Task 4	Maintain the communication strategy and plan by evaluating current communications capabilities, identifying gaps, and documenting communications plan to meet stakeholder requirements.	AM4; L1	Political Savvy and External Situational Awareness (AM4); Communicate Effectively (L1)	1	0	0.15	0.17	1	0	0.15	0.17
Task 5	Prepare and/or facilitate stakeholder understanding of portfolio management related processes, procedures, and protocols using organizational assets (e.g., information systems, training delivery methods) in order to promote common understanding and application of the portfolio management process.	AM4; L1	Political Savvy and External Situational Awareness (AM4); Communicate Effectively (L1)	1	0	0.15	0.17	1	0	0.15	0.17
Task 6	Verify accuracy, consistency, and completeness of portfolio communication, utilizing governance guidelines, to maintain credibility and satisfaction with all stakeholders.	AM4; L1	Political Savvy and External Situational Awareness (AM4); Communicate Effectively (L1)	1	0	0.15	0.17	1	0	0.15	0.17
			Average Score	100%	0.00	15.00%	17.14%	100%	0.00	15.00%	17.14%

[10] Contains information adapted from: PMI (2013), OASD (2024) and Stewart et al. (2021).

(1) Qualitative

While each of the tasks is scored as *Full Alignment* with the DoD competencies, that does not mean that ALL the DoD UOCs correlate to the tasks in this domain. Not surprisingly, the DoD UOCs related to communications are found to come into play here. There are three UOCs with correlation to the six tasks.

(2) Quantitative

Clearly, the communications management domain and the DoD competencies are aligned. Of the five domains, this one is tied for last in both exam weighting and task weighting, yet it has the highest degree of alignment (PMI, 2013).

B. BTI ANALYSIS

To determine a way ahead or to make recommendations that might bear fruit in the coming years, barriers to implementation were looked at across the domains and tasks. The data is captured in each of the tables presented in the preceding sections. The majority of tasks that require a level of change in DoD UOCs for better alignment were categories marked as *No BTI* or *Low BTI*. This means that any valid recommendation made herein should face little to no opposition or should be relatively easy to implement. About a third of the tasks fell into the *Medium BTI* or *High BTI* category. Figure 4 shows the breakdown.

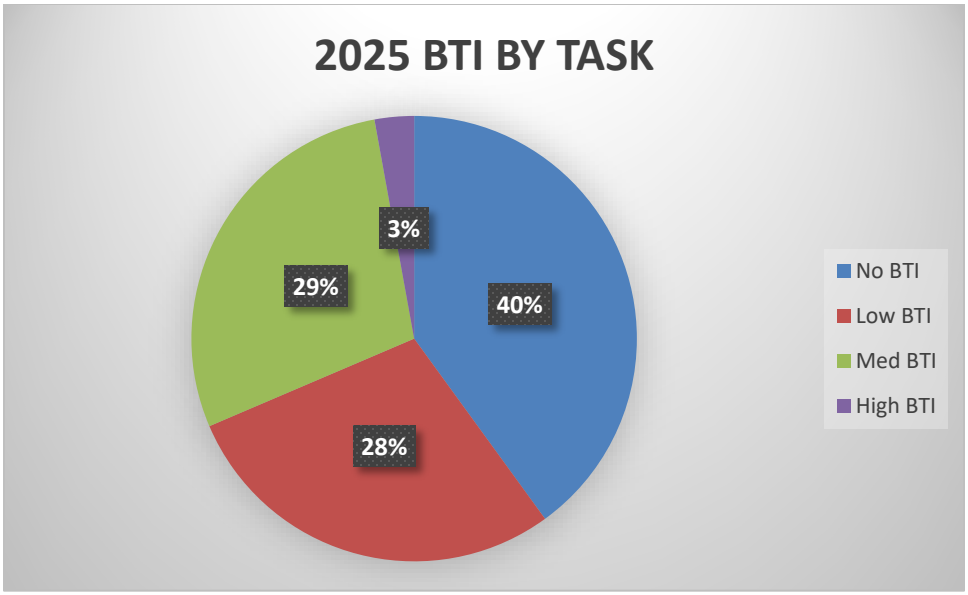

Figure 4. BTI By Task Distribution

Next, Figure 5 shows a side-by-side comparison of the BTI By Task distribution for the 2021 study and this study.

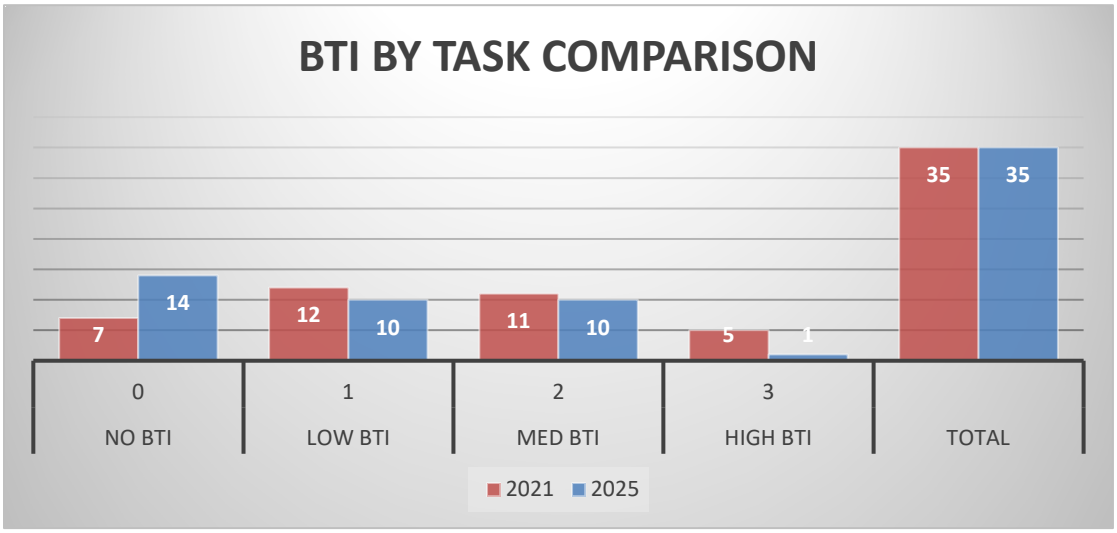

Figure 5. BTI By Task Distribution Comparison

C. SUMMARY

This chapter presented results from the gap analysis and BTI analysis. There were both qualitative and quantitative comparisons. There were both macro-level and micro-level comparisons. The data proves that despite the lack of an explicitly named portfolio management career field or set of standards, like those provided by PMI, DoD is moving in a good direction. The next chapter discusses the findings, provides some recommendations and then concludes with responses to the research questions posed by this study.

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V. FINDINGS, CONCLUSION, AND RECOMMENDATIONS

This chapter concludes the study by discussing the findings (answers to the research questions), draws some conclusions, and provides some recommendations for further study. This chapter provides some insight into what the research can tell us and offers some possible solutions to any problem areas the research highlights. At the end of the day, this study is one more research effort contributing to the body of knowledge in acquisition sciences.

A. FINDINGS

This study was a follow-on to Stewart et al.'s study from 2021. As such, this study's primary and secondary research questions were posed with an eye towards setting a marker for the status and comparing that marker to the previous marker established first by Karnes (2020) and updated by Stewart et al. (2021). As Karnes' methodology was slightly different than Stewart et al. (2021), only his summary alignment number was used in this document. As the research unfolded, an implied question was posed regarding BTI, and added to this study for continuity purposes and to provide a basis for discussing recommended changes that the DoD could implement.

1. Question 1

The first research question was: *How do DoD portfolio management competency standards align with PMI portfolio management competency standards?*

As mentioned throughout the study both in cited works from other studies and in this assessment, this question is hard to answer in an explicit fashion. As called out by a University of Maryland study, a RAND Corporation study, previous thesis work by Stewart et al. (2021), DoD portfolio management competency standards do not align directly with PMI portfolio management competency standards by virtue of the fact that there are no DoD portfolio management competency standards. Despite having Instructions (DoDI 5000.66, *Defense Acquisition Workforce Education, Training, Experience, and Career Development Program*) and Directives (DoDD 7045.20, *Capability Portfolio*

Management), that spell out how to manage the acquisition workforce and work portfolio management, the DoD has yet to meet the requirements with the FY2020 NDAA and FY2021 NDAA to implement portfolio management.

This research question would be better rewritten as "Is there any alignment between DoD acquisition work force competencies and PMI Portfolio Management Professional standards?" This study can and does answer that question quite definitively. The DoD AWF competencies are outlined by ASD(A) in his 2024 memorandum and then implemented by the DAU (OASD, 2024). DAWIA realignment efforts also shaped the DAU curriculum, bringing about the effort known as "Back-to-Basics" which condensed fourteen career fields and areas of study into seven. Program management is one of those seven. While the program management area of study has both Practitioner and Advanced levels, neither level is a direct correlation to portfolio management.

The Program Management Functional Career Field Competencies detailed in ASD(A)'s 2024 memorandum are and will remain the closest thing DoD can get to portfolio management competencies unless there is a change. In looking closely at those competencies, this study found that there was 57.69 – 60% alignment between the DoD Units of Competency and the PMI domains and tasks. The alignment of those competencies was discussed in three levels of alignment. The distribution of the various scores is shown in Figure 6.

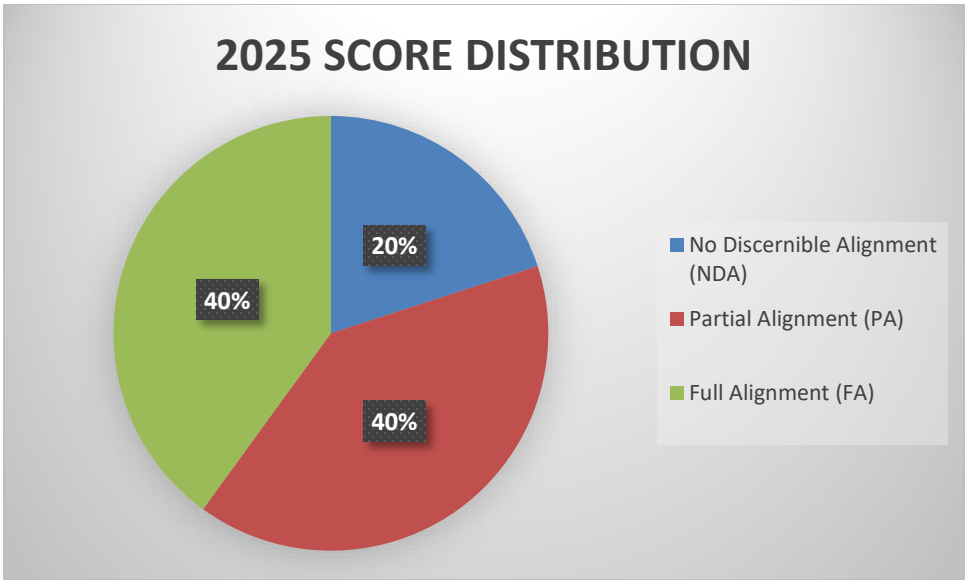

Figure 6. 2025 Alignment Distribution

The Average Alignment by Domain is shown in Figure 7.

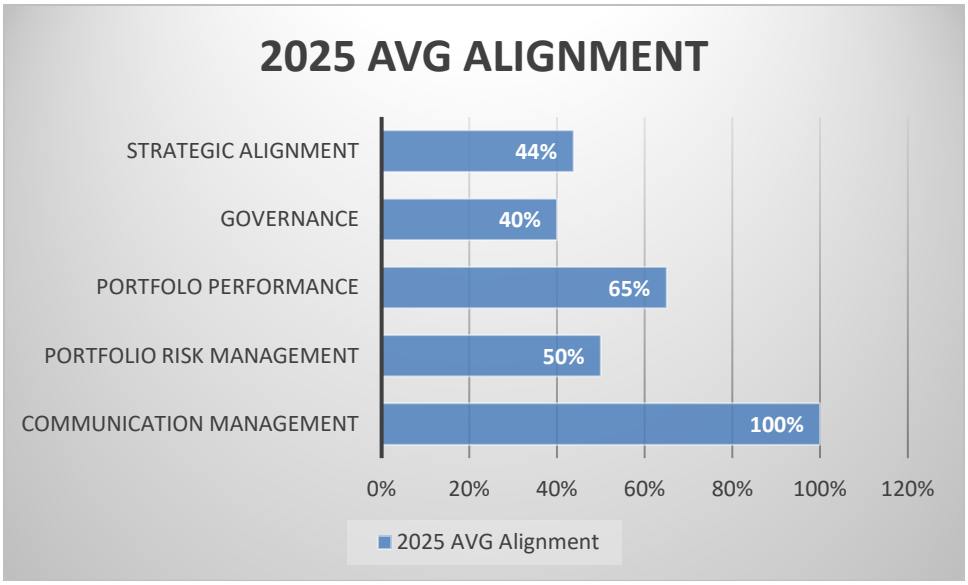

Figure 7. 2025 Average DoD Alignment by PMI Domain

Clearly, there is alignment between the Program Management Functional Career Field Competencies and the PMI Portfolio Management Professional standards. It is equally clear that there is plenty of room for improvement.

2. Question 2

The second research question was: *What has changed since the previous NPS study on this topic was completed in December 2021?*

A lot has changed in the four years since Stewart et al. (2021), completed their study in 2021. Narrowing the scope of that question to look at acquisition work force management within the federal government, a few things come to mind.

The Defense Acquisition Workforce Improvement Act has seen several modifications over the years. The most recent one effectively changed the certification processes used by DAU through "Back-to-Basics." This change took place in February 2022, shortly after the previous study was accepted by NPS (DAU, n.d.a).

DoDD 7045.20, *Capability Portfolio Management,* was revamped and released effective September 25, 2023. This directive outlines responsibilities for senior leadership within DoD with the intent of supporting DoDD 5105.79, *DoD Senior Governance Framework*, released in November 2021, and support acquisition processes among other things across the DoD. DoDD 7045.20 provides direction on what to do without describing how to do it (DoD, 2023).

GAO released a couple of updates on its High-Risk List and several reports that point fingers at the DoD with consistent messaging that the DoD has failed to meet requirements in several NDAAs with respect to improving the acquisition work force and in particular failure to implement portfolio management.

While the above paints a grim picture for the DoD with respect to implementing portfolio management, this study shows positive trends in all PMI domains with regards to alignment between the PMI standards and the DoD competencies for the AWF. Figure 8 shows a comparison between the 2021 study and this year's study on alignment. Of note,

the *No Discernible Alignment* category saw a dramatic drop in value as many of the competencies moved into the *Partial Alignment* and *Full Alignment* categories.

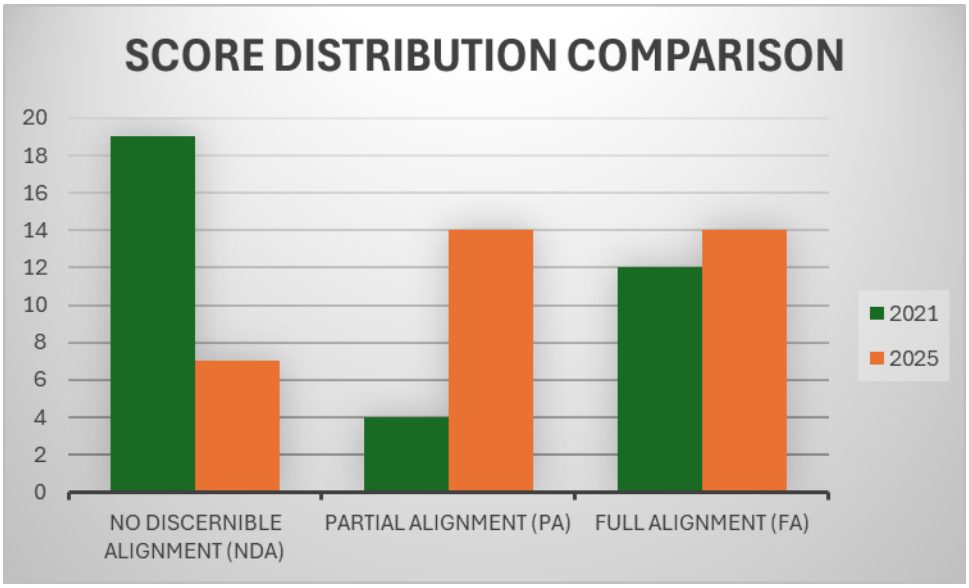

Figure 8. Alignment Distribution Comparison 2021 and 2025 Studies

3. Question 3

A third question was added during research: *Do there appear to be any significant barriers to implementation?*

This question is derived from the research and is a result of a desire to stay aligned with the previous study. The purpose of this question is to make a judgement call on whether recommended changes would face any substantial obstacles in the form of policy change, personnel requirements, budgetary needs, etc. The scoring in this study remained consistent with the previous study with a slight lean towards improvement. While this does not herald overwhelming support for any recommended changes, it does indicate that things might not be as hard as they are imagined to be should changes be necessary. Figure 9 shows a comparison of the 2021 study's BTI averages and this year's study. In all PMI domains, the average BTI decreased. This indicates that it might be easier this year than in previous years to implement change.

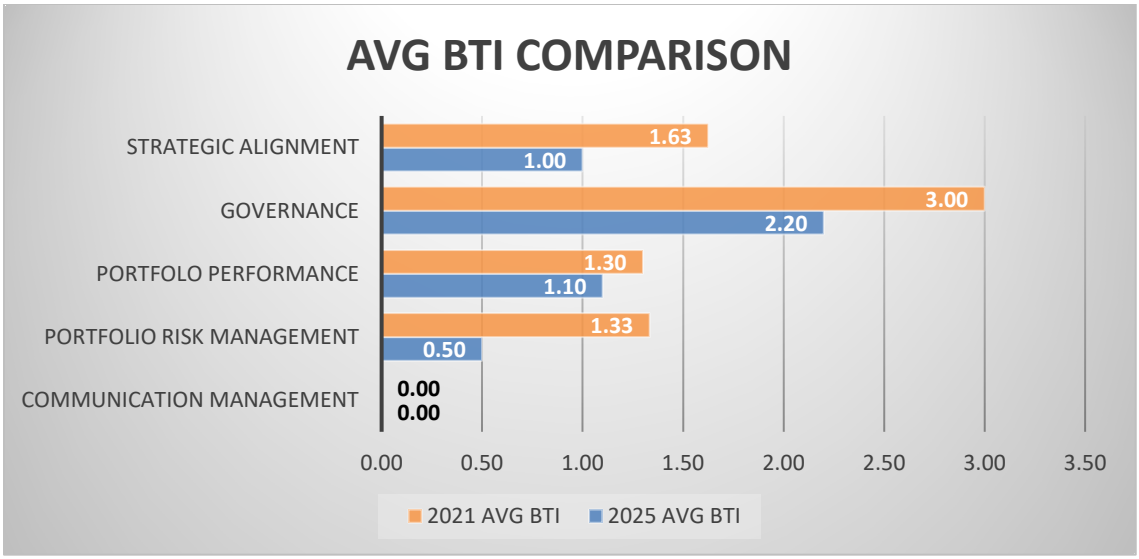

Figure 9. Average BTI by PMI Domain Comparison 2021 and 2025 Studies

B. CONCLUSION

The research and results presented in this study clearly show two distinct truths:

1. DoD has yet to embrace portfolio management and meet the requirements laid out in FY2021 NDAA and several recommendations from the likes of the GAO or the Section 809 Panel.

2. DoD is more than capable of implementing portfolio management.

The real question is when will the DoD implement portfolio management in compliance with a variety of regulations and directives? And what will it take to get them to do so?

There is more than enough policy on the books to mandate a change in DoD AWF, forcing the incorporation of portfolio management in DoD acquisition management. However, the GAO opinion is that legislation may be needed to fix this challenge. This research indicates that DoD may be able to implement changes necessary to implement portfolio management. This is supported by the BTI analysis of this study. Additionally, DAU offerings are tailorable, and the program management competencies could be adjusted to meet PMI standards.

As the leading standards writer and certifier within project management under ISO and ANSI, it would be logical for DoD to align DoD portfolio management principles with PMI's Portfolio Management standards. The MSPM program at NPS is an example of leveraging expertise not resident within the DoD for the betterment of the DoD. Why not do something similar with PMI standards? The DoD should consider adopting the PMI standards and certification processes as the baseline standards for DoD, then make addendums or amendments to accommodate any differences between DoD and industry when implementing changes.

C. RECOMMENDATIONS

The following topics are presented as candidates for future research:

1. DAU and PMI

One recommendation is for more comprehensive research into the possibility of having DAU and PMI work together to define a set of DoD portfolio management competencies. Who better than they to draft the required competencies? The framework of these competencies could become the outline for course offerings either through DAU (perhaps needing development or simply tailoring current offerings) or through existing training provided by PMI or PMI endorsed agencies. The study should include a look at any required policy changes, budgetary concerns, and personnel management improvements that might be gained by such an implementation. This could impact the DoD AWF in positive ways while bringing down costs in both dollars and time. Such an effort would all but guarantee that the DoD was aligned with industry standards while implementing requirements from the FY2021 NDAA.

2. Barriers to Implementation

The research reinforced the recommendation of Stewart et al. (2021). It has been four years since the original study and since the FY2021 NDAA was signed. While there have been positive changes in the DoD AWF, implementation of portfolio management principles has lagged. It appears that all the necessary policy governing roles and responsibilities are in place. Why have those with the requisite authority not taken the

necessary steps to implement portfolio management? The outcome of such a study could be a series of recommendations for ways to overcome those barriers. The study could leverage the research reports of the GAO, other acquisition centers of excellence, and a variety of existing federal entities like the Section 809 Panel.

SUPPLEMENTAL: APPENDICES A, B, AND C

To access the supplemental material(s) listed here, contact the Dudley Knox Library or, for publicly releasable theses and supplementals only, visit the thesis pages in the library's Calhoun database.

A. PMI DATA

Found in the supplemental, this data is a table of domains and tasks adapted from PMI's *Portfolio Management Professional (PfMP) Examination Content Outline* (PMI, 2013).

B. ASD(A) MEMORANDUM DATA

Found in the supplemental, this data is a table of DoD program management competencies adapted from the 2024 ASD(A) memorandum, *Program Management Functional Career Field Competencies* (OASD, 2024).

C. ANALYSIS DATA

Found in the supplemental, this data is a summary of all analysis conducted for this study. It includes tables and charts used throughout this project.

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