



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

MBA PROFESSIONAL PROJECT

ANALYSIS OF MARINE CORPS SYSTEMS COMMAND CONTRACTING WORKFORCE COMPETENCY ASSESSMENT

December 2020

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 2020	3. REPORT TYPE AND DATES COVERED MBA Professional Project	
4. TITLE AND SUBTITLE ANALYSIS OF MARINE CORPS SYSTEMS COMMAND CONTRACTING WORKFORCE COMPETENCY ASSESSMENT			5. FUNDING NUMBERS	
6. AUTHOR(S) Spencer Hayashi and Alex J. Pfannenstiel				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) This research project analyzes Marine Corps Systems Command's contracting workforce competencies. The data was gathered through a Contracting Workforce Competency Assessment, which is based on the National Contract Management Association's Contract Management Standard. This standard was adopted by the DoD as the new basis for the DoD contracting competency model. The purpose of this research is to assess the current workforce's proficiency ratings for buyer competencies and knowledge ratings for seller competencies. This project also compares assessment results to the 2018 Acquisition Workforce Competency Survey. The research findings indicate that buyer task proficiency ratings are higher than seller task knowledge ratings. The buyer tasks proficiency ratings range from Intermediate for Manage Disagreements to Advanced for Request Offers. The seller task knowledge ratings range from Aware for Manage Disagreements to Basic for Plan Negotiations. In addition, buyer competency ratings are stronger for the pre-award and award phases of the contract life-cycle than for the post-award phase. The comparative assessment with the 2018 Acquisition Workforce Competency Survey shows a similar trend, with buyer competency ratings higher in pre-award than the other phases. These findings can be used to develop targeted training plans that address the weaker competency areas, helping to improve the contracting workforce's ability to support the warfighter.				
14. SUBJECT TERMS Contract Management Standard, contracting, Auditability Theory, individual competency assessment, Marine Corps Systems Command, contract management reform,			15. NUMBER OF PAGES 93	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

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**ANALYSIS OF MARINE CORPS SYSTEMS COMMAND
CONTRACTING WORKFORCE COMPETENCY ASSESSMENT**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

**NAVAL POSTGRADUATE SCHOOL
December 2020**

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This research project analyzes Marine Corps Systems Command's contracting workforce competencies. The data was gathered through a Contracting Workforce Competency Assessment, which is based on the National Contract Management Association's Contract Management Standard. This standard was adopted by the DoD as the new basis for the DoD contracting competency model. The purpose of this research is to assess the current workforce's proficiency ratings for buyer competencies and knowledge ratings for seller competencies. This project also compares assessment results to the 2018 Acquisition Workforce Competency Survey. The research findings indicate that buyer task proficiency ratings are higher than seller task knowledge ratings. The buyer tasks proficiency ratings range from Intermediate for Manage Disagreements to Advanced for Request Offers. The seller task knowledge ratings range from Aware for Manage Disagreements to Basic for Plan Negotiations. In addition, buyer competency ratings are stronger for the pre-award and award phases of the contract life-cycle than for the post-award phase. The comparative assessment with the 2018 Acquisition Workforce Competency Survey shows a similar trend, with buyer competency ratings higher in pre-award than the other phases. These findings can be used to develop targeted training plans that address the weaker competency areas, helping to improve the contracting workforce's ability to support the warfighter.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADC I&L	Assistant Deputy Commandant, Installations and Logistics
ANSI	American National Standard Institute
ASN(RDA)	Assistant Secretary of the Navy for Research, Development, and Acquisition
AWCS	Acquisition Workforce Competencies Survey
BCM	Business Clearance Memorandum
BOK	Body of Knowledge
C4I	Command, Control, Computer, Communications, and Intelligence
CAPPO	California Association of Public Procurement Officials
CMBOK	Contract Management Body of Knowledge
CMC	Commandant of the Marine Corps
CMS	Contract Management Standard
CPG	Commandant's Planning Guidance
CPPB	Certified Public Procurement Buyer
CPPO	Certified Public Procurement Officer
CRB	Contract Review Board
CT	Contract Directorate
DASN(AP)	Deputy Assistant Secretary of the Navy for Acquisitions and Procurement
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DPC	Office of the Acting Principal Director, Defense Pricing and Contracting
DoD	Department of Defense
DoN	Department of the Navy
FAI	Federal Acquisition Institute
FAPPO	Florida Association of Public Procurement Officials
FAR	Federal Acquisition Regulation
FY	Fiscal Year
GAO	Government Accountability Office

HCA	Head of Contracting Activity
HQMC	Headquarters Marine Corps
IBA	Individual Business Assessment
IG	Inspector General
IT	Information Technology
MAGTF	Marine Air Ground Task Force
MAPS	Marine Corps Acquisition Procedures Supplement
MCSC	Marine Corps Systems Command
MCTSSA	Marine Corps Tactical Systems Support Activity
NASPO	National Association of State Procurement Officers
NCMA	National Contract Management Association
NDAA	National Defense Authorization Act
NIGP	National Institute for Government Procurement
NMCARS	Navy Marine Corps Acquisition Regulation Supplement
OCS	Operational Contract Support
PPMAP	Procurement Performance Management Assessment Program
Pfm CES	Portfolio Manager Command Element Systems
Pfm GCES	Portfolio Manager Ground Combat Element Systems
Pfm LCES	Portfolio Manager Logistics Combat Element Systems
PM MC Cyber Ops	Program Manager Marine Corps Cyber Operations
PM TRASYS	Program Manager Training Systems
PNM	Pre- & Post-Negotiation Memorandum
SOP	Standard Operating Procedure
UPPCC	Universal Public Procurement Certification Council
USMC	United States Marine Corps

ACKNOWLEDGMENT

We would like to extend our sincerest gratitude to Marine Corps Systems Command. Without the support and participation of the leadership and contracting workforce this research project would not have been possible. We hope that the results of this study provide tangible and actionable information that will result in the best possible support being delivered to the warfighter. Thanks to all of our editors, a special thanks to Rikki Nguyen, for your time and effort in facilitating the approval to conduct our research, and also to the Senior Marine Office for your tireless work behind the scenes advocating for the NPS Marines. Last, but certainly not least, we are extremely grateful to Dr. Rene Rendon for the support, guidance, and mentorship that he provided us throughout not only this process, but our entire educational experience at NPS.

Spencer Hayashi

I am grateful to the family and friends who have encouraged me throughout this process. Your kind words, positive attitudes, and humor have helped me overcome the challenges of conducting graduate work in this new “socially distant” environment.

Alex Pfannenstiel

First, I would like to thank my parents for their everlasting love, support, and guidance. I am grateful to all of my professors for their insight and instruction and to my colleagues for the many unique perspectives which enhanced my education over the past 18 months. Finally, and most importantly, thank you to my beautiful wife, Lauren, for your love, patience, and support throughout my time at NPS.

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I. INTRODUCTION

A. BACKGROUND

Contracting for the Department of Defense (DoD) has been a top concern for Congress due to the annual obligation of hundreds of billions of dollars for goods and services required to ensure the military's readiness (DoDaro, 2019). The pervasive use of contractors in the Iraq and Afghanistan conflicts combined with a drive to modernize has increased DoD contracting with contract obligations expanding from \$189 billion in fiscal year (FY) 2000 to \$320 billion in FY 2018 (Schwartz et al., 2018). DoD contract management has been on the Government Accountability Office (GAO) High-Risk List since 1992, with the acquisition workforce being a main area of challenge after having been faced with expanded requirements from the multiple overseas conflicts and a fluctuating defense budget (DoDaro, 2019). Systemic issues include difficulty identifying capabilities gaps, inadequate workforce capacity, and unclear guidance for contracting policy (DoDaro, 2019).

The DoD has begun prioritizing contract management reform; this has been emphasized in recent major policy documents such as the National Defense Authorization Act (NDAA) for Fiscal Year 2020 (National Defense Authorization Act for Fiscal Year 2020 [NDAA FY 2020], 2019), the Navy's *Business Operations Plan* (Office of the Secretary of the Navy [SECNAV], 2019), the *Commandant's Planning Guidance* (CPG; Commandant of the Marine Corps [CMC], 2019), and the *Marine Corps' Force Design 2030* (Commandant of the Marine Corps [CMC], 2020). One specific requirement denoted in Section 861 of the NDAA (2019) requires the DoD to establish a professional certification based on standards developed by a third-party accredited program (Office of the Acting Principal Director, Defense Pricing and Contracting [DPC], 2020). This triggered Acting Principal Director of Defense Pricing and Contracting Kim Herrington to form a task force with the objectives to "(1) recommend a new talent development structure to replace the current three-level contracting career field certification model, and (2) to identify common and specialty knowledge, skills (credentials), and experience requirements for the contracting

workforce” (DPC, 2020, p. 1). The DoD contracting community feels the impact of this change through current efforts to completely rework Defense Acquisition University (DAU) certifications. Additionally, each service is revising its training programs to meet the new National Contract Management Association (NCMA) Contract Management Standard (CMS; DPC, 2020). This approach is a departure from other contracting reforms in the past two decades, not just adding training, which has been the default, but also changing what is taught, thereby providing a new standard in the form of the CMS for how contracting should be conducted.

The U.S. Navy Business Operations Plan aligns with the 2020 NDAA and Herrington’s reform goals. The plan aims to modernize the Navy’s business operations with an emphasis on, among other aspects, business processes—including contracting and acquisitions—to generate cost savings (SECNAV, 2019). As an entity within the DoN, the Marine Corps’ contracting agencies must also transition to meet these changes due to their organizational and contracting authority structure falling subordinate to the deputy assistant secretary of the Navy for acquisition and procurement (DASN[AP]). A breakdown of the Marine Corps’ contracting authority hierarchy and organization is depicted in figure 9 located in Appendix A.

The Marine Corps is undertaking efforts to modernize its organization to meet the requirements of the previously mentioned policy documents while shifting its focus to meet new strategic threats abroad. General David Berger, the commandant of the Marine Corps, outlined his priorities in the CPG and Force Design 2030 documents, which covered a major redesign of the force and a renewed focus on education and training (CMC, 2019; CMC, 2020). Although contracting reform is not specifically listed in the aforementioned documents, the Marine Corps has identified that the ability to contract effectively will become increasingly important in the future and enable many of the changes needed by this force redesign. The recent conflicts in the Middle East demonstrate the prolific use of contracting for modern warfare: “During Operation Iraqi Freedom/Operation Enduring Freedom, contracting was used to a degree and magnitude that had never been performed in USMC history” (United States Marine Corps [USMC], 2018, p. 1–2). Furthermore, the CPG echoes the old Marine Corps maxim to “train as we

fight” by directing the Marine Corps to “adapt our training in a manner consistent with the threat and anticipated operational challenges” (CMC, 2019, p. 17). Due to the recent change of adopting the CMS as the new DoD competency standard, the Marine Corps has not yet conducted a competency assessment of its contracting workforce based on the CMS. This leaves a deficiency in empirical data and understanding of the current workforce’s capabilities based on the new standard. Insight into individual proficiencies will inform decision-makers on where to focus the redesign of training and education and serve as a benchmark for how the current workforce performs under the CMS.

Competency assessments are not only critical for the transition to the CMS, but they also have been a key deficiency of the DoD acquisition workforce (DoDaro, 2019). The GAO has recommended the use of competency assessments to identify workforce skill gaps but had yet to see implementation of this tool as of its 2019 High Risk Series report to Congress (DoDaro, 2019). Use of a workforce competency assessment will not only assist in the DoD’s transition to the CMS, but also provide much-needed feedback for determining whether the acquisition community has sufficient capacity and capability to meet future needs (DoDaro, 2019).

B. PURPOSE

The DoD’s recent adoption of the CMS as the new Contracting Competency Model ushers in a new age of tailorable talent management. Understanding the current capabilities and knowledge of the contracting workforce is vital to improving the overall organizational capabilities. An organization should first identify its baseline prior to implementing new talent development programs. Although the collective objective is to enable the Marine Corps Systems Command (MCSC) contracting workforce to be as efficient as possible, the goal of this assessment is to clearly define the baseline of individual competencies. The primary purpose of this research is to assess the individual competencies of the MCSC contracting workforce using the NCMA CMS competency framework. The intent of this analysis is to develop a baseline average of the current competency levels across each of the three phases—comprised of five domains—of the

contract management life-cycle (see Figure 1), provide an evaluation of the current competencies, and assess areas of strengths and weaknesses.

A competency assessment is an initial step to identifying the changes needed to align skills to requirements. A competency assessment based on the NCMA CMS has not been conducted within the Marine Corps. While service-specific studies and reviews have helped inform training revisions needed in the DoD, an assessment of individual workforce competencies will provide a more complete understanding of necessary focus areas.

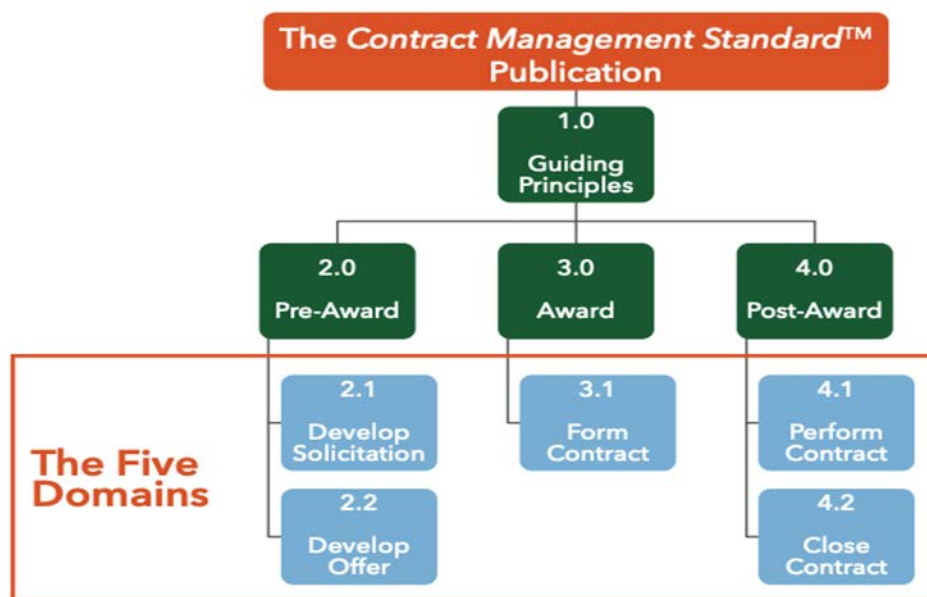


Figure 1. Contract Life-Cycle Phases with Associated Domains.
Source: National Contract Management Association (NCMA) (2019).

C. RESEARCH QUESTIONS

In order for the DoD to implement meaningful changes in pursuit of updating its overall training program for the contracting workforce, the DoD must first obtain an understanding of the current strengths and weaknesses of the contracting workforce within the realm of the CMS. Analysis of assessment results can help to determine a

meaningful path toward achieving a more efficient and effective workforce. With this common understanding, the following are the primary research questions of this study:

- 1. Based on assessment results, what are the proficiency ratings for the buyers' competencies?**
- 2. Based on assessment results, what are the knowledge ratings for the sellers' competencies?**
- 3. Based on assessment results, what recommendations can be made for improving the MCSC contracting workforce competency levels?**
- 4. How do the assessment results compare to the results from the 2018 Federal Acquisition Institute Acquisition Workforce Competency Survey?**

D. ORGANIZATION

This report is organized into six chapters. Chapter I introduces the subject's background information, the primary research questions, and a brief description of the methodology used. The purpose, benefits, and limitations of conducting this research are also summarized. Chapter II is the literature review, providing information on the research's theoretical frameworks, differing contracting workforce competency models, and the DoD's transition to the CMS. Chapter III gives an overview of Marine Corps contracting and explains the structure of MCSC, how MCSC provides procurement management oversight, and why MCSC was selected for this research. Chapter IV is the research methodology, describing the development of the competency survey, its use for assessment, and its deployment within MCSC. Chapter V presents the Contracting Workforce Competency Assessment results, discussion of the results with recommendations, and a comparison of the results to the 2018 Acquisition Workforce Competency Survey. Chapter VI gives a final summary of the research, a conclusion of the findings, and areas for further research.

E. METHODOLOGY

This report assesses the MCSC contract management workforce's competencies in the pre-award, award, and post-award phases of the contract management life-cycle

based on the NCMA CMS framework. A 125-question survey will be administered online to allow participants to self-assess their competency levels. Questions relating to buyer tasks will assess the proficiency in performing contract management job tasks, whereas questions relating to seller tasks will assess knowledge of contractor-performed job tasks. The qualitative data gathered through the Contracting Workforce Competency Assessment will enable identification of baseline proficiency and knowledge ratings of the MCSC contracting workforce. Additional analysis will determine possible relationships between assessment results and other assessments of the MCSC contracting workforce. The final results will be presented in the form of recommendations that MCSC can use to sustain and improve its contracting workforce.

F. BENEFITS OF THE RESEARCH

Marine Corps and MCSC leadership can use the results from this research in three distinct ways. First, this survey establishes a baseline for MCSC to reference in the future as a gauge of whether contract training initiatives are achieving the desired effects. Second, this study can be used to identify specific contracting areas for further evaluation, specifically ones that are shown to need improvement or are shown to be a strength of MCSC personnel. Third, the Marine Corps can consider the recommendations provided when making decisions regarding where to focus training efforts for the contracting workforce. These can be applied within MCSC and similar contracting agencies across the Marine Corps and the DoD. Institutionalizing the Contracting Workforce Competency Assessment within the Marine Corps at regular intervals will enable identification of patterns, consistencies, and trends, providing commanders with more accurate information on workforce capabilities. Training can then be developed and optimized to meet the needs of the organization based on empirical data resulting from the competency assessment.

G. LIMITATIONS OF THE RESEARCH

The primary limitations of this research result from the data being derived from a survey that is anonymous, voluntary, and a self-assessment of skills. The survey information collected is assumed to be reasonably accurate but subject to natural human

biases and variations. The anonymity of the survey participants may result in dishonest responses impacting both demographic and competency data. In addition, the survey being voluntary can result in a lower number of participants while potentially providing a skewed response based on strongly opinionated people who normally respond to questionnaires. This may cause data to not accurately reflect the entirety of the MCSC contracting workforce.

This research is also limited due to data only being gathered from self-assessment results. Results can be impacted due to individual biases, with the potential for wide variation due to differences in opinions, workplace culture, and experience. Workforce competency results may vary if compared to other evaluation metrics such as an academic test or a third-party audit. Despite the limitations, the value of this research cannot be understated due to it being the first source of contracting workforce competency data based on the CMS gathered within the Marine Corps. This assessment can provide a starting point from which further research and contracting workforce reform can be established.

H. SUMMARY

This chapter discussed recent initiatives and directives that have prioritized contract management reform and improvement within the DoD, Department of the Navy (DoN), and USMC. Furthermore, because the DoD only recently adopted the CMS as the new contract management competency standard, the Marine Corps has not conducted a CMS-based assessment of its contracting workforce, leaving a deficiency in empirical data to define current strengths and weaknesses. The primary purpose of this research is to assess the individual competencies of the Marine Corps Systems Command contracting workforce using the NCMA CMS competency framework in order to better position the Marine Corps for future success. This chapter provided an outline of this report and overview of the primary data collection utilizing a web-based survey and the benefits and limitations of this study. Finally, the benefits that this research will provide the Marine Corps as well as the limitations of the assessment were discussed. The following chapter is a literature review that delves into the theoretical basis of this

research, explores various competency models, discusses the future role of the CMS within DoD contracting, and provides a detailed review of the standards forming the foundation of this research.

II. LITERATURE REVIEW

A. INTRODUCTION

As discussed in Chapter I, the DoD has adopted the Contract Management Standard (CMS) as the new competency model for improving the contracting workforce. This chapter discusses the theoretical framework that forms the basis of the research questions and relates to the CMS. Auditability theory explains the components needed for organizations to effectively manage operations and continually improve through successful business process transformation (Falcone, 2017). A discussion of competency modeling explains why individual competencies is the correct metric to use as a framework for workforce improvement. Next, examples of current applications of contract management competency models are shown. A discussion of these models is provided with context for why the DoD chose to adopt the CMS as its new contract management standard. This chapter concludes with a detailed review of the CMS, particularly focusing on the underlying competencies that support the three phases of the contract life-cycle, which are foundational to this research.

B. AUDITABILITY THEORY

Chapter I established that DoD contract management reform, or transformation, is a Congressional priority. Auditability theory provides a framework for the DoD to actively manage its workforce, which can lead to improved performances. Falcone (2017) discussed the theory behind the importance of an established standard and explained how organizations can transform processes to achieve greater operational efficiency and effectiveness. Falcone (2017) argued that “successful business process transformation is the result of an optimal balance of people, processes, and technology” (p. 18). The transformation starts with identifying established governances, then progresses to a set of standards designed to achieve compliance with the governing documents. Once standards are in place, an organization can develop methods for evaluating the effectiveness of those standards. Although Falcone (2017) specifically discussed Process Capability Maturity—referring to the “process” element of business transformation—this framework

also applies to the “people” element, which can be evaluated through individual competencies, as discussed in the following section. Finally, an organization can establish management systems and procedures to assess performance, thus enabling an organization to optimize operations. Figure 2 demonstrates the flow of this process, with the CMS being a core foundation for influencing business transformation. A foundational tenet of workforce improvement is to establish and maintain a system to monitor processes and practices.

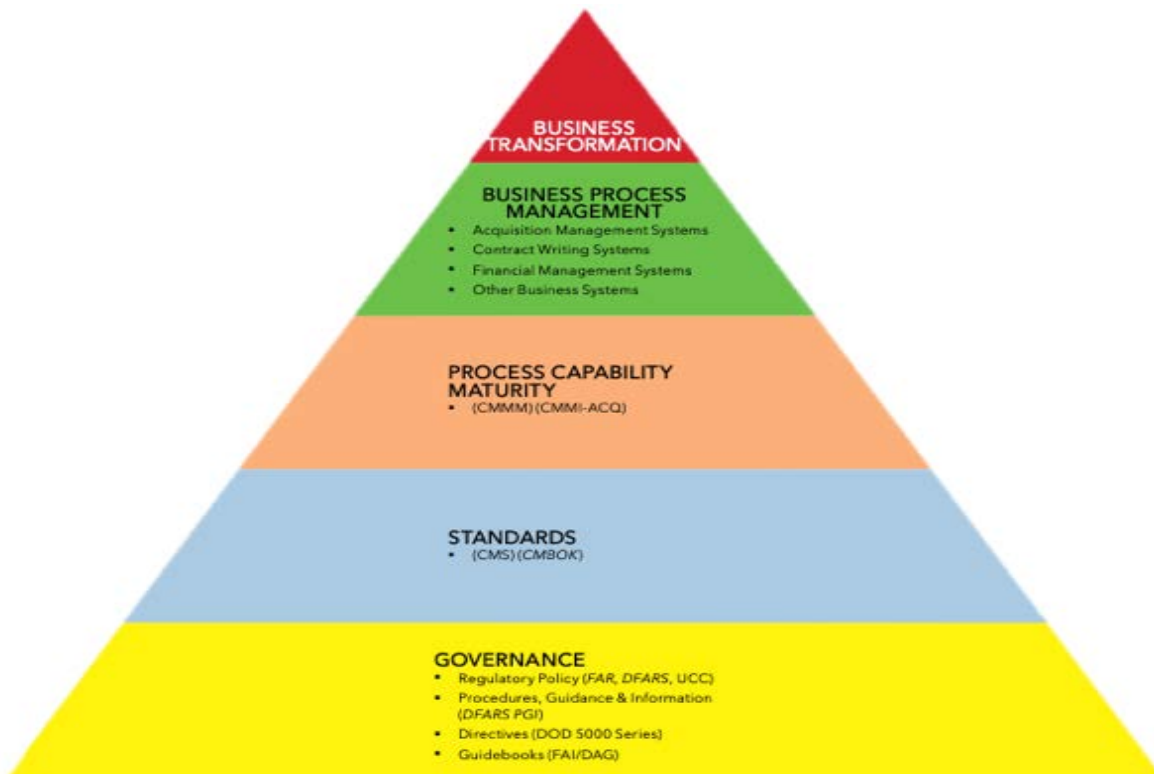


Figure 2. Foundation for Business Process Transformation.
Source: Falcone (2017).

Rendon and Rendon (2016) stated, “Today’s organizations, both public and private, are facing an increased concern for governance and due diligence in their processes and practices” (p. 751). This introduces auditability theory as the means through which MCSC can validate the performance of its contracting workforce. Weigand et al. (2013) explained that the basis of auditability theory lies in agency theory,

wherein “the Principal has delegated a certain level of control over the value object to the Agent, expecting him to optimize its value and safeguard it in all respects” (p. 3). They go on to explain that the essence of auditability is the existence of a means for the principal to gain reasonable assurance that the agent is acting in accordance with the intent of the principal. Rendon (2019) argued that “as organizations focus on proper governance and due diligence in processes and practices, the results include an increased emphasis on auditability in operations” (p. 88). This adds context to Falcone’s (2017) discussion regarding methods for evaluating the effectiveness standards as a necessary step in business transformations.

The implementation of the CMS is an example of auditability theory in action, wherein MCSC is seeking to optimize its acquisitions operations through implementation of a more comprehensive means of validating the competency levels of its workforce. To better understand MCSC’s actions in terms of auditability theory, it is important to first understand the theory’s components. Auditability theory states that in order for organizations to be successful, they have to have competent people, capable processes, and effective internal controls. These components create an “auditability triangle” (see Figure 3; Rendon & Rendon, 2016, p. 754). The personnel component means that the workforce is formally educated to a standard, properly trained to conduct necessary tasks, and sufficiently experienced to carry out their duties and responsibilities. The processes component means that the activities that are expected to be performed are institutionalized and ingrained within the organization’s operations, that the activities are regularly assessed and measured, and that the activities are continuously improved based on those measurements. The internal controls component means that methods for ensuring compliance with internal policies are sufficiently monitored, adequately enforced, and properly reported.



Figure 3. Auditability Triangle. Source: Rendon and Rendon (2016).

According to Rendon and Rendon (2016), “auditability theory can be applied to an organization’s contract management governance structure” (p. 752) despite its traditional application to the financial aspects of an organization. They further explained this developing study area:

As organizations increase their contracting out for acquiring needed supplies and services, the organization’s corporate governance structure and the structure’s impact on contract success, especially contracts in support of major projects, have been emerging research topics in the project management literature. (Rendon & Rendon, 2016, p. 752)

Auditability theory explains that “individual competence will lead to greater success in performing contract management tasks and activities” (Rendon, 2019, p. 90). Therefore, for the purposes of this research, the researchers are focused solely on the competent personnel component of auditability by analyzing individual competency levels.

Within the federal government, Defense Acquisition University (DAU) is the primary institution responsible for the “competent personnel” aspect of the auditability triangle. DAU instructs courses to provide training and education that comply with the standards established by the 1990 Defense Acquisition Workforce Improvement Act

(DAWIA). The education and training standards are divided into three certification levels: Level I (Basic/Entry), Level II (Intermediate/Journeyman), and Level III (Advanced/Senior; Defense Acquisition University [DAU], n.d.d). Each level consists of core requirements for certification and core plus options to advance skills within the certification level. Core requirements are categorized by acquisition training, functional training, education, and experience requirements. The acquisition and functional training requirements are DAU courses. For all certification levels, the education requirement is a baccalaureate degree in any field of study. The final aspect, experience, is gained through on the job training and practice. Levels I–III require 1, 2, and 4 years, respectively, of contracting experience (DAU, n.d.a, n.d.b, n.d.c). Beyond the basic courses required to obtain DAWIA certification, DAU requires continuous learning to ensure the workforce remains current within their career field (DoD, 2019, p. 11; DAU, n.d.d). DAU is partnered with external education institutions, such as the Naval Postgraduate School, to provide this education and training (DAU, n.d.d). The adoption of the CMS by the DoD demonstrates changes being made to improve contract management personnel educational requirements, which helps push toward overall organizational transformational success. The next section discusses the application of competency models, which is another tool that helps organizations assess and improve the personnel aspect of the auditability triangle.

C. COMPETENCY MODELING

As industrial/organizational psychologist Sliter (2015) noted, competency models exist because organizations desire to improve and become more efficient over time. She went on to state that for more than 40 years, many organizations have turned to competency modeling as a means of defining and quantifying the skills and characteristics necessary to achieve desired performance levels in order to evaluate and manage the human capital necessary to perform the daily functions of an organization (Sliter, 2015). Competency modeling is a proven technique for building better organizations. According to Sliter (2015),

This idea of competencies being combinations of KSAOs [knowledge, skills, abilities, and other individual differences] is, arguably, one of the

reasons that they are so applicable to modern jobs. Competencies describe, at a practical and measurable level, what is required of an organization's human resources, and the approach taken stands in contrast to more traditional approaches to understanding job requirements, which focus primarily on discrete tasks and traits. (p. 286)

This approach allows for a strategic, top-down, approach to defining job requirements, which is counter to the traditional approach. The difference is that in a competency-based approach, the focus is on a broad range of capabilities versus the identification of specific tasks (Sliter, 2015). The advantage to this approach is that it is free of constraining rules, which allows it to be “flexible, functional, and forward-looking” (Sliter, 2015, p. 288), thus enabling the design to be applied to jobs that may not be in existence yet or may have rapidly changing task sets (Sliter, 2015). Sliter (2015) went on to explain:

Competencies can serve as the foundation for a wide range of human resources decisions and processes, from selection and training to development and succession planning. Ultimately, this means that competency modeling can promote consistency in the human resources life cycle, ensuring that a company is reliably endorsing and encouraging the same characteristics in its human resources. (p. 286)

Organizations seeking to improve their workforces can therefore look to competency modeling as a means of managing the complexities of their human capital. The difficult task of assessing the abilities of individuals is simplified via this framework. Conducting individual assessments can help to improve a workforce by establishing a feedback loop for managers to determine whether the workforce is performing to the desired level.

Specific to the area of contract management, the Contracting Workforce Competency Assessment developed by Rendon and Schwartz (2019) enables this focused feedback by providing “insight to both individuals and leadership, improving individual learning outcomes and organizational return on investment” (Garrett & Nelson, 2015, p. 61). This is a vehicle by which the principal, MCSC, can manage its agents, the contracting workforce. The next section looks at the application of competency models to

DoD contract management, examining several competency models that are commonly used in government or private organizations and how they differ from the CMS.

D. CONTRACTING COMPETENCY MODELS

This section will examine various contracting workforce competency models associated with four separate organizations: the DoD, Federal Acquisition Institute (FAI), Universal Public Procurement Certification Council (UPPCC), and NCMA. Each organization's model is tailored to meet the specific needs of its target workforce, which results in a wide variance of competencies. The conclusion of this section contains a comparative analysis of the different models and demonstrates why the CMS model is best suited for use by the DoD.

1. Department of Defense Contracting Competency Model

While the DoD has shifted to adopt the NCMA CMS, it is necessary to understand how the DoD contracting workforce has been shaped by the previous framework since it has applied to all DoD agencies, including MCSC for several decades. The DoD has operated under its own competency model that was separate from other government agencies that employ contracting workforce personnel. DoD Instruction 5000.66 is the governing directive for education, training, and experience to ensure that the entire acquisition workforce (which encompasses contracting) meets “uniform eligibility criteria, makes smart business decisions, acts in an ethical manner, and delivers timely and affordable capabilities to the Warfighter” (DoD, 2019, p. 5). The DoD model is comprised of 11 overarching Units of Competence, which are comprised of 10 Technical Units and 1 Professional Unit. These 11 units are subdivided into 38 competencies, which are further broken down into 62 elements that describe specific job tasks. This model “has been used to assess the DoD contract management workforce competencies, determine competency gaps, and identify opportunities for training and development to close those competency gaps” (Rendon & Winn, 2017, p. 69). Periodically, the Undersecretary of Defense for Acquisition, Technology, and Logistics (now known as the Undersecretary of Defense for Acquisition and Sustainment) has conducted Contracting Workforce Competency Assessments based on the DoD model;

however, the results have not been made public (Defense Procurement and Acquisition Policy Office, 2014). While there are some similarities between the DoD model and other models, there are also some distinct differences, which are discussed in the comparative analysis. The following FAI model duplicates that of the DoD but is applied in federal civilian agencies outside of the DoD with a separate governing body.

2. Federal Acquisition Institute Model

The FAI oversees the United States federal civilian agency acquisition workforce. The FAI was established in 1976 and works with entities such as the Office of Federal Procurement Policy, Chief Acquisition Officer Council, and the Interagency Acquisition Career Management Council to fulfill its statutory authorities and responsibilities to develop and manage the federal acquisition workforce (Federal Acquisition Institute [FAI], n.d.a, n.d.c). The FAI employs the Federal Acquisition Certification in Contracting (FAC-C) Program, which consists of training, experience, and education requirements for government contracting professionals. The underlying competencies of the FAC-C Program are identical to those used by the DoD in order to achieve alignment across the federal government (FAI, n.d.b). The FAI administers the Acquisition Workforce Competency Survey (AWCS) biennially to collect data that informs strategic workforce planning. Similar to the DoD, the FAI uses the AWCS to achieve three primary objectives: identify areas of strengths and weaknesses of the workforce, which drives prioritization of training; track progress from year-to-year; and improve human resources management for workforce optimization (FAI, 2018). The next section discusses a competency model that was created by a non-federal agency and is utilized by both public and private organizations.

3. Universal Public Purchasing Certification Council Body of Knowledge Model

A third model currently in use is the UPPCC Body of Knowledge (BOK). According to the UPPCC website, the organization was founded in 1978 “in order to more effectively promote and ensure professionalism in public sector procurement” (Universal Public Purchasing Certification Council [UPPCC], n.d., para. 1). The UPPCC

oversees the Certified Public Procurement Officer (CPPO) and Certified Professional Public Buyer (CPPB) certification programs. Rendon (2019) explained that the UPPCC is used by “various public procurement professional associations such as NIGP [National Institute for Government Procurement], The Institute for Public Procurement, National Association of State Procurement Officers (NASPO), California Association of Public Procurement Officials (CAPPO), and the Florida Association of Public Procurement Officials (FAPPO)” (p. 90).

The current UPPCC BOK was last revised in 2013 to “ensure that the certification exams maintain alignment with the critical skills and knowledge needed for competent performance in the ever evolving public procurement profession” (UPPCC, 2013, p. 1). The UPPCC surveyed professionals from across the procurement profession to update both the CPPO and CPPB BOKs with tasks and knowledge statements representative of the most applicable and valuable skills and abilities necessary to perform procurement activities (UPPCC, 2013). Within the public procurement profession, the CPPO focuses on management positions, whereas the CPPB is concerned with buyer-level positions. Both BOKs are subdivided by the same six domains of Procurement Administration, Sourcing, Negotiation Process, Contract Administration, Supply Management, and Strategic Procurement Planning. The domains are comprised of 87 knowledge statements representing common skills, knowledge, and abilities that are essential to associated job tasks/responsibilities. The CPPO contains 78 of these tasks, whereas the CPPB contains 61 (UPPCC, 2020). The final model discussed is another non-federal-based model that is used to provide a framework for contracting standards and has been widely accepted in many organizations.

4. National Contract Management Association Body of Knowledge Model

The NCMA developed the CMS to serve as the framework for the Contract Management Body of Knowledge (CMBOK) with the purpose of describing contract management “in terms of the processes created through the integration and interaction of job tasks and competencies, and the purposes they serve” (NCMA, 2019, p. 2). The CMS has third-party American National Standard Institute (ANSI) accreditation, having been

validated “through the consensus-based activities of an accredited, authoritative organization” (NCMA, 2019, p. 2), making it a highly recognized source for organizational assessment and meeting the requirements for DoD contracting standards set by the 2020 NDAA. The CMS establishes many of the same principles of contracting competencies as other competency models; however, it expands the scope to consider contract management from multiple perspectives (NCMA, 2019). The CMBOK and the CMS are more detailed in life-cycle breakdown, professional competencies, and broad structure to include more business functions than just the Federal Acquisition Regulation (FAR), with the CMS specifically including both buyer and seller competencies (Rendon & Winn, 2017).

5. Comparative Analysis of Competency Models

Rendon (2019) conducted a comparative analysis that contrasted the previous three models based on his criteria of structure, scope, and supporting documentation. In regard to structure, Rendon (2019) highlighted that the DoD/FAI and UPPCC models lack “logical arrangement” (p. 91) in comparison to the NCMA CMBOK, which is aligned with the contract life-cycle phases. He argued that while all three models contain relevant information, the CMBOK is the most efficiently organized framework. Similarly, Rendon (2019) discussed that the DoD/FAI and UPPCC are limited in scope by being framed solely from the government procurement perspective. He went on to explain that the business-related competencies are slightly more expanded in the UPPCC versus the DoD/FAI model. However, as discussed by Rendon (2019), the CMBOK is much broader and encompasses a greater amount of knowledge. Lastly, Rendon (2019) explained that the CMBOK is reinforced with a greater degree of supporting documentation. He described that there is relatively little additional documentation provided by either the DoD/FAI model or UPPCC to expand beyond the basic competencies outlined in source documents. This is in contrast to the much greater level of detail provided in the CMBOK (Rendon, 2019). Figure 4 summarizes Rendon’s (2019) analysis of the three models, as discussed. Rendon (2019) thus concluded that the CMBOK is the preferable model for providing the most comprehensive contract management framework and recommends adoption by the DoD.

Characteristic	DoD/FAI Model	NCMA CMBOK Model	UPPCC BOK Model
Structure (Construction, Alignment, Relationship)	Combines pre-award and award contract life cycle phases Divides post-award phase Includes specific procurement areas and a collection of professional competency areas Minimal hierarchical relationship (competence, competencies, elements)	Separate competencies for each contract life cycle phase Includes competencies for guiding principles, leadership, m Extensive hierarchical relationship (primary competency, domain, process competency, job tasks, sub-tasks)	Some semblance of contract life cycle phases Includes specific procurement areas Minimal hierarchical relationship (domain, knowledge statement, task/responsibilities)
Scope (Topical Coverage)	Federal/DoD contracting tasks and activities Specific to buyer's contracting process, tasks, activities Includes other contracting competencies (e-procurement, purchase card, professional skills) and professional skills	Govt/Industry contracting tasks and activities Bother buyer and seller contracting process, tasks, activities Includes supporting competencies in business, finance, risk, project, and supply chain management	Federal/State/Local contracting tasks and activities Specific to buyer's contracting process, tasks, activities Includes other contracting competencies (procurement admin, supply mgt, strategic procurement planning)
Supporting Documentation (Availability of Supplemental Information)	Three page documents in spreadsheet format with separate columns for competence, competencies, and elements.	Management Standard. The CMBOK includes a discussion of the CM framework and a discussion of each competency. The CMBOK also contains a glossary and supporting appendices.	Four page document providing an introduction and background and a list of domains, knowledge statements, and associated tasks and responsibilities.

Figure 4. Summary of Comparison Findings. Source: Rendon (2019).

E. DEPARTMENT OF DEFENSE TRANSITION TO THE CONTRACT MANAGEMENT STANDARD

The NDAA for FY 2020 directs and requires the secretary of defense to implement a third-party accredited certification program for all members of the acquisition workforce. Acting Principal Director of Defense Pricing and Contracting Kim Herrington created a Contracting Certification Task Force as part of ongoing acquisition workforce transformation initiatives in response to the NDAA requirements. One of the objectives of Herrington’s task force was to identify common knowledge, skills, and experience required for the contracting workforce (DPC, 2020). Following identification of these requirements, the task force determined that the NCMA CMS comprehensively evaluates these key metrics. Herrington notes that “the model also incorporates an overarching narrative of guiding principles aligned with professional competencies that apply across all phases of the contracting life cycle” (DPC, 2020, p. 1). As a result, the DoD is transitioning from the DoD Contracting Competency Model to the NCMA CMS. It is necessary to understand the key differences between these two models in order to explain why the CMS was chosen as the new competency model for the DoD to follow.

Rendon and Winn (2017) explained four key areas where the two models diverge: life-cycle phases, professional competencies, focus, and buyer–seller competencies. Whereas the DoD model does not align with the contract life-cycle, the CMS aligns its competencies with each phase. This ensures “much more granularity and emphasis on pre-award, award, and post-award job tasks and activities” (Rendon & Winn, 2017, p. 79). The CMS is structured in a manner more consistent with the actions performed throughout the contracting process and is thus easier to use as a guide and aid for analyzing workforce capabilities. Another area where the CMBOK provides greater detail than the DoD model concerns professional competencies. These are skills necessary to perform contracting actions, such as effective communication, interpersonal proficiency, and problem-solving ability. Whereas the CMBOK divides these competencies between three distinct areas, Leadership, Management, and Learn, the DoD model has one broad “Professional Competency” category. Another key difference pointed out by Rendon and Winn (2017) is that the focus on continuous learning is

unique to the CMBOK. The result is that the CMBOK provides “greater granularity and emphasis on these competencies and related activities” (Rendon & Winn, 2017, p. 79). The third major difference between the two models is focus. Rendon and Winn (2017) explained that while the models share some similarities, the CMS is more broadly structured but does not include competencies specifically relating to contracting in combat environments. The result is that the CMS is more comprehensive than the DoD model. The last divergence is that the CMS accounts for the perspectives of both the buyers and sellers, whereas the DoD model does not. Rendon and Winn (2017) argued that this is the “most significant difference” between the two models, since contracts inherently involve both parties, and that the CMS “competency framework may provide a better approach for developing the DoD contract management workforce competency” (p. 79). The DoD’s recent adoption of the CMS as the new competency model confirms concurrence.

F. CONTRACT MANAGEMENT STANDARD

This chapter has provided a basic overview and general purpose of the CMS in addition to explaining why the DoD adopted the CMS as the official contract management model. The CMS “defines key contract management concepts and processes and serves as the foundation and framework for the *Contract Management Body of Knowledge*” (NCMA, 2019, p. 2). Figure 5 depicts the full structure of the CMS which contains seven guiding principles that apply, regardless of circumstances, throughout the entirety of the contract life-cycle. The seven principles are: Skills and Roles, Contract Principles, Standards of Conduct, Regulatory Compliance, Situational Assessment, Team Dynamics, and Communication and Documentation. Below the guiding principles are the three phases of the contract life-cycle: pre-award, award, and post-award. Because this research focuses on competencies relating to the contract management life-cycle phases, each of the various domains, competencies, and job tasks will be discussed in this section.

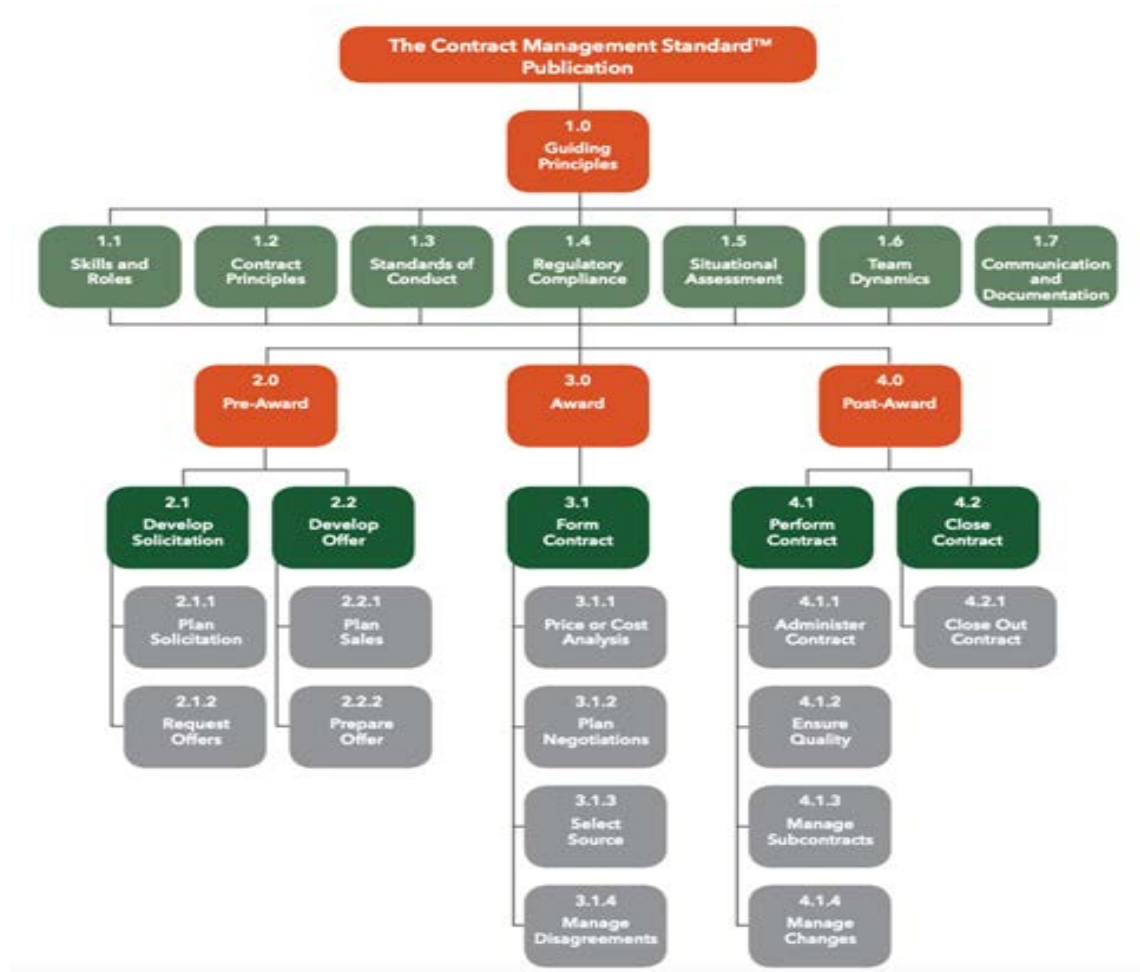


Figure 5. The Contract Management Standard Structure. Source: NCMA (2019).

1. Pre-award Phase

This phase involves all of the necessary preparations for both the buyer and seller to conduct prior to entering into activities with the intent to form a contract. From the buyer perspective, this phase involves the activities associated with identifying requirements, planning requirements fulfillment, and developing an overall strategy for satisfying the requirement need (NCMA, 2019). The buyer domain of Develop Solicitation involves the competencies of Plan Solicitation and Request Offers. The CMS describes Plan Solicitation as “the process by which efforts of all personnel responsible for acquiring goods or services are coordinated and integrated through a comprehensive plan for fulfilling the customer need in a timely manner at a reasonable cost” (NCMA,

2019, p. 9). Request Offers, on the other hand, is “the process of implementing the solicitation plan by soliciting responses from sellers in order to fulfill a customer need” (NCMA, 2019, p. 9). Figure 12 in Appendix B further describes the breakdown of the individual competencies assessed throughout the assessment.

From the seller perspective, this phase involves the activities associated with assessing organizational capacity to compete for a requirement and responding to buyer solicitations (NCMA, 2019). The seller domain of Develop Offer involves the competencies of Plans Sales and Prepare Offer. The CMS describes Plan Sales as the process of developing a market strategy, assessing the marketplace, and evaluating competition, whereas Prepare Offer “is the organization’s ability to execute the sales plan as it assembles an offer to win business” (NCMA, 2019, p. 11). Figure 13 in Appendix B further describes the breakdown of the individual competencies evaluated throughout the assessment.

2. Award Phase

This phase concerns all of the activities necessary for both the buyer and seller to conduct in order to form a contract. From the buyer perspective, this phase involves activities associated with evaluating offers; conducting negotiations; and selecting, awarding and debriefing offerors (NCMA, 2019). From the seller perspective, this phase involves the activities associated with clarifying offers, participating in negotiations, and preparing final offers (NCMA, 2019). The singular domain of Form Contract involves the four competencies of Price or Cost Analysis, Plan Negotiations, Select Source, and Manage Disagreements. Because some tasks associated with these competencies apply to both buyers and sellers, they are not subdivided between buyer/seller-specific tasks. Figure 14 in Appendix B further describes the breakdown of the individual competencies assessed throughout the assessment.

The CMS subdivides the buyer task of Determine Reasonable Pricing into two categories: Perform Price Analysis or Perform Cost Analysis. Price Analysis is “the process of examining and evaluating an offeror’s proposed price without evaluation of the separate detailed cost elements” (NCMA, 2019, p. 13). Cost Analysis is “the process

of reviewing and evaluating any separate cost elements and profit or fee in an offeror's proposal—and of the judgmental factors applied in projecting from the data to the estimated costs—to determine the degree to which the offeror's proposed costs represent the expected actual cost of contract performance assuming reasonable economy and efficiency" (NCMA, 2019, p. 13). The determination for which analysis category to use is based on a number of factors concerning the details of the requirements. Plan Negotiations "is the process of preparing for interaction between the buyer and seller regarding all aspects of the offer and its terms, and often involves clarifying requirements and parties requesting changes or consideration of an alternate approach that may be consistent with the solicitation requirements" (NCMA, 2019, p. 14). This process also includes the act of conducting negotiations between the buyer and seller. The CMS explains that Select Source is the process of evaluating all offers and selecting the one assessed as having the highest likelihood of success. Finally, Manage Disagreements is the "process of resolving conflict between potential and actual contracted parties in order to maintain legal conformity" (NCMA, 2019, p. 14).

3. Post-award Phase

This phase includes all of the activities associated with performance and final closeout of the contract. The CMS explains that "the contract administration functions will vary greatly depending on the complexity of the contract" (NCMA, 2019, p. 16) and that active participation from both the buyer and seller is necessary to ensure satisfactory performance and successful contract conclusion. From the buyer perspective, this phase involves activities associated with resolving issues, executing modifications, monitoring compliance, making payments, and closing the contract (NCMA, 2019). From the seller perspective, this phase involves the activities associated with performing the contract, invoicing, managing subcontractors, managing changes, and closing the contract (NCMA, 2019). The two domains of this phase are Perform Contract and Close Contract. As with the award phase, the tasks associated with these competencies apply to both buyers and sellers and are therefore not subdivided. Perform Contract involves the competencies of Administer Contract, Ensure Quality, Manage Subcontracts, and Manage Changes. The CMS explains that Administer Contract is "the process of

confirming expectations, maintaining communication channels, processing contract documentation, conducting post-award performance reviews, and assessing contract performance” (NCMA, 2019, p.16). The Ensure Quality process is meant to ensure that the product or service adheres to the standards established in the contract (NCMA, 2019). Manage Subcontracts is “the management of contracts in support of the prime contract” (NCMA, 2019, p. 17). This process includes oversight of awarding subcontracts, managing their performance to designed standards, and ensuring appropriate payments (NCMA, 2019). Finally, the Manage Changes process involves identifying modifications to contracts and the subsequent activities necessary to negotiate, implement, and manage those modifications (NCMA, 2019). Figure 15 in Appendix B further describes the breakdown of the individual competencies evaluated throughout the assessment.

The final domain of Close Contract involves both the buyer and seller to ensure that all requirements have been satisfied, resolve any outstanding issues, and settle final payments (NCMA, 2019). The singular competency within this domain, Close Out Contract, is “the process of ensuring: all performance has been accomplished, final contractor performance has been evaluated, final payment has been made, and the contract has been reconciled” (NCMA, 2019, p. 19). Figure 16 in Appendix B further describes the breakdown of the individual competencies assessed throughout the assessment. Chapter IV further explains how the buyer and seller job tasks depicted in the CMS were used to formulate competency statements to create the Contract Management Workforce Assessment used to collect the data from Marine Corps Systems Command.

G. SUMMARY

This chapter provided an overview of auditability theory and competency models, demonstrating their validity to organizations with application seen through the DoD’s adoption of the CMS. Several contracting competency models were discussed, demonstrating the widespread application in the public and private sector. The next chapter introduces the background information and structure of MCSC, which is the target organization for this research.

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III. MARINE CORPS SYSTEMS COMMAND

A. INTRODUCTION

This chapter provides background on MCSC, which is the organizational setting in which this research was conducted. The first section of this chapter begins with an overview of the Marine Corps contracting community and MCSC's alignment within it. The next section explains MCSC responsibilities, its organizational structure, and what programs it manages. The final sections examine MCSC's current internal assessment metrics and why this organization was chosen for this research project.

B. UNITED STATES MARINE CORPS CONTRACTING OVERVIEW

Due to the Marine Corps' relatively small service size and unique departmental relationship, the Navy manages many of the service's major contracting functions, such as military construction and aviation acquisitions, and holds Head of Contracting Activity (HCA) authorities (USMC, 2018). HCA within the Navy rests with the deputy assistant secretary of the Navy for acquisition and procurement (DASN[AP]), with service-specific regulations derived from the Navy Marine Corps Acquisition Regulation Supplement (NMCARS) and Marine Corps Acquisition Procedures Supplement (MAPS; Headquarters Marine Corps [HQMC] Assistant Deputy Commandant, Installations and Logistics [ADC, I&L], 2009). DASN(AP) authority (depicted in Figure 9 in Appendix A) is delegated to the two HCAs that split the Marine Corps' contracting responsibilities, one position at MCSC and the other at HQMC, I&L (USMC, 2018). Figure 9 in Appendix A also illustrates the wide array of other contracting organizations that support the Marine Corps with contracting activities, such as U.S. Cyber Command, Naval Facilities Engineering Command, and Marine Corps Special Operations Command, but do not fall within the direct HCA or HQMC military chain of command. HCA differs from the traditional military command structure, which is depicted in Figure 10 in Appendix A showing HQMC, I&L's and MCSC's alignment under the commandant as the head of the Marine Corps (Marine Corps Concepts & Programs, n.d.).

HQMC, I&L, and MCSC split contracting responsibilities within the Marine Corps, with HQMC, I&L focused on facilities and operational contracting support (OCS) and MCSC managing most major systems acquisitions (HQMC ADC, I&L, 2009). HQMC, I&L has a subordinate branch titled ADC, I&L (Contracts), which is responsible for HQMC, I&L's contracting duties and has delegated contracting authority (HQMC ADC, I&L, 2009). A detailed comparison of MCSC's and ADC, I&L's roles is depicted in Table 5, in Appendix A. ADC, I&L executes its roles through policy administration at its headquarters level and through its subordinate contracting force consisting of regional contracting offices (RCOs) and OCS personnel spread throughout the Marine Corps' operational forces, as depicted in Figure 9 in Appendix A. MCSC conducts all major systems acquisition for the Marine Corps with the exception of procurement involving Marine Corps aviation, which is held with the Naval Air Systems Command (NAVAIRSYSCOM; Navy Marine Corps Acquisition Regulation Supplement [NMCARS] 5201.601-90, 2020). MCSC's responsibilities and organization are further explained in the following section.

C. MARINE CORPS SYSTEMS COMMAND STRUCTURE

1. Organizational Overview

MCSC headquarters is located aboard Marine Corps Base Quantico, VA; however, portfolio and program teams are spread across the country. MCSC operates out of several sites including multiple locations in Northern Virginia; Warren, MI; Camp Pendleton, CA; Orlando, FL; and Albany, GA (MCSC, n.d.b). As one of the three HCAs within the Marine Corps, MCSC employs a diversely talented workforce comprised of Marines, Sailors, civilians, and contractors in the execution of more than 450 acquisition programs (MCSC, n.d.b). MCSC is "responsible for awarding and administering contracts for assigned Marine Corps programs, assigned IT [Information Technology] programs or components, and relevant professional, research and engineering services, except for naval aviation programs" (NMCARS 5201.601-90, 2020). As the DoN's system command for the aforementioned Marine Corps-related programs, MCSC operates along two primary lines of effort: program execution and program executive

office support in fulfillment of its purpose “to equip and sustain Marine forces with the most capable and cost-effective systems for current and future expeditionary and crisis-response operations” (MCSC, n.d.b, para. 2).

As explained on the command’s website, because MCSC is both a Naval Systems Command and HQMC organization, the commander interacts with both the CMC and the assistant secretary of the Navy for research, development, and acquisition (ASN[RDA]). As an HQMC organization, the MCSC commander is accountable to the CMC—via the assistant CMC—for operating forces support and logistics sustainment responsibilities (MCSC, n.d.a; Marine Corps Concepts & Programs, n.d.). MCSC’s authorities for research, development, and acquisition come from the ASN(RDA). The MCSC commander is responsible and accountable for core acquisition processes, incorporation of advanced technology and lessons learned, in-service support, providing support services to Program Executive Offices (PEOs), executing safety programs, and serving as the operational safety and assurance certification authority for the ground weapon and IT system program portfolio (MCSC, n.d.b).

2. Command Organization

MCSC is commanded by a brigadier general and supported by an executive director. In addition to the standard complement of supporting staff positions, MCSC is comprised of three portfolios, 15 programs, and a company-sized Tactical Systems Support Activity (see Figure 11 in Appendix A). This structure is designed similarly to the Marine Air Ground Task Force (MAGTF) construct, which is the principal organizational structure upon which Marine Corps units are formed.

MCSC also provides support to three affiliated PEOs: Land Systems, program manager for Global Combat Support System-Marine Corps, and Joint Project Manager Protection, which are not depicted in Figure 11 in Appendix A (MCSC, n.d.b). MCSC’s portfolios and programs provide a diverse array of functionality to support the command’s mission and purpose. The subordinate activities are divided into three portfolios and three stand-alone entities. The first portfolio, Ground Combat Element Systems (PfM GCES), “Equips and sustains the Marine Corps with fully integrated

infantry, reconnaissance, armor and fire support weapons systems” (MCSC, n.d.d, para. 1). PfM GCES’s subordinate programs are Infantry Weapons, Infantry Combat Equipment, Long Range Fires, and Fire Support Systems. This portfolio works to ensure that ground forces are fielded the optimal equipment to maximize readiness and ensure lethality on the battlefield (MCSC, n.d.d). The second portfolio, Command Element Systems (PfM CES), “Provides and sustains command, control, communications and intelligence capabilities to the MAGTF” (MCSC, n.d.a, para. 1). PfM CES’s subordinate programs are Communications Systems, Intelligence Systems, Command and Control Systems, and Wargaming Capability. These programs combine to provide the Marine Corps with solutions and capabilities that enable it to retain an accurate operational picture of the battlefield to employ forces (MCSC, n.d.a). The third portfolio, Logistics Combat Element Systems (PfM LCES), “Equips and sustains Marine Forces with supply, maintenance, ammunition and engineering systems” (MCSC, n.d.e, para. 1). PfM LCES’s subordinate programs are Engineering Systems, Supply and Maintenance Systems, Ammunition, Medium and Heavy Tactical Vehicles, and Light Tactical Vehicles. This portfolio provides life-cycle support for a broad array of logistical assets and capabilities that are necessary to sustain Marine Forces operating globally (MCSC, n.d.e).

The first stand-alone entity, Marine Corps Tactical Systems Activity (CO MCTSSA), provides “Command, Control, Communications, Computers, and Intelligence (C4I) architecture for enterprise-level testing, engineering, analysis, troubleshooting, and solutions” to MCSC program managers as well as Fleet Marine Forces (MCSC, n.d.f, para. 2). In addition to supporting cutting-edge technological and network solutions, CO MCTSSA is also responsible for amphibious vehicle and testing and engineering (MCSC, n.d.g). The second stand-alone entity, Training Systems (PM TRASYS), improves the Marine Corps’ warfighting effectiveness by “providing training support, and developing and sustaining training systems and devices” (MCSC, n.d.i, para. 1). PM TRASYS focuses on delivering physical and digital training aids for both individual and collective skills. These capabilities ensure that the Marine Corps remains proficient and prepared for global deployments. Finally, the Marine Corps Cyber Operations (PM MC Cyber Ops) program “develops and maintains enterprise Marine Corps applications and services

on the Marine Corps Enterprise Network” (MCSC, n.d.h, para. 4). PM MC Cyber Ops is collocated with Marine Corps Cyber Command to provide direct support which enhances collaboration and speeds up the acquisition process (Osborne, 2020). These portfolios, programs, and activities are supported by a full complement of supporting command and staff offices. This research focuses on one office in particular, the Contracts Directorate (CT).

The CT resides within the MCSC professional staff. This office “manages the full range of technical direction functions required for Marine Corps Systems Command to execute as Head Contracting Authority to the Marine Corps” (MCSC, n.d.c, para. 2). The CT supports and provides procurement solutions to all of MCSC’s portfolio managers, program managers, and affiliated PEOs. Additionally, this office is responsible for recruitment and development of the MCSC contracting workforce (MCSC, n.d.c). The CT is also responsible for talent management of MCSC’s contracting workforce including recruitment, development, and retainment. Due to the large number and scope of MCSC programs, appropriate contract management oversight is important for ensuring successful execution of these programs. The next section discusses the MCSC policies and procedures that fulfil this function through procurement management oversight.

D. PROCUREMENT MANAGEMENT OVERSIGHT

MCSC’s procurement management oversight of contracting activities consists of three primary methods: Contract Review Boards (CRBs), Individual Business Assessments (IBAs), and the Procurement Performance Management Assessment Program (PPMAP). These methods provide oversight of contracting activities and help to ensure compliance with rules and regulations. However, none of these methods focuses on assessing individual competencies. CRBs are periodic reviews that occur to ensure that specific contracts are amenable to good business practices. These boards “focus their efforts on assuring proposed contract solicitations and awards are in compliance with federal acquisition regulations and DoD guidance” (DiNapoli, 2017, p. 18). Although this represents a good method of ensuring compliance, the CRB does not provide feedback regarding individual competencies. IBAs are semi-annual reviews of a sampling of

contract actions performed by an individual contract specialist. The MCSC IBA standard operating procedures (SOP) explains that reviewed files should consider applicable audits, such as DASN(AP), Inspector General (IG), and PPMAP reports (A. Gorman, personal communication, August 18, 2020). Additionally, the reviews look for evidence of source selection process and documentation; determination and Findings (D&F) documentation; justification and Approval (J&A)/limited sources documentation; Business Clearance Memorandum (BCM); Pre-& Post Negotiation Memorandum (PNM) documentation; and actions prepared by each contract specialist (A. Gorman, personal communication, August 18, 2020). The MCSC SOP goes on to explain that the key functionality of the IBA is to identify systemic issues, areas of excellence and areas for improvement, and any best practices or lessons learned (A. Gorman, personal communication, August 18, 2020). The IBA enables MCSC to periodically assess its processes and procedures and to ensure compliance with regulations in addition to aid with individual performance reviews. This is not an assessment of individual competency. The most comprehensive oversight mechanism that MCSC employs is the DoN–mandated PPMAP.

The NMCARS provides guidance to HCAs within the DoN. The section covering procurement management oversight “encourages and assists HCAs in making continuous improvements in their acquisition and procurement processes” (NMCARS 5201.691, 2020). The primary means of conducting this oversight is through the PPMAP, which is described as a “a flexible, performance-based, process-oriented program that requires contracting activities to perform periodic self-assessments” (NMCARS 5201.691, 2020). PPMAP assessments consist of “critical procurement processes used to manage and execute procurement operations within the HCA, including their associated outcomes; performance-based metrics; and the results of employee and customer surveys” (NMCARS 5201.691, 2020). HCAs are directed to use the results of periodic PPMAP assessments to “evaluate the quality of their procurement processes and management systems; validate that execution of delegated authority is occurring according to law and regulation; mitigate the risk of vulnerabilities for fraud, waste, or abuse to occur; and,

take appropriate corrective actions, as needed, to improve or maintain the quality of procurement operations within the contracting activity” (NMCARS 5201.691, 2020).

Using PPMAP, the NMCARS makes each HCA “responsible for performing management and oversight reviews of all procurement operations” (NMCARS 5201.691, 2020). PPMAP provides MCSC with a comprehensive method for performing oversight of procurement operations. However, the focus of PPMAP is on Federal Acquisition Regulations (FAR) specific processes and not on competencies. Since the NMCARS does not direct HCAs to evaluate individual competencies, no current organizational assessments exist for direct comparison. This lack of data regarding a major portion of the Marine Corps contracting workforce makes MCSC a prime candidate for application of the Contracting Workforce Competency Assessment.

E. WHY SELECT MARINE CORPS SYSTEMS COMMAND FOR THIS RESEARCH?

MCSC was chosen for this research project because of its involvement in the task force that selected the CMS as the new DoD contracting standard and because it is the largest procurement organization in the Marine Corps. As such, it is known as the home of the Marine Corps’ acquisition professionals. Although this survey could benefit all members of the Marine Corps’ contracting workforce, querying MCSC provides an excellent opportunity to gauge the capabilities of professionals who are operating at the highest and most complex levels of contracting. Because Contracts Directorate maintains oversight of the entirety of the MCSC contracting workforce, participants in the contract management workforce competency assessment ranged across the entire organization. In addition, MCSC highly benefits from this assessment by being the first in the Marine Corps to gather empirical data on their contract workforce CMS competencies. Application of this assessment at such a large contracting command may lead to the assessment’s adoption by other organizations across the Marine Corps.

F. SUMMARY

This chapter discussed the overall structure of the USMC contracting workforce, explaining how each element functions within the larger organization. Next, the MCSC command structure was examined, along with how it conducts procurement management oversight. Finally, the reasons behind why MCSC was selected for this research were explained. The next chapter discusses the development of the contract management workforce assessment survey and methodology for its application within MCSC.

IV. METHODOLOGY

A. INTRODUCTION

The previous chapters introduced the need for DoD acquisition workforce improvement, explained the framework that can be used to develop the workforce, and identified MCSC as the subject of this research. This chapter will examine the newly developed Contracting Workforce Competency Assessment, which is used as the primary method of data collection to answer the primary research questions. The first section of this chapter explains how the assessment was developed using the NCMA CMS as a guideline. The next section describes the competency levels used to rate responses. The final section discusses how the assessment was deployed and data was collected.

B. SURVEY DEVELOPMENT

Rendon and Schwartz (2020) developed the competency assessment instrument as a means to assess contracting competencies based on the NCMA CMS framework. The assessment focuses on the job tasks aligned to the contract life-cycle phases of pre-award, award, and post-award from both buyer and seller perspectives (Rendon & Schwartz, 2020). The survey used for this research was based on the aforementioned assessment and is comprised of three sections: demographics, buyer competencies, and seller competencies.

Demographics data collection is concerned with basic information regarding the workforce, such as Defense Acquisition Workforce Improvement Act (DAWIA) certification levels, possession (or not) of contracting officer warrants, years of contracting experience, and achievement of other professional certifications. The remainder of the survey is designed for participants to respond to competency statements regarding self-assessed proficiency levels in performing buyer tasks and knowledge levels of seller tasks within each associated domain (Rendon & Schwartz, 2020). The buyer segment of the assessment is composed of competency statements regarding specific job tasks for the contract life-cycle domains of Plan Solicitation, Request Offer, Price or Cost Analysis, Plan Negotiations, Select Source, Manage Disagreements,

Administer Contract, Ensure Quality, Manage Changes, and Close Out Contract. The seller segment of the assessment is composed of competency statements regarding specific job tasks for the contract life-cycle domains of Plan Sales, Prepare Offer, Plan Negotiations, Select Source, Manage Disagreements, Administer Contract, Ensure Quality, Manage Subcontracts, Manage Changes, and Close Out Contract. Participants rate each statement using the Likert scale described in the following section.

C. COMPETENCY LEVELS

The survey uses a Likert scale, ranging from values 1 through 5, to express proficiency and knowledge levels when answering the competency statements (Rendon & Schwartz, 2020). The competency levels are differentiated between buyer and seller tasks. Since this survey is designed to assess the DoD contracting workforce and the government agents who perform buyer tasks, tasks associated with buyer activities are evaluated on proficiency. Tasks associated with seller activities are evaluated on knowledge of the process areas. This is because the DoD contracting workforce is not expected to be able to perform the seller tasks, but having a working knowledge of those tasks enables more efficient and effective contract management. Survey participants self-assess their proficiency levels in performing the buyer-associated tasks based on the scale indicated in Table 1 (aware through expert). Survey participants self-assess their knowledge levels of seller-associated tasks based on the scale indicated in Table 2 (none through advanced). Development of this survey enabled the researchers to assess the MCSC contracting workforce, as explained in the next section.

Table 1. Buyer Proficiency Levels. Adapted from Rendon and Schwartz (2020).

Proficiency Level	Definition
(1) Aware	Applies the competency in the simplest situations and requires close and extensive guidance.
(2) Basic	Applies the competency in somewhat difficult situations and requires frequent guidance.
(3) Intermediate	Applies the competency in difficult situations and requires little or no guidance.
(4) Advanced	Applies the competency in considerably difficult situations and generally requires no guidance.
(5) Expert	Applies the competency in exceptionally difficult situations and involves serving as a key resource and advises others.
N/A	Not applicable/not needed in my job.

Table 2. Seller Knowledge Levels. Adapted from Rendon and Schwartz (2020).

Knowledge Level	Definition
(1) None	I am not aware of this Contractor competency.
(2) Aware	I am aware but have no knowledge of this Contractor competency.
(3) Basic	I have basic-level knowledge of this Contractor competency.
(4) Intermediate	I have intermediate-level knowledge of this Contractor competency.
(5) Advanced	I have advanced-level knowledge of this Contractor competency.

D. SURVEY DEPLOYMENT

The survey is deployed using the Naval Postgraduate School (NPS) open-source surveying tool LimeSurvey (Naval Postgraduate School [NPS], n.d.). The web-based survey enables participants to respond anonymously. As described in Chapter III, the MCSC contracting workforce was chosen as the research subject population due to its unique functionality within the Marine Corps. The link to the survey was emailed to a MCSC point of contact who is not in a leadership position (so as to not unduly influence participation or responses) and who then deployed the survey to the organization's contracting workforce. Responses were collected by the lead investigator. Upon completion of the assessment surveys, the lead investigator compiled the results into deidentified data. This deidentified data was provided to the student investigators to conduct an analysis of the responses.

The survey was deployed on Monday, September 14, 2020, and remained open for 18 days before being closed on Friday, October 2, 2020. Per protocol, a reminder solicitation was sent on Monday, September 21, 2020. The population size was 220, which constitutes the entire population of MCSC's contracting workforce. Overall, 19.5% (43 people) of the MCSC contracting workforce participated in the survey, providing full responses.

E. SUMMARY

This chapter explained the methodology behind the development, rating, and deployment of the Contracting Workforce Competency Assessment. The assessment is a newly developed tool used to evaluate competencies based on the NCMA CMS framework. The assessment is conducted using a survey that asks participants to respond to competency statements by providing self-assessed ratings on a Likert scale. The data is collected using a web-based survey hosted on the NPS LimeSurvey tool, which results in deidentified data to be analyzed. The results of the research, which are presented in the following chapter, enable identification of MCSC contracting workforce proficiency levels in performing the buyer tasks and knowledge levels of seller tasks.

V. ASSESSMENT RESULTS AND ANALYSIS

A. INTRODUCTION

The previous chapter explained the development of the Contracting Workforce Competency Assessment, described how responses are calculated, and detailed how the data was gathered through the use of a survey. This chapter provides the assessment results by presenting the demographics and the survey participants' response data. Next, this chapter compares the results from this research with results from the most recent FAI AWCS to provide greater context to this research's assessment results. Finally, this chapter concludes with recommendations for MCSC contracting workforce training and development based on the assessment results.

B. ASSESSMENT RESULTS AND ANALYSIS

This section provides the Contracting Workforce Competency Assessment results along with an analysis of the data. The survey participants' demographics data are presented first and followed by the response data, which is broken down into the three phases of the contract life-cycle. The data is presented from both the buyer proficiency and seller knowledge levels, which were characterized in Chapter IV. In all instances, the response data reflect the mean average of all survey participants who responded to each relevant question.

1. Demographics

Due to the voluntary nature of this survey, some participants did not choose to answer every question. Therefore, the response rates for each question and the total number of responses vary. Additionally, although these results may not fully represent the overall MCSC contracting workforce, the demographics data implies several notable factors that apply to the auditability theory component of "competent people." The results from the demographics questions are provided in Table 3.

Table 3. MCSC Contracting Workforce Competency Assessment Demographics Results

DAWIA Level		CM Years of Experience	
None	1	3 or Less	5
Level I	3	4 to 8	5
Level II	5	9 to 13	21
Level III	41	14 to 18	4
		19 or more	17
PCO	21		
Professional Certifications		Years in Organization	
CFCM	2	3 or Less	20
CCCM	0	4 to 8	10
CPCM	1	9 to 13	13
Other	7	14 to 18	4
		19 or more	4

Fifty participants responded to indicate their Defense Acquisition Workforce Improvement Act (DAWIA) certification levels. One participant reported “None,” three reported being Level I (Basic/Entry), five reported being Level II (Intermediate/Journeyman), and 41 reported being Level III (Advanced/Senior; Defense Acquisition University [DAU], n.d.d). The number of DAWIA Level III certifications as a percentage of the survey population (82%) indicates a high degree of education and training resident to the workforce.

Furthermore, 21 participants indicated that they are Procuring Contracting Officers (PCO), meaning that they hold warrants from MCSC to award contracts on behalf of the United States Government. In regard to professional certifications, participants had the option of selecting all applicable answers. The participants reported 10 certifications: 2 Certified Federal Contract Managers (CFCMs), 1 Certified Professional Contract Manager (CPCM), and 7 “other” certifications. There were no responses for the Certified Commercial Contract Manager (CCCM) certification. Compared to the number of reported DAWIA certifications, this is a low amount of reported professional certifications.

Fifty-two participants provided responses relating to years of experience in the contract management field. Five participants reported having 3 years or less; five reported 4–8 years; 21 reported 9–13 years; four reported 14–18 years, and 17 reported 19 or more years. Fifty-one participants provided responses relating to years in the organization. Twenty participants reported having 3 years or less; 10 reported 4–8 years; 13 reported 9–13 years; four reported 14–18 years; and four reported 19 or more years. Although the workforce is generally new to the organization (less than 9 years), years of experience in the contracting field is high (greater than 9 years). The remainder of the data points are presented as averages from all responses to report the buyer proficiency and seller knowledge competency levels.

2. Buyer Competencies

Figure 6 reflects the assessment findings for the buyer competencies. These findings are discussed next using the three contract life-cycle phases.

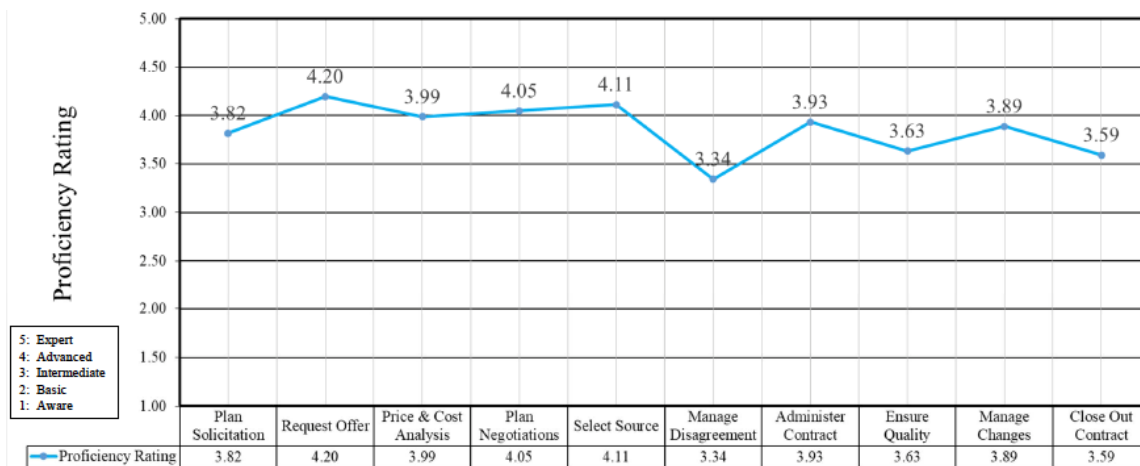


Figure 6. MCSC Contracting Workforce Competency Assessment Buyer Competencies Results

a. Pre-award Phase

The pre-award life-cycle phase from the buyer perspective is divided into the domains of Plan Solicitation and Request Offer. MCSC received a 3.82 (intermediate) proficiency rating for the Plan Solicitation domain and a proficiency rating of 4.20

(advanced) for the Request Offer domain. The combined average buyer proficiency rating for the pre-award phase is 4.01 (advanced). This indicates that the MCSC contracting workforce can perform the job tasks associated with these competencies in “considerably difficult situations and generally requires no guidance” (Rendon & Schwartz, 2020, p. 6).

b. Award Phase

The award life-cycle phase from the buyer perspective is divided into the domains of Price and Cost Analysis, Plan Negotiations, Select Source, and Manage Disagreements. For these domains, MCSC received proficiency ratings of 3.99 (intermediate) for Price and Cost Analysis, 4.05 (advanced) for Plan Negotiations, 4.11 (advanced) for Select Source, and 3.34 (intermediate) for Manage Disagreements. The combined average buyer proficiency rating for the award phase is 3.87 (intermediate). This indicates that the MCSC contracting workforce can perform the job tasks associated with these competencies in “difficult situations and requires little or no guidance” (Rendon & Schwartz, 2020, p. 6).

c. Post-award Phase

The post-award life-cycle phase from the buyer perspective is divided into the domains of Administer Contract, Ensure Quality, Manage Changes, and Close Out Contract. For these domains, MCSC received proficiency ratings of 3.93 (intermediate) for Administer Contract, 3.63 (intermediate) for Ensure Quality, 3.89 (intermediate) for manage changes, and 3.59 (intermediate) for Close Out Contract. The combined average buyer proficiency rating for the post-award phase is 3.76 (intermediate). This indicates that the MCSC contracting workforce can perform the job tasks associated with these competencies in “difficult situations and requires little or no guidance” (Rendon & Schwartz, 2020, p. 6).

3. Seller Competencies

Figure 7 reflects the assessment findings for the seller competencies. These findings are discussed next using the three contract life-cycle phases.

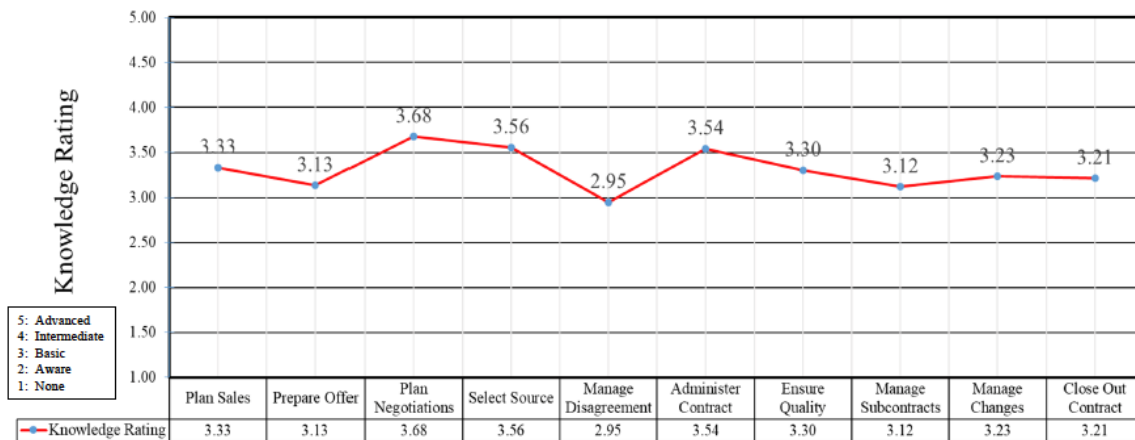


Figure 7. MCSC Contracting Workforce Competency Assessment Seller Competencies Results

a. Pre-award Phase

The pre-award life-cycle phase from the seller perspective is divided into the domains of Plan Sales and Prepare Offer. MCSC received a knowledge rating of 3.33 (basic) for the Plan Sales domain and a knowledge rating of 3.13 (basic) for the Prepare Offer domain. The combined average seller knowledge rating for the pre-award phase is 3.23 (basic). This indicates that the MCSC contracting workforce maintains a “basic level knowledge of this contractor competency” and the associated job tasks (Rendon & Schwartz, 2020, p. 6).

b. Award Phase

The award life-cycle phase from the seller perspective is divided into the domains of Plan Negotiations, Select Source, and Manage Disagreements. For these domains, MCSC received knowledge ratings of 3.68 (basic) for Plan Negotiations, 3.56 (basic) for Select Source, and 2.95 (aware) for Manage Disagreements. The combined average seller knowledge rating for the award phase is 3.39 (basic). This indicates that the MCSC contracting workforce maintains a “basic level knowledge of this contractor competency” and the associated job tasks (Rendon & Schwartz, 2020, p. 6).

c. *Post-award Phase*

The post-award life-cycle phase from the seller perspective is divided into the domains of Administer Contract, Ensure Quality, Manage Subcontracts, Manage Changes, and Close Out Contract. For these domains, MCSC received knowledge ratings of 3.54 (basic) for Administer Contract, 3.30 (basic) for Ensure Quality, 3.12 (basic) for Manage Subcontracts, 3.23 (basic) for Manage Changes, and 3.21 (basic) for Close Out Contract. The combined average seller knowledge rating for the post-award phase is 3.28 (basic). This indicates that the MCSC contracting workforce maintains a “basic level knowledge of this contractor competency” and the associated job tasks (Rendon & Schwartz, 2020, p. 6).

The proficiency and knowledge rating levels both provide valuable insight regarding the MCSC contracting workforce’s competencies. As can be seen in the previous discussion, MCSC has an intermediate to advanced buyer proficiency rating and a basic seller knowledge rating. Further insight can be gained by comparing the rating levels against each other.

4. *Analysis of Assessment Results*

As previously discussed, one of the strengths of the CMS is that it considers both the buyer and seller perspectives. Although the definitions on the Likert scale are different due to the distinction between the performance of buyer tasks and knowledge of seller tasks, the data is comparable and presents distinct trends and findings. Figure 8 presents the combined results of buyer proficiencies and seller knowledge ratings.

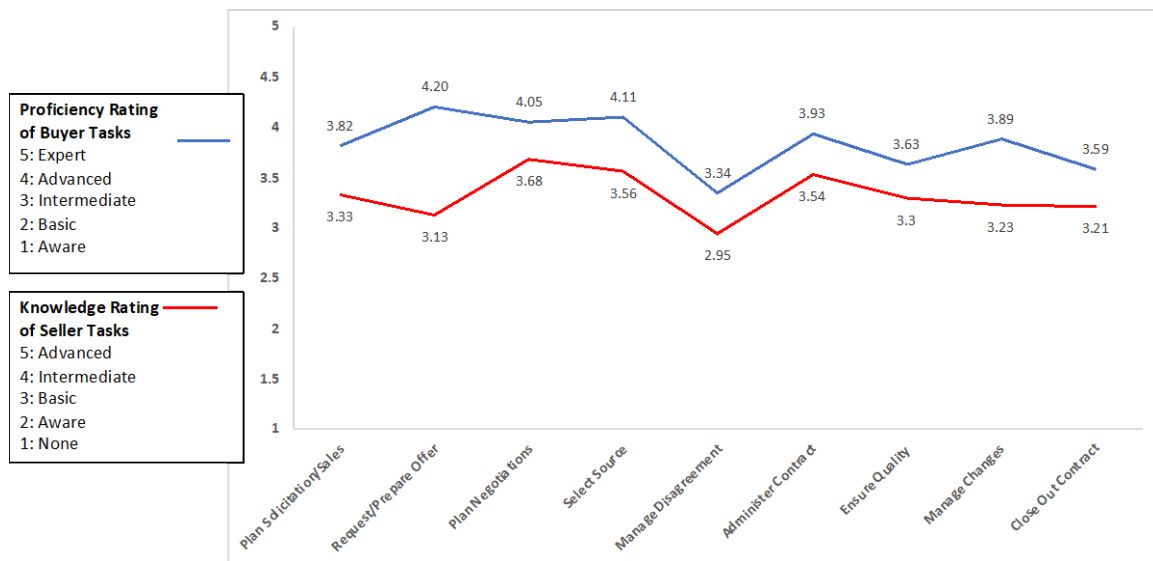


Figure 8. MCSC Contracting Workforce Competency Assessment Results Comparison

It should be noted that the two competencies not in common to the buyer and seller tasks—price and cost analysis (buyer-specific) and manage subcontracts (seller-specific)—are removed in Figure 8 to allow for a more direct comparison of the shared competencies. The competency ratings for buyer proficiency and seller knowledge generally trend in the same direction, with buyer proficiency ratings averaging higher than seller knowledge ratings. Buyer ratings trend higher, being 4.01, 3.87, and 3.76 for pre-award, award, and post-award, respectively, compared to seller ratings at 3.23, 3.39, and 3.28 for the same respective phases.

Overall, based on the assessment, the MCSC contracting workforce has a higher proficiency level regarding buyer tasks, with ratings averaging intermediate-to-advanced compared to an average knowledge level of seller tasks with a rating of basic. The particular outliers are the domains of Request Offers and Prepare Offers. During this pre-award phase, miscommunication can lead to misinformed decisions in subsequent actions and disagreements during contract execution. Additionally, the Manage Disagreement domain is the lowest data point for both buyer and seller competencies. This indicates that MCSC may experience issues with managing protests or other contract disputes. Notably, from both buyer and seller perspectives, this item is based on one data point.

While this comparison is insightful, this assessment results are most beneficial when compared against similar results, such as if MCSC were to conduct this assessment again in the future or against the most recent FAI AWCS.

C. COMPARISON WITH THE FEDERAL ACQUISITION INSTITUTE ASSESSMENT

1. Federal Acquisition Institute Assessment

This section compares the 2018 FAI AWCS with the findings of this research. The FAI assessment was managed by the Office of Federal Procurement Policy and the FAI, with a target population of the acquisition workforce from “all 23 civilian Chief Financial Officers Act agencies (except for the Department of Defense) and over 26 additional small agencies” (FAI, 2018, p. ii). Responses were gathered from contracting professionals (FAC-C holders), contracting officers’ representatives (FAC-COR holders), and project and program managers (FAC-P/PM) (FAI, 2018). For this comparison, only the FAC-C population’s results were utilized, as this population was deemed to best correlate with the MCSC Contracting Workforce Competency Assessment target population. The FAI assessment based its competency questions on the FAI model described in Chapter II and sought to “Identify the strengths and priority training needs of the federal civilian acquisition workforce; Gauge the developmental progress of the acquisition community in targeted areas; and Improve acquisition human capital planning” (FAI, 2018, p. ii).

A generalized comparison of competency scores in the contract life-cycle phases of pre-award, award, and post-award was used due to differences in both assessments. These distinctions primarily consisted of the contracting competencies being based on the separate models of the CMS and FAI models, as well as having slightly differing definitions for each competency proficiency level. In addition, since the NCMA CMS consists of both buyer and seller competencies and the FAI assessment only focuses on buyer competencies, no direct comparison can be made. Similarities between the two studies include both workforce populations sharing similar training and certification standards, mutually based on DAWIA requirements. Both workforces also fall under the

same general ruleset of the FAR and are therefore held to governmental procurement requirements not found in the private business sector. A comparison of scores was calculated by separating each competency area into one of the three life-cycle phases, then taking an average to determine a composite score for each phase. A detailed breakdown of scores by each contracting life-cycle phase is depicted in Figure 17, located in Appendix C.

2. Comparison Results

The first comparison results show an average pre-award phase proficiency score of 3.52 (intermediate) for the FAI assessment and a score of 4.01 (advanced) for the MCSC assessment. The award phase comparison results show an average proficiency score of 3.23 (intermediate) for the FAI assessment and a score of 3.87 (intermediate) score for the MCSC assessment. The final post-award phase comparison results show an average proficiency score of 2.98 (foundational) for the FAI assessment and a score of 3.76 (intermediate) for the MCSC assessment. MCSC showed a higher proficiency level in pre-award and post-award areas; however, this determination may be skewed due to differences in the proficiency level definitions that were utilized for each assessment. An overall comparison of these scores indicates that the FAI assessment workforce and the MCSC workforce were both strongest in the pre-award phase and weakest in the post-award phase, with proficiency scores dropping as the contract life-cycle progressed. The award phase had similar proficiency levels of intermediate for both workforces.

3. Comparison Implications

Comparing these two studies provides insight that a general trend across the whole federal contract management workforce may have stronger proficiencies in pre-award competencies and weaknesses in post-award competencies. The decline in scores from pre-award to post-award may also indicate an institutional focus that has prioritized pre-award competencies. The post-award phase, therefore, may be the best place to begin targeted training. The following section will provides recommendations based on these comparative findings and those specific to the MCSC assessment.

D. RECOMMENDATIONS FOR TRAINING AND DEVELOPMENT

This section contains focused recommendations based on the assessment results analysis. The recommendations are divided into two categories comprised of three sustainment recommendations and four improvement recommendations.

1. Sustainment Recommendations

This section contains three recommendations to sustain current practices based on the assessed strengths of the MCSC contracting workforce. The first recommendation is that MCSC continues current human resource capital management practices. The demographics data revealed that a significant percentage of the survey participants have a high degree of training, education, and experience in the contract management field. This implies that the MCSC leadership is focused on employing a capable and competent workforce. The second recommendation is to sustain current training practices concerning the buyer domains of Request Offers, Plan Negotiations, and Select Source. The assessment revealed that the MCSC contract workforce's highest proficiency levels are in these domains. The third recommendation is that MCSC leadership sustain its commitment to continuous improvement as demonstrated by MCSC's involvement in this research. Momentum in this area can be maintained by establishing periods to perform this assessment, like the bi-annual approach of the FAI's AWCS, to assess the effectiveness of training and development programs.

2. Improvement Recommendations

This section contains four recommendations to improve workforce competencies based on the assessed weaknesses of the MCSC contracting workforce. The first recommendation is that MCSC encourage the contracting workforce to pursue professional certifications such as the CFCM, CCCM, and CPCM. The assessment results indicate that a relatively low number of respondents possess professional certifications beyond the mandatory DAWIA certifications. Each of the recommended certifications is based on the CMBOK/CMS and can thus increase both buyer proficiency and seller knowledge levels. The second recommendation is that future training and development programs should focus on increasing the understanding of the seller competencies and

related tasks. MCSC's contracting workforce seller task knowledge ratings were assessed lower than their buyer task proficiency ratings. An improved sense of the seller perspective can result in higher quality contracts with more effective management through an understanding of how the seller operates. With the recent implementation of the CMS in the DoD, the seller perspective may be emphasized in future DoD workforce training. MCSC can take steps to update its current internal training programs to reflect the seller perspective and leverage the ongoing work that DAU is conducting to revise its education programs to reflect the CMS framework.

The third recommendation is that MCSC focus training efforts on the relevant parts of the FAR and CMBOK for buyer tasks and CMBOK for seller tasks to improve the domains assessed to have the lowest proficiency and knowledge ratings. Table 4 summarizes the associated focus areas for each domain.

Table 4. Domain–FAR–CMBOK Associations

Domain	FAR Part	CMBOK Section
Manage Disagreements (B)	33	3.1.4
Ensure Quality (B)	46	4.1.2
Close Out Contract (B)	4, 12, 13, 14, 15, 31, 32, 42, 44, 45, 47, 48, 52	4.2.1
Prepare Offer (S)	N/A	2.2.2
Manage Disagreements (S)	N/A	3.1.4
Manage Changes (S)	N/A	4.1.4
Close Out Contract (S)	N/A	4.2.1
(B) = Buyer (S) = Seller		

Specific attention should be given to Manage Disagreements, assessed as the lowest buyer proficiency and seller tasks knowledge. Obtaining training from consulting agencies or education institutes that emphasizes non-traditional methods such as alternative dispute resolution or mediation may provide an innovative approach to developing new skill sets in this area. MCSC can also work with DAU, as DAU's new CMS-based training curriculum is established to request training that is designed to meet assessed deficiencies. Leveraging DAU and institutions that provide DAU-equivalent

courses, such as the Naval Postgraduate School, which offers instruction based on the CMBOK/CMS, can further serve to enhance the workforce's contract management competencies.

The final recommendation is that MCSC, and the larger federal contracting workforce, should assess whether contracting workforce proficiencies meet expectations and objectives. The patterns found in the comparative analysis showing a decline in proficiency toward the end of the contract life-cycle should be noted by senior contract management leadership. With the ongoing revisions to federal contract management training and certification standards, a rebalancing of training priorities should be conducted to focus on areas where leaders see the most risk or to establish a balanced approach emphasizing competencies in each phase of the contract life-cycle.

E. SUMMARY

This penultimate chapter presented the results, analysis, and findings derived from the MCSC Contracting Workforce Competency Assessment. The results were broken down by the contract life-cycle phases and domains, which constitute those phases to include a discussion of similarities and differences between the buyer proficiency and seller knowledge assessment results. A comparison of the competency assessment results to those from the recent FAI AWACS was conducted to determine whether parallels exist between separate workforces that are governed by the same fundamental competencies, certifications, and underlying regulations. Lastly, the findings from the assessment results data were used to develop sustainment and improvement recommendations for future MCSC training and development initiatives. The following chapter completes this research project by providing an overall summary, conclusion, and recommendations regarding future research areas.

VI. SUMMARY, CONCLUSION, AND AREAS FOR FURTHER RESEARCH

A. INTRODUCTION

This chapter summarizes the Contracting Workforce Competency Assessment conducted at MCSC. The chapter provides a conclusion of the findings answering the four primary research questions. Finally, recommendations are provided for areas of further research associated with the content presented in this research.

B. SUMMARY

Contracting for the DoD has been a top concern for Congress, and DoD contract management has been on the GAO's High-Risk List since 1992 (DoDaro, 2019). As a result, contract management reform is a priority within the DoD, DoN, and the USMC. Section 861 of the National Defense Authorization Act for Fiscal Year 2020 prompted the DoD to establish new certification standards for the contracting workforce, resulting in the adoption of the National Contract Management Association (NCMA) Contract Management Standard (CMS) as the new DoD-wide contract management competency standard (DPC, 2020).

The foundational theory of this research is based on the "competent personnel" component of auditability theory as a management technique to ensure proper processes and procedures are followed, leading to optimizing organizational performance by improving the capabilities (individual competencies) of the workforce (Rendon & Rendon, 2016). Although several contract management competency models exist, a comparative analysis concluded that the CMS is the most comprehensive contract management framework, which explains the DoD's adoption of this standard (Rendon, 2019).

The contracting workforce within MCSC was chosen as the target population for this research project due to its unique position within the Marine Corps. Data was gathered through a web-based survey in which participants self-assessed their individual competencies within the various domains of the contract life-cycle phases. Prior to this

research project, the Marine Corps had not conducted a CMS-based assessment of its contracting workforce, leaving a deficiency in empirical data to define current abilities. The primary purpose of this research was to assess the individual competencies of the MCSC contracting workforce using the NCMA CMS competency framework.

C. CONCLUSION

This research was conducted based on four primary research questions. These research questions are oriented to provide MCSC with data that can help develop an appreciation of its contracting workforce's strengths and weaknesses. This understanding can assist MCSC leadership with decisions regarding workforce training and development. The following conclusions to the research questions have been drawn based on the results of the Contracting Workforce Competency Assessment.

1. Based on assessment results, what are the proficiency ratings for the buyer competencies?

Overall, buyer proficiency competency ratings are at an intermediate level with seven out of 10 competencies scoring in this range. The remaining three competencies received ratings of an advanced level. When these competencies are organized into the contract life-cycle phases, the pre-award phase is advanced, whereas the award and post-award phases both rate at an intermediate level. The lowest rated competency was that of Manage Disagreements. These ratings suggest a high level of self-assessed skill across the MCSC contracting workforce.

2. Based on assessment results, what are the knowledge ratings for the seller competencies?

Overall, seller knowledge competency ratings are at a basic level with all 10 competencies scoring in this range. When these competencies are organized into the contract life-cycle phases, the pre-award, award, and post-award phases all rate at a basic level. The lowest-rated competency was that of Manage Disagreements which is closely followed by the competency of Prepare Offer. These ratings suggest a moderate level of self-assessed knowledge across the MCSC contracting workforce.

3. Based on assessment results, what recommendations can be made for improving the Marine Corps Systems Command contracting workforce competency levels?

The recommendations, based on the assessment results, are divided into the categories of sustain and improve. The first sustain recommendation is that MCSC continues current human resource capital management practices. Second, MCSC should continue current training practices in the buyer domains of Request Offers, Plan Negotiations, and Select Source. Third, MCSC leadership should sustain its commitment to continuous improvement.

The first improve recommendation is for MCSC to encourage the contracting workforce to pursue professional certifications. Second, future training and development programs should focus on building a better understanding of seller competencies and tasks. Third, MCSC should focus training efforts on the associated parts of the FAR and CMBOK for buyer tasks and CMBOK for seller tasks in the competencies assessed as weaknesses. The final recommendation is that the MCSC leadership should assess if contracting workforce proficiencies assessed in this research meet expectations and objectives.

4. How do the assessment results compare to the results from the 2018 Federal Acquisition Institute Acquisition Workforce Competency Survey?

A comparison was conducted between the MCSC contracting workforce competency results and those of the FAI AWCS. Some general patterns were found between both assessments, with the first being both workforces were strongest in pre-award phase buyer competencies and were weakest in competencies found in post-award phase buyer competencies. Average proficiency scores for both assessments decreased from pre-award to award, to post-award, with the lowest proficiency scores in post-award being 2.98 (foundational) for the FAI AWCS and 3.76 (intermediate) for the MCSC assessment.

D. AREAS FOR FURTHER RESEARCH

The Contracting Workforce Competency Assessment applies to all contracting organizations throughout the DoD. The data and results can be beneficial to all organizations, not just MCSC, that are pursuing reform within the field of contract management. The following recommendations are mentioned for continued progress in the area of contract workforce development.

One of the intentions of this research project was to establish a baseline of competency levels. This research's value can be improved if an annual application of a workforce competency assessment is conducted, establishing trends that could show improvement or decline in competency areas. Future researchers could conduct another competency assessment of the MCSC contracting workforce utilizing this assessment tool or another model to analyze trends. This competency data could also be used to establish trends across the entire DoD or federal contracting workforce, expanding upon the comparison done in this research to include other contracting workforce competency assessments conducted in the Air Force, Army, Navy, or other federal agencies.

MCSC is not the only Marine Corps entity that employs a contracting workforce. Future research should apply this contracting workforce analysis to other Marine Corps contracting organizations, providing a standardized format for how the CMS competencies are assessed. Doing so would enable senior Marine Corps leaders to holistically examine the entire contracting workforce and establish data for year-to-year trend analysis, which would inform training and development decisions with empirical data.

APPENDIX A. UNITED STATES MARINE CORPS CONTRACTING FIGURES AND TABLES

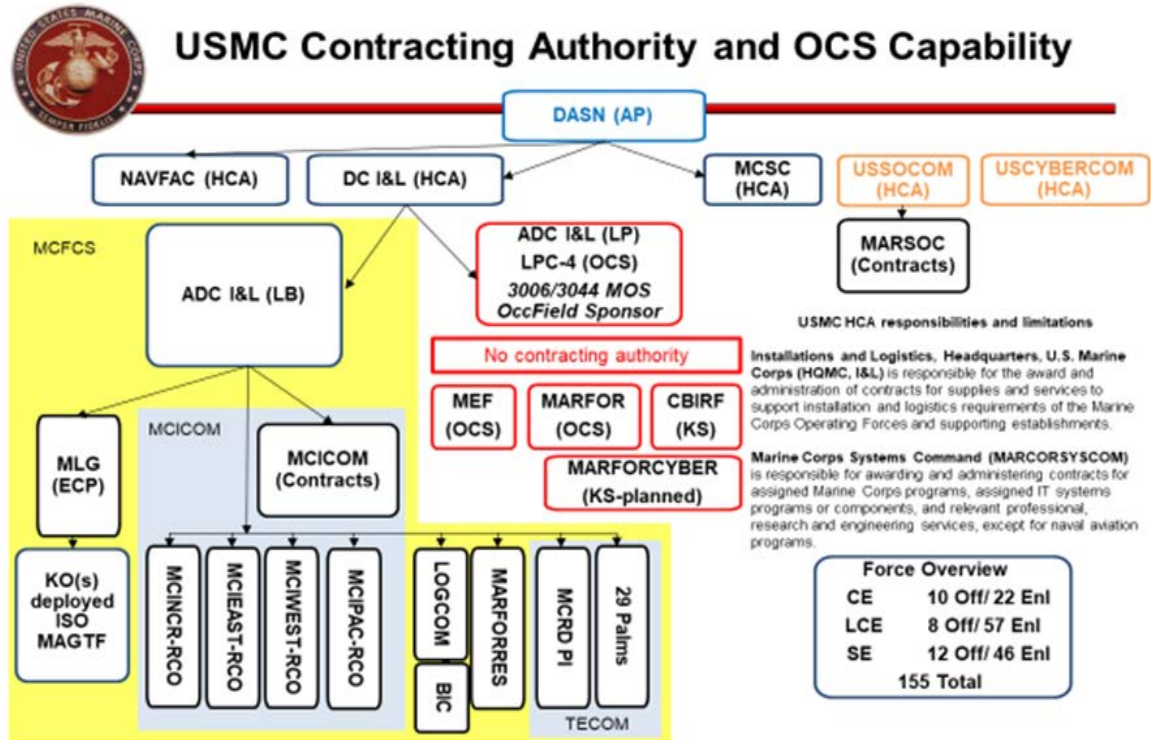


Figure 9. United States Marine Corps Contracting Organization and Authority. Source: W. Young (personal communication, March 17, (2020).

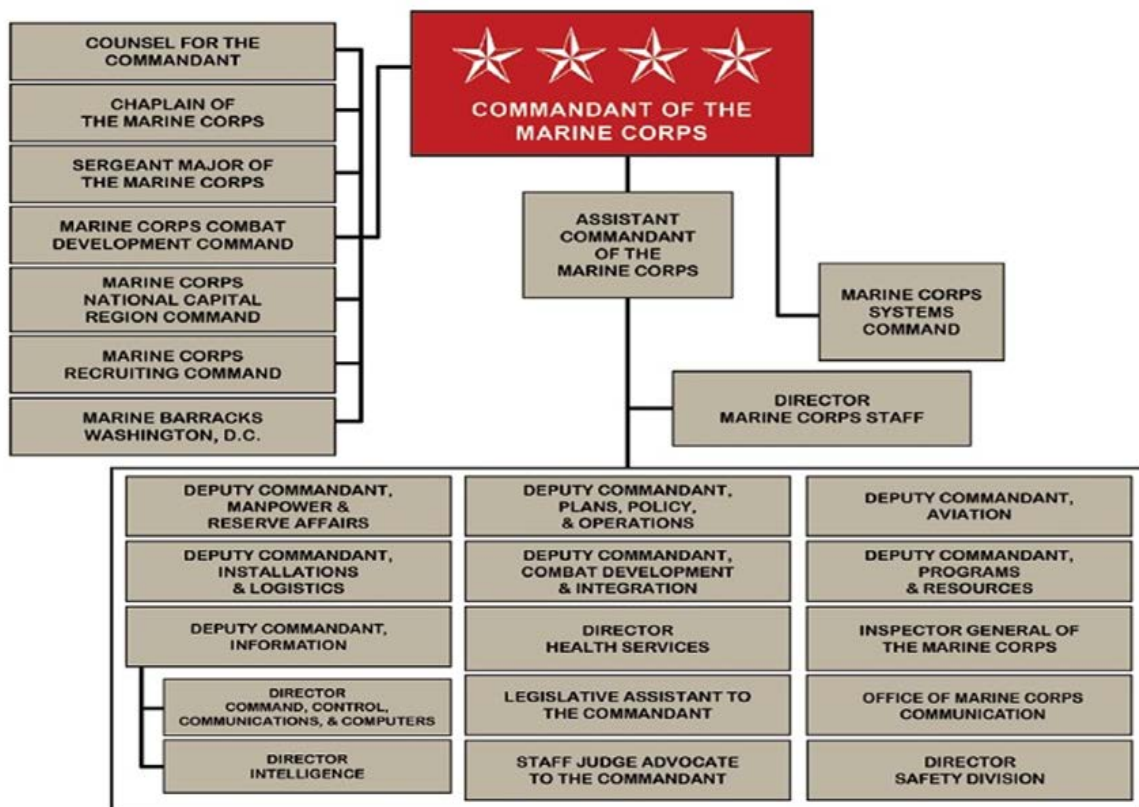


Figure 10. HQMC Supporting Establishment Organization.
Source: Marine Corps Concepts & Programs (n.d.).



Figure 11. Marine Corps Systems Command Organization Chart.
Source: MCSC (n.d.b).

Table 5. ADC, I&L (Contracts) and Marine Corps Systems Command Responsibilities. Adapted from HQMC ADC, I&L (2009).

ADC, I&L (Contracts)	Marine Corps Systems Command
Set contracting policy and oversight in acquiring supplies and services for the MCFCS, including Marine Corps Logistics Command (MCLC), Marine Corps Contingency Contracting Offices (CKOs), and Marine Corps bases and stations.	Information Systems and Network Infrastructure systems and equipment.
Integrate USMC procurement/contracting policies and procedures in the Marine Corps Acquisition Procedures Supplement (MAPS).	Battlespace Management and Air Defense systems and equipment to include Marine Air Ground Task Force (MAGTF) Command and Control and Operations Center systems and equipment.
Act as the Competition Advocate for the USMC.	Communications and Intelligence systems and equipment.
Provide Procurement Performance Management Assessment Program (PPMAP) policy and guidance.	Infantry Weapons Systems and equipment to include amphibious raid and ground reconnaissance systems and equipment.
Serve as the Community Manager for the USMC Contracting Career Field in collaboration with MCSC, to provide an enterprise perspective for managing the military and civilian contracting workforce.	Armor and Fire Support to include tracked combat vehicles, light armored vehicles and artillery systems and equipment.
Implement and Direct the USMC Small and Disadvantaged Business Utilization (SADBU) Program, partnering with MCSC to maximize Small Business participation within the Marine Corps.	Ground Transportation and Engineer Systems and equipment.
Serve as the Program Manager for the USMC Governmentwide Commercial Purchase Card (GCPC) Program and serve as the Level III Agency Program Coordinator (APC).	Combat Equipment and Support Systems to include individual clothing and equipment systems.
Serve as the functional Point of Contact (POC) for Paperless Acquisition (e.g., Standard Procurement System (SPS), Wide Area Workflow (WAWF), PR Builder, FPDS-NG) as well as automated systems such as Contractor Performance and Assessment Reporting System (CPARS).	Training Systems and Equipment associated with Marine Corps unique requirements.
Coordinate all reporting requirements in collaboration with MCSC, as determined on a case-by-case basis, to determine whether reporting requirements will be consolidated or submitted separately.	Ammunition items to include procurement, surveillance and maintenance of Marine Corps weapons and associated ordnance items.

APPENDIX B. COMPETENCY MODEL FIGURES

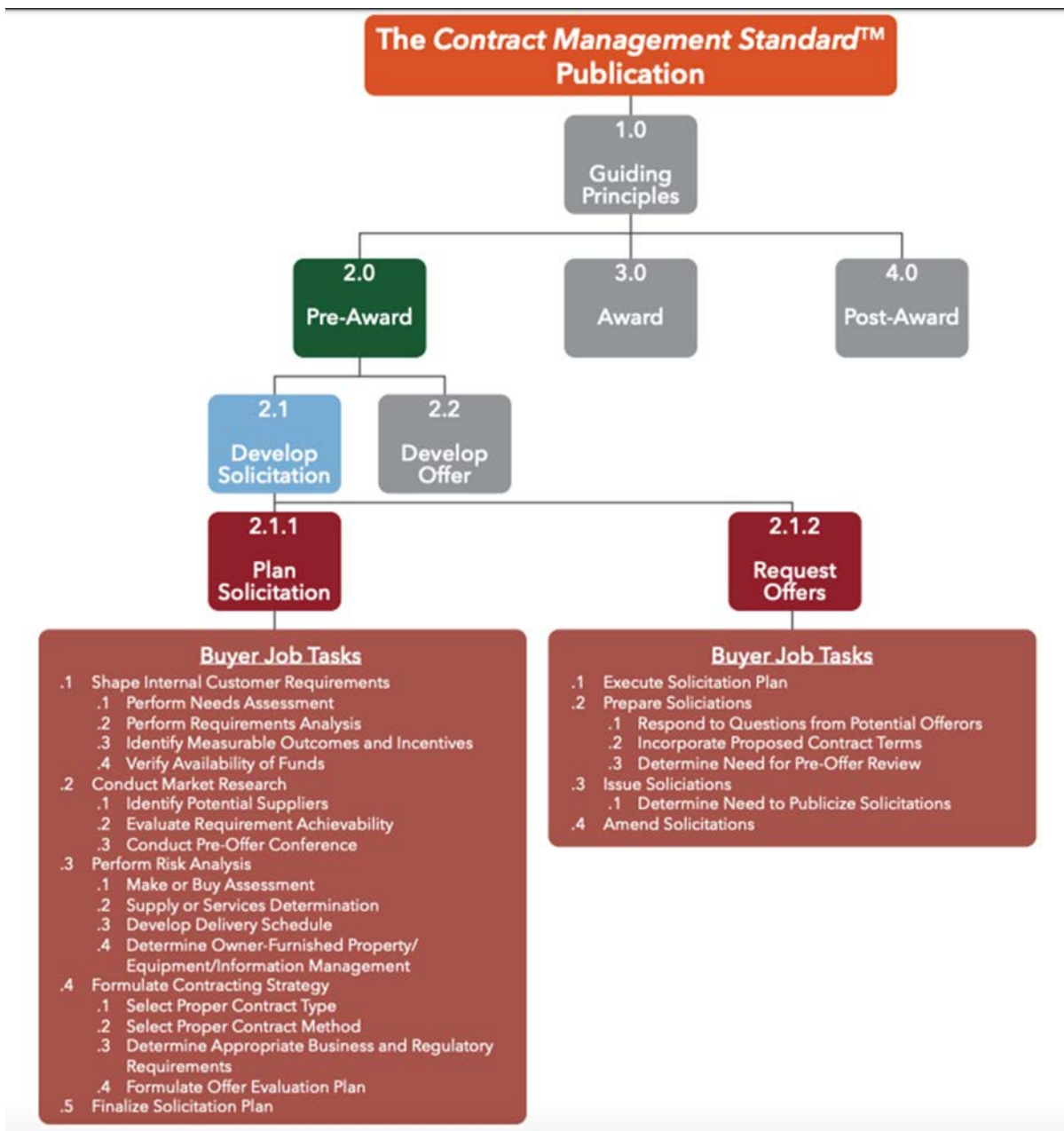


Figure 12. Competencies and Tasks for the Develop Solicitation Domain.
Source: NCMA (2019).

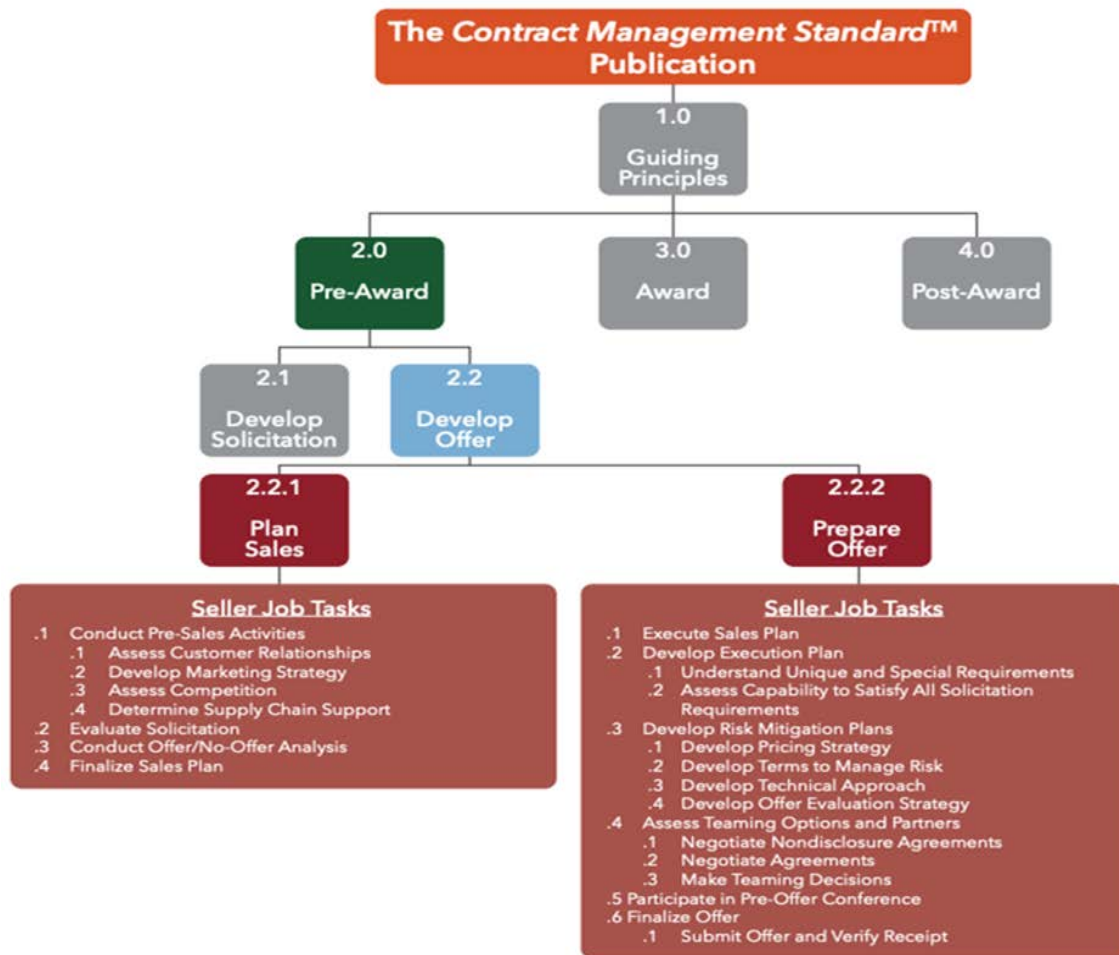


Figure 13. Competencies and Tasks for the Develop Offer Domain.
Source: NCMA (2019).

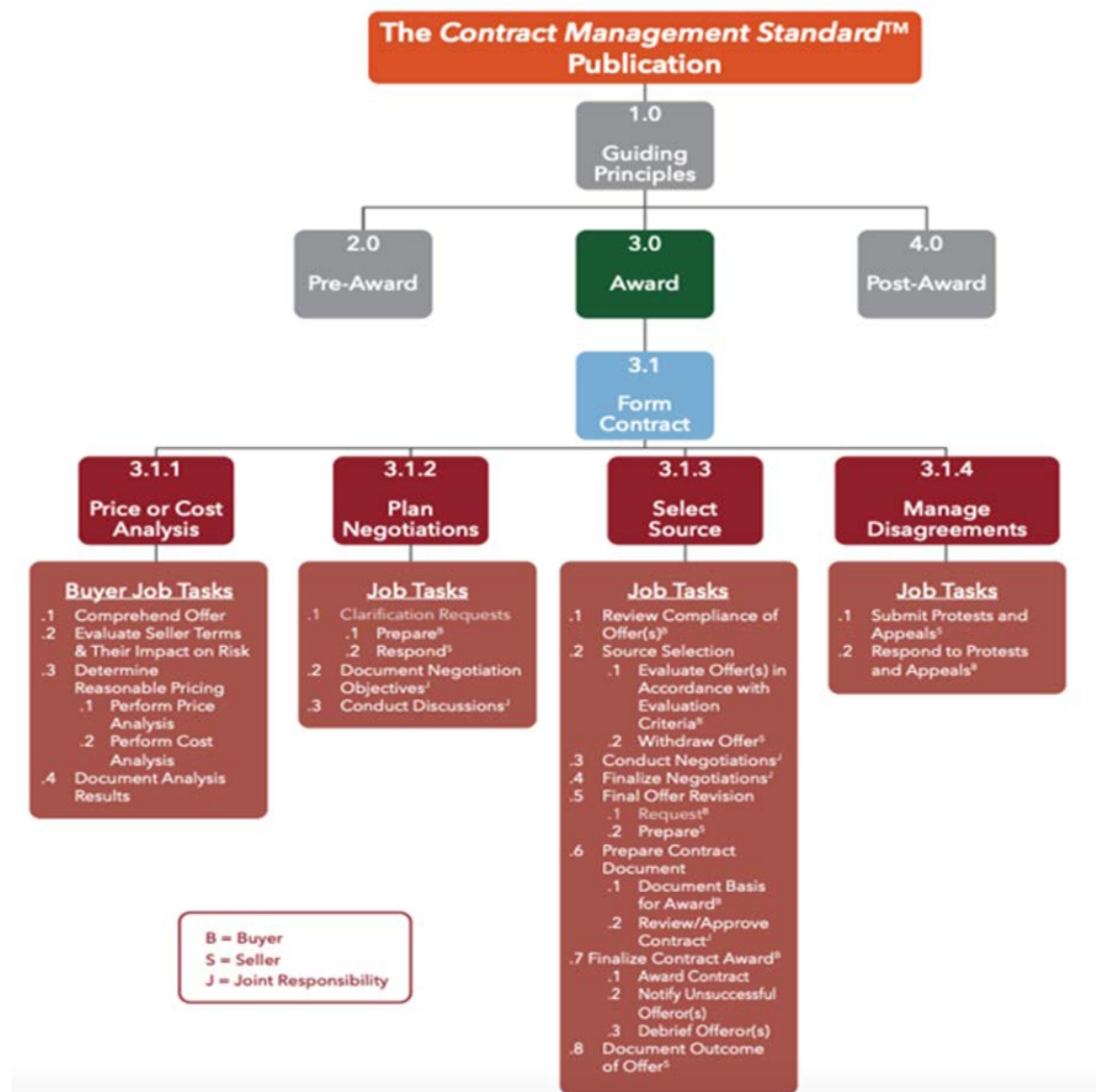


Figure 14. Competencies and Tasks for the Form Contract Domain.
 Source: NCMA (2019).

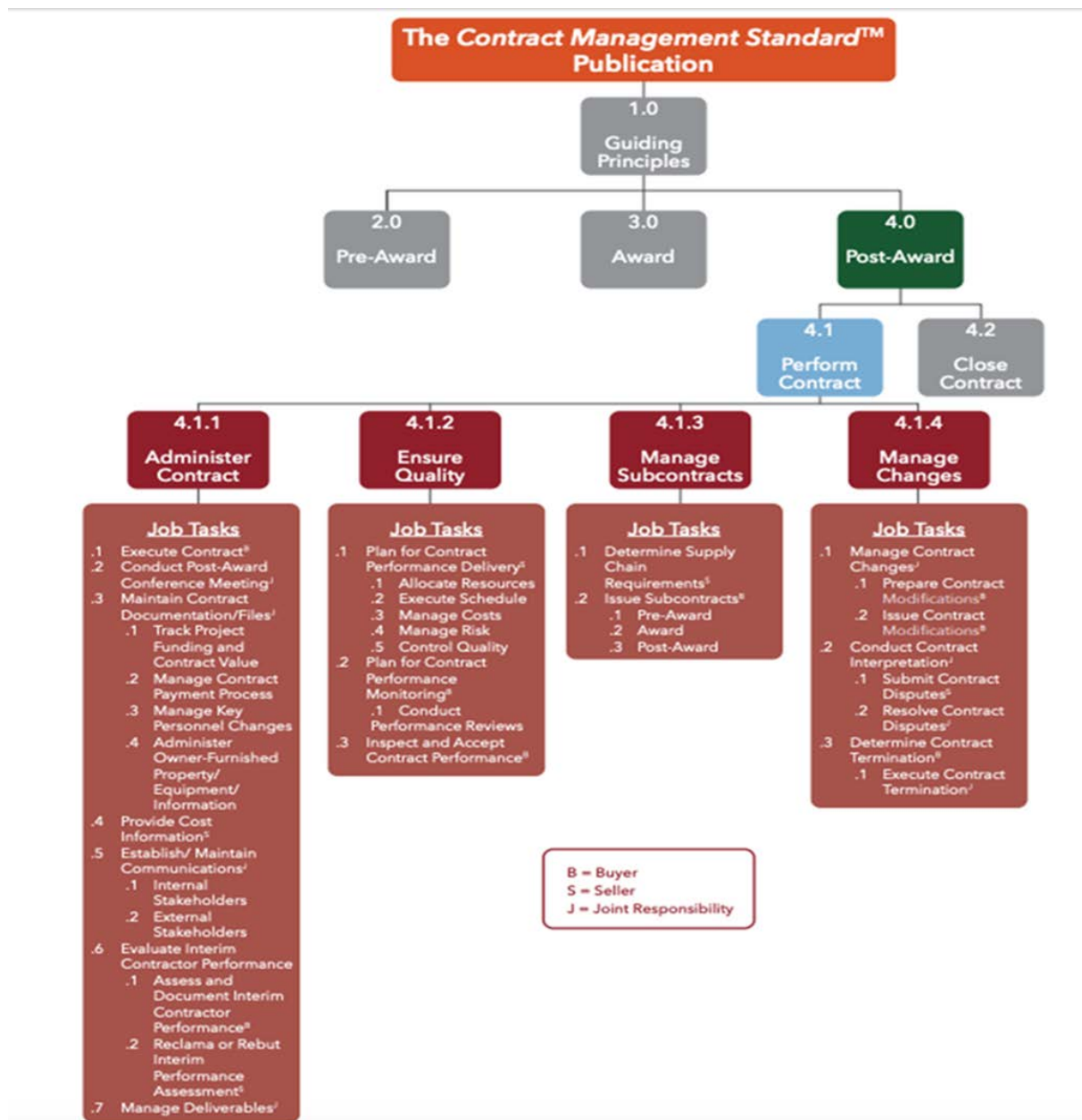


Figure 15. Competencies and Tasks for the Perform Contract Domain.
 Source: NCMA (2019).

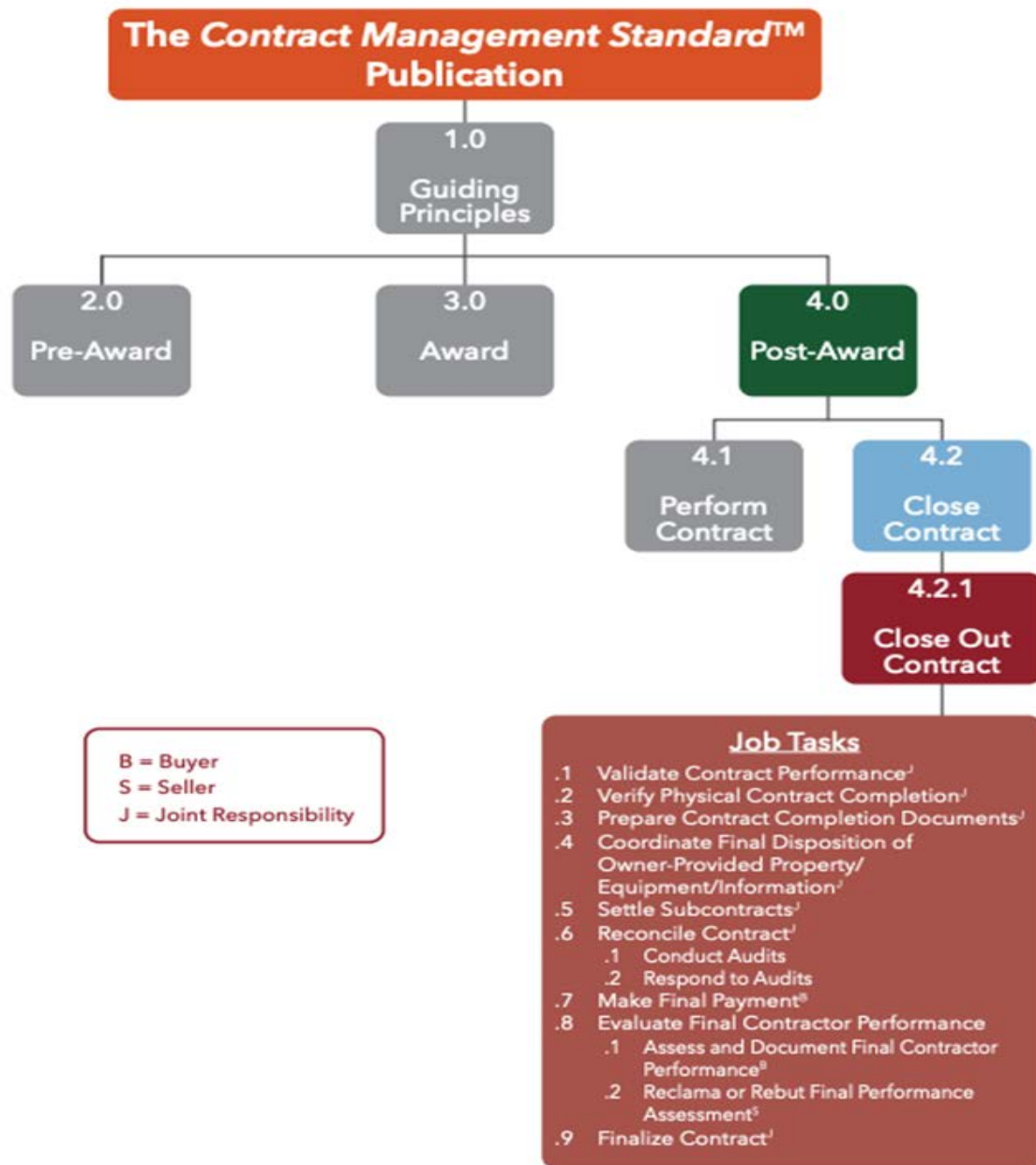


Figure 16. Competencies and Tasks for the Close Contract Domain.
 Source: NCMA (2019).

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APPENDIX C. CONTRACT MANAGEMENT WORKFORCE ASSESSMENT DATA

Contract Life Cycle Phase	2018 Acquisition Workforce Competency Survey	Score	2020 MCSC Contract Management Workforce Competency Assessment	Score
Pre-Award	Determination of How Best to Satisfy Requirements for the Mission Area	3.58	Plan Solicitations	3.82
	Consider Socio-economic Requirements (CSE)	3.48		
	Promote Competition	3.62	Request Offers	4.20
	Source Selection Planning	3.29		
	Solicitation of Offers	3.61		
	Average	3.52	Average	4.01
Award	Advanced Cost and/or Price Analysis	2.84	Price or Cost Analysis	3.99
	Responsibility Determination	3.55	Plan Negotiations	4.05
	Justification of Other than Full and Open	3.40		
	Terms and Conditions	3.39		
	Preparation and Negotiation	3.22		
	Source Selection	3.35	Select Source	4.11
	Bid Evaluation (Sealed Bidding)	3.02		
	Proposal Evaluation (Contracting by Negotiation)	3.43		
	Contract Award	3.73	Manage Disagreements	3.34
	Process Protests	2.37		
	Average	3.23	Average	3.87
Post-Award	Initiation of Work	3.28	Administer Contract	3.93
	Approve Payment Requests	3.07		
	Negotiate Forward Pricing Rates Agreements & Administer Cost Accounting Standards	1.43	Ensure Quality	3.63
	Addressing Small Business Concerns	2.95		
	Contract Performance Management	3.43	Manage Changes	3.89
	Issue Changes and Modifications	3.74		
	Contract Termination	2.60	Close Out Contract	3.58
	Close Out Contracts	3.32		
	Average	2.98	Average	3.76
Proficiency Levels		Proficiency Levels		
(5) Expert: I am capable of handling all assignments involving this competency/skill and may serve as a role model and/or coach for others.		(5) Expert: Applies the competency in exceptionally difficult situations and involves serving as a key resource and advises others.		
(4) Advanced: I am capable of handling most day-to-day assignments involving this competency/skill, though may seek expert assistance with particularly difficult or unique situations.		(4) Advanced: Applies the competency in considerably difficult situations and generally requires no guidance.		
(3) Intermediate: I am capable of handling many day-to-day assignments involving this competency/skill but may seek assistance in difficult or new situations.		(3) Intermediate: Applies the competency in difficult situations and requires little or no guidance.		
(2) Foundational: I am capable of handling some assignments involving this competency/skill but need assistance beyond routine situations.		(2) Basic: Applies the competency in somewhat difficult situations and requires frequent guidance.		
(1) Basic: I am capable of handling the simplest of assignments related to this competency/skill but need significant assistance beyond the easiest solutions.		(1) Aware: Applies the competency in the simplest situations and requires close and extensive guidance.		
(0) None: I do not possess proficiency in this competency/skill.		(N/A No Score): Not applicable/not needed in my job.		

Figure 17. Comparison of Buyer Competencies. Adapted from FAI (2018).

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