



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

JOINT APPLIED PROJECT REPORT

**ANALYSIS OF NGB ENTERPRISE CONTRACT
MANAGEMENT COMPETENCIES**

September 2021

By: Richard W. Powell II

Advisor: Rene G. Rendon
Co-Advisor: Christine Campbell,
National Guard Bureau NY-USPFO

Approved for public release. Distribution is unlimited.

THIS PAGE INTENTIONALLY LEFT BLANK

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 September 2021	3. REPORT TYPE AND DATES COVERED Joint Applied Project Report	
4. TITLE AND SUBTITLE ANALYSIS OF NGB ENTERPRISE CONTRACT MANAGEMENT COMPETENCIES			5. FUNDING NUMBERS	
6. AUTHOR(S) Richard W. Powell II				
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) The purpose of this research is to conduct an individual competency assessment of the Army National Guard's contract management knowledge and evaluate the individual competencies of the Army National Guard's contract officers and contract specialists (1102s). This research evaluates individual competencies throughout all phases of the contract life cycle. In addition to the assessment of individual competencies, this research will also evaluate the individual competencies of the buyer (government) and seller (industry). The National Contract Management Association's (NCMA) Contract Management Body of Knowledge (CMBOK) Contract Management Standard (CMS) and the Defense Acquisition University (DAU) are the evaluation criteria for individual competencies. This research analyzes which life cycle phases are more and less proficient from both a buyer's and seller's perspective. The U.S. Army NGB contracting workforce rates between "Intermediate" and "Advanced" as it rates low in Pre Award and high in Award and Post Award in regards to their proficiency in the CMS buyer competencies. The U.S. Army NGB contracting workforce rates with the "Basic" level of knowledge of CMS seller competency. In order to improve to "Intermediate" knowledge of these competencies, the contracting workforce will have to understand seller competencies in difficult situations with little to no guidance.				
14. SUBJECT TERMS Army National Guard, National Guard Bureau, NGB, Contract Management Body of Knowledge, CMBOK, Contract Management Standard, CMS, National Contract Management Association, NCMA, Defense Acquisition University, DAU, competency assessment, National Defense Authorization Act, NDAA 2020, auditability triangle			15. NUMBER OF PAGES 67	
			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	

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release. Distribution is unlimited.

**ANALYSIS OF NGB ENTERPRISE CONTRACT MANAGEMENT
COMPETENCIES**

Richard W. Powell II, Civilian, Department of the Army

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN CONTRACT MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
September 2021**

Approved by: Rene G. Rendon
Advisor

Christine Campbell
Co-Advisor

Rene G. Rendon
Academic Associate, Graduate School of Defense Management

THIS PAGE INTENTIONALLY LEFT BLANK

ANALYSIS OF NGB ENTERPRISE CONTRACT MANAGEMENT COMPETENCIES

ABSTRACT

The purpose of this research is to conduct an individual competency assessment of the Army National Guard's contract management knowledge and evaluate the individual competencies of the Army National Guard's contract officers and contract specialists (1102s). This research evaluates individual competencies throughout all phases of the contract life cycle. In addition to the assessment of individual competencies, this research will also evaluate the individual competencies of the buyer (government) and seller (industry). The National Contract Management Association's (NCMA) Contract Management Body of Knowledge (CMBOK) Contract Management Standard (CMS) and the Defense Acquisition University (DAU) are the evaluation criteria for individual competencies. This research analyzes which life cycle phases are more and less proficient from both a buyer's and seller's perspective. The U.S. Army NGB contracting workforce rates between "Intermediate" and "Advanced" as it rates low in Pre Award and high in Award and Post Award in regards to their proficiency in the CMS buyer competencies. The U.S. Army NGB contracting workforce rates with the "Basic" level of knowledge of CMS seller competency. In order to improve to "Intermediate" knowledge of these competencies, the contracting workforce will have to understand seller competencies in difficult situations with little to no guidance.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	BACKGROUND	1
	1. Federal Government Contracting	1
	2. DOD Contracting.....	1
	3. Department of the Army Contracting.....	2
	4. Army National Guard Bureau (NGB) Contracting.....	2
	5. Department of Defense Contract Management Problems	3
	6. Response to Contract Management Problems	4
B.	PURPOSE OF RESEARCH	6
C.	RESEARCH QUESTIONS.....	6
D.	BENEFITS AND LIMITATIONS OF RESEARCH.....	6
E.	METHODOLOGY	7
F.	ORGANIZATION OF REPORT	7
G.	SUMMARY	8
II.	LITERATURE REVIEW	9
A.	INTRODUCTION.....	9
B.	AUDITABILITY THEORY	9
	1. Auditability Components	9
	2. DAWIA	11
	3. NCMA	12
C.	THE CONTRACT MANAGEMENT BODY OF KNOWLEDGE (CMBOK)	13
D.	FAR	21
E.	SUMMARY	21
III.	NGB ARMY CONTRACTING.....	23
A.	INTRODUCTION.....	23
B.	NGB HISTORY AND OVERVIEW	23
	1. NGB CONTRACTING AND MISSION	23
	2. NGB CONTRACT TYPES	24
	3. NGB ORGANIZATIONAL STRUCTURE	25
	4. NGB PROCUREMENT MANAGEMENT REVIEWS (PMRs)	25
C.	SUMMARY	28
IV.	ARMY NGB COMPETENCY ASSESSMENT FINDINGS	29

A.	INTRODUCTION.....	29
B.	SURVEY DEVELOPMENT AND POPULATION DEMOGRAPHICS	29
C.	ANALYSIS OF COMPETENCY ASSESSMENT	31
	1. Buyers' Tasks (Pre-Award, Award, Post-Award)	32
	2. Sellers' Tasks (Pre-Award, Award, Post-Award).....	33
D.	DISCUSSION OF ASSESSMENT FINDINGS	34
E.	PROCUREMENT MANAGEMENT REVIEW (PMR) RESULTS	35
	1. Consistency of Buying / Selling Tasks and PMR Results	36
	2. Training Gaps Identified	37
F.	RECOMMENDATIONS FOR COMPETENCY DEVELOPMENT	37
G.	SUMMARY	38
V.	SUMMARY, CONCLUSIONS, AND AREAS FOR FURTHER RESEARCH	41
A.	INTRODUCTION.....	41
B.	SUMMARY	41
C.	CONCLUSION	41
D.	AREAS FOR FURTHER RESEARCH.....	43
	LIST OF REFERENCES	45
	INITIAL DISTRIBUTION LIST	49

LIST OF FIGURES

Figure 1.	Source: Auditability Triangle. Source: Rendon and Rendon (2015).....	10
Figure 2.	Source: NCMA Contract Management Body of Knowledge Competency Chart. Source: Norby et al. (2011).....	15
Figure 3.	Source: The Contract Management Standard. Source: CMS (2019).....	20
Figure 4.	Source: NGB USP&FO Regions. Source: NGB (2015).....	24
Figure 5.	Source: NGB PMR Trends FY17-19. Source: Welcheck (2020).....	26
Figure 6.	Source: PMR Map. Source: Welcheck (2020).....	27
Figure 7.	Source: U.S. Army NGB Buyer Task Survey Results.....	33
Figure 8.	Source: U.S. Army NGB Seller Task Survey Results	34

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1. U.S. Army NGB Survey Respondent Demographics31

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

ACC	Army Contracting Command
AGR	Active, Guard, Reserve
CMBOK	Contract Management Body of Knowledge
CMS	Contract Management Standard
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DOD	Department of Defense
FAR	Federal Acquisition Regulation
GAO	Government Accountability Office
NBG	National Guard Bureau
NCMA	National Contract Management Association
NDAA	National Defense Authorization Act
P&C	Purchasing and Contracting
PMR	Procurement Management Reviews
USP&FO	United States Property and Fiscal Office

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

I extend my sincerest appreciation to my advisor, Dr. Rene Rendon, for your teaching, coaching and mentorship while attending the NPS. Your contract management understanding and good humor made this an enjoyable experience. Thank you for your wisdom, your patience and your guidance through this project. You helped me become a better contract manager, researcher, and academic writer.

I would also like to thank the entire NGB team for participating in this survey. I would like to give special thanks to LTC Holly Payne for her assistance in the deployment of the survey throughout the 54 and to Scott Welcheck for his assistance in providing the PMR results and assistance with the NGB overview.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

A. BACKGROUND

1. Federal Government Contracting

Throughout the Federal government, billions of dollars have been set aside annually for mandatory spending, discretionary spending and interest on debts. Total obligations for the federal government totaled \$4.4 trillion in 2019 (USA spending.gov., n.d.). Total awards in acquisition of assets (contracts) in 2019 totaled \$234.3 billion for over 5.8 million awards (USA spending.gov., n.d.). Each fiscal year federal funds are set aside annually for specific projects and purposes. This funding is split up between different programs such as Social Security, Medicare, Medicaid, Defense, non-defense (i.e., transportation, education, health and housing assistance) and other (i.e., federal retirement, veterans benefits, and nutrition assistance programs) (Bogusz et al., 2020). All federal programs receive funding in order to continue operations, assist communities and departments throughout the United States as well as associated territories. Now, we look deeper into the Department of Defense (DOD), their spending trends and contract actions.

2. DOD Contracting

Within the federal government, Congress sets aside funding for the DOD. Similar to federal government spending, the DOD also has projects and purposes to which it prioritizes procurement dollars. In 2019, the DOD obligated \$171.5 billion on 3.9 million contract awards or “acquisition of assets” (USA spending.gov., n.d.). The DOD is an extraordinarily large organization with 98 separate departments or programs (O&M, RDT&E, MILCON, shipbuilding, aircraft procurement and other procurements). The main departments of the DOD are the Department of the Army, Department of the Navy and Department of the Air Force. The agencies within the DOD that oversee contract management, internal investigations and audits are the Defense Contract Management Agency (DCMA), Defense Contract Audit Agency (DCAA) and the Office of the Inspector General (OIG). These agencies oversee, investigate and recommend policy to spend these obligations within the regulatory guidelines set forth by the federal government. Within

each branch of the military, there are separate contracting departments. The contracting departments for the Navy consist of NAVAIR, NAVSEA and NAVSUP. The Navy awards contracts by specific agencies. NAVAIR awards aviation related contracts, NAVSEA awards contracts related to their naval fleet requirements and NAVSUP awards contracts as they relate to supplies. The contracting department of the Air Force is the Air Force Material Command. The Air Force Material Command contracts for weapons and operational requirements for the Air Force. Next, we will discuss the Army's contract department, which includes the Army Contracting Command (ACC).

3. Department of the Army Contracting

Similar to the federal government and the DOD, the Department of the Army also has specific projects and purposes to which it sets aside their procurement dollars. Within the U.S. Army, these funds are set aside for military personnel (pay, subsistence and recruiting), construction, operations and maintenance, research and development. In 2019, the Department of the Army obligated \$1.2B in spending (USA spending.gov., n.d.). Within this funding, spend there were 122,723 separate contract actions (USA spending.gov., n.d.). Specific projects are also set aside for the modernization of our military force to fill "critical capability gaps and improve lethality in munitions, and air and ground combat platforms" (Chamberlain, 2018). Commanded by a Major General (O-8), the U.S. Army Contracting Commands (ACC) six separate contracting centers are Detroit, Redstone, Orlando, New Jersey, Aberdeen and Rock Island, as well as headquarters and staff sections to include special staff such as small business and inspector general. The mission of ACC is to deliver "decisive contracting solutions across the full spectrum of conflict as part of the Joint Force, anytime, anywhere" (ACC, 2020). The Army's active component is also responsible to set aside funds for the Army National Guard and the Army Reserve. We will further analyze the funding within the Army National Guard.

4. Army National Guard Bureau (NGB) Contracting

NGB is responsible for the oversight and execution of all contract actions involving the Army and Air National Guard units throughout the 54 states and territories (50 states,

District of Columbia and three territories). From 2017–2019 the Army and Air National Guard had received an average of \$14.6B (1.43%) of the DoDs annual Operational and Maintenance (O&M) funds (USA spending.gov., n.d.). These funds are set aside for supplies, services, architect & engineer and construction requirements. These funds allow the Army National Guard to train and maintain their forces throughout the U.S. and its territories as well as preparations to assist the active component for overseas operations.

In New York State alone, the National Guard conducted 626 contract actions, spending \$46.4M (National Guard Bureau, 2015). The Army National Guard within NYS allocated \$13M for 251 of these contract actions (National Guard Bureau, 2019).

5. Department of Defense Contract Management Problems

Although the federal government, DOD and the National Guard Bureau’s Army acquisition workforce have funding for projects, they have faced many of the same problems. Since 1992 DOD contract management has been included in the GAO’s “High-Risk List” and include three specific areas of concentration. The three areas of “High-Risk” include the acquisition workforce, service acquisitions, and operational contract support (Government Accountability Office, 2019). Since the 1990s these challenges have remained constant and difficult to overcome.

Within the acquisition workforce section of GAO report 19–157SP, it was recommended that leadership commitment, capacity, action plans, monitoring and demonstrated progress are reviewed and thoroughly understood in order to correct these systemic issues (Government Accountability Office, 2019). “In a February 2018 report, we recommended ways the military departments could improve how they train, mentor, retain, and ultimately select program managers—a critical acquisition career field— based upon practices used by leading organizations. The military departments agreed with those recommendations but have not yet identified a strategy for how they will be implemented.” (Government Accountability Office, 2019)

Within the DOD, the Office of the Inspector General (OIG) has also shown concern for contract management as it is one of their top 10 DOD management challenges of 2020. “There is special concern shown for contract oversight and the potential of costing millions

of extra dollars each year due to misused fair and reasonable pricing, and adequate contract management (Department of Defense Office of Inspector General, 2019). As of March 31, 2020, the DOD OIG had 1,602 open recommendations issued to 25 different DOD components (Department of Defense Office of Inspector General, 2020). Within these recommendations, 232 open recommendations relate directly to the DODs acquisition program. The main contracting issues that continue to trouble the DOD IG are the ability to train, certify and retain the contracting workforce.

In order to reduce risk within contract issues, the National Guard Bureau conducts Procurement Management Reviews (PMRs) annually throughout the 54 states and territories they are responsible for. NGB conducts these PMRs to ensure all individual states and territories United States Property and Fiscal Offices (USP&FOs), Purchasing & Contracting (P&C) departments are conducting operations in compliance with NGB regulations, the DOD Federal Acquisition Regulation Supplement (DFARS) , the Army Federal Acquisition Regulation Supplement (AFARS) and the FAR guidelines. These PMRs provide an in depth analysis of all high risk contract actions, workforce capabilities and trends as well as training by the PMR team through a Corrective Action Plan (CAP) in order to improve the processes and procedures at all P&C offices with each state and territory USP&FO.

6. Response to Contract Management Problems

In order to respond to the issue of lack of training within the federal government, Congress implemented the Defense Acquisition Workforce Improvement Act (DAWIA) and created the Defense Acquisition University (DAU) in November 1990 (DAU, 2020). This Act was Congress' response to the training and certification problems within the military and civilian acquisition workforce (DAU, 2020). Within DAWIA, there are three levels of certification. Certifications correspond with an individual's basic or entry level acquisition knowledge (Level I), Intermediate or journeyman level acquisition knowledge (Level II) and advanced or senior level acquisition knowledge (Level III) (Defense Acquisition University, n.d.a). These three levels of certification require certain levels of education, training and experience related to the contracting career field. DAU's

contracting Core Certification Standards (required for DAWIA certification) encompass acquisition training, functional training, education and experience. The education requirements for all certification levels is a baccalaureate degree from an accredited institution. DAU's DAWIA level I requirement consist of completing 11 functional training courses (two of which are resident courses), and one year of contracting experience (Defense Acquisition University, n.d.a). DAU's DAWIA level II requirement consist of completing all level I requirements as well as one class for acquisition training, six functional training courses (two of which are resident courses) and two years of contracting experience (Defense Acquisition University, n.d.a). DAU's DAWIA level III requirement consist of completing all level I and level II requirements as well as one class for acquisition training, three functional training courses (two of which are resident courses) and four years of contracting experience (Defense Acquisition University, n.d.a). Though this certification process is extensive, the GAO High Risk Report identifies the issues of contract management remain throughout our acquisition workforce and recently a new competency framework is directed by Congress to overcome these challenges.

Though these deficiencies have remain relatively unchanged since 1992 (Government Accountability Office, 2019), the plans to train, mentor and retain all fifteen acquisition career fields have already begun. Congress has directed the use of a third-party accredited standard for certification through education and training (US Congress, 2019). The Contract Management Body of Knowledge (CMBOK) and the Contract Management Standard (CMS) use a competency development framework concentrating on both buyers and sellers tasks that meet the Congressional direction of better training, mentoring and retaining the acquisition workforce (US Congress, 2019).

In response to section 861 of NDAA 2020, the systemic contracting issues of DOD and management problems discussed by the GAO and DOD IG, the DOD adopted the CMBOK/ CMS by NCMA which is accredited by the American National Standards Institute (ANSI) (Sanchez et al., 2019) in order to increase the competency of the contracting workforce.

B. PURPOSE OF RESEARCH

Based on the above background, the purpose of this research is to conduct a workforce competency assessment of the NGB's Army contracting professionals. Using NCMA's CMBOK/ CMS as the competency framework, we will assess the Army National Guard's contracting workforce competency of buyer (Government) proficiency and seller (Industry) knowledge. We will accomplish this research by answering the following three questions.

C. RESEARCH QUESTIONS

This research will answer the following questions:

- (1) Based on the competency assessment, how does the National Guard Bureau's Army Contracting Workforce rate in proficiency in Buyer tasks?
- (2) Based on the competency assessment, how does the National Guard Bureau's Army Contracting Workforce rate in knowledge of Seller tasks?
- (3) What training opportunities do the National Guard Bureau's Army contracting community need to concentrate on in order to increase their buyer proficiency and seller knowledge?

D. BENEFITS AND LIMITATIONS OF RESEARCH

The benefits of this research are to provide the leadership of the NGB's Army contracting workforce feedback on the competency levels for both buyer and seller tasks as outlined in the CMBOK/ CMS. This research will provide the leadership of the NGB's Army contracting workforce the ability to identify training opportunities in order to increase the competency of the contracting workforce.

This research is limited because it only focuses on the assessment of the NGB's Army contracting workforce and not the Air National Guard contracting workforce. This research is also limited because the assessment was conducted on a volunteer basis. This research is also limited because the survey population is self-assessing themselves and an assumption is made that all responses are honest and truthful.

E. METHODOLOGY

The methodology for this research is to deploy a pre-developed survey as an assessment instrument to the NGB's Army contracting workforce in order to conduct a competency assessment of the contracting workforce. An analysis of the results will be conducted in order to determine the buyer proficiency and seller knowledge levels of all job related tasks. Training opportunities will be identified based on the assessment results. All members of the Army NGB acquisition workforce will receive an email to access the online survey assessment. The assessment results will help "identify contract management competencies that need additional training emphasis" (Sanchez et al., 2019).

F. ORGANIZATION OF REPORT

This report is organized in five chapters, which are described as follows.

Chapter I provides a brief introduction of contracting in the federal government, DOD, the Department of the Army and the National Guard Bureau's Army Contracting workforce. Chapter I also reviews the purpose of this research, the research questions, the benefits and limitations of the research, the research methodology and the organization of the report.

Chapter II provides an overview of the literature necessary to support this research. Within Chapter II, we review auditability theory through an analysis of the auditability components, DAWIA and NCMA. We then review the contract management standards through an analysis of NCMA's CMBOK/CMS as well as the Contract Management Domain's 3 phases of Pre-Award, Award and Post-Award contract life cycle as they relate to the buyer and seller tasks and a brief review of the Federal Acquisition Regulation.

Chapter III provides an in depth review of the National Guard Bureau's Army acquisition workforce through an introduction, a history and overview of the NGB contracting and mission, types of contracts, organizational structure and review of procurement management reviews.

Chapter IV provides an in depth review of the results of the competency assessment. Within Chapter IV, we will further discuss how the survey was developed,

deployed and how it was used to assess the contracting workforce competency. We will use this chapter to discuss the survey development and population demographics. Next, we will conduct an analysis of the competency assessment. Then, we will discuss the assessment findings. Then, we will conduct an analysis of the competency assessment findings followed by a review of recent PMR results as they relate to the competency assessment. Lastly, we will provide recommendations for the competency development to NGB based off the survey findings.

Chapter V summarizes the background, the problem statement and the purpose of this research. We then conclude our research by summarizing the answers to the research questions and provide recommendations and areas for further research and investigation.

G. SUMMARY

This chapter introduced the importance of contract management, training and the certification processes of the National Guard Bureau's Army contracting workforce. It gave a brief overview of federal contracting in terms of number of contract actions and dollars obligated; the DOD contract actions and dollars obligated; the Army contract actions and dollars obligated; and the National Guard's Army contracting actions and dollars obligated. This chapter also provided the challenges identified by Congress in the 2020 NDAA, the reports provided by GAO and DOD IG top 10 management challenges of 2020. This chapter identified the purpose of our research, to conduct a workforce competency assessment of the National Guard Bureau's Army contracting professionals. This chapter then presented our research questions as well as benefits and limitations of our study, the methodology by which the survey deployed and the data collected from the assessment. Finally, we presented the organization of the report. In the next chapter, we will review the literature that will provide the foundation of our research.

II. LITERATURE REVIEW

A. INTRODUCTION

Throughout this literature review, we will discuss how the auditability theory and the components of auditability are applied through the Defense Acquisition Workforce Improvement Act (DAWIA). We will also discuss the National Contract Management Association's (NCMA's) Contract Management Body of Knowledge (CMBOK) and the Contract Management Standard (CMS). We will explain why these publications are important in order to conduct a workforce competency assessment of the U.S. Army National Guard Bureau's contracting workforce professionals. Then, we will provide a summary of this literature review to help train, educate and certify contracting professionals of the U.S. Army National Guard Army contracting workforce.

B. AUDITABILITY THEORY

“Auditability theory is concerned with those aspects of governance needed by organizations to ensure successful achievement of mission goals and objectives.” (Rendon, 2019, p. 5) Any organization that obligates taxpayer dollars on contract actions must have morals and ethics above reproach, especially when regarding fiscal responsibility. Power explains that, “a theory of auditability requires a much wider field of vision than an audit alone because it delineates a distinctive managerial and governmental epistemology by which organizational practices can be publicly known to both their participants and by distant others” (Power, 2007, p. 192). “Agencies need competent personnel, capable procurement processes, and effective internal controls, i.e., auditability, in performing their procurement duties and achieving their procurement mission” (Rendon & Rendon, 2015, p. 724). We will further discuss the components of the auditability triangle throughout this section.

1. Auditability Components

Rendon (2015) states that an agency must have all three components to remain mission ready at all times. As shown in Figure 1, this Conceptual Framework involves

three components. These components are “effective internal controls, capable processes, and competent personnel” (Rendon & Rendon, 2015, p. 715). Within this section, we will discuss these three components of the conceptual framework.

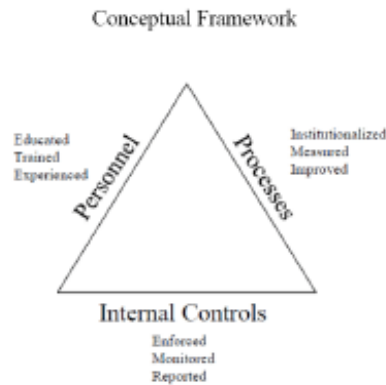


Figure 1. Source: Auditability Triangle. Source: Rendon and Rendon (2015).

The first side of the auditability triangle we will concentrate on is the capable processes components. “The capable process component of the auditability triangle reflects DOD contract management processes and related activities performed by the contracting workforce” (Rendon & Rendon, 2015, p. 754). The definition of capable processes are the “inherent ability of a process to produce planned results. As the capability of the process increases, it becomes predictable and measurable” (Ahern et al., 2001, p. 4). Within this portion of the auditability triangle, an agency must have institutionalized, measured and improved processes to demonstrate the agency is capable of fulfilling this requirement.

The next side of the auditability triangle concentrates on effective internal controls. Effective internal controls refers “to the objectives of enforcing internal control policies to ensure compliance with laws and regulations, monitoring procedures to assess enforcement and reporting any material weaknesses” (Rendon & Rendon, 2015, p. 754). “The GAO’s Standards for Internal Control in the Federal Government (the “Green Book”) (Government Accountability Office, 2014) defines internal control as a process effected by an entity’s oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved” (Government Accountability

Office, 2014, p. 5). Within this portion of the auditability triangle, these internal controls must be enforced, monitored and reported in order to remain capable.

The last side of the auditability triangle is the concentration of this research and consists of competent personnel. “The competent personnel component of the auditability triangle refers to the education, training, and experience of acquisition personnel performing contract management duties” (Peters et al., 2019, p. 8). Within this portion of auditability, it is imperative for individuals to be properly educated, trained and experienced in order to be successful within the contracting workforce. Since 1990, the DAWIA has mandated this training, experience and education of the contracting workforce.

2. DAWIA

Congress enacted DAWIA in 1990 to ensure the fulfillment of the acquisition workforce’s personnel competencies. This act was passed in response to a report entitled: *A Formula for Action: A Report to the President on Defense Acquisition* in 1986 stating that DOD personnel are undertrained and inexperienced according to industry standard (Blue Ribbon Commission on Defense Acquisition, 1986). This act also recommends the minimum education, training and experience requirements for all acquisition professionals.

The education requirements, training curricula and acquisition experience explained throughout this section represent the importance of education, training and experience in fulfilling the requirements of the contracting workforce.

The education requirements for any contracting DAWIA level certification is a baccalaureate degree in any field of study. The training, presented by DAU, consist of fourteen weeks of classroom instruction. The instruction focuses on the three phases of the contracting life cycle. In order for a Contract Specialist (GS-1102) in the Army to fulfill their career field requirement for training, they must achieve a level II certification within two years (Director Acquisition Career Manager, 2020). Within the DOD, the workforce contracting workflow changes to meet the changing atmosphere of the contracting workforce. The experience requirements for a level I DAWIA certification is 1-year

contracting experience, a level II DAWIA certification requires 2-years contracting experience and a level III DAWIA certification requires 4-years of contracting experience.

“The Director of Defense Pricing and Contracts, serving as Functional Leader for the Contracting Career Field, is working with DOD Senior Procurement Executives and the Defense Acquisition University to include a continuous competency-based management process for the DOD-wide Contracting Community” (Defense Procurement and Acquisition Policy, 2020). The process involved will include the following:

- “Define all competencies required for the Contracting Community in order to deliver mission critical capabilities” (Defense Procurement and Acquisition Policy, 2020)
- “Assess all competencies present in the Contracting Community and identify gaps for current and future requirements” (Defense Procurement and Acquisition Policy, 2020)
- “Align and adjust all personnel strategies to address the identified competency gaps and provide opportunities for training and development throughout the contracting community” (Defense Procurement and Acquisition Policy, 2020)

Next, we will review the National Contract Management Association (NCMA) and the standards within this organization that DOD adopted as its contracting workforce competency model.

3. NCMA

The NCMA “is the world’s leading resource for professionals in the Contract Management field” (National Contract Management Association, n.d.). With over 20,000 members, NCMA concentrates on the individual competencies of educating, training and providing knowledgeable experience to the acquisition workforce. NCMA provides federal, commercial and professional certifications to the acquisition workforce. NCMA also provides online and in-person learning opportunities as well as workshops,

symposiums and seminars to improve individual competencies in the acquisition workforce. Accredited by American National Standards Institute (ANSI) in 2019, the CMS “identifies meaningful job tasks and competencies and provides a roadmap for targeted and relevant professional development. In addition, the ANSI accreditation process contributes to the continual improvement of the contract management workforce and provides a bridge between formal standards and individual competence” (National Contract Management Association, n.d.).

The NDAA 2020 directed that a formally recognized third party accredited “professional certification program” be adopted to provide structured training, education and experience for the acquisition workforce. The ANSI-accredited standard already existed through the NCMA’s CMS. NCMA had the foresight to develop a professional certification program to educate the contracting workforce. Next, we will discuss how this Contract Management Standard links into the CMBOK/CMS and helps educate and train the contracting workforce.

C. THE CONTRACT MANAGEMENT BODY OF KNOWLEDGE (CMBOK)

The CMBOK is a product of NCMA that provides an overarching knowledge of the Contract Management Domain’s 3 phases of Pre Award, Award and Post Award contract life cycle as they relate to the buyer and seller tasks as well as the seven core competencies for contracting professionals. These core competencies and sub categories (see Figure 2) represent the structure of the CMBOK.

The first core competency is Leadership. The focus of Leadership is to “find out why adept leadership skills are necessary for Contract Management professionals at all levels” (National Contract Management Association, n.d.). The subcategories of Leadership concentrate on competence, character, collaboration and vision. The second core competency is Management. The focus of Management is to “discover how management competency involves setting goals to enhance both individual proficiency and organizational capability” (National Contract Management Association, n.d.). The subcategories of Management concentrate on business management, financial management, project management, risk management and supply chain management. The

third core competency is Guiding Principles. The focus of Guiding Principles is to “learn how to look for defining principles through all phases of the contract life cycle, no matter what each unique situation throws your way” (National Contract Management Association, n.d.). The subcategories of Guiding Principles focus on skills & roles, contract principles, standard of conduct, regulatory compliance, situational assessment and team dynamics. The fourth core competency is Pre Award. The focus of Pre Award is to “familiarize yourself with the first phase of the contract life cycle, when buyers produce solicitations and sellers prepare offers” (National Contract Management Association, n.d.). The subcategories of the Pre Award competency concentrates on acquisition planning, requesting offers, business development and develop a win strategy. The fifth core competency is Award. The focus of the Award competency is to “let us walk you through this often-complicated phase in which the buyer and seller work together to produce a contract” (National Contract Management Association, n.d.). The subcategories of the Award competency are cost or price analysis, conduct negotiations, source selection and manage legal conformity. The sixth core competency is Post Award. The focus of the Post-Award competency is to “dig into contract execution and completion — the contract administration process” (National Contract Management Association, n.d.). The subcategories of the Post Award competency is to administer contract, ensure quality, subcontract management, manage changes and contract closeout. The seventh core competency is Learning. The focus of the Learning is “continuing education ensures Contract Managers’ commitment to professional development and lifelong learning” (National Contract Management Association, n.d.). The subcategories of the Learn competency are continuous learning, individual competency and organizational capability.

The CMBOK enables contracting professionals to obtain the education, knowledge and experience a competent workforce must obtain through the information provided in these seven core competencies. The CMBOK, currently on its sixth edition, changes with the contract management profession throughout the years. The CMS, commonly mentioned in conjunction with the CMBOK, provides a roadmap of the guiding principles, contract life cycle phase and job tasks within the CMBOK.



Figure 2. Source: NCMA Contract Management Body of Knowledge Competency Chart. Source: Norby et al. (2011)

The Contract Management Standard

The CMS, published by NCMA in 2019 and then adopted by DOD, provides more detailed principles regarding the Pre-Award, Award and Post Award tasks. “The purpose of the Contract Management Standard™ Publication is to describe contract management in terms of the processes created through the integration and interaction of job tasks and competencies, and the purposes they serve. The common and repeated use of this standard will improve productivity, increase efficiency, and reduce costs” (Contract Management Standard Publication [CMS], 2019).

Similar to the components of the CMBOK, The CMS consists of specific components (see Figure 3). The first component of the CMS is Guiding Principles. The

focus of Guiding Principles is to assist contract managers in all three phases of the contract life cycle. These principles are relevant for these managers regardless of the agencies urgencies, policies, necessities or funds. The subcategories of the Guiding Principles component are Skills and Roles, Contract Principles, Standards of Conduct, Regulatory Compliance, Situational Assessment, Team Dynamics and Communication & Documentation. (CMS, 2019)

The Skills and Roles subcategory concentrates on the abilities necessary for contract managers to be successful in their duties as well as the roles important for management (both buyers and sellers) to coordinate and communicate with their teams in order to be successful. The Contract Principles subcategory concentrates on the essentials of a contract to ensure the validity of a contract and consist of general concepts and addresses specific contract matters. The Standards of Conduct subcategory concentrates on ethics, transparency, protecting information and avoiding conflicts of interest. The Regulatory Compliance subcategory concentrates on understanding the “laws, codes, and regulations” applicable to the contract managers. The Situational Assessment subcategory concentrates on capturing knowledge from current or past situations and applying these reviews to future situations. The Team Dynamics subcategory concentrates on the relationships of the buyers and sellers in order to satisfy the customer requirements. The Communication & Documentation subcategory concentrates on lessening favoritism, maximizing successes and ensuring clarity throughout all effected parties while documenting these communications for a common understanding for everyone involved in the contract action. After understanding the Guiding Principles, the CMS then discusses the contract life cycle phases (CMS, 2019). Next, we will focus on the components of the contract life cycle phases.

The three components of the contract life-cycle phases consist of Pre Award, Award and Post Award. Within each life cycle phase, there are domains, competencies and job tasks. The five domains of the life cycle phases are located within the life cycle phases. Within the Pre Award phase, the CMS discusses two of the five domains, Develop Solicitation and Develop Offer. Within the Award phase, the CMS discusses the third domain, Form Contract. In the Post Award phase, the CMS discusses the last two domains,

Perform Contract and Close Contract. These domains produce the most significant contract management outcomes and are most important to the contract managers. The competencies are the outcomes produced from each domain. After Develop Solicitation, the outcome is the solicitation. After Develop Offer, the outcome is the offer. After Form Contract, the outcome is the contract. After Perform Contract, the outcome is the contract performance. After Close Contract, the outcome is the closed contract. Within each competency, there are specific buyer and seller job tasks. Next, we will discuss each buyer and seller job task as it relates to each domain.

Within Develop Solicitation, there are specific buyer job tasks associated with Plan Solicitation and Request Offers. The job tasks for Plan Solicitation help the buyer understand how to plan the solicitation through understanding the customer needs, applicable market research, risk analysis, articulate the strategy and conclude the plan. The job tasks for Request Offers help the buyer understand how to execute the plan for a solicitation, how to prepare the solicitation, issue the solicitation and amend the solicitation if and when necessary. Similar to the job tasks of the buyer there are also job tasks associated with the seller. Within Develop Solicitation, there are specific seller job tasks associated with Develop Offer. The job tasks for Plan Sales include the assessment of customer relationships, assessing their competition, evaluate and analyze the solicitation posted by the buyer and finalize a sales plan. The job tasks for Prepare Offer help plan, develop and execute the seller plan while reducing risk and assess the opportunity to collaborate with other sellers, communicate their decisions to leadership and finalize the sellers offer. From the Pre Award phase the CMS moves into the Award phase to analyze each buyer and sellers job tasks. Next, we will discuss the job tasks associated with the domain of forming the contract.

Within Form Contract, there are specific job tasks associated with Price or Cost Analysis, Plan Negotiations, Select Source and Manage Disagreements. The job tasks for Price or Cost Analysis are not associated with the seller but help the buyer understand the offer, evaluate terms and risk, determine reasonable pricing and document the analysis results. The job tasks for Plan Negotiations help the buyer understand how to prepare clarification requests and help the seller understand how to respond. The job tasks for Plan

Negotiations also help both the buyer and seller document objectives and conduct meaningful discussions. The job tasks for Select Source help the buyer review an offer's compliance, evaluate offers from the seller, revise the final offer, document the basis for award and finalize the contract award. The job tasks associated with Select Source help the seller understand how to withdraw an offer, request a final revision and document the outcome of offers. Joint tasks for both the buyer and seller in Select Source are to conduct and finalize negotiations. The job tasks associated with Manage Disagreements are how to submit protests and appeals for the seller, and how to respond to protests and appeals for the buyer. Next, we will discuss the job tasks associated with the post award domain.

Associated with Post Award is Perform Contract. There are specific job tasks for both buyers and sellers associated with Administer Contract, Ensure Quality, Manage Subcontracts and Manage Changes. The buyer job tasks for Administer Contract help the buyer understand how to execute a contract, evaluate performance through assessment and documentation. The seller job tasks for Administer Contract help the seller understand how to calculate cost information and rebut a performance assessment. The joint job tasks for Administer Contract help both the buyer and the seller understand how to conduct post award meetings, maintain contract files, maintain effective communications and manage deliverables. The buyer job tasks for Ensure Quality help the buyer understand how to plan for contract performance monitoring. The seller tasks for Ensure Quality help the seller plan for contract performance delivery. The joint tasks for Ensure Quality help both the buyer and seller understand how to inspect and accept contract performance. The buyer job tasks for Manage Changes help the buyer prepare and issue contract modifications as well as determine contract terminations. The seller job tasks for Manage Changes help the seller submit contract disputes. The joint job tasks for Manage Changes help both the buyer and seller manage contract changes, interpret the contract, resolve disputes and execute terminations.

Also associated with the Post Award domain is Close Contract. There are specific job tasks for both buyers and sellers associated with Closeout Contract. The buyer job tasks associated with Closeout Contract help the buyer understand how to make a final payment, evaluate the contractor performance and document the contract file. The seller job tasks

associated with Closeout Contract help the seller understand how to rebut final performance assessments. The joint job tasks associated with Closeout Contract help both the buyer and the seller understand how to validate performance, verify physical completion/ completion documentation, finalize subcontracts, reconcile audits and finalize the contract.

“These processes involve the ability to perform multiple job tasks, both simultaneously and sequentially, while achieving meaningful results. The tasks performed on a routine basis by contract managers. Contract managers systematically process the job tasks to achieve the expected results of the competencies” (CMS, 2019, p. 3).

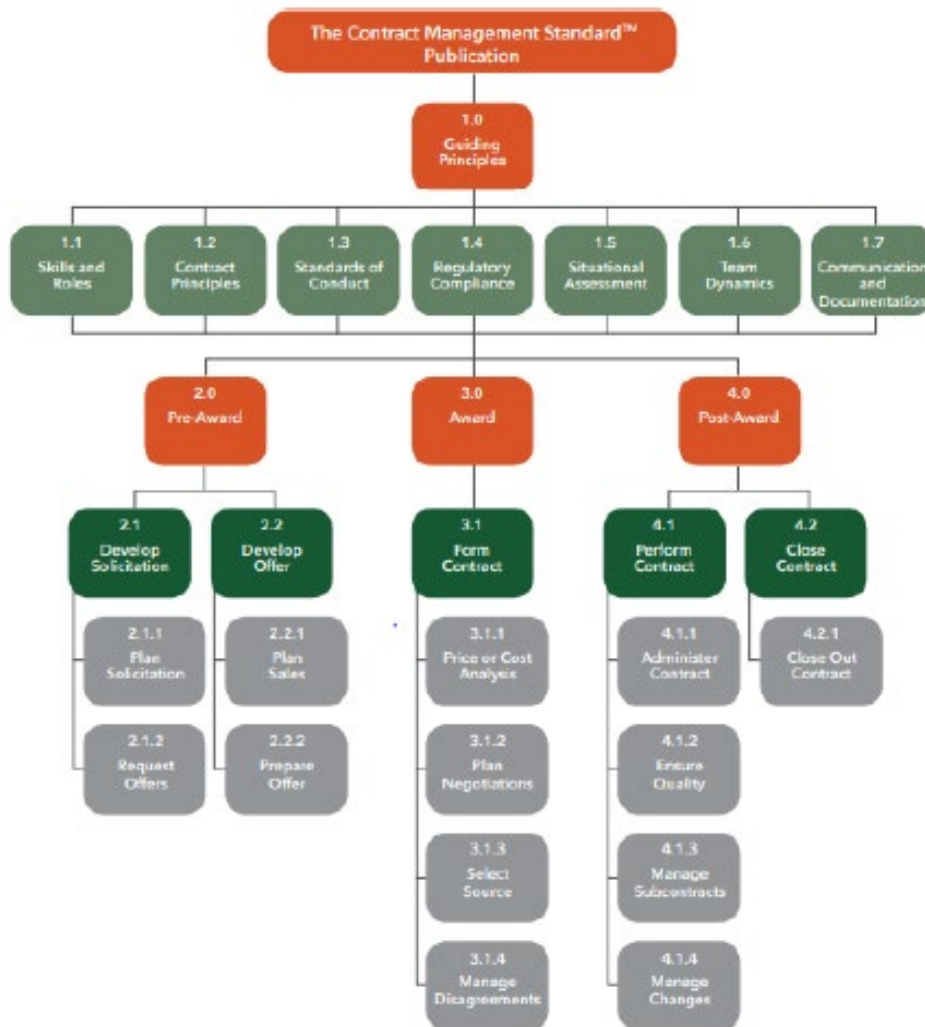


Figure 3. Source: The Contract Management Standard. Source: CMS (2019)

Throughout the components of the CMS discussed above, each component increases the user’s knowledge, education and experience of the personal competencies. The use of these guiding principles are for both the buyer (government) as well as the seller (industry). As discussed above, the CMS provides the general accepted contract management principles, concepts and processes. These general principles, concepts and processes are applied to the federal government through the Federal Acquisition Regulation (FAR). The next section will discuss the FAR.

D. FAR

Although not based on the FAR, the competencies of CMS can be mapped to the sections of the FAR in “the CMS-FAR Matrix” (Rendon & Winn, 2017, pp. 76–78). This is important because the regulations that govern the federal government procurement process is the Federal Acquisition Regulation (FAR). The acquisition supplements that regulate spending for all DOD organizations are the DFARS and DFARS-PGI. Within each department of DOD, there are additional supplements. The major commands supplements throughout DOD are: AFARS, for the Department of the Army; AFFARS, for the Department of the Air Force; and NMCARS, for the Department of the Navy and Marine Corps. These DOD organizations also have subordinate organizations who also have regulatory guidelines, which add to the policies and procedures for the obligation of funds for procurement.

E. SUMMARY

Throughout this literature review, we conducted a review of the auditability theory, the components of the auditability triangle (competent personnel, effective internal controls, and capable processes) and the certification levels of DAWIA. Then, we discussed how NCMA’s, CMBOK and CMS have the ability to educate, train, certify the contracting workforce, and integrate all components of the FAR. In the next chapter, we will provide a thorough description of the NGB Army Acquisition Workforce and the contracting personnel who provided the information for this research.

THIS PAGE INTENTIONALLY LEFT BLANK

III. NGB ARMY CONTRACTING

A. INTRODUCTION

This chapter introduces the National Guard Bureau's (NGB) Army contracting. First, we will provide a history and overview of NGB contracting. Within the history and overview section, we will discuss the contracting mission, different contract types, organizational structure and Procurement Management Review (PMR) historic trends. Then, we will provide a summary of NGB contracting and provide a transition into the workforce competency assessment of the National Guard Bureau's Army contracting professionals.

B. NGB HISTORY AND OVERVIEW

Throughout history, the National Guard's responsibility in federal contracting has expanded from simple supply and services to complex construction contracts as well as Architect and Engineer (A&E) IDIQ type contacts. Along with the increased contracting responsibility came an increase in training, education and experience. First, individual states were responsible to support their own militia with state appropriated funds (Doubler, 2001, p. 109). Then, the Militia Act of 1903 (Doubler, 2001) and the National Defense Act of 1916 began the allocation of federal funding to support the National Guard.

Annually, the National Guard conducts training, maintains their equipment and keeps their facilities operationally ready to support both state and federal missions. In order to conduct these tasks, the National Guard receives the funding outlined in the first chapter to procure these goods, services, specialty projects such as construction and A&E. To be good stewards of the taxpayer dollar each individual state or territory has an office of Purchasing and Contracting (P&C) within the United States Property and Fiscal Office (USP&FO).

1. NGB CONTRACTING AND MISSION

The mission of the NGB's Head of Contracting Agency (HCA) is to, "Provide comprehensive contracting and acquisition solutions in times of peace, war and disaster for

the National Guard and its nation and global partners” (National Guard Bureau, n.d.). This mission permits the NGB contracting workforce to remain competent in their individual duties, certified in accordance with regulatory guidelines and experienced with the up to date contracting workforce environment. In order for this mission and intent to flow to all levels of contracting, the structure of NGB must effectively reach throughout NGB directorate of acquisitions to each state office of P&C (see Figure 4).

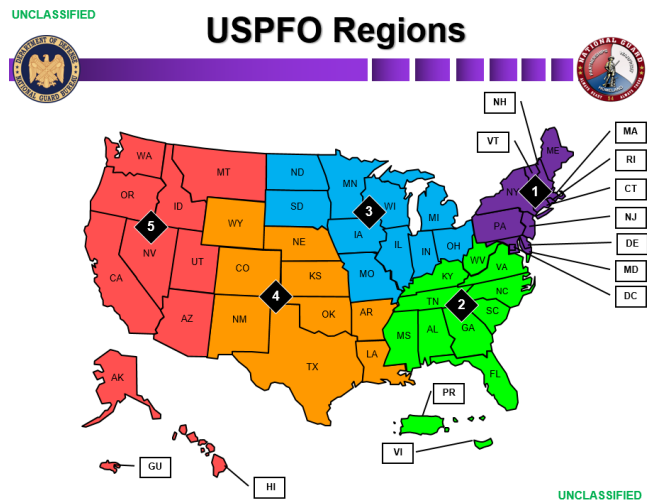


Figure 4. Source: NGB USP&FO Regions. Source: NGB (2015)

2. NGB CONTRACT TYPES

Each office of P&C obligates millions of dollars each year to maintain their readiness levels while NGB keeps oversight of all offices of P&C. NGB’s directorate of acquisitions distributes contracting guidance on policies and procedures. In addition to providing contracting oversight, NGB also conducts training events, contract reviews, GPC training, and Contract Officer Review Boards (CORBs) as the warrant authority for all offices of P&C. These training opportunities also help increase the individual competencies in education and experience throughout the NGB contracting workforce. The different types of contract actions used by NGB are Task Orders, Delivery Orders, Purchase Orders, Contract Modifications (funded and zero dollar), Definitive Contracts and Blanket Purchase Agreements (BPA). NGB offices of P&C conduct cradle-to-grave (all phases of

the contracting life cycle) contracting using mainly Simplified Acquisition Procedures (SAP) in FAR Part 13 and acquisition of commercial items in FAR Part 12.

3. NGB ORGANIZATIONAL STRUCTURE

With overall responsibilities for oversight and execution of all contract actions involving the Army and Air National Guard, the HCA leads NGB's Directorate of Acquisitions and answers directly to the Chief of the NGB. The Directorate of Acquisitions is composed of the Contracting Oversight Divisions, and the Operational Contracting Division and branches. The Contracting Oversight Divisions consists of 30 federal technician employees, along with full-time Active Guard Reserve (AGR) and Active Duty Occupational Specialty (ADOS) Soldiers and Airmen. The Contracting Oversight divisions are made up of the Acquisition Compliance and Oversight Division (AQ-P), the Contracting Ombudsman and Integration Division (AQ-O), the eBusiness Division (AQ-E), the Cooperative Agreements Division (AQ-A) and the Workforce Development Division (AQ-W). The Operational Contracting Division and its branches consist of the Operational Contracting Division (AQ-D) and five separate branches (AQ-C 1–5) with 39 federal employees, AGR and ADOS Soldiers and Airmen (NGB, n.d.). The structure of NGB directorate of acquisitions ensures effective communication to all levels.

4. NGB PROCUREMENT MANAGEMENT REVIEWS (PMRs)

In order to ensure the execution of the NGB's mission is in accordance with regulatory guidelines, NGB uses PMRs to ensure workforce compliance. Through the annual allocation of funds for supplies, services, architect & engineer and construction requirements, AQ-W conducts Procurement Management Reviews (PMR) in order to ensure the spending of taxpayer dollars conducted legally and effectively. The PMRs analyze five categories within the agency and the risk level as it relates to the frequency and severity of a contract deficiency (Welcheck, 2020). The five categories of the NGB PMR are; Contract Execution, Workforce Trends & Capabilities, Management Control & Process, Government Purchase Card (GPC) and the Small Business Program (Welcheck, 2020). High risk issues found in NGB PMRs since 2016 (see Figure 5) are the lack of funding documentation, vendor checks in System for Award Management (SAM),

modification documentation, adequate competition and evaluation factors used to make the contract decision (Welcheck, 2020).

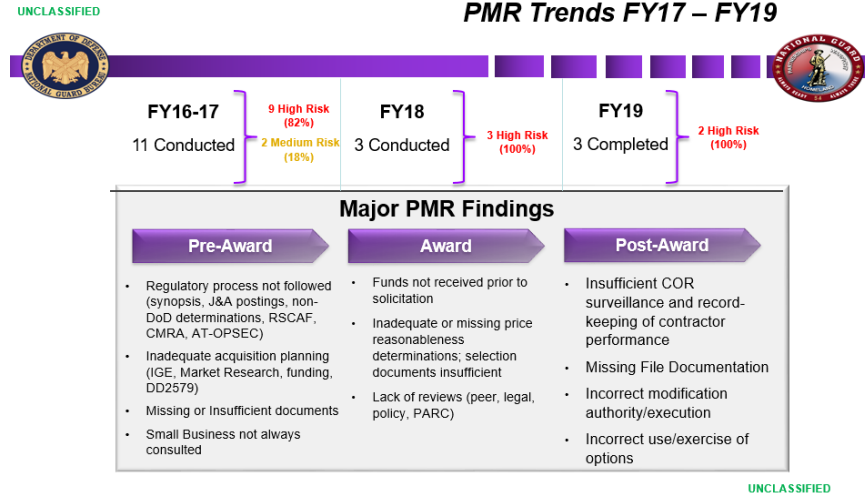


Figure 5. Source: NGB PMR Trends FY17-19. Source: Welcheck (2020)

The risk levels for each state and territory throughout NGB (see Figure 6) show the need for the workforce competency assessment and an analysis of buyer and seller tasks, as well as the identification of training opportunities for the NGB contracting workforce. This analysis and recommendations will be discussed in Chapter IV when we review the assessment findings.

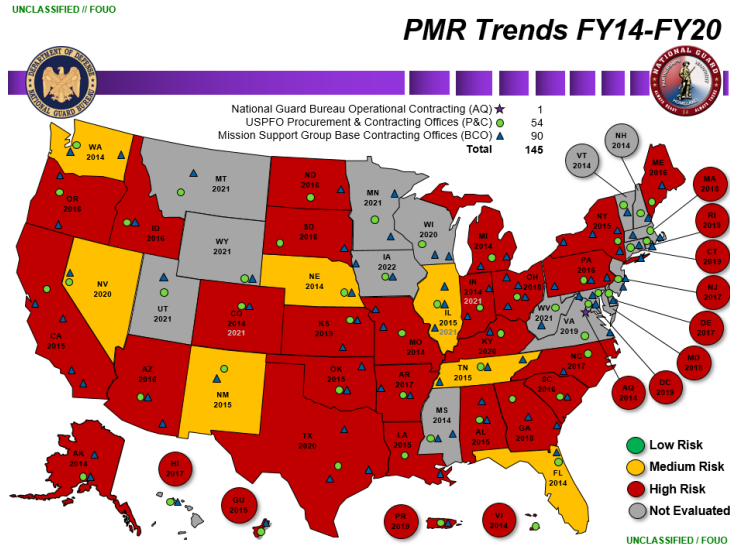


Figure 6. Source: PMR Map. Source: Welcheck (2020)

Based on the last NYS National Guard PMR findings in 2015, NYS received high risk ratings in contract execution and the Government Purchase Card (GPC) Program (NGB, 2015). There were 11 contracting findings identified in this 2015 PMR. A finding is defined as “areas to which may be indefensible in the event of a knowledgeable protest” (NGB, 2015)”

1. Independent Government Cost Estimate (IGCE) not completed to FAR 36 standard
2. Failure to state basis of award in solicitation
3. Not synopsisizing actions over \$25,000 in FEDBIZOPS
4. Failure to annotate the requirement to post Contractor Manpower Reporting (CMR) in solicitations for contractors
5. Fair and reasonable price determination document not in contract file
6. Proof contractors were not on the Excluded Parties List (EPLS) on System for Award Management (SAM)
7. Contract Officer Representatives (CORs) not providing monthly status reports

8. No evidence of periodic status meetings not held with CORs
9. No evidence of in-scope determinations prior to execution of a modification
10. No documentation to support the limitation of competition
11. No evidence of Price Negotiation Memorandum (PNM) or Pre-Negotiation Objective Memorandum (POM) supporting negotiations in support of FAR 15 requirements

Following the 2015 PMR for NYS, the NGB PMR team recommended training in all of the areas of findings. NGB developed internal policies and procedures to ensure all contract files were documented in accordance with FAR guidelines and NGB PARC policy. These policies and procedures were communicated to the NGB contracting workforce throughout the USP&FO offices of P&C (NGB, 2015).

C. SUMMARY

Throughout this chapter, we discussed contracting at the U.S. Army's NGB level. We reviewed the history and overview of NGB, the contracting and mission requirements, the contract types used by NGB as well as NGB's organizational structure. Lastly, we reviewed the NGB PMR trends and findings through 2019. Next, we will conduct a review of the competency assessment, provide an in depth review for the trends of the competency assessment, as well as discuss recommendations for training and opportunities to improve the buyer and seller tasks as well as areas for further research.

IV. ARMY NGB COMPETENCY ASSESSMENT FINDINGS

A. INTRODUCTION

This chapter will discuss the competency assessment and findings as they relate to the National Guard Bureau's (NGB) contracting workforce. Rendon developed this "innovative approach to assessing DOD Contracting workforce competency" (Sanchez et al., 2019) in response to the NCMA establishing the CMS. In addition, "Congress directed the secretary of defense to implement a professional certification program for all members of the acquisition workforce that is based on standards developed by a third-party accredited program based on nationally or internationally recognized standards (NDAA, 2019)" (Sanchez et al., 2019). First, we will discuss the survey development and population demographics. Next, we will conduct an analysis of competency assessment and discuss the assessment findings. Then, we will discuss a review of recent PMR results as they relate to the competency assessment findings. Lastly, we will provide recommendations for the competency development for NGB based off the assessment findings.

B. SURVEY DEVELOPMENT AND POPULATION DEMOGRAPHICS

The U.S. Army NGB contracting workforce consists of Title 32 Dual Status Technicians, Title 5 Civilians, Title 10 Military, Active Duty Occupational Specialty (ADOS) and Active Guard Reserve (AGR) personnel. The development of the 57-question survey was a self-assessment conducted on a volunteer basis. The survey instrument consisted of job tasks for each competency and asked the respondent to rate their proficiency in performing each buyer tasks and to rate their knowledge of each seller tasks. The survey used a five-point Likert Scale to the contracting workforce's assessment of buyer proficiency and seller knowledge. For example, in the Pre Award life cycle phase, Plan Solicitation is a competency which includes many job tasks, one of these job tasks is "Perform Needs Assessment" (National Contract Management Association, n.d.).

When analyzing their proficiency ratings of the buyer competencies (Rendon, 2020), the following are the definitions of each proficiency rating:

1. **Aware:** When the buyer is competent with simple circumstances and must have close and wide-ranging supervision.
2. **Basic:** When the buyer can apply each competency in slightly challenging circumstances with common supervision.
3. **Intermediate:** When the buyer can apply each competency in challenging circumstances with little to no supervision.
4. **Advanced:** When the buyer can apply each competency in significantly challenging circumstances with no supervision.
5. **Expert:** When the buyer can apply each competency in extremely challenging circumstances while acting as a subject matter expert to guide others.

When analyzing their knowledge ratings of the seller competencies (Rendon, 2020), the following are definitions of each knowledge rating:

1. **None:** When the seller is not aware of this Contractor competency.
2. **Aware:** When the seller is aware, but have no knowledge of this Contractor competency.
3. **Basic:** When the seller has a basic level knowledge of this Contractor competency.
4. **Intermediate:** When the seller has an intermediate level knowledge of this Contractor competency.
5. **Advanced:** When the seller has an advanced level knowledge of this Contractor competency.

Total eligible to take the survey was the U.S. Army NGB contracting workforce. The survey was deployed throughout the 54 states and territories and 525 contracting workforce employees were eligible to take the survey (Payne, 2020). The NGB Acquisition Career Manager deployed the survey electronically to the U.S. Army National Guard contracting workforce for approximately 40 days (April 2020 to the end of June 2020).

The response rate (see Table 1) for the survey consists of the 525 workforce employees eligible to take the survey, 20 workforce employees had responded to the survey, which results in a 4% response rate for the deployed survey.

Table 1. U.S. Army NGB Survey Respondent Demographics

Total Eligible	Completed Responses	Warranted Responses	DAWIA Level I	DAWIA Level II	DAWIA Level III	Years of Experience	Years in Organization	NGB Regions
525	20	10	2	6	12	<3 = 2 4-8 = 3 9-13 = 4 14-18 = 4 19+ = 7	<3 = 6 4-8 = 4 9-13 = 3 14-18 = 1 19+ = 6	1 = 3 2 = 5 3 = 3 4 = 3 5 = 6

Summarized in Table 1 are the demographics of this survey. The demographics of the survey consisted of 10 responses from Warranted Contracting Officers. Out of the 20 responses, all respondents had received a DAWIA certification, 18 of the respondents received a DAWIA Certification Level of II or III. Out of the 20 responses, 15 respondents had nine or more years of contracting experience. Out of the 20 respondents, 10 respondents had nine or more years' experience within NGB. Out of the 20 respondents, 11 responses were from NGB Regions 2 and 5, and 9 responses were from NGB regions 1, 3 and 4. Out of the 20 respondents, four had earned professional certifications from NCMA, two were Certified Federal Contract Managers, two were Certified Professional Contract Managers and four had other professional certifications.

After understanding how the survey was developed, deployed, the response rate of the survey and the demographics, we are prepared to discuss the competency assessment.

C. ANALYSIS OF COMPETENCY ASSESSMENT

The survey assessed the NCMA CMS Competencies for the Pre Award, Award, and Post Award tasks for both buyers and sellers. The survey analyzed twenty specific competencies, consisting of ten buyer competencies and their related job tasks as well as ten seller competencies and their related job tasks. The buyer competencies analyzed (see Figure 7) were Plan Solicitations, Request Offers, Price & Cost Analysis, Plan

Negotiations, Select Source, Manage Disagreements, Administer Contracts, Ensure Quality, Manage Changes and Contract Closeout. The seller competencies analyzed (see Figure 8) were Plan Sales, Prepare Offers, Plan Negotiations, Select Source, Manage Disagreements, Administer Contracts, Ensure Quality, Manage Subcontracts, Manage Changes and Close-Out Contracts. When analyzing the buyer competencies and seller competencies, there are many similarities. This section will compare and contrast the findings from the buyer proficiency ratings with the seller knowledge ratings.

1. Buyers' Tasks (Pre-Award, Award, Post-Award)

Figure 7 depicts the average response ratings for items as they relate to buyer competencies and the associated job tasks. There are three findings resulting from the assessment of the buyer's competencies. The first finding is the average proficiency rating for all buyer competencies is between a low rating of 3.06 and high rating of 3.85. The finding for Manage Disagreement rated at 3.06 and the finding for Ensure Quality rated at 3.85 puts them in the Intermediate proficiency rating level, which means that the buyer "can apply the competency in difficult situations and requires little or no guidance" (Rendon, 2020). The second finding is the average proficiency ratings throughout the contract life cycle. The average proficiency ratings seem to be lower in Pre Award competencies and higher in Post Award competencies with the Award phase (Select Source) in the middle with a proficiency rating of 3.51. The competency of Administer Contract is slightly higher than the average rating and the remaining competencies fall between Intermediate and Advanced levels of buyer proficiency. The third finding is that the Manage Disagreement competency is significantly lower than all the average competency ratings.

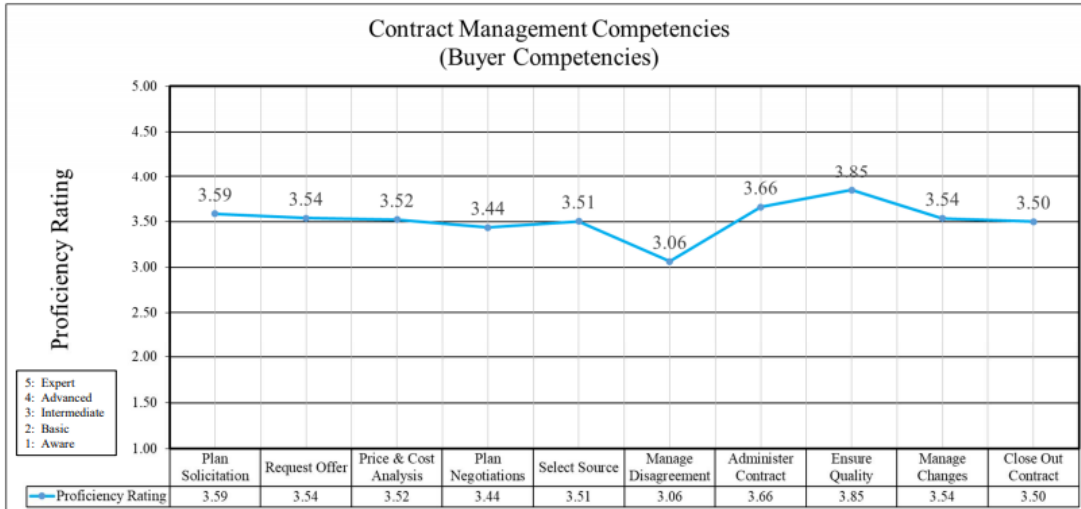


Figure 7. Source: U.S. Army NGB Buyer Task Survey Results

2. Sellers' Tasks (Pre-Award, Award, Post-Award)

Figure 8 depicts the average response ratings for items as they relate to seller competencies and the associated job tasks. There are three findings resulting from the assessment of the seller competencies. The first finding is that the average knowledge rating for all seller tasks is lower than the buyer competency. The seller competencies fall between a rating of 3.41 and 2.88. The lowest knowledge level for the seller task is Manage Disagreement at 2.88. The highest knowledge level for the seller tasks is Administer Contract at 3.41. This puts the average seller knowledge rating within Aware, “I am aware, but have no knowledge of this Contractor competency” and Basic “I have basic level knowledge of this Contractor competency” (Rendon, 2020). The second finding is similar to the buyer competency proficiency ratings found above, the average knowledge ratings seem to be lower in Pre Award and Award competencies and higher in Post Award competencies. The third finding is that the Post Award competencies fall within the Basic knowledge level. Many buyer competencies and seller competencies in Figures 7 and 8 show patterns or consistencies. Next, we will discuss the assessment findings and analyze these patterns and consistencies within the survey findings.

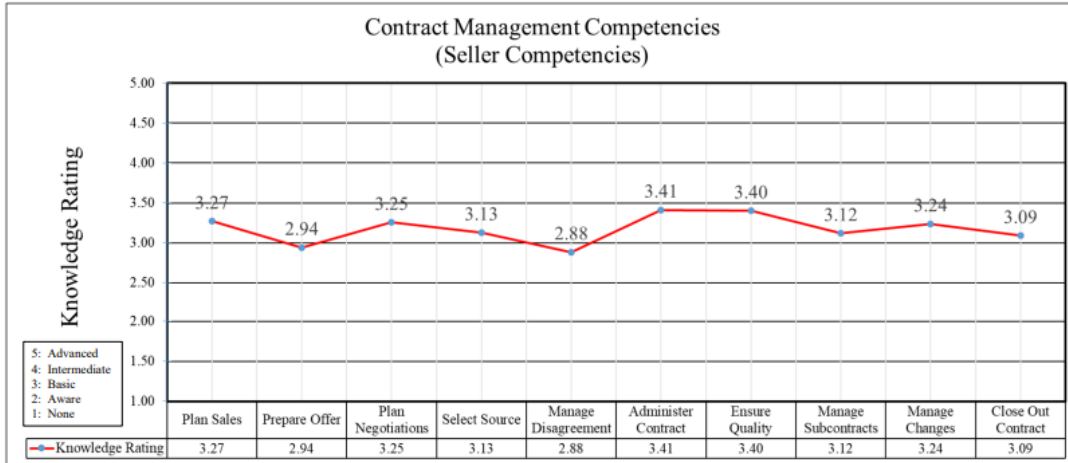


Figure 8. Source: U.S. Army NGB Seller Task Survey Results

D. DISCUSSION OF ASSESSMENT FINDINGS

After conducting an analysis of the competency assessment, we now discuss the findings addressed in the previous section. We will discuss four competency assessment findings throughout this section. First, we will discuss the buyer proficiency rating being higher than the seller knowledge rating as it relates to the demographics of the survey respondents. Next, we will discuss how the buyer proficiency is higher than the seller knowledge as it relates to training provided to the contracting workforce. Then, we will discuss how the buyer proficiency rating potentially increased due to an organizational emphasis of contract administration. Lastly, we will discuss how the Manage Disagreement competency is the lowest competency in both the buyer proficiency and seller knowledge.

The first point of discussion compares the finding of the overall buyer proficiency rating being higher than the overall seller knowledge rating as it relates to the respondents demographics. A possible reason for this finding could be due to the years of certification experience of the responding population. Half of the respondents were Warranted Contracting Officers/ Procuring Contracting Officers (PCO). These individuals generally have higher levels of knowledge in contracting due to Contract Officer Review Boards (CORBs), participation in training events, such as Roadshows, and years of contracting knowledge.

The second point of discussion compares the finding of the overall buyer proficiency rating being higher than the overall seller knowledge rating as it relates to training and education of the respondents. A possible reason for this finding could be that the NGB contracting workforce mainly receives DAU training, which only focuses on the buyer competencies and not the seller competencies. In addition, the majority of the assessment respondents were DAWIA Level III, and 15 out of 20 respondents had more than nine years of contracting experience. The majority of training and experience for these respondents was through DAU training, which is focused only on the buyer competencies.

The third point of discussion compares the finding of how the competencies for buyer proficiency rating is lower in Pre Award and Award tasks and higher in Post Award tasks. The higher Post Award proficiency ratings may be because NGB recently emphasized the need to conduct Post Award competencies (Contract Closeout) over Pre Award and Award competencies such as Plan Negotiation and Manage Disagreement.

The last point of discussion compares the finding of the Manage Disagreement competency as a buyer proficiency competency and a seller knowledge competency. In both the buyer proficiency and the seller knowledge, this competency is rated the lowest of all competencies. This low buyer proficiency and seller knowledge rating may reflect a lack of critical skills by the contracting workforce to conduct tasks within the abilities to the Manage Disagreement competency. This result could be due to a lack of critical thinking, problem solving, decision-making and conflict resolution, which may not be emphasized in the current contract workforce training.

When comparing and contrasting the results of the assessment findings, understanding the patterns and consistencies between buyer proficiency and seller knowledge tasks helps the U.S. Army NGB contracting workforce focus on future training. Next, we will review the PMR results in order to find similarities between the assessment findings and discussions provided above.

E. PROCUREMENT MANAGEMENT REVIEW (PMR) RESULTS

Recently the NGB PMR team has highlighted many issues throughout the contract life cycle. Throughout the Pre Award phase of the contracting life cycle, the NGB PMR

team found that regulatory processes were not followed, adequate acquisition planning was not being conducted and contract files were missing or contained insufficient documentation. In the Award phase of the contracting life cycle, the NGB PMR team found that funds or proper documentation were not received prior to the solicitation postings, inadequate or missing price reasonableness determinations, selection documents were insufficient and many awards lacked peer reviews. In the Post Award phase of the contract life cycle, the NGB PMR team noted insufficient COR surveillance documentation and record keeping of contractor performance was missing from the contract file, incorrect modification authority/execution was conducted and incorrect use/exercise of contract option years was common practice (Welcheck, 2020). These PMR results show an accurate view of audits conducted by the higher headquarters and highlight discrepancies found throughout the U.S. Army NGB contracting workforce. When comparing the PMR trends of FY 17- FY19 to the competency assessment results similar trends were identified. Next, we will discuss the PMR results as they relate to the consistencies of the buyer and seller tasks.

1. Consistency of Buying / Selling Tasks and PMR Results

Throughout the competency assessment review, consistencies between the PMR results relating to competencies of buyer tasks were identified. The PMR results reflected deficiencies throughout the contract life cycle due to failure to follow regulatory processes and the competency assessment revealed a decreased competency knowledge in Plan Negotiation and Manage Disagreement. However, the PMR did not review individual competency knowledge of the contracting workforce. The PMR only reviewed compliance with regulatory guidelines. When the PMR results are compared to the competency assessment results, there is a discrepancy suggesting the PMR results would reflect a higher rating than found in the PMR trends. Based off of the PMR trends and findings, one would assume that a much lower competency rating for each buyer competency than the assessment findings of an Intermediate proficiency rating level. Regarding the knowledge of seller competencies, the U.S. Army NGB workforce, there were no findings as the review of these competencies are not conducted in a PMR. When comparing the buying

and selling competencies with the PMR results training gaps have been identified. Next, we will review the identified training gaps.

2. Training Gaps Identified

The structure of current DAU training focuses on the proficiency of buyer competencies and not the knowledge of seller competencies. A training opportunity identified by this competency assessment is to concentrate more training on CMS competencies, which include both buyer and seller tasks in order to have a better understanding of industry practices. In addition, the U.S. Army NGB contracting workforce is less comfortable with managing disagreements for both buyer and seller competencies. Another training opportunity could focus on the Manage Disagreement competency between the customer, buyer and seller. The training gaps identified provide a road map for future training opportunities. When compared to the PMR results, the competency assessment findings will also assist in consistency of competencies as they associate with the PMR findings. After identifying the training gaps of the U.S. Army NGB contracting workforce, next we will discuss the recommendations for competency development.

F. RECOMMENDATIONS FOR COMPETENCY DEVELOPMENT

After conducting an analysis of the U.S. Army NGB contracting workforce and comparing the NGB PMR review with the competency assessment results, we identify six recommendations for competency development.

Our first recommendation is for NGB to continue training the contracting workforce on buyer competencies, but to include new training on the CMS buyer competencies as reflected in the Contract Management Standard. Throughout this training, special emphasis should be placed on the CMS buyer competencies and how they align with the FAR. The current competency rating falls within the rating of Intermediate to Advanced. The U.S. Army NGB contracting workforce should aim for a competency rating of Advanced to Expert.

The second recommendation is for NGB to focus its training on the CMS Pre Award competencies. Pre Award competencies should be focused on because the assessment reflected the Pre Award competencies rated lower than the Award and Post Award competencies.

The third recommendation is for NGB to concentrate on the buyer's competency, Manage Disagreement, as it is the lowest rated competency. NGB should provide training to develop skills such as critical thinking, problem solving, decision-making and conflict resolution as they apply to Pre Award and Award competencies so the workforce will be competent in the Manage Disagreement competency prior to those disagreements reaching a protest level.

The fourth recommendation for NGB to provide training on the CMS seller competencies. The results of the assessment reflected the CMS seller knowledge ratings were lower than the buyer proficiency ratings. Providing training for the seller competencies would increase the industry knowledge of the U.S. Army NGB contracting workforce.

The fifth recommendation for NGB is to apply special emphasis of the training on the Pre Award seller competencies. Similar to the buyer's proficiency competency ratings, the Pre Award seller competencies also rated lower in the Pre Award competencies than they rated in the Award and Post Award competencies.

Our last recommendation is for NGB to provide training on the seller's competency, Manage Disagreement. Similar to the buyer competency, Manage Disagreement is also rated the lowest knowledge level for the U.S. Army NGB contracting workforce.

These recommendations would help the U.S. Army NGB contracting workforce accomplish higher levels of contract management and understanding of both buyer and seller competencies throughout the contract life cycle.

G. SUMMARY

This chapter presented the survey development and population demographics. Conducted an analysis of competency assessment and discussed the assessment findings.

We prepared an analysis of the competency assessment findings and reviewed the PMR results as they relate to the competency assessment. Lastly, we provided recommendations for competency development to NGB for the U.S. Army NGB contracting workforce. Next, we will summarize and conclude our research by answering the research questions and provide recommendations for further research.

THIS PAGE INTENTIONALLY LEFT BLANK

V. SUMMARY, CONCLUSIONS, AND AREAS FOR FURTHER RESEARCH

A. INTRODUCTION

This chapter will summarize the background, the problem statement and the purpose of this research. We then conclude our research by summarizing the answers to the research questions. Lastly, we provide recommendations for further research and investigation.

B. SUMMARY

The DOD spends billions of dollars in obligations in government contracts (USA spending.gov., n.d.). These billions of dollars equate to hundreds of thousands of contracting actions. These contracting actions are performed by the contracting workforce (USA spending.gov., n.d.). The GAO has identified DOD contracting on the “High-Risk List” because of areas related to the acquisition workforce, services acquisition and operational contract support (GAO, 2019). In addition, the DOD IG has identified DOD contract management as the top “10 management challenge” (Department of Defense Office of Inspector General, n.d.). In response to these issues, the NDAA 2020 has directed DOD to change the way they train the contracting workforce and to adopt an industry standard to train the contracting workforce. The DOD has adopted the NCMA standard as that competency framework. The purpose of this research is to conduct a competency assessment of a population of the DOD contracting workforce using the adopted NCMA CMS.

C. CONCLUSION

Through research and analysis of the U.S. Army NGB contracting workforce, we are able to answer the following research questions.

- (1) Based on the competency assessment, how does the National Guard Bureau's Army Contracting Workforce rate in proficiency in Buyer tasks

The U.S. Army NGB contracting workforce rates between "Intermediate" and "Advanced" as it rates low in Pre Award and high in Award and Post Award in regards to their proficiency in the CMS buyer competencies. The contracting workforce has the ability to apply the competency in difficult situations and requires little or no guidance. However, the contracting workforce does not have the ability to apply the competency in considerably difficult situations and generally requires no guidance.

- (2) Based on the competency assessment, how does the National Guard Bureau's Army Contracting Workforce rate in knowledge of Seller tasks

The U.S. Army NGB contracting workforce rates with the "Basic" level of knowledge of CMS seller competency. In order to improve to "Intermediate" knowledge of these competencies, the contracting workforce will have to understand seller competencies in difficult situations with little to no guidance.

- (3) What Training Opportunities does the Army National Guard need to concentrate on in order to increase their buyer proficiency and seller knowledge

It would be beneficial for the U.S. Army NGB contracting workforce to concentrate on the areas noted within this research. In earlier chapters, we had identified six recommendations for training. The first recommendation is to include new NCMA CMS training on buyer tasks. The second recommendation is for NGB to focus their training on the CMS Pre Award tasks. The third recommendation is for NGB to concentrate on the buyer's task, Manage Disagreement competency, as it is the low rated competency. The fourth recommendation for NGB to provide training on CMS seller competencies. The fifth recommendation for NGB is to apply special emphasis of the training in the Pre Award seller knowledge competencies. The sixth recommendation is for NGB to provide training on the seller's knowledge task, Manage Disagreement. There is opportunity to focus PMRs on individual competencies as well as regulatory discrepancies. Increasing training opportunities focused on these competency areas will increase buyer proficiency and knowledge of seller competencies.

D. AREAS FOR FURTHER RESEARCH

Following the conclusion of this research, there are areas within this research that could use follow on research and further investigation.

- (1) Reassess the U.S. Army NGB Contracting Workforce hoping for a higher response rate and include the U.S. Air Force NGB Contracting Workforce

The timing of when to deploy a survey is a critical decision prior to conducting research. Deploying a survey at roadshows or conferences where there is a captured audience would most likely have the largest response rate and deploying a survey at the end of the fiscal year would not provide many responses. This survey received a 2% response rate after being deployed and extended for multiple months. The focus of the contracting workforce was impacted by unforeseeable events throughout 2020–2021, which had a large impact on the response rate for the survey.

There are also other possible areas to increase the research response rate throughout NGB by including the Air National Guard in the competency assessment. Since this research focused only on the U.S. Army NGB contracting workforce, including the Air National Guard into this research would double the survey population and present a more accurate picture of the competencies throughout the entire NGB contracting workforce spectrum.

When an agency implements recommendations, a contracting workforce competency reassessment would be important to show a correlation between contracting workforce before and after implementing the recommended NCMA CMS training.

- (2) Further investigate the lowest competency rating for Manage Disagreement

As the competency of Manage Disagreement rates the lowest out of all buyer proficiency and seller knowledge competencies, the contracting workforce could relate this to a lack of knowledge involving critical skills. Because disagreements happen frequently all throughout the contracting life cycle, it is important for the contracting workforce to have a good understanding on how to identify when a disagreement is taking place and take actions to solve or mitigate the problem. An additional investigation here would help

NGB identify a lack of critical thinking, problem solving, decision-making and conflict resolution skills throughout the contracting workforce. This information would help the U.S. Army NGB contracting workforce manage disagreements better in the future.

(3) Why Pre Award tasks were rated lower than Post Award tasks

Similar to the previous opportunity for further research regarding Manage Disagreement, this opportunity for further research could also help the U.S. Army NGB contracting workforce become more proficient in Pre Award tasks.

Through our assessment, the U.S. Army NGB contracting workforce show a better understanding, or feel more comfortable conducting Post Award tasks. Further investigation here could help NGB understand why the contracting workforce feels more comfortable conducting the Post Award tasks as opposed to the Pre Award tasks.

When conducting this further research, NGB could concentrate on the outputs from each Pre Award task. Concentrating on the solicitation, the offer, and the contract will help the research team understand root causes of the Pre Award issues.

(4) PMR system to incorporate CMS competencies for buyer and seller tasks

Lastly, an area for further research is for NGB to incorporate the CMS competencies for buyer and seller tasks into the Procurement Management Reviews (PMRs). As these reviews are conducted to ensure the execution of the NGB's mission is in accordance with regulatory guidelines and compliance, the CMS would be a beneficial tool to help train, certify and educate the NGB contracting workforce understand buyer and seller tasks throughout the contract life cycle. By doing this, NGB will be able to better track and manage the contract workforce knowledge and progress throughout the 54 states and territories.

LIST OF REFERENCES

- Ahern, D. M., Clouse, A., & Turner, R. (2008). *Cmmi distilled: A practical introduction to integrated process improvement*. Addison-Wesley.
- Air Force Acquisition. (n.d.). *Home*. Retrieved July 2020, from <https://ww3.safaq.hq.af.mil/Contracting/>
- Army Contracting Command [ACC]. (n.d.). *About us*. Retrieved July 2020, from <https://www.army.mil/acc#org-about-us>
- Blue Ribbon Commission on Defense Acquisition. (1986). *A formula for action: A report to the president on defense acquisition*. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a171632.pdf>
- Bogusz, C., Feinstein, A., Ready, D., & Salazar, J. (2020, April). *The Federal budget in 2019*. <https://www.cbo.gov/system/files/2020-04/56324-CBO-2019-budget-infographic.pdf>
- Chamberlain, P. A. (2018, February). *Army FY 2019 budget overview*. Retrieved June 2019, from <https://www.nationalguard.mil/Leadership/Joint-Staff/Personal-Staff/Legislative-Liaison/Important-Documents/FileId/176969/>.
- Contract Management Standard Publication [CMS] (2019). *Contract management standard, 2 nd Ed*. <https://www.ncmahq.org/standards-certification/contractmanagement-standard>
- Defense Acquisition University. (n.d.a). *Certifications & related programs*. <https://www.dau.edu/faq/Pages/Certifications-Programs.aspx>
- Defense Acquisition University. (n.d.b). *DOD contracting competency model (Contract Management Standard)*. <https://icatalog.dau.edu/onlinecatalog/Doc/CFcompetencys/CONCompetencies.pdf>.
- Defense Procurement and Acquisition Policy. (n.d.). *DPAP operations: workforce management: acqdemo. dpap, dpap operations, workforce management, acqdemo*. Retrieved April 12, 2020, from https://www.acq.osd.mil/dpap/ops/contracting_competency_assessment.html.
- Department of Defense Office of Inspector General. (2019, November 4). *Top dod management challenges – fiscal year 2020*. Retrieved June 2020, from <https://www.dodig.mil/Reports/Top-DOD-Management-Challenges/Article/2108369/top-dod-management-challenges-fiscal-year-2020/>.

- Department of Defense Office of Inspector General. (2020, July 23). *Compendium of open office of Inspector General recommendations to the Department of defense*. Retrieved June 2020, from <https://www.dodig.mil/Reports/Compendium-of-Open-Recommendations/Article/2288645/compendium-of-open-office-of-inspector-general-recommendations-to-the-department/>.
- Department of Defense Office of Inspector General. (n.d.). Retrieved June 2020, from <https://www.dodig.mil/About/>.
- Director, Acquisition Career Manager [DACM] office. USAASC. (n.d.). *Career*. Retrieved June 2020, from <https://asc.army.mil/web/dacm-office/>.
- Doubler, M. D. (2001). *I am the Guard: A history of the Army National Guard, 1636–2000*. Army National Guard, Department of the Army.
- Federal Acquisition Institute. (n.d.). *Federal acquisition certification in contracting*. Retrieved July 29, 2020, from <https://www.fai.gov/certification/contracting-fac-c>.
- Government Accountability Office. (2014, September). *Standards for internal control in the federal government (GAO-14-704G)*. <https://www.gao.gov/assets/gao-14-704g.pdf>
- Government Accountability Office. (2019, March). *Substantial efforts needed to achieve greater progress on high-risk areas (GAO-19-157SP)*. <https://www.gao.gov/assets/gao-19-157sp.pdf>
- Government Accountability Office. (n.d.). *Inspector General*. <https://www.gao.gov/ig/>
- National Contract Management Association. (n.d.). *Home*. Retrieved from <https://www.ncmahq.org/>
- National Guard Bureau. (2015). *Procurement management review of NY USP&FO, Purchasing & Contracting*. Alexandria, VA: NGB Office of the PARC.
- National Guard Bureau. (2019). *New York Procurement management review FY 19 Listing of NGB_PMR_Workload by location*. Arlington, VA.
- National Guard Bureau. (n.d.). *Directorate of Acquisitions- HCA Mission and Vision*. Retrieved February 20, 2020, from <https://gko.portal.ng.mil/ngb/STAFF/D01/D01/SitePages/HCA%20Mission%20and%20Vision.mil>.
- Naval Facilities Engineering Systems Command. (n.d.). Retrieved July 2020, from https://www.navfac.navy.mil/about_us.html.
- Norby, M., Smith, E., & Smith, R. (2011). *Contract management body of knowledge (Cmbok)*. National Contract Management Association.

- Payne, L. H. (2020, February 10). Acquisition Career Manager. (email correspondence, Interview)
- Peters, R. N., Stewart, S. L., & Weese, S. F. (2019). (rep.). *Contract management maturity model assessmnt of the air foce nuclear weapon center*. Monterey, CA: Naval Postgraduate School.
- Power, M. (1996). *Making things auditable*. *Accounting, Organizations and Society*, 21(2-3), 289–315. Elsevier Ltd.
- Power, M. (2007). *Organized uncertainty designing a world of risk management*. Oxford University Press.
- Rendon, R. G. (2016). (rep.). *Assessment of Navy Contract Management Processes*. Naval Postgraduate School.
- Rendon, R. G. (2019). (rep.). *Enhancing Professional and Technical Excellence: Analysis of Contract Management Competency Models*. Naval Postgraduate School.
- Rendon, R. G. (2020). Proficiency ratings and knowledge ratigs. (email correspondence, Interviewer)
- Rendon, R. G., & Rendon, J. M. (2015). *Auditability in public procurement: An analysis of internal controls and fraud vulnerability*. *International Journal of Procurement Management*, 8(6), 710.
- Rendon, R. G., & Winn, T. (2017). *Competency in contract management: a comparison of DOD and CMBOK competency models [Review of Competency in contract management: a comparison of DOD and CMBOK competency models]*. Naval Postgraduate School. <http://hdl.handle.net/10945/56443>
- Sanchez, S. M., Lynh, G. E., Luhrs, C., & McDonald, M. L. (2019). *Acquisition Research: Creating Synergy for Informed Change*. <https://doi.org/http://hdl.handle.net/10945/63077>
- Under Secretary of Defense (Comptroller)/CFO. (2018, December 2). *DOD releases fiscal year 2019 budget proposal* [Press release]. https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2019/fy2019_Press_Release.pdf
- U.S. Congress. (2018, August). *National Defense Authorization Act 2019 (Pub. L. No. 115–91)*. <https://www.congress.gov/bill/115th-congress/house-bill/5515/text>
- U.S. Congress. (2019, December). *National Defense Authorization Act 2020 (Pub. L. No. 116–92)*. <https://www.congress.gov/bill/116th-congress/senate-bill/1790>
- USA spending.gov. (n.d.). *USAspending.gov*. <https://www.usaspending.gov/#/>

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California